



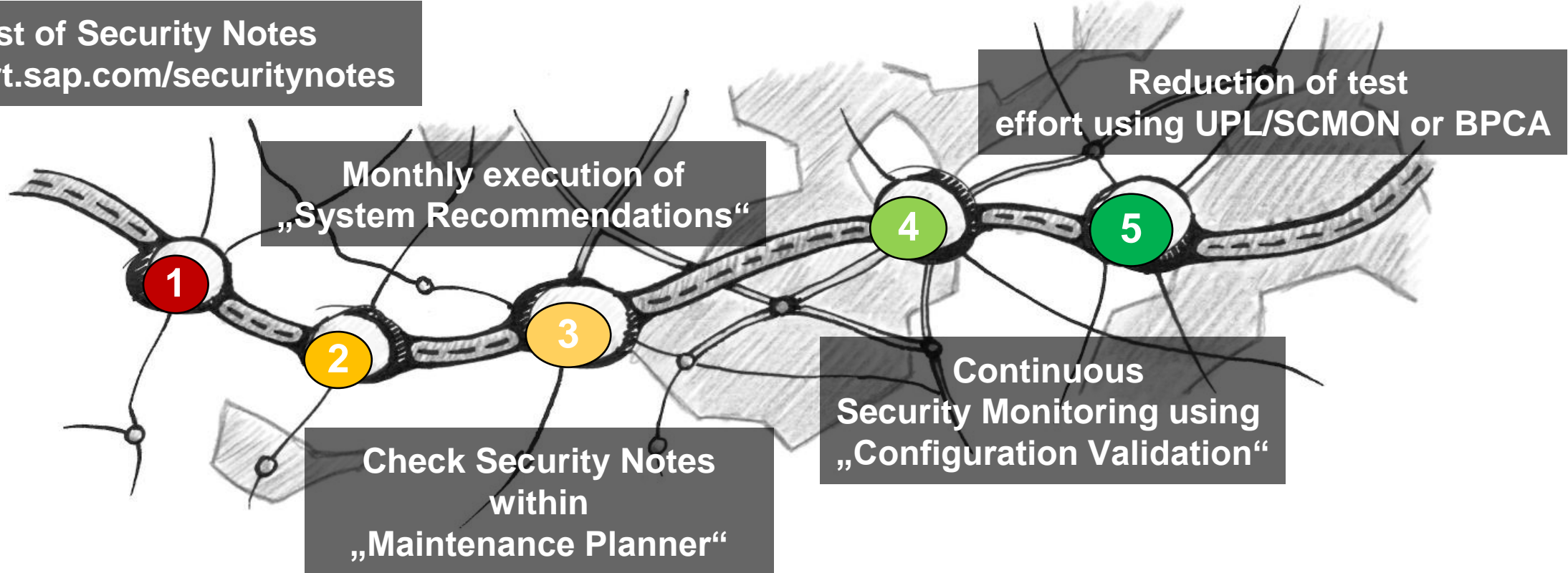
DSAG & ASUG & ES: Security Patching

Germany

America

EMEA/Asia

List of Security Notes
support.sap.com/securitynotes



Frank Buchholz, SAP CoE Security Services
July 2021



News from ASUG

➤ **ASUG Insights → Security**

<https://www.asug.com/insights/business-function/information-security>

<https://www.asug.com/insights/topic/cybersecurity>

➤ **ASUG Insights → Solution Manager**

<https://www.asug.com/insights/sap-product/sap-solution-manager-solman>

➤ **SAP Customer Influence program - SAP Identity Management 8.0 (2021)**

<https://influence.sap.com/sap/ino/#/campaign/2566>

News from DSAG

AK Security & Vulnerability Management

<https://dsagnet.de/go/security>

Registrierung:

<https://www.dsag.de/ab-sofort-live-das-neue-dsagnet>

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Weitere Anleitungen und Hilfestellungen finden Sie [auf dieser Seite](#).

Sollten Sie Schwierigkeiten beim Login haben, können Sie sich gerne an support@dsag.de wenden.

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KENNWORT:

[Kennwort vergessen?](#)

ANMELDEN

Konto beantragen

News from DSAG

Registrierung DSAGlive

https://www.scherer-event.com/DSAGLIVE_2021

Programm: <https://dsaglive.plazz.net/>

AK Security & AG Cloud Security direkt am ersten Tag, 20.09.2021 zwischen 11 und 12:30 und 13:30 bis 15 Uhr

Vortragsplanungen laufen zurzeit, Änderungen noch möglich:

- **CISO der SAP: „SAP Security Strategy Update“**
- **„SAP S4/HANA-Berechtigungen – First Steps bei der Migration“**
- **„Relevanz von Cyber Security in der Cloud“ von der SAP**
- **„SAP IDM als zentrales Identitymanagement bei der BARMER“**

Zeiten	Montag, 20.09.2021
08:30-09:00 Uhr	
09:00-10:30 Uhr	Keynote & Talk: Mut und Intelligenz – Jetzt!
10:30-11:00 Uhr	
Themengruppen 11:00-12:30 Uhr	Security & Vulnerability Management V01a V01b
	Infrastruktur & Betrieb V02a V02b
	Instandhaltungsmanagement V03a V03b
	Healthcare V04a V04b
	Globalization V05a V05b
12:30-13:30 Uhr	
	Virtuelle Pressekonferenz 14:00 Uhr
Themengruppen 13:30-15:00 Uhr	Cloud Security V06a V06b
	Master Data Management, Data Quality und Data Governance V07a V07b
	Automotive V08a V08b
	Steuern V09a V09b
	SAP V501a 01b

Hosts of the Security Notes Webinar

Overview

ASUG Information Security

English Wednesday 18:00-19:00 CEST = 12:00 EST = 9:00 PST

Calendar: <https://www.asug.com/events?events%5B%5D=1356781>

DSAG AK Security & Vulnerability Management

German Thursday 14:00-15:00 CET

Calendar: <https://www.dsag.de/arbeitsgremien/ak-identity-management-security/veranstaltungen>

You can find the latest version of the presentation on
SAP Support Portal /sos

<https://support.sap.com/sos>

→ **Advisories** → **Security Notes Webinar**

Advisories

- SAP Security Notes Advisory
- SAP Security Notes Webinar

Hosts of the Security Notes Webinar

ASUG

ASUG Information Security

Regular schedule:
Wednesday in the week after the Patch Day
18:00-19:00 CEST = 12:00 EST = 9:00 PST

Calendar:

<https://www.asug.com/events?events%5B%5D=1356781>

Events

ASUG offers a full slate of events crafted around key topics of interest for specific industries, business roles, and technologies. We look forward to seeing you—whether in person or online—very soon.

[Reset filters](#)

By Date

All upcoming

By Location

Any region

Event Type

- ASUG Executive Exchange
- ASUG Express
- ASUG Women Connect
- Classroom Training
- Industry and Technology Conferences
- Influence Councils
- Regional Chapter Events
- SAPPHIRE NOW + ASUG Annual Conference
- Think Tanks and Interest Groups

Webcasts x

Event Cost

Event Format

THE Best Solution Option for Refreshing Data in SAP S/4HANA®

August 18, 2020
Online

What's New from SAP Security Patch – August 2020

August 19, 2020
Online

Drive Productivity with Intelligent RPA

August 19, 2020
Online

ASUG Express: SAP Integration Essentials

August 20, 2020
Online

Hosts of the Security Notes Webinar

DSAG

DSAG AK Security & Vulnerability Management

Regular schedule:

Thursday in the week after the patch day

14:00-15:00 CET

Calendar:

<https://www.dsag.de/arbeitsgremien/ak-identity-management-security/veranstaltungen>

Overview

Support Portal – Security Notes

<https://support.sap.com/securitynotes>

This is a filtered list

→ All SAP Security Notes

Here you can find all Security Notes

Support Portal – Expert Search

<https://support.sap.com/notes>

→ Expert Search

for Document Type = SAP Security Notes

Here you can find all Security Notes

Security Patch Process FAQ

<https://scn.sap.com/community/security/blog/2012/03/27/security-patch-process-faq>

SAP Solution Manager application „System Recommendations“

This is the selection of security notes (from the full list on Support Portal), which *is relevant* or *might be relevant* for a specific technical system (ABAP, Java, HANA, etc).

Notes which are not shown here are not relevant for *this* system.

RSECNOTE and the corresponding chapter in the EWA show a small – and old – selection of security notes only.

Do not use RSECNOTE anymore - its content is outdated and incomplete - use System Recommendations!

TechEd Recording

SEC104 - Security Notes, System Recommendations and Business Process Change Analyzer

<http://events.sap.com/teched/en/session/13574>

This sessions shows how to set up a monthly patch process based on the application System Recommendations in SAP Solution Manager 7.1. See the integration with the usage procedure logging (UPL) and the business process change analyzer (BPCA) to identify business processes which might get affected by the implementation of security notes.

The presentation is based on the standard slide deck at <https://support.sap.com/sos>

→ [CoE Security Services - Security Patch Process](#)

In the Media Library you find the monthly updated [SAP Security Notes Advisory](#), too.



July 2021

Topics July 2021



SAP Insider: The Power of Prevention

Note [3066437](#) - SAP Support Package Stack Kernel 7.53 Patch Level 801

Note [3000663](#) - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager

Note [3066316](#) - Missing authorization check in SAP CRM ABAP

Note [3016478](#) - HANA Audit Policies for S/4HANA

Note [3053829](#) - SOS: No or wrong check results about profile parameters for combined ABAP/HANADB systems

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

SAP Insider: The Power of Prevention

The Power of Prevention

How Patching and Awareness Can Fortify SAP Systems Against Hacks

By Aditi Kulkarni, Product Security Senior Specialist, SAP Labs India

<https://www.sap.com/documents/2021/05/845d9eaa-de7d-0010-bca6-c68f7e60039b.html>

In our new normal of remote and cloud environments and rising cyber risk from more sophisticated threat actors, it is more critical than ever for organizations to prioritize their patching strategy. This article explains how patching and awareness can fortify SAP systems against hacks.

[Download the Document](#)

Note [3066437](#) - SAP Support Package Stack Kernel 7.53 Patch 801

SP Stack Kernel 753 PL 801 (release note [3066437](#)) replaces the **SP Stack Kernel 753 PL 800** (release note [3017467](#)) in order to enable the customers to apply the priority very high Security Note [3007182](#) with an SP Stack Kernel.

Limitation: You cannot use the Rolling Kernel Switch procedure (see Note [3046390](#))

Further corrections within this patch:

- Note [3032624](#) - Memory Corruption in SAP NetWeaver AS ABAP and ABAP Platform
- Note [3000663](#) - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager
- CommonCryptoLib was updated to version 8.5.39. For details see Note [3051811](#)
- Several corrections for kernel regressions. For details see Note [3066437](#)

You can use SP Stack Kernel 753 PL 801 plus [dw824+](#) to implement additional corrections.

Note 3000663 - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager

HANA

Support Package Patches

Software Component	Support Package	Patch Level	
SAP EXTENDED APP SERVICES 1	SP000	000133	SAP HANA XSA 1.0.133
SAP HANA DATABASE 2.0	SP048	000006	SAP HANA 2.0 SPS 04 Revision 48.06
	SP056	000000	SAP HANA 2.0 SPS 05 Revision 56
XS RUNTIME 1	SP000	000133	

Fixed versions of SAP Web Dispatcher are included in:

Note 3000663 - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager

WebDispatcher

The solution was published in Dec 2020 - March 2021 depending on the release

SAP WEB DISPATCHER 7.49	no security patch	→ patch 946
SAP WEB DISPATCHER 7.53	patch (724), 810	
SAP WEB DISPATCHER 7.73	patch 328	→ 334
SAP WEB DISPATCHER 7.77	patch (318), 323	→ 328
SAP WEB DISPATCHER 7.81	patch (29), 110	

(insufficient patch level), patch level of solution

→ including side effect solving note [3027971](#)

Note 3000663 - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager

Kernel (ICM)

SAP KERNEL 7.22 patch (1021), 1022		or stack kernel 1100	09.07.2021
SAP KERNEL 7.49 patch (938), 941	→ 946	or stack kernel 1000	25.05.2021
SAP KERNEL 7.53 patch (724), 810		or stack kernel 801 plus dw824+	
SAP KERNEL 7.73 patch 331	→ 334	or stack kernel 400	06.04.2021
SAP KERNEL 7.77 patch (318), 323	→ 328	or stack kernel 400 in July/August	
SAP KERNEL 7.81 patch (29), 110		or stack kernel 200 in August/September	
SAP KERNEL 7.82 patch (17), 21	→ 23		
SAP KERNEL 7.83 patch (6), 11	→ 14		
SAP KERNEL 7.84 no security patch	→ 13		

(insufficient patch level), patch level of solution

→ including side effect solving note 3027971

Medium probity Kernel security note 3032624 for disp+work requires slightly higher patch levels.

Note 3000663 - HTTP Request Smuggling in SAP Web Dispatcher and Internet Communication Manager

ICM is part of disp+work

You find the side effect solving note 3027971 in “Content Info” file (but not the security note.)

Example for Kernel 7.77:

dw_343-80004393.sar

CONTENT DETAIL FCMS PROPERTIES

<input type="checkbox"/>	Webgui: trace cleanup, removed some unimportant warnings	3025985	327
<input checked="" type="checkbox"/>	"Error in HTTP response: Invalid header field" caused by missing name	3027971	328
<input type="checkbox"/>	Conversation ID is not deleted from internal table	3031464	328
<input type="checkbox"/>	DP: No functional changes	3019319	328
<input type="checkbox"/>	DP: support for mutex wait or deadlock situations	3025345	328
<input type="checkbox"/>	Wrong trace entry "INVALID SAPGUI CONNECT DATA: TOOLBAR_HEIGHT"	2946456	328

Note 3066316 - Missing authorization check in SAP CRM ABAP

Deactivation of obsolete function `CRM_MKTTGGRP_FE_WRITE_FILE` implies deactivation of obsolete calling function `CRM_MKTTGGRP_FILE_EXPORT`

The feature for data export was introduced with note 672599 and secured using the logical file name (directory) `MARKETING_FILES` with note 1504416

Note 3066316

```
FUNCTION crm_mkttggrp_fe_write_file.  
  
*>>> START OF DELETION <<<<<  
DATA:  
  lv_file      TYPE string,  
  lv_line     TYPE string.  
  
* set file name  
lv_file = iv_file.  
  
* check if file is in directory (or below) of logical directory  
CALL FUNCTION 'FILE_VALIDATE_NAME'  
  EXPORTING  
    logical_filename = gc_fec_logical_file_name  
  CHANGING  
    physical_filename = lv_file
```

Note 1504416

```
*>>> START OF INSERTION <<<<<  
* directory, files, etc.  
CONSTANTS:  
  gc_fec_logical_file_name TYPE fileintern VALUE 'MARKETING_FILES'.  
*>>> END OF INSERTION <<<<<  
  
*>>> START OF INSERTION <<<<<  
* check if file is in directory (or below) of logical directory  
CALL FUNCTION 'FILE_VALIDATE_NAME'  
  EXPORTING  
    logical_filename = cl_crm_mktccm_pcpge_util=>gc_logical_file_name  
  CHANGING  
    physical_filename = lv_filename  
*>>> END OF INSERTION <<<<<
```

This class attribute shows the same name

Keep in mind: This logical file name (directory) `MARKETING_FILES` is still in use by background report `CRM_MKTTGGRP_EXPORT_BATCH` which you can use to export campaign data.

Note 3016478 - HANA Audit Policies for S/4HANA

Blog: Security by Default – HANA Audit Policies for S/4HANA

<https://blogs.sap.com/2021/06/08/security-by-default-hana-audit-policies-for-s-4hana/>

- **Catch events related to security configuration and log actions related to security**
- **Log changes for users and authorizations**
- **Log unusual events**
- **No unnecessary redundancies**
- **Avoid non-meaningful entries in the audit log**

Source: GitHub <https://github.com/SAP-samples/s4hana-hana-audit-policies>

(The documentation and another external Blog shows similar principles.)

Note 3016478 - HANA Audit Policies for S/4HANA

All policy templates use audit trail type TABLE and have specific retention times for this target.

Adjust these settings according to your requirements.

Some policy templates contain placeholders which you have to adjust, too.

Result on the Security tab:

Audit Policies

Policy	Policy Status	Audited Actions	Audited Action ...	Audit Level	Users	Target Object
_SAP_session connect	Enabled	CONNECT	UNSUCCESSFUL	ALERT		
_SAP_recover database	Enabled	BACKUP DATA, BACKUP CATALOG DELETE, R...	ALL	INFO		
_SAPS4_01 Schema Access...	Enabled	SELECT, INSERT, EXECUTE, UPDATE, DELETE	SUCCESSFUL	CRITICAL	All except:SAPEC1	SAPEC1

Note 3016478 - HANA Audit Policies for S/4HANA

Mandatory HANA Audit Policies (File: `1_hana_audit_policy_mandatory.sql`)

A first set of policies defined as mandatory ensure traceability of security relevant changes. These have the prefix “_SAP_”.

They are identical to the audit policies provided by "SAP HANA Cockpit Audit Policy Wizard" (starting with SAP HANA Cockpit 2.0 SP13).

No system specific content. No system specific adjustment necessary.

These policies are useful and recommended in any case. For new installations or for conversion (but not for updates) you get these Security-by-Default settings if no audit policy is defined yet.

Note 3016478 - HANA Audit Policies for S/4HANA

S/4HANA Schema Access Log HANA Audit Policies

(File: 2_s4hana_hana_audit_policy_recommended.sql)

The second set of policies define "recommended" policies for S/4 systems. These have the prefix "_SAPS4_".

These policies vary with the usage of the SAP HANA DB and **cannot be defined identical for all systems (i.e. replace placeholder <SAPABAP1> with list of real names)**.

Example: "_SAPS4_01 Schema Access Log" (This is an important policy!):

```
CREATE AUDIT POLICY "_SAPS4_01 Schema Access Log"  
  . . .  
  ON <SAPABAP1>.*  
  EXCEPT FOR <SAPABAP1>
```

Note 3016478 - HANA Audit Policies for S/4HANA

S/4HANA Optional HANA Audit Policies (File: `3_s4hana_hana_audit_policy_optional.sql`)

The third set called “optional” suggests policy definition for extended system changelog and monitoring. These have the prefix “_SAPS4_Opt_”.

Example: "_SAPS4_Opt_01 Repository"

In a development system you get many results so this policy might not be useful (and you find versions of repository objects elsewhere)

Example: "_SAPS4_Opt_02 Data Definition"

An audit for DDL statements is only workload relevant.

In case HANA is not exclusively used for S/4HANA (respective for ABAP-on-HANA in general) the policy will cause a huge amount of not relevant entries and a negative impact on performance is expected.

Note 3053829 - SOS: No or wrong check results about profile parameters for combined ABAP/HANADB systems

Solved

The guided self-service SOS did not use current values for profile parameters in case of a combined ABAP-on-HANA installation.

As a result, several checks showed

- wrong (false-negative) results in the individual chapters,
- wrong (false-positive) ratings in the rating overview table, and
- the checks about the password policy even vanish from the report.

Solution: Implement note 3053829 or use the automated content update

5.1.1.1 Secure System Internal Communication (BA091)

Parameter: system/secure_communication

Rating	Instance	Current Value	Recommended Value
!	All instances		ON

Profile parameter system/secure_communication is not set to ON. System-internal communication is not protected and may allow intruders to access your system.

5.1.1.3.1 Separation of Internal and External Message Server Communication (BA084)

Parameters: rdisp/msserv rdisp/msserv_internal

Rating	Instance	Error Condition	Value of rdisp/msserv	Value of rdisp/msserv_internal
!	All instances	rdisp/msserv_internal is not defined		

Profile parameter rdisp/msserv_internal is not defined or points to the same port as profile parameter rdisp/msserv_internal.

Main Chapter	Chapter	Check	Rating
Special Focus Checks	Special Focus Checks	Additional Super User Accounts Found (0022)	!
Authentication	General Authentication	Users Who Have Not Logged On for an Extended Period of Time (0010)	!
		Security Critical Events for End Users Are Not Logged in the Security Audit Log (0136)	!
		Interval After Which Inactive Users Are Logged Off Is Too Long (0137)	✓
		Multiple Logons Using the Same User ID Is Not Prevented (0138)	✓

Note 3053829 - SOS: No or wrong check results about profile parameters for combined ABAP/HANADB systems

Solved

Samples about affected checks:

- Password Logon is at Least Partly Allowed (0139)
- Password Policy (+ sub checks 0009, 0127, ...)
(These chapters are suppressed as well if no password logon is allowed according to check 0139)
- Multiple Logons Using the Same User ID Is Not Prevented (0138)
- SSO Ticket Can Be Sent via an Unsecured Connection (0608)
- Secure System Internal Communication (BA091)
- RFC Gateway Security Properties (BA079)
- Enabling an Initial Security Environment (BA080)
- RFC Gateway Access Control Lists (BA081)
- Separation of Internal and External Message Server Communication (BA084)
- Message Server Access Control List (BA086)
- Sending Trace Data to Remote Client (0169)
- Security Audit Log is not active (0170)
(This check still shows another issue if you are using the new 'Kernel Parameters' as of SAP_BASIS 7.50 instead of the profile parameters to configure the Security Audit Log)



June 2021

Topics June 2021



Notes [3020104](#) [3020209](#) [3021197](#) - Memory Corruption vulnerability in SAP NetWeaver ABAP

Note [3007182](#) - Improper Authentication in SAP NetWeaver ABAP Server and ABAP Platform

Note [3026990](#) - RFC Logon - New Internal Logon Ticket - Increased Compatibility Level

How to patch the Kernel

Kernel version vs. CommonCryptoLib version

CCDB-Read-API

Configuration Reporting for Kernel version and CryptoLib version

Recordings:
[DSAG \(German\)](#)
ASUG
SAP Learning HUB

Notes 3020104 3020209 3021197 - Memory Corruption vulnerability in SAP NetWeaver ABAP

All these notes solve similar vulnerabilities in different components of the Kernel:

Component	Note <u>3020104</u> Enqueue Server	Note <u>3020209</u> + RFC Gateway	Note <u>3031464</u> RFC Gateway	Note <u>3021197</u> disp+work
-----------	---------------------------------------	--------------------------------------	------------------------------------	----------------------------------

Update
→ complete kernel

SAP KERNEL 7.21				
SAP KERNEL 7.22	SP1022	SP1022		SP1022
SAP KERNEL 7.49	SP945	SP946		SP944
SAP KERNEL 7.53	SP810	SP810		SP810
SAP KERNEL 7.73	SP333	SP334		SP333
SAP KERNEL 7.77		SP328	SP328	SP326
SAP KERNEL 7.81		SP111		SP110
SAP KERNEL 7.82		SP024		SP023
SAP KERNEL 7.83		SP015		SP013
SAP KERNEL 7.84				SP000
SAP KERNEL 8.04	SP196	SP196		SP196

↓
Minimal patch level
(but check next slide, too)

Note 3007182 - Improper Authentication in SAP NetWeaver ABAP Server and ABAP Platform

Another HotNews targets SAP_BASIS and Kernel:

Component	Note <u>3020104</u> Enqueue Server	Note <u>3020209</u> + RFC Gateway	Note <u>3031464</u> RFC Gateway	Note <u>3021197</u> disp+work	Note <u>3007182</u> ABAP & disp+work
SAP KERNEL 7.21					SP1410
SAP KERNEL 7.22	SP1022	SP1022		SP1022	SP1022
SAP KERNEL 7.49	SP945	SP946		SP944	SP948
SAP KERNEL 7.53	SP810	SP810		SP810	SP810
SAP KERNEL 7.73	SP333	SP334		SP333	SP335
SAP KERNEL 7.77		SP328	SP328	SP326	SP330
SAP KERNEL 7.81		SP111		SP110	SP113
SAP KERNEL 7.82		SP024		SP023	
SAP KERNEL 7.83		SP015		SP013	
SAP KERNEL 7.84				SP000	SP001
SAP KERNEL 8.04	SP196	SP196		SP196	SP197

↓
Minimal patch level
(but check next slide, too)

Note 3007182 - Improper Authentication in SAP NetWeaver ABAP Server and ABAP Platform

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Component	Note <u>3020104</u> Enqueue Server	Note <u>3020209</u> + RFC Gateway	Note <u>3031464</u> RFC Gateway	Note <u>3021197</u> disp+work	Note <u>3007182</u> ABAP & disp+work	+ Side effect notes + Note <u>3030604</u>
SAP KERNEL 7.21					SP1410	SP1411 (*)
SAP KERNEL 7.22	SP1022	SP1022		SP1022	SP1022	SP1024
SAP KERNEL 7.49	SP945	SP946		SP944	SP948	SP1000 (stack)
SAP KERNEL 7.53	SP810	SP810		SP810	SP810	SP816 (SP801**)
SAP KERNEL 7.73	SP333	SP334		SP333	SP335	SP410 (*)
SAP KERNEL 7.77		SP328	SP328	SP326	SP330	SP336
SAP KERNEL 7.81		SP111		SP110	SP113	SP119
SAP KERNEL 7.82		SP024		SP023		SP025
SAP KERNEL 7.83		SP015		SP013		SP016
SAP KERNEL 7.84				SP000	SP001	SP009
SAP KERNEL 8.04	SP196	SP196		SP196	SP197	SP202

(*) Instead of patching Kernel 7.21 or 7.73 consider upgrading to newer Kernel release.

(**) [SAP Kernel News 14.06.2021](#): SP Stack Kernel 753 PL#801 to be delivered in a few weeks (01.07.2021). It will contain the priority very high SAP Security Note 3007182

↓
**Minimal patch level
to solve all issues**

Note 3007182 - Improper Authentication in SAP NetWeaver ABAP Server and ABAP Platform

New dynamic profile parameters as described in related note 3026990:

<code>rfc/intticket/mode</code>	Mode of the internal ticket for RFC respective http
<code>http/intticket/mode</code>	0 Old ticket (fallback, in case of troubleshooting)
	1 New ticket without IP address comparison (used if not all application servers are in the same address space)
	2 New ticket (default)
<code>rfc/intticket/validity</code>	Validity of the internal ticket in seconds
<code>http/intticket/validity</code>	0 No restrictions (as a temporary fallback until the clocks are synchronized)
	300 (default)
	The value must be greater than the time difference between the application servers and with the time difference with the database server and the maximum time for the first RFC call.

Note 3026990 - RFC Logon - New Internal Logon Ticket - Increased Compatibility Level

Side-effect solving notes:

Note 3039802 - WebSocket RFC with Alias User in Same System
Relevant as of kernel 7.77

Note 3045515 - RFC_WITHIN_SAME_SYSTEM - Wrong Result
Relevant for kernel 8.04 on ByD

Note 3046390 - Incorrect SAP compatibility level for SAP executables on Windows prevents rolling kernel switch (RKS)
Relevant for kernel 7.49 and higher

Note 3050126 - Internal RFC fails due to time difference between database and application server
Relevant for all kernel releases, no support for kernel 7.73 anymore, therefore go for a release update to kernel 7.77

How to patch the Kernel

- Apply the latest SP Stack Kernel if it already contains the correction. For the list of current SP Stack Kernels, see Note [2083594](#) (Kernel Versions and Kernel Patch Levels).
- Apply the hotfix only if you are experiencing a serious error that is not yet corrected by the latest SP Stack Kernel. **Yes, this is the case in case of serious security vulnerabilities!**
- Review the regression note for the required patch level before installing the kernel patch. For details, see Note [1802333](#) (Finding information about regressions in the Kernel using search term KRNL<release>PL).
- For instructions on how to download and install kernel patches, see Note [19466](#) (Downloading SAP kernel patches).
- The paper [Update Strategy for the Kernel of the Application Server ABAP in On Premise Landscapes](#) provides detailed information on the SAP recommendations.
- **Rolling Kernel Switch (RKS)**
<https://help.sap.com/viewer/1ba3197c1aa7489882770103e3a610dc/7.40.18/en-US>
“The rolling kernel switch (RKS) is an automated procedure that enables the kernel in an ABAP system to be exchanged without any system downtime. RKS can also be used to make parameter changes while the system is running. Usually, RKS only causes minimal restrictions for users of the system.”
The RKS is available as of Kernel release 7.41 and SAP_BASIS 7.40 SP 5
Limitation see notes [953653](#) and [2576697](#) → Restart is required

System Recommendations shows Kernel notes for Java systems

Parts of the Kernel are part of an Java Application Server too, e.g. the message server or the RFC gateway but not disp+work. Therefore you find the Kernel in the LMDB (and PPMS) for Java systems, too:

Navigation Tree

- FJ7 (Application Server Java)
 - Software
 - System Database
 - Technical Instances
 - Hosts
 - Related Logical Component Groups

Technical System FJ7 on mo-2a7157fc9 - FJ7 (Application Server Java) - Software

Product Instances | Product Instances (Details) | **Software Component Versions**

Add | Delete | Repository Information | Details | i

Display Name	Supplier	Installation Type	System or Instance	SP Level	Patch Level
PI GUI LIBRARY 7.50 (SAP_XIGUILIB 7.50)	automatic	Installed on System	FJ7 on mo-2a7157fc9	13	3
PI SCP BUILD TOOLS 7.50 (PI-SCP-BUILD 7.50)	automatic			13	0
PI SCP EXTENSIONS 7.50 (PI-SCP-EXT 7.50)	automatic			13	0
PORTAL BASIS 7.50 (EP-BASIS 7.50)	automatic			13	2
PORTAL BASIS API 7.50 (EP-BASIS-API 7.50)	automatic			13	0
SAP JVM 8.1 (SAPJVM 8.1)	automatic	Installed on Instance	Instance 02 of FJ7...	028	
SAP KERNEL 7.45 64-BIT UNICODE (KRNL64UC 7.45)	automatic			301	301
SAP ODATA4J+CXF-REST LIB 7.50 (ODATA-CXF-EXT 7.50)	automatic	Installed on System	FJ7 on mo-2a7157fc9	13	0
SAP SUPPORT TOOLS 7.50 (SUPPORTTOOLS 7.50)	automatic			13	0

In such a case you will see these notes in application System Recommendations for Java systems, too.

Kernel version vs. CommonCryptoLib version

The CommonCryptoLib is installed everywhere. It is part of the Kernel bundle as well, however, it is somehow loosely coupled with the Kernel and it might have happened that you have missed updating the CommonCryptoLib.

Whenever you plan Kernel updates for your complete system landscape you inspect the installed version of the Kernel beforehand.

You should have a look to the installed version of the CommonCryptoLib, too.

Use application Change Reporting respective transaction CCDB in the SAP Solution Manager to inspect the Configuration Stores `SAP_KERNEL` und `CRYPTOLIB`.

This is the view from report
[ZSHOW_KERNEL_STORES](#)

You can find this report on the wiki
[SAP CoE Security Services – Tools](#)

You need an [authorization](#) for `AI_CCDB_SC` with `CONT_AUTH=SECURITY` and `ACTVT=03` to access configuration store `CRYPTOLIB`.

See next page for a view based on standard BW reporting using application Configuration Validation respective Change Reporting

Short SID	Full ...	ABAP release	Kernel release	patch	Comp.date	CCL Version	CCL Date
FA7	ldcifa...	SAP BASIS 7.40	749_REL	936	07.12.2020	8.5.32	24.04.2020
FQ7	ldcif...	SAP BASIS 7.40	749_REL	910	06.06.2020	8.5.32	24.04.2020
FT7	ldcift...	SAP BASIS 7.40	749_REL	936	07.12.2020	8.5.32	24.04.2020
HHA	ldcih...	SAP BASIS 7.40	749_REL	312	12.08.2017	8.5.14	27.07.2017
IWH	spwd...	SAP BASIS 7.50	753_REL	601	17.03.2020	8.5.30	30.10.2019
OQL	atgv...	SAP BASIS 7.40	753_REL	422	03.06.2019	8.5.28	08.05.2019
Q5K	ldai1...	SAP BASIS 7.02	722_EXT_REL	1000	07.06.2020	8.5.33	26.05.2020
	ldciq...	SAP BASIS 7.02	722_EXT_REL	1000	07.06.2020	8.5.33	26.05.2020
Q8J	ldai1...	SAP BASIS 7.50	753_REL	718	07.11.2020	8.5.35	08.09.2020
	ldai2...	SAP BASIS 7.50	753_REL	718	07.11.2020	8.5.35	08.09.2020
	ldai3...	SAP BASIS 7.50	753_REL	718	07.11.2020	8.5.35	08.09.2020
	ldciq...	SAP BASIS 7.50	753_REL	718	07.11.2020	8.5.35	08.09.2020
Q05	ldciq...	SAP BASIS 7.50	745_REL	500	12.05.2017	8.5.12	12.04.2017
Q06	ldciq...	SAP BASIS 7.51	749_REL	800	24.10.2019	8.5.29	22.08.2019

CCDB-Read-API

Report ZSHOW KERNEL STORES uses the API functions of function group `DIAGST_CCDB_READ` to access configuration data from the SAP Solution Manager

You can call the API locally in the SolMan or remotely from an external system.
 You can test the functions in transaction SE37 by activating `DISPLAY=X`.
 The RFC functions return either ABAP table structures or XML documents.

Get technical systems having stores

`DIAGST_GET_TECH_SYSTEMS` `DIAGST_GET_TECH_SYSTEMS_RFC`

Get store directory

`DIAGST_GET_STORES` `DIAGST_GET_STORES_RFC` stores for systems
`DIAGST_GET_STORES_HOSTS` `DIAGST_GET_STORES_HOSTS_RFC` stores for hosts

Get store content for table stores, ini stores and property stores (`STORE_TYPE = TABLE, INI , PROPERTY`)

`DIAGST_TABLE_SNAPSHOT` `DIAGST_TABLE_SNAPSHOT_RFC` get snapshot
`DIAGST_TABLE_TIMERANGE` `DIAGST_TABLE_TIMERANGE_RFC` get history generic search
`DIAGST_TABLE_PARAMETERS` `DIAGST_TABLE_PARAMETERS_RFC` get history specific search

Get store content for text stores (`STORE_TYPE = TEXT`)

`DIAGST_TEXT_SNAPSHOT` `DIAGST_TEXT_SNAPSHOT_RFC` get snapshot
`DIAGST_TEXT_TIMERANGE` `DIAGST_TEXT_TIMERANGE_RFC` get history

Get store content for xml stores (`STORE_TYPE = XML`)

`DIAGST_XML_SNAPSHOT` `DIAGST_XML_SNAPSHOT_RFC` get snapshot
`DIAGST_XML_TIMERANGE` `DIAGST_XML_TIMERANGE_RFC` get history

Get store content for event stores (`STORE_TYPE = EVENT`)

`DIAGST_EVENT_PARAMETERS` `DIAGST_EVENT_PARAMETERS_RFC` get snapshot
`DIAGST_EVENT_TIMERANGE` `DIAGST_EVENT_TIMERANGE_RFC` get history

Import parameters	Value
SID	
INSTALL_NUMBER	
LONG_SID	
TECH_SYSTEM_TYPE	
GROUP_NAMESPACE	ACTIVE
GROUP_LANDSCAPE_CLASS	
GROUP_LANDSCAPE_ID	
GROUP_COMP_ID	
GROUP_SOURCE	
GROUP_NAME	
STORE_CATEGORY	
STORE_TYPE	
STORE_FULLPATH	
STORE_NAME	SAP_KERNEL
STORE_MAINALIAS	
STORE_SUBALIAS	
STORE_TPL_ID	
HAS_ELEMENT_FROM	0
HAS_ELEMENT_TO	0
ELEMENT_FILTER	C
CASE_INSENSITIVE	
PATTERN_SEARCH	X
SEARCH_STRING	
ONLY_RELEVANT	X
PROTECTED	A
DISPLAY	X
CALLING_APPL	

The API documentation is available on request.

Configuration Reporting for Kernel version and CryptoLib version

Use Configuration Reporting `0TPL_0SMD_VCA2_VAR_REP_CELL` to show configuration items in cells and configuration item names on the x-axis.

The screenshot shows the SAP Configuration Reporting interface. The 'Report Execution' tab is selected. Underneath, 'Reporting Templates' is also selected. The 'Configuration reporting' sub-tab is active. A table lists various configuration reports, with '0TPL_0SMD_VCA2_VAR_REP_CELL' highlighted. Below the table, there are options for 'Save selections', 'Suppress query variables pop-up', and 'Number of rows displayed'.

Reference system and comparison systems

Operator validation Consistency validation **Configuration reporting** Weighted validation

Save selections

Choose a configuration report

Configuration report	Description
0TPL_0SMD_VCA2_VAR_REP_HIER	Reporting using a hierarchical display (no validation)
0TPL_0SMD_VCA2_VAR_REP_FLAT	Reporting using a flat list (no validation)
0TPL_0SMD_VCA2_VAR_REP_CELL	Matrix Reporting (configuration item values in cells, configuration item names on x-axis - no validation)
0TPL_0SMD_VCA2_SYS_RECOM_NOTES	System recommendation reporting (missing SAP Notes calculated from system recommendations)

Suppress query variables pop-up 030 Number of rows displayed All in one page

Start configuration reporting

Configuration Reporting for Kernel version and CryptoLib version

Choose a comparison list containing the systems and start reporting.

Enter the required configuration stores on the variables screen:

SAP_KERNEL

CRYPTOLIB requires [authorization](#) for AI_CCDB_SC

Enter the required configuration items on the variables screen:

CCL

KERN_COMP_TIME

KERN_PATCHLEVEL

KERN_REL

Variables for Config.Validation - Items, Values in Cells

Reference System	#		
Systems	FA7	0020270862	
	FA7		
	FJ7		
	FQ7		
	FQ7_SM	0020270862	
	FSJ		
	FT7000010020908401		
			Insert Row
Type of System (ABAP, JAVA, ...)	ABAP		ABAP
Config Store	SAP_KERNEL		
	CRYPTOLIB		
			Insert Row
Configuration Item	CCL		
	KERN_COMP_TIME		
	KERN_PATCHLEVEL		
	KERN_REL		
			Insert Row
Date Range			To
Use selective Read of CIs	X		

Execute Check

(You could try to add ABAP_COMP_RELEASE as well but this produces a poor result.)

Configuration Reporting for Kernel version and CryptoLib version

Configuration Items					Configuration Item	CCL	KERN_COMP_TIME	KERN_PATCHLEVEL	KERN_REL
System	ConfigStore	Host	Instance	Path	Checked [UTC]	Value	Value	Value	Value
E73 0020187823	CRYPTOLIB	ld8201	ld8201_E73_03	#	20210614202421	8.5.33 May 26 2020			
	SAP_KERNEL	ld8201	ld8201_E73_03	#	20210614202421		Jun 7 2020 15:44:10	1000	722_EXT_REL
FA7 0020270862	CRYPTOLIB	ldcifa7	ldcifa7_FA7_00	#	20210614203129	8.5.32 Apr 24 2020			
	SAP_KERNEL	ldcifa7	ldcifa7_FA7_00	#	20210614203130		Dec 7 2020 12:39:35	936	749_REL
FBT 0020270862	CRYPTOLIB	ldai1fbt	ldai1fbt_FBT_00	#	20210614203138	8.5.36 Nov 5 2020			
		ldai2fbt	ldai2fbt_FBT_00	#	20210614203145	8.5.36 Nov 5 2020			
		ldcifbt	ldcifbt_FBT_00	#	20210614203149	8.5.36 Nov 5 2020			
	SAP_KERNEL	ldai1fbt	ldai1fbt_FBT_00	#	20210614203140		Mar 1		
		ldai2fbt	ldai2fbt_FBT_00	#	20210614203148		Mar 1		
		ldcifbt	ldcifbt_FBT_00	#	20210614203150		Mar 1		
FQ7 0020270862	CRYPTOLIB	ldcifq7	ldcifq7_FQ7_00	#	20210614203133	8.5.32 Apr 24 2020			
	SAP_KERNEL	ldcifq7	ldcifq7_FQ7_00	#	20210614203134		Jun		



















Adjust the view to get a better result

Remove rows:

Checked [UTC]
 ConfigStore
 Host or Instance
 Path

Navigation Block:

Rows

Checked [UTC]			
ConfigStore			
Host			
Instance			
Path			
System			

Configuration Reporting for Kernel version and CryptoLib version

Configuration Items

System	Host	Configuration Item Instance	CCL Value	KERN_COMP_TIME Value	KERN_PATCHLEVEL Value	KERN_REL Value
E73 0020187823	ld8201	ld8201_E73_03	8.5.33 May 26 2020	Jun 7 2020 15:44:10	1000	722_EXT_REL
FA7 0020270862	ldcifa7	ldcifa7_FA7_00	8.5.32 Apr 24 2020	Dec 7 2020 12:39:35	936	749_REL
FBT 0020270862	ldai1fbt	ldai1fbt_FBT_00	8.5.36 Nov 5 2020	Mar 12 2021 22:58:52	800	753_REL
	ldai2fbt	ldai2fbt_FBT_00	8.5.36 Nov 5 2020	Mar 12 2021 22:58:52	800	753_REL
	ldcifbt	ldcifbt_FBT_00	8.5.36 Nov 5 2020	Mar 12 2021 22:58:52	800	753_REL
FQ7 0020270862	ldcifq7	ldcifq7_FQ7_00	8.5.32 Apr 24 2020	Jun 6 2020 19:33:49	910	749_REL
FT7 0020908401	ldcift7	ldcift7_FT7_00	8.5.32 Apr 24 2020	Dec 7 2020 12:39:35	936	749_REL

Store the result as a bookmark for later use

Limitations:

- **Filter values, which you choose later, are not part of the bookmark**
- **No export to Excel possible**



May 2021

Topics May 2021



Use of Configuration Validation for stand-alone Web Dispatcher?

Note [2114798](#) - Unauthorized use of application functions in SAP GUI for HTML

Note [2745860](#) - Information Disclosure in Enterprise Services Repository of SAP Process Integration

Notes [3049661](#), [3049755](#) - Vulnerabilities in SAP Business One, version for SAP HANA (Business-One-Hana-Chef-Cookbook)

Note [2785547](#) - Introduction of the ICM LDAP Plug-In as Successor of the LDAP Connector

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Use of Configuration Validation for stand-alone Web Dispatcher?

Question/request from ASUG:

- We run a Web Dispatcher on the ASCS instance and want to validate the corresponding profile parameters in the ASCS profile files.
- Problem: It is not possible to validate the instance profile parameter values (i.e. using target systems 2ADISCL and 2AAUDIT).

Yes, that's true, stand-alone Web Dispatchers do not feed data into store ABAP_INSTANCE_PAHI

An incomplete workaround could be, to get and inspect the profile parameter text files in stores DEFAULT.PFL and <SID>_<Instance>_<hostname> of store group WEBDISP-PROFILE

Landscape	Group Source	Store Name	Group Name	Store Type
 Web Dispatcher Installed Technical System (WEB_FA7~WEBDISP~Idcifa7)	File System	DEFAULT.PFL	WEBDISP-PROFILE	Text Store
 Web Dispatcher Installed Technical System (WEB_FA7~WEBDISP~Idcifa7)	File System	WEB_W90_Idcifa7	WEBDISP-PROFILE	Text Store

Blog: How to monitor standalone (non-ABAP) Web Dispatcher Security in Solution Manager

<https://blogs.sap.com/2021/02/10/how-to-monitor-standalone-non-abap-web-dispatcher-security-in-solution-manager/>

Use of Configuration Validation for stand-alone Web Dispatcher?

Caveats

- The configuration stores of the instance profiles have individual names. You cannot automatically address all of them within one target system
- The configuration stores have type “text”. Use special line content operators as described in the blog.

How-to get the configuration stores of store group WEBDISP-PROFILE ?

- **Configuring Web Dispatcher for Root Cause Analysis in Solution Manager**
<http://wiki.sdn.sap.com/wiki/x/4I-uDQ#MaintenanceofProductintheSystemLandscape-WebDispatcher>
and
<https://wiki.scn.sap.com/wiki/display/SMSETUP/Configuring+Web+Dispatcher+for+Root+Cause+Analysis+in+Solution+Manager>

More information about profile parameters

- **Blog: Checking profile parameter values in SAP NetWeaver and SAP HANA**
<https://blogs.sap.com/2021/05/20/checking-profile-parameter-values-in-sap-netweaver-and-sap-hana/>

Note 2114798 - Unauthorized use of application functions in SAP GUI for HTML

Old “Support Package SAP Security note” from 2015

Correction Instruction:

```
*$ Valid for : $*
*$ Software Component SAP_BASIS SAP Basis component $*
*$ Release 700 SAPKB70026 - SAPKB70032 $*
*$ Release 710 SAPKB71013 - SAPKB71019 $*
*$ Release 711 SAPKB71109 - SAPKB71114 $*
*$ Release 701 SAPKB70113 - SAPKB70117 $*
*$ Release 702 SAPKB70210 - SAPKB70217 $*
*$ Release 730 SAPKB73005 - SAPKB73013 $*
*$ Release 720 SAPKB72006 - SAPKB72007 $*
*$ Release 731 SAPKB73104 - SAPKB73116 $*
*$ Release 740 SAPKB74003 - SAPKB74011 $*
```

SAPKB74012

SAP_BASIS 740: SP 0012

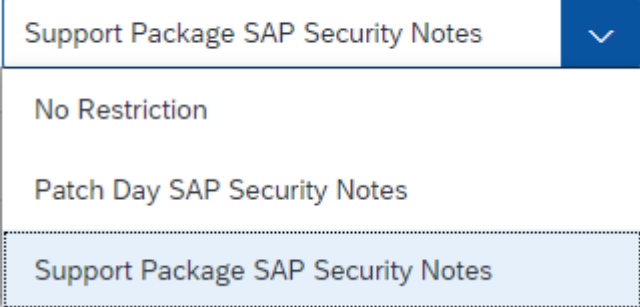
Component Version: SAP_BASIS 740 Registered On: 14.08.2015

Package Level: 0012

EPS File Name: CSN01200615320095995PAT

→ Should already be solved via Support Package

SAP Security Patch Day:



The screenshot shows a dropdown menu for 'SAP Security Patch Day'. The menu is open, displaying four options: 'Support Package SAP Security Notes' (selected), 'No Restriction', 'Patch Day SAP Security Notes', and 'Support Package SAP Security Notes' (highlighted with a dotted border). The selected option is shown in a blue bar with a downward arrow.

Note 2745860 - Information Disclosure in Enterprise Services Repository of SAP Process Integration

This note **enables** you to secure RFC connections from SAP PI to a backend system via SNC.

Implement this note i.e. if you want to encrypt all internal server-to-server connections, too.

The new option is available via Support Package (patch 0) only:

- 7.31 SP 28 16.12.2020
- 7.40 SP 23 16.12.2020
- 7.50 SP 20 02.03.2021

Documentation:

Importing IDocs and RFCs

<https://help.sap.com/viewer/0b9668e854374d8fa3fc8ec327ff3693/7.5.20/en-US/2ba48f3c685bc358e1000000a11405a.html>

Notes 3049661, 3049755 - Vulnerabilities in SAP Business One, version for SAP HANA (Business-One-Hana-Chef-Cookbook)

SAP Business One Product Support

<https://partneredge.sap.com/en/products/business-one/support.html>

<https://community.sap.com/topics/business-one>





Note Search

https://apps.support.sap.com/sap/bc/ui5_ui5/svt/sbos_notesearch/index.html

SAP Business One Note Search

Enter your search term or note number here ... Fuzzy Search: Off

SAP Business One Notes My Favorite Notes Hotnews Notes **Security Notes**

	3049755 - [CVE-2021-27613] Information Disclosure in SAP Business One (Chef business-one- Under certain conditions, Chef business-one-cookbook, used to install SAP Business One, allows an attacker to exploit an insecure temporary folder for incoming & outgoing payroll data and to access information which would otherwise be	11.05.2021	
	3049661 - [CVE-2021-27616] Multiple vulnerabilities in SAP Business One, version for SAP HANA This SAP Security Note addresses several vulnerabilities identified in SAP Business One for SAP HANA. The vulnerability details along with their CVE relevant information can be found below. Information Disclosure : Under certain conditions,	11.05.2021	

Notes 3049661, 3049755 - Vulnerabilities in SAP Business One, version for SAP HANA (Business-One-Hana-Chef-Cookbook)

Solution: Update the cookbook to latest version 0.1.20 from 06.05.2021 and then reinstall the system using this updated cookbook to get tightened file permissions

Install SAP Business One version of HANA automatically using Chef
<https://github.com/SAP-archive/business-one-hana-chef-cookbook>

Commits on May 6, 2021

Tighten permissions
SAPAurelien committed 12 days ago

Commits on Apr 21, 2021

Change permissions to files/folders in a more secure manner
SAPAurelien committed 27 days ago

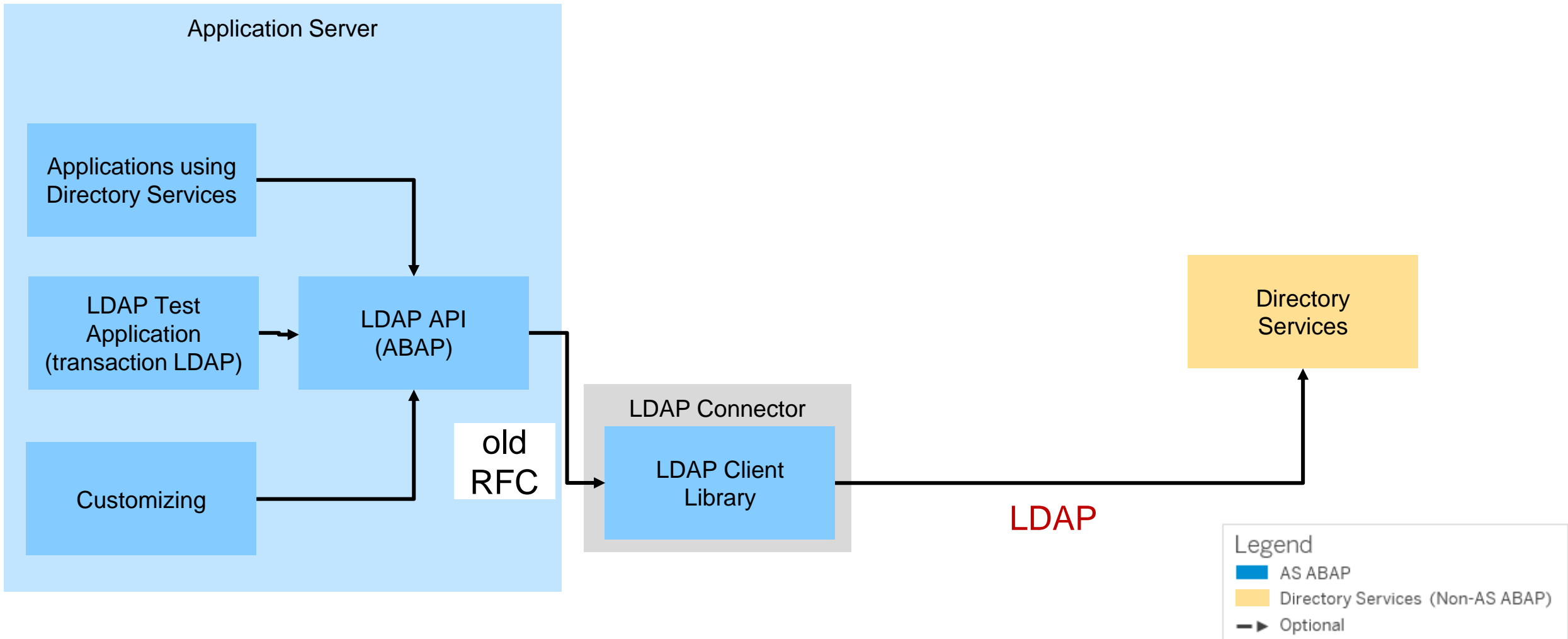
Version bump
SAPAurelien committed 27 days ago

Change the temporary backup path to a more secure location
SAPAurelien committed 27 days ago

```
12  recipes/server.rb
@@ -126,7 +126,7 @@
126 126  directory "#{v_installerlocalfolder}" do
127 127  owner "root"
128 128  group "root"
129 - mode 0777
+ mode 0744
130 130  recursive true
131 131  not_if { ::File.exist?("#{v_installerlocalfolder}") }
132 132  end
```

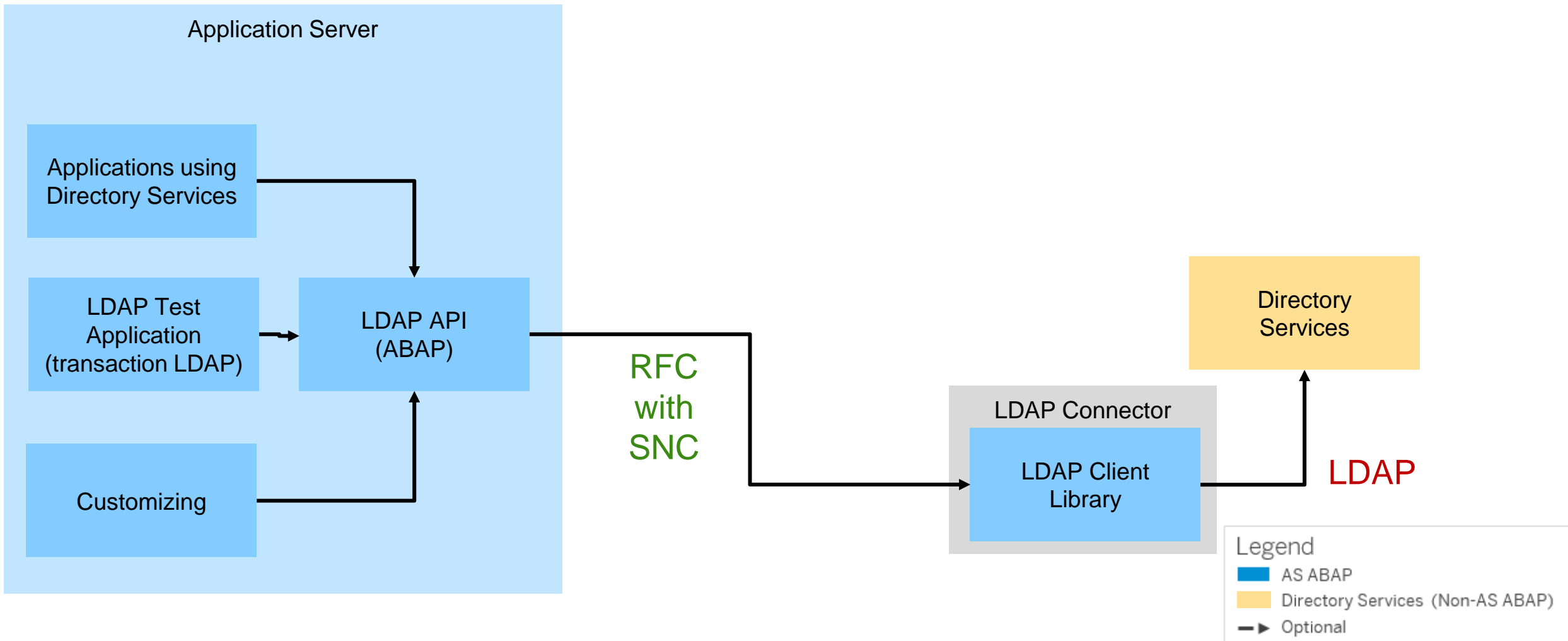

Secure LDAP connection via ICM

Note 2785547 - Introduction of the ICM LDAP Plug-In



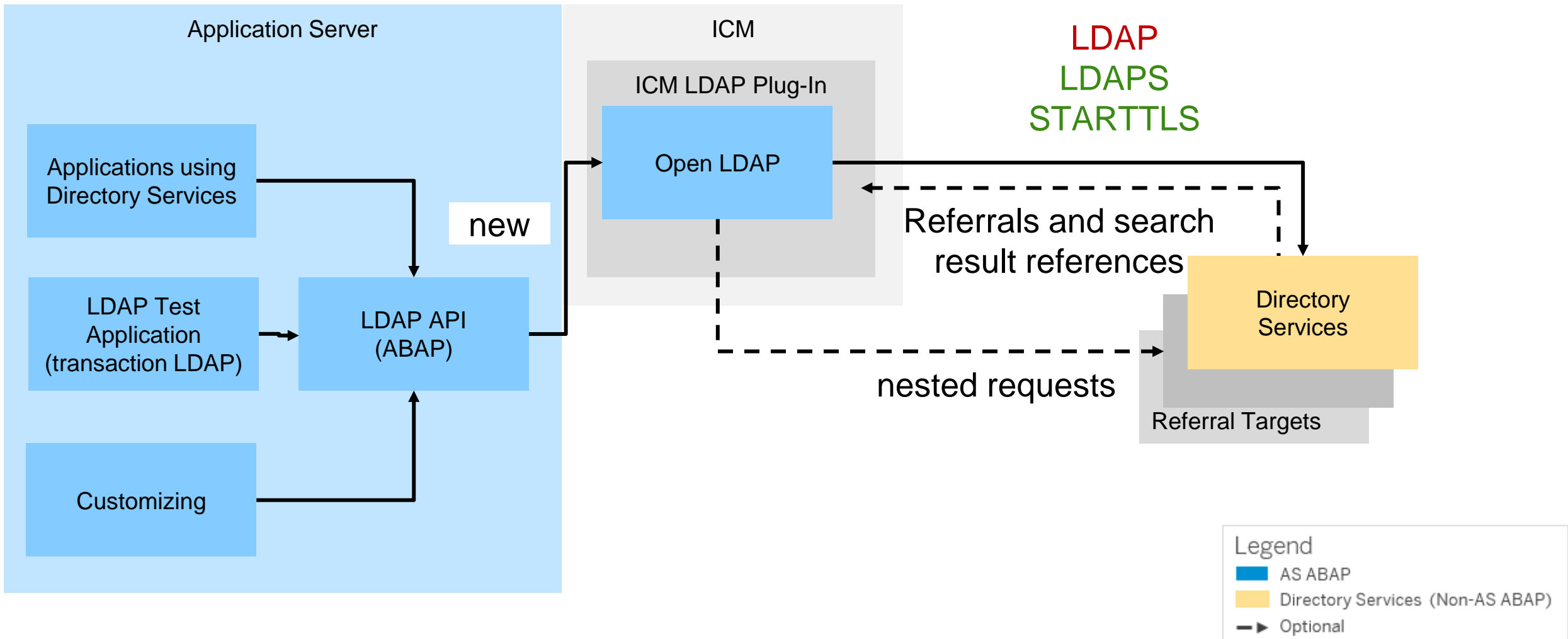
Secure LDAP connection via ICM

Note 2785547 - Introduction of the ICM LDAP Plug-In



Secure LDAP connection via ICM

Note 2785547 - Introduction of the ICM LDAP Plug-In



Secure LDAP connection via ICM

Note 2785547 - Introduction of the ICM LDAP Plug-In

You can replace old LDAP connector with “LDAP connection via ICM” as of SAP_BASIS 7.50 SP 16, 7.51 SP 9, 7.52 SP 5, 7.53 SP 3 with Kernel 7.53 patch 510 or higher

No other changes in configuration needed, however, just using the new connection via ICM does not give you an encrypted communication channel: you have to secure the connection using STARTTLS or LDAPS, too

Note 2844331 - Product Assistance on ICM LDAP Plug-In for ABAP Platform 7.53 SP03

Online Help – Directory Services

<https://help.sap.com/viewer/c6e6d078ab99452db94ed7b3b7bbcccf/201909.000/en-US/4874337175bb501ae10000000a42189b.html>

Note 2820255 - ICM LDAP RZ11 parameter documentation

Note 2801455 - ICM LDAP: Fix STARTTLS memory leak (only relevant for Kernel 7.77)

Secure LDAP connection via ICM

Transaction LDAP → Server

Server name	DEMO
LDAP Application	General <input type="checkbox"/> Default
LDAP Server	
Application to the Directory Service	
<input checked="" type="checkbox"/> Use ICM LDAP Plug-In	LDAP Client Library "OpenLDAP" (Vendor Version 20447); ICM LDAP API Version 1.0
Host name	1d7078
Port Number	389
Security Protocol	Unencrypted
System Logon	<input type="checkbox"/> Read Anonymously

Use LDAP via ICM instead of old LDAP connector

Without any other changes you still get an unencrypted connection

Secure LDAP connection via ICM

Transaction LDAP → Server

Server name

LDAP Application Default

LDAP Server

Application to the Directory Service

Use ICM LDAP Plug-In LDAP Client Library "OpenLDAP" (Vendor Version 20447); ICM LDAP API Version 1.0

Host name

Port Number

Security Protocol

SSL Client Identity Use for Authentication (SASL EXTERN

Provide Authorization Identity

Available security protocols:
port 389 STARTTLS
port 636 LDAPS

Available authentication options:
user + password
anonymous PSE
PSE with client certificate

LDAP Connection through ICM



The ICM LDAP plug-in is available in this system

Use

When this indicator is set, connections to this directory server are established through the ICM LDAP plug-in.

When this indicator is not set, the connection will be established through the middleware component "LDAP Connector", which needs to be configured and managed separately.

SAP recommends using the ICM LDAP plug-in for all LDAP server connections.

When activating this setting for an already existing directory server entry, test that the connection to the directory server still works afterwards for the following reasons:

- Although LDAP Connectors are regularly started on application server instances, you might have configured a detached LDAP Connector to mitigate network routing limitations from the network in which the application server resides and the network where the directory server resides. Switching from LDAP Connector to ICM LDAP plug-in then might then cause the connection to fail.
- You might use an LDAP Connector on Microsoft Windows using the implicit creation of a secure connection based on port 636 and having the server certificate in the trust store of the operating system. The ICM LDAP plug-in uses SAP standard technology to maintain trust (SSL client identities in transaction STRUST) and therefore you might need to add the directory server certificate to the SSL client identity you choose for usage by the ICM LDAP plug-in for this connection.
- The LDAP Connector, as using the LDAP client libraries of the operating system platform where it resides, might have implicit behavior which is not documented, and which is not present in the ICM LDAP plug-in.

Dependencies

- When all LDAP servers are configured to use the ICM LDAP plug-in, you can remove all LDAP Connectors.
- The LDAP Connector is considered deprecated with the existence of the ICM LDAP plug-in. It will not receive further feature updates and might be removed completely in future.
- Documentation of any type or source which asks you to create LDAP Connectors (and does not explicitly provide reasons why the ICM LDAP plug-in shall not be used) has been created before the ICM LDAP plug-in was developed and shall be ignored regarding this activity.
- The ICM LDAP plug-in only supports LDAP protocol version "LDAPv3".
- The ICM LDAP plug-in is not available on all platforms. When you have a system with heterogenous application servers (different operating systems or character byte widths), verify that the ICM LDAP plug-in is available on all of them before activating this setting. You can use this LDAP Servers maintenance view to review the state. It is shown next to the "Use ICM LDAP Plug-In" checkbox.

LDAP Connection through ICM

The LDAP Plug-in of the ICM requires the HTTP plug-in up to Kernel 7.81.

As of Kernel 7.82 you can enable (default) or disable specific outbound protocols for the ICM using new dynamic boolean profile parameters:

`icm/LDAP/enable_client`

Enable LDAP as client (used for STARTTLS as well)

`icm/LDAPS/enable_client`

Enable LDAPS as client

and

`icm/TCP/enable_client`

Enable TCP as client

`icm/TCPS/enable_client`

Enable TCPS as client



April 2021

Topics April 2021



Active Cyberattacks on Mission-Critical SAP Applications – Report from Onapsis

Note [3017823](#) - Information Disclosure in SAP Solution Manager

Note [3040210](#) - Remote Code Execution vulnerability in Source Rules of SAP Commerce

Note [3036436](#) - Potential XXE Vulnerability in SAP Process Integration (ESR Java Mappings)

Note [3039649](#) - Unquoted Search Path in SAPSetup

Note [3036679](#) - Update 1 to Security Note 1576763: Potential information disclosure relating to usernames

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Active Cyberattacks on Mission-Critical SAP Applications

<https://onapsis.com/active-cyberattacks-mission-critical-sap-applications>

- Note [1445998](#) - Disabling invoker servlet** CVE-2010-5326 Critical Jul 20, 2011
- Note [2234971](#) - Directory traversal in AS Java Monitoring** CVE-2016-3976 High Mar 8, 2016
- Note [2258786](#) - Potential information disclosure relating to SAP Web Administration Interface**
CWE-200 Medium Mar 07, 2016
- Note [2296909](#) - Denial of service (DOS) vulnerability in BPM** CVE-2016-9563 Medium Aug 08, 2016
- Note [2547431](#) - Directory Traversal vulnerability in Internet Sales** CVE-2018-2380 Medium Feb 13, 2018
- Note [2890213](#) - Missing Authentication Check in SAP Solution Manager** CVE-2020-6207 Critical Mar 10, 2020
- Note [2934135](#) - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)**
CVE-2020-6287 Critical Jul 14, 2020
- Note [2939665](#) - Disable/Enable LM Configuration Wizard | Critical API's in LM Configuration Wizard**

Protecting Standard Users

CWE-307 Critical

<https://help.sap.com/viewer/12a2bc096c53101493cef874af478673/7.0.37/en-US/3ecdacbedc411d3a6510000e835363f.html>

about CTB_ADMIN see also:

Troopers 2016: An easy way into your multi-million dollar SAP systems: An unknown default SAP account

https://troopers.de/events/troopers16/603_an_easy_way_into_your_multi-million_dollar_sap_systems_an_unknown_default_sap_account/

Note 1445998 - Disabling invoker servlet

2016-05

2015-10

Solution from 2010

Good news: The Invoker Servlet has been disabled by default as of release 7.20.

But: In case of older systems – including some double stack systems – you have to disable the vulnerable feature manually.

Check via Configuration Validation

Configuration Item: EnableInvokerServletGlobally

Configuration Store: servlet_jsp

Baseline Target System: 1JNOTEEST

FRUN Policy: BL2_SYSTEM-J.xml

The screenshot shows the SAP System Management Configuration interface. The 'System Properties' section is expanded to show 'XS2' configurations. The 'Global server configuration' is selected, and the 'Details' section is open, showing a table of properties:

Name	Startup Mode
security	core
servlet_jsp	always
shell	always

Below this, the 'Extended Details' section shows the 'Properties' table:

Name	Value
Invoker	
EnableInvokerServletGlobally	false

Note 2234971 - Directory traversal in AS Java Monitoring

Solution via Support Package

Note 2258786 - Potential information disclosure relating to SAP Web Administration Interface

2016-03

Configuration:

Deactivate support of public monitoring information in the web administration interface.
Set the subparameter **ALLOWPUB** of the profile parameter `icm/HTTP/admin_<xx>` to **FALSE**.
Then, access to administration pages without a logon is deactivated completely.

Check via Configuration Validation

Configuration Store: ABAP_INSTANCE_PAHI **respective** ABAP_INSTANCE_PAHI_ENH

Configuration Item: `icm/HTTP/admin*`

Check value to contain sub-parameter `ALLOWPUB=FALSE`

Baseline Target System (but not for this sub-parameter): 2ADISCL

FRUN Policy (but not for this sub-parameter): `BL2_DISCL-A.xml`

Related Notes:

Note 870127 - Security note for SAP Web Dispatcher

Note 2260323 - Internet Communication Manager (ICM) 7.20 security settings

Note 2296909 - Denial of service (DOS) vulnerability in BPM

Solution via Support Package

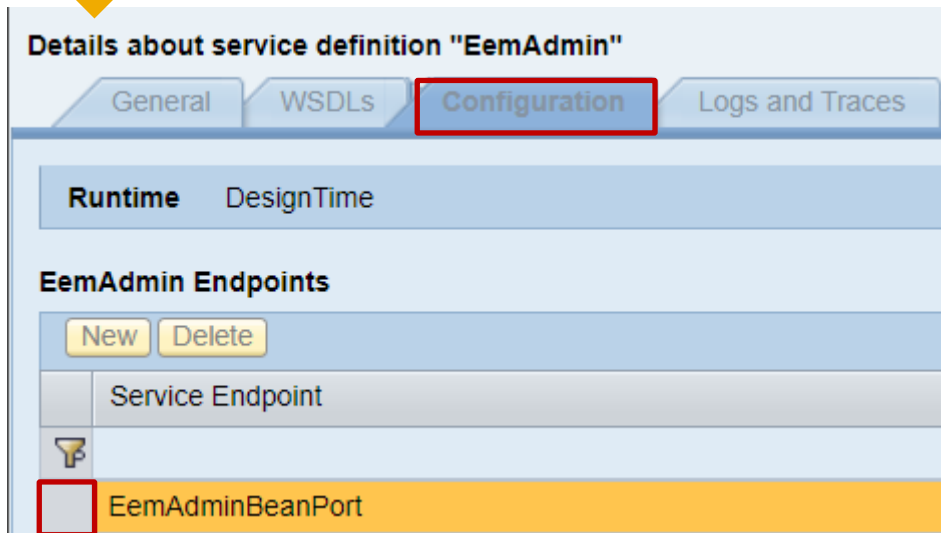
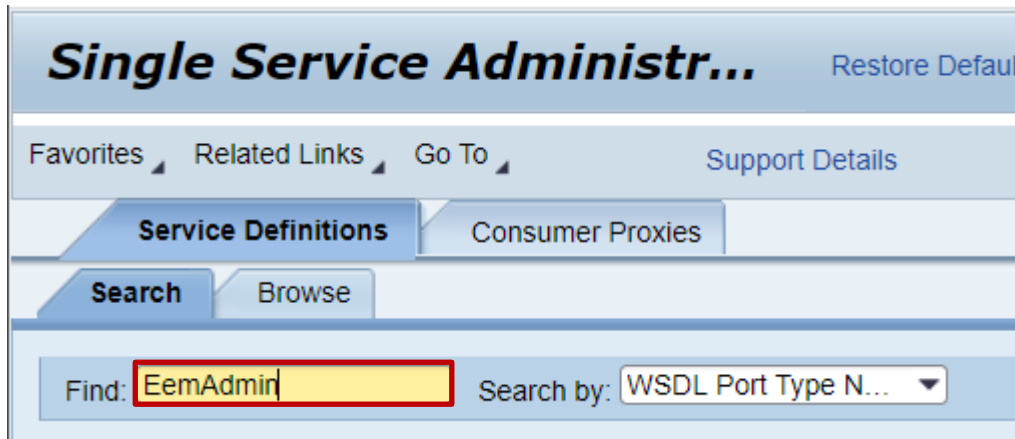
Note 2547431 - Directory Traversal vulnerability in Internet Sales

Solution via Support Package

Note 2890213 - Missing Authentication Check in SAP Solution Manager

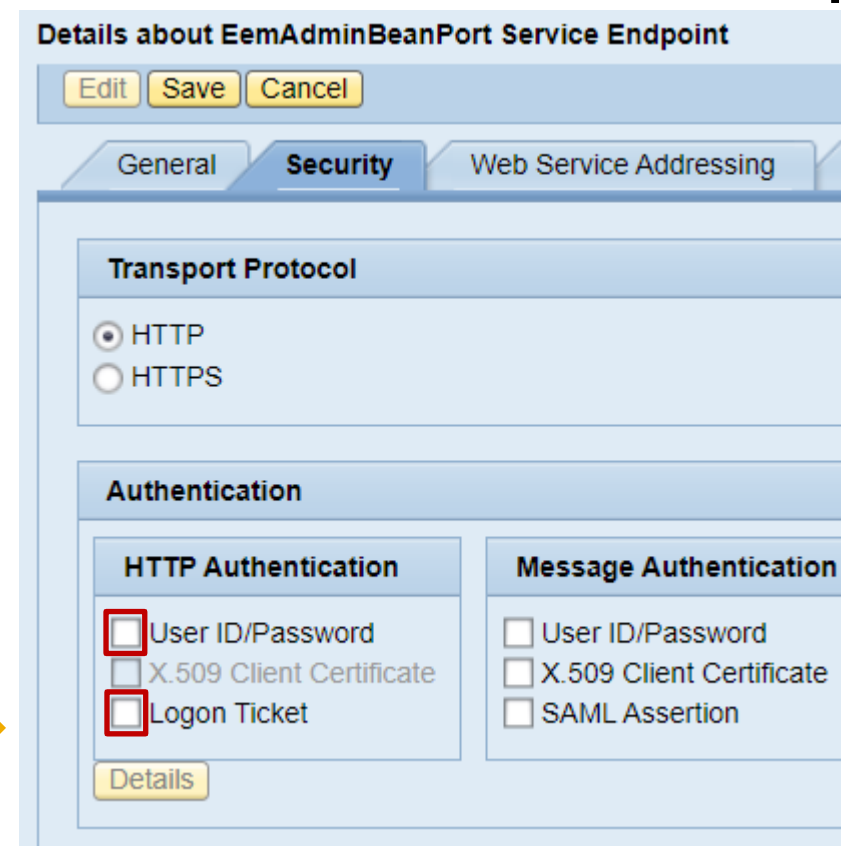
2020-11

2020-03



Solution via Support Package

Workaround: Manual activation of EemAdmin authentication as a partial fix.



Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

2020-09

2020-08

2020-07

At once: Deactivate on all application servers the aliases CTCWebService ctc/core ctcprotocol respective application tc~lm~ctc~cul~startup_app and validate that service CTCWebService is offline as described in KBA 2939665

In addition: Implement firewall rules for URL blocking as described in note 1589525 or develop filter rules for administrative requests according to note 451753

Short time: Implement the patch for Software Component LMCTC as described in the note.

The patch does not depend on any other component and you can it deploy online (without downtime or restart) using telnet (see KBA 1715441) or if possible SUM (see [Blog](#) and Note 1641062).

Software Download Example:

<https://launchpad.support.sap.com/#/softwarecenter/search/LM%2520CONFIGURATION%2520WIZARD%25207.50>

Scheduled: Schedule a combined update of all Java components. You can take the time for preparation, if you have deactivated the vulnerability described by this note.

Protecting Standard Users

EarlyWatch Alert Solution Finder in Support Portal Launchpad

<https://launchpad.support.sap.com/#/ewasolutionfinder>



6 Systems

Default Passwords of Standard Users (Security → ABAP Stack)

Standard users including SAP* or DDIC have default password

Report RSUSR003

Check via Configuration Validation

Configuration Store: STANDARD_USERS

Baseline Target System: 1ASTDUSR

FRUN Policy: BL2_STDUSR-A.xml

Prof.Param				
login/no_automatic_user_sapstar 1				
Client	User	Lock	Password Status	Reason
000	DDIC		Exists; Password not trivial.	
	SAP*		Exists; Password not trivial.	Locked
	SAPCPIC		Does not exist.	
	TMSADM		Exists; Password not trivial.	
001	DDIC		Exists; Password not trivial.	
	SAP*		Does not exist. Logon not possible. See SAP Note 2383	
	SAPCPIC		Does not exist.	
	TMSADM		Does not exist.	

Note 3017823 - Information Disclosure in SAP Solution Manager

The ABAP correction instruction **already solves the vulnerability** of the RFC enabled function modules by clearing the critical data.

In addition you find references to normal, functional corrections for software component LM-SERVICE. These corrections are not directly linked to the security issue.

```

*&-----
*& FUNCTION FM_GET_ISEMS
*&-----
...
CALL METHOD CL_DIAGSTP_WILYEM_UTILS=>GET_ISEMS
IMPORTING
EX_EMS = EX_ISEMS.

*>>> START OF DELETION <<<<<
*>>> END OF DELETION <<<<<<<

*>>> START OF INSERTION <<<<<
LOOP AT ex_isems ASSIGNING FIELD-SYMBOL(<fs_isem>).
CLEAR <fs_isem>-users.
ENDLOOP.
*>>> END OF INSERTION <<<<<<<
    
```

Referenced notes	LM-SERVICE 7.20 SP 8 Patch 27	LM-SERVICE 7.20 SP 9 Patch 21	LM-SERVICE 7.20 SP 10 Patch 13	LM-SERVICE 7.20 SP 11 Patch 7	LM-SERVICE 7.20 SP 12 Patch 1
3028401 - Improve Logging for SMDA Connection Issues	X	X	X	X	X
3023350 - Solution Manager Introscope Integration Change	X	X	X	X	X
3010560 - Entries at HostAgentMonitoring Webservice are Missing	patch 26	X	X	X	X
3009666 - Solution Manager Corrections	X	X	X	X	
2997708 - Support Solution Manager Java Servers Without a P4S Port	-	-	patch 11	X	
2979821 - Protect Webservices Defined by .wsdef Files	-	X	X	X	

Note 3040210 - Remote Code Execution vulnerability in Source Rules of SAP Commerce

Version 17 from 13.04.2021 is the first published version.

SAP Commerce installations that do **not** include any extensions from the Rule Engine module are **not** affected.

An installation **is** directly affected if you grant write privileges on such Source Rules to employees, who shall not be able to execute script code in SAP Commerce. **But of course you always should keep installed software up to date.**

The patch itself was published on 15.04.2021:

```
graph TD; rulebuilderbackoffice --> ruleenginebackoffice; ruledefinitions --> ruleengineservices; droolsruleengineservices --> ruleengineservices; ruleenginebackoffice --> ruleengineservices; ruleengineservices --> ruleengine; ruleengineservices --> ordercalculation;
```

<input type="checkbox"/>	Name	Patch Level	File Type	File Size	Release Date	Change Date	Related Info
<input type="checkbox"/>	CXCOMM201100P_5-70005693.ZIP Patch for CX COMMERCE 2011 SP00	5	ZIP	1520342 KB	15.04.2021	15.04.2021	☰
<input type="checkbox"/>	CXCOMM201100P_4-70005693.ZIP Patch for CX COMMERCE 2011 SP00	4	ZIP	1493390 KB	09.03.2021	09.03.2021	☰

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Note 3036436 - Potential XXE Vulnerability in SAP Process Integration (ESR Java Mappings)

This is a knowledge-sharing note about **securing custom-made Java mappings** for XML documents by disabling DTD:

```
setFeature("http://apache.org/xml/features/disallow-doctype-decl", true)
```

The topic is relevant for any kind of Java programs using XML, e.g. in products like SAP PO, MII Workbench, etc.

Java mapping

<https://help.sap.com/viewer/0b9668e854374d8fa3fc8ec327ff3693/7.5.20/en-US/4bf40fddc0c33de4e1000000a42189e.html>

Securing parsers, schema validation and transformer

<https://help.sap.com/viewer/c591e2679e104fcd8dc8e77771ff524/7.5.20/en-US/4c839c4dc19c4872990439d2945ee238.html>

Related note about securing against XXE in SAP standard content:

Note 2932473 - Information Disclosure in SAP NetWeaver (XMLToolkit for Java)

Note [3036436](#) - Potential XXE Vulnerability in SAP Process Integration (ESR Java Mappings)

Applications might require relaxed rules:

- **KBA [2879503](#) - AS Java is not getting started with exit code 2150 - DOCTYPE is disallowed (Issue during upgrade)**

Other applications work fine but show unnecessary log entries:

- **KBA [2629349](#) - How to stop the message generated from org.apache.tomcat.util.digester.Digester in SMP server log**
- **KBA [2440311](#) - Error message DOCTYPE is disallowed**

Note 2818965 - Clickjacking vulnerability in Runtime Workbench of SAP Process Integration

The correction of the note enables a specific application of SAP Process Integration to use the general Clickjacking Protection for JSP on the Application Server Java

Related Notes:

Note 2286679 - Clickjacking Framing Protection in JAVA

Note 2170590 - Central Whitelist maintenance & activation

Note 2263656 - HTMLB

Note 2290783 - Java Server Pages

Check configuration using Transaction CCDB

Configuration Store: Clickjacking

Configuration Item: ClickjackingProtectionService

<input type="checkbox"/>	Landscape	Component Version	Store Name	Element Status	Element Class	Element Name	Element Value
<input type="checkbox"/>	Java Instance (FBJ~JAVA~ldcifbj_FBJ_04)	J2EE ENGINE SERVERCORE 7.50	Clickjacking	Initial (Current)	Table Row	ClickjackingProtectionService	true
<input type="checkbox"/>	Java Instance (PO1~JAVA~nced60229921a_PO1_00)	J2EE ENGINE SERVERCORE 7.31	Clickjacking	Initial (Current)	Table Row	ClickjackingProtectionService	false
<input type="checkbox"/>	Java Technical System (PO1~JAVA)	J2EE ENGINE SERVERCORE 7.31	Clickjacking	Initial (Current)	Table Row	ClickjackingProtectionService	false

Note 3039649 - Unquoted Search Path in SAPSetup

Application Component BC-FES-INS

→

Setup and Administration of the central Installation Server

SAP GUI Packaging and Installation

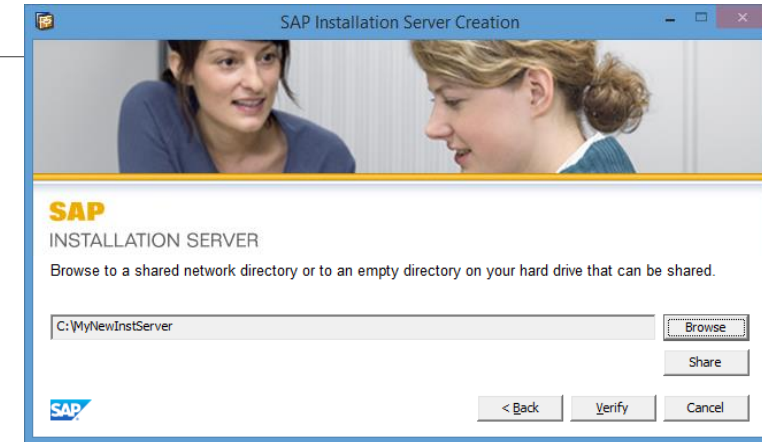
<https://wiki.scn.sap.com/wiki/display/Basis/SAP+GUI+Packaging+and+Installation>

SAP Frontend Installation Guide

https://help.sap.com/doc/2e5792a2569b403da415080f35f8bbf6/760.05/en-US/sap_frontend_inst_guide.pdf

SAPSetup Guide

https://help.sap.com/doc/1b770fc9e71e4062851ffe7de158007d/9.0.105.0/en-US/SAPSetup_Guide.pdf



Note 3036679 - Update 1 to Security Note 1576763: Potential information disclosure relating to usernames

This is a secure-by-default story:

Note 1576763 introduced a switched authorization check for TH_USER_LIST in Oct. 2011

- Release 4.6C – 7.20: **Off by default** but you can activate the new check
- Release 7.30: **Off by default** but you couldn't activate the new check
This is now solved with Note 3036679
- Release 7.31: **On by default** but you can de-activate the new check
- Higher releases: **Always on** (the switch was removed)

More interesting question: Who is still running systems on 7.30?

End of Mainstream Maintenance: 31.12.2020



March 2021

Topics March 2021



Blogs: Java Parameter service/protectedwebmethods

Blogs: RFC Gateway security

Note [3017378](#) - Possible authentication bypass in SAP HANA LDAP scenarios

Note [3022622](#) - Code injection vulnerability in SAP Manufacturing Integration and Intelligence

Note [3022422](#) - Missing Authorization Check in SAP NetWeaver AS JAVA (MigrationService)

How to secure P4 on AS Java

Note [2574394](#) - Configure Diagnostics Agents with check for Client Certificate

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Blogs: Java Parameter service/protectedwebmethods

Blogs by Johannes Goerlich:

Go for `service/protectedwebmethods = ALL first`

Protecting web methods offered by SAP Instance Agent

<https://blogs.sap.com/2021/02/22/protecting-web-methods-offered-by-sap-instance-agent>

Protecting web methods offered by SAP Host Agent

<https://blogs.sap.com/2021/02/22/protecting-web-methods-offered-by-sap-host-agent>

Profile Parameters:

`service/protectedwebmethods`

`service/hostname`

`service/http/hostname`

`service/https/hostname`

`service/http/acl_file`

`service/https/acl_file`

`service/admin_users`

`service/admin_group`

`service/sso_admin_user_<xx>`

Blogs: RFC Gateway security

Blogs by Johannes Goerlich:

RFC Gateway security

Part 1: General questions about the RFC Gateway security

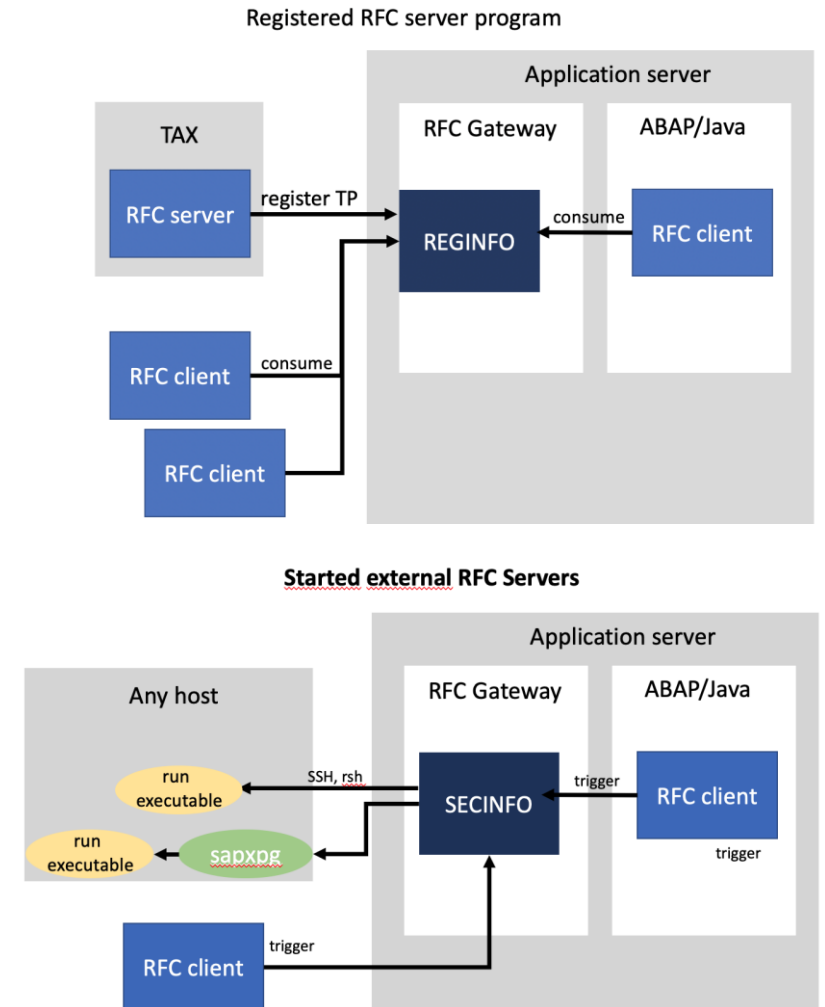
Part 2: reginfo ACL in detail

Part 3: secinfo ACL in detail

Part 4: prxyinfo ACL in detail

Part 5: ACLs and the RFC Gateway security

Part 6: RFC Gateway Logging



Note 3017378 - Possible authentication bypass in SAP HANA LDAP scenarios

LDAP Servers used for authentication should not allow unauthenticated authentication

Overview (Dec 2018)

Product	Can be disabled	Disabled by default
Red Hat Directory Server	Yes	<u>Yes</u>
OpenLDAP	Yes	<u>Yes</u>
Novell eDirectory	Yes	<u>No</u>
Oracle/Sun Directory Server	Yes	<u>Yes</u>
Microsoft AD LDS/ADAM	Yes* (Server 2019+)	No
Microsoft Active Directory	Yes* (Server 2019+)	No

Apache is not affected

<https://directory.apache.org/apacheds/advanced-ug/4.1.1.3-unauthenticated-authn.html>

LDAP: Disable Unauthenticated Auth, but keep Anonymous Auth (May 2015)

<https://community.microfocus.com/t5/eDirectory-User-Discussions/LDAP-Disable-Unauthenticated-Auth-but-keep-Anonymous-Auth/td-p/2200547>

AD, LDS and LDAP unauthenticated binds: A series of unfortunate security events (Jan 2017)

<https://blog.lithnet.io/2017/01/ad-lds-and-ldap-unauthenticated-binds.html>

Disabling Unauthenticated Binds in Active Directory (Dec 2018)

<https://blog.lithnet.io/2018/12/disabling-unauthenticated-binds-in.html>

Note 3022622 - Code injection vulnerability in SAP Manufacturing Integration and Intelligence

SAP MII allows developer users having at least role `SAP_XMII_Developer` to create dashboards (which is a kind of limited development activity).

Such a developer could attack the system by **injecting malicious JSP** leading e.g. to **remote OS code execution on the server**.

- **Use strict separation between development and production systems**
- **Reduce assignments to role `SAP_XMII_Developer`, `SAP_XMII_Administrator`, and `SAP_XMII_Super_Administrator` in production systems**

Note 3022622 - Code injection vulnerability in SAP Manufacturing Integration and Intelligence

SAP MII - Security Guide

Authorizations

<https://help.sap.com/viewer/9e5b0e960a9f49828522215c3fa14e71/15.4/en-US/c1eb0758e9219244e10000000a4450e5.html>

Roles **SAP_XMII_Developer**, **SAP_XMII_Administrator**, and **SAP_XMII_Super_Administrator**

Actions for Permissions

<https://help.sap.com/viewer/d70c3ac3566b41dd896cd7cecc94e14a/15.4/en-US/4c9768bdc14d60c3e10000000a15822d.html>

Actions **XMII_SSCE_ALL**, **XMII_SSCE_CHANGE**, ...

SAP MII Self Service Composition Environment

„Create dashboards using any SAP MII content (Query Templates, Display Templates, MDO/KPI Objects, and Resource Files), UI elements, and tags from Plant Information Catalog.”

“The **Source Code** tab (html, css, and client-side Javascript) is hidden by default. Only users assigned with action **XMII_SSCE_DEVELOPER** can edit the source code.”

Note 3022622 - Code injection vulnerability in SAP Manufacturing Integration and Intelligence

What else? Here is a sample from the guideline:

Connections (remote calls)

<https://help.sap.com/viewer/d70c3ac3566b41dd896cd7cecc94e14a/15.4/en-US/4c72e07ce631469ee10000000a15822d.html>

and

MDO Lifecycle (jobs)

<https://help.sap.com/viewer/d70c3ac3566b41dd896cd7cecc94e14a/15.4/en-US/4cc8daa98e9b60c5e10000000a15822d.html>

use the

Credential Store

<https://help.sap.com/viewer/d70c3ac3566b41dd896cd7cecc94e14a/15.4/en-US/4c983ef0311160c4e10000000a15822d.html>

- You can verify role assignments and usage of these technical users with stored credentials. (There exist a special “Usage” tab.)

Note [3022422](#) - Missing Authorization Check in SAP NetWeaver AS JAVA (MigrationService)

Do you need to run a full Support Package update via SUM or is it sufficient just to apply patches?

„As a final solution, you have to patch your systems with a new version of the J2EE-APPS.SCA,. ...
NOTE: This solution is an offline deployment that requires a restart of your systems.”

Note [2886099](#) - FAQ for SAP Note 3022422

“3. Is it possible to upgrade J2EE-APPS only or should the whole stack be upgraded?
J2EE-APPS should be applied together with all its dependencies according to "SCA Dependency Analysis" tool.”


You find the "SCA Dependency Analysis" in the SAP Support Portal when you navigate to the download page for Java packages.

See Note [1974464](#) - Information on SCA Dependency Analysis for Java download objects





Note 3022422 - Missing Authorization Check in SAP NetWeaver AS JAVA (MigrationService)

[https://apps.support.sap.com/sap\(bD1lbiZjPTAwMQ==\)/support/swdc/notes/index.do?cvnr=73554900100200001504&support_package=SP015&patch_level=000014](https://apps.support.sap.com/sap(bD1lbiZjPTAwMQ==)/support/swdc/notes/index.do?cvnr=73554900100200001504&support_package=SP015&patch_level=000014)









J2EE ENGINE APPLICATIONS 7.50 - SP015: Select Files for Download

	File type	Instantiation	Download Object	Title	Info File	File Size (KB)	Last Changed	SCA Dependency
<input type="checkbox"/>	SCA	# OS independent	J2EEAPPS15P_15-80000576.SCA	SP15 Patch15 for J2EE ENGINE APPLICATIONS 7.50	Info	7268	10.03.2021	

The following objects are recommended with minimum patch level due to potential dependencies for the download request:

Software Component Version	Support Package	Min. Patch Level	Download
J2EE ENGINE BASE TABLES 7.50	SP015	000002	
J2EE ENGINE FACADE 7.50	SP015	000002	
J2EE ENGINE SERVERCORE 7.50	SP015	000034	
MESSAGING SYSTEM SERVICE 7.50	SP015	000032	

The following objects are recommended with minimum patch level due to potential dependencies for the download request:

Software Component Version	Support Package	Min. Patch Level	Download
ESR 7.50	SP015	000010	
J2EE ENGINE APPLICATIONS 7.50	SP015	000013	
NW DEVELOPER STUDIO 7.50	SP015	000016	
PI GUI LIBRARY 7.50	SP015	000003	
SOA MONITORS BASIC 7.50	SP015	000004	
XI ADAPTER FRAMEWORK 7.50	SP015	000057	
XI CONNECTIVITY SE 7.50	SP015	000003	
XI TOOLS 7.50	SP015	000017	

Example for J2EE ENGINE APPLICATIONS 7.50 SP 15

Several other packages are required (if installed)

Note 3022422 - Missing Authorization Check in SAP NetWeaver AS JAVA (MigrationService)

What about the workaround?

The workaround within SAP note 3030298 is sufficiently protecting the system till the next system restart, but during the next startup of the system the system becomes vulnerable again for the time until the deployed service is running.

That is why you should apply the permanent solution as per SAP note 3022422 the latest during the next system restart.

You can use Maintenance Planner to download only the required patches for your system without generating a stack xml file.

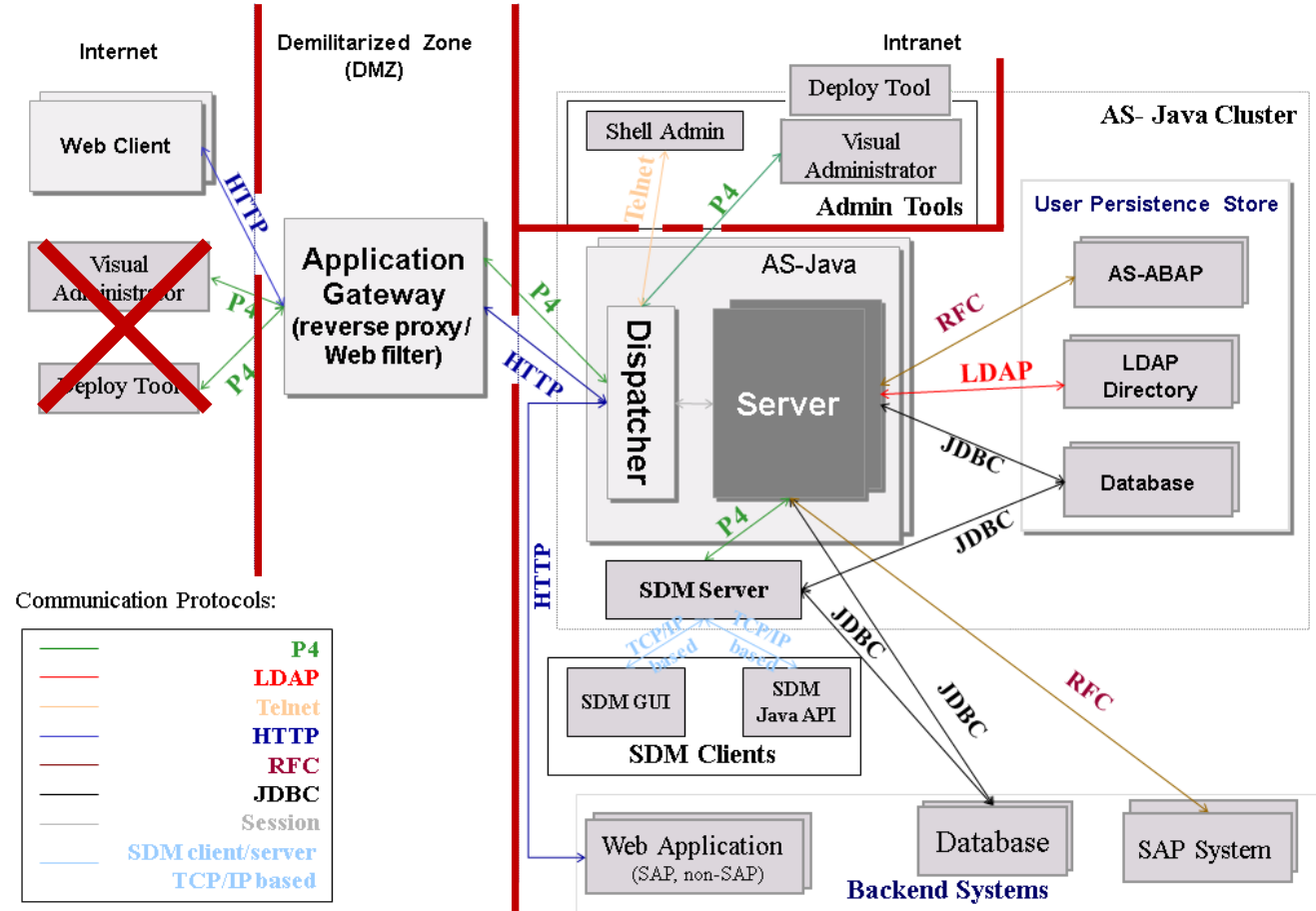
You can also use 'SAP NW Java Support Tool' to calculate dependencies as per KBA 2352717. see KBA1715441 - Deploy/Undeploy/Force Redeploy EAR/SDA/SCA files on SAP AS JAVA

How to secure P4 on AS Java

TCP/IP Ports of All SAP Products: <https://help.sap.com/viewer/ports>

P4 / P4S is only required locally on the Java server respective in Visual Administrator and Deploy Tools

- Do not expose P4 and P4S on internet
- Block or restrict P4 and P4S on network level between user zone and server zone



Transport Layer Security

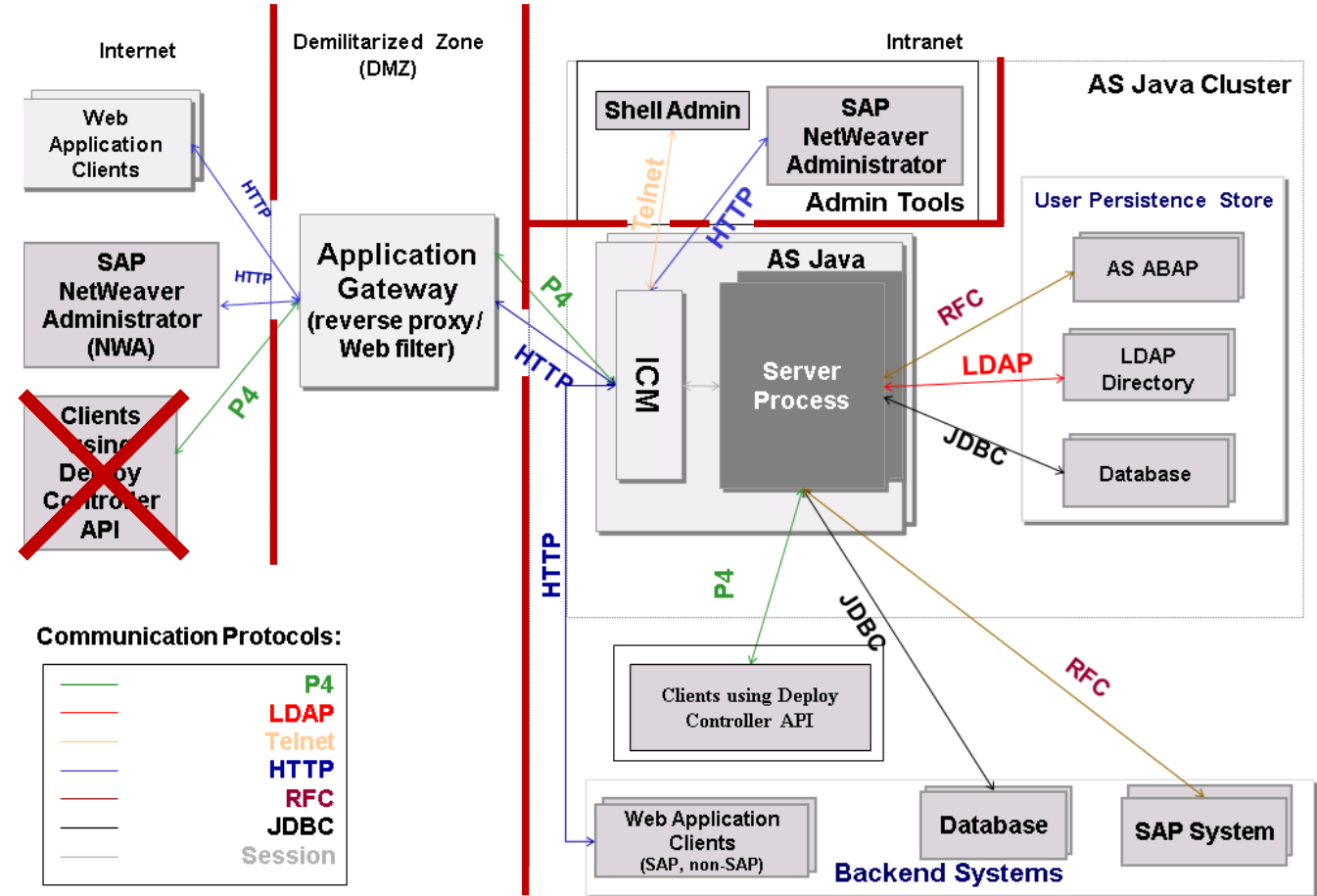
<https://help.sap.com/viewer/2f8b1599655d4544a3d9c6d1a9b6546b/7.03.28/en-US/46875b4243fadc54e1000000a155106.html>

How to secure P4 on AS Java

TCP/IP Ports of All SAP Products: <https://help.sap.com/viewer/ports>

P4 / P4S is only required locally on the Java server respective in Visual Administrator and Deploy Tools

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Transport Layer Security

<https://help.sap.com/viewer/2f8b1599655d4544a3d9c6d1a9b6546b/7.5.19/en-US/46875b4243fadc54e1000000a155106.html>

How to secure P4 on AS Java

KBA [1770585](#) - How to configure SSL on the AS Java

KBA [2268643](#) - How to configure the P4S port with Solution Manager 7.2

KBA [2267534](#) - How to remove the P4 P4S properties in the Java stack of Solution Manager 7.2

Note [2322555](#) - Connect the Diagnostics Agent to Solution Manager 7.2 using SSL

KBA [2419031](#) - How to configure the P4S port for the J2ee NetWeaver Application Server

Note [2458281](#) - Diagnostics Agent P4S via SAProuter

KBA [2511578](#) - How to configure the P4S in the AS Java 7.0X

Security Note [2574394](#) - Configure Diagnostics Agents to Check the Solution Manager Server Certificate

Diagnostics Agent Connectivity in Solution Manager 7.2

<https://wiki.scn.sap.com/wiki/x/r4htGw>

Diagnostics Agent 7.2 Troubleshooting

<https://wiki.scn.sap.com/wiki/x/5sviGg>

Note 2574394 - Configure Diagnostics Agents with check for Client Certificate

Solution Manager Workcenter “SAP Solution Manager Administration”

→ Agents Administration

→ Agent Admin

Agent Administration [Log Off](#)

Agents Agent Connectivity Agent Security Applications Viewer Applications Management Application Configuration SAP Host Agent

Allows a change to be made to the connection mode of the diagnostics agent for the managing system

i The SMD server has multiple nodes, so diagnostics agents must connect using the message server.

Table Size: [Refresh](#) [Apply for All](#) [Reset for All](#)

Server Name/Host Name	P4	P4 SSL	MS/P4	MS/P4 SSL	MS HTTPS/P4 SSL	SAP Router			
df.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
.wdf.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
.wdf.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
orp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
df.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
df.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
df.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
.wdf.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
.wdf.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset
.wdf.sap.corp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not configured		Apply	Reset

Note 2622660 - Security updates for the browser control Google Chromium delivered with SAP Business Client



Note Version	SAP Business Client Release	Chromium Stable Release	highest CVSS rating of contained security corrections
Version 54 from 09.03.2021	SAP Business Client 7.0 PL17 SAP Business Client 7.70 PL1	Chromium 88.0.4324.150	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 49 from 26.01.2021	SAP Business Client 7.0 PL16 SAP Business Client 7.70 PL0	Chromium 87.0.4280.141	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 47 from 22.12.2020	SAP Business Client 7.0 PL15	Chromium 87.0.4280.66	Base Score: 7.5 (Priority High) AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N
Version 46 from 10.11.2020	SAP Business Client 7.0 PL14	Chromium 86.0.4240.183	Base Score: 10.0 (Priority Hot News) AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H
Version 44 from 13.10.2020	SAP Business Client 7.0 PL13	Chromium 85.0.4183.102	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 42 from 25.08.2020	SAP Business Client 7.0 PL12	Chromium 84.0.4147.105	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 41 from 14.07.2020	SAP Business Client 7.0 PL11	Chromium 83.0.4103.97	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 40 from 28.04.2020	SAP Business Client 7.0 PL10	Chromium 81.0.4044.92	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H
Version 39 from 10.03.2020	SAP Business Client 6.5 PL22 SAP Business Client 7.0 PL9	Chromium 80.0.3987.122	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H

Security Note Priority	CVSS v3 Base score
Low	0.1 - 3.9
Medium	4.0 - 6.9
High	7.0 - 8.9
Hot News	9.0 - 10.0



February 2021

Topics February 2021



Note [2897141](#) - CVE-2020-1938 'Ghostcat' Tomcat AJP Vulnerability

Note [2992154](#) - SAML Assertion Signature MD5 Digest Algorithm Vulnerability in SAP HANA Database

Java Parameter service/protectedwebmethods

Note [3014875](#) - Reverse Tabnabbing attack in SAP Netweaver AS ABAP, AS Java and SAP UI5 applications on multiple platforms

Note [3014121](#) - Remote Code Execution vulnerability in SAP Commerce (cloud & on-prem)

SAP GUI for Windows 7.70

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note [2897141](#) - CVE-2020-1938 'Ghostcat' Tomcat AJP Vulnerability

This note is not classified as a Security Note, even if it describes a possible security vulnerability in Component BI-BIP-DEP

SAP BusinessObjects Business Intelligence Platform product does NOT require the use of AJP connector, so the product itself is not affected by this vulnerability.

However, you could configure AJP on your own depending on their usage like split deployment, reverse proxy or load balancing.

To fix this vulnerability, upgrade Apache Tomcat to a non-vulnerable version as per Apache Tomcat documentation. If you don't use AJP and you can't upgrade Tomcat, you can disable AJP connector.

Other applications using Tomcat might be affected / not affected:

Note [2498770](#) - Tomcat vulnerabilities (CVE-*) NOT impacting SAP BusinessObjects Business Intelligence Platform XI 3.1 /4.0 /4.1 /4.2 /4.3

Note [2909840](#) - Apache Tomcat vulnerability aka GHOSTCAT

Note [2928570](#) - 'Ghostcat' Apache Tomcat AJP Vulnerability in SAP Liquidity Management for Banking

Note [2941645](#) - Apache JServ Protocol Vulnerability in SAP Commerce

Note 2992154 - SAML Assertion Signature MD5 Digest Algorithm Vulnerability in SAP HANA Database

MD5 digest support in SAML assertions has been removed from SAP HANA 2 with the following revisions:

- **HANA 2.0 SPS04 revision 48.03**
- **HANA 2.0 SPS05 revision 53**

With SAP HANA 1.0 revision 122.34, you can disable MD5 using a new parameter `saml_signature_hash_types = 'sha1,sha256'` in `global.ini`

You can verify whether your SAML Identity Provider (IdP) still uses the MD5 algorithm by activating the “authentication trace” on “debug” level as described in note 3024481.

SAP HANA: Troubleshooting Problems with User Authentication and SSO

<https://help.sap.com/viewer/bed8c14f9f024763b0777aa72b5436f6/2.0.05/en-US/c6ddb6d97610148b5ba05d69f58528.html>

- **Remember: After completing troubleshooting, reduce the authentication trace level back to default.**

Java Parameter service/protectedwebmethods



SAP Start Service (sapstartsrv) security

<https://wiki.scn.sap.com/wiki/display/SI/SAP+Start+Service+%28sapstartsrv%29+security>

sapstartsrv service parameters

<https://wiki.scn.sap.com/wiki/display/SI/sapstartsrv+service+parameters>

Protected web methods of sapstartsrv

<https://wiki.scn.sap.com/wiki/display/SI/Protected+web+methods+of+sapstartsrv>

Note [927637](#) - Web service authentication in sapstartsrv as of Release 7.00

Note [2838788](#) - How to verify if service/protectedwebmethods is recognized by sapstartsrv

Protected web methods

<https://blogs.sap.com/2018/10/24/protected-web-methods/>

Java Parameter service/protectedwebmethods

Just for
discussion !

Default

SDEFAULT

Solman Monitoring

SDEFAULT `-ReadLogFile -ABAPReadSyslog -ListLogFilesError -J2EEGetProcessList2 -J2EEGetProcessList`

JAVA NWA System Overview

SDEFAULT `-J2EEGetProcessList -PerfRead -MtGetTidByName`

SUM

DEFAULT

Other Examples which I've seen:

SDEFAULT `-ListLogFiles -ReadLogFile -ListLogFilesError -J2EEGetProcessList -J2EEGetThreadList2
-GetVersionInfo -ParameterValue -PerfRead -MtGetTidByName -getTidsByName
-GetAccessPointList -GetAccessPointList2 -UtilSnglmsgReadRawdata -GWGetConnectionList
-GWGetClientList`

SDEFAULT `-GetProcessList -J2EEGetProcessList -J2EEGetThreadList -GetEnvironment -GetStartProfile
-GetInstanceProperties -GetVersionInfo -ABAPGetWPTTable -GetAlertTree`

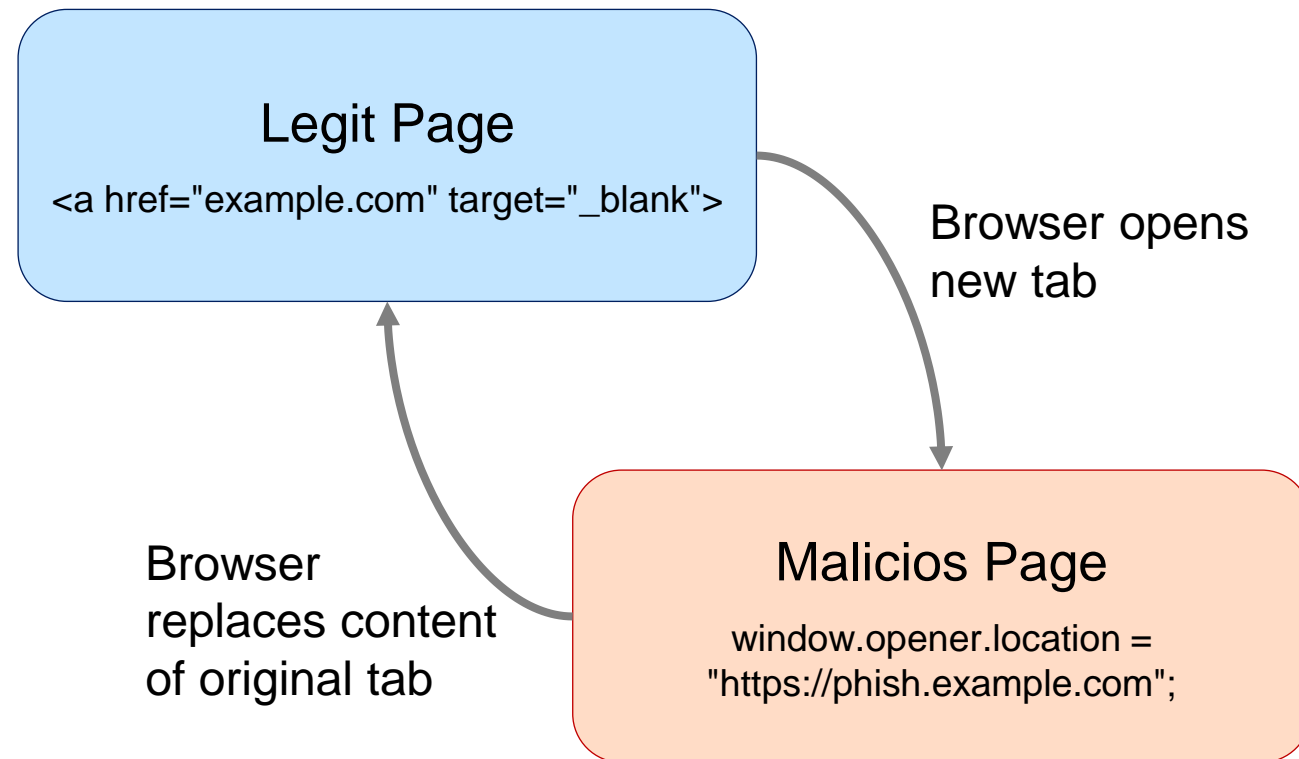
SDEFAULT `-ReadLogFile -ListLogFiles -J2EEGetProcessList -GetVersionInfo -ParameterValue`

SDEFAULT `-ReadLogFile -ListLogFiles -GetAlertTree -GetCIMObject`

Note 3014875 - Reverse Tabnabbing attack in SAP Netweaver AS ABAP, AS Java and SAP UI5 applications on multiple platforms

Reverse Tabnabbing vulnerabilities are attacks, where an page linked from the target page uses the opener browsing context to redirect the target page to a phishing site.

SAP UI5 and Fiori Launchpad	Note <u>3014303</u>
Web Dynpro ABAP	Note <u>2974582</u>
SAP GUI for HTML	Note <u>2973428</u>
Business Server Pages	Note <u>2972275</u>
WebCUIF	Note <u>2994289</u>
Unified Rendering (March 2021)	Note <u>2978151</u>
Web Dynpro Java (March 2021)	Note <u>2976947</u>
HTMLB for Java (March 2021)	Note <u>2977001</u>
AS Java Start Page	Note <u>2965315</u>



Note 3014875 - Reverse Tabnabbing attack in SAP Netweaver AS ABAP, AS Java and SAP UI5 applications on multiple platforms

Reverse Tabnabbing vulnerabilities are attacks, where an page linked from the target page uses the opener browsing context to redirect the target page to a phishing site.

SAP UI5 and Fiori Launchpad Note 3014303

Web Dynpro ABAP Note 2974582

SAP GUI for HTML Note 2973428

Business Server Pages Note 2972275

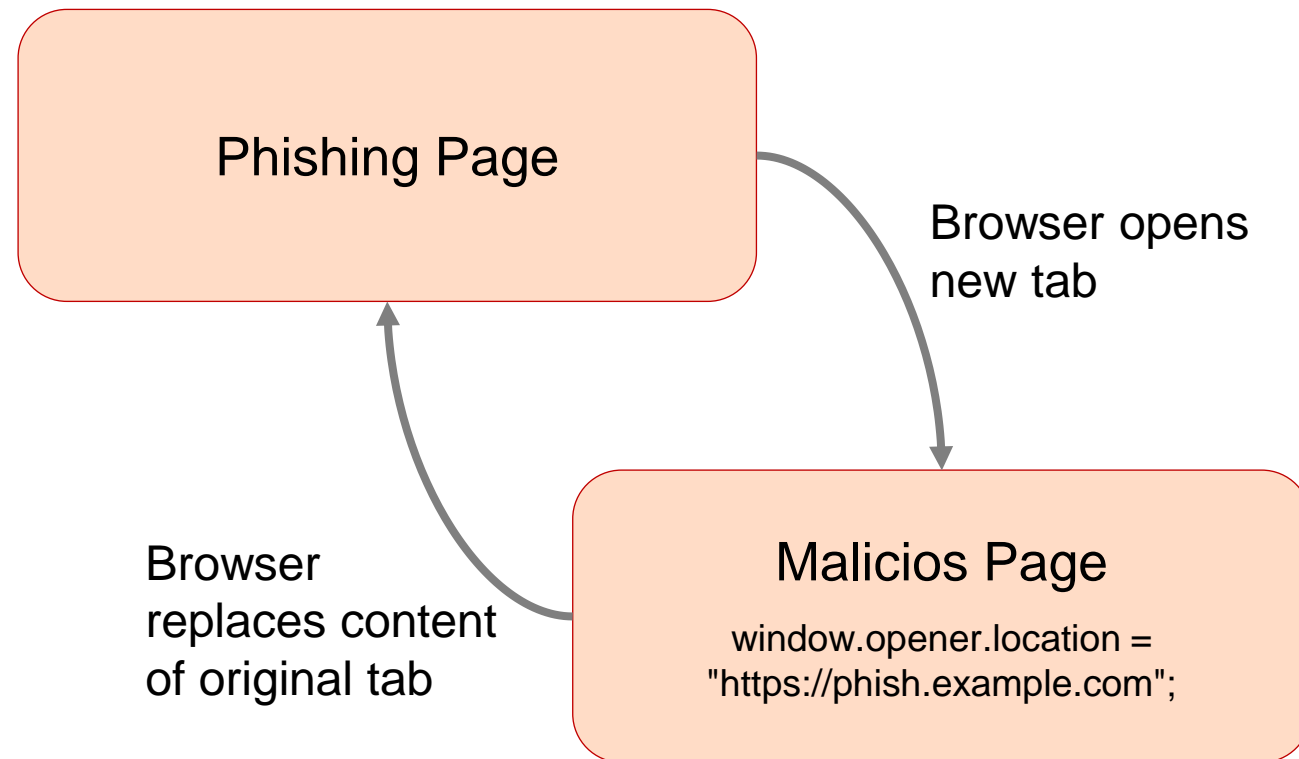
WebCUIF Note 2994289

Unified Rendering

Web Dynpro Java

HTMLB for Java

AS Java Start Page Note 2965315



Note 3014121 - Remote Code Execution vulnerability in SAP Commerce (cloud & on-prem)

Note 3020726 - Remote Code Execution vulnerability in SAP Commerce: FAQ

➤ Q1: Which customers are affected?

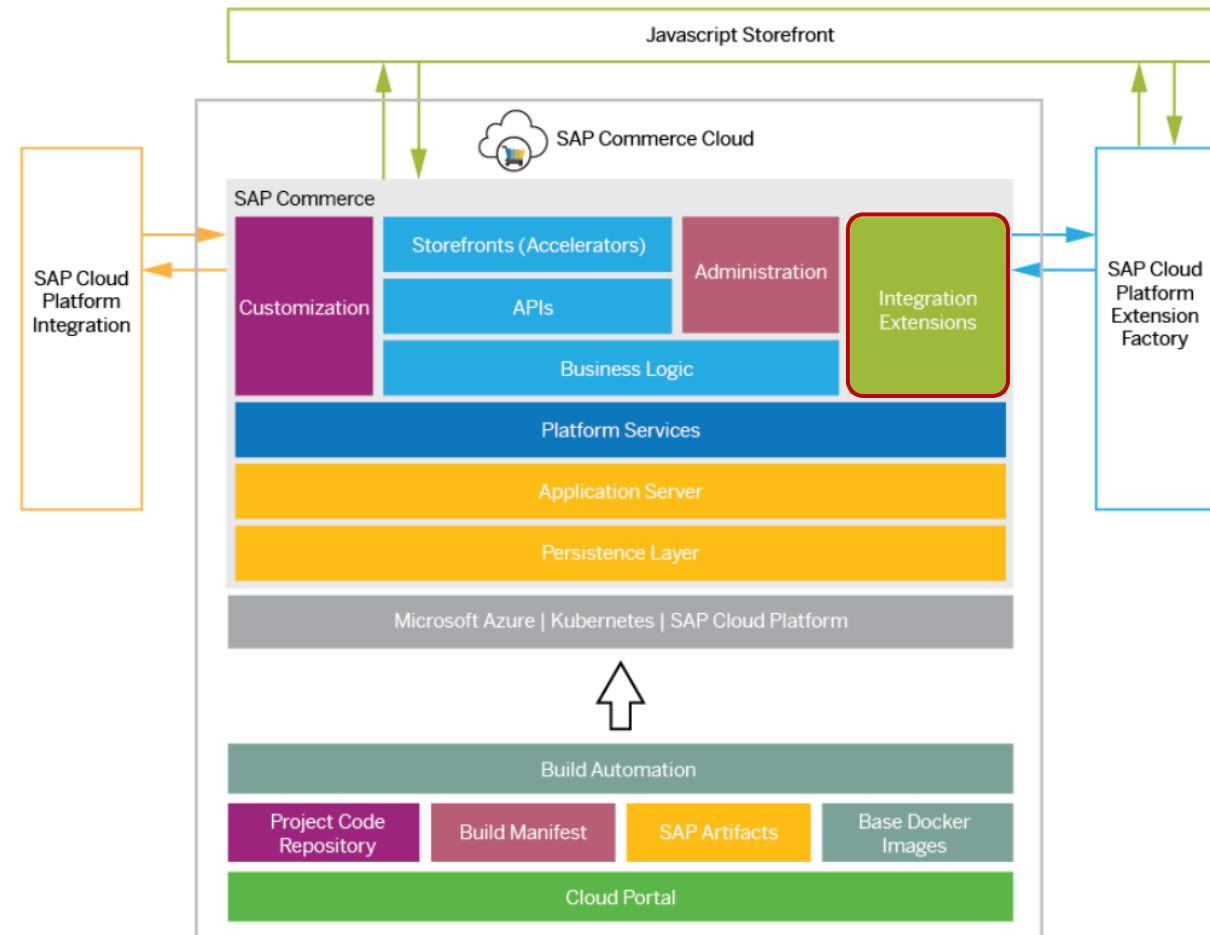
All customers who have the SAP Commerce **ruleengine extension installed** are very likely affected. Another precondition is that customers are making use of default user accounts and user groups of SAP Commerce, or have custom user accounts or user groups that have permissions to change or create DroolsRule items.

➤ Q2: Are customers who host SAP Commerce **on premise** affected?

Yes.

➤ Q3: Are customers of SAP Commerce **Cloud** affected?

Yes, customers of SAP Commerce Cloud (both CCv1 and CCv2) are affected. They need to take the same measures as on premise customers, as described in the SAP Security Note.



Note 3014121 - Remote Code Execution vulnerability in SAP Commerce (cloud & on-prem)

SAP Commerce - Installing and Upgrading – System Requirements

<https://help.sap.com/viewer/a74589c3a81a4a95bf51d87258c0ab15/2011/en-US/8c6b9a8186691014bd8dd9635cabfaff.html>

SAP Commerce Cloud Architecture

<https://help.sap.com/viewer/20125f0eca6340dba918bda360e3cdfa/v2011/en-US/8b5588d8866910149d4eb5f99c75b6b4.html>

“You manage your SAP Commerce Cloud deployments in the Cloud Portal, which enables you to control and monitor all aspects of your SAP Commerce Cloud instances. Builds are fully automated. They are packaged as Docker nodes, orchestrated by Kubernetes, and deployed on Microsoft Azure public cloud infrastructure. You have full control over build configuration using build manifest files, and can connect your own GitHub repository to pull in any custom code for your project at build time.”

Infrastructure Considerations for On-Prem SAP Commerce

<https://www.sap.com/cxworks/article/432591793/infrastructure-considerations-for-on-prem-sap-commerce>

Migrate to SAP Commerce Cloud

<https://www.sap.com/cxworks/article/435949091/migrate-to-sap-commerce-cloud>

Older security notes:

Note 2786035 - Code Injection vulnerabilities in SAP Commerce Cloud

Note 2697573 - Cross-Site Scripting (XSS) vulnerability in SAP Commerce / SAP Hybris

SAP GUI for Windows 7.70

SAP GUI for Windows 7.70

https://help.sap.com/viewer/product/sap_gui_for_windows/770.00/en-US

What's New in SAP GUI for Windows

<https://help.sap.com/viewer/e8f03b91f99d45f4ae9d90ddf6e44b70/770.00/en-US>

Note 2796898 - New and changed features in SAP GUI for Windows 7.70

<https://launchpad.support.sap.com/#/notes/2796898>

SAP GUI Security Module

<https://help.sap.com/viewer/ca5169c2f72448eeb608cd09564ccf90/770.00/en-US>

No major updates concerning security features – but a strong opportunity to review existing security settings:

- Check installed version ([→ slides from 2016-01](#))
- Security Configuration ([→ slides from 2017-04](#))
- Enable SNC Client Encryption ([→ slides from 2017-05](#))
- Log unencrypted GUI /RFC ([→ slides from 2015-07](#))

SAP GUI for Windows 7.70 - Chromium Edge for HTML Control

Up to Release 7.60, the SAP GUI HTML control always uses the control for Microsoft Internet Explorer. As a result, SAP GUI may launch an Internet Explorer window.

As of Release 7.70, SAP GUI for Windows offers to embed the Microsoft WebView2 control (Edge based on Chrome) <https://docs.microsoft.com/en-us/microsoft-edge/webview2>

➤ Installation required



Microsoft Edge WebView2 Runtime

12.02.2021

➤ Local activation in SAP Logon required

(This is not related to the Chromium plugin of the SAP Business Client.)

SAP GUI Options - SAP Logon

Find a setting

- Visual Design
 - Theme Settings
 - Font Settings
 - Branding
 - Color Settings
- Interaction Design
 - Keyboard Settings
 - Visualization 1
 - Visualization 2
 - Notifications
 - Control Settings
 - Sound Settings

Interaction Design

Additional Control Services

Enable additional control services

Search Provider: Google

HTML Control

Browser Control: Edge (based on Chromium)

- Internet Explorer
- Edge (based on Chromium)



January 2021

Topics January 2021



Q&A Notes for Security HotNews

Note [2622660](#) - Security updates for the browser control Google Chromium delivered with SAP Business Client

Note [2983367](#) - Code Injection vulnerability in SAP Business Warehouse (Master Data Management) and SAP BW4HANA (reloaded)

Note [2986980](#) - Multiple vulnerabilities in SAP Business Warehouse (Database Interface)

Note [2999854](#) - Code Injection in SAP Business Warehouse and SAP BW/4HANA

Note [2945581](#) - Cross-Site Scripting (XSS) vulnerability in SAP CRM WebClient UI

Note [3001373](#) - Information Disclosure in Central Order on Cloud Foundry

Note [2911103](#) - SE16N: Alternative edit mode

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Q&A Notes for Security HotNews

December 2020

Note [2989075](#) - Missing XML Validation in SAP BusinessObjects Business Intelligence Platform (Crystal Report)

➤ -

Note [2974774](#) - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

➤ Note [2997167](#) - Missing Authentication Check In NW AS Java P2P Cluster Communication - Frequently asked questions and answers

Note [2973735](#) - Code Injection in SAP AS ABAP and S/4 HANA (DMIS)

➤ Note [2985806](#) - FAQ for SAP Note 2973735 - Code Injection vulnerability in S/4 HANA

January 2021

Note [2999854](#) - Code Injection in SAP Business Warehouse and SAP BW/4HANA

➤ Note [3006112](#) - Q&A for SAP Security Note 2999854

Note [2986980](#) - Multiple vulnerabilities in SAP Business Warehouse (Database Interface)

➤ Note [3005196](#) - Q&A for SAP Security Note 2986980

Note [2983367](#) - Code Injection vulnerability in SAP Business Warehouse (Master Data Management) and SAP BW4HANA

➤ Note [2999167](#) - Q&A for SAP Security Note 2983367

Note [2979062](#) - Privilege escalation in SAP NetWeaver Application Server for Java (UDDI Server)

➤ Note [2989299](#) - Frequently asked questions and answers

Note [2622660](#) - Security updates for the browser control Google Chromium delivered with SAP Business Client

➤ (Exception, old note which gets updated regularly.)

Note 2622660 - Security updates for the browser control Google Chromium delivered with SAP Business Client



Note Version	SAP Business Client Release	Chromium Stable Release	highest CVSS rating of contained security corrections
Version 47 from 22.12.2020	SAP Business Client 7.0 PL15	Chromium 87.0.4280.66	Base Score: 7.5 (Priority High) AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N
Version 46 from 10.11.2020	SAP Business Client 7.0 PL14	Chromium 86.0.4240.183	Base Score: 10.0 (Priority Hot News) AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H
Version 44 from 13.10.2020	SAP Business Client 7.0 PL13	Chromium 85.0.4183.102	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 42 from 25.08.2020	SAP Business Client 7.0 PL12	Chromium 84.0.4147.105	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 41 from 14.07.2020	SAP Business Client 7.0 PL11	Chromium 83.0.4103.97	Base Score: 9.6 (Priority Hot News) AV:N/AC:L/PR:N/UI:R/S:C/C:H/I:H/A:H
Version 40 from 28.04.2020	SAP Business Client 7.0 PL10	Chromium 81.0.4044.92	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H
Version 39 from 10.03.2020	SAP Business Client 6.5 PL22 SAP Business Client 7.0 PL9	Chromium 80.0.3987.122	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H
-	SAP Business Client 6.5 PL21 SAP Business Client 7.0 PL8	Chromium 79.0.3945	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H
Version 37 from 28.01.2020	SAP Business Client 6.5 PL20 SAP Business Client 7.0 PL7	Chromium 79.0.3945	Base Score: 8.8 (Priority High) AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H

Security Note Priority	CVSS v3 Base score
Low	0.1 - 3.9
Medium	4.0 - 6.9
High	7.0 - 8.9
Hot News	9.0 - 10.0

Note 2983367 - Code Injection vulnerability in SAP Business Warehouse (Master Data Management) and SAP BW4HANA



Q&A Note 2999167

The validity of the correction instructions now covers all relevant SP levels

Software Component	Release	from SP	to SP
SAP_BW	700	SAPKW70018	SAPKW70040
SAP_BW	701	SAPKW70107	SAPKW70123
SAP_BW	702	SAPKW70207	SAPKW70223
SAP_BW	730	SAPKW73006	ALL SUPP. PACKAGES
SAP_BW	731	SAPKW73107	SAPKW73128
SAP_BW	740	SAPKW74002	SAPKW74024
SAP_BW	750	750	SAPK-75019INSAPBW
SAP_BW	751	751	SAPK-75111INSAPBW
SAP_BW	752	752	SAPK-75207INSAPBW
SAP_BW	753	753	SAPK-75305INSAPBW
SAP_BW	754	754	SAPK-75403INSAPBW
SAP_BW	755	755	755
DW4CORE	100	100	SAPK-10018INDW4CORE
DW4CORE	200	200	SAPK-20006INDW4CORE

Support Packages		
Software Component	Release	Support Package
SAP_BW	700	SAPKW70041
	701	SAPKW70124
	702	SAPKW70224
	731	SAPKW73129
	740	SAPKW74025
	750	SAPK-75020INSAPBW
	751	SAPK-75112INSAPBW
	752	SAPK-75208INSAPBW
	753	SAPK-75306INSAPBW
	754	SAPK-75404INSAPBW
	755	SAPK-75501INSAPBW
DW4CORE	782	SAPK-78202INSAPBW
	100	SAPK-10019INDW4CORE
	200	SAPK-20007INDW4CORE

Note 2986980 - Multiple vulnerabilities in SAP Business Warehouse (Database Interface)

Q&A Note 3005196

Deactivation of critical, obsolete RFC-function `RSDL_DB_GET_DATA_BWS` in software component `SAP_BW` which exists on all ABAP systems.

- No test required, just do it
- Detection:
Inspect Workload Statistics or Security Audit Log or use ETD to verify that the RFC function is not called
- Manual workaround with modification:
Deactivate the function by yourself
- Manual workaround without modification:
Check authorizations for authorization object `S RFC` for function `RSDL_DB_GET_DATA_BWS` as well as for function group `RSDL`

```
*&-----  
*& Object          FUNC RSDL_DB_GET_DATA_BWS  
*& Object Header   FUGR RSDL  
*&-----  
*& FUNCTION RSDL_DB_GET_DATA_BWS  
*&-----  
...  
FUNCTION rsdl_db_get_data_bws.  
  
*>>>> START OF DELETION <<<<<<  
* Local field symbol definition  
*>>>> END OF DELETION <<<<<<  
*>>>> START OF INSERTION <<<<<<  
MESSAGE x001(rsdl).  
* security issue  
  
* Local field symbol definition  
*>>>> END OF INSERTION <<<<<<
```

Note 2999854 - Code Injection in SAP Business Warehouse and SAP BW/4HANA

Q&A Note 3006112

Normal function RSDRC_ITAB_LOGGING gets secured in software component SAP_BW which exists on all ABAP systems. This function is called by RFC function RSDRI_DF_TEXT_READ

- No test required, just do it
- Generated report Z_RSDRI_DF_TXT_* is only useful for debugging purpose.
- Detection:
Inspect Workload Statistics or Security Audit Log or use ETD to verify that the RFC function respective the report is not called.

```
*&-----*
*& Object      FUNC RSDRC_ITAB_LOGGING
*& Object Header FUGR RSDRC_SERVICES
*&-----*
*& FUNCTION RSDRC_ITAB_LOGGING
*&-----*
...
    l_s_code2-line = <l_comp>.

*   --- cope with quotes
*>>>> START OF DELETION <<<<<
        IF <l_s_component>-type_kind = 'C'.
            REPLACE ALL OCCURRENCES OF '''' IN l_s_code2-line WITH '''''.
*>>>> END OF DELETION <<<<<
*>>>> START OF INSERTION <<<<<
        IF <l_s_component>-type_kind = cl_abap_typedescr=>typekind_char
            OR <l_s_component>-type_kind = cl_abap_typedescr=>typekind_string.
            l_s_code2-line = cl_abap_dyn_prg=>escape_quotes( l_s_code2-line ).
*>>>> END OF INSERTION <<<<<
```

Note 2945581 - Cross-Site Scripting (XSS) vulnerability in SAP CRM WebClient UI

Software component **WEBCUIF** exists in various ABAP system types.

Manual instruction to delete a MIME object before implementation via **SNOTE** in the development system

Navigate to path **SAP** → **BC** → **BSP** → **SAP** and use the search function, download the file to have a backup until

Following SAP Notes are implemented in this step:

Note Action	Note	Version
Implement SAP Note	2945581	6

App Status	Obj. Ty...	Object	Message Text
<input checked="" type="checkbox"/>	SMIM	jquery-3.5.1.min.js	New object will be created
<input checked="" type="checkbox"/>	SMIM	current.min.js	New object will be created

Object Navigator

MIME Repository

Repository Browser

Repository Information System

Name	Description
AOC	AOC
WCFGW_WRAPPER	
WCF_JQUERY	Provides URL for loading jQuery files
current.min.js	Latest supported version of jQuery (2.2.4.min)
jquery-1.11.1.min.js	
jquery-1.12.4.min.js	
jquery-2.2.4.min.js	
jquery-3.2.1.min.js	
WCF_SAVEDSEARCH	
sohbat_slider	
sohbat_desktop	
sohbat_video	
SYSTEM_INFO	
UI5_APC_TEST	
UI5_TEST_APC	

Context menu for current.min.js:

- Change...
- Display...
- Upload/Download
- Convert to BSP
- Delete...
- Properties
- Object Directory Entry
- Other Functions

Note 3001373 - Information Disclosure in Central Order on Cloud Foundry

Central Order service for SAP Customer Experience solutions

Purpose: Consolidate and manage your order-related data in a central cloud-based service. This service runs in the **Cloud Foundry** environment.

Manual instruction to recreate binding credentials if you have created them before 04.12.2020.

Online Documentation - Central Order Service Guide – Initial Setup

<https://help.sap.com/viewer/d91676a7fa624c31b7b1c526d7787e2f/Beta/en-US/227cf2f493d74fd6a996a88f29c82bee.html>

Online Documentation - Central Order Service Guide – Creating Service Keys

<https://help.sap.com/viewer/65de2977205c403bbc107264b8eccf4b/Cloud/en-US/4514a14ab6424d9f84f1b8650df609ce.html>

You can use service keys to **generate credentials** to communicate directly with a service instance. The service key contains the URL that you use to call the APIs of the service, the client ID, and the **client secret**. Note this information, as you need it in follow-on procedures.

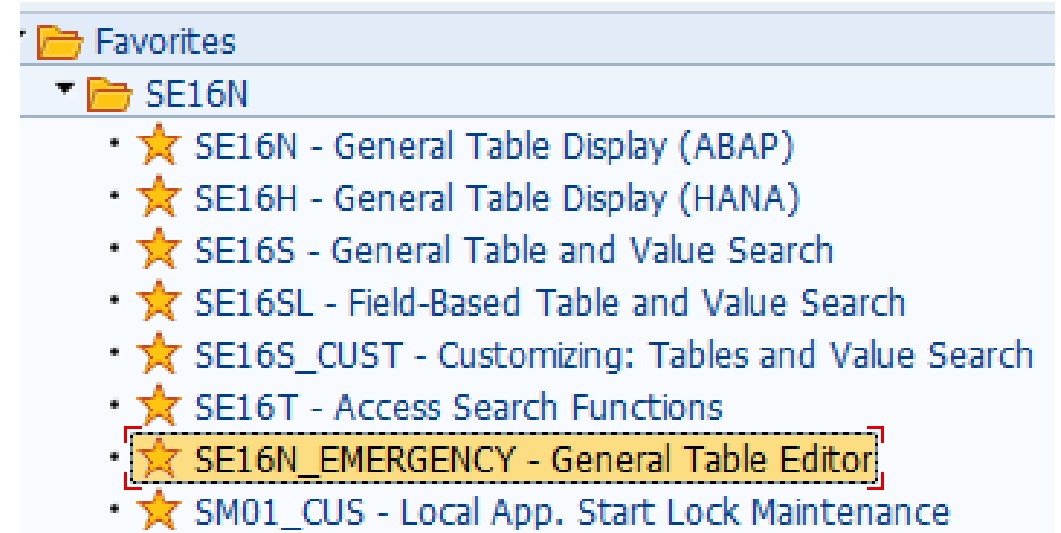
Service keys contain authentication- and authorization-related content and have to be handled securely.

Note 2911103 - SE16N: Alternative edit mode

Transaction SE16N does not offer change mode via command `&SAP_EDIT` anymore.

New transaction SE16N_EMERGENCY can be used instead.

- Several required notes with additional manual implementation steps
- The transaction gets locked by default
- You can unlock it via transaction SM01_CUS
- Authorizations for S_TABU_DIS / S_TABU_NAM with activity 02=change is required
- Usage get logged, view logs via report `RKSE16N_CD_DISPLAY`



Note 2911103 - SE16N: Alternative edit mode

Several required notes, e.g. 2787892, 2848972, 2863410, 2867757, 2879630, 2880334, 2886898, 2905486, 2911103 with additional manual implementation steps

Icon	Note	Version	Short text	Component	Proc. Status	Implementation State	
	2787892	5	CO-OM tools: Change to text table selection	CO-OM	Not Relevant	Cannot be implemented	
	2848972	1	CO-OM tools: SE16N: Text tables T000 and T002	CO-OM	In Process	Can be implemented	
	2863410	3	SE16N: Hiding empty columns	CO-OM	In Process	Can be implemented	+ manual steps
	2867757	3	SE16N: FAQ: Conversion of inputs and outputs	CO-OM	In Process	Can be implemented	+ manual steps
	2879630	3	SE16H: Outer join definition improvement	CO-OM	In Process	Can be implemented	
	2880334	4	SE16N: Display of selection condition	CO-OM	In Process	Can be implemented	+ manual steps
	2886898	17	SE16H: Enhancements to join conditions	CO-OM	In Process	Can be implemented	+ manual steps
	2905486	2	SE16N: Change documents for fields of type STRING	CO-OM	In Process	Can be implemented	+ manual steps
	2911103	6	SE16N: Alternative edit mode	CO-OM	In Process	Can be implemented	+ manual steps

However, on higher releases give `SNOTE` a try first – depending on the version of `SNOTE` it can perform most or all of the manual steps automatically!

Note 2911103 - SE16N: Alternative edit mode

USR02: Anzeige der gefundenen Einträge

Transaction SE16N_EMERGENCY

Search in Table: USR02 Logon Data (Kernel-Side Use)

Number of hits: 500

Runtime: 0 Maximum no. of hits: 500

Insert Column: []

User Name	Initial Password	Valid from	Valid To	User Type	User group	Failed	Lo...	Account no	Created On	Logon	Logon	Initial Password
EMPLOYEE	0000000000000000			A Dialog		0	0		17.04.2015	10.09.2019	12:32:13	0000000000000000
EVIL	0000000000000000			A Dialn		0	0		27.03.2017	27.03.2017	13:23:38	0000000000000000
FFADMIN	0000000000000000											
FFAUDITOR	0000000000000000											
FFCONTROL_ZF	0000000000000000											
FFCTRL_SVLFG	0000000000000000											
FFDEMO_CNTL	0000000000000000											
FFDEMO_OWNER	0000000000000000											
FFEIGNER	0000000000000000											
FFID	0000000000000000											
FFIDNUTZER	0000000000000000											
FFID_01_2	0000000000000000											
FFID_02	0000000000000000											
FFID_03	0000000000000000											

Display Change Documents

Entries found : 15

Report **RKSE16N_CD_DISPLAY**

ID	Table	User Name	Start Date	Time	Cl D	Explanation
20.210.104.182.523,3421430	USR02	D019687	04.01.2021	19:25:23	-	Reset failed logon counter
20.201.123.131.638,7188900	USR02	I521842	23.11.2020	14:16:38	-	
20.181.010.164.919,5583070	LTDX	I329026	10.10.2018	18:49:19	-	
20.181.010.164.705,7944540	LTDX	I329026		18:47:05	-	
20.171.130.054.709,1643020	ZUSERS	I307499	30.11.2017	06:47:09	-	
20.171.129.070.234,8127280	ZUSERS	I307499	29.11.2017	08:02:34	-	

Note 2911103 - SE16N: Alternative edit mode

Related notes / correction notes of component CO-OM

Note 2002588 - CO-OM Tools: Documentation for SE16S, SE16SL, and SE16S_CUST

...

Note 2906317 - SE16N: Access to CDS views

Note 2968176 - SE16H: Improvements for outer joins and having

Note 2978713 - SE16N Selection Screen does not show separators

Note 2985178 - SE16N_EMERGENCY: Explanation popup occurs even with no change of data

Note 3007467 - SE16H: Authorization check for execution of Join-Selections



December 2020

Topics December 2020



Configuration & Security Analytics (CSA) in FocusedRun

Note [2890213](#) - Missing Authentication Check in SAP Solution Manager (reloaded)

Note [2985866](#) - Missing Authentication Check in SAP Solution Manager (JAVA stack)

Note [2983204](#) - Multiple Vulnerabilities in SAP Solution Manager 7.2 (User Experience Monitoring)

Note [2974330](#) - Unrestricted File Upload vulnerability in Java (Process Integration Monitoring)

Note [2974774](#) - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

Note [2983367](#) - Code Injection vulnerability in SAP Business Warehouse (Master Data Management) and SAP BW4HANA

Note [2670851](#) - Authority check in RSSG_BROWSER

Note [2978768](#) - Improper authentication in SAP HANA database

System Recommendations – Recalculation for some notes

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

SAP Focused Run – Use Cases & High Level Architecture

Advanced
Integration
Monitoring
(AIM)

Advanced
User
Monitoring
(AUM)

Advanced
Application
Management
(AAM)

Advanced
Configuration
Monitoring
(ACM)

Advanced
System
Management
(ASM)

Advanced
Event & Alert
Management
(AEM)

Advanced
Root Cause
Analysis
(ARA)

Advanced
Analytics &
Intelligence
(AAI)

SAP Focused Run - Application Foundation

Landscape Management Database

Simple Diagnostic Agent & SAP Host Agent

Monitoring & Alerting Infrastructure

Expert Scheduling Framework

Simple System Integration

Guided Procedure Framework

SAP HANA + SAP NetWeaver ABAP + SAPUI5 as Technology Foundation

Policies for the SAP Security Baseline Template

Policy Selection

Search [] [] [] [] []

Policy Name	Description	Schedule	Active Exemptions
BL2_CRITAU-A	[BL 2.2] CRITICAL Authorizations - ABAP	Off	0
BL2_NETENC-A	[BL 2.2] Encryption of Network Connections - ABAP	Off	0
BL2_PWDPOL-A	[BL 2.2] Password Policy - ABAP	Off	0
BL2_RFCGW-A	[BL 2.2] RFC Gateway Security Options	Off	0
BL2_SSO-A	[BL 2.2] Single Sign-On - ABAP	Off	0
BL2_STDUSR-A	[BL 2.2] Standard Users - ABAP	Off	0
BL2_PROCESS-A	[BL 2.2] Baseline Policy: PROCESS - ABAP	Off	0
BL2_CHANGE-A_FRUN2	[BL 2.2] Protect Production System against changes – ABAP	Off	0
BL2_CHANGE-A_FRUN3	[BL 2.2] Protect Production System against changes – ABAP	Off	0
BL2_DISCL-A	[BL 2.2] Information Disclosure – ABAP	Off	0
BL2_FILE-A	[BL 2.2] Directory Traversal Protection – ABAP	Off	0
BL2_MSGSRV-A	[BL 2.2] Message Server Security - ABAP	Off	0

Confirm Cancel

Validation

*Policy: [] [Select..]

Systems Checks Systems / Checks

Compliance of systems

Compliant Customer

Lifecycle Status

Validation

*Policy:

Select..

You can select several policies and run them together against all connected systems to get a complete cross-system view.

Systems Checks Systems / Checks

Compliance of systems



Compliant Customer

Lifecycle Status

Policy Selection

Search

<input type="checkbox"/>	Policy Name	Description	Schedule	Active Exemptions
<input checked="" type="checkbox"/>	BL2_CRITAU-A	[BL 2.2] CRITICAL Authorizations - ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_NETENC-A	[BL 2.2] Encryption of Network Connections - ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_PWDPOL-A	[BL 2.2] Password Policy - ABAP	Off	0
<input type="checkbox"/>	BL2_RFCGW-A	[BL 2.2] RFC Gateway Security Options	Off	0
<input type="checkbox"/>	BL2_SSO-A	[BL 2.2] Single Sign-On - ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_STDUSR-A	[BL 2.2] Standard Users - ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_PROCESS-A	[BL 2.2] Baseline Policy: PROCESS - ABAP	Off	0
<input type="checkbox"/>	BL2_CHANGE-A_FRUN2	[BL 2.2] Protect Production System against changes – ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_CHANGE-A_FRUN3	[BL 2.2] Protect Production System against changes – ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_DISCL-A	[BL 2.2] Information Disclosure – ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_FILE-A	[BL 2.2] Directory Traversal Protection – ABAP	Off	0
<input checked="" type="checkbox"/>	BL2_MSGSRV-A	[BL 2.2] Message Server Security - ABAP	Off	0

Confirm Cancel

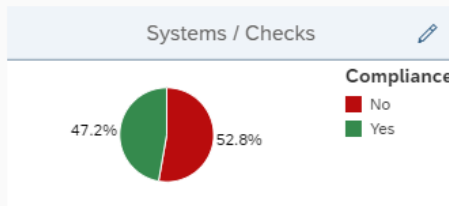
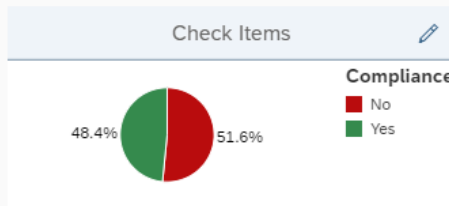
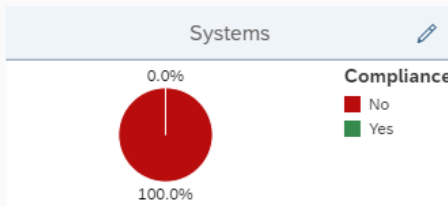
Validation

*Policy:

- [BL 2.2] CRITICAL Authorizations - ABAP
- [BL 2.2] Encryption of Network Connections - ABAP
- [BL 2.2] Password Policy - ABAP
- [BL 2.2] Standard Users - ABAP

Select..

Validated at 12/16/2020, 3:17:21 PM - 3 hours ago



Systems **Checks** Systems / Checks

Compliance

Aggregated view per Policy

Checks - Items: 119 - displayed: 119

Display Check Filter Area

Filter, Sort, Refresh icons

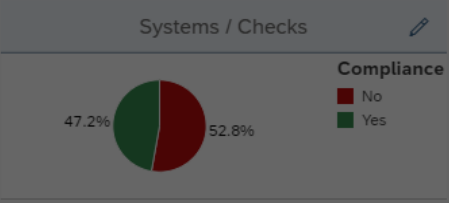
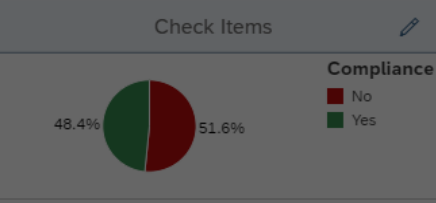
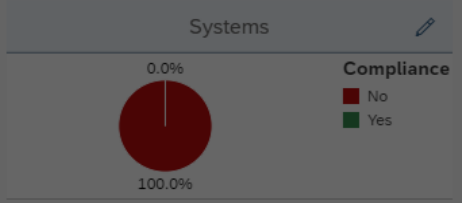
Compliant	Policy	Check	Check Description	% Non Compliant	# Non Compliant	# Compliant	Compliance Rule
No	BL2_PROCESS-A	AUDIT-A_a.3p	[p2-STANDARD] Audit Log IP address loggin...	100	10	0	No: (NAME = 'rsau/log_peer_address' and NOT (VALUE = '1')) No: no item matches compliant or n... i
No	BL2_PROCESS-A	AUDIT-A_a.4	[p2-STANDARD] Audit Log number of selecti...	100	8	0	No: (NAME = 'SlotCount' and not (lpad(VALUE, 4, '0') >= '0010')) i
No	BL2_PROCESS-A	AUDIT-A_b1.1	[p2-STANDARD] Audit Slot for SAP* user exi...	100	7	0	No: EXIST:(SLOTINDEX like '%' and STATUS = 'X' and UNAME = 'SAP#*') i
No	BL2_PROCESS-A	AUDIT-A_b1.3	[p2-STANDARD] Audit Slot for DDIC user ex...	100	7	0	No: EXIST:(SLOTINDEX like '%' and STATUS = 'X' and UNAME = 'DDIC') i
No	BL2_PROCESS-A	AUDIT-A_b1.5	[p2-STANDARD] Audit Slot for SAPCPIC use...	100	7	0	No: EXIST:(SLOTINDEX like '%' and STATUS = 'X' and UNAME = 'SAPCPIC') i
No	BL2_PROCESS-A	AUDIT-A_b2.1	[p2-STANDARD] Audit Slot for CRITICAL US...	100	7	0	No: EXIST:(SLOTINDEX like '%' and STATUS = 'X' and (UNAME != 'SAP#*' and UNAME != 'DDIC' a... i
No	BL2_PROCESS-A	AUDIT-A_b2.1a	[p2-STANDARD] Audit Slot for SUPPORT or ...	100	7	0	No: EXIST:(SLOTINDEX like '%' and STATUS = 'X' and (UNAME like 'SAPSUPPORT%' or UNAME li... i
No	BL2_CHANGE-A_...	CHANGE-A_e.2	[p3-EXTENDED] Transport Parameter VERS...	100	1	0	No: (NAME = 'VERS_AT_IMP' and VALUE != 'ALWAYS') i
No	BL2_CHANGE-A_...	CHANGE-A_f	[p2-STANDARD] Transport Parameter TLOG...	100	2	0	No: (NAME = 'TLOGOCHECK' and VALUE != 'TRUE') i
No	BL2_CHANGE-A_...	CHANGE-A_g.2	[p3-EXTENDED] Transport Parameter TP_V...	100	2	0	No: (NAME = 'TP_VERSION' and VALUE < '380') i

Validation

*Policy:

- [BL 2.2] CRITICAL Authorizations - ABAP
- [BL 2.2] Encryption of Network Connections - ABAP
- [BL 2.2] Password Policy - ABAP
- [BL 2.2] Standard Users - ABAP

Validated at 12/16/2020, 3:17:21 PM - 3 hours ago



Systems Checks Systems / Checks

Compliance Checks - Items: 13

System ID	System Type	IT Admin Role
FA7TMO	ABAP	Quality Assurance
FBTTMO	ABAP	Undefined
FH1TMO	ABAP	Undefined
FT4ADM	ABAP	Production System
FT7TMO	ABAP	Undefined
HHATMO	ABAP	Production System
JDETMO	ABAP	Production System
QM7DLM	ABAP	Undefined
QPTDLM	ABAP	Quality Assurance Sy...
QPTSSC	ABAP	Undefined

Policy Selection

Search

<input type="checkbox"/>	Policy Name	Description	Schedule	Active Exemptions
<input type="checkbox"/>	SNOTES_201707-12	SNOTES OF 201707 TO 201712	Off	0
<input type="checkbox"/>	PatchDay_2020_08	SNotes of PatchDay: 2020-08	Daily	0
<input type="checkbox"/>	PatchDay_2020_02	SNotes of PatchDay: 2020-02	Daily	0
<input type="checkbox"/>	PatchDay_2020_01	SNotes of PatchDay: 2020-01	Daily	0
<input type="checkbox"/>	PatchDay_2019-04	SNotes of PatchDay: 2019-04	Off	0
<input type="checkbox"/>	PatchDay_2020_07	SNotes of PatchDay: 2020-07	Daily	0
<input type="checkbox"/>	PatchDay_2020_06	SNotes of PatchDay: 2020-06	Daily	0
<input checked="" type="checkbox"/>	PatchDay_2020_10	SNotes of PatchDay: 2020-10	Daily	0
<input checked="" type="checkbox"/>	PatchDay_2020_11	SNotes of PatchDay: 2020-11	Daily	0
<input checked="" type="checkbox"/>	PatchDay_2020_12	SNotes of PatchDay: 2020-12	Daily	0
<input checked="" type="checkbox"/>	PatchDay_2020_12_HDB	SNotes of PatchDay: 2020-12 HANA	Off	0
<input type="checkbox"/>	ABAP_SNotes_2020	SNotes for PatchDays 2020 (ABAP, priority 1 and 2)	Off	0

Confirm Cancel

Display Check Columns 30 Columns

	PROCESS-A	BL2_PROCESS-A	BL2_PROCESS-A
AUDIT-A_a.5p		AUDIT-A_b1.1	AUDIT-A_b1.3
		⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗
	⊗	⊗	⊗

Policies for Security Notes

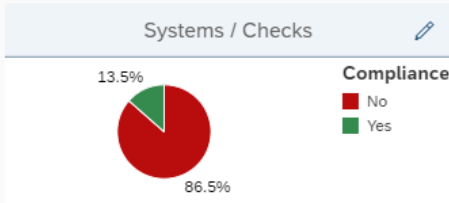
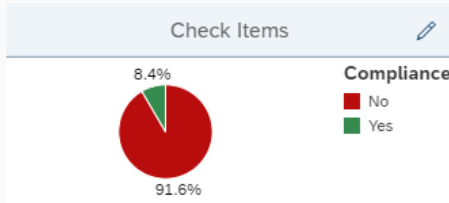
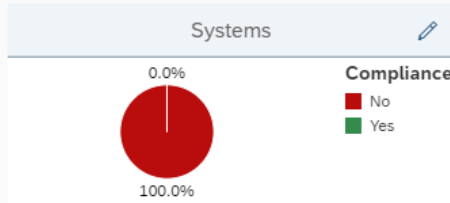
Validation

*Policy:

- SNotes of PatchDay: 2020-10
- SNotes of PatchDay: 2020-11
- SNotes of PatchDay: 2020-12
- SNotes of PatchDay: 2020-12 HANA

Select..

Validated at 12/16/2020, 10:04:57 AM - 8 hours ago



Systems Checks Systems / Checks

Compliance

Aggregated view per Policy (PatchDay)

Checks - Items: 21 - displayed: 21

Display Check Filter Area

Compliant	Policy	Check	Check Description	% Non Compliant	# Non Compliant	# Compliant	Compliance Rule
No	PatchDay_2020_12	0002973735	[p1-CVSS 9.1] Note 0002973735 missing an...	100	4	0	No: (((COMPONENT = 'DMIS' and VERSION = '2011_1_620' and lpad(SP,4,'0') between '0000' an... i
No	PatchDay_2020_12	0002983367	[p1-CVSS 9.1] Note 0002983367 missing an...	100	15	0	No: (((COMPONENT = 'DW4CORE' and VERSION = '100' and lpad(SP,4,'0') between '0010' and '0... i
No	PatchDay_2020_12	0002993132	[p2-CVSS 7.6] Note 0002993132 missing an...	100	4	0	No: (((COMPONENT = 'DMIS' and VERSION = '2011_1_620' and lpad(SP,4,'0') between '0000' an... i
No	PatchDay_2020_11	0002984627	[p2-CVSS 8.6] Note 0002984627 missing an...	100	7	0	No: (((COMPONENT = 'SAP_BASIS' and VERSION = '782' and (lpad(SP,4,'0')) < '0003') or (COM... i
No	PatchDay_2020_...	0002978768	[p3-CVSS 4.2] Note 0002978768 exists	100	11	0	No: (((NAME = 'VERSION' AND substring(VALUE,0,6) = '1.00.0') OR (NAME = 'VERSION' AND subs... i
No	PatchDay_2020_12	0002843016	[p3-CVSS 4.3] Note 0002843016 missing an...	57	4	3	No: (((COMPONENT = 'SAP_UI' and VERSION = '750' and (lpad(SP,4,'0')) < '0016') or (COMPO... i
No	PatchDay_2020_11	0002944188	[p3-CVSS 4.3] Note 0002944188 missing an...	100	6	0	No: (((COMPONENT = 'S4CORE' and VERSION = '100' and (lpad(SP,4,'0')) < '0011') or (COMPO... i
No	PatchDay_2020_12	0002945581	[p3-CVSS 4.7] Note 0002945581 missing an...	100	10	0	No: (((COMPONENT = 'S4FND' and VERSION = '102' and lpad(SP,4,'0') between '0000' and '0006'... i
No	PatchDay_2020_12	0002996479	[p3-CVSS 5.3] Note 0002996479 missing an...	100	16	0	No: (((COMPONENT = 'SAP_BASIS' and VERSION = '740' and (lpad(SP,4,'0')) < '0026') or (COM... i
No	PatchDay_2020_11	0002264508	[p3-CVSS 5.4] Note 0002264508 missing an...	50	2	2	No: (((COMPONENT = 'FI-CA' and VERSION = '600' and lpad(SP,4,'0') between '0001' and '0027') ... i
No	PatchDay_2020_11	0002319577	[p3-CVSS 5.4] Note 0002319577 missing an...	50	2	2	No: (((COMPONENT = 'FI-CA' and VERSION = '600' and (lpad(SP,4,'0')) < '0029') or (COMPO... i
No	PatchDay_2020_12	0002989719	[p3-CVSS 6.3] Note 0002989719 missing an...	100	4	0	No: (((COMPONENT = 'SAP_APPL' and VERSION = '600' and lpad(SP,4,'0') between '0001' and '0... i
No	PatchDay_2020_11	0002971954	[p3-CVSS 6.5] Note 0002971954 missing an...	100	13	0	No: (((COMPONENT = 'SAP_BW' and VERSION = '731' and (lpad(SP,4,'0')) < '0028') or (COMPO... i
No	PatchDay_2020_12	0002938650	[p4-CVSS 3.4] Note 0002938650 missing an...	33	1	2	No: (((COMPONENT = 'ST' and VERSION = '720' and (lpad(SP,4,'0')) < '0012'))) Yes: (((COMPO... i
No	PatchDay_2020_10	0002429274	Note 0002429274 missing and solution with...	50	2	2	No: (((COMPONENT = 'S4CORE' and VERSION = '101' and to_integer(REPLACE_REGEXPR('\. l... i
No	PatchDay_2020_10	0002606194	Note 0002606194 missing and solution with...	50	2	2	No: (((COMPONENT = 'S4CRM' and VERSION = '100' and to_integer(REPLACE_REGEXPR('\. IN ... i
No	PatchDay_2020_10	0002941667	Note 0002941667 missing and solution with...	96	22	1	No: (((COMPONENT = 'SAP_BASIS' and VERSION = '700' and to_integer(REPLACE_REGEXPR('\. ... i

SAP-samples / frun-csa-policies-best-practices

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- Pull requests 1
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- Security
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 ManfredAch December 2020 sec patch day ABAP and HANA Policy ...	decc94e 6 days ago	🕒 132 commits
 .reuse	update license	2 months ago
 BaselinePolicies/SOS	Update BL2_NETCF-A.xml	19 days ago
 LICENSES	update license	2 months ago
 MiscPolicies/ABAPSPStackAge	Update age_of_sap_basis.xml	6 months ago
 NotesPolicies	December 2020 sec patch day ABAP and HANA Policy	6 days ago
 Schema	Move policy schema	2 years ago
 Scripts	Move powershell scripts	2 years ago

About

Best practices check examples for creating CSA policies in SAP Focused Run

[sample](#) [sap-focused-run](#) [best-practices](#)

[sample-code](#) [sap-solution-manager](#)

[Readme](#)

Releases

No releases published

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master frun-csa-policies-best-practices / NotesPolicies /

Go to file

ManfredAch	December 2020 sec patch day ABAP and HANA Policy	decc94e	6 days ago	History
..				
ABAP	December 2020 sec patch day ABAP and HANA Policy		6 days ago	
HANA	December 2020 sec patch day ABAP and HANA Policy		6 days ago	



Policies for Security Notes



master frun-csa-policies-best-practices / NotesPolicies / ABAP / ABAP_snotes_patchday_2020 /

Go to file

ManfredAch	December 2020 sec patch day ABAP and HANA Policy ...	decc94e	6 days ago	History
..				
	ABAP_snotes_patchday_2020-01.xml	SecNotesPD-01_2019 -- 01_2020		last month
	ABAP_snotes_patchday_2020-02.xml	Create ABAP_snotes_patchday_2020-02.xml		10 months ago
	ABAP_snotes_patchday_2020-03.xml	Create ABAP_snotes_patchday_2020-03.xml		9 months ago
	ABAP_snotes_patchday_2020-04.xml	Create ABAP_snotes_patchday_2020-04.xml		8 months ago
	ABAP_snotes_patchday_2020-05.xml	Create ABAP_snotes_patchday_2020-05.xml		7 months ago
	ABAP_snotes_patchday_2020-06.xml	Create ABAP_snotes_patchday_2020-06.xml		6 months ago
	ABAP_snotes_patchday_2020-07.xml	Create ABAP_snotes_patchday_2020-07.xml		5 months ago
	ABAP_snotes_patchday_2020-08.xml	Create ABAP_snotes_patchday_2020-08.xml		4 months ago
	ABAP_snotes_patchday_2020-09.xml	Update ABAP_snotes_patchday_2020-09.xml		last month
	ABAP_snotes_patchday_2020-10.xml	Create ABAP_snotes_patchday_2020-10.xml		2 months ago
	ABAP_snotes_patchday_2020-11.xml	Create ABAP_snotes_patchday_2020-11.xml		last month
	ABAP_snotes_patchday_2020-12.xml	December 2020 sec patch day ABAP and HANA Policy		6 days ago



Policies for Security Notes



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <!--
3 This FRUN CSA policy contains rules to check the following ABAP Security Notes:
4
5 [p3-CVSS 5.3] 0002996479 BC-ABA-LA - [CVE-2020-26835] Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS AB
6 [p1-CVSS 9.1] 0002983367 BW-WHM-DBA-MD - [CVE-2020-26838] Code Injection vulnerability in SAP Business Warehouse (Master
7 [p2-CVSS 7.6] 0002993132 CA-DT-CNV - [CVE-2020-26832] Missing Authorization check in SAP NetWeaver AS ABAP and SAP S4
8 [p1-CVSS 9.1] 0002973735 CA-LT-PCL - [CVE-2020-26808] Code Injection in SAP AS ABAP and S/4 HANA (DMIS)
9 [p3-CVSS 4.3] 0002843016 CA-UI5-DLV - [CVE-2019-0388] Content spoofing vulnerability in UI5 HTTP Handler
10     + manual activity
11     version 9 "...few minor textual changes in the note..."
12 [p3-CVSS 4.7] 0002945581 CA-WUI-UI - Cross-Site Scripting (XSS) vulnerability in SAP CRM WebClient UI
13     + manual activity
14     version 6 "...added prerequisite note 2542223 in the correction instruction."
15 [p3-CVSS 6.3] 0002989719 FI-CF-INF - Missing Authorization check in S/4HANA (Central Finance)
16 [p4-CVSS 3.4] 0002938650 SV-SMG-DIA-APP-TA - [CVE-2020-26836] Open Redirect in SAP Solution Manager (Trace Analysis)
17
18
19
20 The policy does not check the following Security Notes:
21
22 [p1-CVSS 10.0] 0002974774 BC-JAS-COR-CLS - [CVE-2020-26829] Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Clus
23 [p3-CVSS 5.4] 0002971163 BC-JAS-SEC - [CVE-2020-26816] Missing Encryption in SAP NetWeaver AS Java (Key Storage Servic
24 [p3-CVSS 6.5] 0002974330 BC-NWA-XPI - [CVE-2020-26826] Unrestricted File Upload vulnerability in SAP NetWeaver Applica
25 [p1-CVSS 9.6] 0002989075 BI-RA-CR-VW - [CVE-2020-26831] Missing XML Validation in SAP BusinessObjects Business Intellig
26 [p3-CVSS 5.4] 0002971180 EPM-DSM-GEN - [CVE-2020-26828] Formula Injection in SAP Disclosure Management
27 [p2-CVSS 8.5] 0002983204 SV-SMG-MON-EEM - [CVE-2020-26837] Multiple Vulnerabilities in SAP Solution Manager 7.2 (User Expe
28 [p3-CVSS 4.2] 0002978768 HAN-DB-SEC - [CVE-2020-26834 ] Improper authentication in SAP HANA database
29
30 SAP Security: PatchDay_2020-12
31 Version: 001
32 Date: 09.12.2020
33 -->
34
35 <targetsystem desc="SNotes of PatchDay: 2020-12" id="PatchDay_2020-12" multisql="Yes">
36
37 <!-- [p3-CVSS 5.3] BC-ABA-LA 0002996479 - [CVE-2020-26835] Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS AB (Version 0004) -->
38 <configstore name="ABAP_NOTES">
39   <checkitem desc="[p3-CVSS 5.3] Note 0002996479 exists" id="0002996479" operator="check_note">
40     <compliant>NOTE = '0002996479' and PRSTATUS = 'E'</compliant>
41     <noncompliant/>
42   </checkitem>
43 </configstore>
44 <configstore name="COMP_LEVEL">
45   <checkitem desc="[p3-CVSS 5.3] Note 0002996479 missing and solution with SP available" id="0002996479" operator="check_note:0002996479">
46     <compliant>{
47       ( COMPONENT = 'SAP_BASIS' and VERSION = '740' and not( (lpad(SP,4,'0')) &lt;t; '0026' ) ) <!-- SAP_BASIS 740 SAPKB74026 --> or
48       ( COMPONENT = 'SAP_BASIS' and VERSION = '750' and not( (lpad(SP,4,'0')) &lt;t; '0020' ) ) <!-- SAP_BASIS 750 SAPK-75020INSAPBASIS --> or
49       ( COMPONENT = 'SAP_BASIS' and VERSION = '751' and not( (lpad(SP,4,'0')) &lt;t; '0012' ) ) <!-- SAP_BASIS 751 SAPK-75112INSAPBASIS --> or
```

Example for a Policy

Policy Catalog

- Upload Catalog XML
- Upload Catalog XML remotely**

Catalog Policy

Name: /Default/PatchDay_2020-12

Check Items: [Icons: List, Grid, Print, Copy, Download, Delete] [Input Field] [Arrow]

- > [p3-CVSS 5.3] Note 0002996479 exists (0002996479)
- > [p3-CVSS 5.3] Note 0002996479 missing and solution with SP available (0002996479)
- > [p3-CVSS 5.3] Note 0002996479 missing and applicable using Correction Instruction (0002996479)
- > [p-CVSS] Note 0002983367 exists (0002983367)
- > [p1-CVSS 9.1] Note 0002983367 missing and solution with SP available (0002983367)
- > [p1-CVSS 9.1] Note 0002983367 missing and applicable using Correction Instruction (0002983367)
- > [p2-CVSS 7.6] Note 0002993132 exists (0002993132)
- > [p2-CVSS 7.6] Note 0002993132 missing and solution with SP available (0002993132)
- > [p2-CVSS 7.6] Note 0002993132 missing and applicable using Correction Instruction (0002993132)
- > [p1-CVSS 9.1] Note 0002973735 exists (0002973735)
- > [p1-CVSS 9.1] Note 0002973735 missing and solution with SP available (0002973735)
- > [p1-CVSS 9.1] Note 0002973735 missing and applicable using Correction Instruction (0002973735)
- > [p3-CVSS 4.3] Note 0002843016 exists (0002843016)
- > [p3-CVSS 4.3] Note 0002843016 missing and solution with SP available (0002843016)
- > [p3-CVSS 4.3] Note 0002843016 missing and applicable using Correction Instruction (0002843016)
- > [p3-CVSS] Note 0002945581 exists (0002945581)
- > [p3-CVSS 4.7] Note 0002945581 missing and solution with SP available (0002945581)
- > [p3-CVSS 4.7] Note 0002945581 missing and applicable using Correction Instruction (0002945581)
- > [p3-CVSS 6.3] Note 0002989719 exists (0002989719)

Active Policy

Name: SNotes for PatchDays 2020 (ABAP, priority 1 and 2) [ABAP_SNotes_2020] Select..

Check Items: [Icons: Print, Copy, Paste, Window, Close]

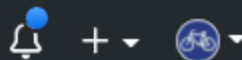
- > [p1-CVSS 9.1] Note 0002983367 missing and solution with SP available (0002983367)
- > [p1-CVSS 9.1] Note 0002983367 missing and applicable using Correction Instruction (0002983367)
- > [p2-CVSS 7.6] Note 0002993132 exists (0002993132)
- > [p2-CVSS 7.6] Note 0002993132 missing and solution with SP available (0002993132)
- > [p2-CVSS 7.6] Note 0002993132 missing and applicable using Correction Instruction (0002993132)
- > [p1-CVSS 9.1] Note 0002973735 exists (0002973735)
- > [p1-CVSS 9.1] Note 0002973735 missing and solution with SP available (0002973735)
- > [p1-CVSS 9.1] Note 0002973735 missing and applicable using Correction Instruction (0002973735)
- > [p-CVSS] Note 0002983367 exists (0002983367)

Manage Catalog of Policies and active Policies



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frun-csa-policies-best-practices

Unwatch 15 Unstar 8 Fork 10

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master

frun-csa-policies-best-practices / BaselinePolicies / SOS /
v2.2 / ABAP_SYSTEM / BL2_CHANGE-A_frun2.0.xml

Go to file

168 lines (168 sloc) | 10 KB

Raw

Blame



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <targetsystem xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3   <!--
4   -->
5   <!-- CHANGE-A: Protect Production System against
6   <configstore name="GLOBAL">
7     <checkitem desc="[p1-CRITICAL] Global Modification
8     <compliant> ((NAME = 'GLOBAL_SETTING' ...
```

Upload Policy from GitHub

Copy&Paste raw-link

The screenshot shows the SAP Policy Management interface. On the left, there is a navigation menu with 'Policy Maintenance' and 'Policy Catalog'. The main area displays 'Policy Catalog' with options to 'Upload Catalog XML' and 'Upload Catalog XML remotely'. A dialog box titled 'Upload Catalog Policy' is open in the foreground, featuring a text input field containing the URL 'https://github.com/SAP-samples/frun-cs...'. The dialog also includes 'Upload policy' and 'Cancel' buttons.

Configuration & Security Analytics (CSA) in FocusedRun

FRUN

<https://support.sap.com/en/alm/focused-solutions/focused-run-expert-portal.html>

Advanced Configuration Monitoring (ACM)

Configuration & Security Analytics (CSA)

<https://support.sap.com/en/alm/focused-solutions/focused-run-expert-portal/configuration-and-security-analytics.html>

CSA Best Practices

<https://support.sap.com/en/alm/sap-focused-run/expert-portal/configuration-and-security-analytics/csa-best-practices.html>

Github SAP samples

<https://github.com/SAP-samples/frun-csa-policies-best-practices>

Security Baseline Template Policies

<https://github.com/SAP-samples/frun-csa-policies-best-practices/tree/master/BaselinePolicies/SOS/v2.2>

Security Notes Policies

<https://github.com/SAP-samples/frun-csa-policies-best-practices/tree/master/NotesPolicies>

Configuration & Security Analytics (CSA) in FocusedRun

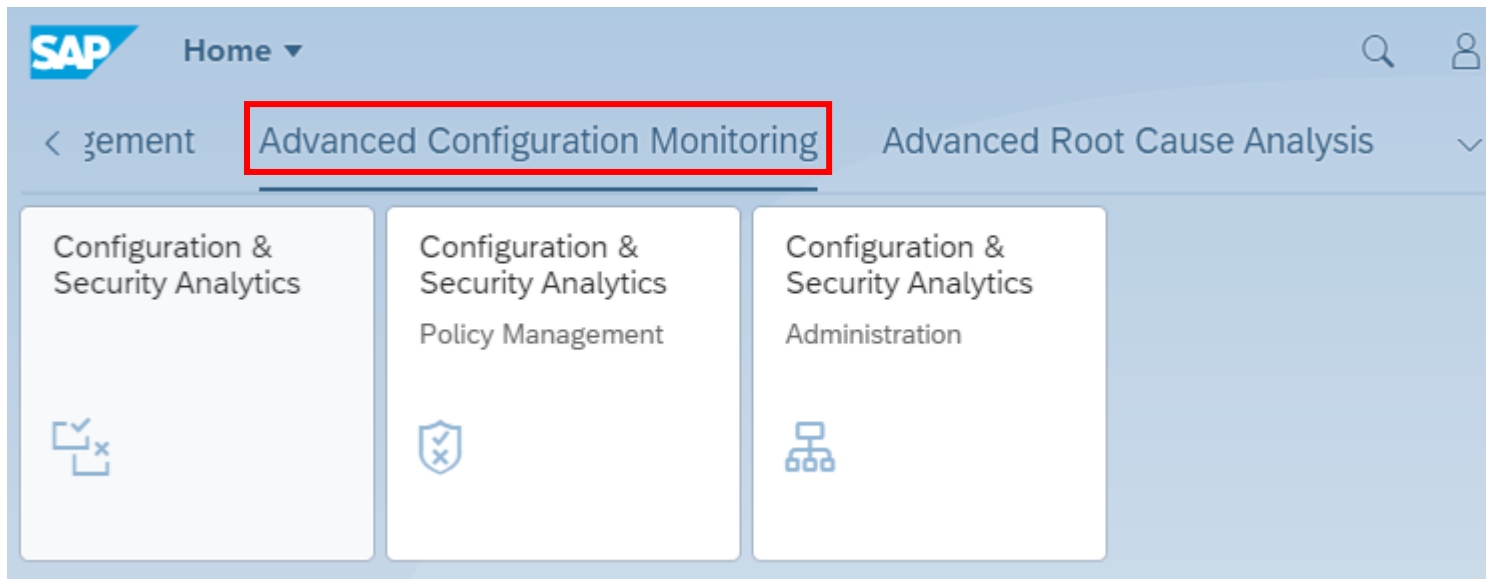
FRUN Internet Demo System

Landing Page

<https://support.sap.com/en/alm/sap-focused-run/internet-demo-system.html>

Demo System

<https://frun.almdemo.com/sap/bc/ui2/flp?sap-client=100&sap-language=EN#Shell-home>



Note 2890213 - Missing Authentication Check in SAP Solution Manager

Note 2985866 - Missing Authentication Check in SAP Solution Manager

corrected

HotNews note (re)-published on 10.11.2020

These issues are relevant for all customers using SAP Solution Manager 7.2 on Support Package SP11 and lower. No additional activities are required after applying the patch.

In NetWeaver Administrator go to *System Information: Components Info*
 Find LM-SERVICE and check the version; the format looks like: 1000.7.20.[SP].[Patch].[Creation Date]

Patches containing this particular correction:

SOLMANDIAG 720	<u>SP004</u>	<u>000012</u>	}	March
SOLMANDIAG 720	<u>SP005</u>	<u>000013</u>		
SOLMANDIAG 720	<u>SP006</u>	<u>000014</u>		
SOLMANDIAG 720	<u>SP007</u>	<u>000020</u>		
SOLMANDIAG 720	<u>SP008</u>	<u>000016</u>		
SOLMANDIAG 720	<u>SP009</u>	<u>000008</u>		
SOLMANDIAG 720	<u>SP010</u>	<u>000002</u>		
SOLMANDIAG 720	<u>SP011</u>	<u>000004</u>	}	November

What you get on 18.11.2020:

SP04 patch 17	12.11.2020
SP05 patch 18	06.10.2020
SP06 patch 19	12.11.2020
SP07 patch 26	04.11.2020
SP08 patch 24	04.11.2020
SP09 patch 18	04.11.2020
SP10 patch 9	04.11.2020
SP11 patch 4 / 5	22.10.2020 / 04.11.2020

For this component you always install the latest patch of a specific Support Package.

Note 2983204 - Multiple Vulnerabilities in SAP Solution Manager 7.2 (User Experience Monitoring)

Related note:

➤ **Note 2890213 - Missing Authentication Check in SAP Solution Manager (User-Experience Monitoring)**

Make sure *Single Sign-On Automatic Activity* in SAP Solution Manager Configuration has been executed:
Transaction `SOLMAN_SETUP` → Cross Scenario Configuration → Mandatory Configuration
→ Infrastructure Preparation → (2) Setup Connectivity → (2.2) Enable Connectivity → Set Up Single Sign-On

Patches containing this particular correction:

		Published on
SOLMANDIAG 720	<u>SP003</u> <u>000008</u>	12.11.2020
SOLMANDIAG 720	<u>SP004</u> <u>000017</u>	12.11.2020
SOLMANDIAG 720	<u>SP005</u> <u>000019</u>	19.11.2020
SOLMANDIAG 720	<u>SP006</u> <u>000019</u>	12.11.2020
SOLMANDIAG 720	<u>SP007</u> <u>000026</u>	04.11.2020
SOLMANDIAG 720	<u>SP008</u> <u>000024</u>	04.11.2020
SOLMANDIAG 720	<u>SP009</u> <u>000018</u>	28.10.2020
SOLMANDIAG 720	<u>SP010</u> <u>000009</u>	28.10.2020
SOLMANDIAG 720	<u>SP011</u> <u>000005</u>	04.11.2020

Note 2974330 - Unrestricted File Upload vulnerability in Java (Process Integration Monitoring)

Vulnerability:

Deny of Service (DoS) for Java system in application „Send test message“ of Process Integration Monitoring

Mitigation:

Action `NWA_SUPERADMIN_NWA_SENDETESTMSG` is required to call the function. The action is part of most PI administrator roles.

Configuration:

NWA → Configuration → Infrastructure → Java System Properties

Select the Applications tab and filter for application `tc~lm~itsam~co~ui~nwacommon~wd`

<code>sndTestMessage.monitor.payload.filesize.limit</code>	5	default [MB]
<code>sndTestMessage.monitor.payload.file.extensions</code>	<code>txt,xml</code>	default

Logs:

If the uploaded file size is larger than the configured filesize limit property or the file extension is not listed in the allowed extensions property an error occurs in UI and Developer Traces log:

NWA → Log Viewer (select Developer Traces view)

Note 2974774 - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

KBA 2997167 - Missing Authentication Check In NW AS Java P2P Cluster Communication - Frequently asked questions and answers

Question: “Assuming that the network is not isolated: If the MS Access Control List is configured, than any connect attempt from another server via the join port is blocked. Correct?”

- **Yes, if the IP or FQDN of the remote client (who wants to make a p2p connection to the join port of some server node) is not allowed from the MS ACL, then the connection will be refused from the accepting server node.**

Workaround / extended settings:

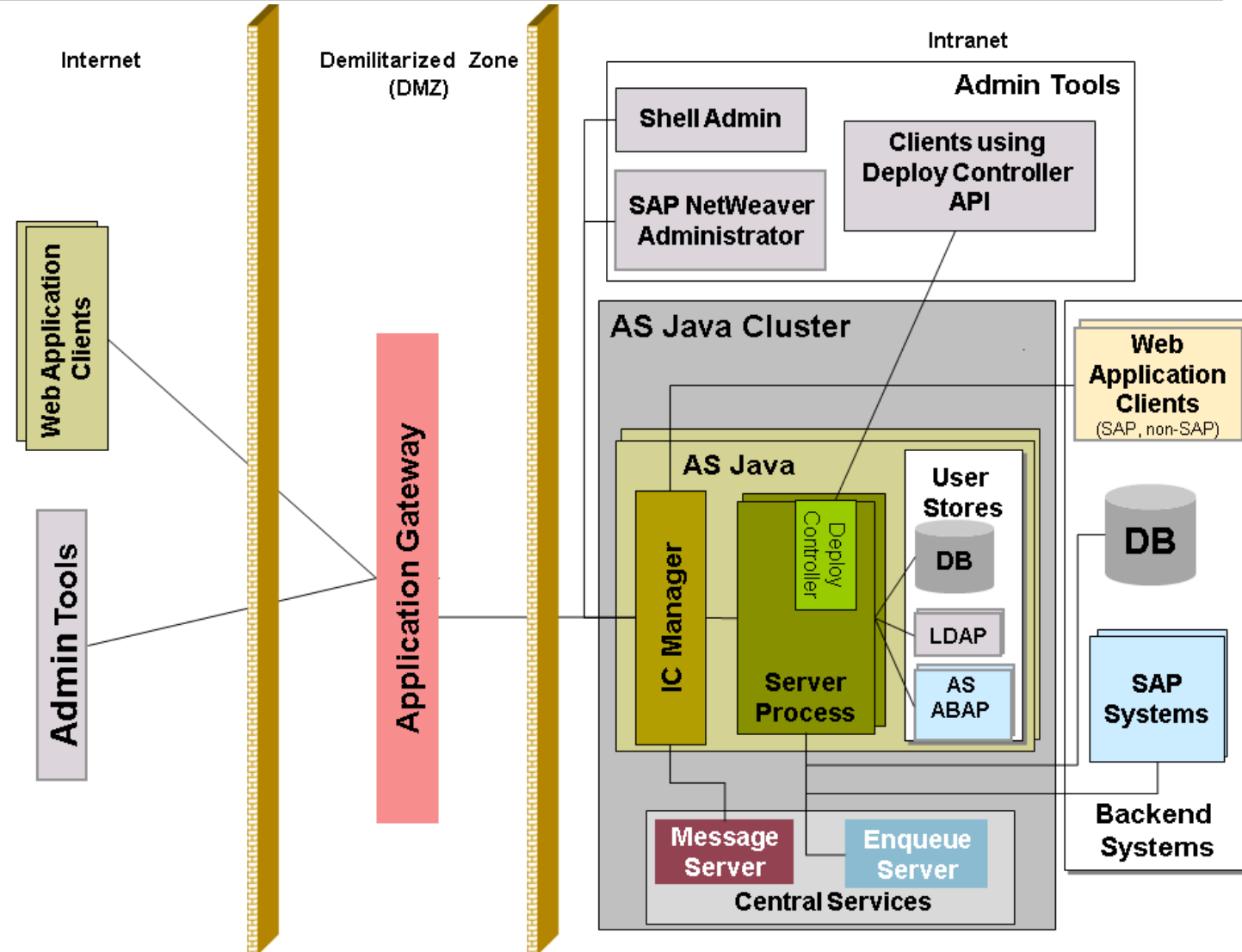
- Configure Message Server ACL to allow **P2P connections** only from trusted IP addresses according to this topic: Security Settings for the SAP Message Server.
- Make sure that the **Join Port**, opened by the P2P Server Socket, is protected on network level via network segmentation, with firewall, or both. Furthermore, the communication between the cluster elements must be secured via the IPsec protocol suite. For more information about cluster communication, see: Configuring Cluster Communication Ports.

Note 2974774 - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

Online Help

Technical System Landscape

Use an Application Gateway,
e.g. the SAP Web Dispatcher

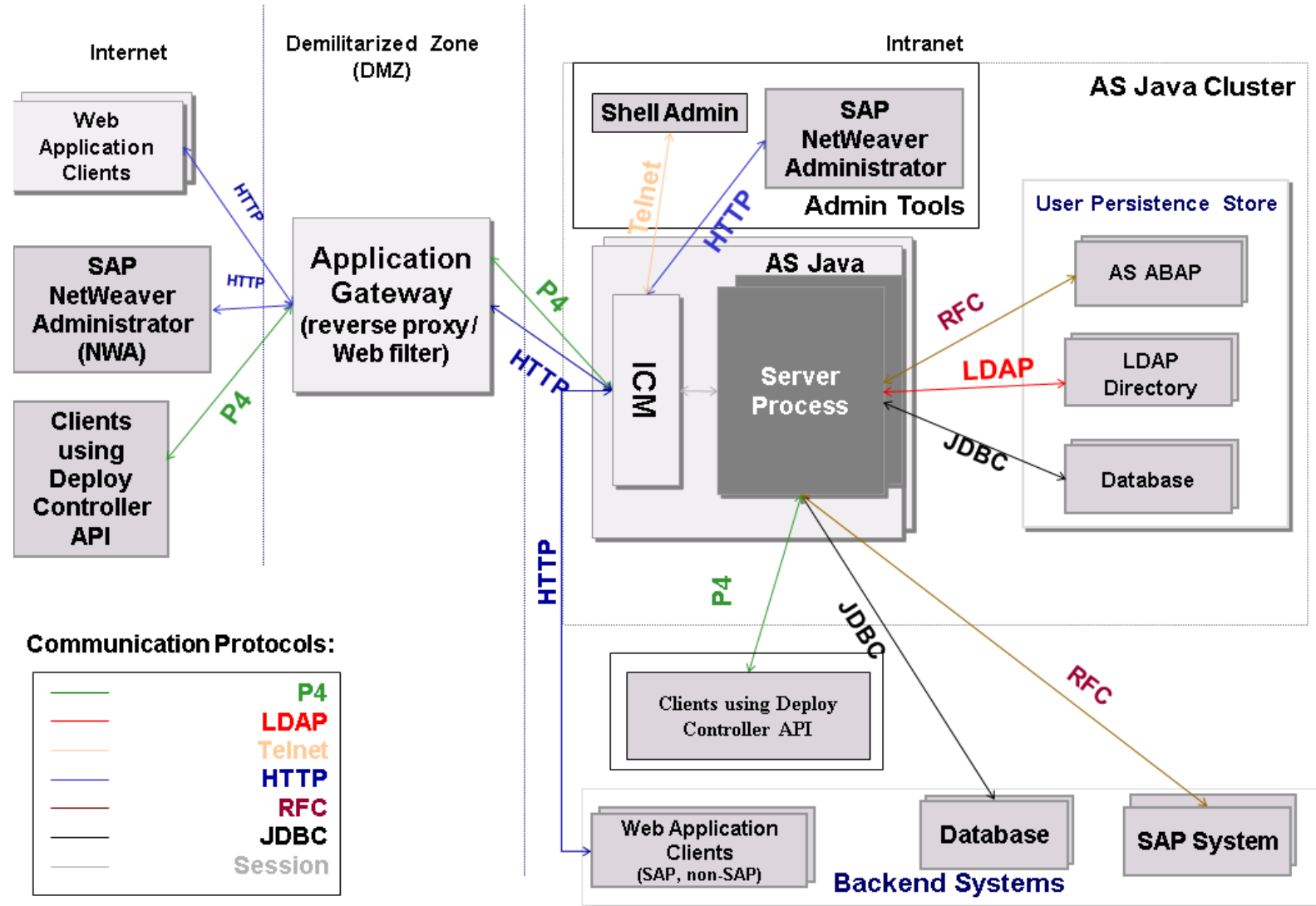


Note 2974774 - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

Online Help

Transport Layer Security

Use an Application Gateway, e.g. the SAP Web Dispatcher



Note 2974774 - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

Online Help - AS Java Ports → AS Java Server Ports

Internal Port	Value	s0, s1, s2,..., s15 is the number of the server process NN is the instance number
Server Join Port	For s0 = 5NN20; for s1 = 5NN25; for s2 = 5NN30; etc. for s15 = 5NN95	
Server Debug Port	For s0 = 5NN21; for s1 = 5NN26; for s2 = 5NN31; etc. for s15 = 5NN96	
DSR Infrastructure	For s0 = 5NN22; for s1 = 5NN27; for s2 = 5NN32; etc. for s15 = 5NN97	

TCP/IP Ports of All SAP Products: <https://help.sap.com/viewer/ports>

Note 2974774 - Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)

Online Help - Security Settings for the SAP Message Server

Parameter	Port
ms/acl_file_admin	Administration port on the message server. This port is set with parameter ms/admin_port.
ms/acl_file_ext	External port on the message server, which all clients can use. This port is set with parameter rdisp/msserv.
ms/acl_file_extbnd	Port number under which an external binding program (icmbnd) has to log on to in order to bind a port. This port is set with parameter rdisp/extbnd_port.
ms/acl_file_int	External port on the message server This port is set with parameter rdisp/msserv_internal.
ms/server_port_<xx>	This parameter identifies the message server port at which HTTP(S) requests can arrive.

Note 2983367 - Code Injection vulnerability in SAP Business Warehouse (Master Data Management) and SAP BW4HANA

Unvalidated input parameter allows
ABAP code injection via
GENERATE SUBROUTINE POOL

Replaced by fixed value in old
systems

Deactivation of obsolete function in
higher support package levels

Caution: The validity ranges of the
correction instructions are quite small:
Open a ticket if you need the note for a
(quite) old system.

solved

```
*$ Correction Inst.          0020751258 0000841263          $$
*$-----$$
*$ Valid for                :                          $$
*$ Software Component      SAP_BW      Business Information Warehouse  $$
*$ Release 700             SAPKW70038 - SAPKW70040      $$
*$ Release 701             SAPKW70121 - SAPKW70123      $$
*$ Release 702             SAPKW70221 - SAPKW70223      $$
*$ Release 731             SAPKW73121 - SAPKW73128      $$
*$ Release 730             Fm SAPKW73019                $$
*$*$-----$$*$*$
*&-----*
*& Object                   FUNC RSDMD_BATCH_CALL      *
*& Object Header           FUGR RSDMD                  *
*&-----*
*& FUNCTION RSDMD_BATCH_CALL
*&-----*
...
L_T_ABAP = ' USING                                     '. APPEND L_T_ABAP.
L_T_ABAP = ' I_JOBNAME LIKE TBTCJOB-JOBNAME ' . APPEND L_T_ABAP.
L_T_ABAP = ' I_JOBCOUNT LIKE TBTCJOB-JOBCOUNT.' . APPEND L_T_ABAP.

*>>>> START OF DELETION <<<<<<
CONCATENATE 'SUBMIT' I_REPID INTO L_T_ABAP SEPARATED BY SPACE.
*>>>> END OF DELETION <<<<<<

*>>>> START OF INSERTION <<<<<<
" CONCATENATE 'SUBMIT' I_REPID INTO L_T_ABAP SEPARATED BY SPACE.
CONCATENATE 'SUBMIT' 'RSDMD_DEL_BACKGROUND' INTO L_T_ABAP SEPARATED BY SPACE.
*>>>> END OF INSERTION <<<<<<
```

Note 2670851 - Authority check in RSSG_BROWSER

Transaction / report RSSG_BROWSER is a simple table viewer (similar like SE16).

It generates a program based on template RSSG_BROWSER_TEMPLATE

Authorizations for S_DEVELOP DEBUG 02 and S_TABU_DIS / S_TABU_NAM are required.

Do not use it in production systems!

In addition you should implement

Note 2999035 - Authority check S_TABU_DIS in RSSG_BROWSER

Note 2978768 - Improper authentication in SAP HANA database

Search Term: <input type="text" value="Enter search term"/>	Components (Start with): <input type="text" value="HAN-DB"/>	Components (Exact): <input type="text" value="No Restriction"/>	Excluded Components (Exact): <input type="text" value="No Restriction"/>
Released On (Free): <input type="text" value="MMM d, y - MMM d, y"/>	Soft.Comp.: <input type="text" value="No Restriction"/>	Support Package (Equal): <input type="text" value="No Restriction"/>	Product: <input type="text" value="No Restriction"/>
Priority: <input type="text" value="No Restriction"/>	Category: <input type="text" value="No Restriction"/>	Release Status: <input type="text" value="No Restriction"/>	Document Type: <input type="text" value="SAP Security Notes"/>

32 document(s) found

1st Security Note for the HANA database since more than a year

Sort: Released On Export List as CSV File Add to Worklist

<input type="checkbox"/>	SAP Component	Number	Version	Title	Category	Priority	Released On
<input type="checkbox"/>	HAN-DB-SEC	2978768	8	SAML authentication user name validation flaw in SAP HANA database	Program error	Correction with medium priority	08.12.2020
<input type="checkbox"/>	HAN-DB	2829681	3	[CVE-2019-0357] Privilege escalation in SAP HANA database	Program error	Correction with medium priority	10.09.2019
<input type="checkbox"/>	HAN-DB	2798243	3	[CVE-2019-0350] Denial of service (DOS) in SAP HANA database	Program error	Correction with high priority	13.08.2019
<input type="checkbox"/>	HAN-DB	2772376	2	[CVE-2019-0284] XML External Entity vulnerability in SAP HANA sldreg	Program error	Correction with medium priority	09.04.2019
<input type="checkbox"/>	HAN-DB-SEC	2704878	3	[CVE-2018-2497] Event not logged in SAP HANA database audit log	Program error	Correction with low priority	11.12.2018
<input type="checkbox"/>	HAN-DB-SEC	2572940	6	[CVE-2018-2369] Information Disclosure in authentication function of SAP HANA	Program error	Correction with medium priority	27.02.2018

System Recommendations – Recalculation for some notes

Unfortunately due to a bug **several non ABAP security notes** released on **08.12.2020** have incorrect patch level. We have fixed the bug and corrected the data on backbone.

To re-pushing them to customer, we modified the released date of affected notes in backbone to **10.12.2020**. The corrected notes have been recalculated automatically, i.e. if the background job is scheduled daily basis (no extra action is required).

Number	System type	Title
<u>2971163</u>	JAVA	Missing Encryption in SAP NetWeaver AS Java (Key Storage Service)
<u>2971180</u>	DISCMGMS	Formula Injection in SAP Disclosure Management
<u>2974330</u>	JAVA	Unrestricted File Upload vulnerability in SAP NetWeaver Application Server for Java (Process Integration Monitoring)
<u>2974774</u>	JAVA	Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)
<u>2978768</u>	HANABD	Improper authentication in SAP HANA database
<u>2983204</u>	JAVA	Multiple Vulnerabilities in SAP Solution Manager 7.2 (User Experience Monitoring)
<u>2989075</u>	BOBJ	Missing XML Validation in SAP BusinessObjects Business Intelligence Platform (Crystal Report)

System Recommendations – Recalculation for some notes

Standard * ▼ Hide Advanced Search Filters (1) Go

Technical System: ▼ Release Date: 📅

Note Type: ⊗ ▼ Priority: ▼

Implementation Status: ▼ Processing Status: ▼

Note Number: ⊗ ⊗ ⊗ ⊗ ⊗ 2 More 📄 Correction Types: ▼

Kernel: ▼ Release-Independent: ▼

Number	System type
<u>2971163</u>	JAVA
<u>2971180</u>	DISCMGMS
<u>2974330</u>	JAVA
<u>2974774</u>	JAVA
<u>2978768</u>	HANABD
<u>2983204</u>	JAVA
<u>2989075</u>	BOBJ

SAP Notes for selected technical systems: 4

<input type="checkbox"/>	Technical System	Note Number	Note Version	Short text	Release Date	Application Component	Priority ID	Support Package	Implementation Status	Processing Status
<input type="checkbox"/>	X3J~JAVA	2974774	14	[CVE-2020-26829] Missing Authentication Check In SAP NetWeaver AS JAVA (P2P Cluster Communication)	12/12/2020	BC-JAS-COR-CLS	1	SP015	New	Undefined
<input type="checkbox"/>	X3J~JAVA	2983204	14	[CVE-2020-26837] Multiple Vulnerabilities in SAP Solution Manager 7.2 (User Experience Monitoring)	12/10/2020	SV-SMG-MON-EEM	2	SP010	New	Undefined
<input type="checkbox"/>	OHY~HANADB	2978768	8	[CVE-2020-26834] Improper authentication in SAP HANA database	12/10/2020	HAN-DB-SEC	3		New	Undefined
<input type="checkbox"/>	X3J~JAVA	2971163	7	[CVE-2020-26816] Missing Encryption in SAP NetWeaver AS Java (Key Storage Service)	12/10/2020	BC-JAS-SEC	3	SP015	New	Undefined

System Recommendations – Recalculation for some notes

How to trigger recalculation:

Use transaction SE16 for table AGSSR_KV to delete following entries for field SRKEY:

BACKEND_SHNOTES_2020_12
CALC_*\$*\$2020_12

Maybe better:

CALC_*\$JAVA\$2020_12
CALC_*\$HANADB\$2020_12
CALC_*\$BOBJ\$2020_12

Then copy and re-release job
SM:SYSTEM RECOMMENDATIONS

The screenshot shows the SAP Data Browser interface for table AGSSR_KV. The title bar reads "Data Browser: Table AGSSR_KV: Selection Screen". Below the title bar, there are icons for navigation and a label "Number of Entries". The main area contains a selection screen with fields for "SRKEY" and "USER_ID". A context menu is open over the table entries, showing options like "Create", "Change", "Delete all", and "Exit". The table entries are as follows:

SRKEY	SRVALUE	USER_ID
BACKEND_SHNOTES_2020_12	2020_12\$20201201\$202012...	
CALC_*\$*\$2020_12	2020_12\$20201201\$202012...	
CALC_891_WAS\$ATC\$2020_12	2020_12\$20201201\$202012...	
CALC_A24\$ABAP\$2020_12	2020_12\$20201201\$202012...	
CALC_A75\$JAVA\$2020_12	2020_12\$20201201\$202012...	



November 2020

Topics November 2020



Note [2952084](#) - Information Disclosure in SAP Process Integration (PGP Module – Business-to-Business Add On)

Note [2963592](#) - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver (Knowledge Management)

Note [2971112](#) - Incorrect Default Permissions in SAP ERP Client for E-Bilanz 1.

Note [2890213](#) - Missing Authentication Check in SAP Solution Manager

Note [2985866](#) - Missing Authentication Check in SAP Solution Manager (JAVA stack)

Scenarios for Using the Security Audit Log

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note 2952084 - Information Disclosure in SAP Process Integration (PGP Module – Business-to-Business Add On)

PGP Secure Store (New)

https://help.sap.com/saphelp_nw-secure-connect103/helpdata/en/da/33e33a47d14419bd51829f3ab53a94/frameset.htm




Maintaining PGP Keys

https://help.sap.com/saphelp_nw-secure-connect103/helpdata/en/8b/11483856d04f6b9c7bf378ecd1670c/frameset.htm

SFTP Adapter – Configuring PGP Secure Store

<https://blogs.sap.com/2017/10/31/sftp-adapter-configuring-pgp-secure-store/>

Use Configuration Store J2EE_COMP_SPLEVEL and search for element PIB2BPGP to show systems and installed versions of that component:

Landscape	Component Version	Store Name	Element Status	Element Class	Element Name	Element Value
 Java Technical System (JW5~JAVA)	J2EE ENGINE SERVERCORE 7.50	J2EE_COMP_SPLEVEL	Initial (Current)	Table Row	[COMPONENT]=PIB2BPGP [RELEASE]=1.0	[EXTRELEASE]=5 [PATCH_LEVEL]=0 [DESCRIPTION]=PGP MODULE
 Java Technical System (PO1~JAVA)	J2EE ENGINE SERVERCORE 7.31	J2EE_COMP_SPLEVEL	Updated (Current)	Table Row	[COMPONENT]=PIB2BPGP [RELEASE]=1.0	[EXTRELEASE]=4 [PATCH_LEVEL]=3 [DESCRIPTION]=PGP MODULE
 Java Technical System (PJ2~JAVA)	J2EE ENGINE SERVERCORE 7.31	J2EE_COMP_SPLEVEL	Initial (Current)	Table Row	[COMPONENT]=PIB2BPGP [RELEASE]=1.0	[EXTRELEASE]=5 [PATCH_LEVEL]=0 [DESCRIPTION]=PGP MODULE

Note 2952084 - Information Disclosure in SAP Process Integration (PGP Module – Business-to-Business Add On)

App /SecureStore

The screenshot shows the 'PGP Secure Store' interface. The 'Secure Store' tab is active. Under 'Upload PGP Key', there is a dropdown for 'Select File Type' set to 'Zip File (*.zip)', a text field for '*Zip File:' with a 'Browse...' button, and a 'Description:' field. An 'Import' button is below. The 'Uploaded Keys' section has 'Remove', 'Download', and 'Update Keys' buttons. A table lists keys: 'pubring.gpg' (highlighted) and 'secring.gpg'. Below the table, there are 'Key Content' and 'Details' buttons.

Module parameter useSecureStore of related Communication Components (PGPEncryption and PGPDecryption)

The screenshot shows the configuration for a Communication Component 'CC_Decryption'. The 'Module' tab is active. The 'Processing Sequence' table is as follows:

Number	Module Name	Type	Module Key
1	localejbs/PGPDecryption	Local Enterprise Bean	DEC
2	localejbs/CallSapAdapter	Local Enterprise Bean	entry

The 'Module Configuration' table is as follows:

Module Key	Parameter Name	Parameter Value
DEC	ownPrivateKey	secring.gpg
DEC	partnerPublicKey	pubring.gpg
DEC	pwdOwnPrivateKey	*****
DEC	useSecureStore	true

Note 2952084 - Information Disclosure in SAP Process Integration (PGP Module – Business-to-Business Add On)

By default the modules PGPEncryption and PGPDecryption access the keys from this location:
`usr/sap/<System ID>/<Instance ID>/sec`

If you want to store the PGP keys in some other location, use module parameter `keyRootPath` and specify the path.

If you do not want to store the PGP keys on a file system, use PGP Secure Store functionality using module parameter `useSecureStore=true`

If you import a new PGP key to PGP Secure Store, it will be stored with encryption.

Manual activity is required only for existing PGP keys.

If some unencrypted keys exist, the new button Update Keys is enabled.

Note 2963592 - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver (Knowledge Management)

Informational note:

Malicious resource execution in Knowledge Management cannot be achieved when using HTML Editor with “**Always Use Secure HTML Editor**” and “**Allow Only Basic Formatting**” enabled.

These settings are enabled by default as of NetWeaver version 7.11.

Review the configuration in the Portal:
System Administration → System Configuration
→ Knowledge Management → Content Management
→ Utilities → Editing → HTML Editing

<https://help.sap.com/viewer/96e4ea277c104112bc0237851eecb13e/7.5.19/en-US/444cd511c6233f8ee10000000a1553f7.html>

(The documentation still claims, that the settings are deactivated by default.)

This is another topic compared with notes 2928635, 2957979 and KBA 2932212 about "Force Text Download"

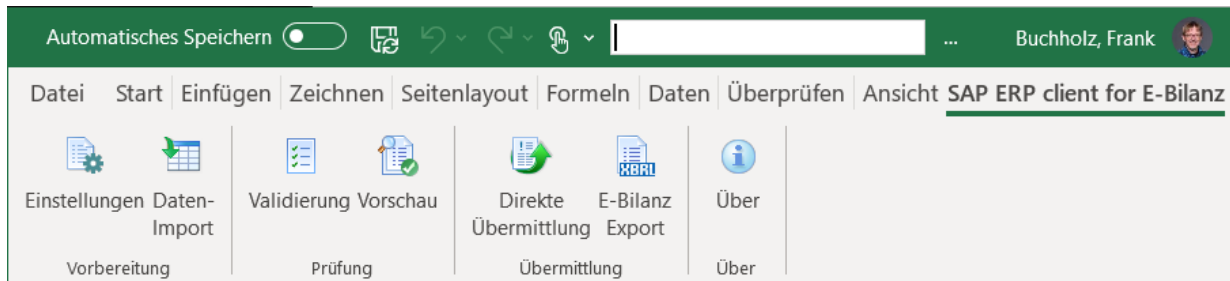
- ✓ Always Use Secure HTML Editor
- ✓ Allow Only Basic Formatting
- ❖ Allow Links
- ❖ Activate Clipboard Buttons
- ❖ Allow Preview
- ❖ Allow Indenting
- ❖ Allow Tables
- ❖ Allow Bullets and Numbering
- ❖ Allow Images
- ❖ Allow Text Size and Font Setting
- ❖ Allow Color Settings

Caution: The deactivation of editing functions can affect existing documents.

Note 2971112 - Incorrect Default Permissions in SAP ERP Client for E-Bilanz 1.0

Relevant for German Tax only: <http://www.eststeuer.de/>

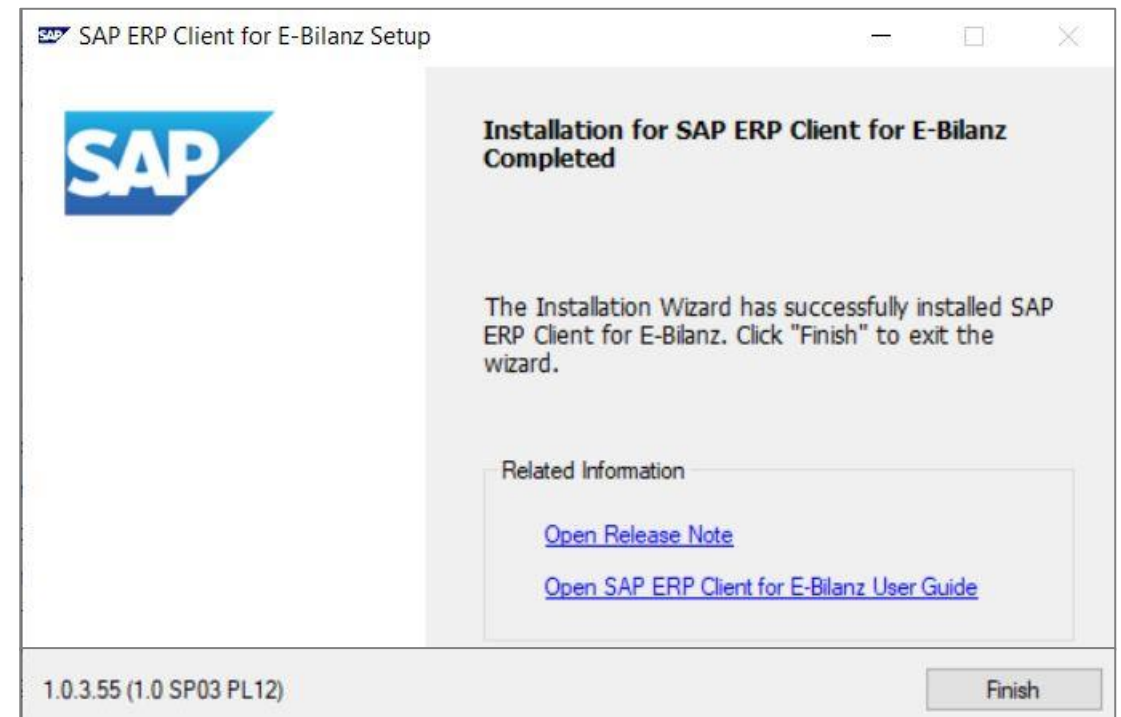
The note describes an add-on for Excel



Administration and User Guide (German)

<https://help.sap.com/boebilanz10/>

Note 2906774 – Installation Guide



Note 2890213 - Missing Authentication Check in SAP Solution Manager

Note 2985866 - Missing Authentication Check in SAP Solution Manager

corrected

HotNews note (re)-published on 10.11.2020

These issues are relevant for all customers using SAP Solution Manager 7.2 on Support Package SP11 and lower. No additional activities are required after applying the patch.

In NetWeaver Administrator go to *System Information: Components Info*
 Find LM-SERVICE and check the version; the format looks like: 1000.7.20.[SP].[Patch].[Creation Date]

Patches containing this particular correction:

SOLMANDIAG 720	<u>SP004</u>	<u>000012</u>	}	March
SOLMANDIAG 720	<u>SP005</u>	<u>000013</u>		
SOLMANDIAG 720	<u>SP006</u>	<u>000014</u>		
SOLMANDIAG 720	<u>SP007</u>	<u>000020</u>		
SOLMANDIAG 720	<u>SP008</u>	<u>000016</u>		
SOLMANDIAG 720	<u>SP009</u>	<u>000008</u>		
SOLMANDIAG 720	<u>SP010</u>	<u>000002</u>		
SOLMANDIAG 720	<u>SP011</u>	<u>000004</u>	}	November

What you get on 18.11.2020:

SP04 patch 17	12.11.2020
SP05 patch 18	06.10.2020
SP06 patch 19	12.11.2020
SP07 patch 26	04.11.2020
SP08 patch 24	04.11.2020
SP09 patch 18	04.11.2020
SP10 patch 9	04.11.2020
SP11 patch 4 / 5	22.10.2020 / 04.11.2020

For this component you always install the latest patch of a specific Support Package.

Note 2890213 - Missing Authentication Check in SAP Solution Manager
Note 2985866 - Missing Authentication Check in SAP Solution Manager

Related notes:

[...]

Note 2898858 - LM-SERVICE 7.20 SP 10 Patch 2 → Solution for Webservice Security

Note 2908684 - LM-SERVICE 7.20 SP 10 Patch 4 → Solution for Missing authentication check

[...]

Note 2898818 - WebService Security

(created in March 2020, not published but listed in patch info)

Scenarios for Using the Security Audit Log

Transaction `RSAU_CONFIG` offers several scenarios how to store events in files and/or in the database.

➤ See documentation for [NW 7.50](#)

What is the purpose of these variants?

➤ See documentation for [S/4HANA 1909](#) or [S/4HANA 2020](#) which explain these scenarios

The screenshot displays the configuration interface for the Security Audit Log, divided into three main sections:

- General Parameters:**
 - Static security audit active
 - Recording Target: **Record in Database and File System** (dropdown menu is open, showing options: Record in File System, Record in Database and File System, Record in Database)
 - Number of Filters per Profile
 - Generic user selection
 - Log peer address not terminal ID
- Configuration for File System:**
 - Protection format active
 - One audit file per day
 - Maximum Size of Audit File: 0 MB
 - Multiple audit files per day
 - Maximum Size of One Audit File
 - Maximum Size of All Audit Files
 - Alert Mode (Read and Delete) (dropdown menu is open, showing options: Temporary Buffer, Audit Log with Archive Interface, Persistence at external system (API-mode))
- Configuration for Database:**
 - Recording Type: **Alert Mode (Read and Delete)** (dropdown menu is open, showing options: Alert Mode (Read and Delete))

Scenarios for Using the Security Audit Log

Different teams have quite different access patterns and requirements

- **IT operations team and intrusion detection teams want to get alerts in realtime.**
They require to log unsuccessful as well as successful events to strengthen the sharpness of alerts.
- **Emergency access monitoring teams inspect logs after a couple of days.**
They rely on extensive logs for emergency users.
- **IT administration teams who run infrastructure projects access logs within a couple of weeks**
They need to activate/deactivate specific events to support their projects.
- **Audit teams validate logs month after the events**
They rely on the integrity of the logging system and the log data.
- **Data protection teams have to ensure that personal data is only stored and processed with dedicated purpose**
They define archiving requirements and data retention times

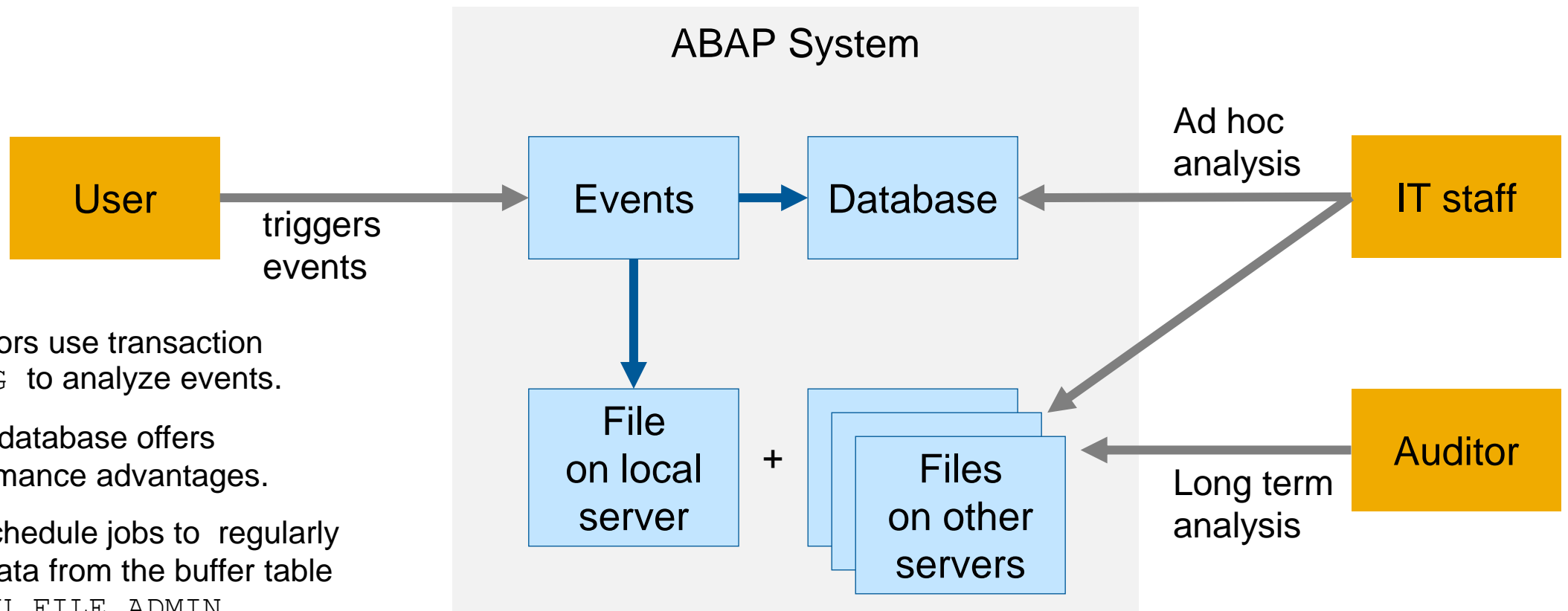
Scenarios for Using the Security Audit Log

	Recording Type
<p>➤ Only Logging in the File System (Classic Approach) Local system audit approaches with a few events and few requirements for the protection of personal data during the evaluation of logs</p>	-
<p>➤ Logging in the File System and Database with Alert Monitoring Local system audit approaches, but adds the ability to display selected events in a timely fashion as alerts in a central system</p>	Alert Mode (Read and Delete)
<p>➤ Logging in the File System and Database as Temporary Buffer Local system audit approaches, but adds the ability to for administrators to regularly evaluate large datasets of log data. No archiving possible.</p>	Temporary Buffer
<p>➤ Only Logging in the Database Recommended for an average number of events and high requirements regarding the protection of personal data during the evaluation of log data. Archiving object <code>BC_SAL</code></p>	Audit Log with Archive Interface
<p>➤ Logging in the Database with External Evaluation and Storage Global audit approach, where events are moved to a central system for evaluation and long-term storage.</p>	Persistence in ext. System (API)

Scenarios for Using the Security Audit Log

Example: Logging in the File System and Database with Temporary Buffer

Local system audit approaches, but adds the ability to for administrators to regularly evaluate large datasets of log data



IT staff and auditors use transaction `RSAU_READ_LOG` to analyze events.

Searching in the database offers significant performance advantages.

Administrators schedule jobs to regularly purge obsolete data from the buffer table using report `RSAU_FILE_ADMIN` (= transaction `RSAU_ADMIN`)



October 2020

Topics October 2020



SAP Secure By Default for S/4HANA on Premise 2020 [Status - October 2020](#)

Note [2971638](#) - Hard-coded Credentials in CA Introscope Enterprise Manager

Note [2969828](#) - OS Command Injection Vulnerability in CA Introscope Enterprise Manager

Note [2941667](#) - Code Injection Vulnerability in SAP NetWeaver (ABAP) (reloaded)

Note [887164](#) - BSP Test Applications in Production Systems

Note [2973497](#) - Multiple Vulnerabilities in SAP 3D Visual Enterprise Viewer

Note [2883638](#) - Information Disclosure in Supplier Relationship Management

Note [2973100](#) - Missing Authorization check in Manage Substitutions - Products and Manage Exclusions - Product

Security Baseline Template 2.1 incl. Configuration Validation Package 2.1-CV-1

Important Notes for System Recommendations and Configuration Validation





SAP Secure By Default for S/4HANA on Premise 2020

Status - October 2020

Bjoern Brencher, S/4HANA Security

SAP Secure By Default for S/4HANA on Premise 2020

Motivation

- After installation of an S/4HANA on-premise system, customers need to invest significant time and resources to apply various security settings and configurations.
- With this project, we aim to switch security settings directly after installation, system copies or conversions to secure defaults.
- This will decrease the effort required by customers to apply security settings and further will ensure that customer systems have a reasonable security status directly after installation.

SAP Secure By Default for S/4HANA on Premise 2020

Status

Products in Scope

- S/4HANA on Premise 2020
- Products based on S/4HANA Foundation, e.g.
 - SAP Focused Run 3.0
 - SAP Access Control

Customer Documentation

- SAP Note [2926224](#) is a collection note including attachment
- SAP Blog <https://blogs.sap.com/2020/10/07/secure-by-default-for-s-4hana-2020/>

Status

- First shipment done with S/4HANA on Premise 1909
- Additional security topics shipped with S/4HANA on Premise 2020
- Further improvements planned with S/4HANA on Premise 2021

SAP Secure By Default for S/4HANA on Premise 2020

Technical View

Profile Parameters are set to secure values for S/4 HANA 2020

- 17 recommended values
- 27 parameters default values were changed in the SAP Kernel 7.81

Switchable Authorization Framework (SACF)

- Automatic activation of all SACF scenarios to enable additional business authorization checks (if not already set up by the customer)

Security Audit Log (SAL) (shipped with 1909)

- Automatic configuration of the Security Audit Log (if not already set up by the customer)

SAP Secure By Default for S/4HANA on Premise 2020

How can I get the Improvements?

Secure by Default in S/4HANA 2020 (SAP Note [2926224](#)) is shipped for

New installations and system copies

SWPM 2.0 SP07

Target: S/4HANA 2020

Conversions

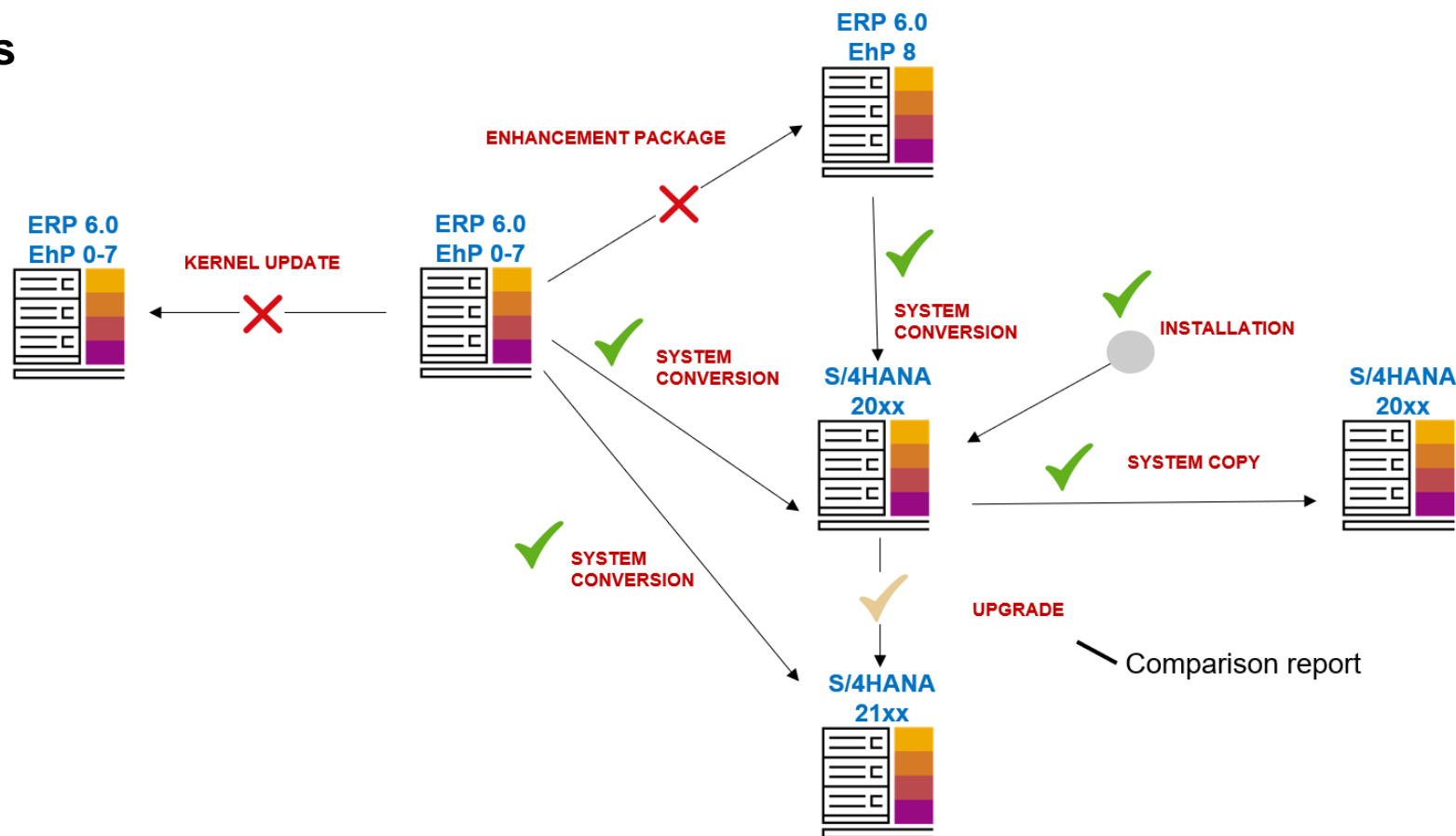
SUM 2.0 SP09

Target: S/4HANA 2020

Upgrades

No automated changes

Comparison report can be used



SAP Secure By Default for S/4HANA on Premise 2020

Technical View – Recommended Value for Profile Parameter



Difference between recommended values and kernel defaults

- SAP kernel defaults are values stored in the kernel and will be activated with a kernel upgrade
- Recommended values are additionally stored in kernel binaries and are used by SAP lifecycle tools (e.g. SWPM, SUM) to set values in new installations, system copies and conversions

Why are some recommended values not enabled?

- Some recommended values are added to the `DEFAULT.PFL` as comments (disabled)
- Disabled recommended values need to be enabled after SAP lifecycle tools are finished

Display Profile Parameter Details

Change Value  

Metadata for Parameter login/password_compliance_to_current_policy

Description	Value
Name	login/password_compliance_to_current_policy
Type	Integer Interval
Further Selection Criteria	Interval [0,1]
Unit	
Parameter Group	Login
Parameter Description	current password needs to comply with current password policy
CSN Component	BC-SEC-LGN
System-Wide Parameter	Yes
Dynamic Parameter	Yes
Vector Parameter	No
Has Subparameters	No
Check Function Exists	No
Internal Parameter	No
Read-Only Parameter	No

Value of Profile Parameter login/password_compliance_to_current_policy

Expansion Level	Value
Kernel Default	0
Default Profile	0
Instance Profile	0
Current Value	0
Recommended Value	1
Associated Note	862989

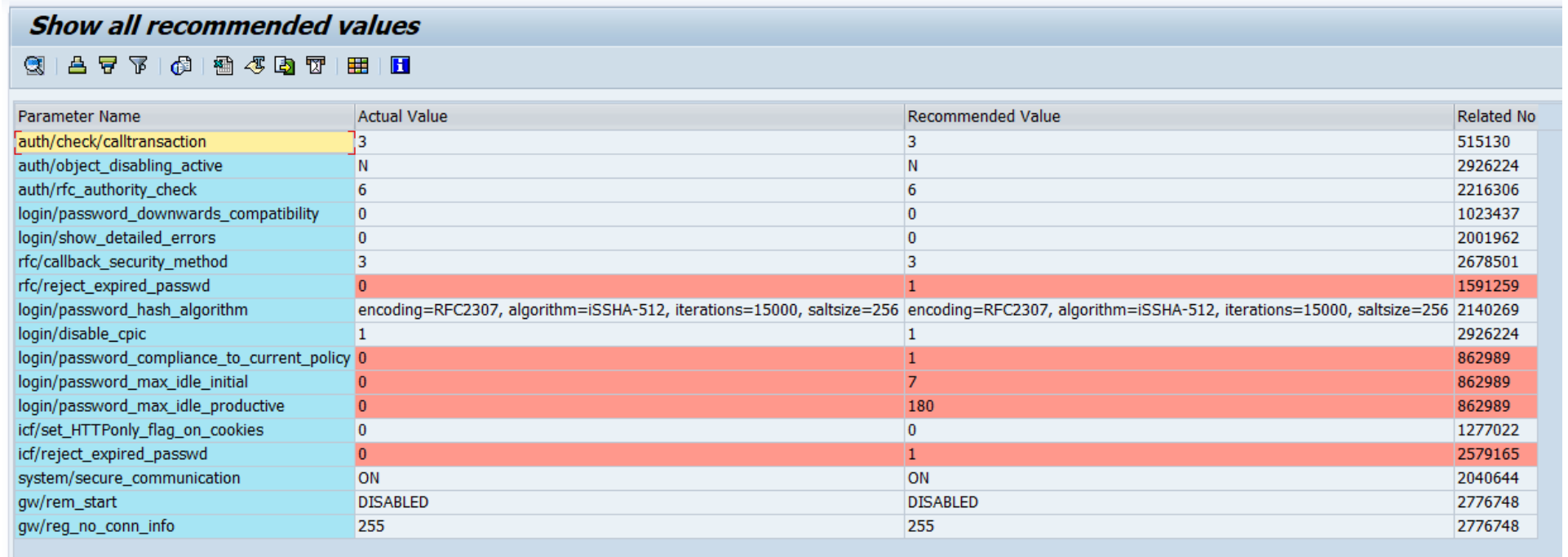
Origin of Current Value: Kernel Default

SAP Secure By Default for S/4HANA on Premise 2020 Upgrade Scenarios

Support of S/4HANA 2020 upgrade scenario

- No automated changes during upgrade
- Enhanced comparison report `RSPFRECOMMENDED` shows actual system values vs recommended security profile parameters

Show all recommended values



Parameter Name	Actual Value	Recommended Value	Related No
auth/check/calltransaction	3	3	515130
auth/object_disabling_active	N	N	2926224
auth/rfc_authority_check	6	6	2216306
login/password_downwards_compatibility	0	0	1023437
login/show_detailed_errors	0	0	2001962
rfc/callback_security_method	3	3	2678501
rfc/reject_expired_passwd	0	1	1591259
login/password_hash_algorithm	encoding=RFC2307, algorithm=iSSHA-512, iterations=15000, saltsize=256	encoding=RFC2307, algorithm=iSSHA-512, iterations=15000, saltsize=256	2140269
login/disable_cplic	1	1	2926224
login/password_compliance_to_current_policy	0	1	862989
login/password_max_idle_initial	0	7	862989
login/password_max_idle_productive	0	180	862989
icf/set_HTTPOnly_flag_on_cookies	0	0	1277022
icf/reject_expired_passwd	0	1	2579165
system/secure_communication	ON	ON	2040644
gw/rem_start	DISABLED	DISABLED	2776748
gw/reg_no_conn_info	255	255	2776748

SAP Secure By Default for S/4HANA on Premise 2020

Is this enough Security?

Is Secure By Default enough Security?

- Secure by default settings cannot and will not cover all aspects of security settings in S/4HANA systems
- SAP highly recommends customers to perform additional reviews and improvements of their security settings

Where can I find more information on SAP Security?

- Use the SAP-provided tools and services (<https://support.sap.com/sos>). These inform you about gaps in a cost efficient way.
 - EarlyWatch Alert (alert on most critical topics)
 - Configuration Validation (check security configurations)
 - System Recommendations (display missing security patches)
- Review SAP Security Whitepapers (<https://support.sap.com/securitywp>)

SAP Secure By Default for S/4HANA on Premise 2020

Management Summary

Technical View

- Secure By Default with S/4HANA on Premise covers Profile Parameters (extended with 2020), Switchable Authorization Framework (SACF) (new with 2020), Security Audit Log (shipped with 1909)

Supported Scenarios

- Settings are automatically applied as part of new installations, system copies and conversions
- Tooling is provided to support customers in S/4HANA upgrade scenarios (as settings are not applied directly)

Products in Scope

- S/4HANA
- Products running on S/4HANA Foundation (e.g. Focused Run)

Implement more Security

- Use the SAP provided tools, like EWA, Configuration Validation, System Recommendation

Thank you

Contact information



Bjoern Brencher
S/4HANA Security
E-mail: bjoern.brencher@sap.com

Note 2971638 - Hard-coded Credentials in CA Introscope Enterprise Manager

Affected Products:

Third Party add-on delivered as OEM for SAP Solution Manager and SAP Focused Run

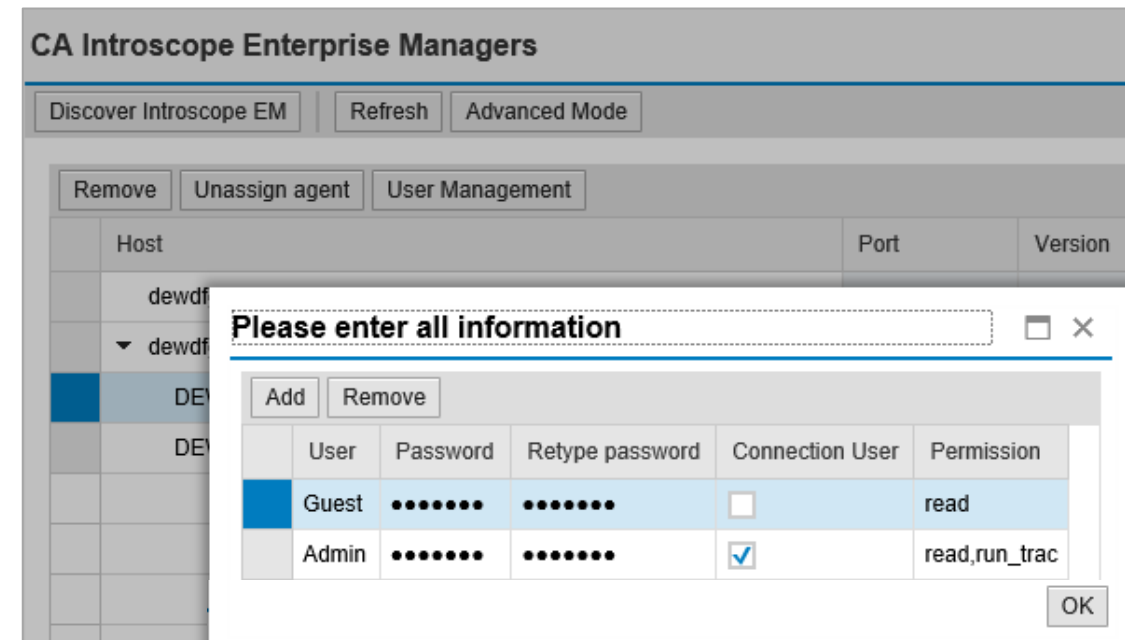
<https://support.sap.com/en/alm/solution-manager/expert-portal/introscope-enterprise-manager.html>

The important part of the note is to **change the default passwords** of the users `Admin` and `Guest`. Use SAP Solution Manager, configuration step 4 "Define CA Introscope" in "Infrastructure Preparation" to set Introscope credentials. This updates the credentials on Introscope side as well as in the SAP Solution Manager.

See Note 2310713 / KBA 2512694

After that and in addition you can implement the patch provided by the note:

"The solution is to deploy an additional Enterprise Manager plugin that blocks the passwords for the pre-defined users `Admin` and `Guest` if they still have default values."



Note 2971638 - Hard-coded Credentials in CA Introscope Enterprise Manager

Default installation location is `/usr/sap/ccms/apmintroscope`, but you may have chosen a different location during installation. This folder is called `<EM_HOME>` in some of the notes.

Transaction `AL11` (view only) → `DIR_CCMS` → `apmintroscope` → `config` → `users.xml`

Directory: `/usr/sap/ccms/apmintroscope/config`
Name: `users.xml`

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<principals xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" version="0.3" plainTextPasswords="false" xsi:noNamespaceSchemaLocation="users0.3.xsd">
  <users>
    <user password="cf25f327d28e3476c61fb03e3266b1fc41b9b35cf07051625bc47abd7fb82fe4" name="Admin"/>
    <user password="e3b0c44298fclcl49afbf4c8996fb92427ae41e4649b934ca495991b7852b855" name="Guest"/>
  </users>
  <groups>
    <group name="CEM System Administrator" description="CEM System Administrator Group">
      <user name="Admin"/>
    </group>
    <group name="Admin" description="Administrator Group">
      <user name="Admin"/>
    </group>
    <group name="CEM Analyst" description="CEM Analyst Group"/>
    <group name="CEM Configuration Administrator" description="CEM Configuration Administrator Group"/>
    <group name="CEM Incident Analyst" description="CEM Incident Analyst Group"/>
  </groups>
</principals>
```

Note 2969828 - OS Command Injection Vulnerability in CA Introscope Enterprise Manager



Affected Products:



Third Party add-on delivered as OEM for SAP Solution Manager and SAP Focused Run

<https://support.sap.com/en/alm/solution-manager/expert-portal/introscope-enterprise-manager.html>

It might be the case that you run a quite old version even if you have updated the SAP Solution Manager recently as it's not part of the SUM package. All old versions are assumed to be vulnerable.

On SAP Solution Manager 7.2, instead of installing a patch (if available for the installed version), you could consider to install to latest version in any case:

Items Available to Download (2) LINUX ON X86_64 64BIT  

Selected Items (0)							
<input type="checkbox"/>	Name	Patch Level	File Type	File Size	Release Date	Change Date	Related Info
<input type="checkbox"/>	WILYISEM00P_2-70005226.ZIP SP 00 PL 2 for WILY INTROSCOPE ENTPR MGR 10.7	2	ZIP	1340812 KB	09.10.2020	09.10.2020	
<input type="checkbox"/>	WILYISEM00_1-70005226.ZIP SP00 PL1 for WILY INTROSCOPE ENTPR MGR 10.7	1	ZIP	1340803 KB	06.10.2020	06.10.2020	

Note 2969828 - OS Command Injection Vulnerability in CA Introscope Enterprise Manager

How-to verify the installed version:

a) via the Introscope log file as described in the note

This gives you the exact patch number, e.g. 10.1.0.15 or 10.5.2.113 (vulnerable) or 10.7.0.304 (new)

Transaction AL11 (view only) → DIR_CCMS → apmintroscope → logs → IntroscopeEnterpriseManager.log

```
Directory: /usr/sap/ccms/apmintroscope/logs
Name:      IntroscopeEnterpriseManager.log
```

```
Feb 05, 2017 6:06:58 PM org.springframework.osgi.extender.internal.activator.ContextLoaderListener start
INFO: Starting [org.springframework.osgi.extender] bundle v.[1.2.1]
Feb 05, 2017 6:06:58 PM org.springframework.osgi.extender.internal.support.ExtenderConfiguration <init>
INFO: No custom extender configuration detected; using defaults...
Feb 05, 2017 6:06:58 PM org.springframework.scheduling.timer.TimerTaskExecutor afterPropertiesSet
INFO: Initializing Timer
2/05/17 06:07:01.137 PM UTC [INFO] [main] [Manager] Introscope Enterprise Manager Release 10.1.0.15 (Build 990014)
2/05/17 06:07:01.138 PM UTC [INFO] [main] [Manager] Using Java VM version "Java HotSpot(TM) 64-Bit Server VM 1.8.0_45" from Oracle Corporation
2/05/17 06:07:01.138 PM UTC [INFO] [main] [Manager] Using Introscope installation at: /usr/sap/ccms/apmintroscope/.
2/05/17 06:07:01.139 PM UTC [INFO] [main] [Manager] CA Wily Introscope(R) Version 10.1.0
2/05/17 06:07:01.139 PM UTC [INFO] [main] [Manager] Copyright (c) 2015 CA. All Rights Reserved.
2/05/17 06:07:01.139 PM UTC [INFO] [main] [Manager] Introscope(R) is a registered trademark of CA.
2/05/17 06:07:01.139 PM UTC [INFO] [main] [Manager] Starting Introscope Enterprise Manager...
2/05/17 06:07:01.140 PM UTC [INFO] [main] [Manager] This Enterprise Manager is license free.
2/05/17 06:07:01.249 PM UTC [INFO] [main] [Manager] Found valid license file: /usr/sap/ccms/apmintroscope/./license/SAP.em.lic
```

Note 2969828 - OS Command Injection Vulnerability in CA Introscope Enterprise Manager

How-to verify the installed version:

b) via the software component list of the Java part of the SAP Solution Manager

Caveat: This shows the version of the "agent", which might differ from the version of the "enterprise manager".

[https:// \[hostname\]:5xx00](https://[hostname]:5xx00) → System Information

or

[https:// \[hostname\]:5xx00/nwa](https://[hostname]:5xx00/nwa) → Configuration Management → Infrastructure → System Information

or

[https://\[hostname\]:5xx00/monitoring/SystemInfo](https://[hostname]:5xx00/monitoring/SystemInfo)

Notes:

Note 1757810 – How to get the complete list of software components on your NetWeaver Application Server Java

Note 1771843 – How to identify and search the latest patch level for a Netweaver Java Component [VIDEO]

Note 1752501 – Retrieving the Java version information offline

Note 2181113 – Getting the Versions of Deployed Units on AS Java from a Command Prompt

Note 2969828 - OS Command Injection Vulnerability in CA Introscope Enterprise Manager

How-to verify the installed version :

c) via application Configuration and Change Database (CCDB).

Caveat: This shows the version of the "agent", which might differ from the version of the "enterprise manager".

Transaction CCDB → Status → Cross Selection

Filter for Store Name = J2EE_COMP_SPLEVEL

Filter for Element Pattern = WILY*

Result:

Cross-system list of installed Software Component Versions

Element Viewer						
Element Value Width: Unlimited(60) Height: 5 rows						
View: [Standard View] [Print Version] [Export] [Store Details]						
Landscape	Component Version	Store Name	Element Class	Element Name	Element Value	
Java Technical System (FTJ~JAVA)	J2EE ENGINE SERVERCORE 7.50	J2EE_COMP_SPLEVEL	Table Row	[COMPONENT]=ISAGENT_MIN_J5 [RELEASE]=10.1	[EXTRELEASE]=00 [PATCH_LEVEL]=0 [DESCRIPTION]=WILY INTRO AGT MIN J5 VIA SM	
Java Technical System (SI7~JAVA)	SAP J2EE ENGINE 7.02	J2EE_COMP_SPLEVEL	Table Row	[COMPONENT]=ISAGENT_MIN_J5 [RELEASE]=9	[EXTRELEASE]=10 [PATCH_LEVEL]=2 [DESCRIPTION]=WILY INTRO AGT MIN J5 VIA SM	
Java Technical System (FOJ~JAVA)	J2EE ENGINE SERVERCORE 7.50	J2EE_COMP_SPLEVEL	Table Row	[COMPONENT]=ISAGENT_MIN_J5 [RELEASE]=10.5	[EXTRELEASE]=02 [PATCH_LEVEL]=0 [DESCRIPTION]=WILY INTRO AGT MIN J5 VIA SM	

Note 2969828 - OS Command Injection Vulnerability in CA Introscope Enterprise Manager

Tipps:

- **SAP Solution Manager 7.2 SP 11 requires CA Introscope Enterprise Manager 10.7**

This version is required to be able to configure the application in
SolMan Setup → Infrastructure Preparation → Step 4 “Define CA Introscope”

- **Do not forget to update the SAP Management Modules**

<https://support.sap.com/en/alm/solution-manager/expert-portal/introscope-enterprise-manager.html>

→ SAP Setup Guide for Introscope 10.7

and Note 1579474 - Management Modules for Introscope delivered by SAP

Note 2941667 - Code Injection Vulnerability in SAP NetWeaver (ABAP) (reloaded)

Prerequisite note on 7.40 up to Support Package 8:

Note 1979454 - Missing authorization check in Batch Input Recorder

This note introduces function BDC_RECORD_AUTH_CHECK

Support Package SAPKB74009

Correction instruction for 740 - SAPKB74008

Caveat: Depending on the release / installed notes

- you have to set Profile Parameter `bdc/shdb/auth_check = TRUE` to activate the authority check for `S_BDC_MONI`,
- you can set `bdc/shdb/auth_check = FALSE` to switch off the authority check, or
- the authority check is mandatory (Note 2966249 as of `SAP_BASIS 7.55`).

```
*>>>> START OF INSERTION <<<<<<
FUNCTION BDC_RECORD_AUTH_CHECK.
*
  data: begin of apqi_info.
        include structure apqi.
  data: end of apqi_info.
  data: o_aktivität(4).
  data: par_value(5) type c.
*
  clear: auth_rc.
*
  * check only authority with profile value bdc/shdb/auth_check = true
  call 'C_SAPGPARAM' id 'NAME' field 'bdc/shdb/auth_check'
                        id 'VALUE' field par_value.          "#EC CI_CCALL
  translate par_value to upper case.
  check par_value eq 'TRUE'.
```

Note 887164 - BSP Test Applications in Production Systems

Deactivate test services according to note 887164:

```
/sap/bc/bsp/sap/bsp_model  
/sap/bc/bsp/sap/htmlb_samples  
/sap/bc/bsp/sap/it00  
/sap/bc/bsp/sap/it01  
/sap/bc/bsp/sap/it02  
/sap/bc/bsp/sap/it03  
/sap/bc/bsp/sap/it04  
/sap/bc/bsp/sap/it05  
/sap/bc/bsp/sap/itmvc2  
/sap/bc/bsp/sap/itsm  
/sap/bc/bsp/sap/sbspext_htmlb  
/sap/bc/bsp/sap/sbspext_phtmlb  
/sap/bc/bsp/sap/sbspext_table  
/sap/bc/bsp/sap/sbspext_xhtmlb  
/sap/bc/bsp/sap/system_private  
/sap/bc/bsp/sap/system_public
```

Deactivate test services of ABAP Channels (APC):

```
/sap/bc/apc_test/*  
/sap/bc/webdynpro/sap/ABAP_ONLINE_COMMUNITY  
/sap/bc/apc/sap/abap_online_community
```

Deactivate more test services:

```
/sap/bc/echo/redirect  
  
/sap/bc/gui/sap/its/test/*  
  
/sap/bc/kw/skwr
```

Note 2948239

Note 2973497 - Multiple Vulnerabilities in SAP 3D Visual Enterprise Viewer

SAP 3D Visual Enterprise Viewer is a part of the SAP Front-End installation.

More issues solved about some file types (.cgm, .jt, .pdf, .rh)

Solution with VE_VIEWER_COMPLETE 9.0 SP 9 patch 3

Previous Note 2960815 - Improper Input Validation in SAP 3D Visual Enterprise Viewer

File types: .bmp , .cgm, .dib, .eps, .fbx, .gif, .hdr, .hpg, .hpgl, .plt, .pdf, .pcx, .rh, .rle, .tga

Solution with VE_VIEWER_COMPLETE 9.0 SP 9 patch 2

Note 2883638 - Information Disclosure in Supplier Relationship Management

“Pre-requisite for this vulnerability is `BYPASS_OUTB_HANDLER` is not set to true in Standard Call Structure configuration for the particular Catalog in SPRO.”

**See:
Define External Web-Services - Parameters and values in the Call Structure**

<https://wiki.scn.sap.com/wiki/display/SRM/Define+External+Web-Services+-+Parameters+and+values+in+the+Call+Structure>

`BYPASS_OUTB_HANDLER`: The Outbound Handler service creates a link called "Back To SRM Application" on the top of the catalog view. This parameter disables the service, usually for performance reasons. Adding the Parameter value 'X' turns off the handler.

The SRM-MDM Catalog already has a "back" link rendered by the Search UI, so set this to avoid duplicate links.

See SAP Notes 1249846, 1489343, 1405908, 1474056 and 1887020.

See more information and debugging hints about inbound and outbound handler [here](#).

Note 2973100 - Missing Authorization check in Manage Substitutions - Products and Manage Exclusions - Product

```
IF substituteproduct IS NOT INITIAL.  
  IF substitute_data-authorizationgroup IS NOT INITIAL.  
    AUTHORITY-CHECK OBJECT 'M_MATE_MAT'  
      ID 'BEGRU' FIELD substitute_data-authorizationgroup  
      ID 'ACTVT' FIELD '03'.  
  
    IF sy-subrc <> 0.  
      allowed = abap_false.  
      RETURN.  
    ENDIF.  
  ENDIF.  
  
  IF substitute_data-type_begru IS NOT INITIAL.  
    AUTHORITY-CHECK OBJECT 'M_MATE_MAR'  
      ID 'BEGRU' FIELD substitute_data-type_begru  
*>>>> END OF DELETION <<<<<<
```

The existing authorization checks for authorization objects M_MATE_WGR, M_MATE_MAT, and M_MATE_MAR are rearranged in the code.

→

No adjustments of roles required

```
      SORT authorized_products BY product.  
  
      LOOP AT unique_products INTO DATA(product_range).  
        READ TABLE authorized_products INTO DATA(authorized_product) WITH KEY product = product_range-low BINARY SEARCH.  
        IF sy-subrc = 0.  
          AUTHORITY-CHECK OBJECT 'M_MATE_MAT'  
            ID 'BEGRU' FIELD authorized_product-authorizationgroup  
            ID 'ACTVT' FIELD '03'.  
  
          IF sy-subrc = 0.  
            DATA(type_is_authorized) = abap_true.  
            DATA(group_is_authorized) = abap_true.  
  
            IF authorized_product-type_begru IS NOT INITIAL.  
              AUTHORITY-CHECK OBJECT 'M_MATE_MAR'  
                ID 'BEGRU' FIELD authorized_product-type_begru  
*>>>> END OF INSERTION <<<<<<
```

Security Baseline Template 2.1 incl. ConfVal Package 2.1-CV-1

New version on <https://support.sap.com/sos>

→ [SAP CoE Security Services - Security Baseline Template Version 2.1 \(with ConfigVal Package\)](#)

Title	Type	Changed
_SAP Security Notes Advisory	ZIP	2020-09
_Security Notes Webinar	PDF	2020-09
RFC Gateway and Message Server Security	PDF	2019-06
SAP CoE Security Services - Check Configuration & Authorization	PDF	2020-01
SAP CoE Security Services - Overview	PDF	2020-01
SAP CoE Security Services - Secure Operations Map	PDF	2020-01
SAP CoE Security Services - Security Patch Process	PDF	2019-07
SAP CoE Security Services - Security Baseline Template Version 1.9 (including ConfigVal Package version 1.9_CV-5)	ZIP	2018-08
SAP CoE Security Services - Security Baseline Template Version 2.1 (including ConfigVal Package CV-1)	ZIP	2020-10

Target System

Long SID: Store Name:

Details

Select Target System

SID	Description
<input checked="" type="radio"/> 1ACHANGE	Protect Production System against changes (v2.1_CV-1)
<input type="radio"/> 1ACRITA	No use of critical auth. profile SAP_ALL (v2.1_CV-1)
<input type="radio"/> 1ACRITB	No use of critical auth. profile/role SAP_NEW (v2.1_CV-1)
<input type="radio"/> 1ACRITC	Critical Authorizations (v2.1_CV-1)
<input type="radio"/> 1AMSGSRV	Message Server Security (v2.1_CV-1)
<input type="radio"/> 1APWDPOL	Password Policy (v2.1_CV-1)
<input type="radio"/> 1ARFCGW	RFC Gateway Security (v2.1_CV-1)
<input type="radio"/> 1ASECUPD	Regular Security Updates (v2.1_CV-1)
<input type="radio"/> 1ASTDUSR	Standard Users (v2.1_CV-1)

Security Baseline Template 2.1 incl. ConfVal Package 2.1-CV-1

[Critical] Target System

1ACHANGE	Protect Production System against changes
1ACRITA	No use of critical auth. profile SAP_ALL
1ACRITB	No use of critical auth. profile/role SAP_NEW
1ACRITC	Critical Authorizations
1AMSGSRV	Message Server Security
1APWDPOL	Password Policy
1ARFCGW	RFC Gateway Security
1ASECUPD	Regular Security Updates
1ASTDUSR	Standard Users
1HAUDIT	Audit Settings
1HNETCF	Secure Network Configuration
1HPWDPOL	Password Policy
1HSECUPD	Regular Security Updates
1HTRACES	Critical Data in trace files
1JMSGSRV	Message Server Security
1JNOTEST	No Testing Functionality in Production
1JPWDPOL	Password Policy
1JSECUPD	Regular Security Updates
1JRFCGW	RFC Gateway Security

[Standard] Target System

2AAUDIT	Audit Settings
2ACHANGE	Protect Production System against changes
2ACRITD	Protection of Password Hashes
2ADISCL	Information Disclosure
2AFILE	Directory Traversal Protection
2AMSGSRV	Message Server Security
2ANETCF	Secure Network Configuration
2ANETENC	Encryption of Network Connections
2AOBSCNT	Obsolete Clients
2APWDPOL	Password Policy
2ASSO	Single Sign-On
2AUSRCTR	User Control of Action
2HAUDIT	Audit Settings
2HPWDPOL	Password Policy
2HSTDUSR	Standard Users
2JDISCL	Information Disclosure
2JMSGSRV	Message Server Security
2JSEIFRG	No Self-Registration of Users
2JSESS	Session Protection

Security Baseline Template 2.1 incl. ConfVal Package 2.1-CV-1

[Extended] Target System

3ACHANGE	Protect Production System against changes
3AFILE	Directory Traversal Protection
3ANETENC	Encryption of Network Connections
3APWDPOL	Password Policy
3ARFCGW	RFC Gateway Security
3ASCRIP	Scripting Protection
3JAUDIT	Audit Settings
3JPWDPOL	Password Policy
3JSSO	Single Sign-On
3JRFCGW	RFC Gateway Security

[Notes] Target System

N0510007	Note 510007 - Setting up SSL on AS ABAP
N1322944	Note 1322944 - ABAP: HTTP security session
N2065596	Note 2065596 - Restricting logons to server
N2288631	Note 2288631 - CommonCryptoLib
N2449757	Note 2449757 - Add.auth.check in Trusted RFC
N2562089	Note 2562089 - Directory Traversal vulnerability
N2562127	Note 2562127 - Support Connection SNC / SSO
N2671160	Note 2671160 - Missing input validation in CTS
N2934135	Note 2934135 - LM Configuration Wizard

Important Notes for System Recommendations and Configuration Validation

- Note [2729269](#) - CCDB: Config store GLOBAL_CHANGE_LOG, COMPONENTS_CHANGE_LOG, NAMESPACES_CHANGE_LOG 06.02.2019
- Note [2764556](#) - ST 7.20 CV Dashboard Builder using function DIAGCPL_CV_DSH with database related configuration stores 05.03.2019
- Note [2772002](#) - Warning in the store CLIENTS_CHANGE_LOG - Extractor not available [EXTR_NOT_FOUND] 24.04.2019
- Note [2843018](#) - ST 7.20 SP07-09 CV exceptions accept _ in extSID 25.09.2019
- Note [2870159](#) - ST 7.20 CV for SysMon - add client information 05.12.2019
- Note [2891758](#) - ST 7.20 SP08/09/10 CV table store * item not found 12.02.2020
- Note [2943967](#) - ST 7.20 SP10/11 Target ABAP_NOTES fill from System Recommendations 03.07.2020
- Note [2747922](#) - SysRec: Corrections for Solution Manager 720 SP08 Fiori UI 15.09.2020
- Note [2854704](#) - SysRec: Collective Corrections for Solution Manager 720 SP09 Fiori UI 15.09.2020
- Note [2857899](#) - SysRec: Collective Corrections for Solution Manager 720 SP10 Fiori UI 15.09.2020
- Note [2458890](#) - SysRec: Support SAP GUI Notes 17.09.2020



September 2020

Topics September 2020



Note [2961991](#) - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

Note [2960815](#) - Improper Input Validation in SAP 3D Visual Enterprise Viewer

Note [2958563](#) - Code Injection vulnerability in SAP NetWeaver ABAP

Note [2951325](#) - Improper Authorization Checks in Banking services from SAP Bank Analyzer and SAP S/4HANA Financial Products

Note [2934135](#) - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard) – reloaded (Configuration Validation)

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note 2961991 - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

The Mobile Channel Servlet is an integral part of SAP Hybris Marketing Cloud which you install on SAP Cloud Platform.

Additional information:

Note 2963056 - FAQ - for SAP Note 2961991 - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

Workaround:

Note 2962970 - Disable the SAP Cloud Platform Servlet Used by the SAP Marketing Mobile SDK

Note 2961991 - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

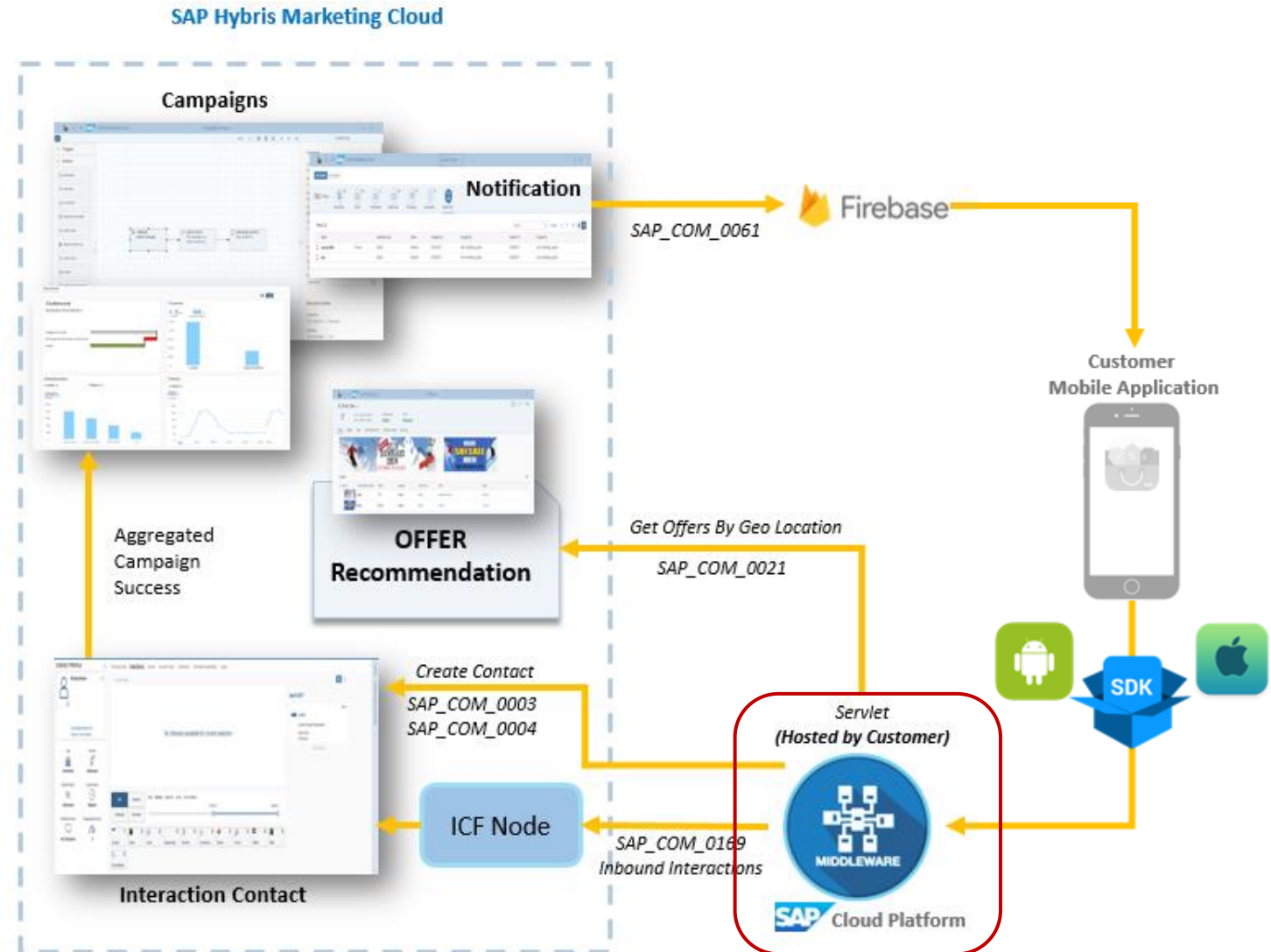
The note solves a vulnerability in the **servlet** used to integrate between Mobile Applications and the SAP Hybris Marketing Cloud.

You install this **servlet** on SAP Cloud Platform.

See Blog “Mobile Engagement using SAP Hybris Marketing” (2017)

<https://blogs.sap.com/2017/08/23/mobile-engagement-using-sap-hybris-marketing/>

Tipp: The mobile SDK and **servlet** will be deprecated in future release 2011.



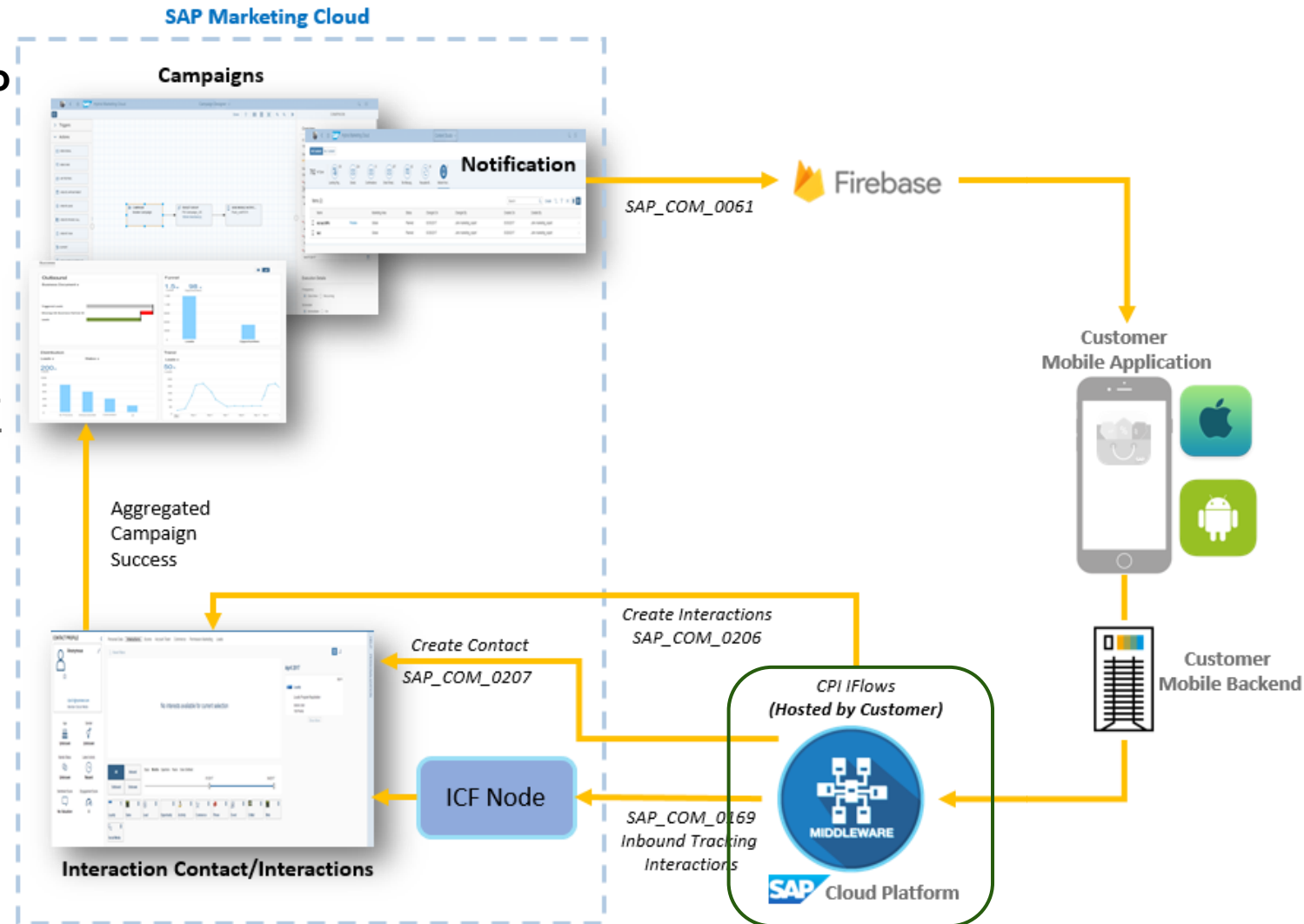
Note 2961991 - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

You can use the new **Integration Flows** instead to connect your mobile app with SAP Marketing Cloud.

This version is not affected by the vulnerability.

Mobile App Integration with Google Firebase

<https://help.sap.com/viewer/fd4e354968fd432db74bff1992c3a1fb/2005.500/en-US/712c1edf8ae945df84012a6c84213556.html>



Note 2961991 - Improper Access Control in SAP Marketing (Mobile Channel Servlet)

The servlet is available on OneDrive. You find the installation and configuration guideline for a specific release within the zip archive:

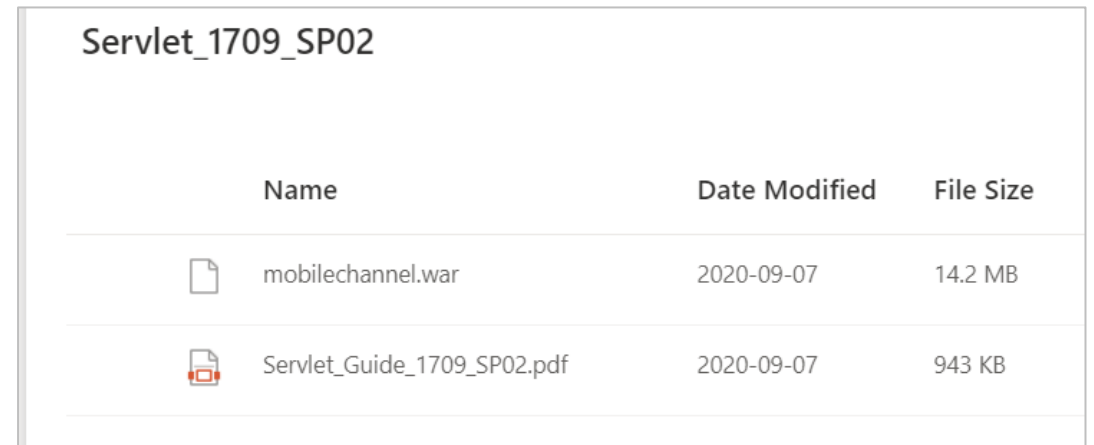
You re-deploy it centrally on SAP Cloud Platform.



You just need to re-deploy the servlet as described in chapter 2.2 “Deploying the .war File”

You do not need to touch any configuration.

You can inspect the application URL to learn about the account ID and the app name:

https://mobilechannelab1234567.hana.ondemand.com/mobilechannel/sap/opu/odata/sap/API_MKT_LOCATION_SRV/



Servlet_1709_SP02			
	Name	Date Modified	File Size
	mobilechannel.war	2020-09-07	14.2 MB
	Servlet_Guide_1709_SP02.pdf	2020-09-07	943 KB

Caveat: There is no way to inspect or validate the version of the current installation.

Note 2960815 - Improper Input Validation in SAP 3D Visual Enterprise Viewer

SAP 3D Visual Enterprise Viewer is a part of the SAP Front-End installation.

The solution is part of SAP 3D Visual Enterprise Author 9.0 FP09 MP2

References:

<https://help.sap.com/ve>

<https://help.sap.com/viewer/68649624a1bd101496efce73094bb411/9.0.0.9/en-US/bedf68d83eae430f892ed29522bf6744.html>



Note 2958563 - Code Injection vulnerability in SAP NetWeaver ABAP

The correction deactivates an obsolete critical function.

The software component SAP-BW is part of every ABAP system but the vulnerability only exist for specific databases: „*Note that the vulnerability is platform specific, that is only ABAP Servers on **DB4** or **Sybase** are vulnerable.*”

Function `RSDU_LIST_DB_TABLE_DB4`

```
IF con_ref->get_dbms( ) <> 'DB4'.  
    RAISE dbms_not_supported.  
ENDIF.
```

Function `RSDU_LIST_DB_TABLE_SYB`

```
IF sy-dbsys <> 'SYBASE'.  
    RAISE dbms_not_supported.  
ENDIF.
```

→ You may skip this note on systems running other databases.

Note 2951325 - Improper Authorization Checks in Banking services from SAP Bank Analyzer and SAP S/4HANA Financial Products

Only relevant for software components FSAPPL 500 and S4FPSL 100

Updated authorization object F_BABR_BAS

Manual instruction: It might be required to add allowed activity 01=create in both cases to be able to maintain authorizations in PFCG.

In any case you should validate roles which you have created similar to these ones:

SAP_FPS_CUSTOMIZER

SAP_FPS_EXP_FINANCIAL_ACCTNT

SAP_FPS_EXP_FINANCIAL_PLANNER

SAP_FPS_EXP_PLANNER

SAP_FPS_EXP_VDM_REPORTING

Object: F_BABR_BAS
Text: Smart AFI: Basic Authorizations in Accounting
Class: FSBA Financial Services - Bank Analyzer
Author: KAHNM

Authorization Field	Short Description
/BA1/BRSRC	Source System
/BA1/LGENT	Legal Entity
ACC_SYSTEM	Accounting System
ACTVT	Activity

FH9(1)/003 Define Values

Object: F_BABR_BAS Smart AFI: Basic Authorizations in Accounting
Field name: ACTVT Activity

S...	Ac...	Text
<input checked="" type="checkbox"/>	02	Change
<input checked="" type="checkbox"/>	03	Display
<input checked="" type="checkbox"/>	16	Execute

Note 2948239 - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS ABAP (BSP Test Application)

In addition to implement the note to secure the SICE service `sbspext_table` you should deactivate this and other test applications in production systems.

The screenshot shows the SAP NetWeaver AS ABAP configuration interface. The top section is titled "Filter Details" and contains the following fields:

- Virtual Host:
- Service Path:
- ServiceName:
- Description: (highlighted with a red box)
- Lang.: English (dropdown menu)
- Reference:

Below the fields are three buttons: "Apply", "Reset", and "Fine-Tune".

The bottom section is titled "Virtual Hosts / Services" and shows a tree view of services. The "sbspext_table" service is highlighted with a red box. The "Documentation" column provides details for each service:

Virtual Hosts / Services	Documentation
default_host	VIRTUAL DEFAULT HOST
sap	SAP NAMESPACE; SAP IS OBLIGED NOT TO DELIVER ANY SER...
bc	BASIS TREE (BASIS FUNCTIONS)
bsp	BUSINESS SERVER PAGES (BSP) RUNTIME
sap	NAMESPACE SAP
it00	BSP TEST APPLICATION
sbspext_table	TEST16
echo	REPEAT OF REQUEST DOCUMENT (ONLY FOR INTERNAL USE)
redirect	REDIRECT TEST FOR LOGON
gui	ITS-Based GUI Services
sap	SAP Namespace for ITS-Based GUI Services
its	ITS Directory
scwm	SCWM services
rfui	TEST: RFUI
test	ITS Test Services
mobile	Test for Mobile Devices
itsmobile00	TEST: ITSmobile, Screens Generated and Modified
itsmobile01	TEST: ITSmobile, Screens Generated
itsmobile02	TEST: ITSmobile, Screens Generated
itsmobile03	TEST: ITSmobile, Screens Generated
itsmobile04	TEST: ITSmobile, Screens Generated
kw	KNOWLEDGE WAREHOUSE
skwr	SKWR TEST

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard) - reloaded (Configuration Validation)

Cross system verification of installed patches

Application ChangeReporting or CCDB in the SAP Solution Manager

(Configuration Validation requires a trick)

Configuration Store: J2EE_COMP_SPLEVEL

Component: LMCTC

Validation is possible in application Configuration & Security Analytics (CSA) in FRUN

The screenshot shows the SAP Solution Manager interface. The top section is titled 'Store List' and contains a table with columns: Name, Alias: Subalias, Type, As of (2020/07/15), Log, and More Details. The first row, 'J2EE_COMP_SPLEVEL', is highlighted with a red box. Below this is the 'Store Content' section, which includes a search bar and a 'History' button. The 'History' table has columns: History, COMPONENT, RELEASE, EXTRELEASE, PATCH_LEVEL, and DESCRIPTION. The third row, 'LMCTC', is highlighted with a red box. Below the history table is an 'Element History' window, which is a detailed view of the selected component. It has columns: Date, Mod. Type, COMPONENT, RELEASE, EXTRELEASE, PATCH_LEVEL, and DESCRIPTION. The first row in this window, dated 2019/10/29 23:00:44, is highlighted with a red box.

Name	Alias: Subalias	Type	As of	Log	More Details
J2EE_COMP_SPLEVEL	J2EE-SOFTWARE: SUPPORT-PACKAGE-LEVEL		2020/07/15	✓	+
LANDSCAPE	J2EE-SOFTWARE: SYSTEM_LANDSCAPE		2020/07/15	✓	+
CTC_MERGED_PROPERTIES	J2EE ENGINE: CTC-PROPERTIES		2020/07/15	⚠	+

History	COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
2	LM-TOOLS		16	0	LIFECYCLE MGMT TOOLS
2	LMCFG		16	0	LM CONFIGURATION
2	LMCTC		16	0	LM CONFIGURATION WIZARD

Date	Mod. Type	COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
2019/10/29 23:00:44		LMCTC	7.50	16	0	LM CONFIGURATION WIZARD
2019/01/03 23:00:31				13	0	LM CONFIGURATION WIZARD

History	COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
2	LMNWABASICAPPS	7.50	16	0	LM NWA BASIC APPS
2	LMNWABASICCOMP		16	0	LMNWABASICCOMP


Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard) - reloaded (Configuration Validation)



The Configuration Store `J2EE_COMP_SPLEVEL` has key fields `COMPONENT` and `RELEASE` (few filter operators, no duplicates allowed) and data fields `EXTRELEASE`, `PATCH_LEVEL`, `DESCRIPTION` (many filter operators available).

You want to define conditions like these:

Target System : J2EECOMP / Store Name : J2EE_COMP_SPLEVEL

Comparison Store: FAJ / 00505... [Change](#) | Find: [Find](#) [Find Next](#) Replace with:



	Sel.	 COMPONENT	 RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
<input type="radio"/>	<input type="checkbox"/>	(=) LMCTC	(=) 7.50	(=) 18	(>=) 1	(Ignore)
<input checked="" type="radio"/>	<input type="checkbox"/>	(=) LMCTC	(=) 7.50	(=) 19	(>=) 0	(Ignore)

However, this leads to the error **“Duplicate entry”**.

➤ You have to enter distinct values for key fields.

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard) - reloaded (Configuration Validation)

We need a trick: The condition has to look different but still addresses the same configuration items.

Solution: Use a regular expression which includes a different but irrelevant part.

The regular expression (something)? catches zero or one occurrences of something.

COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
(Regex) LMCTC(7.10)?	(=) 7.10	(Ignore)	(Ignore)	(Ignore)
(Regex) LMCTC(7.11)?	(=) 7.11	(Ignore)	(Ignore)	(Ignore)
(Regex) LMCTC(7.20)?	(=) 7.20	(Ignore)	(Ignore)	(Ignore)
(Regex) LMCTC(7.30 19)?	(=) 7.30	(=) 19	(>=) 1	(Ignore)
(Regex) LMCTC(7.30 20)?	(=) 7.30	(=) 20	(>=) 1	(Ignore)
(Regex) LMCTC(7.30 21)?	(=) 7.30	(>=) 21	(Ignore)	(Ignore)
(Regex) LMCTC(7.31 23)?	(=) 7.31	(=) 23	(>=) 1	(Ignore)
(Regex) LMCTC(7.31 24)?	(=) 7.31	(=) 24	(>=) 1	(Ignore)
(Regex) LMCTC(7.31 25)?	(=) 7.31	(=) 25	(>=) 1	(Ignore)
(Regex) LMCTC(7.31 26)?	(=) 7.31	(=) 26	(>=) 1	(Ignore)
(Regex) LMCTC(7.31 27)?	(=) 7.31	(=) 27	(>=) 0	(Ignore)
(Regex) LMCTC(7.31 28)?	(=) 7.31	(>=) 28	(Ignore)	(Ignore)
(Regex) LMCTC(7.40 18)?	(=) 7.40	(=) 18	(>=) 1	(Ignore)
(Regex) LMCTC(7.40 19)?	(=) 7.40	(=) 19	(>=) 1	(Ignore)
(Regex) LMCTC(7.40 20)?	(=) 7.40	(=) 20	(>=) 1	(Ignore)
(Regex) LMCTC(7.40 21)?	(=) 7.40	(=) 21	(>=) 1	(Ignore)
(Regex) LMCTC(7.40 22)?	(=) 7.40	(=) 22	(>=) 0	(Ignore)
(Regex) LMCTC(7.40 23)?	(=) 7.40	(>=) 23	(Ignore)	(Ignore)
(Regex) LMCTC(7.50 12)?	(=) 7.50	(=) 12	(>=) 2	(Ignore)
(Regex) LMCTC(7.50 13)?	(=) 7.50	(=) 13	(>=) 3	(Ignore)
(Regex) LMCTC(7.50 14)?	(=) 7.50	(=) 14	(>=) 2	(Ignore)
(Regex) LMCTC(7.50 15)?	(=) 7.50	(=) 15	(>=) 2	(Ignore)
(Regex) LMCTC(7.50 16)?	(=) 7.50	(=) 16	(>=) 2	(Ignore)
(Regex) LMCTC(7.50 17)?	(=) 7.50	(=) 17	(>=) 2	(Ignore)
(Regex) LMCTC(7.50 18)?	(=) 7.50	(=) 18	(>=) 1	(Ignore)
(Regex) LMCTC(7.50 19)?	(=) 7.50	(=) 19	(>=) 0	(Ignore)
(Regex) LMCTC(7.50 20)?	(=) 7.50	(>=) 20	(Ignore)	(Ignore)

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard) - reloaded (Configuration Validation)

Result:

▼ Konfigurationselemente						
SAP-Systemkennung	Konfigurationselement	Wert des ConfigItems	KonfValid: Datenoper	Compliance	Konform (1=ja, -1=nein, " "=nicht bewertet)	
A75	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:3;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
A8Z	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:10;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
BE4	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:1;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
BEB	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:0;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
BED	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:0;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
BEF	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:0;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
BEH	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:0;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
BQ1	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:7;PATCH_LEVEL:1	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
EIB	COMPONENT:LMCTC/RELEASE	7.40	EXTRELEASE:8;PATCH_LEVEL:0	>=EXTRELEASE:23/IgnorePATCH_LEVEL:	No	-1
FAJ	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:18;PATCH_LEVEL:1	=EXTRELEASE:18/>=PATCH_LEVEL:1	Yes	1
FBJ	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:15;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
FOJ	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:18;PATCH_LEVEL:1	=EXTRELEASE:18/>=PATCH_LEVEL:1	Yes	1
FTJ	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:18;PATCH_LEVEL:1	=EXTRELEASE:18/>=PATCH_LEVEL:1	Yes	1
GEA	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:10;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
JC3	COMPONENT:LMCTC/RELEASE	7.40	EXTRELEASE:10;PATCH_LEVEL:0	>=EXTRELEASE:23/IgnorePATCH_LEVEL:	No	-1
JE7	COMPONENT:LMCTC/RELEASE	7.10	EXTRELEASE:19;PATCH_LEVEL:0	IgnoreEXTRELEASE:/IgnorePATCH_LEVEL:	Yes	1
JW5	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:20;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	Yes	1
N4Q	COMPONENT:LMCTC/RELEASE	7.10	EXTRELEASE:21;PATCH_LEVEL:0	IgnoreEXTRELEASE:/IgnorePATCH_LEVEL:	Yes	1
N75	COMPONENT:LMCTC/RELEASE	7.50	EXTRELEASE:3;PATCH_LEVEL:0	>=EXTRELEASE:20/IgnorePATCH_LEVEL:	No	-1
PJ2	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:21;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
PJ4	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:14;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
PO1	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:22;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
U3S	COMPONENT:LMCTC/RELEASE	7.31	EXTRELEASE:20;PATCH_LEVEL:0	>=EXTRELEASE:28/IgnorePATCH_LEVEL:	No	-1
XI2	COMPONENT:LMCTC/RELEASE	7.40	EXTRELEASE:9;PATCH_LEVEL:0	>=EXTRELEASE:23/IgnorePATCH_LEVEL:	No	-1

Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Patch installed
 Patch missing
 Patch installed
 Patch installed
 Support Package too old
 Support Package too old
 Release not affected
 Support Package installed
 Release not affected
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old
 Support Package too old



August 2020

Topics August 2020



Note [2835979](#) - Code Injection vulnerability in Service Data Download (reloaded)

Note [2928635](#) - Cross-Site Scripting (XSS) in SAP NetWeaver (Knowledge Management)

Note [2932212](#) - Security measures to protect malicious file uploading and opening in KM

Note [2957979](#) - Q&A for SAP Security Note [2928635](#)

Note [2948106](#) - FAQ - for SAP Note [2934135](#) - LM Configuration Wizard

11. How to verify if the vulnerability is mitigated after applying the patch or deactivating the application aliases?

KBA [2953257](#) - Check implementation of Note [2934135](#) based on data from SLD

Note [2754546](#) - Potential information disclosure in Lumira Designer

Note [2921615](#) - BI Platform stores SAP BW Authentication Password as clear text

Note [2941667](#) - Code Injection Vulnerability in SAP NetWeaver (ABAP)

Note [2452425](#) - Collective Note - SAP SSO Certificate Lifecycle Management

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note 2835979 - Code Injection vulnerability in Service Data Download (reloaded)

Solution available since December 2019

HotNews published in May 2020

Proof-of-Concept Exploit published in August 2020

https://www.theregister.com/2020/08/12/sap_netweaver_abap_bug/

<https://sec-consult.com/en/blog/2020/08/code-injection-in-sap-application-server-abap-solution-tools-plugin-st-pi/>

Did you have updated the corresponding Support Package of Software Component ST-PI?
(You can update software component ST-PI independently from any other maintenance activities.)

Note 2928635 - Cross-Site Scripting (XSS) in SAP NetWeaver (KM)

Note 2932212 - Security measures to protect KM



➤ Activate the **Virus Scanner Service** on AS Java

https://help.sap.com/doc/saphelp_nw74/7.4.16/en-us/b8/f5af401efd8f2ae10000000a155106/frameset.htm

Example: <https://archive.sap.com/documents/docs/DOC-30967>

➤ Activate **Force Text Download** in any case

(This setting is part of “SAP Secure by Default” guidance for latest releases in case of new installations)

Parameters of the WebDAV Protocol incl. Force Text Download

https://help.sap.com/doc/saphelp_nw74/7.4.16/en-us/95/c3744f7143426e8f99c362244e0b55/frameset.htm

In addition you might want to maintain additional filter options:

➤ **Malicious Script Filter**

https://help.sap.com/doc/saphelp_nw74/7.4.16/en-us/84/4da32a99254685aa62aedf6f132429/frameset.htm

Note: If a malicious script filter is activated for the repository containing the file with executable script, the Force Text Download parameter is ignored.

➤ **File Extension and Size Filter**

https://help.sap.com/doc/saphelp_nw74/7.4.16/en-us/84/4da32a99254685aa62aedf6f132429/frameset.htm

➤ Note 599425 - Permissions for KM repositories

Older releases are not affected.

What about deactivating WebDAV instead of securing it?

If you do not use Knowledge Management in the Portal, e.g. if you use the Portal only to integrate user interfaces into a central server, you can deactivate WebDAV as well:

Parameter “**Enable WebDAV Server**” determines if support of the WebDAV protocol as specified in [RFC 2518](#) is enabled. If it is disabled, only http standard methods GET, HEAD, PUT, DELETE, and OPTIONS calls are processed whereas the WebDAV specific methods to lock, release, create, copy, move, or delete resources are blocked.

By default, this parameter is activated.

However, KBA [2957979](#) states the following:

Q9. Is this vulnerability exploitable if WebDAV has been disabled?

A. **Yes, it is.** This setting affects the standard UI. You need to apply the SAP Security Note [2928635](#).

Note 2948106 - FAQ - for SAP Note 2934135 - LM Configuration Wizard

11. How to verify if the vulnerability is mitigated after applying the patch or deactivating the application aliases?

Make an http call using method `HEAD` in command line or in REST clients to `http(s)://<host>:<port>/CTCWebService/CTCWebServiceBean`

Tips for using command line tool “curl” to submit the call:

- Use the option `--head` (respective the shortcut option `-I` which is an upper case "i") to trigger a `HEAD` request. This option omits possible error conditions which you might get if you would use the http method `GET` or `POST` instead.
- You may add option `--location` (respective the shortcut option `-L`) to follow automatically a redirect location provided by the server together with http response code `307`.
- You may add option `--verbose` (respective the shortcut option `-v`) to make the operation more talkative.

Example:

```
curl --head --location http://<host>:<port>/CTCWebService/CTCWebServiceBean/
```

The response code should be:

- ✓ 401 “Unauthorized” or an authentication pop-up after applying the patch according to SAP Note 2934135
- ✓ 404 “Not Found” after deactivating the application aliases according to SAP Note 2939665

In a SAP Solution Manager system you can use the report provided by KBA 2953257 to run this verification for all Application Server Java systems which are registered in the Software Lifecycle Directory (SLD).

KBA 2953257 - Check implementation of Note 2934135 based on data from SLD

The report checks if the software component LMCTC has as least on of the patch levels which are listed in Note 2934135.

In addition you get a list of URLs pointing to the critical servlet described in that note and you can test if these URLs are working (which is critical) or are blocked (which is secure).

The screenshot shows a configuration window titled "Check Note 2934135". It contains the following fields and options:

- System:** A text input field followed by "bis" and another text input field, with a yellow arrow icon on the right.
- Software Component:** A text input field containing "LMCTC" followed by "bis" and another text input field, with a yellow arrow icon on the right.
- Test Service:** A checked checkbox.
- Service parameters:**
 - Service:** A text input field containing "/CTCWebService/CTCWebServiceBean/".
 - http method:** Radio buttons for "http method HEAD" (selected), "http method GET", and "http method POST".
 - http timeout:** A text input field containing "1".
 - SSL Client Identity:** A text input field containing "ANONYM".
- Extended log:** An unchecked checkbox.

Note 2754546 - Potential information disclosure in Lumira Designer

New feature in Lumira 2.3 from march 2019 **with manual settings**

Administrator Guide - General Security Recommendations

<https://help.sap.com/viewer/b2ab3c5d05314085985c4b78aa17db2d/2.4.0/en-US/3ba5253372bc1014ae0faa81b0e91070.html>

Disabling Java VM Arguments in SAP Lumira Designer (available as of release 2.3)

<https://help.sap.com/viewer/3dbb00422a214e39970963651f8a3094/2.3.0/en-US/509293b300c44e7f9cb45af7427ebdcd.html>

„You can now prevent the use of unsupported security-relevant Java VM arguments in SAP Lumira Designer **centrally** on every user's machine by adding a setting to a branch in the **Windows registry** to which the users don't have write access.”

```
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Prefs\com\sap\lumira\designer]
"disable_insecure_vm_args"="true"
```

Related note about same setting:

Note 2762504 - Disable predefined user/password authentication for OLAP connections by default

Note 2921615 - BI Platform stores SAP BW Authentication Password as clear text

Before you can import roles or publish BW content to the **BI platform**, you must provide information about the **SAP Entitlement Systems** to which you want to integrate. The BI platform uses this information to connect to the target SAP system when it determines role memberships and authenticates SAP users.

Connection data for an authentication plugin was stored including user with password in clear text.

Business Intelligence Platform Administrator Guide – How to add an SAP entitlement system

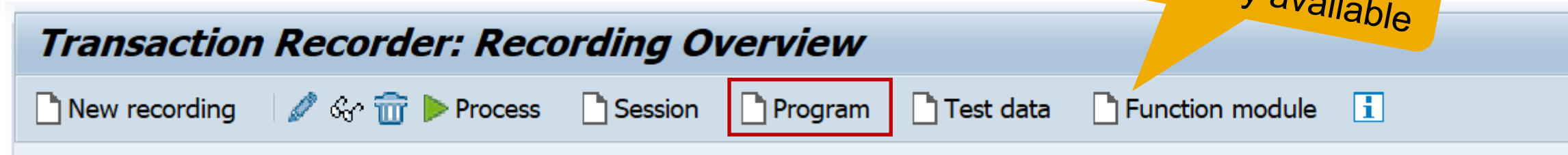
<https://help.sap.com/viewer/DRAFT/2e167338c1b24da9b2a94e68efd79c42/4.3.1/en-US/468134a16e041014910aba7db0e91070.html>

To solve this issue:

- 1. Update the software**
- 2. Change the password of this user in the SAP BW and update the connection data in the CMC of the BI platform**

Note 2941667 - Code Injection Vulnerability in SAP NetWeaver (ABAP) and ABAP Platform

Transaction SHDB



The batch input recorder report RSBDCREC is changed from local implementation to central API.

Beside **various repository checks**, the API function RPY_PROGRAM_INSERT requires that user has authorization **S_DEVELOP**.

The minimal authorization required is S_DEVELOP with parameters OBJTYPE=PROG, OBJNAME=<name>, and ACTVT=01.





➤ You cannot use this report (or this operation) in production systems anymore

Note 2452425 - Collective Note - SAP SSO Certificate Lifecycle Management for ABAP

Report `SSF_ALERT_CERTEXPIRE` alerts on expiring certificates (MTE class R3SyslogSecurity) or AutoABAP report `SSFALRTEXP`, see note 572035

**Alerts only,
no renewal**

Check and Warn About Certificates Expiring Soon

   Test Warnings  Lock AutoABAP

Scope of Checks

No. of Days until Expiration

Replacement for AutoABAP

Check Certificate List

Check the PSEs

SSL Servers of All Servers

Create Warnings

Create warnings using Alert Framework (subscription)

Warn (internal communication)

Note 2452425 - Collective Note - SAP SSO Certificate Lifecycle Management for ABAP

The configuration of the SLS, ABAP systems and Java Systems is described here:

Configuring Certificate Lifecycle Management based on Secure Login Server (SLS)

<https://blogs.sap.com/2020/07/09/configuring-certificate-lifecycle-management/>

Renew Certificates

Reset Context

SLS Metadata URL	https://mo-82d540fa5.mo.sap.corp:50101/SecureLoginServer/appser..
No. of Days Until Expiration	20
PSE Context	All

- All
- SNC SAPCryptolib
- SSL server
- SSL client
- WS Security
- SMIME
- SSF



July 2020

Topics July 2020



Note [2934135](#) - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Note [2774489](#) - Code Injection vulnerability in ABAP Tests Modules of SAP NetWeaver Process Integration

Note [2932473](#) - Information Disclosure in SAP NetWeaver (XMLToolkit for Java)

Note [2923117](#) - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO (reloaded)

Note [2923799](#) - Final Shutdown of RFC Connections From Customer Systems to SAP

Note [2928592](#) - Download digitally signed Notes using HTTP in SAP_BASIS 700 to 731

Note [2934203](#) - ST-A/PI 01T* SP01 - 01U SP00: SAP backbone connectivity for RTCCTOOL

KBA [2911301](#) / Note [2946444](#) - SAP Support Portal - Renew client certificate

Recommended Notes for System Recommendations

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note [2934135](#) - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

All Java systems on all releases as of 7.30 are affected - standalone Java as well as the Java part of dual stack systems.

Be aware that such Java systems often serve as internet facing User Interface systems.

ABAP systems are not affected.

This Java application is used by few SAP Lifecycle procedures only, such as the initial technical setup, and it is not needed in day-to-day operations.

Related notes:

KBA [2948106](#) - FAQ - for SAP Note 2934135

Note [2939665](#) - Disable LM Configuration Wizard

Note [1589525](#) (describing firewall URL filter rules)

Note [1451753](#) (describing filtering of administration requests)

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

At once: Deactivate on all application servers the aliases `CTCWebService ctc/core ctcprotocol` respective application `tc~lm~ctc~cul~startup_app` and validate that service `CTCWebService` is offline as described in KBA 2939665

In addition: Implement firewall rules for URL blocking as described in note 1589525 or develop filter rules for administrative requests according to note 451753

Short time: Implement the patch for Software Component LMCTC as described in the note.

The patch does not depend on any other component and you can it deploy online (without downtime or restart) using telnet (see KBA 1715441) or if possible SUM (see [Blog](#) and Note 1641062).

Software Download Example:

<https://launchpad.support.sap.com/#/softwarecenter/search/LM%2520CONFIGURATION%2520WIZARD%25207.50>

Scheduled: This month you find multiple notes about Java, therefore, schedule a combined update of all Java components. You can take the time for preparation, if you have deactivated the vulnerability described by this note.

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

View current status:

Call the NetWeaver Administrator at **http(s)://<host>:<port>/nwa** and login with admin user

→ **Operations**

→ **Start and Stop** (you can cancel any additional logon popup for OS credentials)

→ **JAVA Applications**

→ **Filter for tc~lm~ctc~cul~startup_app**

Start & Stop: Java Applications | Restore Default View | Back Forward | History | Home | Help | Log Off

Favorites | Related Links | Go To | Support Details | Search: Go

Java Instances | Java Services | **Java Applications**

Application List

Retrieve Status: On | Start | **Stop** | Restart | More Actions

Name	Vendor	Status
tc~lm~ctc~cul~startup_app		
tc~lm~ctc~cul~startup_app	sap.com	Stopped

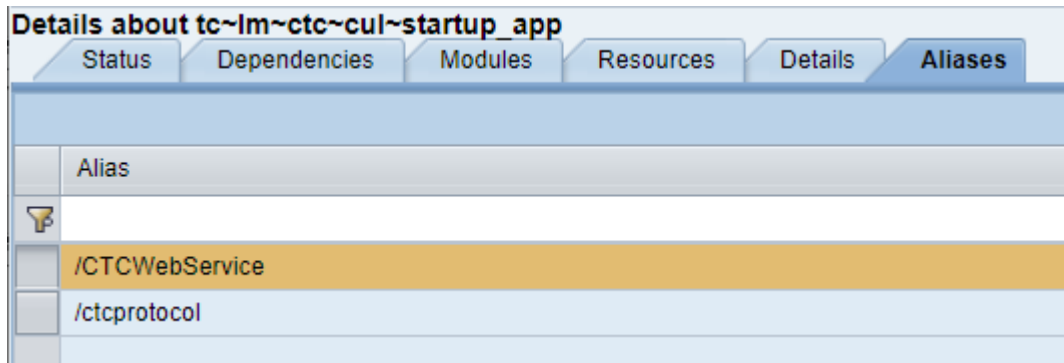
What about other application servers?
What happens when you restart of the server?

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

View current status (continued):

In the lower part you can view the application aliases which are associated with this application.

These are the aliases which you should deactivate according to **Note 2939665**



The screenshot shows a configuration window titled "Details about tc~lm~ctc~cul~startup_app". It has several tabs: Status, Dependencies, Modules, Resources, Details, and Aliases. The "Aliases" tab is selected. Below the tabs is a table with the following content:

Alias
/CTCWebService
/ctcprotocol

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

View current status (continued):

→ **More Actions** (or NWA → Configuration → System Information)

→ **View Application Component Info** and compare it with the patch list of the note

- 7.10 not affected
- 7.11 not affected
- 7.20 not affected
- 7.30 SP 19 patch 1
- 7.30 SP 20 patch 1
- 7.30 SP 21 patch 0
- 7.31 SP 23 patch 1
- 7.31 SP 24 patch 1
- 7.31 SP 25 patch 1
- 7.31 SP 26 patch 1
- 7.31 SP 27 patch 0
- 7.31 SP 28 patch 0
- 7.40 SP 18 patch 1
- 7.40 SP 19 patch 1
- 7.40 SP 20 patch 1
- 7.40 SP 21 patch 1
- 7.40 SP 22 patch 0
- 7.40 SP 23 patch 0
- 7.50 SP 12 patch 2
- 7.50 SP 13 patch 3
- 7.50 SP 14 patch 2
- 7.50 SP 15 patch 2**
- 7.50 SP 16 patch 2
- 7.50 SP 17 patch 2
- 7.50 SP 18 patch 1
- 7.50 SP 19 patch 0
- 7.50 SP 20 patch 0

System Information: Components Info Restore Default View | Back Forward | History | Home

Favorites Related Links Go To Support Details Search:

System Information **Components Info**

Software Components

[Export to Spreadsheet](#)

Vendor	Name	Version	Location
sap.com	LMCTC	1000.7.50.15.1.20190620184300	SAP AG
sap.com	LMNWABASICAPPS	1000.7.50.15.0.20190505183500	SAP AG

Development Components of SCA LMCTC

Display: Per selected software component [Export to Spreadsheet](#)

Vendor	Name	Version	Change Number	Apply Time	Location	Software Type	Software Component
sap.com	tc~lm~ctc~cul~interface_sda	7.5015.20190618123015.0000	14	03.02.2020 17:18 UTC	SAP AG	library	sap.com/LMCTC
sap.com	tc~lm~ctc~cul~startup_app	7.5015.20190618123015.0000	14	03.02.2020 17:22 UTC	SAP AG	application	sap.com/LMCTC
sap.com	tc~lm~ctc~metamodel_sda	7.5015.20190618123015.0000	14	03.02.2020 17:18 UTC	SAP AG	library	sap.com/LMCTC

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Disable Service:

Call the NetWeaver Administrator at **http(s)://<host>:<port>/nwa** and login with admin user

- **Configuration**
- **Infrastructure**
- **JAVA HTTP Provider Configuration**
- **Application Aliases**

Scroll down and deactivate

CTCWebService
ctc/core
ctcprotocol

Active	Application
<input checked="" type="checkbox"/>	BOBJMonService/default
<input checked="" type="checkbox"/>	CMSRTS/Config1
<input type="checkbox"/>	CTCWebService
<input checked="" type="checkbox"/>	ClassificationService/CS
<input checked="" type="checkbox"/>	ComponentListService

Active	Application
<input type="checkbox"/>	ctc/core
<input checked="" type="checkbox"/>	ctc/di
<input checked="" type="checkbox"/>	ctc/esr
<input checked="" type="checkbox"/>	ctc/sld
<input type="checkbox"/>	ctcprotocol

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Verify deactivation:

Call the Web Service Navigator at **http(s)://<host>:<port>/wsnavigator** and login with admin user

Choose Search Type „Provider System“ and search for `CTCWebService`

You should get an error message which indicates that the service is offline.

The screenshot displays the 'Web Services Navigator' interface. At the top, a red error message reads 'Invalid Response Code: (404) Not Found'. Below this, there are tabs for 'Service test' and 'Test scenario'. A process flow diagram shows four steps: 1. Service, 2. Operation, 3. Input Parameters, and 4. Result. Navigation buttons include 'Previous', 'Next', 'Invocation Parameters', 'Invoke', and 'Add to Test Scenario'. The 'Service Information' section shows search criteria: Search Type is 'Provider System', Search for is 'CTCWebService', and Provider System is 'Local Java AS'. A 'Search' button is present. Below, a table titled 'Found 1 Service Interfaces' lists one result: CTCWebServiceSi with namespace urn:CTCWebServiceSi.

Interface Name	Namespace
CTCWebServiceSi	urn:CTCWebServiceSi

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Verify deactivation:

Call the services using a HEAD request and check the http return code: **vulnerable** **ok**

`http(s)://<host>:<port>/CTCWebService/CTCWebServiceBean` **200 / 405** **404 / 401**

`http(s)://<host>:<port>/CTCWebService/CTCWebServiceBean?wsdl` **200+xml** **404 / 401**

()

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼ <wsdl:definitions xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" xmlns:tns="urn:CTCWebServiceSi" targetNamespace="urn:CTCWebServiceSi">
  ▼ <wsdl:types>
    ▼ <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:CTCWebServiceSi" version="1.0">
      <xs:element name="CTCManagementException" type="tns:CTCManagementException"/>
      <xs:element name="RemoteException" type="tns:RemoteException"/>
      <xs:element name="cancelExecution" type="tns:cancelExecution"/>
      <xs:element name="cancelExecutionResponse" type="tns:cancelExecutionResponse"/>
      <xs:element name="endOfExecution" type="tns:endOfExecution"/>
      <xs:element name="endOfExecutionResponse" type="tns:endOfExecutionResponse"/>
      <xs:element name="eventsAvailable" type="tns:eventsAvailable"/>
      <xs:element name="eventsAvailableResponse" type="tns:eventsAvailableResponse"/>
      <xs:element name="execute" type="tns:execute"/>
      <xs:element name="executeResponse" type="tns:executeResponse"/>
      <xs:element name="executeSynchronous" type="tns:executeSynchronous"/>
      <xs:element name="executeSynchronousResponse" type="tns:executeSynchronousResponse"/>
    
```

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Alternative option to deactivate the application

Disable application:

Call the NetWeaver Administrator at [http\(s\)://<host>:<port>/nwa](http(s)://<host>:<port>/nwa) and login with admin user

- Operations
- Start and Stop (you can cancel any additional logon popup for OS credentials)
- JAVA Applications
- **More Actions**
- **Edit Startup Filters**

The screenshot shows the 'Start & Stop: Java Applications' interface. The 'More Actions' dropdown menu is open, showing options: View Logs, View Application Component Info, View Application Properties, View Related Functionality, and Edit Startup Filters (highlighted with a red box). The application list below shows:

Name	
AdobeDocumentServices	
applicationsAdminApp	
bi~alv	sap.com

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Alternative option to deactivate the application

Disable application (continued):

→ Filters

→ Add

Action	Component	Vendor Mask	Name Mask
start	all components	*	*
stop	application	sap.com	tc~je~p4tunneling~app
stop	all components	sap.com	tc~sec~rbam~*
start	application	sap.com	tc~sec~rbam~ctc~library_ear
stop	application	sap.com	loadobserver

Local Filters

Save | Add | Remove | Modify | Move Up | Move Down | Normalize

No filters present.

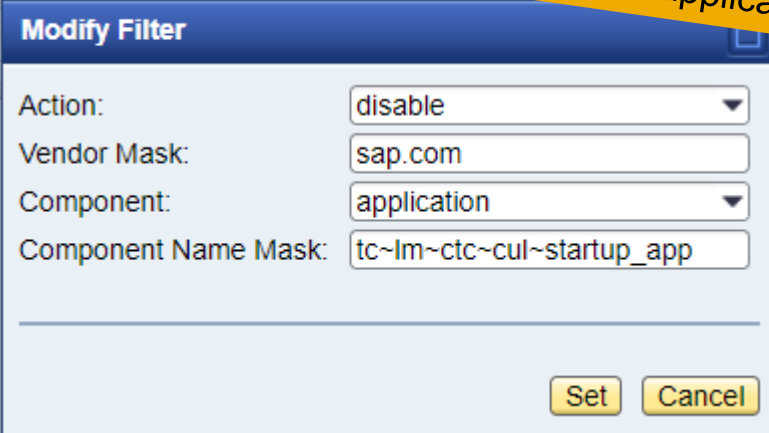
Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Alternative option to deactivate the application

Disable application (continued):

Enter Filter:

Action: disable
Vendor mask: sap.com
Component: application
Component Name mask: tc~lm~ctc~cul~startup_app



Modify Filter

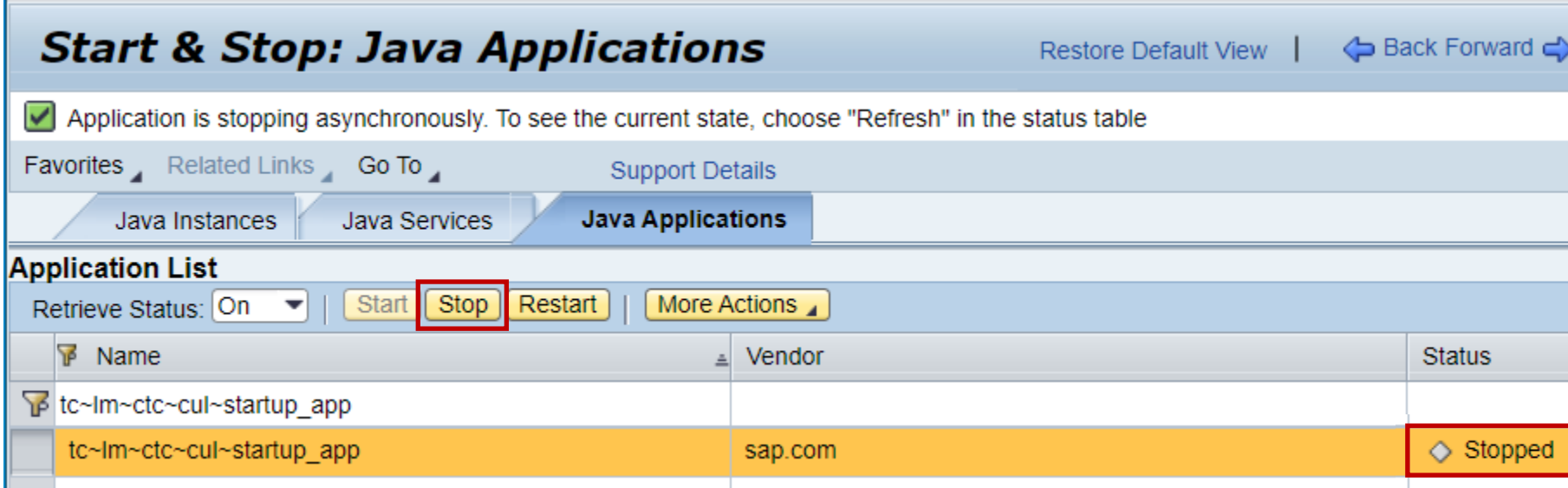
Action: disable
Vendor Mask: sap.com
Component: application
Component Name Mask: tc~lm~ctc~cul~startup_app

Set Cancel

Set and Save the Filter

Filters were saved successfully.
In order for the changes to take effect, restart the cluster.

You can stop the application manually as well:



Start & Stop: Java Applications Restore Default View | Back Forward

Application is stopping asynchronously. To see the current state, choose "Refresh" in the status table

Favorites Related Links Go To Support Details

Java Instances Java Services **Java Applications**

Application List

Retrieve Status: On | Start **Stop** Restart | More Actions

Name	Vendor	Status
tc~lm~ctc~cul~startup_app		
tc~lm~ctc~cul~startup_app	sap.com	Stopped

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Alternative option to deactivate the application

Verify deactivation:

Call the Web Service Navigator at **http(s)://<host>:<port>/wsnavigator** and login with admin user

Choose Search Type „Provider System“ and search for `CTCWebService`

If you find the service, then the system might still be vulnerable (if not patched):


You should get an error message which indicates that the service is offline:

The screenshot displays the SAP NetWeaver AS JAVA Web Service Navigator interface. At the top, there are tabs for "Service test" and "Test scenario". Below the tabs is a process flow diagram with four steps: 1. Service, 2. Operation, 3. Input Parameters, and 4. Result. Below the flow diagram are buttons for "Previous", "Next", "Invocation Parameters", "Invoke", and "Add to Test Scenario". The main section is titled "Service Information" and contains a "Search Service Interfaces" section. The search type is set to "Provider System", the search for field contains "CTCWebService", and the provider system is set to "Local Java AS". A "Search" button is located below the search fields. Below the search results, there are two tables. The first table, titled "Found 1 Service Interfaces", shows one result: "CTCWebServiceSi" with the namespace "urn:CTCWebServiceSi". The second table, titled "Found 0 Service Interfaces", shows no results and a message "No web service interfaces found".

Interface Name	Namespace
CTCWebServiceSi	urn:CTCWebServiceSi

Interface Name	Namespace
No web service interfaces found	

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

<  System Recommendations - SAP Note Overview ▾ 🔍 👤

Standard * ▾ Hide Advanced Search Filters (1) Go

Note Type: ▾ Priority: ▾

Note Number: 2934135

SAP Notes for selected technical systems: 4 ↓ ↑ ⚙️

<input type="checkbox"/>	Technical System	Note Number	Note Version	Short text	Release Date	Application Component	Priority	Support Package	Implementation Status	Processing Status
<input type="checkbox"/>	A8Z~JAVA	2934135	11	[CVE-2020-6287] Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)	14.07.2020	BC-INS-CTC	1 - HotNews	SP012	New	Undefined
<input type="checkbox"/>	JC3~JAVA	2934135	11	[CVE-2020-6287] Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)	14.07.2020	BC-INS-CTC	1 - HotNews	SP018	New	Undefined
<input type="checkbox"/>	FAJ_SM~JAVA	2934135	11	[CVE-2020-6287] Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)	14.07.2020	BC-INS-CTC	1 - HotNews	SP018	New	Undefined

<https://<host>:<port>/sap/bc/ui2/flp?sap-client=<client>&sap-language=EN#Action-UISMMMySAPNotes&/NoteOverview/sapnote=2934135>

Note 2934135 - Multiple Vulnerabilities in SAP NetWeaver AS JAVA (LM Configuration Wizard)

Cross system verification of installed patches

Application ChangeReporting or CCDB in the SAP Solution Manager

(Configuration Validation requires a trick)

Configuration Store: J2EE_COMP_SPLEVEL

Component: LMCTC

Validation is possible in application Configuration & Security Analytics (CSA) in FRUN

The screenshot displays the SAP Solution Manager interface for configuration store management. The top section, 'Store List', shows a table of configuration stores. The 'J2EE_COMP_SPLEVEL' store is selected and highlighted with a red box. Below this, the 'Store Content' section shows a search bar and a table of components. The 'History' table lists components like LMCTC, LMCFG, and LMTOOLS. An 'Element History' window is open, showing a detailed view of the LMCTC component's history, with the entry for 2019/10/29 highlighted by a red box.

Name	Alias: Subalias	Type	As of 2020/07/15	Log	More Detail
<input checked="" type="radio"/> J2EE_COMP_SPLEVEL	J2EE-SOFTWARE: SUPPORT-PACKAGE-LEVEL	...	✓	...	+
<input type="radio"/> LANDSCAPE	J2EE-SOFTWARE: SYSTEM_LANDSCAPE	...	✓	...	+
<input type="radio"/> CTC_MERGED_PROPERTIES	J2EE ENGINE: CTC-PROPERTIES	...	⚠	...	+

History	COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
2	LM-TOOLS		16	0	LIFECYCLE MGMT TOOLS
2	LMCFG		16	0	LM CONFIGURATION
2	LMCTC		16	0	LM CONFIGURATION WIZARD

Date	Mod. Type	COMPONENT	RELEASE	EXTRELEASE	PATCH_LEVEL	DESCRIPTION
2019/10/29 23:00:44	✎	LMCTC	7.50	16	0	LM CONFIGURATION WIZARD
2019/01/03 23:00:31	+			13	0	LM CONFIGURATION WIZARD

2	LMNWABASICAPPS	7.50	16	0	LM NWA BASIC APPS
2	LMNWABASICCOMP		16	0	LMNWABASICCOMP

Note 2774489 - Code Injection vulnerability in ABAP Tests Modules of SAP NetWeaver Process Integration

Easy to implement ABAP correction from July 2019

Did you have solved it in the meantime?

Now you can find an exploit on the internet: Search for CVE-2019-0328

Note 2932473 - Information Disclosure in SAP NetWeaver (XMLToolkit for Java)

Reported by a customer via secure channel:

<https://support.sap.com/securitynotes>

→

[Report a Vulnerability](#)

→

- a) Normal incident**
- b) Web form**
- c) Email to secure@sap.com**
[Get the public PGP key](#)

SAP creates and process a special “Security incident” (restricted access and supervision)

Note 2923117 - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

TLS 1.0 / 1.1 Traffic Analysis

As an admin of an SAP Cloud Platform Neo (sub-)account, you can directly access the logs of the traffic reaching your account using the following applications. It will show you the TLS 1.0 / 1.1 traffic reaching your account for a selected time range.

<https://tlsusagea621a4188.hana.ondemand.com/>

The authentication for the self-service application is using the SAP ID Service, the usual user ID and credentials as used for the SAP Cloud Platform Cockpit and other admin tools.



TLS 1.0 & TLS 1.1 Usage

There is no SAP CP system or application administered by this user with TLS 1.0 or TLS 1.1 traffic. If you still suspect that there is such traffic, you can request a detailed investigation via a Service Ticket in component BC-NEO-SEC-CPG and with "TLS Migration" in the header

Note 2923117 - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

TLS 1.0 / 1.1 Traffic Analysis

LOG_SOURCE = 'CPI'

USER_AGENT = 'SAP NetWeaver Application Server%'

USER_AGENT = 'SAP Web Application Server%'

Sum("REQUESTS") < DAYS

Sum("REQUESTS") without USER_AGENT > DAYS

USER_AGENT that is no Web Browser

Old Browser/Device

Recent Browser/Device

Many different Browser/Devices

→ **Cloud Platform Integration in general**

→ **NetWeaver Application Server**

→ **ABAP Application Server**

→ **Suspected false-positive**

→ **Non-Browser Client**

→ **Non-Browser Client**

→ **Update Browser or Device**

→ **Check Network Devices**

→ **External User-Facing Website**

Note [2923117](#) - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

ABAP systems up to and including ABAP 752 (=S4/HANA 1709) require **explicit opt-in configuration** to enable TLSv1.2-Support for outgoing TLS-protected communication, see the list of recommended profile parameters in section 7 of Note [510007](#):

<code>DIR_EXECUTABLE</code>	<code>\$(DIR_INSTANCE)\$(DIR_SEP)exe</code>
<code>DIR_LIBRARY</code>	<code>\$(DIR_EXECUTABLE)</code>
<code>SAPCRYPTOLIB</code>	<code>\$(DIR_LIBRARY)\$(DIR_SEP)libsapcrypto.so</code>
<code>sec/libsapsecu</code>	<code>\$(SAPCRYPTOLIB)</code>
<code>ssf/ssfapi_lib</code>	<code>\$(SAPCRYPTOLIB)</code>
<code>ssl/ssl_lib</code>	<code>\$(SAPCRYPTOLIB)</code>
<code>ssl/ciphersuites</code>	<code>135:PFS:HIGH::EC_P256:EC_HIGH</code>
<code>ssl/client_ciphersuites</code>	<code>150:PFS:HIGH::EC_P256:EC_HIGH</code>
<code>icm/HTTPS/client_sni_enabled</code>	<code>TRUE</code>
<code>ssl/client_sni_enabled</code>	<code>TRUE</code>

Please ensure that you are not loading an old Cryptolib from a location other than `$(DIR_EXECUTABLE)` with custom values for profile parameters `ssl/ssl_lib`, `ssf/ssfapi_lib`, `sec/libsapsecu`. see also section 2 of SAP Note [510007](#).

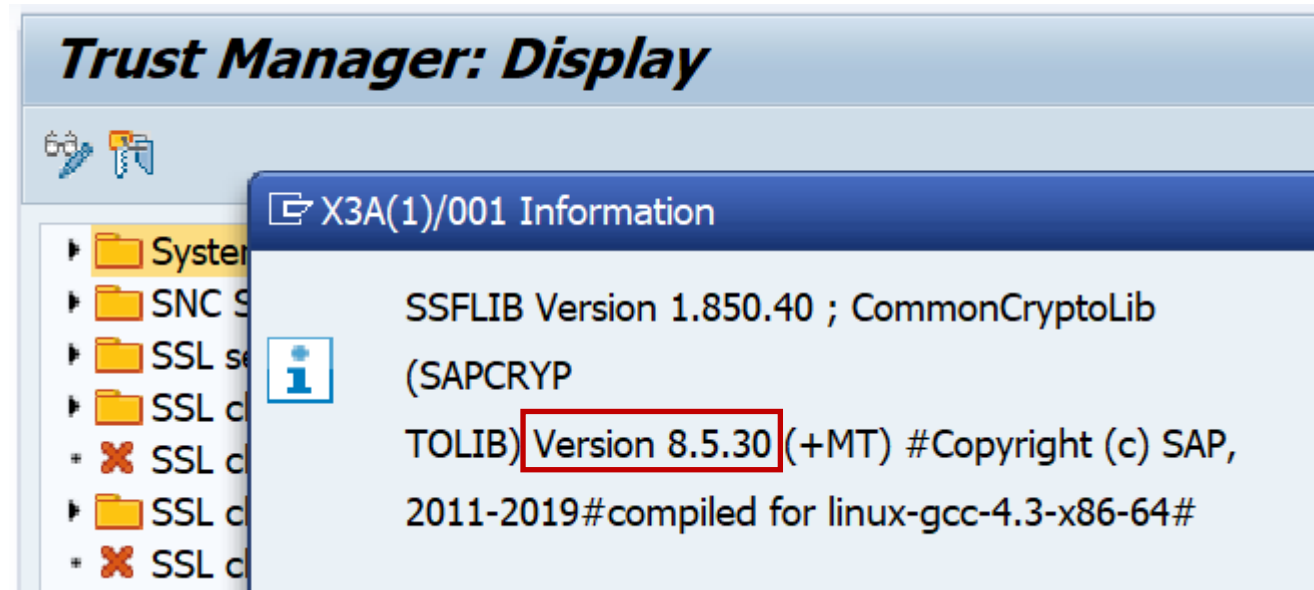
Note [2923117](#) - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

ABAP systems require a minimum version of CommonCryptoLib 8 which implements TLSv1.2. If your version of CommonCryptoLib is older than version 8.4.48, then you should upgrade your library. See also SAP Note [1848999](#).

You can use transaction STRUST → "Environment" → "Display SSF Version" to display the version of your CryptoLib. If you are still on ABAP 7.0x or 7.1x, then you need at minimum Kernel 720 patch 88.

Kernel patches produced after mid-2014 include the most recent version CommonCryptoLib 8 at the time when this Kernel patch was produced. See SAP Note [2083594](#) on Downward Compatible Kernels (DCK) for all Netweaver 7.xx Releases.

In case of problems, please open an incident on BC-NEO-SEC-CPG with "TLS Migration" in header.



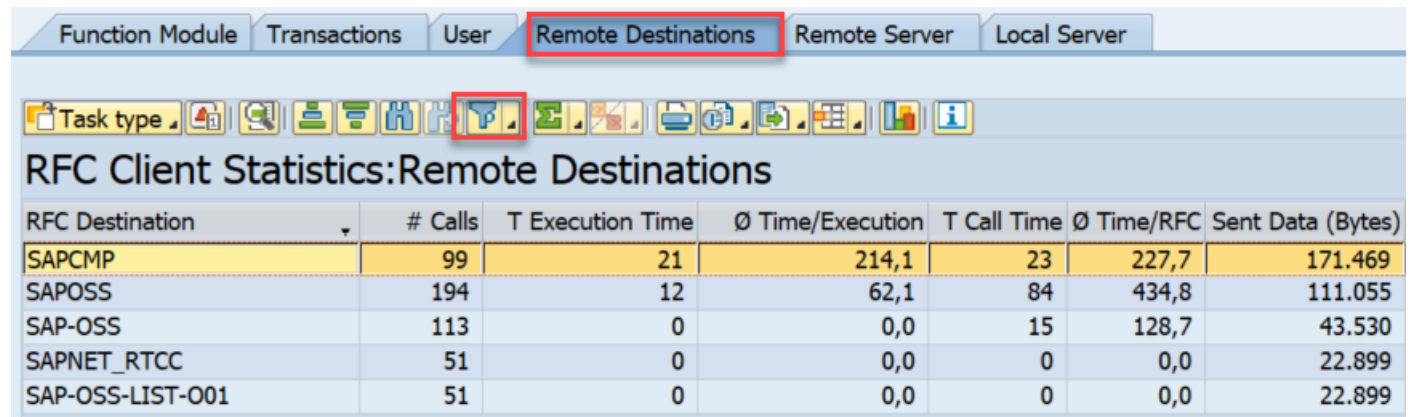
Note 2923799 - Final Shutdown of RFC Connections From Customer Systems to SAP

On Monday November 30, 2020 all RFC communications from customer systems to SAP will cease permanently and irreversibly. Applications which still might use RFC:

- Notes Download
- EWA
- RTCCTOOL
- SAP Solution Manager functions

Transaction ST03N shows the usage of RFC Destinations
Ensure that none of these destinations are still in use:

SAPCMP
SAPOSS
SAP-OSS
SAPNET_RTCC
SAP-OSS-LIST-001



Function Module	Transactions	User	Remote Destinations	Remote Server	Local Server	
RFC Client Statistics:Remote Destinations						
RFC Destination	# Calls	T Execution Time	Ø Time/Execution	T Call Time	Ø Time/RFC	Sent Data (Bytes)
SAPCMP	99	21	214,1	23	227,7	171.469
SAPOSS	194	12	62,1	84	434,8	111.055
SAP-OSS	113	0	0,0	15	128,7	43.530
SAPNET_RTCC	51	0	0,0	0	0,0	22.899
SAP-OSS-LIST-001	51	0	0,0	0	0,0	22.899

Note [2928592](#) - Download digitally signed Notes using HTTP in SAP_BASIS 700 to 731

The note downports for SAP_BASIS 700 to 731 the option to download digitally signed Notes using **HTTP procedure** (in addition to existing method to use a central Download Service system).

You find a new version of the pdf document about “Enabling and Using SNOTE for Digitally Signed SAP Notes”, too.

Related notes:

Note [2934203](#) - ST-A/PI 01T* SP01 - 01U SP00: SAP backbone connectivity for RTCCTOOL

Note [2837310](#) - Connecting Legacy Systems with https to SAP Support Backbone

KBA 2911301 / Note 2946444 - SAP Support Portal connection - Renew client certificate

You have enabled client certificate authentication for technical communication users according to KBA 2805811.

You realize that the validity of these client certificates is limited to 1 year and you want to renew these client certificates efficiently.

**Schedule new report
RSUPPORT_HUB_CERT_RENEWAL
as a monthly background job to
renew the client certificate used
in destinations for the
SAP Support Portal**

SAP Support Portal connection - Renew client certificate

STRUST SM59 RSRFCCHK Tech-User KBA 2911301

Connection to SAP Support Portal

Connect via destination Connect via url

SAP-SUPPORT_PORTAL SSF Application SAPSUP

SSF Application

SSL Client Identity SAPSUP

SSL Client Identity

Technical S-user (CN)	S0012345678	Valid S-user
Issuer	CN=SAP Passport CA G2, O=SAP Trust Community, C=DE	
Valid from	2020-07-09 15:03:34Z	
Valid to	2021-07-09 15:03:34Z	
Days left before expiration	361	
Days left before renewal	<input type="text" value="60"/>	

Add root CA certificates
 Add intermediate CA certificates

Verbose log

Recommended Notes for System Recommendations

Note 2950184 - SyRec: JAVA Note is missing due to too low support package level
(if this note is required, request access to pilot release)

Note 2938632 - SysRec: Not all prerequisite notes are displayed

Note 2933596 - SysRec:7.2: Note for SAP HANA Database is not presented

Note 2930024 - SysRec: validity of note does not match system status

Note 2913837 - SYSREC: System recommendation reports the already implemented notes

Note 2747922 - SysRec: Collective Corrections for Solution Manager 720 SP08 Fiori UI

Note 2854704 - SysRec: Collective Corrections for Solution Manager 720 SP09 Fiori UI

Note 2857899 - SysRec: Collective Corrections for Solution Manager 720 SP10 Fiori UI



June 2020

Topics June 2020



Note [2761608](#) - RFC Callback rejected: Analysis

Note [2912939](#) - Server Side Request Forgery vulnerability in SAP NetWeaver AS ABAP

Note [2918924](#) - Use of Hard-coded Credentials in SAP Commerce and SAP Commerce Datahub

Note [2933282](#) - Missing Authorization Check in SAP SuccessFactors Recruiting

Note [2541823](#) - Switchable authorization checks for RFC in SAP CRM (external billing)

Note [2878935](#) - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS ABAP (BSP Test Application SBSPEXT_TABLE)

Note [2423576](#) - SAIS | Generic audit report about system changes

Recordings:
[DSAG \(German\)](#)
ASUG
SAP Learning HUB

Note 2761608 - RFC Callback rejected: Analysis

In addition to the Security Audit Log messages DUI, DUJ, DUK you can inspect the workprocess trace in transaction SM50 to analyze missing RFC callback entries:

```
L RFC-CALLBACK:: <param> <dest> <func> <cbfunc> result = <r>
```

<param> Current value of profile parameter rfc/callback_security_method (0,1,2,3)
<dest> RFC destination used for original call
<func> Original function called
<cbfunc> Function called back
<r> Result of evaluation (X=allowed, A=allowed but will be rejected with param=3, SPACE=rejected)

Limitation: Currently this option is only valid for SAP_BASIS 7.40 SP 6-21 (via this note)

Note 2912939 - Server Side Request Forgery vulnerability in SAP NetWeaver AS ABAP

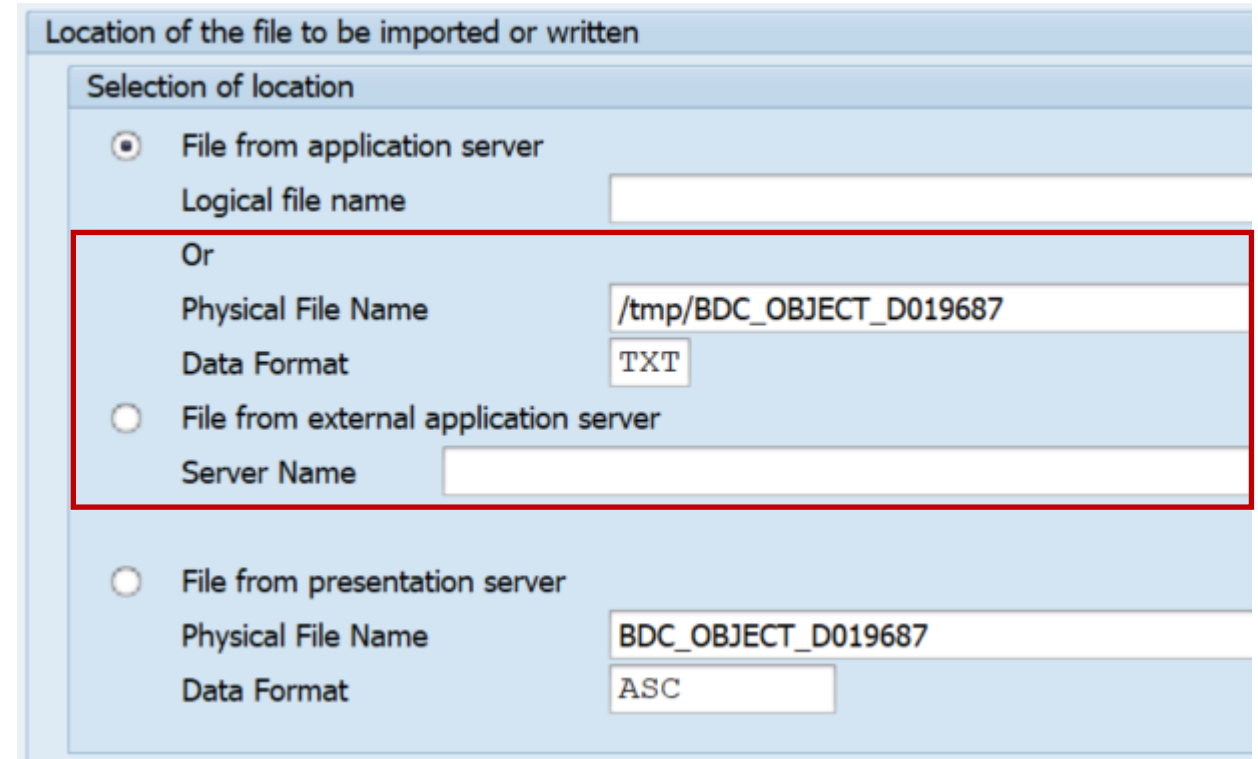
Report `RSBDCDAT` offers an input field for a physical file name on local or remote server to be imported or written.

This is already critical on any operation system.

The note removes these input fields.

➤ Implement the note in any case

Mitigation: The report checks authorizations for `S_BDC_MONI`



The screenshot shows a dialog box titled "Location of the file to be imported or written". It contains three radio button options for file location selection. The first option, "File from application server", is selected. Below it is a text field for "Logical file name". The second option, "File from external application server", is unselected and is highlighted with a red rectangular box. Below it is a text field for "Server Name". The third option, "File from presentation server", is unselected. Below it are text fields for "Physical File Name" (containing "BDC_OBJECT_D019687") and "Data Format" (containing "ASC").

Note 2918924 - Use of Hard-coded Credentials in SAP Commerce and SAP Commerce Datahub

Manual instruction for existing installations:

The patch releases ensure that new installations of SAP Commerce will not accept default credentials anymore. However, they do not remove default credentials from existing installations of SAP Commerce.

Follow the instructions in the Disabling All Default Passwords for Users guide by making use of the scripts provided in Note 2922193.

These scripts contain lists about standard users and standard passwords. You must treat them as publicly known.

Result:

Users included in essential, project, and sample data that previously had default passwords have now random passwords. Non-administrative users with default passwords are disabled.

The administrator user is not touched, therefore, set the administrator password manually

Note 2933282 - Missing Authorization Check in SAP SuccessFactors Recruiting

SAP SuccessFactors is a cloud application → no software update required by customer

The note describes mandatory configuration instructions, i.e. an authorization change, as soon as version *SAP SuccessFactors Recruitment Management 2005* release is used:

“Customers have to provide Read/Write permissions for the JobApplicationInterview entity to the user who is going to access the fields like Resume... This has to be only done while doing API operations...”

Note 2541823 - Switchable authorization checks for RFC in SAP CRM (external billing)

SACF Note:

- Implementation via SNOTE or via SP update does not improve security because it produces inactive software
- Analyze if (technical) users would require new authorizations and adjust roles if necessary
- Use transaction SACF to create the productive SACF scenario and to activate the corresponding authorization check

Caveat: If you plan to implement the note via SNOTE you have to follow the manual instruction, to upload the scenario definition via the attachment of the note.

- Note version 2 from 09.06.2020: **The attachment is missing**

Note 2878935 - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS ABAP (BSP Test Application SBSPEXT_TABLE)

Do not only implement the note via SNOTE but verify in transaction SICF that the BSP test service SBSPEXT_TABLE is not active either:

Is that the only service which should get deactivated?

What about the environment?

The screenshot shows the 'Maintain service' transaction in SAP. The 'Filter Details' section is filled with the following information:

- Virtual Host: (empty)
- Service Path: (empty)
- ServiceName: SBSPEXT_TABLE
- Description: (empty)
- Lang.: English
- Ref.Service: (empty)

Buttons for 'Apply', 'Reset', and 'Fine-Tune' are visible. Below the filter details is a tree view of 'Virtual Hosts / Services' with a context menu open over the 'sbspext_table' service. The context menu options are:

- New Sub-Element
- Display Service
- Delete Service
- Rename Service
- Activate Service
- Deactivate Service
- Test Service

Virtual Hosts / Services	Documentation	Reference Service
default_host	VIRTUAL DEFAULT HOST	
sap	SAP NAMESPACE; SAP IS C	
bc	BASIS TREE (BASIS FUNCT	
bsp	BUSINESS SERVER PAGES	
sap	NAMESPACE SAP	
sbspext_table	TEST16	

Note 2878935 - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver AS ABAP (BSP Test Application SBSPEXT_TABLE)

Use transaction SE84 to view the properties of service SBSPEXT_TABLE

Identify the package SBSPEXT_HTMLB and search again using this package

Ensure that all BSP test applications are deactivated in SICF:

HTMLB_samples
SBSPEXT_HTMLB
sbspext_table

Repository Info System: Find BSP Applications

Repository Information System

Standard Selections

BSP Application	SBSPEXT_TABLE	[Icon]
Short Description		[Icon]
Package		[Icon]
Application Componer		[Icon]

Additional Selections

Author		[Icon]
Last changed by		[Icon]
Changed On		[Icon]

Objects

- Repository Information System
 - Development Coordination
 - Business Engineering
 - ABAP Dictionary
 - Program Library
 - Class Library
 - Web Dynpro
 - BSP Library
 - BSP Applications
 - BSP Extensions

BSP Application	Short Description
<input type="checkbox"/> HTMLB_samples	
<input type="checkbox"/> SBSPEXT_HTMLB	Test Pages for HTMLB BSP Extension
<input type="checkbox"/> sbspext_table	<htmlb:tableView> Example (Design2002+)

Note 2423576 - SAIS | Generic audit report about system changes Availability

Transaction / Report
SAIS_MONI is available
via Support Package:

SAP_BASIS

7.50 SP 18 (or 19)

7.51 SP 11

7.52 SP 07

7.53 SP 05

7.54 SP 03

**Now you can use SNOTE
as well.**

AG Datenzugriff im AK Revision - Treffen/22.03.2017/SAP St. Leon - Rot/W3

10:00 Begrüßung und Vorstellungsrunde

Christoph Kuhn, DSAG

10:45 Das vereinfachte Sperren und Löschen personenbezogener Daten in der Business Suite

- Notwendigkeit
- Konzept
- Umsetzung

Volker Lehnert, SAP SE

11:30 Datenschutzfunktionen in der Business Suite

- Prozesse und Kontrollen dokumentieren
- Ausführung von Kontrollmaßnahmen nachweisen
- Unterstützung für Verzeichnisse

Volker Lehnert, SAP

12:15 Auditfunktionen im AIS

- SAIS: Cockpit als Ersatz für SECR und rollenbasiertes Audit
- SAIS_Moni Prototyp für „Was ist passiert“ Infosystem (bspw. In der Zugangszeit eines SuperUsers)
- Änderungsbelegarchivierung für Berechtigungsvorschlagswerte
- Schaltbare Berechtigungsszenarien im Fokus eines Systemaudit
- Generischer Tabellenzugriff: Neues Datenmodell für Berechtigungsgruppen
- Directory File Traversal – Neue Transaktion SFILE mit Auditorsicht (bspw. Auf Daten, die im Root-Bereich liegen)

Dieter Goedel, SAP

Note 2423576 - SAIS | Generic audit report about system changes

Selection Screen

Generic Audit Evaluation

Standard Selection

Time Restrictions

From Date/Time	01.04.2020	00:00:00
To Date/Time	16.04.2020	23:59:59

User ID

Transaction / Report SAIS_MONI collects events from various sources:

Data Sources and Attributes

- Changes to Client and System Settings (All Users)
- Display Entries from Security Audit Log
- Events (Audit Message)
- Display Entries from System Log
- Events (System Log)
- Display Entries for Generic Table Logging
- Table/View
- Display Entries from Business Application Log
- BAL Object
- Display Entries of General Change Documents
- Object Class
- Display Import Entries (Change and Transport System)
- Display Export Entries (Change and Transport System)
- Display Modified Objects in ABAP Workbench
- Display Changed/Created Objects in ABAP Workbench

Note 2423576 - SAIS | Generic audit report about system changes

Data Sources

Transaction / Report SAIS_MONI collects events:

➤ **Changes to Client and System Settings (All Users)**

➤ **Display Entries from Security Audit Log**

➤ **Display Entries from System Log**

➤ **Display Entries for Generic Table Logging**

➤ **Display Entries from Business Application Log**

➤ **Display Entries of General Change Documents**

➤ **Display Import Entries (Change and Transport System)**

➤ **Display Export Entries (Change and Transport System)**

➤ **Display Modified Objects in ABAP Workbench**

➤ **Display Changed/Created Objects in ABAP Workbench**

Corresponding standard function:

SE06

RSAU_READ_LOG

SM21 / RSYSLOG

RSTBHIST / RSVTPROT

SLG1

RSSCD100 / CHANGEDOCU_READ

SE03 / RSWBOSSR

SE03 / RSWBOSSR

SE95

SE84

Note 2423576 - SAIS | Generic audit report about system changes

Example

Generic Audit Evaluation






 Selektionskriterien

Runtime environment:

Release / System-ID / Client: 754 / EC1 / 001
 Executed at: 17.06.2020 / 10:42:56
 Executed by: D019687
 Number of Selected Log Entries: 300

Selected Period: 17.06.2020 / 00:00:00 - 17.06.2020 / 23:59:59

Source	Date	Time	User	Clie...	Server	Instance	Termi...	TCode	Program Name	Event	Object
BAL	17.06.2020	09:35:06	D019687	001				SE38	NOTE_2423576	SNOT...	Msg.: 000098 Ext.No.: NOTE_2423576
	17.06.2020	10:18:04	D019687	001				SE38	NOTE_2423576	SNOT...	Msg.: 000089 Ext.No.: NOTE_2423576
	17.06.2020	10:21:25	D019687	001				SE38	NOTE_2423576	SNOT...	Msg.: 000098 Ext.No.: NOTE_2423576
SAL	17.06.2020	10:32:45	D019687	001	EC1	mo-872c1591...	WDFN...	SMODI	SAPMSYST	AU4	Start of transaction SMODI failed (Rea...
	17.06.2020	10:32:45	D019687	001	EC1	mo-872c1591...	WDFN...	SMODI	SAPMSYST	AU4	Start of transaction SMODI failed (Rea...
TABLOG	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRNOTE0002423576
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717035
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717171
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717260
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717281
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717316
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717387
	17.06.2020	09:21:23	D019687			mo-872c15913		SNOTE	SCWN_NOTE_DOWNLOAD	Insert	TADIR : R3TRCINS002075125941 0000717388

Note 2423576 - SAIS | Generic audit report about system changes Implementation via SNOTE

SNOTE creates several new objects and fails if you try it in one step:

According to the manual correction instruction you should implement, activate and execute report NOTE_2423576 first.

<https://launchpad.support.sap.com/#/notes/0002423576/D>

The screenshot displays the SAP SNOTE implementation interface. At the top, it states "Following SAP Notes are implemented in this step:" and shows a table with the following data:

Note Action	Note	Version
Implement SAP Note	2423576	7

Below this, a table lists the objects to be implemented:

AppStatus	Obj. Ty...	Object	Message Text
✓	REPS	NOTE_2423576	New object will be created
✓	CLAS	CL_SAIS_MONI_TABLOG	New object will be created
✓	CLAS	CL_SAIS_MONI_SYSLOG	New object will be created

A red vertical box highlights the checkmarks in the first column of the object list. Below the object list, there are tabs for "Transportable Objects" and "Local objects". A dialog box titled "EC1(1)/001 Activation errors" is overlaid on the interface, displaying the following message:

9 errors found. Activate anyway?
Line 8: Type
"SAIS_MONI_CONFIG" is unknown.

The dialog box has three buttons: "Activate", "Show errors", and "Cancel".

Note 2423576 - SAIS | Generic audit report about system changes Implementation via SNOTE

If you missed that, activate and execute this report NOTE_2423576 in SE38:

NOTE_2423576 - Note Implementation

Step 1 Test Run
Step 2 Update & Activate
 Info Show Logs

NOTE_2423576 - Change Log

Date/Time/User	Nu...	External ID	Object text
17.06.2020 09:35:06 D019687	98	NOTE_2423576	Note implementation and management
<ul style="list-style-type: none"> Problem class Other: 83 Problem class Medium: 15 			

Type	Obj.	Object Name	Message Text
			Running in Update Mode
			Create Table (language DE)
			Update successful
			Add field(s) to table
			Field ID will be added
			Field ID_TXT will be added
			Field CLASS will be added

Then restart SNOTE and activate all remaining objects:

EC1(1)/001 System EC1: Activate Inactive Objects of D019687

D..	Obj. Ty...	Object Name	Message Text
REPS		SAIS_MONI_UNT	
REPT		SAIS_MONI	
CINC	CL_SAIS_MONI	=====CCAU	
CINC	CL_SAIS_MONI	=====CCDEF	
CINC	CL_SAIS_MONI	=====CCIMP	
CINC	CL_SAIS_MONI	=====CCMAC	
CPRI	CL_SAIS_MONI		
CPUB	CL_SAIS_MONI		
METH	CL_SAIS_MONI		CONVERT_TO_EXCEPTION
METH	CL_SAIS_MONI		D0100_INIT
METH	CL_SAIS_MONI		D0100_LEAVE
METH	CL_SAIS_MONI		D0100_PAI
METH	CL_SAIS_MONI		D0100_SHOW_SELECTOR
METH	CL_SAIS_MONI		DOUBLECLICK
METH	CL_SAIS_MONI		GET_DATA
METH	CL_SAIS_MONI		GET_DATA_FOR_SELE
METH	CL_SAIS_MONI		GET_ENVIRONMENT
METH	CL_SAIS_MONI		PROGRESS_INDICATOR
METH	CL_SAIS_MONI		SALV_SET_COLUMNS

Note 2423576 - SAIS | Generic audit report about system changes Implementation via SNOTE

Run report NOTE_2423576 again!

This step extends some database tables and adds necessary table content entries to the transport order.

If you miss that step it might happen that you do not get any results in transaction SAIS_MONI

The screenshot shows the SAP SNOTE implementation interface. The top panel, titled "NOTE_2423576 - Note Implementation", has three steps: Step 1 (Test Run), Step 2 (Update & Activate), and Info (Show Logs). Step 2 is selected. A yellow arrow points from Step 2 to the "NOTE_2423576 - Change Log" panel below. The change log table shows a list of changes for the date 17.06.2020 at 10:21:25 by user D019687. The table has columns for Date/Time/User, Nu... (Number of objects), External ID, and Object text. The object text column lists various table changes for SAIS_MONI_CONFIG and SAIS_MONI_OUT, including "Add field(s) to table" and "No update necessary for field...".

Date/Time/User	Nu...	External ID	Object text
17.06.2020 10:21:25 D019687	98	NOTE_2423576	Note implementation and manag
• Problem class Other	83		
• Problem class Medium	15		

Type	Obj.	Object Name	Message Text
			Running in Update Mode
	TABL	SAIS_MONI_CONFIG	Change Table (language DE)
	TABL	SAIS_MONI_CONFIG	No update necessary
	TABL	SAIS_MONI_CONFIG	Add field(s) to table
	TABL	SAIS_MONI_CONFIG	No update necessary for field ID
	TABL	SAIS_MONI_CONFIG	No update necessary for field ID_TXT
	TABL	SAIS_MONI_CONFIG	No update necessary for field CLASS
	TABL	SAIS_MONI_CONFIG	No update necessary for field GET_DATA
	TABL	SAIS_MONI_CONFIG	No update necessary for field MERGE
	TABL	SAIS_MONI_CONFIG	No update necessary for field NAVIGATION
	TABL	SAIS_MONI_CONFIG	No update necessary for field SOURCE
	TABL	SAIS_MONI_CONFIG	No update necessary for field GET_DATA_SOURCE_LOG
	TABL	SAIS_MONI_CONFIG	No update necessary for field SOURCE_TABLE_TYPE
	TABL	SAIS_MONI_CONFIG	Change Table (language DE)
	TABL	SAIS_MONI_CONFIG	No update necessary
	TABL	SAIS_MONI_OUT	Change Table (language DE)
	TABL	SAIS_MONI_OUT	No update necessary
	TABL	SAIS_MONI_OUT	Add field(s) to table



May 2020

Topics May 2020



Note [2923117](#) - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

Note [2917090](#) - Information Disclosure in SAP Adaptive Server Enterprise (Cockpit)

Note [2917275](#) - Code injection in SAP Adaptive Server Enterprise (Backup Server)

Note [2835979](#) - Code Injection vulnerability in Service Data Download

Note [2885244](#) - Missing Authentication check in SAP Business Objects Business Intelligence Platform (Live Data Connect)

Note [2734580](#) - Information Disclosure in SAP ABAP Server

Note [2911801](#) - Binary planting vulnerability in SAP Business Client

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note [2923117](#) - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

As of now (May 2020), SAP Cloud Platform NEO is still supporting TLS version **1.0** and **1.1** in addition to **1.2** in many regions. The support of TLS **1.0** and **1.1** will be completely stopped by end of June 2020. After that time, HTTPS clients not capable of using TLS **1.2** or higher will fail to connect to SAP Cloud Platform NEO.

➤ Browser as a Client

- If a user is using a browser to connect to an application, this browser needs to be in a version supporting TLS 1.2 or higher – all recent versions of the major browsers support this.

➤ SAP NetWeaver AS Java

- For an SAP NetWeaver AS Java, make sure TLS 1.2 is configured in the HTTP destination for the outbound connections to the SAP Cloud Platform NEO endpoint.
- Main Note [2417205](#)
- Versions up to 7.02: Note [2503155](#)
- Versions higher than 7.10: Note [2540433](#)

Note 2923117 - How to address problems with old TLS protocol versions in clients accessing SAP Cloud Platform NEO

➤ **SAP NetWeaver Process Integration as Client contacting SAP Cloud Platform**

- TLSv1.2 support in REST adapter: Note 2295870
- TLSv1.2 support in Axis adapter: Note 2292139

➤ **ABAP Application Server contacting SAP Cloud Platform**

- All SAP products based on NW ABAP Application Server need at least Kernel 7.20 patch 88
- Configuration: Note 510007
- SAP ABAP Application Servers in version 6.40 or older cannot support TLS 1.2.

➤ **Other Clients including Network Devices**

- There is a plenty of other technology clients to access the SAP CP, including native clients of customer applications or clients of Cloud Platform Integration (CPI). These could be customer own or third-party products. All those need to enable TLS 1.2.

➤ **Technical contact**

- In case of technical problems or question, raise a Service Ticket with “**TLS Migration**” in header.

Note [2917090](#) - Information Disclosure in SAP Adaptive Server Enterprise (Cockpit)
Note [2917275](#) - Code injection in SAP Adaptive Server Enterprise (Backup Server)

Various notes about SAP ASE with different priorities, affected releases and solutions

→ Go for the highest version **SAP ASE 16.0 SP 3 PL 8 HF1**

	SAP ASE 15.7 SP 141 HF1	SAP ASE 15.7 SP 141 CE HF1	SAP ASE 16.0 SP 2 PL 9 HF1	SAP ASE 16.0 SP 3 PL 8 HF1
Note 2915585 - Missing validation in SAP Adaptive Server Enterprise (XP Server on Windows)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Note 2916927 - SQL Injection vulnerability in SAP Adaptive Server Enterprise	n.a.	n.a.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Note 2917022 - Information Disclosure in SAP Adaptive Server Enterprise	n.a.	n.a.	n.a.	<input checked="" type="checkbox"/>
Note 2917090 - Information Disclosure in SAP Adaptive Server Enterprise (Cockpit)	n.a.	n.a.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Note 2917273 - SQL Injection vulnerability in SAP Adaptive Server Enterprise (Web Services)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Note 2917275 - Code injection in SAP Adaptive Server Enterprise (Backup Server)	n.a.	n.a.	n.a.	<input checked="" type="checkbox"/>
Note 2920548 - Missing authorization check in SAP Adaptive Server Enterprise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Note 2917090 - Information Disclosure in SAP Adaptive Server Enterprise (Cockpit)
Note 2917275 - Code injection in SAP Adaptive Server Enterprise (Backup Server)

Note 2917090

➤ **Increased criticality:**

It's not about the access to the ASE Cockpit and no ASE database user is related. It's a general issue.

➤ **Mitigation:**

Impacts only Windows platform

Note 2917275

➤ **Mitigation:**

A potential attacker requires to be the Database Owner (dbo) or a user with dump/load database privilege.

Note 2835979 - Code Injection vulnerability in Service Data Download



HotNews

Solution:

“Implement the note. The implementation of the note has no impact to any productive business process.”

→ **Simply do it (if not done already)**

... but you have to do it in all ABAP systems because the ST-PI plugin is installed in all ABAP systems which are connected to a SAP Solution Manager

Version	Maintenance	Solution	Publication of SP
2008_1_46C	Maintenance ended on 17.03.2014	Use Correction Instruction of note 2930680 instead.	
2008_1_620	Maintenance ended on 17.03.2014	Correction Instruction	
2008_1_640	Maintenance ended on 17.03.2014	Correction Instruction	
2008_1_700	In maintenance until 31.12.2025	Correction Instruction or Support Package 22 SAPKITLRDV	02.12.2019
2008_1_710	In maintenance until 31.12.2020	Correction Instruction or Support Package 22 SAPKITLREV	02.12.2019
740	In maintenance until 31.12.2025	Correction Instruction or Support Package 12 SAPK-74012INSTPI	02.12.2019

Note 2885244 - Missing Authentication check in SAP Business Objects Business Intelligence Platform (Live Data Connect)

If you are using SAP BOE Live Data Connect 1.0., 2.0., 2.X., 2.1., 2.2., or 2.3., you need to upgrade to the latest available version 2.4, which you can get from [SAP Software Downloads](#)

Additional manual configuration:

1. Ensure that the authentication mode is set to saml

Activating trusted authentication in SAP BusinessObjects Live Data Connect

<https://help.sap.com/viewer/6be6d1fc887046f7a5e5c1aa52505e86/latest/en-US/52b4494adda340ebb26407a260f5ba72.html>

2. Retrieve the “shared secret” from the Central Management Console of your BIP system.

Activating trusted authentication in SAP BusinessObjects BI Platform

<https://help.sap.com/viewer/6be6d1fc887046f7a5e5c1aa52505e86/latest/en-US/c2fba9beb34f4aabaef6b34f222969bc.html>

3. Use the “shared secret” to set `lde.boe.sharedKey` in the Live Data Connect property file

Configuring SAP BusinessObjects Live Data Connect

<https://help.sap.com/viewer/6be6d1fc887046f7a5e5c1aa52505e86/latest/en-US/14b7943431bb4fb08b73b6ef4f43ab88.html>

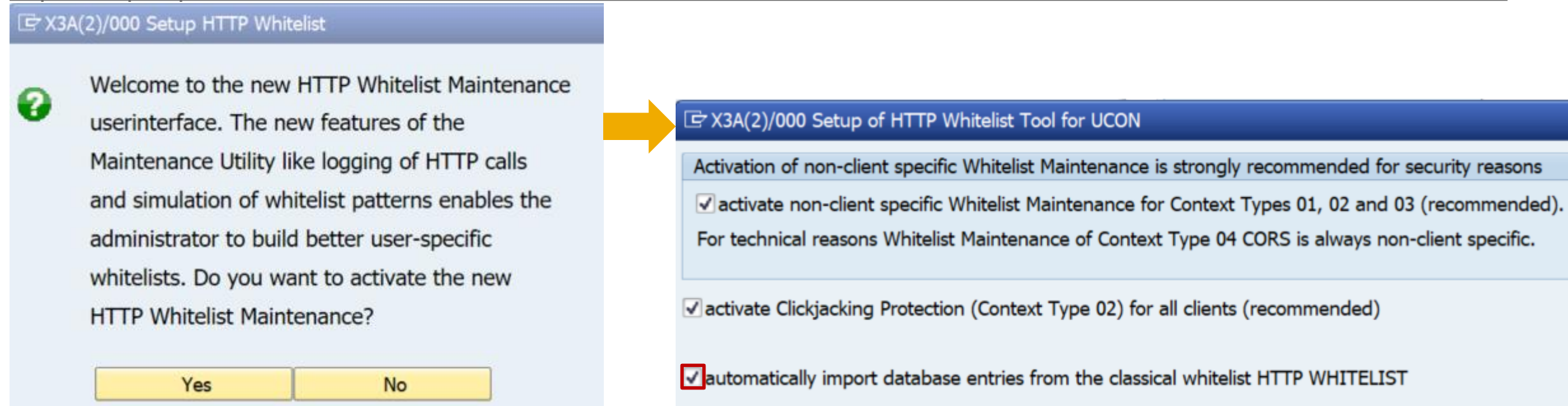
Note 2734580 - Information Disclosure in SAP ABAP Server

Manual configuration of whitelist is still needed!

Option a) If available (as of 7.40 SP 20, 7.50 SP 12, 7.51 SP 6, 7.52 SP 1) use Transaction UCON_CHW in **client 000** or configure it as “**cross-client**” (see Note 2189853)

UCON HTTP Whitelist Scenario

<https://help.sap.com/viewer/1ca554ffe75a4d44a7bb882b5454236f/7.51.10/en-US/91f9f84fe8a64ce59dc29b76e47078eb.html>



The screenshot displays the SAP transaction X3A(2)/000 Setup HTTP Whitelist. It is divided into two main sections. The left section, titled 'X3A(2)/000 Setup HTTP Whitelist', contains a green question mark icon and a welcome message: 'Welcome to the new HTTP Whitelist Maintenance userinterface. The new features of the Maintenance Utility like logging of HTTP calls and simulation of whitelist patterns enables the administrator to build better user-specific whitelists. Do you want to activate the new HTTP Whitelist Maintenance?'. Below this message are two yellow buttons labeled 'Yes' and 'No'. A yellow arrow points from this section to the right section. The right section, titled 'X3A(2)/000 Setup of HTTP Whitelist Tool for UCON', contains a blue header bar and a list of configuration options. The first option is 'Activation of non-client specific Whitelist Maintenance is strongly recommended for security reasons', followed by a checked checkbox for 'activate non-client specific Whitelist Maintenance for Context Types 01, 02 and 03 (recommended)'. Below this is a note: 'For technical reasons Whitelist Maintenance of Context Type 04 CORS is always non-client specific.' The second option is a checked checkbox for 'activate Clickjacking Protection (Context Type 02) for all clients (recommended)'. The third option is an unchecked checkbox for 'automatically import database entries from the classical whitelist HTTP WHITELIST'.

Note 2734580 - Information Disclosure in SAP ABAP Server

HTTP Whitelist Tool for Unified Connectivity (UCON) Change

Execute Selection(Whitelist Maintenance)

Unified Connectivity Scenario Selection

Scenario: HTTP Whitelist Scenario

Records per Page: 10.000

Context Type	Description	Mode	# not cov. by Whitelist	# total called URLs
1	Trusted Network Zone	Logging	0	0
2	ClickJacking Framing Protection	Logging	0	0
3	CSS Style Sheet	Logging	0	0
4	Cross-origin Resource Sharing	Logging	0	0

Available Modes:

- 1. Logging**
Activate this now to get data!
- 2. Simulated Check**
As soon as you have entered some entries, still insecure!
- 3. Active Check**
Secure mode
- 4. Monitoring: Check log**

Context types:

- 1 Trusted Network Zone (former entry types 02, 03, 10, 11, 20, 21, 40 and 99)
- 2 ClickJacking Framing Protection (former entry type 30)
- 3 CSS Style Sheet (former entry type 01)
- 4 Cross-origin Resource Sharing (entry type 50 only available with UCON HTTP Whitelist, see Note 2547381)

Note 2734580 - Information Disclosure in SAP ABAP Server

If the UCON HTTP Whitelist is not available in the system (see Note 2573569) or it is not activated yet, the content of table `HTTP_WHITELIST` is used. If at least one record exists for an entry type, the check is active for that entry type. Entry type 30 (Clickjacking Framing Protection) is always active.

- 01 Portal CSS Theme-URL / HTTP Framework to filter for valid URLs (Note 853878)
- 02 Exit URL for parameter `sap-exiturl`
- 03 NWBC runtime
- 10 WebDynpro Resume URL (Note 2081029)
- 11 Web Dynpro Redirect URL (Note 2081029)
- 20 Redirect URL for SSO, parameter `sap-mysapred` of ICF (Note 612670)
- 21 Redirect URL for ICF Logoff, parameter `redirectURL` of ICF (Note 1509851)
- 30 Clickjacking Framing Protection (Note 2142551)
- 40 Suite Redirect
- 99 Redirect (generic)

Note 2734580 - Information Disclosure in SAP ABAP Server

Option b) In **client 000** maintain table HTTP_WHITELIST with entry type 21 to enable HTTP Whitelist Protection

Transaction SE16 for table HTTP_WHITELIST

Report RS_HTTP_WHITELIST shows the value help for the entry type field, too:

(Caution: Ensure to go back to initial screen to copy the entries into table HTTP_WHITELIST)

Table HTTP_WHITELIST Insert	
Reset	
MANDT	000
ENTRY TYPE	21
SORT KEY	0001
PROTOCOL	HTTPS
HOST	HOST.SAP.CORP
PORT	
URL	/NO_ACCESS

Change View "HTTP White List": Details	
New Entries	
White List EntryType	Redirect URL for ICF Logoff
Sort/Match Seq.	0001
HTTP White List	
Protocol for URL	HPPTS
Host Name and Domain	HOST.SAP.CORP
Port	
URL Pattern	/NO_ACCESS

Note 2911801 - Binary planting vulnerability in SAP Business Client

Client-side configuration and installation of SAP Business Client for Desktop 7.0 together with SAP GUI for Windows 7.60

1. Download SAP Business Client from SAP Software Download Center
[NWBC700_10-70003080.EXE](#)
2. Create and distribute system connections (Fiori Launchpad connection, NWBC connection, SAP logon connection, and SAP shortcut) and client configuration
3. Create and distribute [Security Settings for Browser Controls](#)

See:

Note 2714160 - SAP Business Client 7.0: Prerequisites and restrictions

Note 2622660 - Security updates for the browser control Google

Chromium delivered with SAP Business Client



<https://community.sap.com/topics/business-client> → Install and Configure

Note 2911801 - Binary planting vulnerability in SAP Business Client

Implement note 2920217 to enhance System Recommendations to show SAP Business Client Notes

It simply would show Business Client notes (BC-WD-CLT-BUS) for all ABAP systems. That's similar like with SAPGUI notes (BC-FES-GUI).

Prerequisite: Ensure to have implemented the latest version of note 2458890

Limitation: System Recommendations cannot check the installed version on clients.



April 2020

Topics April 2020



Security Notes Statistics

SOS Checks ABAP / HANA / Java

Note [2896682](#) - Directory Traversal vulnerability in SAP NetWeaver (Knowledge Management)

Note [2863731](#) - Deserialization of Untrusted Data in SAP Business Objects Business Intelligence Platform (CrystalReports WebForm Viewer)

Note [2900118](#) - Code Injection vulnerability in SAP OrientDB 3.0

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Security Notes Statistics

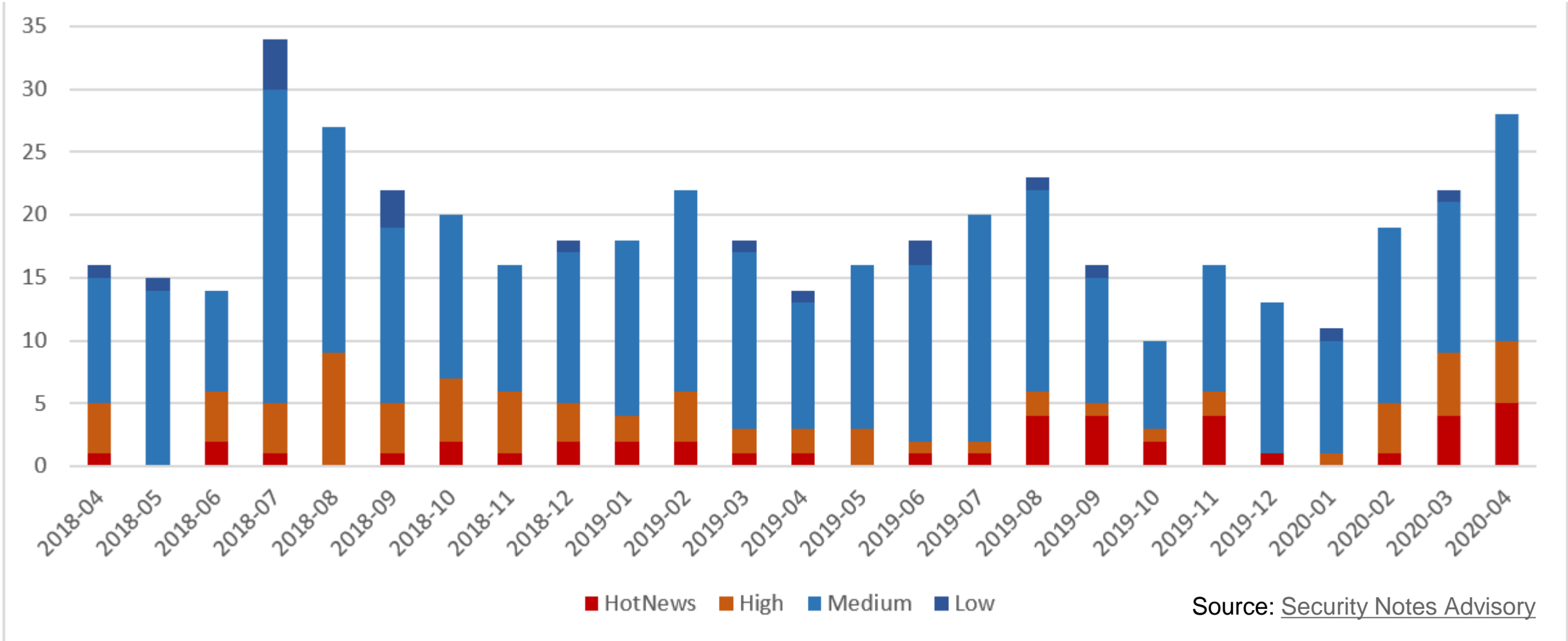
Q: Do you know if there is any general security finding, that is causing this multiple security patch fixing?

A: SAP got reports about multiple critical security vulnerabilities in the SAP Host Agent and the SAP Diagnostics Agents and other parts of the SAP Solution Manager which had been fixed step by step during the past month. Therefore we see notes for these components again and again.

You could download the list of Security Notes from <https://support.sap.com/notes> with filter for “Document Type = SAP Security Notes” to produce a statistics about publication month, however, it might be a little bit misleading as updated notes only show up when they are published the last time but not when they have been published initially. Therefore you would see less notes for previous month than expected.

The Security Notes Advisory on <https://support.sap.com/sos> shows snapshots from each month. Using this data we can construct a chart showing updated notes in every month when such a note was published.

Security Notes Statistics



Source: [Security Notes Advisory](#)

SOS Checks ABAP / HANA / Java

Updated versions published on <https://support.sap.com/sos>

Media Library

Search:

Title	Type	Changed
Security Optimization Service - ABAP Checks	PDF	2020-04
Security Optimization Service - HANA Checks	PDF	2020-04
Security Optimization Service - JAVA Checks	PDF	2020-04

See

Note [1969700](#) - SQL Statement Collection for SAP HANA

Note [1999993](#) - How-To: Interpreting SAP HANA Mini Check Results

Note 2896682 - Directory Traversal vulnerability in SAP NetWeaver (Knowledge Management)

„allowing an attacker to ..., delete, ... arbitrary files on the remote server.“

→The whole server is at risk, therefore CVSS shows “Scope = Changed” which is the main driver for a high score and high priority.

CVSS Score:	9.1
Attack Vector (AV):	Network (N)
Attack Complexity (AC):	Low (L)
Privileges Required (PR):	Low (L)
User Interaction (UI):	None (N)
Scope (S):	Changed (C)
Confidentiality Impact (C):	High (H)
Integrity Impact (I):	Low (L)
Availability Impact (A):	Low (L)

Mitigation: The issue is about uploading files into the Portal which require authorizations for **Portal Content** administration. Therefore you should verify which users are assigned to role `pcd:portal_content/administrator/content_admin/content_admin_role`

Note 2863731 - Deserialization of Untrusted Data in SAP Business Objects Business Intelligence Platform (CrystalReports Viewer)

“Do you need to update all clients (with CRYSTAL REPORTS FOR VS 2010) as well as the server (with SBOP BI PLATFORM SERVERS)?

What happens if you only update either the clients or the server?”

- **No, only the server side needs to be updated.**

“How can a customer check if the solution is implemented completely?”

- **If customer applied the patches linked in the SAP note, it will be implemented completely.**

How is encryption established?

Is it necessary to configure something?

- **Both the encryption and decryption occurs at the server side,
The AES algorithm with random key and IV is applied to encrypt and decrypt the data, no configuration required.**

Note 2900118 - Code Injection vulnerability in SAP OrientDB 3.0

Open Source Package - used in SAP Hybris (part of Callidus Cloud):

<https://orientdb.org/>

<https://github.com/orientechnologies/orientdb>

Server-side test case:

<https://github.com/orientechnologies/orientdb/blob/develop/server/src/test/java/com/orientechnologies/orient/server/script/JSScriptServerTest.java>

Client-side test case:

<https://github.com/orientechnologies/orientdb/blob/develop/core/src/test/java/com/orientechnologies/orient/core/command/script/JSScriptTest.java>

See

Note 2895241 - OrientDB: Information needed by Product/Development Support



March 2020

Topics March 2020



Note [2890213](#) - Missing Authentication Check in SAP Solution Manager (User-Experience Monitoring)

Note [2892570](#) - Missing XML Validation vulnerability in ABAP Development Tools

Note [2826782](#) - Denial of service (DOS) in SAP BusinessObjects Mobile (MobileBIService)

Note [2859004](#) - Cross-Site Request Forgery in SAP Cloud Platform Integration for data services

Note [2871167](#) - Missing Authorization check in SAP ERP and S/4 HANA (MENA Certificate Management)

Note [2808169](#) - SAL | Archiving with BC_SAL / API for alert cockpits

Note [2730525](#) - ANST: Consuming the Note Search Webservice

Note [2818143](#) - ANST: SEARCH_NOTES- Implementing SOAP Based Note Search

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note 2890213 - Missing Authentication Check in SAP Solution Manager (User-Experience Monitoring)



The screenshot shows the SAP NetWeaver Administrator interface. The top navigation bar includes 'Personalize', 'Back Forward', 'History', 'Site Map', 'Help', and 'Log Off'. The user information bar shows 'User: Buchholz Frank', 'Active Profile: Complete List', 'System: X3J On mo-c81a86caf.mo.sap.corp, v.7.50', and 'System Time/Date: 03/12/2020 11:14 AM UTC'. The main navigation tabs are 'My Workspace', 'Availability and Performance', 'Operations', 'Configuration', 'Troubleshooting', and 'SOA'. The 'Configuration' tab is selected, and its sub-menu 'Connectivity' is also selected. The 'Connectivity' sub-menu includes 'Destinations', 'JCo RFC Provider', 'JCo Server Configurations', 'Java HTTP Provider Configuration', and 'Single Service Administration'. The 'Single Service Administration' option is highlighted with a red box. The description for 'Single Service Administration' states: 'Provides functions for administration and configuration of single Web services and Web service clients'.



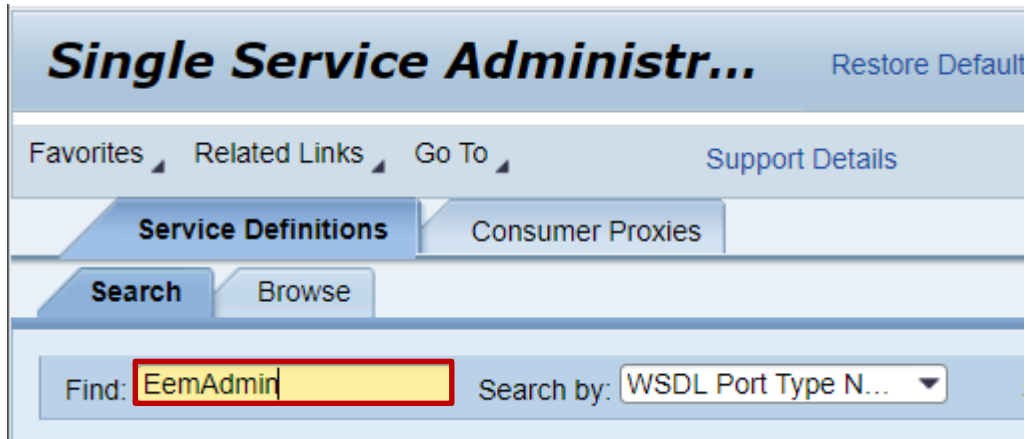
User-Experience Monitoring

<https://support.sap.com/en/alm/solution-manager/expert-portal/user-experience-monitoring.html>

<https://wiki.scn.sap.com/wiki/display/EEM/Home>

Note 2890213 - Missing Authentication Check in SAP Solution Manager (User-Experience Monitoring)

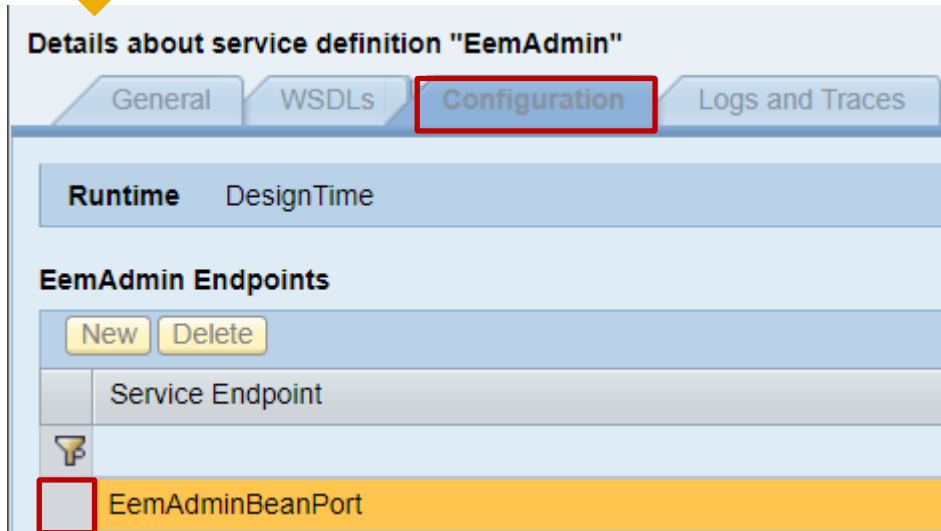
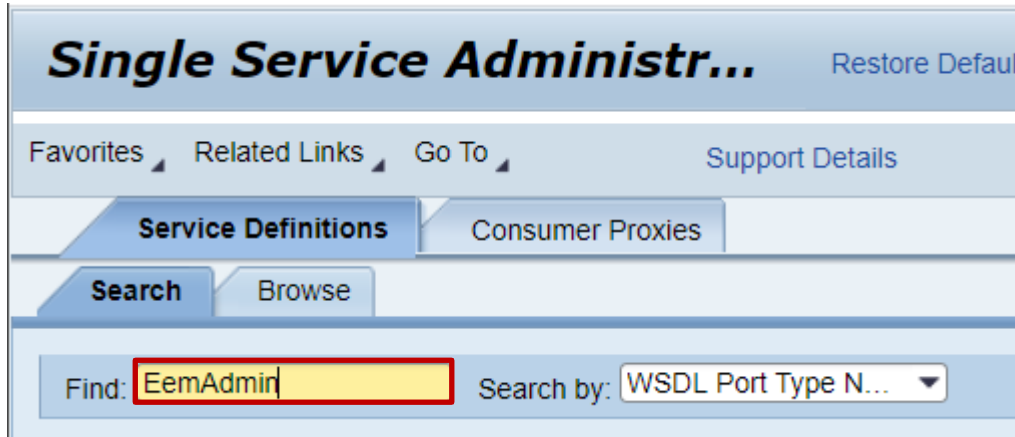
Critical, because EemAdmin is powerful:



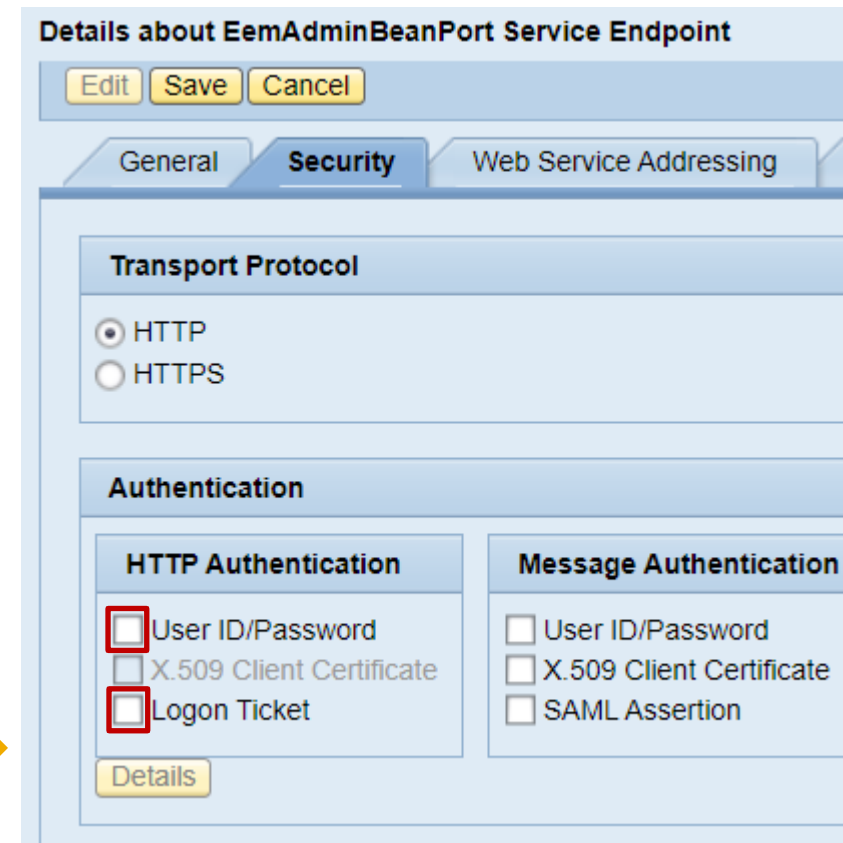
A yellow arrow points from the WSDL URL in the previous screenshot to this table. The table lists various operations available for the service.

Operation Name
checkRepository
deleteScript
downloadResource
getAgentConnectionStatus
getAgentInfo
getAllAgentInfo
getGlobalProperties
getLogsForExecution
getMatchingAgentInfo
reloadScripts
removeAgeletProperties
runScript
setAgeletProperties
setServerName
setTempConfig
startScript
stopScript
uploadResource
uploadResourceWithProperties

Note 2890213 - Missing Authentication Check in SAP Solution Manager (User-Experience Monitoring)



Workaround: Manual activation of EemAdmin authentication as a partial fix.



Note 2892570 - Missing XML Validation vulnerability in ABAP Development Tools

The SAP ABAP in Eclipse client is affected by this vulnerability.

The code execution occurs on the computer where the ABAP Development Tools are installed and is done with the privileges of the logged on (frontend) user.

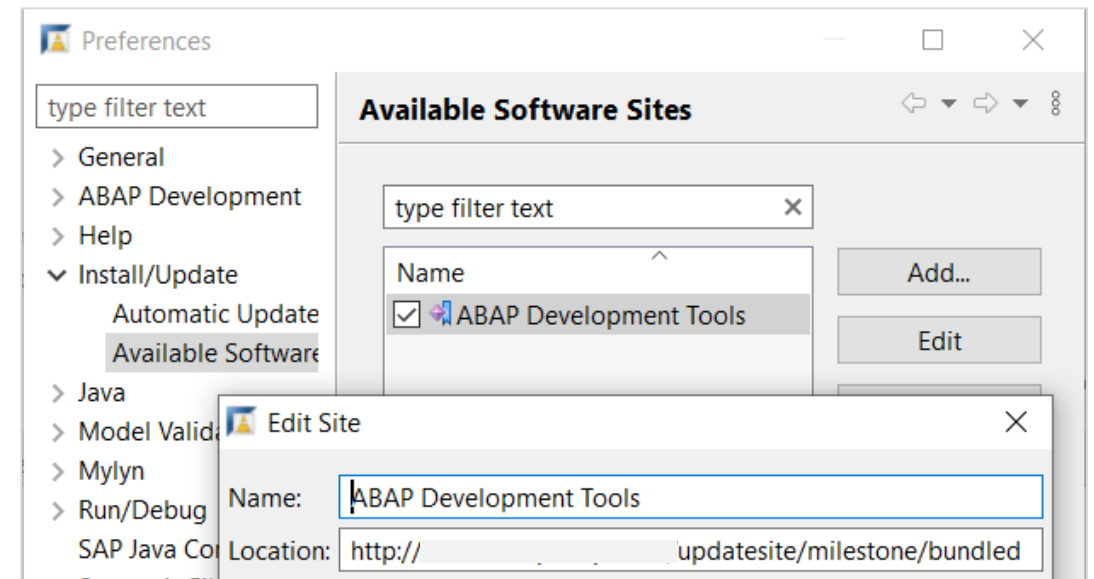
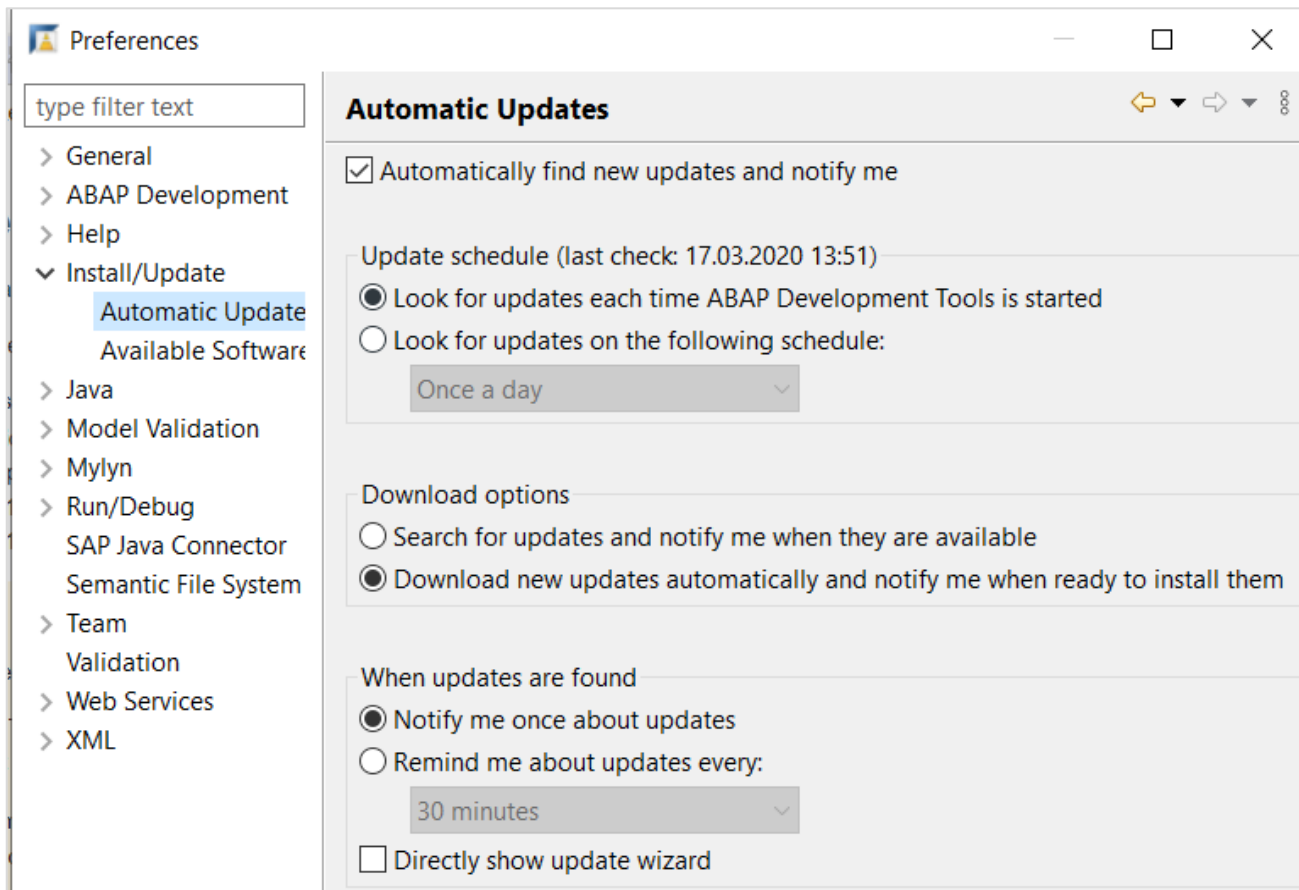
The easiest way to get the ABAP Development Tools is to use SAPs update sites described/linked on <https://tools.hana.ondemand.com/#abap>.

They host the latest available version of the tools.

Alternatively you can download from the SAP Software Download Center as described in the note.

Note 2892570 - Missing XML Validation vulnerability in ABAP Development Tools

Ensure to distribute the package via Eclipse within your organization and that developers configure their installation to get it automatically:



What do you get using “Help → About”?

Note [2826782](#) - Denial of service (DOS) in SAP BusinessObjects Mobile (MobileBIService)

Solution: Implement the patch for SBOP BI PLATFORM SERVERS 4.2 as described in the note

The reference to the deployment guide and to KBA [2824635](#) show how to configure MobileBIService in general. This is not related to the vulnerability.

Note 2871167 - Missing Authorization check in SAP ERP and S/4 HANA (MENA Certificate Management)

The note is about assigning table authorization group FC01 to view FIMENAV_COMPCERT as described in the manual instruction. The automatic instruction for SNOTE does not change anything.

What about other tables or views of that component?

You can use transaction STDDAT (or report RDDPRCHK or old report RDDTDDAT_BCE) to validate the settings for all tables and views of package GLO_FIN_FI_GEN. You will see that more tables and views are not assigned to table authorization group.

Anyway, if you run a sound authorization concept about S_TABU_NAM but to not use S_TABU_DIS at all, then this note is not important.

→ Go for utilizing S_TABU_NAM instead S_TABU_DIS

Note 2859004 - Cross-Site Request Forgery in SAP Cloud Platform Integration for data services

Solved by SAP Cloud Platform, no action required

Note 2808169 - SAL | Archiving with BC_SAL / API for alert cockpits

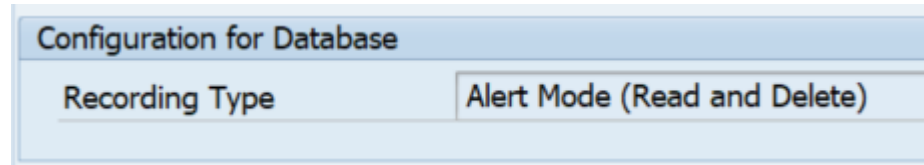
RFC function module `RSAU_API_GET_ALERTS`

Available as of SAP_BASIS 7.50

Favorable call intervals lie between one and 10 minutes (depending on alert requirements).

The general idea is to read and delete log entries within one step.

Prerequisite: recording target "Record in Database" in Alert Mode and archive connection



Required authorizations:

`S_SAL` with `SAL_ACTVT = SHOW_ALERT`

See report `RSAU_ALERT_DEMO`

See FAQ note 2191612 for further information

Note 2730525 - ANST: Consuming the Note Search Webservice

Note 2818143 - ANST: Implementing SOAP Based Note Search

Enable ANST to use the new SAP Backbone connectivity.



February 2020

Topics February 2020



Focus Insights: Go for it!

SAP Release and Maintenance Strategy (SAP HANA)

Secure Operations Map

Security Baseline Template 2.0

Note [2887651](#) - Issues with SameSite cookie handling

Note [2822074](#) - Missing Authorization check to access BOR object attributes remotely

Note [2880869](#) - Cross-Site Scripting (XSS) vulnerability in ABAP Online Community Application

Note [2836445](#) - Unprivileged Access to technical data using SAPOSCOL of SAP Host Agent

Note [2841053](#) - Denial of Service (DOS) Vulnerability in SAP Host Agent

SAP Support Portal - How to request access to “Display Security Alerts in SAP EarlyWatch Alert Workspace”

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Focus Insights: Go for it!

Focused Solutions for SAP Solution Manager

<https://support.sap.com/en/alm/focused-solutions.html>

„As of 2020, the usage rights of SAP Solution Manager include Focused Build and Insights – at no additional costs! No restriction of users or usage.”

References:

➤ Focused Insight

<https://support.sap.com/en/alm/focused-solutions/focused-insights.html>

➤ Installation Guide

https://help.sap.com/doc/2a5eebe6285b465eb7fb4a6e66b8ea2b/230/en-US/FINSIGHTS_InstallationGuide.pdf

➤ User Guide – Tactical Dashboard

https://help.sap.com/doc/8a37845658d5409ca853d8999ecaebba/230/en-US/FINSIGHTS_TAC_Dashboard.pdf

Focus Insights: Go for it!

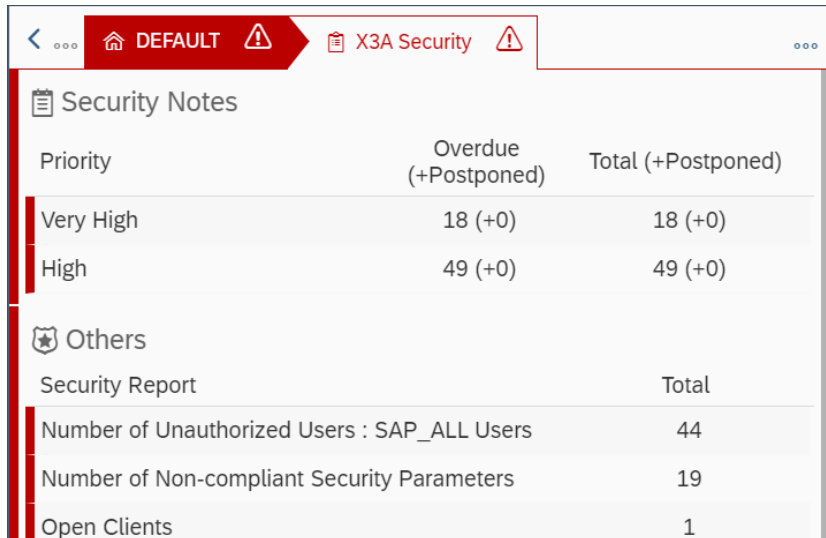
Focused Insights: Public Online Demo

<https://blogs.sap.com/2017/09/18/focused-insights-online-demo/>

Examples:

➤ Operations Control Center

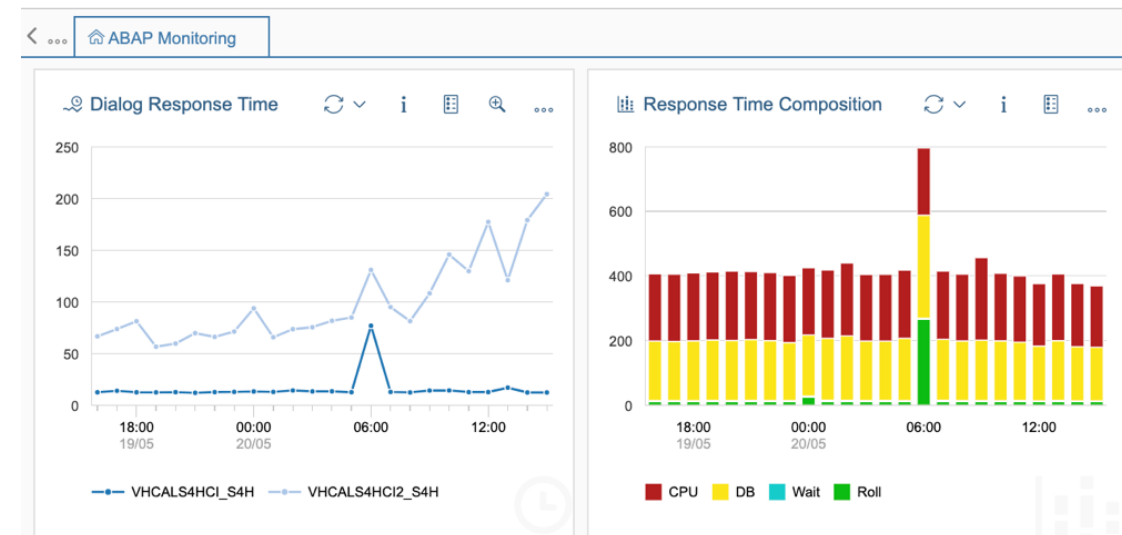
➤ Tactical Dashboard (incl. Security Scenario)



The screenshot shows the SAP Security Notes dashboard. At the top, there are navigation tabs for 'DEFAULT' and 'X3A Security'. Below this is a 'Security Notes' section with a table showing the status of security notes. The table has three columns: Priority, Overdue (+Postponed), and Total (+Postponed). There are two rows for 'Very High' and 'High' priority notes. Below the table, there is an 'Others' section with a 'Security Report' table showing the number of unauthorized users, non-compliant security parameters, and open clients.

Priority	Overdue (+Postponed)	Total (+Postponed)
Very High	18 (+0)	18 (+0)
High	49 (+0)	49 (+0)

Security Report	Total
Number of Unauthorized Users : SAP_ALL Users	44
Number of Non-compliant Security Parameters	19
Open Clients	1



SAP Release and Maintenance Strategy (SAP HANA)

SAP Release and Maintenance Strategy, February 4, 2020

https://support.sap.com/content/dam/support/en_us/library/ssp/release-upgrade-maintenance/maintenance-strategy/sap-release-and-maintenance-strategy-new.pdf

2.3.10.2 Revision strategy

„SAP plans to provide bug fixes and security patches for every support package stack either until the next but one support package stack is released or for about one year. Afterwards, customers must adopt regular more recent support package stack to receive further fixes.”

Q: Is this related to the “24-month-rule” for Security Patches?

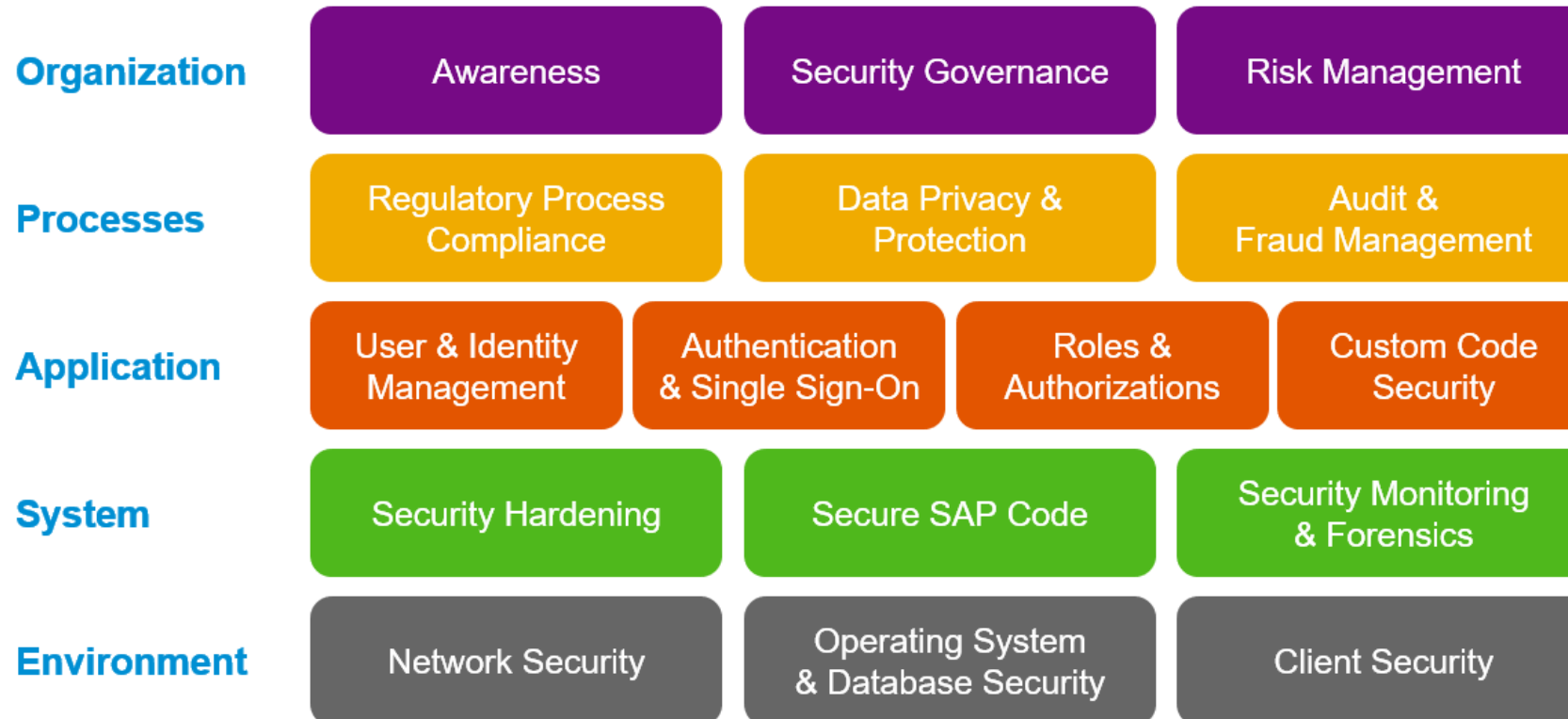
➤ **No, SAP HANA follows an exceptional rule anyway:**

<https://support.sap.com/en/my-support/knowledge-base/security-notes-news.html>

Secure Operations Map

New version on <https://support.sap.com/sos>

→ Secure Operations Map, v3 from January 2020



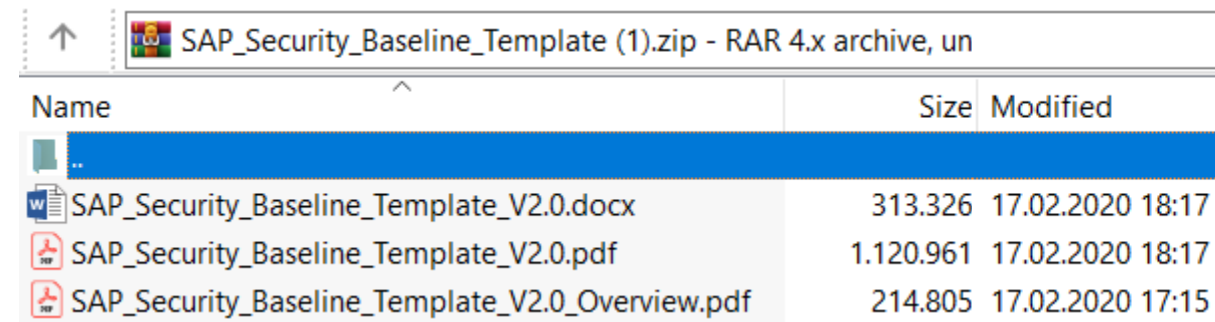
Security Baseline Template 2.0

← **New version on <https://support.sap.com/sos>**

→ [SAP CoE Security Services - Security Baseline Template Version 2.0 \(without ConfigVal Package\)](#)

Title	Type	Changed
_SAP Security Notes Advisory (for January 2020)	ZIP	2020-02
_Security Notes Webinar	PDF	2020-01
RFC Gateway and Message Server Security	PDF	2019-06
SAP CoE Security Services - Check Configuration & Authorization	PDF	2020-01
SAP CoE Security Services - Overview	PDF	2020-01
SAP CoE Security Services - Secure Operations Map	PDF	2020-01
SAP CoE Security Services - Security Patch Process	PDF	2019-07
SAP CoE Security Services - Security Baseline Template Version 1.9 (including ConfigVal Package version 1.9_CV-5)	ZIP	2018-08
SAP CoE Security Services - Security Baseline Template Version 2.0 (without ConfigVal Package)	ZIP	2020-02

Currently you find the requirements document but not yet the corresponding template package for Configuration Validation



Name	Size	Modified
..		
SAP_Security_Baseline_Template_V2.0.docx	313.326	17.02.2020 18:17
SAP_Security_Baseline_Template_V2.0.pdf	1.120.961	17.02.2020 18:17
SAP_Security_Baseline_Template_V2.0_Overview.pdf	214.805	17.02.2020 17:15

Note 2887651 - Issues with SameSite cookie handling

Chrome default settings

As of February, 2020, Google Chrome version 80 and higher implements the `SameSite=Lax` default.
<https://www.chromestatus.com/feature/5088147346030592>

chrome://version/

Google Chrome: 80.0.3987.87 (Offizieller Build) (64-Bit) (cohort: Stable Installs Only)
Überarbeitung: 449cb163497b70dbf98d389f54e38e85d4c59b43-refs/branch-heads/3987@{#801}
Betriebssystem: Windows 10 OS Version 1909 (Build 18363.592)

chrome://flags/#same-site-by-default-cookies

SameSite by default cookies

Treat cookies that don't specify a SameSite attribute as if they were `SameSite=Lax`. Sites must specify `SameSite=None` in order to enable third-party usage. – Mac, Windows, Linux, Chrome OS, Android

[#same-site-by-default-cookies](#)

Default ▾

<https://www.chromium.org/updates/same-site/test-debug>

Note 2887651 - Issues with SameSite cookie handling

Affected scenarios

Affected scenarios:

Currently, the following products based on the SAP Kernel do not set the `SameSite=None` attribute:

- SAP Application Server ABAP
- SAP Application Server Java, incl. SAP Enterprise Portal and SAML Identity Provider based on AS Java
- SAP HANA XS Classic
- SAP HANA XS Advanced

All scenarios that integrate these products with web services from **different registrable domains within a single browser window** are potentially affected.

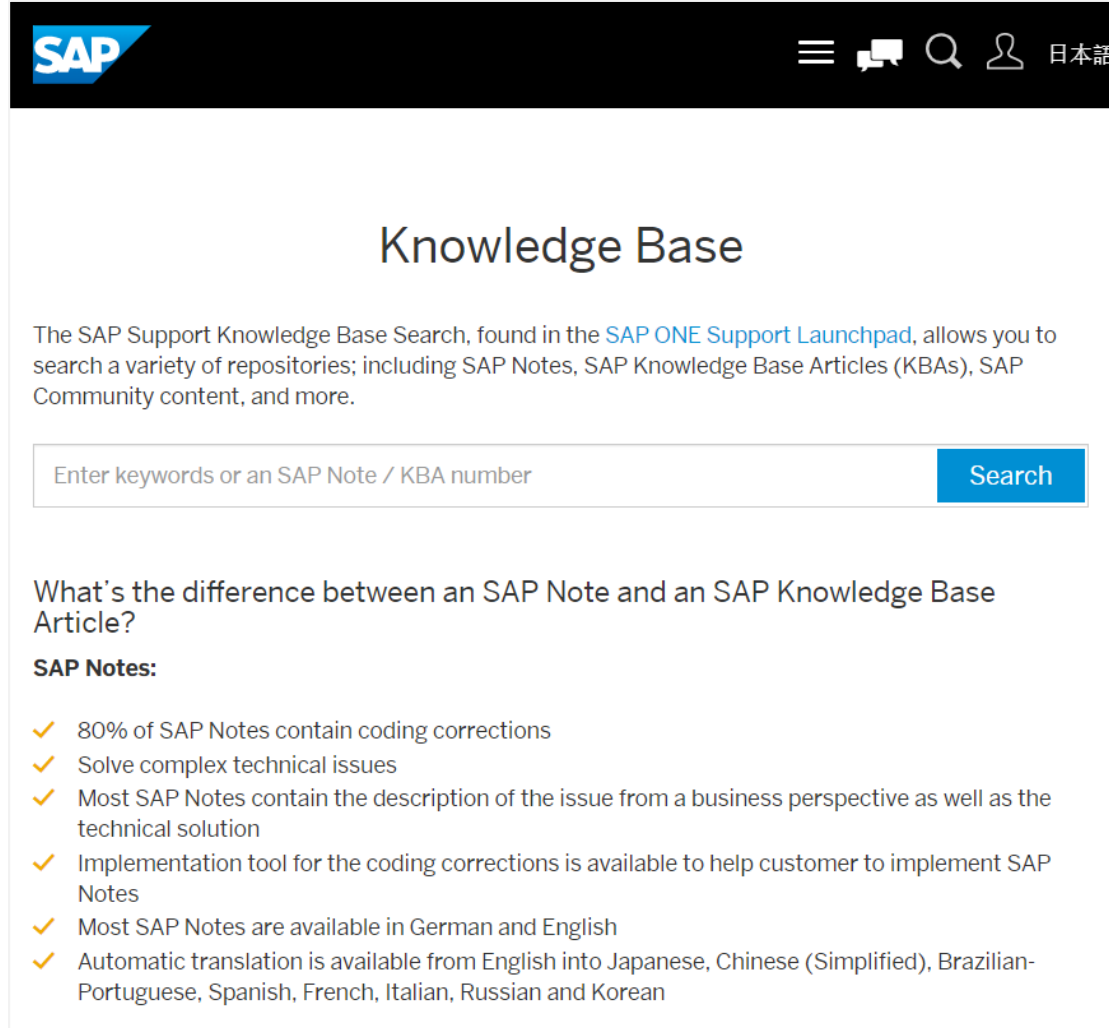
Examples are scenarios that integrate with **SAP Analytics Cloud, Enterprise Portals, SAP CoPilot, SAP Enable Now Web Assistant** or that use **Logon using a SAML IdP**.

Pure intranet scenarios **within a corporate DNS domain** (e.g. *.acme.corp) **are not affected**.

Solution: Ensure to use HTTPS protocol and implement modification rule set on Web Dispatcher.

Note 2887651 - Issues with SameSite cookie handling

How to verify potential issues: F12 Show Developer Console



Knowledge Base

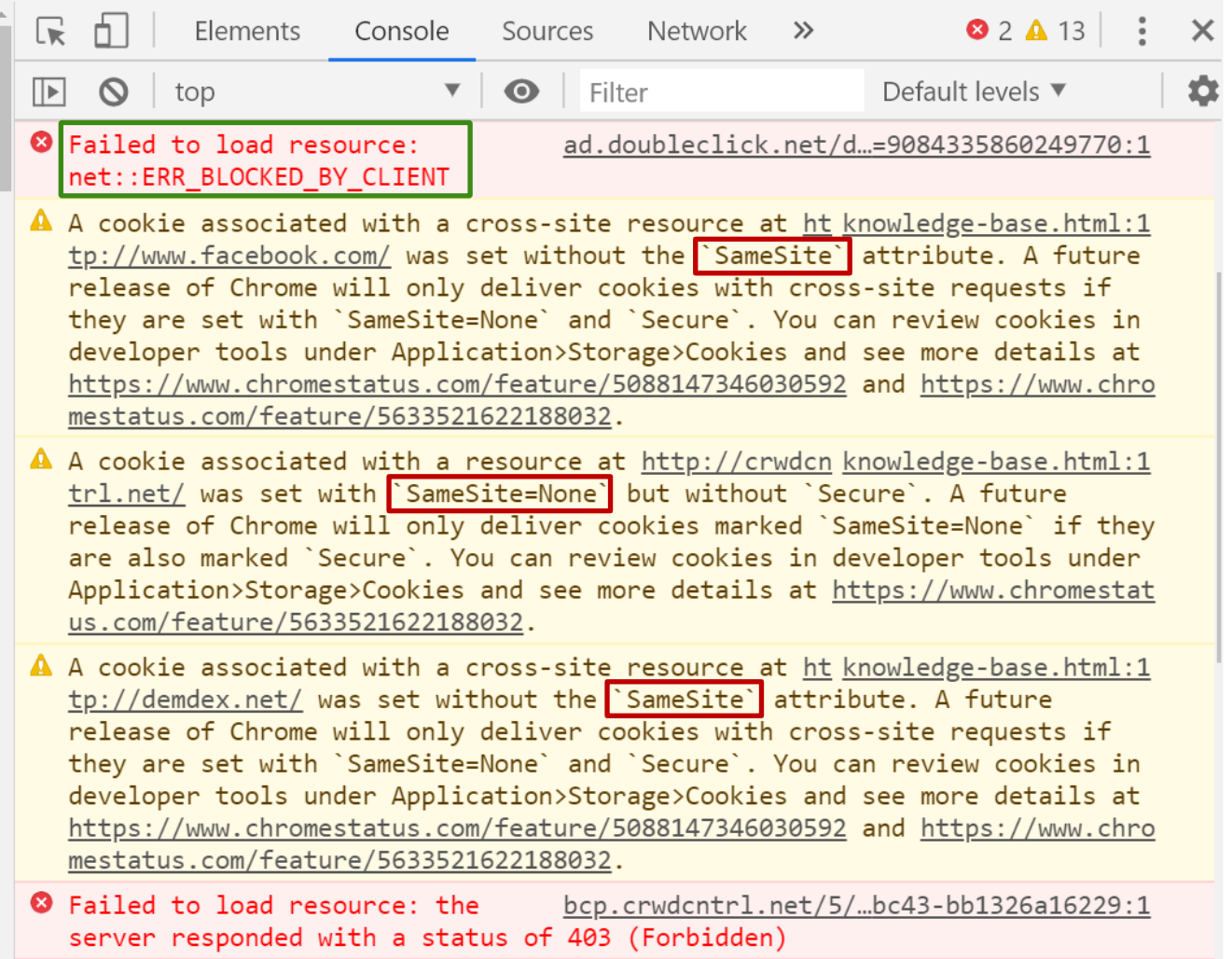
The SAP Support Knowledge Base Search, found in the [SAP ONE Support Launchpad](#), allows you to search a variety of repositories; including SAP Notes, SAP Knowledge Base Articles (KBAs), SAP Community content, and more.

Enter keywords or an SAP Note / KBA number

What's the difference between an SAP Note and an SAP Knowledge Base Article?

SAP Notes:

- ✓ 80% of SAP Notes contain coding corrections
- ✓ Solve complex technical issues
- ✓ Most SAP Notes contain the description of the issue from a business perspective as well as the technical solution
- ✓ Implementation tool for the coding corrections is available to help customer to implement SAP Notes
- ✓ Most SAP Notes are available in German and English
- ✓ Automatic translation is available from English into Japanese, Chinese (Simplified), Brazilian-Portuguese, Spanish, French, Italian, Russian and Korean



Elements Console Sources Network >> 2 13

top Filter Default levels

- ✖ Failed to load resource: `net::ERR_BLOCKED_BY_CLIENT` [ad.doubleclick.net/d...=9084335860249770:1](#)
- ⚠ A cookie associated with a cross-site resource at [ht knowledge-base.html:1 tp://www.facebook.com/](#) was set without the `SameSite` attribute. A future release of Chrome will only deliver cookies with cross-site requests if they are set with `SameSite=None` and `Secure`. You can review cookies in developer tools under Application>Storage>Cookies and see more details at <https://www.chromestatus.com/feature/5088147346030592> and <https://www.chromestatus.com/feature/5633521622188032>.
- ⚠ A cookie associated with a resource at [http://crwdcn knowledge-base.html:1 trl.net/](#) was set with `SameSite=None` but without `Secure`. A future release of Chrome will only deliver cookies marked `SameSite=None` if they are also marked `Secure`. You can review cookies in developer tools under Application>Storage>Cookies and see more details at <https://www.chromestatus.com/feature/5633521622188032>.
- ⚠ A cookie associated with a cross-site resource at [ht knowledge-base.html:1 tp://demdex.net/](#) was set without the `SameSite` attribute. A future release of Chrome will only deliver cookies with cross-site requests if they are set with `SameSite=None` and `Secure`. You can review cookies in developer tools under Application>Storage>Cookies and see more details at <https://www.chromestatus.com/feature/5088147346030592> and <https://www.chromestatus.com/feature/5633521622188032>.
- ✖ Failed to load resource: the `bcp.crwdcntrl.net/5/...bc43-bb1326a16229:1` server responded with a status of 403 (Forbidden)

Note 2822074 - Missing Authorization check for remote access BOR

Summary (as far as I see it):

- Wait for the Support Package, then activate the SACF scenarios (see note 2845081 for details).
- Workflow BOR object attributes should not be accessed remotely. The functions are remote enabled to allow asynchronous execution. However, it might be the case that there exist exceptions: Remote access to BOR object instances is primarily used for UI integration. Partner products may also use this type of integration and use SAP connectors for this.
- Mitigation: Ensure that no user has authorizations for S_RFC for function group SWOR respective function modules SWO_INVOKE and SWO_INVOKE_INTERNAL of that group. (However, I do not know if some technical users require this authorizations.)
- An application which needs this kind of information should use the published APIs of the corresponding BOR object instead.
- After the implementation of the note and the activation via SACF framework the objects can't be instantiated anymore remotely (unless the user has authorizations for authorization object S_BOR_RFC respective S_BOR_PRX).
- Do not include Workflow BOR objects for authorization object S_BOR_RFC and S_BOR_PRX in any role (unless you know about a specific exception which forces you to add these authorizations).
- In upcoming releases it might be the case that this become standard (showing application exception OL-926 “Object does not exist”).

Note 2822074 - Missing Authorization check to access BOR

Correction Instructions + Manual Modifications

Before implementation via SNOTE:

- Implement prerequisite note 2844646 (which loads notes 2775698 and 2447731, too). Restart SNOTE
- **Mandatory:** New field `REMOTE_AUTH_CHECK_REQUIRED` in structure `SWOTRTIME`
- This requires a registration key and you have to ignore the warning that modification of central basis DDIC objects is forbidden.

Before or after implementation via SNOTE:

- **Mandatory:** Create authorization objects `S_BOR_RFC` and `S_BOR_PRX`
- **Mandatory:** Create SACF scenario definitions `SWO_REMOTE_ACCESS` and `SWO_PROXY_ACCESS`
- **Recommended:** New messages 861, 868, 869, and 870 in message class `OL`
- **Optional:** Adapt the translations of the messages

Mandatory activation for the production system:

- **Recommended:** Do not add authorizations for authorization objects `S_BOR_RFC` and `S_BOR_PRX` into any roles
- **Mandatory:** Activate SACF scenarios `SWO_REMOTE_ACCESS` and `SWO_PROXY_ACCESS`
- **Recommended:** Verify successful activation via report `SWO_RFC_AUTH_CHECK_STATE`

Note 2822074 - Missing Authorization check to access BOR

Validity of Correction Instructions + Manual Modifications:

SAP_BASIS

700	SAPKB70029 - SAPKB70037
701	SAPKB70114 - SAPKB70122
702	SAPKB70214 - SAPKB70222
710	SAPKB71017 - SAPKB71024
711	SAPKB71112 - SAPKB71119
730	SAPKB73010 - SAPKB73019 (SP 20 might be incomplete → go for SP 21)
731	SAPKB73108 - SAPKB73125 (SP 26 might be incomplete → go for SP 27)
740	SAPKB74012 - SAPKB74022 (SP 23 might be incomplete → go for SP 24)
750	SAPK-75003INSAPBASIS - SAPK-75016INSAPBASIS (SP 17 might be incomplete → go for SP 18)
751	To SAPK-75109INSAPBASIS
752	To SAPK-75205INSAPBASIS
753	To SAPK-75303INSAPBASIS
754	w/o Support Packages

Solution via Support Packages:

Caution: you still have to activate the SACF scenarios manually!

SAP_BASIS 700	SAPKB70038
SAP_BASIS 701	SAPKB70123
SAP_BASIS 702	SAPKB70223
SAP_BASIS 710	SAPKB71025
SAP_BASIS 711	SAPKB71120
SAP_BASIS 730	SAPKB73021
SAP_BASIS 731	SAPKB73127
SAP_BASIS 740	SAPKB74024
SAP_BASIS 750	SAPK-75018INSAPBASIS
SAP_BASIS 751	SAPK-75110INSAPBASIS
SAP_BASIS 752	SAPK-75206INSAPBASIS
SAP_BASIS 753	SAPK-75304INSAPBASIS
SAP_BASIS 754	SAPK-75402INSAPBASIS

Note 2880869 - Cross-Site Scripting (XSS) vulnerability in ABAP Online Community Application

Multiple corrections partly requiring configuration

- Escaping was corrected
- Input is validated to prevent from external entity (XXE) issue
- The mime content is checked using malware scanner **but only if you are using the Virus Scan Adapter, transactions VSCAN / VSCANPROFILE and an external Virus Scan Engine**

Application ABAP Online Community Application uses virus scan profile /SIHTTP/HTTP_UPLOAD

Provider Type: ADAPTER (Virus Scan Adapter)

Status:

Start Stop

Supported Parameters

Parameters	Type	Initial	Parameter Value
CUST_ACTIVE_CONTENT	BOOL		1
CUST_CHECK_MIME_TYPE	BOOL		1

Dialog Structure

- Virus Scan Profile
 - Steps
 - Configuration Parameters
 - Profile Configuration Parameters
 - MIME-Types

Virus Scan Profile

Virus Scan Profile	Active
/SIHTTP/HTTP_DOWNLOAD	<input checked="" type="checkbox"/>
/SIHTTP/HTTP_UPLOAD	<input checked="" type="checkbox"/>
/SIWB/KW_UPLOAD_CREATE	<input checked="" type="checkbox"/>

Note 2836445 - Unprivileged Access to technical data using SAPOSCOL

Note 2836445 - Unprivileged Access to technical data using SAPOSCOL

HostAgent profile `/usr/sap/hostctrl/exe/host_profile`

Profile parameter `ipc/shm_permission_1002 = 0777`

For Linux: The solution is turned **on** by default.

For Unix: The solution is turned **off** by default as there might be negative impact to other consumers.

Note 2841053 - Denial of Service (DOS) Vulnerability in SAP Host Agent

Restrict access to the ports 1128 and 1129 to the datacenter network – but SUM requires it ... see next slide for potential issues

If you need to expose the SAP Host Agent to untrusted networks, you can disable default username/password-based authentication and only allow certificate-based authentication.

HostAgent profile `/usr/sap/hostctrl/exe/host_profile`
respective `%ProgramFiles%\SAP\hostctrl\exe\host_profile`

Profile parameter `saphostagent/authentication_method = disabled`

SSL Configuration for the SAP Host Agent

https://help.sap.com/viewer/6e1636d91ccc458c987094ee1fb864ae/HAG_CURRENT_VERSION/en-US/6aac42c2e742413da050eaecd57f785d.html

Blog: [How to configure X.509 client certificate authentication for SAP host agents in LVM](#)

Note [2841053](#) - Denial of Service (DOS) Vulnerability in SAP Host Agent

The Software Update Manager (SUM) uses ports 1128 (http) respective 1129 (https), too:

Note [2284028](#) - SUM SL Common UI : Troubleshooting problems with the new SUM UI

Note [1826767](#) - 'Could not check credentials...Connection refused' when upgrading HANA using SUM

Therefore it might be necessary to open these ports during maintenance.

Other notes:

Note [2669791](#) / [2689366](#) - SAP host agent connectivity with certificate based authentication

SAP Support Portal - How to request access to “Display Security Alerts in SAP EarlyWatch Alert Workspace”

See [SAP Support Portal Release Notes - February 2020](#)
S-users who lack a particular authorization can now request it through a comfortable self-service. Requests can be made from within the tile catalog as well as from the list of all your authorizations (e.g. click on you user and choose menu item 'Authorizations and Functions').

Then call “Request Authorization”, scroll down and request **“Display Security Alerts in SAP EarlyWatch Alert Workspace”**.

Once submitted, a workflow is started:

1. The requestor can find this request – and previous ones – under “My Authorizations and Functions” in the user profile area.
2. For all user administrators, a new action item will be created in the new “Action Required” section of the User Management application.
3. They will be notified about this task through launchpad alerts and notification e-mails. These alerts can be customized in the launchpad’s Notification Center.
4. The requestor is informed about the change through launchpad and e-mail notifications.

The screenshot shows the 'Authorization Request' form in the SAP Support Portal. A dropdown menu is open, listing various authorization options. The selected option is 'Display Security Alerts in SAP EarlyWatch ...'. Below the dropdown, there is a text area with the text 'I'm part of the Security Audit team.' At the bottom right of the form, there are 'Submit' and 'Cancel' buttons.



January 2020

Topics January 2020



Obsolete Workarounds for System Recommendations

Note [2845401](#) - Missing Authorization check in Realtech RTCISM 100

Note [2871877](#) - Multiple security vulnerabilities in SAP EAM, add-on for MRO 4.0 by HCL

Note [2822074](#) - Missing Authorization check in SAP NetWeaver (ABAP Server)

Note [2863397](#) - Missing Authorization Check in Automated Note Search Tool (ANST)
Short introduction for ANST

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Obsolete Workarounds for System Recommendations

Note [2686105](#) - [OBSOLETE] HTTP error 0 when sending data to SAP via destination SAP-SUPPORT_PORTAL

Note [2833610](#) - [OBSOLETE] Download large volume of note data from SAP support backbone via web service

If you have used these notes, you should now remove workaround settings

via transaction SM30_DNOC_USERCFG_SR

(or in transaction DNO_CUST04 / table DNOC_USERCFG)

Remove following entries/values:

SYSREC_CALC_MODE = **VERS_2019**

SYSREC_DELTA_DAYS = **1** (ok: **7**)

SYSREC_RFC_CALL = **X**

Change View "Service Desk Customizing":

New Entries

Name	Field Name	Seq...	Field val.
	SYSREC_CALC_MODE	0	VERS_2019
	SYSREC_DELTA_DAY...	0	7
	SYSREC_NOTE_TYPE...	0	HSLPCA
	SYSREC_RFC_CALL	0	
	SYSREC_UNUSED_SU...	0	X

Note 2845401 - Missing Authorization check in Realtech RTCISM

The note refers to an Add-On of an SAP partner

<https://www.realtech.com/>

The note points to normal software packages for ABAP (but does not contain automatic correction instructions for SNOTE):

<https://launchpad.support.sap.com/#/softwarecenter/search/RTCISM>

<https://launchpad.support.sap.com/#/softwarecenter/search/SAPK-10001INRTCISM>

Software Component: RTCISM

SAPK-10001INRTCISM RTCISM 100: SP 1			
File Type: SAR		Component Release: RTCISM 100	
SAP NOTES	EXTENDED ATTRIBUTES	PACKAGE CONDITIONS	OBJECT LIST
Pgm ID	Object Type	Object name	
LIMU	FUNC	/RTC/CM_CMDB_NOTIFY	
LIMU	FUNC	/RTC/CM_CMDB_NOTIFY_SERVICE	
LIMU	FUNC	/RTC/CM_CMDB_PING	

Note 2871877 - Multiple security vulnerabilities in SAP EAM, add-on for MRO 4.0 by HCL for SAP S/4HANA 1809

The note refers to an Add-On of an SAP partner
<https://www.hcltech.com/sap/sap-hcl-partnership/imro>

The note contains transport files.
Import this transport only if you have installed this Add-On in version 4.0:

Software Component: AXONLABS

Transactions: /AXONX/MBX; /AXONX/EBX; /AXONX/IBX; /AXONX/EWI

This security note replaces KBA 2869792 “High priority security issue in the Add-On Product” which had contained the same transport files.

Note 2822074 - Missing Authorization check in SAP NetWeaver (ABAP Server)

➤ **Manual DDIC and repository object changes required!**

➤ **You can ignore the side-effect solving notes, which are not available anyway:**

This document is causing side effects

Number	Title
2879349	Securing Business Objects against Missing Authorization for FS-PM
2842851	Securing Business Objects against Missing Authorization for AP-MD-BP

➤ **A related note describes the SACF Scenarios:**

Note 2845081 - Switchable authorization checks SWO_REMOTE_ACCESS and SUCD SWO_PROXY_ACCESS

Note 2863397 - Missing Authorization Check in Automated Note Search Tool (ANST)

An application that makes it easier to find SAP Correction Notes

SAP Automated Note Search Tool: I'm loving it!

The power of tools - How ANST can help you to solve billing problems yourself!

KBA 1818192 - FAQ: Automated Note Search Tool

ANST is available as of

SAP Basis	700	SAPKB70028
	701	SAPKB70113
	702	SAPKB70213
	731	SAPKB73106
	740	all SP

Automated Note Search & Customer Code Detection Tool (ANST)

Automated Note Search & Customer Code Detection Tool

Open trace
 Object Customizing
 Settings
 Delete Trace

Execution Data

Transaction
 Program
 BSP Application
 Web Dynpro Application
 WD Application Configuration
 CRM BSP Frame
 CRM Webclient
 CRM UI Frame

Transaction Code:

Trace Parameters

Description

Save Trace

Transaction ANST
= Report ANST_SEARCH_TOOL

Example: search notes for transaction SNOTE

Trace first then choose relevant application components

You always get some basic entries from tracing within ANST itself. Ignore these parts.

SAP Automated Note Search and Customer Code Detection Tool

Note search
 Customer Code
 Download Trace
 Customizing Tables

Application Component	Obj ...	Obj name
<ul style="list-style-type: none"> ▸ <input type="checkbox"/> (BC-SRV-QUE)-SAP Query-(1) ▸ <input type="checkbox"/> (BC-SRV-SCR)-SAPscript-(5) ▸ <input type="checkbox"/> (BC-TWB-TST-CAT)-CATT Computer Aide ▾ <input checked="" type="checkbox"/> (BC-UPG-NA)-SAP Note Assistant-(379) 		
<ul style="list-style-type: none"> • <input checked="" type="checkbox"/> • <input checked="" type="checkbox"/> • <input checked="" type="checkbox"/> 	<p>CPUB CL_CWB_OBJECT_MTXT</p> <p>METH CL_CWB_OBJECT_METH</p> <p>METH CL_CWB_OBJECT_METH</p>	<p>WRITE_TO_DB</p> <p>INITIALIZE</p>

Automated Note Search & Customer Code Detection Tool (ANST)

SAP Automated Note Search and Customer Code Detection Tool

Result

Download Note	Application Area	Note Num...	Status	Note Title
	BC-TWB-TST-ECA	2456260	Not in System	Improvements for eCATT archiving
	BC-TWB-TST-P-PM	2499300	Not in System	STATS: Records from Remote Instances may be Missing
	BC-UPG-DTM-TLA	2384136	Not in System	IF_TR_CTS_OBJ without constructor
	BC-UPG-NA	1935301	Not in System	SNOTE tries to download SAP note 0000000000
		2235515	Not in System	Insufficient logging in SNOTE
		2280101	Not in System	Correction to indentify the SPDD phase
		2347322	Not in System	Note Status of the TCI note is not shown correctly in the subsequent sy...
		2408383	Not in System	TCI - Enabling System for SAP Note Transport-Based Correction Instruct...
		2422357	Not in System	TCI - Authorization Check - Handshake of SNOTE with SPAM
		2425129	Not in System	Missing XML Validation vulnerability in SAP Note Assistant
		2448501	Not in System	Transport-Based Correction Instruction (TCI): Displaying TCI Object List...
		2459558	Not in System	Supported object type check in snote
		2499199	Not in System	TCI - Remove unecessary Note downloads and exclude unwanted deliv...
		2557463	Not in System	TCI - Adding SAP Note information in error messages , Status handling ...
	BC-UPG-OCS-SPA	2362521	Not in System	Add-On uninstallation aborts with error "Package type AOP is not suppo...
	BC-WD-ABA	2285553	Not in System	Corrections for unified rendering up to SAP_UI 750/03 Ib

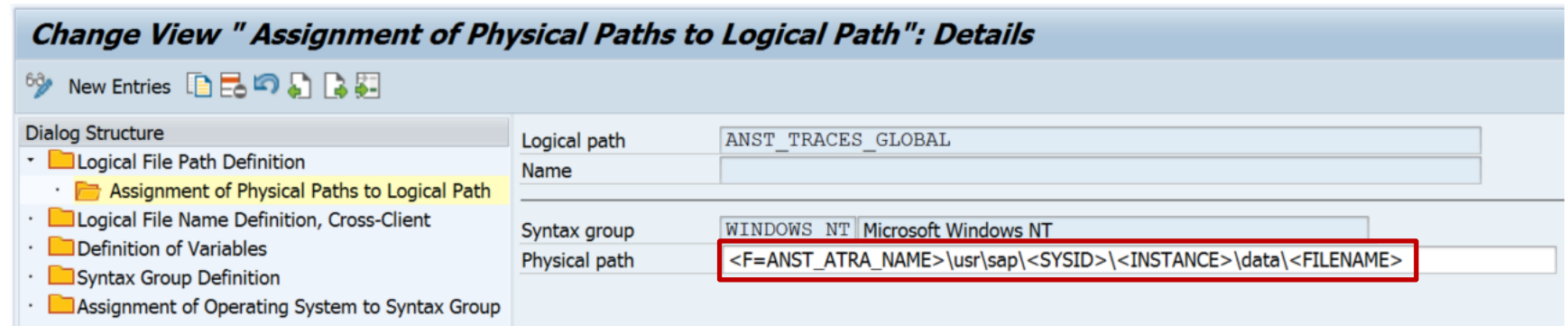
Automated Note Search & Customer Code Detection Tool (ANST)

Preparation for **Dynamic Tracing** which you need to go for RFC scenarios or Fiori applications:

Note [2286869](#) - ANST: Trace On/Off error "Dynamic Start and Stop cancelled by user"
You have to implement this note if required and you need to execute the manual activity in any case.

Transaction FILE:

Ensure to have the correct values for logical path
ANST_TRACES_GLOBAL
and logical file
ANST_TRACES



Change View "Assignment of Physical Paths to Logical Path": Details

New Entries

Dialog Structure

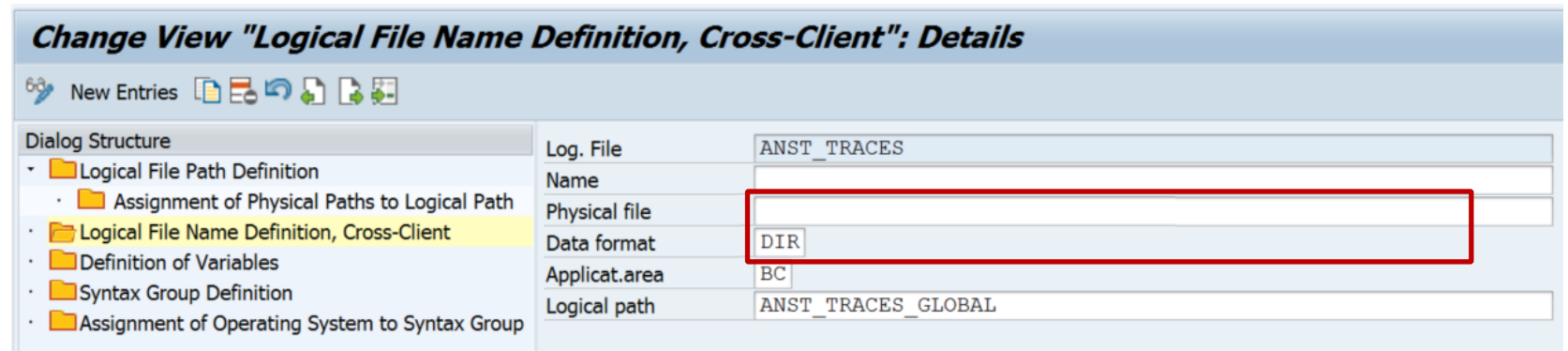
- Logical File Path Definition
 - Assignment of Physical Paths to Logical Path
- Logical File Name Definition, Cross-Client
- Definition of Variables
- Syntax Group Definition
- Assignment of Operating System to Syntax Group

Logical path: ANST_TRACES_GLOBAL

Name:

Syntax group: WINDOWS NT | Microsoft Windows NT

Physical path: <F=ANST_ATRA_NAME>\usr\sap\<SYSID>\<INSTANCE>\data\<FILENAME>



Change View "Logical File Name Definition, Cross-Client": Details

New Entries

Dialog Structure

- Logical File Path Definition
 - Assignment of Physical Paths to Logical Path
- Logical File Name Definition, Cross-Client
- Definition of Variables
- Syntax Group Definition
- Assignment of Operating System to Syntax Group

Log. File: ANST_TRACES

Name:

Physical file:

Data format: DIR

Applicat.area: BC

Logical path: ANST_TRACES_GLOBAL

Automated Note Search & Customer Code Detection Tool (ANST)

Example: Dynamic tracing for System Recommendations Object List – UPL/SCMON integration

1. Ensure to use the same application server for Fiori and ANST!
2. Navigate in the Fiori App just before the screen which you want to trace
3. Activate tracing in ANST
4. Continue the Fiori App
5. Stop tracing in ANST
6. Choose Application Areas to collect objects in scope which might match
(The selected Application Areas are used to collect object name but not as a filter for notes)
7. Request notes list, sort or filter by Application Area and identify relevant notes

Automated Note Search & Customer Code Detection Tool (ANST)

Automated Note Search & Customer Code Detection Tool

 Open trace  Object Customizing  Settings  Delete Trace  Trace On/Off

Activate Trace

Execution Data

- Transaction Program BSP Application
 Web Dynpro Application WD Application Configuration CRM BSP Frame
 CRM Webclient CRM UI Frame
Transaction Code

Trace Parameters

Description
 Save Trace

X3A(1)/001 TRACE Recording for START_STOP_TRACE

User Name
Application





 Start Recording  

Automated Note Search & Customer Code Detection Tool (ANST)

Automated Note Search & Customer Code Detection Tool

 Open trace
  Object Customizing
  Settings
  Delete Trace
  Trace On/Off

Continue Application

 0 Protokoll
  54 Objektliste
  0 Vorausgesetzte Hi...
  0 Hinweise zu Neben...

Objektliste



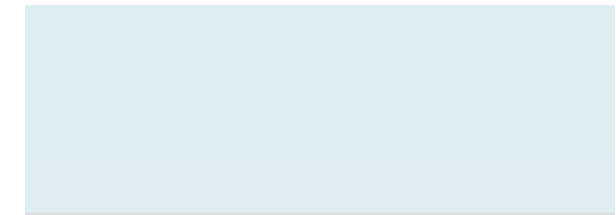
Transportprogramm-ID	Transportobjekttyp	Transportobjektname	Programm-ID (TADIR)	Objekttyp (TADIR)	Objektname (TADIR)	Anzahl Verwendungen
LIMU	CINC	CL_SCWN_APP_LOG== =====CCDEF	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_APP_LOG== =====CCIMP	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_APP_LOG== =====CCMAC	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCDEF	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCIMP	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden

Automated Note Search & Customer Code Detection Tool (ANST)

SAP Automated Note Search and Customer Code Detection Tool

Filter Results

Download	Note Status	Note Priority	Note Numbr	Application Ar	Note Title
	Not in System		1134338	AP-PRC-CON	VMC buffers are updated before database COMMI...
	Not in System		1784753	BC-ABA-LA	Transparent table DOKTL requires ORDER BY PRI...
	Not in System		1841167	BW-SYS-DB-M	Automatic index repair in BW process chains
	Not in System		1912764	BW-SYS-DB-S	SYB:[ASE Error SQL156]Incorrect syntax near key...
	Not in System		1930695	BW-WHM-MT	Changeover from XML to SQL-based analytic privi...
	Not in System		1931455	CRM-ANA-OR	SAP HANA Live Reporting - Implementation for E...
	Not in System		1953830	BW-WHM-MT	Workspace CompositeProviders and HCPRs are n...
	Not in System		1993744	BW-MT	BW modeling tools: Composite SAP Note for SAP...
	Not in System		2035288	BC-ABA-LA	AMDP methods in ZDM upgrade



name (TADIR)	Anzahl Verwendungen
SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden
CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden

LIMU	CINC	CL_SCWN_APP_LOG== =====CCMAC	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCDEF	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCIMP	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden

Automated Note Search & Customer Code Detection Tool (ANST)

SAP Automated Note Search and Customer Code Detection Tool

Identify specific Notes

Download Note Status	Note Priority	Note Numbr	Application Area	Note Title
Not in System		2356354	SV-SMG-SR	SysRec 7.2: UPL error, see application log

Objektliste

Transportprogramm-ID	Transportobjekttyp	Transportobjektname	Programm-ID (TADIR)	Objekttyp (TADIR)	Objektname (TADIR)	Anzahl Verwendungen
LIMU	CINC	CL_SCWN_APP_LOG== =====CCDEF	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_APP_LOG== =====CCIMP	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_APP_LOG== =====CCMAC	R3TR	CLAS	CL_SCWN_APP_LOG	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCDEF	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden
LIMU	CINC	CL_SCWN_DS_VERIFY =====CCIMP	R3TR	CLAS	CL_SCWN_DS_VERIFY	Keine anwendbaren Daten vorhanden



December 2019

Topics December 2019



Customer Connection Program - SAP Identity Management 8.0
Continuous Influence Session - SAP Cloud Identity Access Governance

F4 Authorization check in Value Help

WINTER IS COMING - How to keep Connectivity to Support Backbone
Note [2865869](#) - Technical Communication User Required to Connect to SAP

Recordings:
[DSAG \(German\)](#)
ASUG
[SAP Learning HUB](#)

Customer Connection Program

SAP Identity Management 8.0

<https://blogs.sap.com/2019/12/09/customer-connection-program-for-sap-identity-management-8.0>

Customers can submit improvement requests for SAP products in mainstream maintenance. The SAP team will consider requests with a minimum of 10 supporting customers (by votes).

<https://influence.sap.com/sap/ino/#/campaign/2085>

Continuous Influence Session

SAP Cloud Identity Access Governance

<https://influence.sap.com/sap/ino/#/campaign/1739>

Single view / reporting of user's access
Project: SAP Cloud Identity Access Governance

Request ID: 238444 Status: Submitted
Category: Access Analysis

📅 Oct 22, 2019 📅 Oct 22, 2019 ❤️ 1 🗨️ 0

IPS - Improve Scheduler
Project: SAP Cloud Identity Access Governance

Request ID: 235759 Status: Submitted
Category: Access Request

📅 Aug 27, 2019 📅 Nov 26, 2019 ❤️ 2 🗨️ 0

Security improvements in the workflow
Project: SAP Cloud Identity Access Governance

Request ID: 230344 Status: Acknowledged
Category: Access Request

📅 May 3, 2019 📅 Oct 15, 2019 ❤️ 5 🗨️ 0

Access request by other employee
Project: SAP Cloud Identity Access Governance

Request ID: 229689 Status: Under Review
Category: Access Request

📅 Apr 16, 2019 📅 Oct 15, 2019 ❤️ 6 🗨️ 0

Provide a single view (tile and report) of a user's access assignments, including risks associated with the access.

Modify the IPS job scheduler so that it gives more options than just "Run every XX Minutes" and add an option to schedule IPS ReSync jobs

The approval workflow consists of three stages: manager, profile owner and security, and we are expecting that the security stage would only happen if there exist a risk.

Allow employees to open an access request for another user. The main idea is to have a option to centralize access requests and decrease approval steps.

F4 Authorization check in Value Help

Example: Transaction MIRO

Possible Entries for Purchasing Document

Selections for the Purchasing Document

Invoicing Party	100010
Supplier	100015
<input checked="" type="checkbox"/> Different Inv. Party Too	
Company Code	0001

Authorization Trace: Transaction STAUTHTRACE

System Trace for Authorization Checks

Date	Date/Time	User	Type	Applicatio	Result of Authorization Check	Object	Field 1	Value 1	Field 2	Value 2
06.12.2019	15:52:58:597	D019687	Transaction	MIRO	Authorization check successful	S_TCODE	TCD	MIRO		
06.12.2019	15:52:58:597	D019687	Transaction	MIRO	Authorization check successful	M_RECH_BUK	BUKRS		ACTVT	01
06.12.2019	15:52:58:660	D019687	Transaction	MIRO	Authorization check successful	M_RECH_BUK	BUKRS	0001	ACTVT	01
06.12.2019	15:52:58:661	D019687	Transaction	MIRO	Authorization check successful	F_BKPF_BUK	BUKRS	0001	ACTVT	01
06.12.2019	15:52:58:663	D019687	Transaction	MIRO	Authorization check successful	M_RECH_BUK	BUKRS	0001	ACTVT	01
06.12.2019	15:52:58:695	D019687	Transaction	MIRO	Authorization check successful	M_RECH_AKZ	ACTVT		02	
06.12.2019	15:53:30:539	D019687	Transaction	MIRO	Authorization check successful	F_LFA1_GEN	ACTVT	F4		
06.12.2019	15:53:30:543	D019687	Transaction	MIRO	Authorization check successful	F_LFA1_GRP	KTOKK	0001	ACTVT	F4
06.12.2019	15:53:30:544	D019687	Transaction	MIRO	Authorization check successful	F_LFA1_GRP	KTOKK	KRED	ACTVT	F4
06.12.2019	15:53:30:545	D019687	Transaction	MIRO	Authorization check successful	F_LFA1_GRP	KTOKK	LIEF	ACTVT	F4

How to grant authorizations for new F4 check?

F4 Authorization check in Value Help

Note [2682142](#) - Introduction of activity value 'Value Help' in authorization objects

The attachments show a long list of applications with updated authorization proposals

Note [2792518](#) - Introduction of activity value 'Value Help' in further authorization objects

➤ **You need to adjust authorization proposals (SU25 and SU24) and roles (SU25 and PFCG) to grant authorization for F4**

You can omit this activity temporarily by applying the procedure described in note [2606478](#).

Important correction note:

Note [2805887](#) - Enhancement of base class CL_SU2X_F4

Valid as of release 7.31

Useful other note:

Note [2567368](#) - SU2X | Enhancement of report SU2X_UPDATE_S_TABU_NAM

F4 Authorization check in Value Help

Remove F4 from SU24 / Create and use role SAP_NEW_F4

Note [2606478](#) - REGENERATE_SAP_NEW | bridging authorizations for input helps

Valid as of release 7.52

Implement note [2805887](#) before

Step 1: Implement note [2606478](#) again to get the latest version of F4 authorization data

Currently you see version 5 from 26.06.2019

Step 2: Use report SU24_REVERT_F4 to remove F4 values from authorization proposals in SU24 temporality

Step 3: Execute step 2c in transaction SU25 and transport the generated roles to production

You will observe, that you do not get new F4 values in authorization proposals for roles

Step 4: Use report REGENERATE_SAP_NEW to generate role SAP_NEW_F4 and transport it to the production system

Step 5: Use transaction SU10 to assign this role SAP_NEW_F4 to all dialog users (directly or via a reference user)

Yes, in opposite to outdated **authorization profile** SAP_NEW or **critical role** SAP_NEW you can (almost) safely assign this **role** SAP_NEW_F4 to users if you just want to ignore the F4 check.

WINTER IS COMING - How to keep Connectivity to Support Backbone

Sending System:	System directly connected to SAP		
Software Component	SAP_BASIS < 700	SAP_BASIS ≥ 700	
Channel	RFC with technical user	RFC with technical user	https
Enable https communication with SAP Note 2837310 or ST-PI 2008_1 * SP22	n.a.	n.a.	Yes
Implement ST-PI 740 SP09	n.a.	n.a.	n.a.
Enable https communication with checklists	n.a.	n.a.	Yes
Functionality	Enables sending of SAP EarlyWatch Alert data to SAP, other applications are not covered		

Legend: less preferred option workaround for EWA best option

WINTER IS COMING - How to keep Connectivity to Support Backbone

Sending System:	System directly connected to SAP		SAP Solution Manager 7.1	
Software Component	SAP_BASIS < 700	SAP_BASIS ≥ 700	ST 710 SP01-SP16	
Channel	RFC with technical user	RFC with technical user	https	https
Enable https communication with SAP Note 2837310 or ST-PI 2008_1 * SP22	n.a.	n.a.	Yes	Yes
Implement ST-PI 740 SP09	n.a.	n.a.	n.a.	n.a.
Enable https communication with checklists	n.a.	n.a.	Yes	Yes
Functionality	Enables sending of SAP EarlyWatch Alert data to SAP, other applications are not covered			

Legend: less preferred option workaround for EWA best option

WINTER IS COMING - How to keep Connectivity to Support Backbone

Sending System:	System directly connected to SAP			SAP Solution Manager 7.1	SAP Solution Manager 7.2		
Software Component	SAP_BASIS < 700	SAP_BASIS ≥ 700		ST 710 SP01-SP16	ST 720 SP01-SP04	ST 720 SP05-SP07	ST 720 ≥ SP08
Channel	RFC with technical user	RFC with technical user	https	https	https	https	https
Enable https communication with SAP Note 2837310 or ST-PI 2008_1 * SP22	n.a.	n.a.	Yes	Yes	n.a.	n.a.	n.a.
Implement ST-PI 740 SP09	n.a.	n.a.	n.a.	n.a.	Yes	Yes	Already included
Enable https communication with checklists	n.a.	n.a.	Yes	Yes	Yes	Yes	Yes
Functionality	Enables sending of SAP EarlyWatch Alert data to SAP, other applications are not covered					All	

Legend: less preferred option workaround for EWA best option

WINTER IS COMING - How to keep Connectivity to Support Backbone

Sending System:	System directly connected to SAP		SAP Solution Manager 7.1	SAP Solution Manager 7.2			
Software Component	SAP_BASIS < 700	SAP_BASIS ≥ 700	ST 710 SP01-SP16	ST 720 SP01-SP04	ST 720 SP05-SP07	ST 720 ≥ SP08	
Channel	Temporary workaround: RFC with technical communication user		https	https	https	https	https
Enable https communication with SAP Note 2837310 or ST-PI 2008_1 * SP22			n.a.	n.a.	Yes	Yes	n.a.
Implement ST-PI 740 SP09	n.a.	n.a.	n.a.	n.a.	Yes	Yes	Already included
Enable https communication with checklists	n.a.	n.a.	Yes	Yes	Yes	Yes	Yes
Functionality	Enables sending of SAP EarlyWatch Alert data to SAP, other applications are not covered					All	

Legend: less preferred option workaround for EWA best option

Are you ready? Check EWA Alert about SAP Backbone Connectivity

EWA Workspace (Dashboard)

<https://launchpad.support.sap.com/#/ewaworkspace>

→

EWA Solution Finder (EWA Alerts)

<https://launchpad.support.sap.com/#/ewasolutionfinder>

The filter settings are compiled into the URL, therefore you can use the URL from the address bar to show this alert „Service Readiness → SAP Backbone Connectivity“ for all system for which the current S-user is authorized:

<https://launchpad.support.sap.com/#/ewasolutionfinder/generic/filters/categoryHash=W3siY2F0ZWdvcnkiOiJTZXJ2aWNIUmVhZGluZXNzliwic3ViY2F0ZWdvcnkiOiJCYWNrYm9uZUNvbm5lY3Rpdml0eSJ9XQ%253D%253D>

Are you ready? Check EWA Alert about SAP Backbone Connectivity

The screenshot shows the SAP EarlyWatch Alert Solution Finder interface. At the top, there is a search bar with the text "HTTPS -> SAP" entered. Below the search bar, there are filters for "Alert Rating" and "Age". The results section shows 3 results, with 0 Alerts, 0 Recommendations, and 3 Descriptions. The first result is titled "SAP Backbone Connectivity" and includes a code block: `<> {2}`. It states: "Starting January 1, 2020, the connectivity to SAP will be changed, ..." and lists "2 Systems: SM1, ST7". The second result is also titled "SAP Backbone Connectivity" and states: "Starting January 1, 2020, the connectivity to SAP will be changed, for ..." and lists "1 System: T42". The third result is titled "SAP Backbone Connectivity" and includes the same code block: `<> {2}`. It states: "Starting January 1, 2020, the connectivity to SAP will be changed, ..." and lists "3 Systems: FA7, FQ7, H8F".

Instead of filtering for an alert category you can use one of the search strings (including quotation marks and spaces)

"HTTPS -> SAP"
respective
"RFC -> SAP"

To get the list of systems which send EWA data via the new webservice destination respective via RFC.



Destination	User	Ready for 2020	Date (received)
HTTPS -> SAP		<input checked="" type="checkbox"/>	29.10.2019

Are you ready? Check EWA Alert about SAP Backbone Connectivity

Yes !

SAP Backbone Connectivity of FA7

System which sends EWA data via SAP Solution Manager

✔ System FA7 is prepared for SAP Support Backbone update sending EWA data on HTTPS through SAP SOLUTION MANAGER 7.2 FA7

Starting January 1, 2020, connectivity to SAP will be changed. For details, see [landing page](#) .

The following table shows the latest data transmissions for system FA7:

Latest Service Data for System FA7 Sent to SAP

WebService in use

Date (collected)	System	Sends EWA?	Kernel	Kernel	ST-PI	ST-PI	Destination	User	Ready for 2020	Date (received)
27.11.2019	SAP SOLUTION MANAGER 7.2 FA7	yes	749 701	✔	740 12	✔	HTTPS -> SAP		✔	27.11.2019

Note 2865869 - Technical Communication User Required to Connect to SAP - Anonymous User Login Denied

For a **limited period of time** your systems can continue to access the SAP Support Backbone with **RFC**. To ensure functionality of the RFC destination, replacing the anonymous user with a **technical communication user** is the only mandatory action in the system.

RFC to SAP Support Backbone can only be used for the following functionality from January 2020 onwards: SAP Note Assistant (transaction `SNOTE`) and EarlyWatch Alert (EWA / transaction `SDCCN`). This is a restriction especially for Solution Manager systems: all Solution Manager specific applications are not supported.

- Service Data Control Center (*SDCC*, transaction `SDCCN`) supports the following functionality with connection to SAP Support Backbone:
 - *Send session data:*
Is used to send service data, especially that of the Earlywatch Alert, to SAP. It is also used for the license measurement data.
 - *Refresh service definitions:*
Keeps the *service definitions* up to date. The service definitions are the list of function modules collected as service data for the EWA (or any other service) in *SDCC*.
 - *Service Preparation - Service Recommendation Refresh:*
`RTCCTOOL` connects to SAP Support Backbone for the *Service Preparation - Service Recommendation Refresh*. It updates the content of the *Service Recommendation* (the checklist in `RTCCTOOL`).

- SAP Note Assistant (transaction `SNOTE`) supports the download and implementation of digitally signed SAP Notes.



November 2019

Topics November 2019



Blog: Secure By Default - Ways To Harden Your Systems

System Recommendations – Important Notes

Note [2393937](#) - VMC Authority Check

Note [2777910](#) - Unrestricted File Upload vulnerability in AS Java (Web Container)

Note [2839864](#) - Update 2: OS Command Injection vulnerability in SAP Diagnostics Agent

SAP Support Backbone – SDCCN

Note [2836302](#) - Automated guided steps for enabling Note Assistant for TCI and Digitally Signed SAP Notes

Are you ready? Check EWA Alert about SAP Backbone Connectivity

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
[SAP Learning HUB](#)

Secure By Default: Ways To Harden Your Systems

Blog from Birger Toedtman, SAP Consulting

<https://blogs.sap.com/2019/10/02/secure-by-default-ways-to-harden-your-systems-at-almost-no-cost/>

- Use the SAP-provided tools and services, such as **EarlyWatch Alert, Security Optimization Service, Configuration Validation** and **System Recommendations**
- **Always introduce disruptive security settings with good timing.**
The upgrade situation and new installations are very good points in time for this
- **S/4HANA 1909** provides an up-to-date “secure by default” design. So in case you are running a **new installation** or a **conversion** (**but not in case of an upgrade**), nothing has to be done for a variety of security settings

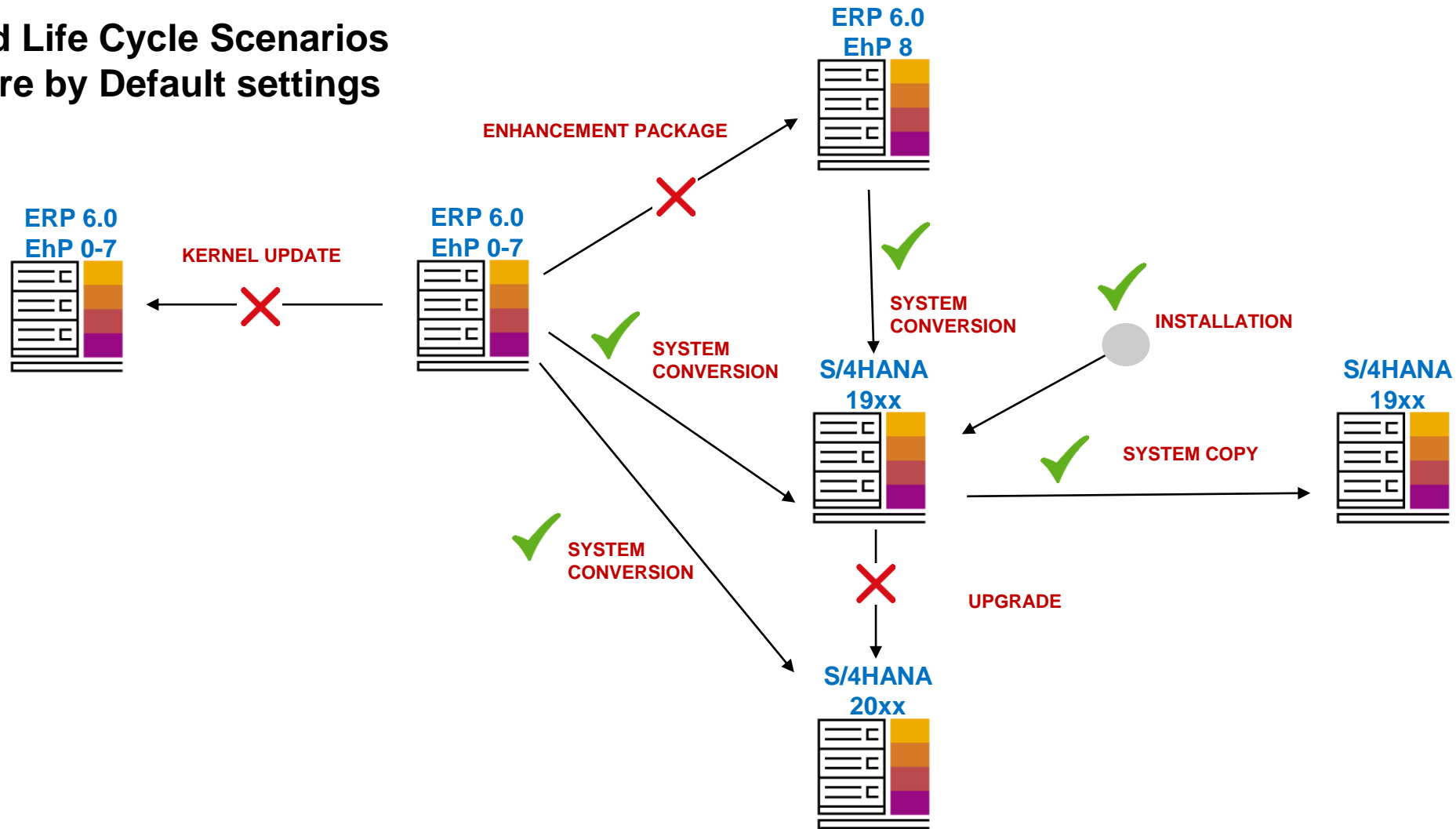
In case of an **upgrade** SAP recommends to implement (at least) the same settings as described in note [2714839](#) respective note [2713544](#) “New security settings during conversion to S/4HANA 1909”

Both notes show currently the same checklist:

`New_Security_Settings-SUM20P6_Conversion-to-S4H1909.xlsx`

Secure By Default: Ways To Harden Your Systems

Supported Life Cycle Scenarios with Secure by Default settings



Secure By Default: Ways To Harden Your Systems

Note	Name	Recommended	Note	Name	Recommended
515130	auth/check/calltransaction	3	2794817	ms/http_logging	1
-	auth/object_disabling_active	N	-	rdisp/gui_auto_logout	1H
2216306	auth/rfc_authority_check	6	2441606	rdisp/vbdelete	0
2776748	gw/reg_no_conn_info	255	2678501	rfc/callback_security_method	3
2776748	gw/rem_start	DISABLED	668256	rfc/ext_debugging	0
1277022	icf/set_HTTPonly_flag_on_cookies	0	1591259	rfc/reject_expired_passwd	1
-	login/disable_cplic	1	2788140	wdisp/add_xforwardedfor_header	TRUE
1023437	login/password_downwards_compatibility	0	2838480	Security Audit Log configuration	See note 2676384
2788140	icm/HTTP/logging_0	[...] LOGFORMAT=%t %a %u1 \ "%r\ " %s %b %Lms %{Host}i %w1 %w2			
2788140	icm/HTTP/logging_client_0	[...] LOGFORMAT=%t %a %u1 \ "%r\ " %s %b1 %b %Lms %{Host}i %P			
2788140	icm/security_log	[...] LEVEL=3			
2794817	ms/HTTP/logging_0	[...] LOGFORMAT=%t %a %u1 \ "%r\ " %s %b %{Host}i			
2140269	login/password_hash_algorithm	encoding=RFC2307,algorithm=iSSHA-512,iterations=15000,saltsizes=256			

System Recommendations – Important Notes

Note 2795529 - SysRec: Irrelevant kernel notes are displayed

Note 2825239 - SysRec 7.2: Performance Improvement in SysRec Job in SP08 and SP09

Note 2833610 - SysRec 7.2: Download large volume of note data from SAP support backbone via web service

Transaction DNO_CUST04:

Field Name	Seq...	Field val.
SYSREC_CALC_MODE	0	VERS_2019
SYSREC_DELTA_DAYS	0	7
SYSREC_NOTE_TYPES	0	HSLPCA
SYSREC_RFC_CALL	0	
SYSREC_UNUSED_SUBHR	0	X

Note 2780862 - SYSREC7.2: Required notes missing which have been published on the very last day of a month

System Recommendations – Important Notes

Note 2747922 - SysRec: Corrections for Solution Manager 720 SP08 Fiori UI

To upload data you might need a security rule like this in the SAPGUI:

Ursprung:	Benutzer		
Typ:	Datei		
Objekt:	C:/Users/<user>/Downloads/MySAPNotes-1.8.5-opt-static-abap/*		
Aktion:	Zulassen	Zugriffsarten:	Lesen
<input checked="" type="checkbox"/> Regel ist aktiv			

You might have to run SPAU beforehand if you already loaded previous versions

The note contains version 1.8.5 which is newer than a previous version like 1.9.69 (versions renumbered to match SP 8)

Use transaction SE80 for package UISM_AGS_SYSREC_UI to view file version.json

Page version.json

Properties Layout

```
1 { "application" : "MySAPNotes",
2   "version" : "1.9.69",
3   "buildNumber" : "68",
4   "buildId" : "68",
5   "branch" : "origin/rel-1.9",
6   "revision" : "aab993dcbd171e835ba2e48cbaca8571d3ef0dd2",
7   "GitURL" : ""
```

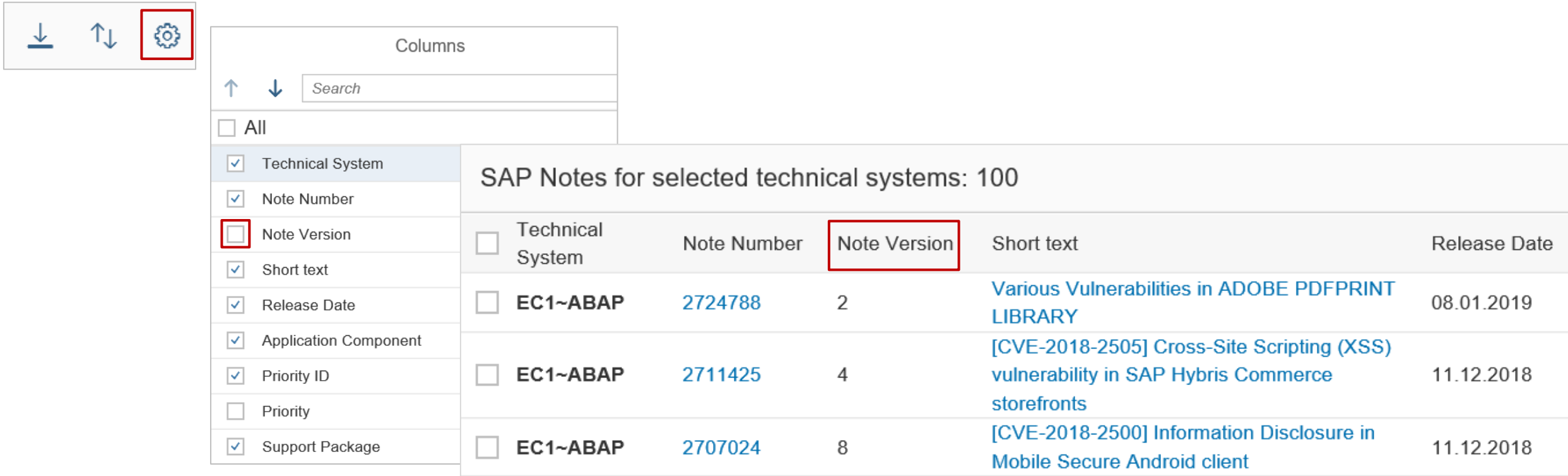
Old version

System Recommendations – Important Notes

Note [2747922](#) - SysRec: Corrections for Solution Manager 720 SP08 Fiori UI (version **1.8.5**)

Note [2854704](#) - SysRec: Corrections for Solution Manager 720 SP09 Fiori UI (version **1.9.77**)

A new feature allows you to show the note version on the Notes List (change setting required):



The screenshot shows the SAP Notes List configuration and data view. On the left, a 'Columns' panel is open, showing a list of columns with checkboxes. The 'Note Version' checkbox is highlighted with a red box. To the right, a table displays SAP Notes for selected technical systems. The 'Note Version' column in the table is also highlighted with a red box.

Columns Configuration:

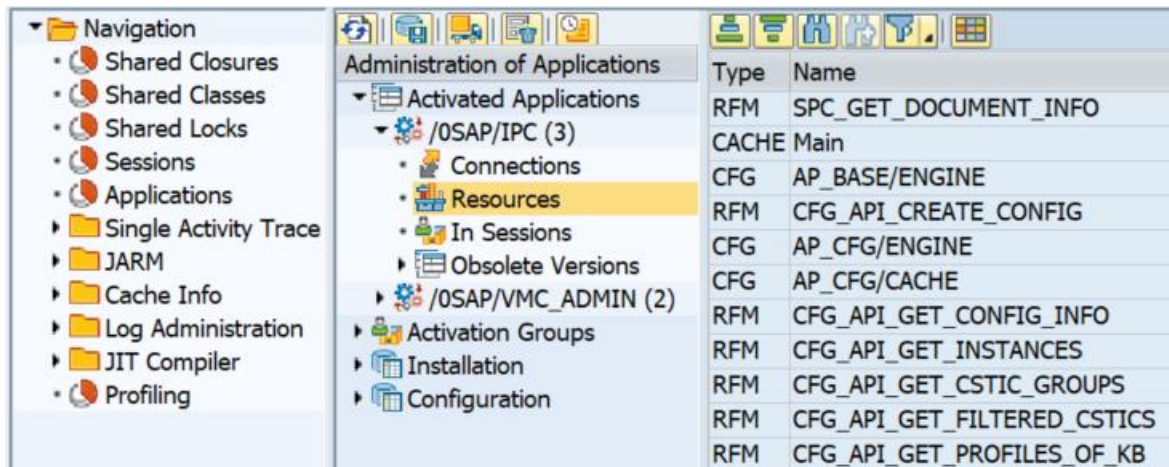
- All
- Technical System
- Note Number
- Note Version
- Short text
- Release Date
- Application Component
- Priority ID
- Priority
- Support Package

SAP Notes for selected technical systems: 100

<input type="checkbox"/> Technical System	Note Number	Note Version	Short text	Release Date
<input type="checkbox"/> EC1~ABAP	2724788	2	Various Vulnerabilities in ADOBE PDFPRINT LIBRARY	08.01.2019
<input type="checkbox"/> EC1~ABAP	2711425	4	[CVE-2018-2505] Cross-Site Scripting (XSS) vulnerability in SAP Hybris Commerce storefronts	11.12.2018
<input type="checkbox"/> EC1~ABAP	2707024	8	[CVE-2018-2500] Information Disclosure in Mobile Secure Android client	11.12.2018

Note 2393937 - VMC Authority Check


The Virtual Machine Container (VMC), i.e. used in CRM systems, provides remote-enabled Java modules (jRFC) which can be called like any other RFC enabled functions of external RFC servers.



The screenshot shows the 'Administration of Applications' interface. The left pane shows a navigation tree with 'Resources' selected. The right pane displays a table of RFC-enabled functions:

Type	Name
RFM	SPC_GET_DOCUMENT_INFO
CACHE	Main
CFG	AP_BASE/ENGINE
RFM	CFG_API_CREATE_CONFIG
CFG	AP_CFG/ENGINE
CFG	AP_CFG/CACHE
RFM	CFG_API_GET_CONFIG_INFO
RFM	CFG_API_GET_INSTANCES
RFM	CFG_API_GET_CSTIC_GROUPS
RFM	CFG_API_GET_FILTERED_CSTICS
RFM	CFG_API_GET_PROFILES_OF_KB

Within ABAP you just see empty function stubs to allow ABAP developers to see the interface:



The screenshot shows the 'Function Builder: Display CFG_API_GET_CONFIG_INFO' interface. The 'Source code' tab is active, displaying the following ABAP code:

```
1 FUNCTION CFG_API_GET_CONFIG_INFO .
2
3   ***"Local Interface:
4   ** IMPORTING
5   **   VALUE(CONFIG_ID) TYPE COMT_CFGM_CONFIG_ID
6   **   VALUE(GET_CONTEXT) TYPE COMT_CFGM_BOOLEAN DEFAULT 'F'
7   **   VALUE(INCLUDE_PRICE_DETAILS) TYPE COMT_CFGM_BOOLEAN DEFAULT 'F'
8   ** EXPORTING
9   **   VALUE(CONFIG_INFO) TYPE COMT_CFGM_EXTENDED_CONFIG_INFO
10  **   VALUE(CONTEXT) TYPE COMT_CFGM_CONTEXT_I
11  ** EXCEPTIONS
12  **   PARAMETER_EXCEPTION
13  **   COMMAND_EXCEPTION
14  **   EXCEPTION_CONFIG_NULL
15  **-----
16
17
18
19 ENDFUNCTION.
```

Note 2393937 - VMC Authority Check

The Virtual Machine Container (VMC) of an ABAP system is not active by default

Prerequisite to activate the VMC (default: `off`):

Profile parameter `vmcj/enable = on` (or any other of the other 'active' values: `ENABLE`, `ACTIVATE`)

Check the status in transaction SM52 :

VMC Overview of Server Idcifa7_FA7_00

Server: Idcifa7_FA7_00 Date: 19.11.2019, Time: 16:54:37

VMC is not active 8 VMs (Minimum/Maximum Number of VMs 8 / 8)

Shared GC Inactive (Young GC / Old GC / Shared GC = 18 / 0 / 0), Full Limit = 60 %

Shared Pool 768 MB

Global Classes 131 MB / 17 % (Used/Allocated 27.839.056 / 136.902.071 Bytes, 20 %)

Global Programs 48 MB / 6 % (Used/Allocated 7.348.296 / 50.331.648 Bytes, 15 %)

Global Data 16 MB / 2 % (Used/Allocated 10.808.224 / 17.017.344 Bytes, 64 %)

Global Copy-Only Data 131 MB / 17 % (Used/Allocated 61.720 / 136.933.871 Bytes, 0 %)

Global Admin Data 3 MB / 0 % (Used/Allocated 44.392 / 2.789.376 Bytes, 2 %)

Other Global Data 182 KB / 0 % (Used/Allocated 145.232 / 186.383 Bytes, 78 %)

Nu...	Time	WP	Type	Status	User	Program	CPU	Memo...
0	04.02.34		Template	In Pool			0:00:01.120	68
1	16.54.33		RFC	In Pool			0:01:42.570	68

... or even simpler:

Check the status via report
RSVMCRT_HEALTH_CHECK :

Status of Java Execution Environment

◆ The Java component is deactivated

Note 2393937 - VMC Authority Check

Access to remote enabled functions in **external RFC servers** is not restricted by authorization object S_RFC (which is a check performed by an ABAP RFC server only).

Exception: the VMC of an ABAP system can run authorization check for S_RFC *(citation needed)* even if the function is implemented outside of ABAP.

However, you need to activate this setting first. *(citation needed)*

Related notes:

Note 863354 - Using the "VM container" component

Note 658464 - Security check of IPC (with references to some other notes)

Note 412309 - Authorization profile RFC user for IPC

Related topics:

Note 720523 - IPC security: Maintaining params for SSL secured connections

Note 698181 - IPC security: Maintaining parameters for SNC-RFC connections

Note 2393937 - VMC Authority Check

The screenshot displays the SAP Administration of Applications interface. On the left, a navigation pane shows 'Applications' selected. The main area is split into two views: 'SAP Configurations' and 'Customer Configurations'. Both views show a tree structure of nodes under 'Administration of Applications' > 'Configuration' > 'Components' > 'IPC' > 'SAP Configurations' > 'AP_BASE/ENGINE' > 'v.0'. The 'SAP Configurations' view shows the following values:

Node	SAP Value
engines	
implementation	
authorizationCheck	false
authorizationCheckSACF	false
cache	false
openssl	false
installation	
type	0
monitor	
jarm	true
ConversionEngine	
CurrencyConvOverflowCheck	true

The 'Customer Configurations' view shows the following values:

Node	Customer Value
engines	
implementation	
authorizationCheck	true
authorizationCheckSACF	true
cache	
openssl	
installation	
type	
monitor	
jarm	
ConversionEngine	
CurrencyConvOverflowCheck	

Transaction SM53

The authorization checks are **not active by default**

You can activate them in a customer configuration as described in the note

The SACF setting activates an authorization check for additional authorization object IPC **but only if you activate it in SACF, too** (citation needed)

Note 2393937 - VMC Authority Check

Which users require the role containing authorizations for S_REF and IPC?

This is described in the manual activity of the note:

The IPC - SACF scenario for AP Engines cannot be analyzed in transaction SACF, it can be analyzed with the VMC logs in transaction SM53. In order to see the needed VMC warnings logs, the default severity needs to be changed from ERROR to WARNING for the category `/Applications/AP/BASE/Core`

In order to build a user list, which are using the AP Engines, the VMC logs need to be analyzed. Check the logs for category `/Applications/AP/BASE/Core` and extract the users to build the user lists. This analysis needs to be done on each application server.

Use the user list to update all corresponding roles which are using the AP Engines.

Note 2777910 - Unrestricted File Upload vulnerability in AS Java (Web Container)

Why do you not see patches for old Support Packages?

a) It could be the case that the vulnerability was introduced with a specific SP. However, the reference to the workaround described in related note 1975430 indicates that this particular security vulnerability exist in all releases.

b) Support Packages which are older than 24 month do not necessarily get (security) patches anymore

However, it seems that there exist more exceptions

Example for release 7.10 and 7.40:

Software Component	Support Package	Published (Last changed)	~Age	Patch	Published
ENGINEAPI 7.10	SP021	08.08.2016	38 month		
ENGINEAPI 7.10	SP022	27.07.2017	27 month		
ENGINEAPI 7.10	SP023	10.05.2018	17 month		
ENGINEAPI 7.10	SP024	10.05.2019	5 month	000002	20.06.2019
ENGINEAPI 7.10	SP025	Not available yet		000000	Not available yet
ENGINEAPI 7.40	SP016	30.10.2017	24 month		
ENGINEAPI 7.40	SP017	30.01.2018	21 month		
ENGINEAPI 7.40	SP018	14.08.2018	14 month		
ENGINEAPI 7.40	SP019	04.01.2019	9 month	000002 pl 6	26.08.2019
ENGINEAPI 7.40	SP020	23.07.2019		000001 pl 3	26.08.2019
ENGINEAPI 7.40	SP021	Not available yet		000000	Not available yet

Note 2839864 - Update 2: OS Command Injection vulnerability in SAP Diagnostics Agent

Note 2808158 - OS Command Injection vulnerability in SAP Diagnostics Agent

Note 2823733 - Update 1: OS Command Injection vulnerability in SAP Diagnostics Agent

Note 2839864 - Update 2: OS Command Injection vulnerability in SAP Diagnostics Agent

By applying the patch the file `commands.xml` will be cleared of all commands except `echo`:

```
<OsCmd exec="echo Hello" param="false" >
```

As a result, commands for the OS Command Collector have to be added manually to the `commands.xml`. For reference the `old_commands.xml` is attached to the note.

In case commands need to be added for this purpose, it is strongly recommended to use setting `param="false"`.

Open question: which commands are required?

Note 2839864 - Update 2: OS Command Injection vulnerability in SAP Diagnostics Agent

Which commands are required?

The old commands .xml shows various topics which might require commands if you are using these scenarios:

1. OS
2. TREX (TREX commands have been removed use transaction TREXADMIN in Solution Manager)
3. SAP MDM
4. SAP PPM BY IDS
5. FOCUS ALM
6. SAP BCM SOFTWARE
7. SAP BPC FOR MICROSOFT/NETWEAVER
8. SAP PRICE & MARGIN MANAGEMENT
9. SAP POS
10. SAP ARC&DOC ACCESS BY OT
11. BOBJ ENTERPRISE XI
12. VERTEX
13. WEBSPHERE APPSERVER
14. SAP MFG EXECUTION
15. SBOP DATA SERVICES 4.0
- H. Help

Note 2839864 - Update 2: OS Command Injection vulnerability in SAP Diagnostics Agent

Which commands are required?

Example for topic “1. OS”

Note 2849096 - MSC: Cannot find command `DateTime` and `CpuStat` in command list

Using this note you can replace both commands by still existing `echo` command.

Instead of implementing and running the report you can use transaction `SE16` for table `DMDATTRIBUTE` as well:

```
report p_update_os_command_check.  
update DMDATTRIBUTE  
  set value = 'Echo'  
  where model_key = 'Setup'  
        and model_class = 'ST SELBSTDIAGNOSE'  
        and attrib_class = 'param_value'  
        and ( value = 'CpuStat' or value = 'DateTime' ).
```

MODEL KEY	Setup
MODEL CLASS	ST SELBSTDIAGNOSE
VERSNR	1
OBJECT NO	292
ATTRIB NO	2
ATTRIB CLASS	param_value
VALUE	DateTime
READONLY	<input type="checkbox"/>

Support Backbone Connectivity – SDCCN

Note 2837310 - Supporting HTTPS Connections for SDCCN

On **ST-PI 2008_1_7xx**, *Service Data Control Center* (SDCC, transaction SDCCN) only supports RFC connections to SAP Support Backbone. HTTPS connections are not supported. In particular, **Solution Manager 7.1** is not capable to connect to SAP Support Backbone after January 1st 2020 due to this missing functionality. An SAP Solution Manager system is no more allowed to communicate with SAP Support Backbone with RFC protocol.

This SAP Note provides the functionality allowing to connect a Solution Manager 7.1 to SAP Support Backbone using secure https connections for the functionality provided by SDCC.

Support Backbone Connectivity – SDCCN

Note 2837310 - Supporting HTTPS Connections for SDCCN

SDCC Refresh service definitions:

- uses destination `SAP-SUPPORT_PORTAL`
- requires ST-PI 2008_1_700 18 SP14 (or notes 2220413 and 2220414)
- requires destination `SAP-SUPPORT_PORTAL` to be active in SDCC destination table `/BDL/RFCDEST`. (Without this note 2837310, it must be entered in transaction `SE16`.)
- If there is a main system defined in SDCC destination table, the *Refresh service definitions* is not performed against SAP Support Backbone.
- keeps the *service definitions* up to date. The service definitions are the list of function modules collected as service data for the EWA (or any other service) in SDCC

SDCC Send session data:

- uses destination `SAP-SUPPORT_PARCELBOX`
- requires this note 2837310 being implemented
- is used to send service data, especially that of the Earlywatch Alert, to SAP (aka direct EWA, which is not processed on a Solution Manager). It is also used for the license measurement data.

Support Backbone Connectivity – SDCCN

Note 2837310 - Supporting HTTPS Connections for SDCCN

Related information:

Note 2740667 - RFC connection SAPOSS to SAP Service & Support backbone will change (latest) in January 2020

Note 2823658 - EWA Checks for SAP Backbone Connectivity

SAP Support Backbone Connectivity Troubleshooting in Solution Manager 7.2

<https://gad5158842f.us2.hana.ondemand.com/dtp/viewer/#!/tree/1423/actions/17822>

Checklist for Support Backbone Update For SAP Solution Manager 7.2 SPS 5

https://help.sap.com/doc/20f8ecd5028346a38fac89c2f3052bf6/SP5/en-US/loiob0605883e376454abce03682db18e39d_sps5.pdf

Note 2836302 - Automated guided steps for enabling Note Assistant for TCI and Digitally Signed SAP Notes

Use new report **RCWB_TCI_DIGITSIGN_AUTOMATION** to enable respective validate SNOTE

Task No.	Task Name	Task Status	Task Status Information
Step 1	Download & Implement Pre-requisite Notes	No Action Required	Click for Details
Step 2	Upload TCI Bootstrap Package	No Action Required	Click for Details
Step 3	Implement TCI Bootstrap Package	No Action Required	Click for Details
Step 4	Download & Implement TCI Bootstrap Note	No Action Required	Click for Details
Step 5	Upload TCI Rollback Package	No Action Required	Click for Details
Step 6	Implement TCI Rollback Package	No Action Required	Click for Details
Step 7	Download & Implement TCI Rollback Note	No Action Required	Click for Details
Step 8	Upload TCI package for Digitally Signed Note enablement: SAPK74000SCPSAPBASIS	Completed	
Step 9	Download & Implement SAP Note for Digitally Signed Note enablement: 0002576306	Completed	
Step 10	Download & Implement SAP Note: 0002721941	Completed	
Step 11	SNOTE Configuration for Digitally Signed SAP Note download	Completed	Re-configure



Report **RCWB_SNOTE_AUTOMATE_DWNLD_PROC**

Step Num...	Description	Action
* Step 1	Configure Download Procedure for SNOTE	
* Step 2	Maintain Procedure Connectivity	
* Step 3	Lock Procedure Configuration in Transport Request	

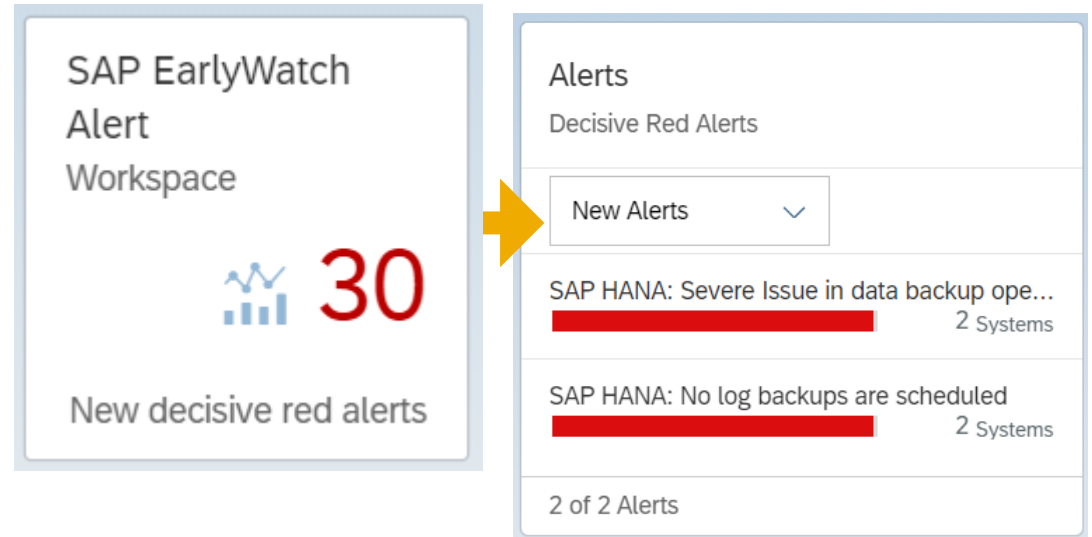
Troubleshooting:

Note 2857602 - Report from SAP Note 2836302 is hanging in Step4
 → Finish the SPAM queue and make sure that the status is green

Are you ready? Check EWA Alert about SAP Backbone Connectivity

EWA Workspace

<https://launchpad.support.sap.com/#/ewaworkspace>



The image shows a screenshot of the SAP EarlyWatch Alert Workspace. On the left, a summary card displays 'SAP EarlyWatch Alert Workspace' with a bar chart icon and a large red number '30', indicating 'New decisive red alerts'. A yellow arrow points from this card to a detailed view of the alerts on the right. The detailed view shows 'Alerts' under the heading 'Decisive Red Alerts'. It includes a 'New Alerts' dropdown menu and a list of two alerts, each with a red progress bar and '2 Systems' affected:

- SAP HANA: Severe Issue in data backup ope... (2 Systems)
- SAP HANA: No log backups are scheduled (2 Systems)

At the bottom of the alert list, it shows '2 of 2 Alerts'.

Are you ready? Check EWA Alert about SAP Backbone Connectivity

EWA Workspace

<https://launchpad.support.sap.com/#/ewaworkspace>

1. Open Alerts (= EWA Solution Finder)
2. Remove „Alert Rating“ filter
3. Remove „Age“ filter
4. Choose „Alert Category“
„Service Readiness → SAP Backbone Connectivity“

Alerts
Decisive Red Alerts

New Alerts ▾

SAP HANA: Severe Issue in data backup ope...
2 Systems

SAP HANA: No log backups are scheduled
2 Systems

2 of 2 Alerts

Customer:

System ID:

Database:

Alert Rating:

Age:

Alert Category:


30 Results | 30 Alerts | 0 Recommendations | 0 Descriptions

Are you ready? Check EWA Alert about SAP Backbone Connectivity

Alert Rating: Age: Alert Category:

1 Results | 1 Alerts | 0 Recommendations | 0 Descriptions

SAP Backbone Connectivity (Service Data Quality and Service Readiness)

 The Earlywatch Alert data are yet not sent through a channel ready for SAP Support Backbone update on January 1st 2020.

7 Systems: [O3Y](#), [OQL](#), [Q43](#), [QE4](#), [QPT](#), [T1E](#), [Y54](#)

Service Readiness → SAP Backbone Connectivity

Overview about systems

Are you ready? Check EWA Alert about SAP Backbone Connectivity

Alert Rating: Age: Alert Category:

1 Results | 1 Alerts | 0 Recommendations | 0 Descriptions

SAP Backbone Connectivity of Q43

System which sends EWA data via SAP Solution Manager

⚠ Solution Manager 7.1 SNH processing the EWA for system Q43 is of release 710. To be prepared for SAP Support Backbone update a Solution Manager 7.2 should be used.

Starting January 1, 2020, the connectivity to SAP will be changed, for details see this [landing page](#) . You must act to be able to still receive SAP EarlyWatch Alert reports and Remote Support Services.

The following table shows the latest data transmissions for system Q43:

Latest Service Data for System Q43 Sent to SAP

Date (collected)	System	Sends EWA?	Destination	User	Ready for 2020	Date (received)
23.09.2019	Solution Manager 7.1 SNH	yes	RFC -> SAP		⚠	23.09.2019

The SAP software release of system Q43 does not allow a fully functional connection to the updated SAP Support Backbone. You can realize the connection to SAP Support Backbone through a Solution Manager 7.2. If not yet done, perform the managed system setup for system Q43 on this Solution Manager. For SNOTE you additionally need to perform a configuration on system Q43 itself.

Are you ready? Check EWA Alert about SAP Backbone Connectivity

Alert Rating: Age: Alert Category:

1 Results 1 Alerts 0 Recommendations 0 Descriptions

SAP Backbone Connectivity of T1E

System which sends EWA data directly

EHP7 FOR SAP ERP 6.0 T1E - the release is not known here **processing the EWA for system T1E** is not yet prepared for SAP Support Backbone update. This requires a Solution Manager 7.2.

Starting January 1, 2020, the connectivity to SAP will be changed, for details see this [landing page](#) . You must act to be able to still receive SAP EarlyWatch Alert reports and Remote Support Services.

The following table shows the latest data transmissions for system T1E:

Latest Service Data for System T1E Sent to SAP

Date (collected)	System	Sends EWA?	Kernel	Kernel	ST-PI	ST-PI	Destination	User	Ready for 2020	Date (received)
23.09.2019	EHP7 FOR SAP ERP 6.0 T1E	yes	742 300	!	740 8	!	RFC -> SAP		!	23.09.2019

System T1E can be connected to the updated SAP Support Backbone, but you may find it more feasible to realize the connection through a Solution Manager 7.2. If not yet done, perform the managed system setup for system T1E on this Solution Manager. For SNOTE you additionally need to perform a configuration on system T1E itself.

Are you ready? Check EWA Alert about SAP Backbone Connectivity

EWA Workspace (Dashboard)

<https://launchpad.support.sap.com/#/ewaworkspace>

→

EWA Solution Finder (EWA Alerts)

<https://launchpad.support.sap.com/#/ewasolutionfinder>

The filter settings are compiled into the URL, therefore you can use the URL from the address bar to show this alert „Service Readiness → SAP Backbone Connectivity“ for all system for which the current S-user is authorized:

<https://launchpad.support.sap.com/#/ewasolutionfinder/generic/filters/categoryHash=W3siY2F0ZWdvcnkiOiJTZXJ2aWNIUmVhZGluZXNzliwic3ViY2F0ZWdvcnkiOiJCYWNrYm9uZUNvbm5lY3Rpdml0eSJ9XQ%253D%253D>

SAP Backbone Connectivity

a) Get Software

- **SAP Solution Manager 7.2 SP 8**
- **Kernel** (Release 742 patch \geq 401, Release 745 patch \geq 400, Release $>$ 745)
- **ST-PI AddOn** (ST-PI 740 SP10, ST-PI 2008_1_700 SP20, ST-PI 2008_1_710 SP20, ST-A/PI 01T* SP01)
- **Note Assistant, Transaction SNOTE** (Notes [2576306](#) [2603877](#), [2632679](#), [2721941](#), [2813264](#), ...)
- **Task List for (partly) automated configuration** (Note [2827658](#))

b) Configure Backbone Connectivity

- **Create technical S-user on SAP Support Backbone**
- **Update PSE with certificates** (CA certificate plus optional client certificate)
- **Create web service destination**
- **Activate new connection for Note Assistant, transaction SNOTE**

c) Go-live

- **Check application log if SNOTE loads digitally signed notes via web service connection**
- **Check Workload Statistics if web service connections are used and RFC destinations are not used**

SAP Backbone Connectivity

Decisions to Configure Backbone Connectivity

- a) Which systems are in scope?**
At least for all development systems (for SNOTE) and all production systems (for EWA) are in scope
- b) Individual webservice connections or central Download Service?**
The Download Service allows SNOTE to load notes including TCI packages
- c) How many technical S-users?**
1 per system
1 per 'system group'
1 per customer number
- d) Logon to technical S-users with passwords or with client certificates?**
- e) If you go for passwords: Configure systems manually or using (partly) automated task list?**
- f) If you go for client certificates: Create them via SAP Passport on SAP Support Portal or generate them locally?**



October 2019

Topics October 2019



SAP EarlyWatch Alert Workspace – Security Status

SAP Support Backbone Connectivity – Trusted Certificates

Java: Guest user is not an Administrator

Note [2786151](#) - Denial of service (DOS) in Kernel (RFC), SAP GUI for Windows and for Java

Note [2828682](#) - Information Disclosure vulnerability in SAP Landscape Management Enterprise

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

SAP EarlyWatch Alert Workspace - Security Status

<https://launchpad.support.sap.com/#/ewaworkspace>

New card *Security Status* added to the SAP EarlyWatch Alert Workspace:

New Authorization *Display Security Alerts in SAP EarlyWatch Alert Workspace*

<https://launchpad.support.sap.com/#/user/management>

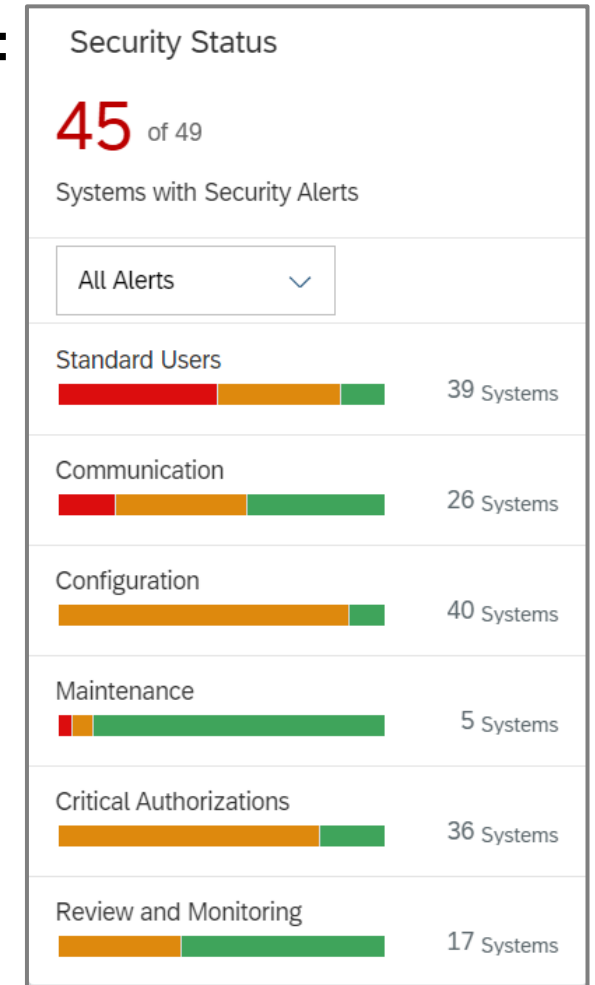
The new authorization is initially assigned to super administrators only.

Users can receive the authorization from super administrators or from user administrators (if they themselves got the authorization).

See [Release Notes](#)

Blog: [Displaying Security Alerts in the SAP EarlyWatch Alert Workspace](#)

Authorizations
...
Reports
Support Desk Evaluation
Service Reports and Feedback
<i>Display Security Alerts in SAP EarlyWatch Alert Workspace</i>
My Support Program Report



SAP Support Backbone Connectivity – Required Certificates

Which certificates are required for PSE SAPSUP?

- Any of the certificates in a certificate chain can be used.
- You can call the URLs in the browser to inspect the certificate chain to decide which ones you want to add to the PSE
- Caution: other applications may use additional URLs (see ST03N)
- Recommendation:
DigiCert SHA2 Secure Server CA
DigiCert Global CA G2

URL

<https://notesdownloads.sap.com>

<https://documents.support.sap.com>

<https://apps.support.sap.com/dummy>

<https://softwaredownloads.sap.com>

<https://servicepoint.sap.com>

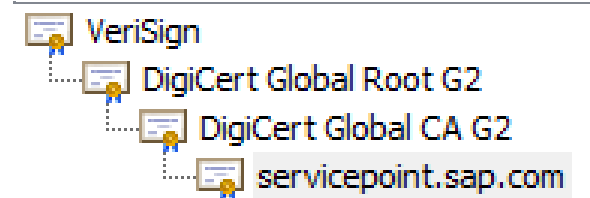
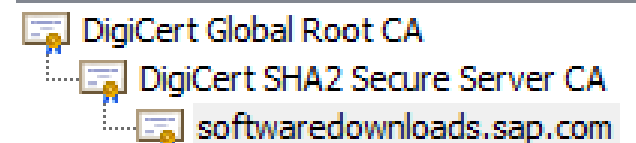
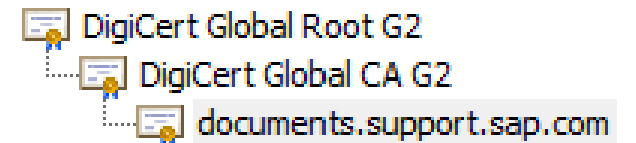
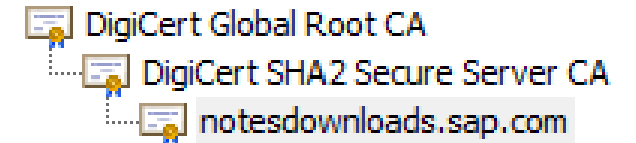
...

Destination

SAP-SUPPORT_NOTE_DOWNLOAD

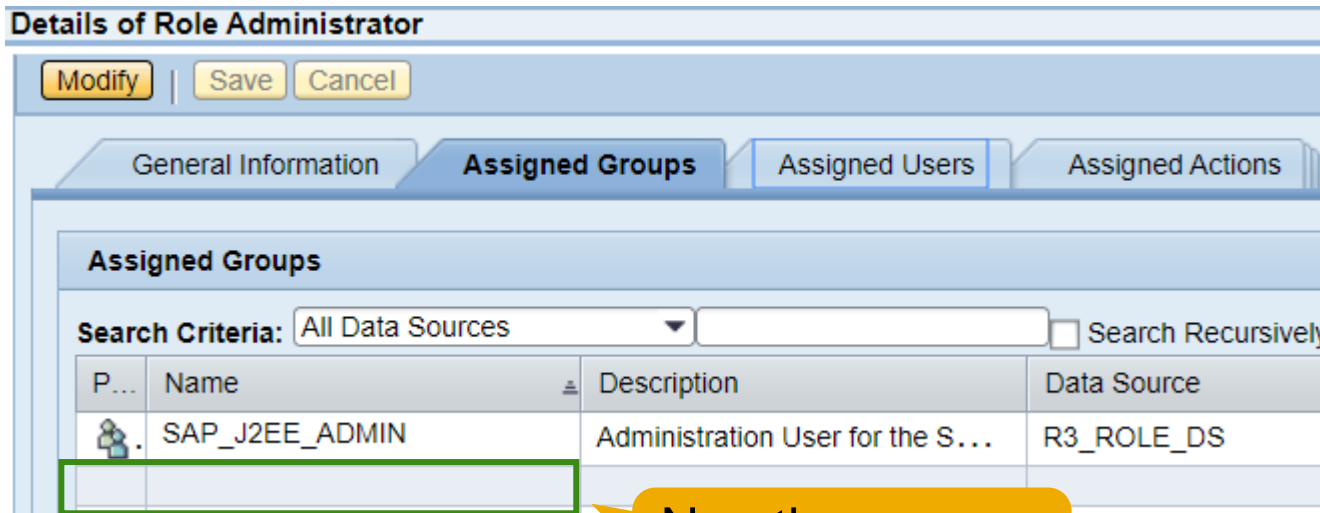
SAP-SUPPORT_PARCELBOX

SAP-SUPPORT_PORTAL



Java: Guest user is not an Administrator No-brainer

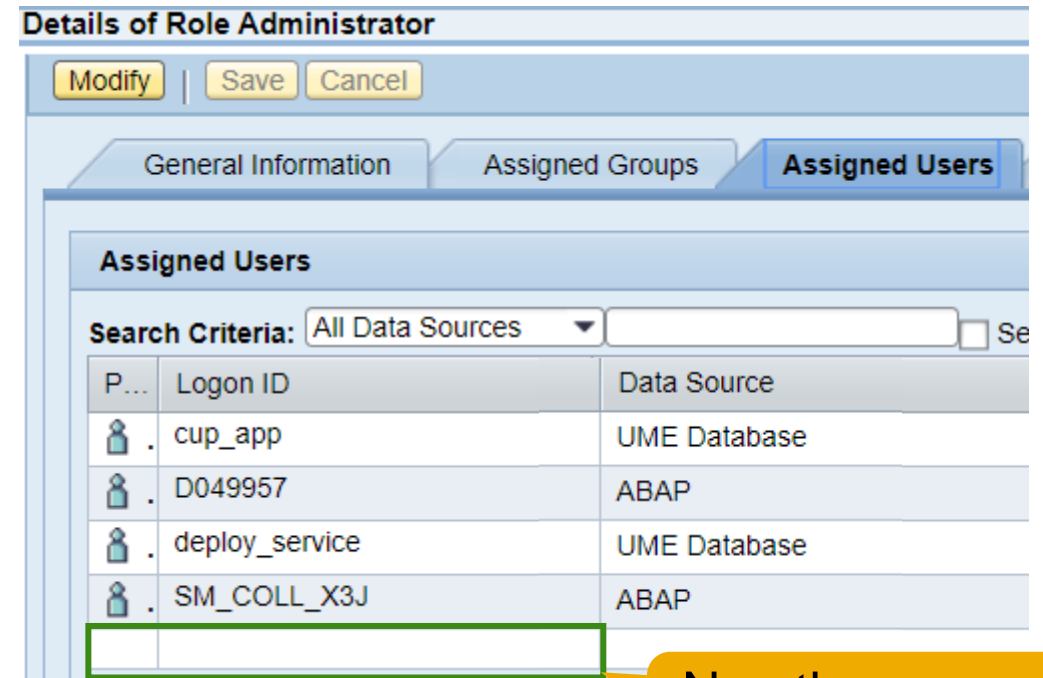
User J2EE_GUEST is not an Administrator. Never.



The screenshot shows the 'Assigned Groups' tab in the SAP Role Administrator. The search criteria is set to 'All Data Sources'. A table lists the assigned groups:

P...	Name	Description	Data Source
	SAP_J2EE_ADMIN	Administration User for the S...	R3_ROLE_DS

No other groups than expected



The screenshot shows the 'Assigned Users' tab in the SAP Role Administrator. The search criteria is set to 'All Data Sources'. A table lists the assigned users:

P...	Logon ID	Data Source
	cup_app	UME Database
	D049957	ABAP
	deploy_service	UME Database
	SM_COLL_X3J	ABAP

No other users than expected

Use proposed roles and users – Example for XI:
UME Roles and Actions (AS Java)

<https://help.sap.com/viewer/bd0c15451669484cbc84a54440340179/7.5.16/en-US/61908817bfae4c36a051d95b5a245364.html>

Java: Guest user is not an Administrator

What about other users having role Administrator?

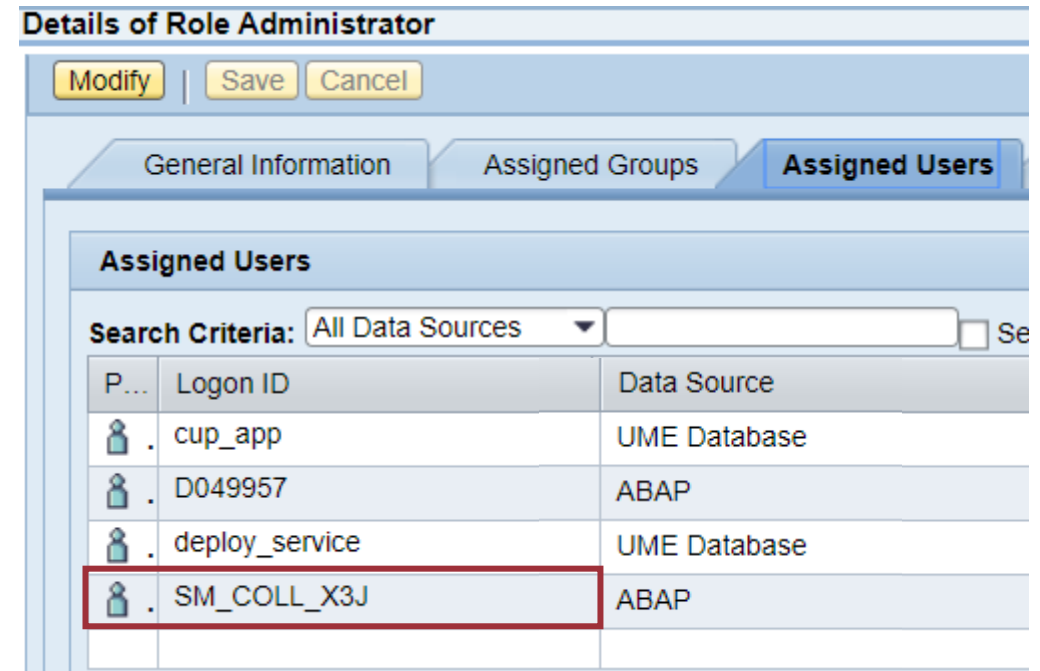
i Note

Administration privileges are only required for the initial set-up of the Introscope BCI Adapter. If you are solely interested in Introscope Metrics, you can remove the Java administration privileges. Be aware that some extractors, especially those which are relevant in the context of RCA, may fail. As a consequence the Configuration Validation functions may not work properly. Additionally, the trace enabling of E2E is not possible.

⚠ Caution

The CCDB CTC Extractor and CCDB DB Extractor need SAP_J2EE_ADMIN rights to run. The role SAP_J2EE_ADMIN allows administration rights for the complete Java Stack, including UME (user administration).

User SM_COLL_<sid> is created for data collection in the managed system.



The screenshot shows the 'Details of Role Administrator' interface. It has tabs for 'General Information', 'Assigned Groups', and 'Assigned Users'. The 'Assigned Users' tab is active, displaying a table of assigned users. The table has columns for 'Logon ID' and 'Data Source'. The user 'SM_COLL_X3J' is highlighted with a red border.

P...	Logon ID	Data Source
	cup_app	UME Database
	D049957	ABAP
	deploy_service	UME Database
	SM_COLL_X3J	ABAP

Technical User SM_COLL_<sid>

<https://help.sap.com/viewer/283e4c6df1d44887a6449094bbfc3775/7.2.09/en-US/85455eb9b44e485eadf22cd9332bd283.html>

Note 2786151 - Denial of service (DOS) in Kernel (RFC), SAP GUI for Windows and for Java

1st version from 10.09.2019 (v12), updated on 24.09.2019 (v13): no change of patches between these publications

Section “Reason and Prerequisites” gives hints for your risk decision: The potential DOS attack is only possible if un-encrypted RFC connection is possible (no SNC) and if RFC trace is raised to trace levels 2 or 3 (default is 1). A successful attack would crash the work process with core dump instead of triggering a normal short dump.

Corrections:

- On servers: RFC library within Kernel**
- On clients: Embedded RFC library of SAP GUI for Windows and SAP GUI for Java**

Both corrections solve the same issue but are not dependent on each other

Note 2828682 - Information Disclosure vulnerability in SAP Landscape Management Enterprise

Implement SAP Landscape Management 3.0 SP12 Patch 2

Perform the manual correction instruction that are described in this SAP Note. Execute at least goal 1 to update configuration parameters

Product Page:

www.sap.com/lama

Community Page:

www.sap.com/lama-community

Documentation:

https://help.sap.com/viewer/product/SAP_LANDSCAPE_MANAGEMENT_ENTERPRISE/3.0.12.0/en-US

What's New:

<https://help.sap.com/viewer/98cc0d7a1caa44bf9618f35fae6eb6cb/3.0.12.0/en-US>



September 2019

Topics September 2019



DSAG - Customer Influence Voting

SAP Support Backbone Connectivity – Download Service

SAP Support Backbone Connectivity – Update of Task List

How to reload Message Server ACL

Notes [2362078](#), [2624688](#), [2778519](#) – Secure System Internal Communication

Note [2813809](#) - SOS: Release dependent changes of the data collector

Note [2838480](#) - SAL | Secure By Default (as of SAP_BASIS 7.54)

Note [2676384](#) - Best practice configuration of the Security Audit Log

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

DSAG - Customer Influence Voting

<https://influence.sap.com/sap/ino/#/campaign/1107/ideas>

Automated password management of technical user accounts

<https://influence.sap.com/sap/ino/#/idea/231149>

The requested new solution implements a central software component, that is capable to change passwords of technical users in SAP systems (ABAP, JAVA, Business Objects) either manually triggered or automatically in a defined schedule (e.g. every n days, every last Saturday of a month) using a given password policy. It includes the password change in the password store (ABAP - SU01, Java - UME , etc.) and in all calling systems (at first SAP systems, but third party systems are in scope in general).

Authentication of RFC interface users via X.509

<https://influence.sap.com/sap/ino/#/idea/233140>

RFC communications can be secured using SNC. However, the established security context is a machine-to-machine one. The individual RFC interface user is not authenticated that way but still by either password or TrustedRFC methods only. While TrustedRFC is not a viable option for all cases, using passwords is error-prone and requires a high maintenance effort when policies demand a frequent password cycling. As a solution, it should be possible to authenticate the individual, called RFC user on the receiving side via X.509 authentication methods.

DSAG - SAP Security Vu...

Automated password management of technical user accounts

Request [231149](#)

Category

 Vote

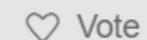
 26

Phase: Pre-Collection
Status: New

[Authentication of RFC interface users via X.509](#)

Request [233140](#)

Category

 Vote

 5

Phase: Pre-Collection
Status: New

DSAG - Customer Influence Voting

<https://influence.sap.com/sap/ino/#/campaign/1107/ideas>

Current status of discussion (of course this may change):

Automated password management of technical user accounts

<https://influence.sap.com/sap/ino/#/idea/231149>

➤ **not planned**

Authentication of RFC interface users via X.509

<https://influence.sap.com/sap/ino/#/idea/233140>

➤ **still in scope, as related to ongoing investigation about "RFC over WebSockets" which would allow authentication and encryption based on TLS with client certificates**

SAP Support Backbone Connectivity – Download Service

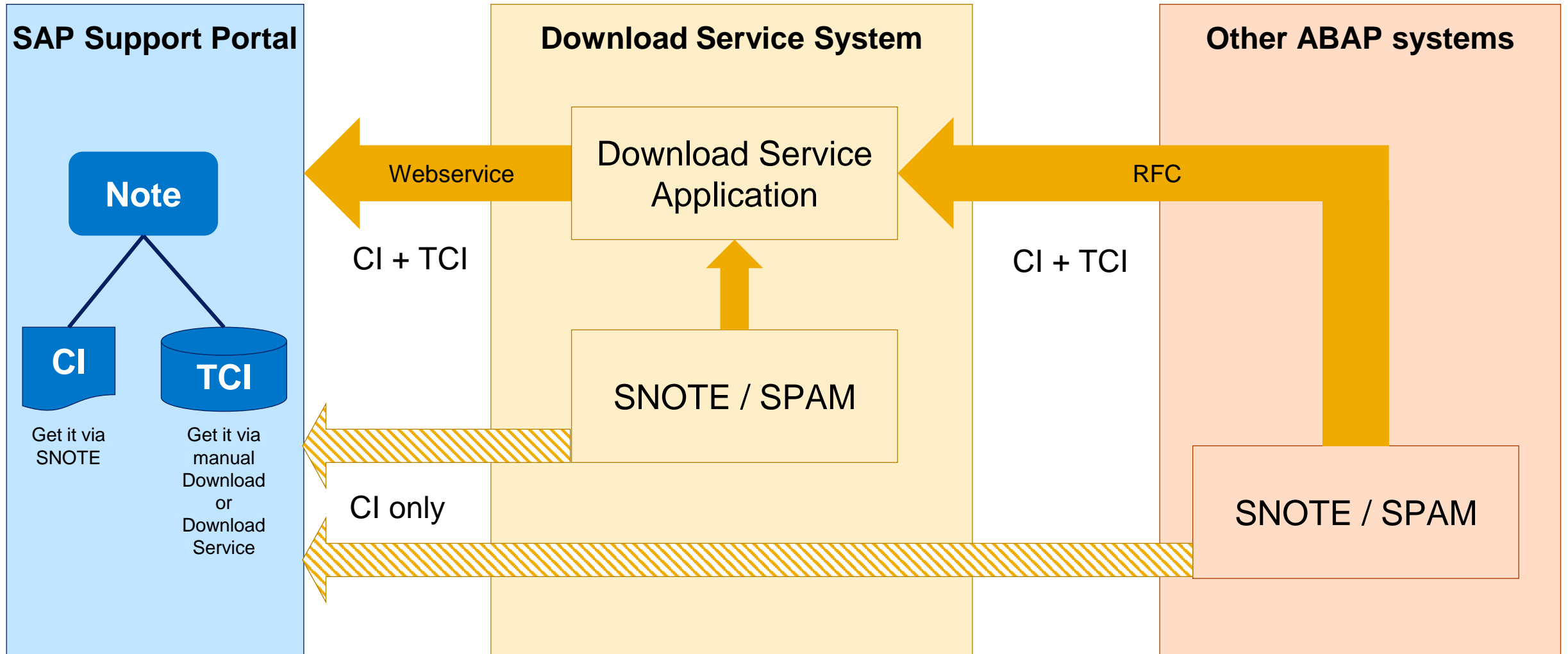
The most important use case for the ABAP Download Service is downloading from SAP file shares connected to the SAP Support Portal and the download of SAP Notes with all their dependencies and relevant SAP Notes transport-based correction instructions (TCIs).

The Download Service is part of SAP Solution Manager 7.2, however, as it's a basis component any ABAP system can be used as download service system. You can connect other systems to the download service system via RFC.

Documentation - SAP NetWeaver Download Service

<https://help.sap.com/viewer/9d6aa238582042678952ab3b4aa5cc71/7.5.15/en-US/7cd5bc1666824b3eba96e8a79dd2055e.html>

SAP Support Backbone Connectivity – Download Service



SAP Support Backbone Connectivity – Download Service

Required correction notes

Note [2456654](#) - Adjustment of SAP NetWeaver Download Service for new download locations

**Note [2503500](#) - Proxy configuration for SAP NetWeaver Download Service
with manual implementation activities**

- Valid for (=minimal possible version) SAP_BASIS 700 SP 32-34, 701 SP 17-19, 702 SP 17-19, 710 SP 19-22, 711 SP 14-17, 730 SP 13-17, 731 SP 14-20, 740 SP 9-17, 750 up to SP 9, 751 up to SP 3, 752 w/o SP

Note [2554853](#) - SAP NetWeaver download service for SAP Notes

Note [2618713](#) - SNOTE: Timeout during download of SAP Notes via SAP Download Service

Note [2681011](#) - Download Service: Missing method implementation in unit test class

- Solved with (= recommended version) SAP_BASIS 700 SP 36, 701 SP 21, 702 SP 21, 710 SP 23, 711 SP 18, 730 SP 19, 731 SP 23, 740 SP 20, 750 SP 11, 751 SP 6, 752 SP 1

SAP Support Backbone Connectivity – Download Service Activation

On a Download Service System:

1. Maintain S-User and execution parameters using transaction SDS_CONFIGURATION
Required roles SAP_BC_SDS_CONF_ADMIN respective SAP_BC_SDS_TASK_USER
2. Install client certificates according note 2620478 using transaction STRUST
3. Adapt proxy settings (if required)
4. Configure HTTPS service (if required)
5. Set up download directory (if required)
6. Set up SL protocol service (if required)

Logon with S-user and password required
Use of Client Certificates is not possible

On other managed systems:

- Create RFC Destination pointing to the Download Service System
Required authorizations for remote user see next slide

On all systems:

- Configure applications like SNOTE or LMDB to use the Download Service locally or remotely

SAP Support Backbone Connectivity – Download Service Activation

Required authorizations for remote user in Download Service System

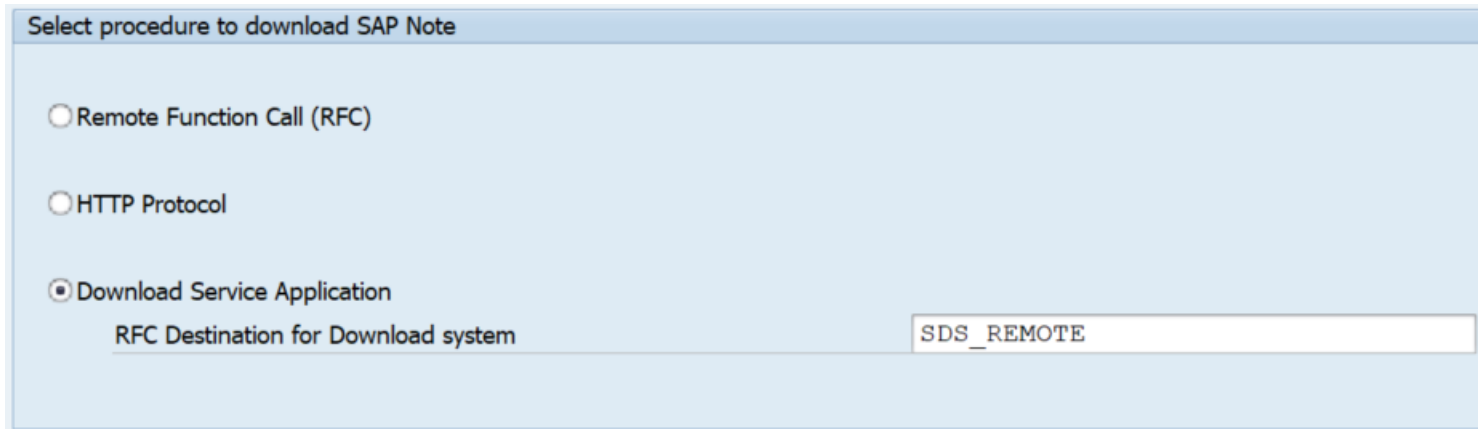
inspired by role SAP_BC_SDS_TASK_USER / authorization trace using transaction STAUTHTRACE

Authorization object	Field 1	Value 1	Field 2	Value 2	Field 3	Value 3
S_RFC	RFC_TYPE	FUGR	RFC_NAME	SDS_APPLICATION STC_TM_API STC_TM_FUNCTIONS	ACTVT	16
S_RFC	RFC_TYPE	FUNC	RFC_NAME	FUNCTION_EXISTS	ACTVT	16
S_BTCH_ADM	BTCADMIN	Y				
S_BTCH_JOB	JOBACTION	RELE	JOBGROUP	' '		
S_CTS_ADMI	CTS_ADMFCT	EPS1				
S_DATASET	PROGRAM	CL_SDS_*	ACTVT	06, 33, 34	FILENAME	/usr/sap/trans/EPS/in/*
S_PROGNAM	P_ACTION	BTCSUBMIT	P_PROGNAM	STC_TM_PROCESSOR		
S_SDS_MGR	ACTVT	03, 16, 23	SDS_FUNCT	DOWNLOAD		
S_TC	ACTVT	03, 16	STC_SCN	SAP_BASIS_DOWNLOAD_SERVICE		

SAP Support Backbone Connectivity – Download Service Configuration for SNOTE

Use report RCWB_SNOTE_DWNLD_PROC_CONFIG to configure the RFC Destination:

- In the download service system, use NONE
- In the managed systems, use the RFC connection pointing to the download service system



Select procedure to download SAP Note

Remote Function Call (RFC)

HTTP Protocol

Download Service Application

RFC Destination for Download system: SDS_REMOTE

If not available yet, you get this report via note [2576306](#) (complete via TCI) respective note [2508268](#) (with manual implementation steps)

SAP Support Backbone Connectivity – Download Service Configuration for LMDB

Note [2756210](#) - Configuration of SAP Netweaver Download Service for LMDB Content import automation

SAP Support Backbone Connectivity – Update of Task List

SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

Note 2827658 - Automated Configuration of new Support Backbone Communication - Update 02 (old note 2793641)

- Corrected validity for 7.40
- Added check for DigiCert High Assurance EV Root CA certificate
- Updated task: 'New OSS: Create HTTPS Connections for SAP Services (SM59)': in case a router string is used and the https proxy is active the host will be added to the http proxy filter list
- Updated task: 'Test HTTPS Connections for SAP Services (SM59)': added check for https proxy filter setting
- Added new task 'New OSS: Add hosts to filter in all clients with http proxy enabled (SM59)': loops over all clients and adjusts the https proxy filter in case the destination uses a router string and https proxy is active
- Update task 'Old OSS: Configuration of SAPOSS Connection (OSS1): Create connection SAPOSS': task set to optional

How to reload Message Server ACL

- a) **Transaction SMMS → Goto → Security Settings → Access Control → Reload**
(Line length is limited in SMMS, enter multiple lines instead of long lines, see note [2383292](#))
- b) **Own programs which calls ABAP function MS_LOAD_ACL_INFO**
- c) **OS Command using msmon (use command 'HELP' to find more commands)**
`echo 'RELOAD_ACL_INFO' | msmon -mshost <mshost> -msserv <internal-MS-port> -expert -cmdfile -`
- d) **Same command using report RSBDCOS0**
Example using profile parameter variables:
`echo 'RELOAD_ACL_INFO' | $(DIR_EXECUTABLE)$ (DIR_SEP)msmon -mshost $(SAPMSHOST) -msserv $(rdisp/msserv_internal) -expert -cmdfile -`

How to reload Message Server ACL

If secure communication is active (profile parameter `system/secure_communication = ON`) then

- Either call the reload command via the external port

or

- call `msmon as <sidadm>` to get access to the secure store
- add the option `-ssl secure_store` to request secure communication and
- use option `pf=<profile>` instead of `-mshost <mshost> -msserv <internal-MS-port>` to provide the reference to the crypto library
- ensure that environment variable `SECUDIR` is set

```
SECUDIR=/usr/sap/<sysid>/<instance>/sec
```

```
echo 'RELOAD_ACL_INFO' | msmon pf=<profile> -ssl secure_store -expert -cmdfile -
```

Notes [2362078](#), [2624688](#), [2778519](#) – Secure System Internal Communication

SAP recommends to activate Secure System Internal Communication by setting profile parameter `system/secure_communication = ON` in **default profile DEFAULT.PFL** for pure ABAP based systems according to note [2040644](#).

Minimum requirement: SAP_BASIS 7.40 SP 8 with Kernel release 742 or higher

Recommended minimal versions according to additional notes [2362078](#), [2624688](#), [2778519](#):

- SAP_BASIS 7.40 SP 11
- Kernel release 749 with patch ≥ 710
- Kernel release 753 with patch ≥ 416
- Kernel release 773 with patch ≥ 121
- Kernel release > 773

Note 2813809 - SOS: Release dependent changes of the data collector

The data collectors within the managed systems of the following checks had to be revised due to release dependent changes:

- Users who are authorized to Call Function Modules for User Admin (0019)
- Users who are authorized to Disable Authorization Checks Within Transactions (0102)
- Users who are authorized to Maintain Trusted Systems (0240)
- Users who are authorized to Maintain Trusting Systems (0268)
- Users who are authorized to Activate ICF Services (0655)
- Users who are authorized to Delete Payroll Results (0951)

This issue is corrected with release 01U* (Support Package 0) of the ST-A/PI application service tools.

Note [2838480](#) - SAL | Secure By Default (as of SAP_BASIS 7.54)

Note [2676384](#) - Best practice configuration of the Security Audit Log

Profile Parameters respective Kernel Parameters:

- `rsau/enable = 1`
- `rsau/user_selection = 1`
- `rsau/selection_slots = 10` (or higher)
- `rsau/integrity = 1` (if available according to note [2033317](#))
- **Target: Database** (if available)

Filters:

- **All clients *, user SAP#*:** Record all events for user SAP*
The character # serves to mask * as non-wildcard.
- **All clients *, user <your emergency user IDs>*:** Record all events
- **Client 066, all users *:** Record all events
- **All clients *, all users *:** Record all events except events which might produce high volume **AUW, AU5, AUK, CUV, DUR, and EUE**. Deactivate these events via "Detailed Display"



August 2019

Topics August 2019



Note [2786035](#) - Code Injection vulnerabilities in SAP Commerce Cloud

Note [2798743](#) - Missing Authorization check in ABAP Debugger

Note [668256](#) - Using HTTP/external debugging

Note [668252](#) - Authorization check for HTTP/external debugging

Note [2286679](#) - Clickjacking Framing Protection in JAVA

SAP Support Backbone Connectivity – Check usage of destinations

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Note 2786035 - Code Injection vulnerabilities in SAP Commerce Cloud

Note 2697573 - Cross-Site Scripting (XSS) vulnerability in SAP Commerce / SAP Hybris
Solution:

SAP Hybris Commerce 6.7 or later

Note 2786035 - Code Injection vulnerabilities in SAP Commerce Cloud

Solution (software downloads for SAP Hybris Commerce):

SAP Hybris Commerce 6.3.0.31 Patch Release

SAP Hybris Commerce 6.4.0.25 Patch Release

SAP Hybris Commerce 6.5.0.22 Patch Release

SAP Hybris Commerce 6.6.0.20 Patch Release

SAP Hybris Commerce 6.7.0.18 Patch Release

SAP Commerce Cloud Patch Release 1808.13

SAP Commerce Cloud Patch Release 1811.9

SAP Commerce Cloud Patch Release 1905.1

Do not use these versions anymore
because of note 2697573

These links show
the patch info

Workaround: Deinstall Virtualjdbc and Mediaconversion extensions if not needed

Note 2798743 - Missing Authorization check in ABAP Debugger

Why is the priority only “high”?

- You need authorizations for **debug-display** in any case (S_DEVELOP with OBJTYPE=DEBUG and ACTVT=03) which should be considered as critical anyway
- The correction is a about a **special case** while debugging an **update task**

Note 668256 - Using HTTP/external debugging

Note 668252 - Authorization check for HTTP/external debugging

Debugging of RFC sessions is controlled using the dynamic profile parameter `rfc/ext_debugging`

0: RFC external debugging is not permitted

1: RFC external debugging is only active for calls from external programs

2: RFC external debugging is only active for calls from ABAP systems

3: RFC external debugging is permitted [default]

Mitigation:

- Both users require authorizations for debug-display
- Authorization as chosen by parameter `abap/authority_to_catch_for_debugging` required, e.g. for `S_DEVELOP` with `OBJTYPE=DEBUG` and `ACTVT=90` is required

➤ **Decide if you want to allow external debugging in productive systems**

Note 2286679 - Clickjacking Framing Protection in JAVA

How to activate Clickjacking Protection

Enabling the Clickjacking Protection Service on Java systems

1. Log on to SAP NetWeaver Administrator at `http://<host>:<port>/nwa`.
2. Navigate to “Configuration → Infrastructure → Java System Properties”
3. Choose the Applications tab.
4. Search for an application named `tc~lm~itsam~service~clickjacking` and select the row.
5. Under the Properties tab, select the `ClickjackingProtectionService` property and change its value from `false` to `true`.
6. Save the configuration and restart AS Java.

The screenshot shows the SAP NetWeaver Administrator interface. The 'Applications' tab is selected. A table lists applications, with the row for 'tc~lm~itsam~service~clickjacking' highlighted. Below this, the 'Extended Details' section is open to the 'Properties' tab. A table shows the 'ClickjackingProtectionService' property, which is currently set to 'false'. The 'Changeable' checkbox is checked, and the 'Custom Calculated' value is 'true'.

Name	Default	Calculated Value	Changeable	Custom Calculated
ClickjackingProtectionService	false		<input checked="" type="checkbox"/>	true

Note 2286679 - Clickjacking Framing Protection in JAVA

How to check if Clickjacking Protection is active

The new version of the note describes how to check if Clickjacking Protection is active on a Java server:

URL: `http[s]://<host>:<port>/sap.com~tc~lm~itsam~servlet~clickjacking/check`

Result: `{"version" : "1.0", "active" : false, "status" : "OFF"}`

`{"version" : "1.0", "active" : true, "origin" : "null", "framing" : false}`

Several UI Framework use this feature (see Online Help):

- Note 2169860 - Web Dynpro JAVA (WDJ)
- Note 2169722 - Enterprise Portal (iViews)
- Note 2290783 - Java Server Pages (JSP)

Note 2286679 - Clickjacking Framing Protection in JAVA

How to check if Clickjacking Protection is active

Application Configuration Validation does not know about this setting:

Transaction CCDB → Cross Selection → Search for values/patterns:

However,

Name = `tc~lm~itsam~service~clickjacking`

or

Element Pattern = `ClickjackingProtectionService`
does not show results.

Update April 2021:

In the meantime you will find
Configuration Store "Clickjacking"
showing this Configuration Item

SAP Support Backbone Connectivity

Check usage of RFC Destinations



Workload in System FA7

Expert mode

Workload

- Idcifa7_FA7_00
- Total
 - Day
 - Week
 - Month
 - This month
 - 07/2019
 - 06/2019
 - 05/2019
 - 04/2019

Analysis Views

- Workload Overview
- Transaction Profile
- Application Statistics
- Time Profile
- Ranking Lists
- Memory Use Statistics
- RFC Profiles
 - RFC Client Profile
 - RFC Server Profile
 - RFC Client Destination Profile
 - RFC Server Destination Profile
- User and Settlement Statistics
- Frontend Statistics
- Spool Statistics
- Response Time Distribution
- Table Access Statistics

Instance: TOTAL
Period: 07/2019
Task type: NONE

First record: 01.07.2019
Last record: 31.07.2019
Time period: 31 Day(s)

Function Module Transactions User Remote Destinations Remote Server Local Server

Task type

RFC Client Statistics:Remote Destinations

RFC Destination	# Calls	T Execution Time	Ø Time/Execution	T Call Time	Ø Time/RFC	Sent Data (Bytes)
SAPCMP	99	21	214,1	23	227,7	171.469
SAPOSS	194	12	62,1	84	434,8	111.055
SAP-OSS	113	0	0,0	15	128,7	43.530
SAPNET_RTCC	51	0	0,0	0	0,0	22.899
SAP-OSS-LIST-001	51	0	0,0	0	0,0	22.899

Transaction ST03N shows the usage of RFC Destinations



Ensure that none of these destinations are still in use

Filter for destinations:

- SAPCMP
- SAPOSS
- SAP-OSS
- SAPNET_RTCC
- SAP-OSS-LIST-001

SAP Support Backbone Connectivity

Check usage of RFC Destinations

The details might give you hints why such RFC destinations are still in use:

Workload in System FA7

Instance: TOTAL | Period: 07/2019 | Task type: NONE | First record: 01.07.2019 | Last record: 31.07.2019 | Time period: 31 Day(s)

Function Module: Transactions | User: Remote Destinations | Remote Server | Local Server

Task type: RFC Client Statistics: Remote Destinations

RFC Client Statistics: Remote Destinations

Calls to Target SAPOSS

Report or Transaction name	Job Name	User	RFC User	Local Server	Remote Server	Name of RFC Program
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6928_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6929_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6932_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6926_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6927_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6931_I71_01	CL_DBA_NOTE_DOWNLOAD=====
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00	pwdf6933_I71_01	CL_DBA_NOTE_DOWNLOAD=====
SAPMHTTP		HOUSH	RFC_OCS	ldcifa7_FA7_00	pwdf6930_I71_01	SAPLCRFC
CL_GPA_AUTO_DEMO=====CP		SM_FA7	RFC_OCS	ldcifa7_FA7_00	pwdf6933_I71_01	/SDF/SAPLCOMUSER_UPDATE
RSDBA_DBH_SETUP_UPDATE_CHECK		SHARIFY	RFC_OCS	ldcifa7_FA7_00		CL_DBA_NOTE_DOWNLOAD=====

The first entries refer to note download → Use transaction `CWB_SNOTE_DWNLD_PROC` = report `RCWB_SNOTE_DWNLD_PROC_CONFIG` to adjust the settings of `SNOTE`

SAP Support Backbone Connectivity

Check usage of Webservice

Workload in System FA7

← → ↺ Full Screen On/Off Save View

Expert mode

Workload

- Idcifa7_FA7_00
- Total
 - Day
 - Week
 - Month
 - This month
 - 07/2019
 - 06/2019
 - 05/2019
 - 04/2019

- Analysis Views
- Workload Overview
- Transaction Profile
- Application Statistics
- Time Profile
- Ranking Lists
- Memory Use Statistics
- RFC Profiles
- User and Settlement Statistics
- Frontend Statistics
- Spool Statistics
- Response Time Distribution
- Table Access Statistics
- Load from External Systems
- Web Statistics
 - WEB Client Statistics
 - WEB Client Destination Statistics

Instance: TOTAL
Period: 07/2019
Task type: NONE

First record: 01.07.2019
Last record: 31.07.2019
Time period: 31 Day(s)

Host Transactions User URL

Task type

WEB Client Statistics: Host

Protocol	Host Name	Port	Calls	T.CallTime	Executi...	Total Sent
HTTPS	apps.support.sap.com	443	29	1	0	5.334
HTTPS	documents.support.sap.com	443	588	35	0	79.579.634

Transaction ST03N shows the usage of Webservices

→

Check that the new webservices are used

Filter for host:
*support.sap.com



July 2019

Topics July 2019



Note [2808158](#) - OS Command Injection vulnerability in SAP Diagnostics Agent

Note [2812152](#) - Update 1 to Security Note 2643447

Note [2774742](#) - Cross-Site Scripting (XSS) vulnerability in ABAP Server and ABAP Platform

Note [2738791](#) - Information disclosure in SAP NetWeaver AS Java (Startup Framework)

Security Audit Log as of 7.50

The intermediate Support Backbone Update Guide

Recordings:
[DSAG \(German\)](#)
ASUG
[SAP Learning HUB](#)

Note 2808158 - OS Command Injection vulnerability in SAP Diagnostics Agent

Updated by note 2839864

The SAP Diagnostics Agents get patched by a special procedure on the SolMan describe here:

Note 2686969 - Upgrading the LM-SERVICE Patch Level

Do you have additional manual work to do?

“Since the number of allowed control characters has been reduced, it should be checked if all used commands still work, especially those manually added to the commands.xml.”

→ If you do not know what this is about, you most likely do not need to do anything, however, this may be an opportunity to validate existing set of whitelisted OS commands which can be executed via the Diagnostics Agent.

Note 2808158 - OS Command Injection vulnerability in SAP Diagnostics Agent

Updated by note 2839864

How-to execute OS commands?

Root Cause Analysis Workcenter
→ OS Command Console

Which whitelisted commands are available?

SAP Solution Manager Administration Workcenter
→ Agents Administration
→ Agent Admin
→ Choose tab „Applications Configuration“
→ `com.sap.smd.agent.application.remoteos`
→ Application Resources
→ `commands.xml`

The screenshot shows the 'OS Command Console' interface. It is divided into several sections:

- Context:** Host: System:
- Prompt:** Group: Command: Parameters: Option: Interval:
- Result:** Hello world

Note 2808158 - OS Command Injection vulnerability in SAP Diagnostics Agent

Updated by note 2839864

The screenshot shows the SAP Agent Administration interface. The 'Application Configuration' tab is active, displaying the configuration for the 'commands.xml' resource. The resource details include Name: commands.xml, Size (Bytes): 118722, and Date: Fri Jul 05 16:05:17 CEST 2019. A browser window is open, displaying the XML content of the file. The XML content includes a summary of SAP applications and a list of OS commands. The following XML snippet is highlighted:

```
<?xml version="1.0" encoding="UTF-8"?>
- <CmdList xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <!-- Summary: 1. OS 2. TREX (Trex commands have been removed, please use transaction TREXADMIN in Solution Manager) 3. SAP MDM 4. SAP PPM BY IDS 5. FOCUS ALM 6. SAP BCM SOFTWARE 7. SAP BPC FOR MICROSOFT/NETWEAVER 8. SAP PRICE & MARGIN MANAGEMENT 9. SAP POS 10. SAP ARC&DOC ACCESS BY OT 11. BOBJ ENTERPRISE XI 12. VERTEX 13. WEBSHERE APPSERVER 14. SAP MFG EXECUTION 15. SBOP DATA SERVICES 4.0 H. Help -->
  <!-- Available variables are: 1. %TS_HOME%: Installed Technical System installation path 2. %SCV_HOME%: Software Component Version installation path 3. %INST_HOME%: Instance path 4. %landscape: <landscape_level>: <landscape_attribute>%: Landscape attribute, e.g. %landscape:NODE:name%. Available Landscape levels are: TS (Technical System), ITS (Installed Technical System), INST (Instance), NODE (Node), SCV (Software Component Version), 5. %template: <template_key>%: Template parameter, e.g. %template:${InstallPath}% 6. %JAVA_HOME%: Java installation path 7. %SMD_AGENT_HOME%: SMD Agent installation path 8. %SMD_AGENT_VERSION%: SMD Agent version -->
  <!-- Tips: 1. Do not log secure variable when the command is executed: prefix the variable with "secure:" e.g. %secure:TS_HOME%, %secure:template:${InstallPath}%, etc. -->
  <!-- 1. OS -->
  - <CmdGroup cv_ppms_id="*" name="Network">
    - <Cmd name="NetStat" desc="Displays active TCP connections." key="os.net_stat">
      - <OsCmd runtime="300" param="true" path="" exec="netstat" ostype="WINDOWS">
        <Exclude param="^[0-9]*$"/>
        <Help ref="help.os.net_stat"/>
      </OsCmd>
      - <OsCmd runtime="300" param="true" path="" exec="netstat" ostype="UNIX">
        <Exclude param="^-w$"/>
        <Help ref="help.os.net_stat"/>
      </OsCmd>
    </CmdGroup>
  </CmdList>
```

Note 2812152 - Update 1 to Security Note 2643447

Side effect solving note, which is required if you install respective have installed note 2643447 via SNOTE

Note	Case 1	Case 2	Case 3	Case 4	Case 5
<u>2643447</u>	Cannot be implemented	Can be implemented	Can be implemented	Completely implemented	Completely implemented
<u>2812152</u>	Cannot be implemented	Can be implemented	Cannot be implemented	Can be implemented	Cannot be implemented
Conclusion	Nothing to do	Implement note <u>2812152</u> which loads note <u>2643447</u> to solve security vulnerability	Implement note <u>2643447</u> to solve security vulnerability	Implement note <u>2812152</u> to avoid syntax error	Nothing to do

Note 2774742 - Cross-Site Scripting (XSS) vulnerability in ABAP Server and ABAP Platform

The note implements secure default configuration in **SAP_BASIS 7.51, 7.52, 7.53** but keeps insecure default in **SAP_BASIS 7.00, 7.01, 7.10, 7.11, 7.20, 7.30, 7.31, 7.40, 7.50**.

If you are using SAP Content Management (see SICF path `/sap/bc/contentserver`) and **want to activate secure configuration in old releases** you need to execute both manual activities:

1. The manual pre-implementation about modifying value range of DDIC domain `SDOK_PFNAM` enables you to maintain the setting (transportable). You can install a Support Package instead.
2. The manual post-implementation about maintaining table `SDOKPROF` using `SE16` describes how to enter either insecure value **inline** (a file is displayed directly in the browser) or secure value **attachment** (the browser shows a download popup).
As there is no automatic transport, use `SE16` to add the entry on a workbench transport manually. This step is required even if you install a Support Package.

Note 2738791 - Information disclosure in SAP NetWeaver AS Java (Startup Framework)

Java systems run with parts of the Kernel.

The note refers to „SAP java startup / jstart“ which is part of the disp+work package.

The correction described by the note is part of e.g. Kernel 7.53 patch 410.

You cannot get a whole Kernel with at least this patch level (currently you find patch 401 for package SAPEXE .SAR), however, you can use the disp+work package (dw .sar currently show patch 425).

Depending on current setting of parameter `jstart/TRACE` you might consider to delete old trace files `/usr/sap/DAA/SMD*/work/dev_jstart*`, too.

SAP Software Downloads Knowledge Base Enter search term Frank Bud

SAP KERNEL 7.53 64-BIT UNICODE (SUPPORT PACKAGES AND PATCHES)

DOWNLOADS INFO ECCN INFO

Multispanning: Packages that are larger than 4 GB will be packed in an archive, which is split into 4 GB parts. All archives need to be downloaded and unpacked. For more details on multispanning and how to extract the multi-part .exe archive on UNIX See SAP Note 886535.

Items Available to Download (40) LINUX ON X86_64 64BIT #DATABASE INDEPEND...

Selected Items (0)

<input type="checkbox"/>	Name	Patch Level	File Type	Change Date
<input type="checkbox"/>	dw_425-80002573.sar disp+work package	425	SAR	11.07.2019
File Size: 193494 KB Release Date: 11.07.2019				
<input type="checkbox"/>	SAPEXE_401-80002573.SAR Kernel Part I (753)	401	SAR	18.06.2019
File Size: 326066 KB Release Date: 18.06.2019				

Security Audit Log as of 7.50

Transaction SM19 vs. RSAU_CONFIG

Note [2191612](#) - FAQ | Use of Security Audit Log as of SAP NetWeaver 7.50

1. Can transactions SM18, SM19, and SM20 still be used in parallel with RSAU_CONFIG, RSAU_READ_LOG, and RSAU_ADMIN?

...**we recommend against mixed usage**, since the settings for the new functions are not detectable in the old environment and - particularly in SM18 and SM19 - are ignored or accidentally overwritten.

Tip: Use transaction SM01_CUS in 000 clients to lock the "old" applications once you have switched to the current concept.

Security Audit Log as of 7.50

Important corrections

Configuration:

Note 2663455 - RSAU_CONFIG | Corrections and functional enhancements

(correction for SNOTE respective SP for SAP_BASIS 7.50 SP 14, 7.51 SP 8, 7.52 SP 4, 7.53 SP 1)

Note 2743809 - RSAU_CONFIG | Optimization of screen sequence

(correction for SNOTE respective SP for SAP_BASIS 7.50 SP 15, 7.51 SP 8, 7.52 SP 4, 7.53 SP 2)

Reporting:

Note 2682603 - RSAU_INFO_SYAG | Incomplete display of active events

(correction for SNOTE respective SP for SAP_BASIS 7.50 SP 14, 7.51 SP 8, 7.52 SP 3, 7.53 SP 1)

Note 2682072 - RSAU_READ_LOG - error in selection with filter

(correction for SNOTE respective SP for SAP_BASIS 7.50 SP 14, 7.51 SP 7, 7.52 SP 3, 7.53 SP 1)

The intermediate Support Backbone Update Guide Overview

Connectivity to SAP's Support Backbone

<https://support.sap.com/backbone-update>

Support Backbone Update Guide ([html](#) / [pdf](#))

Digitally Signed SAP Notes

<https://support.sap.com/en/my-support/knowledge-base/note-assistant.html>

Note [2537133](#) for FAQs on Digitally Signed SAP Notes

Webinar [replay](#)

Click [here](#) to view the presentation

[Cheat Sheet](#) for enabling SNOTE for Digitally Signed SAP Notes and for TCI

and (among others)

Note [2174416](#) - Creation and activation of users in the Technical Communication User app

Note [2740667](#) - RFC connection SAPOSS to SAP Service & Support backbone

Note [2738426](#) - Automated Configuration of new Support Backbone Communication

The intermediate Support Backbone Update Guide

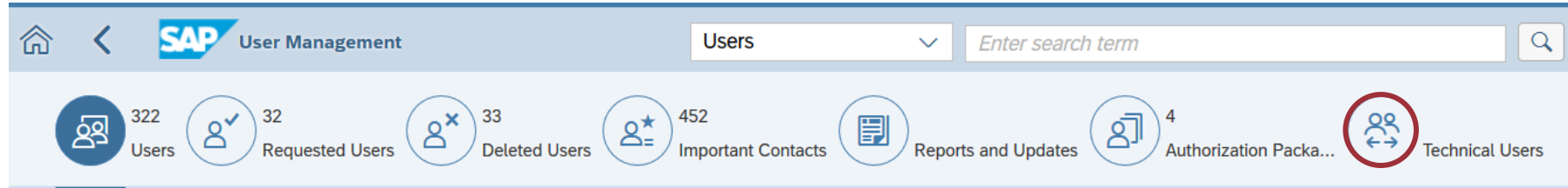
Enable SNOTE for Digitally Signed Notes and for https communication

Concerning the Note Assistant, transaction SNOTE, several steps are required:

1. Get updated software (main part from September 2017) plus some smaller updates (notes [2603877](#), [2632679](#), [2721941](#), [2813264](#), ...)
2. Request technical S-users via [User for Support Hub Communication application](#) and wait for 1 day
(preferred: 1 user per system; acceptable: 1 user per system line DEV-TST-PRD; not recommended: 1 user per installation or per customer number)
3. Adjust destinations
 - a) Up to release 7.31, replace generic user OSS RFC with specific technical S-user in RFC Destinations SAPOSS, etc. as described in note [2740667](#)
 - b) As of release 7.40, adjust RFC Destinations SAPOSS, etc. and create http destinations SAP-SUPPORT_PORTAL, SAP-SUPPORT_PARCELBOX, SAP-SUPPORT_NOTE_DOWNLOAD as described in note [2827658](#) (which replace old notes [2793641](#) and [2738426](#))

The intermediate Support Backbone Update Guide

Request Technical Communication User



Request Technical Communication User on SAP Support Portal

Proposed naming: <installation number>_<system id>

<https://launchpad.support.sap.com/#/user/management>

→ <https://launchpad.support.sap.com/#/techuser>

Request User

***Customer:**

***Description:**

***Email:**

***Language:**

Department:

Submit Cancel

User was successfully requested

The new technical user account will be created within one business day

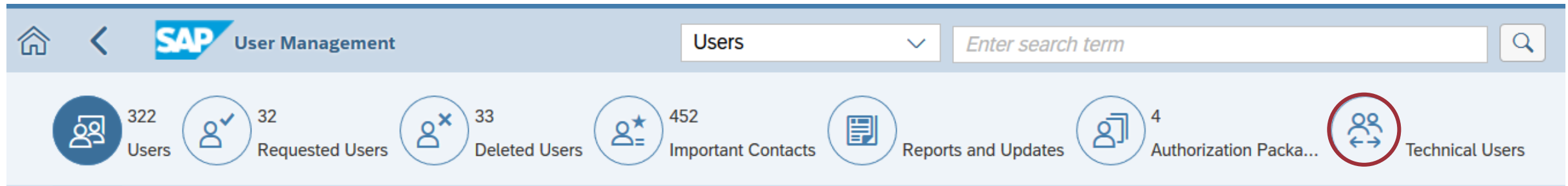
OK

The intermediate Support Backbone Update Guide

Bonus: Note [2805811](#) - Enable client certificate authentication for tech. users

SAP Support Portal User Management - Technical Communication User Application

The Technical Communication User application allows you to administer user IDs used in system-to system connections between your company's landscape (most commonly in your SAP Solution Manager) and the SAP Support backbone. This application has now been enhanced and integrated into the User Management application.



Like before, you can request new users and activate them, delete existing ones, or change their passwords. In addition, if you want to exchange data with the SAP Support infrastructure using client certificate authentication, **you can now generate SAP Passports for technical communication users (optional)**. This way you avoid the need to manage passwords.

The intermediate Support Backbone Update Guide (Partly) Automated Configuration of new Support Backbone Communication

Note [2738426](#) - Automated Configuration of new Support Backbone Communication

Version 13 from 08.07.2019

For new implementation and update of existing task list:

Please jump directly to “SAP NOTE 2793641 - Automated Configuration of new Support Backbone Communication - Update 01” and follow instructions to implement SAP Note/TCL.

SAP NOTE [2827658](#) - Automated Configuration of new Support Backbone Communication - Update 02

Note [2793641](#) - Automated Configuration of new Support Backbone Communication - Update 01

Version 3 from 08.07.2019

- 1. Implement the TCL of note [2793641](#) with transaction SNOTE**
- 2. Install certificates into transaction STRUST**
- 3. Execute task list 'New OSS Communication' via transaction STC01 with adjusted settings**
- 4. Check destinations using report RSRFCCHK**
- 5. Switch SNOTE to using https instead of RFC**
- 6. Verify that you can download digitally signed notes via https**

The intermediate Support Backbone Update Guide

Note 2793641 – (Partly) Automated Configuration

SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

Transaction STC01 for task list SAP_BASIS_CONFIG_OSS_COMM

Maintain Task List Run SAP_BASIS_CONFIG_OSS_COMM_20190711103509931

Task List: SAP_BASIS_CONFIG_OSS_COMM New OSS Connectivity

Task List Run: SAP_BASIS_CONFIG_OSS_COMM_20190711103509931

Ex.	C...	St.	Log	Autom.	Phase	Comp.	Task Description	H...	Pa...	Parameter
<input checked="" type="checkbox"/>					Verification	SECURITY	New OSS: Check CommonCryptoLib <SAPCRYPTOLIB> Version >= 8.4.48			
<input checked="" type="checkbox"/>					Verification	SECURITY	New OSS: Check TLS prot. version >= TLSv1.1 w.BEST-OPTION (RZ11)			
<input checked="" type="checkbox"/>					Verification	STRUST	New OSS: Check Certificates for SSL Client (STRUST)			
<input checked="" type="checkbox"/>					Configuration	HTTPS	New OSS: Create HTTPS Connections for SAP Services (SM59)			
<input checked="" type="checkbox"/>					Validation	HTTPS	New OSS: Test HTTPS Connections for SAP Services (SM59)			
<input checked="" type="checkbox"/>					Configuration	OSS1	Old OSS: Configuration of SAPOSS Connection (OSS1)			
<input checked="" type="checkbox"/>					Configuration	ICM	New OSS: Restart ICM (SMICM)			

Preparation: Manual activity to find and download the required certificates which you then upload into transaction STRUST

Restart ICM, too

This step is useless, as you do not want to use old RFC destinations anyway (and you would have to change the user afterwards as well).

Enter user credentials of Technical Communication User, scroll down and activate all three checkboxes „Overwrite existing destination“

The intermediate Support Backbone Update Guide

Note [2793641](#) – (Partly) Automated Configuration

SAP NOTE [2827658](#) - Automated Configuration of new Support Backbone Communication - Update 02

Transaction STRUST for PSE „SSL-Client (Standard)“

You can get these certificates via note [2620478](#) - Download Service: Trust anchor certificates required for software downloads

Trust Manager: Display

System PSE
SNC SAPCryptolib
SSL server Standard
SSL client SSL Client (Anonym
SSL client BCM
SSL client SSL Client (Standar
mo-c81a86caf_X3A_01
SSL client PAYPAL
SSL client SAPGGB
SSL client WSSE Web Service
WS Security Standard
WS Security Other System En
WS Security WS Security Keys
SMIME Standard

SSL client SSL Client (Standar

Own Certificate

Subject: CN=X3A SSLC DFAULT, OU=I0020230702, OU=SAP Web AS, O=SAP Trust Community, C=...
(Self-Signed)

Certificate List

Subject
CN=DigiCert Global Root G2, OU=www.digicert.com, O=DigiCert Inc, C=US
CN=DigiCert Global Root CA, OU=www.digicert.com, O=DigiCert Inc, C=US
CN=VeriSign Class 3 Public Primary Certification Authority - G5, OU="(c) 2006 VeriSign
CN=mo-c81a86caf.mo.sap.corp, OU=IINITIAL, OU=SAP Web AS, O=SAP, C=DE

The intermediate Support Backbone Update Guide

Note 2793641 – (Partly) Automated Configuration

Check adjusted SAP destinations using report RSRFCCHK (clear field ,Connection Type‘)

The new destinations got the new settings:

SAP-SUPPORT_NOTE_DOWNLOAD
 SAP-SUPPORT_PARCELBOX
 SAP-SUPPORT_PORTAL

Destination **SAPOSS** still got generic user OSS RFC and you have to adjust the other destinations **SAP-OSS**, **SAP-OSS-LIST-001**, and **SAPNET_RTCC** by yourself also:

RFC Configuration

Standard Selection

RFC destinations: *SAP*

Connection Type:

Connection Test

Execute connection test

SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

Connection type	RFC Destination	Target host	User or Alias	Password
ABAP Connections	SAP-OSS	OSS 1_PUBLIC /H/147.204.2.5/S/sapdp99/H/oss001	S0011331137	Password saved
	SAP-OSS-LIST-001	OSS 1_PUBLIC /H/147.204.2.5/S/sapdp99/H/oss001	S0011331137	Password saved
	SAPNET_RTCC	OSS EWA /H/147.204.2.5/S/sapdp99/H/oss001	ST14_RTCC	Password saved
	SAPOSS	OSS EWA /H/147.204.2.5/S/sapdp99/H/oss001	OSS_RFC	Password saved
HTTP Connections to External Ser	SAP-SUPPORT_NOTE_DOWNLOAD	notesdownloads.sap.com	S0019841862	Password saved
	SAP-SUPPORT_PARCELBOX	documents.support.sap.com	S0019841862	Password saved
HTTP Connections to ABAP System	SAP-SUPPORT_PORTAL	apps.support.sap.com	S0019841862	Password saved

The intermediate Support Backbone Update Guide

Note 2793641 – (Partly) Automated Configuration

Check adjusted SAP destinations using report RSRFCCHK (clear field ,Connection Type‘)

SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

RFC Con

Standard Selection

RFC destinations: *SAP*

Connection Type:

Connection Test

Execute connection test

The connection test of the destination SAP-SUPPORT_NOTE_DOWNLOAD returns http code 404 - not found.

Nevertheless, **the connection is ok**, to download notes

Connection type	RFC Destination	Target host	Connection Test	Logon Status
ABAP Connections	SAP-OSS	OSS 1_PUBLIC /H/147.204.2.5/S/sapdp99/H/oss001	✓	Connection test with logon was successful
	SAP-OSS-LIST-001	OSS 1_PUBLIC /H/147.204.2.5/S/sapdp99/H/oss001	✓	Connection test with logon was successful
	SAPNET_RTCC	OSS EWA /H/147.204.2.5/S/sapdp99/H/oss001	✓	Connection test with logon was successful
HTTP Connections to External Ser	SAP-SUPPORT_NOTE_DOWNLOAD	notesdownloads.sap.com	✗	(HTTP: 404) Not Found
	SAP-SUPPORT_PARCELBOX	documents.support.sap.com	✓	(HTTP: 200)
HTTP Connections to ABAP System	SAP-SUPPORT_PORTAL	apps.support.sap.com	✓	(HTTP: 200) OK

ok

The intermediate Support Backbone Update Guide

Note [2721941](#) - Download of digitally signed note via

SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

You can observe that the automated task list creates destinations pointing to PSE „**SSL Client (Standard)**“ – this is the reason why it's necessary to import the CA certificates into this PSE.

You can define the destinations pointing to PSE „**SSL Client (Anonymous)**“, as well (which might be a more logical definition because the client certificate is not used anyway). In this case you have to import the CA certificates into this PSE.

The screenshot displays the SAP configuration interface for an RFC Destination named 'SAP-SUPPORT_PORTAL'. The 'Logon Procedure' section is active, showing 'Basic Authentication' as the selected method. Below this, the 'User' field is populated with 'S0019841862'. The 'Security Options' section shows 'Status of Secure Protocol' set to 'Active' and 'SSL Certificate' set to 'DEFAULT SSL Client (Standard)'. A red box highlights the 'DEFAULT SSL Client (Standard)' selection in the dropdown menu.

The intermediate Support Backbone Update Guide

Note 2721941 - Download of digitally signed note via


SAP NOTE 2827658 - Automated Configuration of new Support Backbone Communication - Update 02

Finally you switch SNOTE from using RFC to connecting via

Transaction CWB_SNOTE_DWNLD_PROC = Report RCWB_SNOTE_DWNLD_PROC_CON

Enter the new destinations SAP-SUPPORT_PORTAL and SAP-SUPPORT_NOTE_DOWNLOAD

Defining Procedure for Downloading SAP Note

 Select procedure to download SAP Note

Remote Function Call (RFC)

HTTP Protocol

RFC Destination (H Type) for SAP Support Portal

RFC Destination (G Type) for SAP Note Download

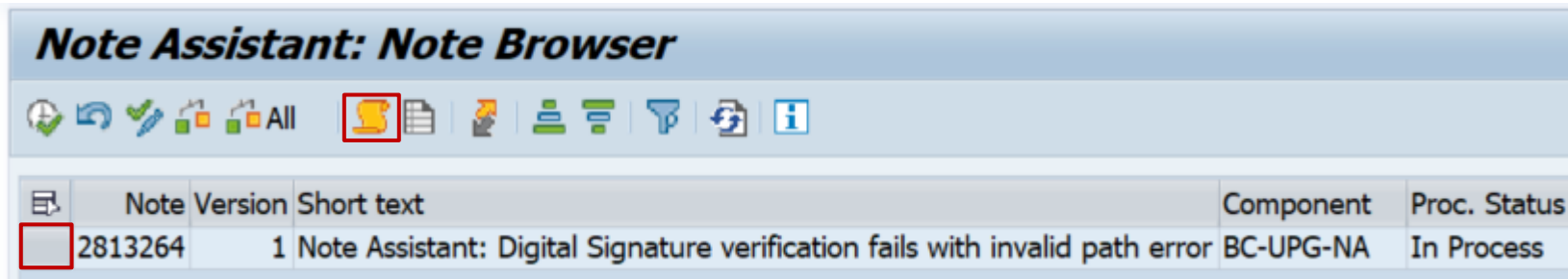
Download Service Application

Bonus: Transport based Correction Instruction (TCI) packages and prerequisite notes are downloaded automatically via remote access to Download Service of SAP Solution Manager 7.2

The intermediate Support Backbone Update Guide Verification

Use SNOTE to download and install a note, then check the log:

Note Assistant: Note Browser



Note	Version	Short text	Component	Proc. Status
2813264	1	Note Assistant: Digital Signature verification fails with invalid path error	BC-UPG-NA	In Process

Note Log 2813264


Date	Time	User	M...	Text	Mes
11.07.2019	17:18:40	D019687		Digitally signed SAP Note 0002813264 downloaded in version 0001 using HTTPS	
11.07.2019	17:18:57	D019687		Processor has been changed: new D019687, old	
				Processing status changed to 'in processing' (version)	
11.07.2019	17:19:02	D019687		User D019687 confirmed that he or she has read the SAP Note text	
11.07.2019	17:19:13	D019687		SAP Note locked in request EC1K951153	
11.07.2019	17:19:16	D019687		Correction instructions 002075125841 00005952760001 completely implemented	
11.07.2019	17:19:21	D019687		SAP Note is fully implemented and activated	

The intermediate Support Backbone Update Guide Verification

You can use report SCWB_NOTE_MONITOR, too:

- Msg. 158 Note ... downloaded in version ... (using RFC SAPOSS) very old
- Msg. 823 Digitally signed SAP Note ... downloaded ... using RFC old
- Msg. 824 Digitally signed SAP Note ... downloaded ... using HTTP ok
- Msg. 825 Digitally signed SAP Note ... downloaded ... using download service ok

Report SCWB_NOTE_MONITOR



Date	Time	Note	Impl. State		ID	Numb...
21.12.2018	23:43:26	2399707	Cannot be im...	Note 0002399707 downloaded in version 0108 (using RFC SAPOSS)	SCWN	158
05.01.2019	12:47:46	2662687	Undefined Im...	Note 0002662687 downloaded in version 0003 (using RFC SAPOSS)	SCWN	158
	12:48:20			Correction instructions 002075125919773 00004014600014: Changes cannot be app...	SCWN	634
	13:20:19			User D049399 confirms performance of manual activity 002075125819773 00004094...	SCWN	122
	13:20:44			Correction instructions 002075125919773 00004014600014: Changes cannot be app...	SCWN	634
05.04.2019	14:47:00	2373735	Can be imple...	Digitally signed SAP Note 0002373735 downloaded in version 0004 using RFC	SCWN	823
13.06.2019	19:04:23	2242128	Cannot be im...	Digitally signed SAP Note 0002242128 downloaded in version 0006 using RFC	SCWN	823
11.07.2019	17:18:40	2813264	Completely i...	Digitally signed SAP Note 0002813264 downloaded in version 0001 using HTTPS	SCWN	824
	17:19:16			Correction instructions 002075125841 00005952760001 completely implemented	SCWN	286
	17:19:21			SAP Note is fully implemented and activated	SCWN	636
	17:38:44	2603877	Cannot be im...	Digitally signed SAP Note 0002603877 downloaded in version 0001 using HTTPS	SCWN	824

old

ok



June 2019

Topics June 2019



How to get rid of Act Now! (if already done...)

Note [2070691](#) - Potential information disclosure relating to database server file system

Note [2748699](#) - Information Disclosure in Solution Manager 7.2 / CA Introscope Enterprise

Note [1997734](#) - Missing authorization check in RFC runtime

Note [2730227](#) - Missing Authorization Check in SAP Central Payment

RFC Gateway on Java

RFC Gateway and Message Server – Logging and Monitoring

ETD for RFC Gateway and Message Server Monitoring

Recordings:
[DSAG \(German\)](#)
ASUG
SAP Learning HUB

How to get rid of Act Now! (if already done...)

The Support Portal shows a message box for all notes having ABAP correction instructions:

Act Now! SAP Notes Download and Upload Process Impacted. From January 1, 2020, the download and upload process **will stop working** unless Note Assistant (SNOTE transaction) is enabled in ABAP systems to work with digitally signed SAP Notes. Learn more about actions required from your side on the SAP Support Portal page for [Digitally Signed SAP Notes](#). To understand the overall impact of the SAP Support Backbone update, refer to [SAP Support Portal](#).

How to get rid of Act Now! If already done?

- **Use AdBlock rules which remove elements from a page** (you might need more entries):

```
DIV[id="__xmlview2--idOSSRetiredMsg"]  
DIV[id="__jsview3--idforRetireOSS"]
```

- **Use a TamperMonkey Script, which e.g. inserts a global CSS style to hides the elements**

```
$('#head').append('<style type="text/css">#__xmlview2--idOSSRetiredMsg,  
#__jsview3--idforRetireOSS { display: none; }</style>');
```

How to get rid of Act Now! (if already done...)

TamperMonkey Script

```
// ==UserScript==
// @name          Hide_OSSRetiredMsg
// @namespace     http://tampermonkey.net/
// @version       1.0
// @description   Remove "Act Now! SAP Notes Download and Upload Process Impacted."
// @author        Frank Buchholz, SAP SE
// @match         https://launchpad.support.sap.com/
// @grant         none
// ==/UserScript==

function addGlobalStyle(css) {
    var head, style;
    head = document.getElementsByTagName('head')[0];
    if (!head) { return; }
    style = document.createElement('style');
    style.type = 'text/css';
    style.innerHTML = css;
    head.appendChild(style);
}

addGlobalStyle('#__xmlview2--idOSSRetiredMsg, #__jsview3--idforRetireOSS { display: none; }');
```

Note 2070691 - Potential information disclosure relating to database server file system

The original version 4 of note 2070691 didn't covered all releases and introduced a side-effect error which is solved in note 2708068. The new version 6 contains the same solution and covers all relevant releases.

You can install one of both notes to get the same solution (which is e.g. part of ST-PI 7.40 SP 11)

Note	Version	Short text	Component ID	Status	Implementation Stat.
2070691	6	Potential information disclosure relating to database server file system	SV-SMG-SDD	new	Can be implemented
2708068	3	2070691 encoutered error message unable to find delivery event	SV-SMG-SDD	new	Can be implemented

SP available as of mid of June

If you install one of the notes,

Co...	Status	Obj. Type	Object	Message Text
<input checked="" type="checkbox"/>		FUNC	/SDF/SADV SHOW DBA PROFILE LOG	Changes can be applied
<input checked="" type="checkbox"/>		FUNC	/SDF/SORA SAPDBA SXPG	Changes can be applied

SNOTE will state, that there is no need to install the other one:

Co...	Status	Obj. Type	Object	Message Text
<input checked="" type="checkbox"/>		FUNC	/SDF/SADV SHOW DBA PROFILE LOG	All changes already exist
<input checked="" type="checkbox"/>		FUNC	/SDF/SORA SAPDBA SXPG	All changes already exist

Note 2748699 - Information Disclosure in Solution Manager 7.2 CA Introscope Enterprise Manager

Procedure:

1. Apply patch of note 2748699 on SAP Solution Manager (and check note 1579474)
2. Apply patch of related notes 2534316 (for Introscope 10.5) respective 2285189 (for Introscope 10.1) depending on the installed version
3. Change password of user `SM_EXTERN_WS` (respective the user which you have designated for this purpose) in the SAP Solution Manager via transaction `SOLMAN_SETUP` → "Cross Scenario Configuration" → "Mandatory Configuration" → "System Preparation" → "Maintain Technical Users"; Use Case ID is `SM_EXTERN_WS` (Do not use transaction `SU01`)
4. Push configuration in SAP Solution Manager to managed systems via transaction `SOLMAN_SETUP` → "Cross Scenario Configuration" → "Mandatory Configuration" → "Basic Configuration" → "Configure Basic Functions" → execute task "Push DPC Configuration to CA Introscope"

Note 1997734 - Missing authorization check in RFC runtime

With this correction from 2015 you could be a little bit more lazy in case of scenario “Single Sign-On via Trusted RFC” concerning authorizations for S_RFCACL field RFC_USER ... but it’s still recommended to work with strict authorizations:

Authorization Object S_RFCACL	Manual				
Authorization T-E118493100	Manual				
RFC_SYSID	Manual	*			System ID (for SAP and External systems)
RFC_CLIENT	Manual	*			RFC client or domain
RFC_USER	Manual	*			RFC User (SAP or External)
RFC_EQUSER	Manual	Y			RFC ... ID
RFC_TCODE		*			RFC
RFC_INFO		*			RFC
ACTVT		16			Activity

Bad, instead enter list of systems / clients

Very bad (but no harm done anymore if RFC_EQUSER = Y), instead enter a dummy value like ‘ ‘

“Single Sign-On via Trusted RFC”

The SOS still reports authorizations with RFC_USER = * as “not compliant” (independent from the value of RFC_EQUSER).

Note 2730227 - Missing Authorization Check in SAP Central Payment

Note 2730227 - Missing Authorization Check in SAP Central Payment

↔ (required / is relevant only if)

Note 2651431 - Central Payment: Historical Open Items – Ensuring Payment and Clearing Takes Place in the Source System (Source Side)

↔ (required / is relevant only if)

Pilot Note 2346233 - Central Payment for SAP Central Finance: Pilot Note for Activating Central Payment

↔ (required / is relevant only if)

... several other notes ...

Central Payment is released in S/4HANA 1709 with the status “Released with Restrictions”

Note 1529849 - Gateway security setting on SCS instance, AS Java

General rule (if required at all): Start of RFC servers not required. Only local registered RFC servers available.

secinfo

```
# start of external programs disabled (no entry required)
```

reginfo

```
# list of java servers  
p TP=* HOST=local  
p TP=* HOST=<host name>  
...
```

You can manage the gateway with the program `gwmmon`.

In particular, changes to the files can be dynamically loaded subsequently without having to restart the RFC Gateway.

RFC Gateway and Message Server – Logging and Monitoring

How to check if there's a Standalone Gateway running on an application server?

```
sapcontrol -nr $$ -function GetProcessList
```

\$\$ corresponds to instance number

Example for standalone RFC Gateway on ASCS/SCS instance:

```
GetProcessList
OK
name, description, dispstatus, textstatus, starttime, elapsedtime, pid
msg_server, MessageServer, GREEN, Running, 2019 05 07 14:09:25, 672:37:49, 52888
enserver, EnqueueServer, GREEN, Running, 2019 05 07 14:09:25, 672:37:49, 52889
gwr, Gateway, GREEN, Running, 2019 05 07 14:09:25, 672:37:49, 52890
```

<https://wiki.scn.sap.com/wiki/pages/viewpage.action?pageId=491913782>

RFC Gateway and Message Server – Logging and Monitoring

How to use 'gwmon' tool to monitor a standalone RFC Gateway?

```
echo GET_RELEASE | gwmon -cmdfile - -gwghost mo-c81a86caf -gwserv sapgw01
```

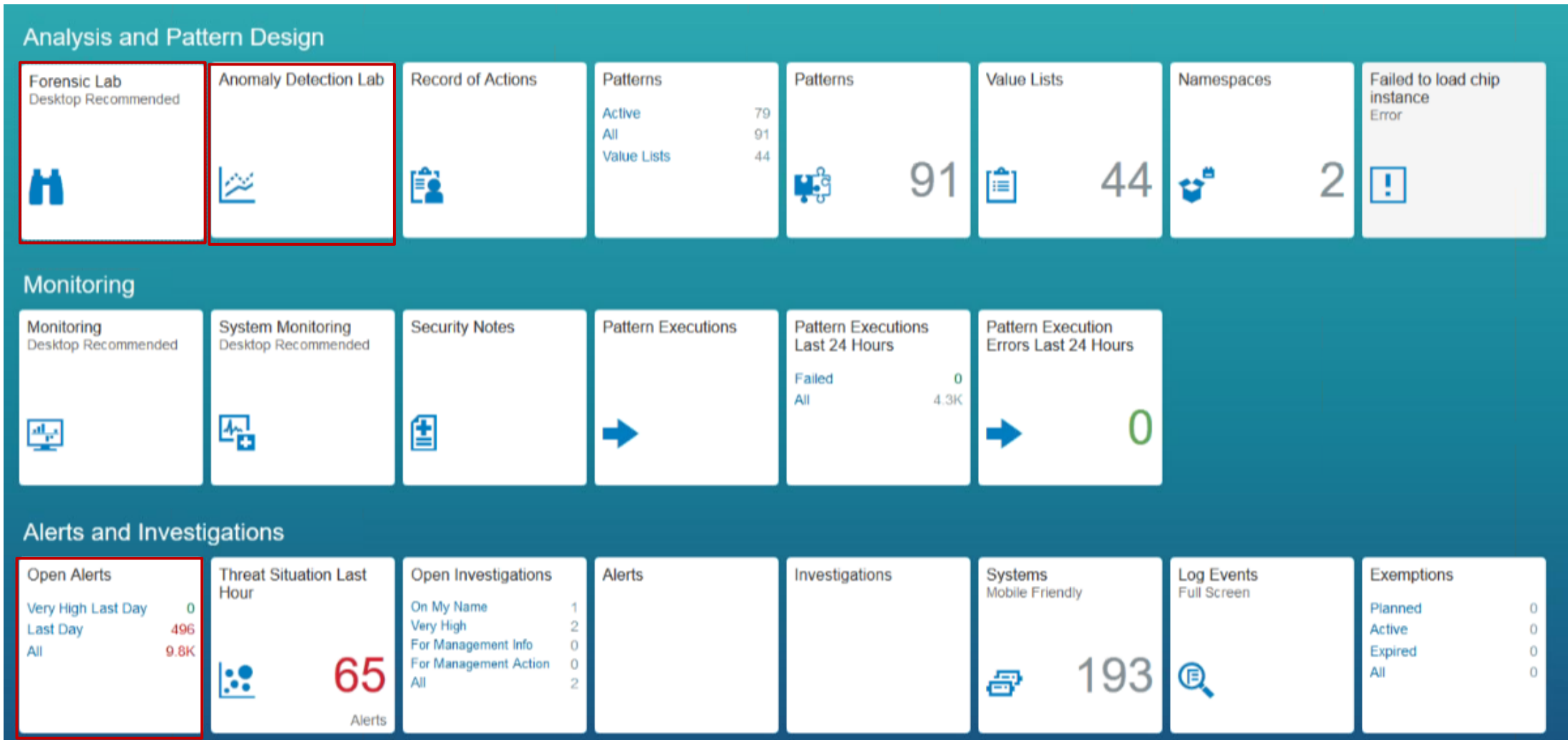
Prerequisite: Remote monitoring needs to be active with `gw/monitor=2`

Useful commands:

```
GET_RELEASE  
GET_PARAM  
GET_SECINFO  
GET_REGINFO  
GET_TRUSTED_IPADR  
GET_SEC
```

<https://wiki.scn.sap.com/wiki/pages/viewpage.action?pageId=491913782>

ETD for RFC Gateway and Message Server Monitoring Launchpad



ETD for RFC Gateway and Message Server Monitoring

Preparation: Log Learning of Log Type "SAP Message Server"

← **Log Learning**
 Help Knowledge Base Forensic Lab

Run Name: **SAPMessageServer** Phase: **Testing** Status: **Successful** Staging Status: **Out of Sync** Productive Status: **Out of Sync**

4 Entry Types
 2 Runtime Rules
 4 Test Results
 Documentation
 80 Protocol

Assign Log Type

Markup	Hits	Log Type	Event
[Thr <Var> <Timestamp> [Thr <Var> *** <KeyValue.List> MsSClientHandle: MsSRead <Var> <Var> MSEINTERN <Var> <Var>]	1		
[Thr <Var> <Timestamp> [Thr <Var> LOGOUT: <Var> [<IP.IP>] (DIA UPD BTC SPO <Var> ICM)]	1	Message Server Developer Trace	Application Server, Logoff
[Thr <Var> <Timestamp> [Thr <Var> LOGIN: <Var> [<IP.IP>] (DIA UPD BTC SPO <Var> ICM)]	1	Message Server Developer Trace	Application Server, Logon
[Thr <Var> <Timestamp> [Thr <Var> *** <KeyValue.List> MsSRead: NiBufReceive (<KeyValue.List>) <Var> <Var>]	1		

Annotations
Value Mapping
Constant Values

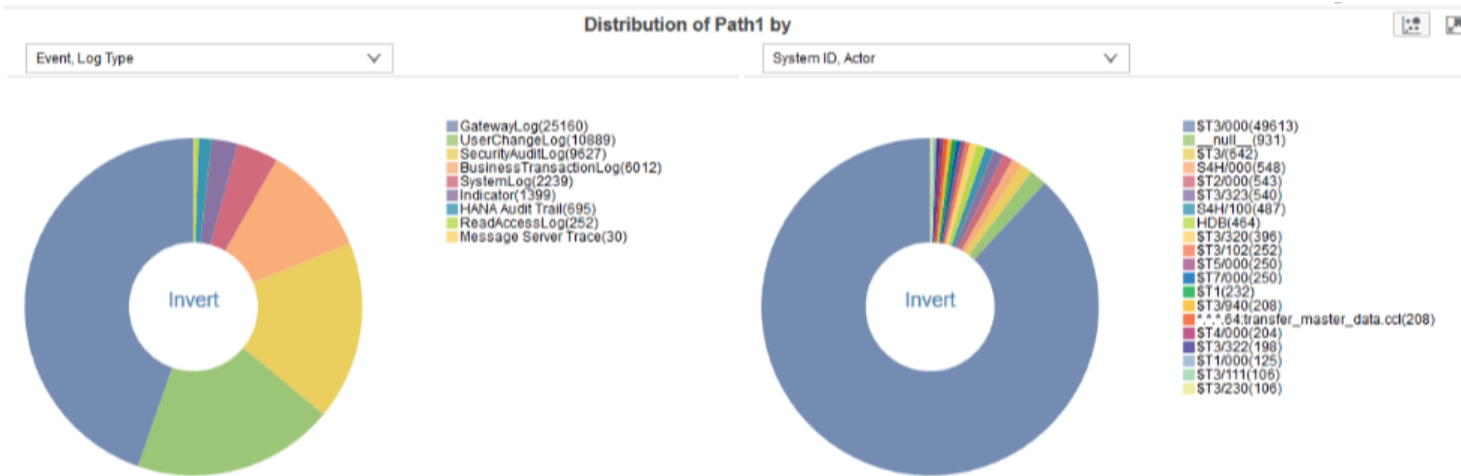
Annotation	Attribute	Original Data
Var		[Thr 123456789123] Thu May 23 15:25:01 2019 [Thr 123456789123] LOGIN: [REDACTED] [REDACTED] (DIA UPD BTC SPO UP2 ICM)
Timestamp	Timestamp	
Var		
Var	Service, Instance Name	
IP.IP	Network, IP Address, Initiator	

ETD for RFC Gateway and Message Server Monitoring

Event database

Event Log Types

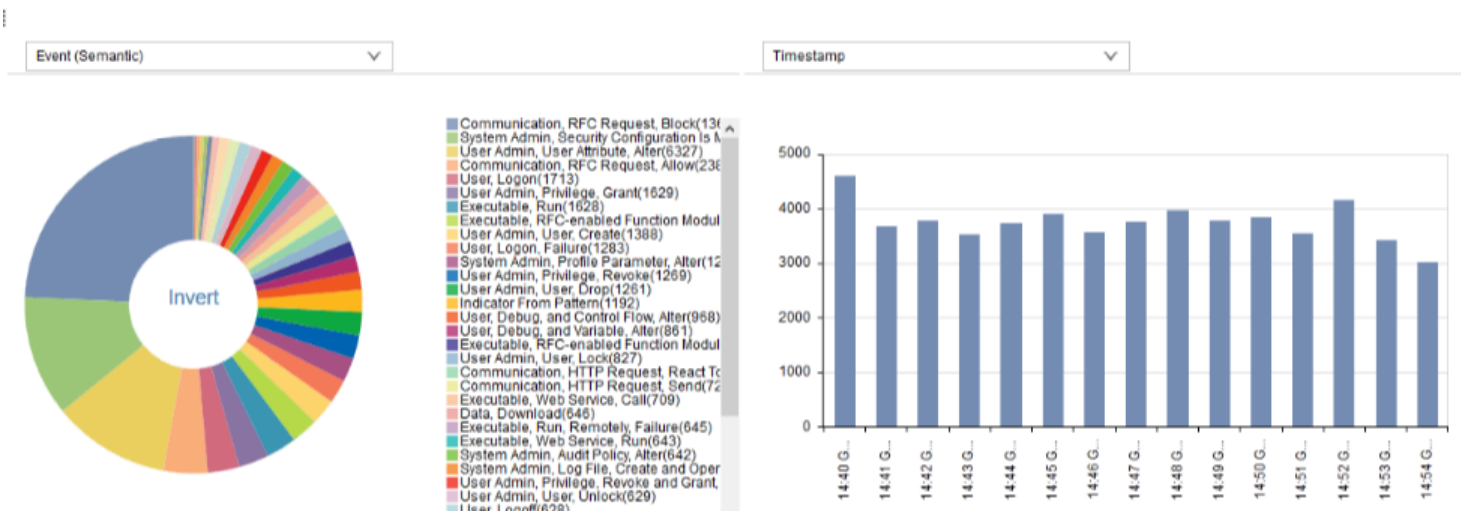
...
Message Server Trace



Source Systems

Semantic Events

...
Server Logon
Server Logoff



Timestamp of selected events

ETD for RFC Gateway and Message Server Monitoring

Anomaly Detection Lab

SAP Enterprise Threat Detection: Anomaly Detection Lab

Pattern: http://demo: SAPMessageServerAttack New occurrence

Pattern: http://demo: SAPMessageServerAttack New occurrence

+ Assign Evaluation Remove Evaluation

http://demo: SAPMessageServer Unallowed Access or Trial Chart	New Occurrence
---	----------------

Description:
Alert shows if a successful or trial access to the Gateway takes place that did not happen before

Execution Output:
Alert

Create output when:
Anomaly is detected by at least one evaluation

Severity:
High

Status:
Active

Purpose: Find unusual events

Assumption: We'll get only the same events like in the past 4 weeks

Alert: New events

ETD for RFC Gateway and Message Server Monitoring Attack Detection Patterns in Forensic Lab

SAP Enterprise Threat Detection: Forensic Lab

http://demo:SuspiciousMessageServerConnects >> Last 5 minutes

New Refresh Open Save Save As

Path1 Path2

Events Events

19 548 19 548

Subset1 Subset1

Event Log Type Event Log Type

IN Message Server Trace IN Message Server Trace

10 10

Subset2 Subset2

Event (Semantic) Correlation ID

IN Application Server, Logon = Path1.Subset3.Correlation ID

5 10

Subset3 Subset3

Network, IP Address, Initiator Event (Semantic)

IN VALUE SAPMessageServerLogonAllowedIP IN Application Server, Logoff

LIST

5

Status: Active

Execution Output: Alert

Base Measurement On: Count of Log from Pa

Threshold: >= 1

Group By: Network, IP Addr, Service, Instanc, Correlation ID

Append group by field

Execution: Scheduled

Runs Every (min): 2

Alert Default Severity: High

Credibility of Attack: []

Success of Attack: []

Navigate to exemptions

Purpose: Detects potential attacks

Source: Message Server Log

Path1: Application Server Logon validated against whitelist

Path2: Application Server Logoff

Correlation: Logoff shortly after Logon

Alert: Critical logon attempts



May 2019

Topics May 2019



Extended availability for Security Corrections

RFC Gateway & Message Server Security

Pilot Phase for Security Dashboard in the SAP EarlyWatch Alert Workspace

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

Extended availability for Security Corrections

News @ Support Portal: <https://support.sap.com/securitynotes>

Security fixes for SAP NetWeaver based products are also delivered with the support packages of these products. For all SAP Security Notes with high or very high priority we provide this service for support packages shipped within the last 24 months* (extended from 18 month).

*Exceptions are e.g. **SAP Gui**, **Kernel**, **HANA** which come with their own release strategy.

ABAP: no big difference as most ABAP Corrections Instructions cover all Support Packages of releases which are in maintenance anyway (if technically possible)

Java: no big deal either, typically you can expect one more older Support Package which offers a solution via patch (however, you most likely will go for an Support Package upgrade anyway)

➤ Go for regular, i.e. yearly Support Package upgrades (see note [2797813](#) , too)

RFC Gateway & Message Server vulnerabilities

←

You can find reports on SAP vulnerabilities that have hit the media by end of April (you can find one example [here](#) or another in German [here](#)). The background of these reports were messages from [US-CERT](#) and [Reuters](#) which refer to a presentation at [OPCDE DBX 2019](#) that got picked up quickly.

In order to demonstrate the urgency of the matter the security researchers published a [modular exploit kit](#) that makes it even easier to attack these misconfigurations.

Please note that the reported vulnerabilities are basically misconfigurations in on-premise installations SAP has addressed in multiple publications years ago. This is acknowledged by other [security companies that incited the coverage](#).

You can find official statements from SAP [here](#) or [here](#).

Two weeks later, the security researchers published [some notes regarding the news release after SAP OPCDE talk](#).

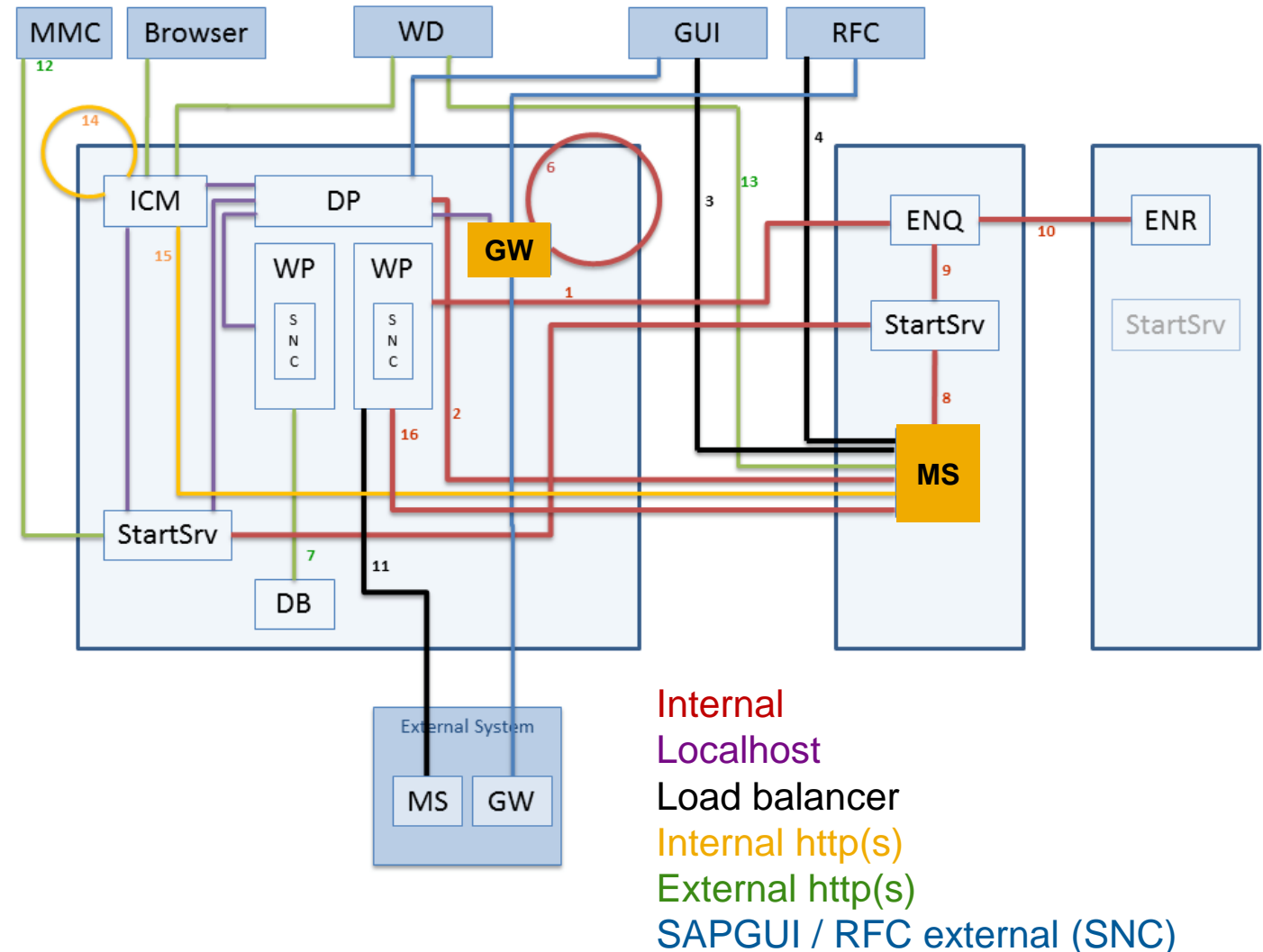
Architecture & Main Risks

RFC Gateway (GW)

- Remote access via RFC always possible
- Access Control List secures access i.e. using keywords “local” and “internal”
- **Attacker can execute OS commands on application server**

Message Server (MS)

- Remote access possible if internal port is not blocked on network level
- Access Control List secures access to internal port
- Attacker server plays the role of an application server which allows Man-in-the-Middle attacks
- **Attacker becomes “internal” in relation to other components of the application server**



RFC Gateway & Message Server vulnerabilities

Only on-premise **ABAP** (including S/4HANA) and **Java** (see note [1529849](#)) based systems are affected.

When installing a new single system with SAP Basis ≥ 740 using a most recent SWPM release, these freshly created systems are properly secured concerning profile parameters.

However, systems that have been upgraded throughout the last years may still be vulnerable, including those of SAP Basis ≥ 740 .

If you did not misconfigure networks in a way that would allow RFC communications or Message Server access to SAP systems from the Internet (which SAP strongly recommends not to do), the vulnerability can be exploited from the customers intranet only, if at all.

You should review important SAP security recommendations, in particular the whitepaper “[SAP Security Recommendations: Securing Remote Function Calls \(RFC\)](#)” concerning the **RFC Gateway** and the [Documentation of Message Server security](#).

The first publication of this [whitepaper](#) was over 8 years ago.

RFC Gateway and Message Server Configuration Settings

Topic	Profile Parameter	changeable in RZ11	Recommended value	RFC Whitepaper	EarlyWatch Alert Note 863362	Security Optimization Service	Security Baseline Template 1.9
GW	gw/acl_mode	yes	1	yes	yes	yes (SY088)	yes
GW	gw/reg_no_conn_info	yes	255	-	yes	yes (SY087)	yes
GW	gw/proxy_check			-	-	-	-
GW	gw/sim_mode	yes	0	yes	-	yes (0273)	yes
GW	gw/monitor	yes	1	yes	-	Yes (0269)	yes
GW	gw/logging	yes	ACTION=SSZ (plus some more switches)	yes	-	-	-
GW	gw/sec_info		<file name>	yes	yes	yes (SY089, 0282)	-
GW	gw/reg_info		<file name>	yes	yes	yes (SY089)	-
GW	gw/prxy_info		<file name>	-	-	-	-
GW	Non-trivial entries in the ACL files		no * values for host	yes	yes	yes	yes
Topic	Profile Parameter	changeable in RZ11 / SMMS	Recommended value	Documentation (party only description but no recommendation) + Notes	EarlyWatch Alert Note 863362	Security Optimization Service	Security Baseline Template 1.9
MS	ms/acl_info		<file name>	Note 821875 , 1421005	yes	yes (SY094)	yes
MS	ms/audit	yes	1 or 3		-	-	-
MS	rdisp/msserv		Default sapms<SID> (=36NN) respective 0 on central Java SCS instance	Note 821875 , 1421005	yes	yes (SY092)	-
MS	rdisp/msserv_internal		39NN	Note 821875 , 1421005	yes	yes (SY092)	yes
MS	ms/acl_file_int		<file name>		-	-	-
MS	ms/monitor	yes	0	Note 821875	yes	yes (SY093)	yes
MS	ms/admin_port	yes	0	Note 821875	yes	yes (SY093)	yes
MS	ms/server_port <xx>	yes	not set		-	-	-
MS	system/secure_communication		ON	Note 2040644	-	-	-
MS	Non-trivial entries in the ACL files		no * values		-	-	yes
MS	Firewall settings			Note 821875	- (out of scope)	- (out of scope)	- (out of scope)

RFC Gateway and Message Server Configuration Validation

Use following Configuration Stores to validate the setting in application Configuration Validation of the SAP Solution Manager:

ABAP

- Profile Parameters: ABAP_INSTANCE_PAHI
- RFC Gateway secinfo: GW_SECINFO
- RFC Gateway reginfo: GW_REGINFO
- Message Server ACL: MS_SECINFO

Java

- Profile Parameters: Parameters
- ACL files: -

See Security Baseline Template with Target Systems BL_S-7 and BL_S-8

RFC Gateway Security

RFC Gateway @ SAP Wiki

<https://wiki.scn.sap.com/wiki/display/SI/RFC+Gateway>

Note 2605523 - [WEBINAR] Gateway Security Features

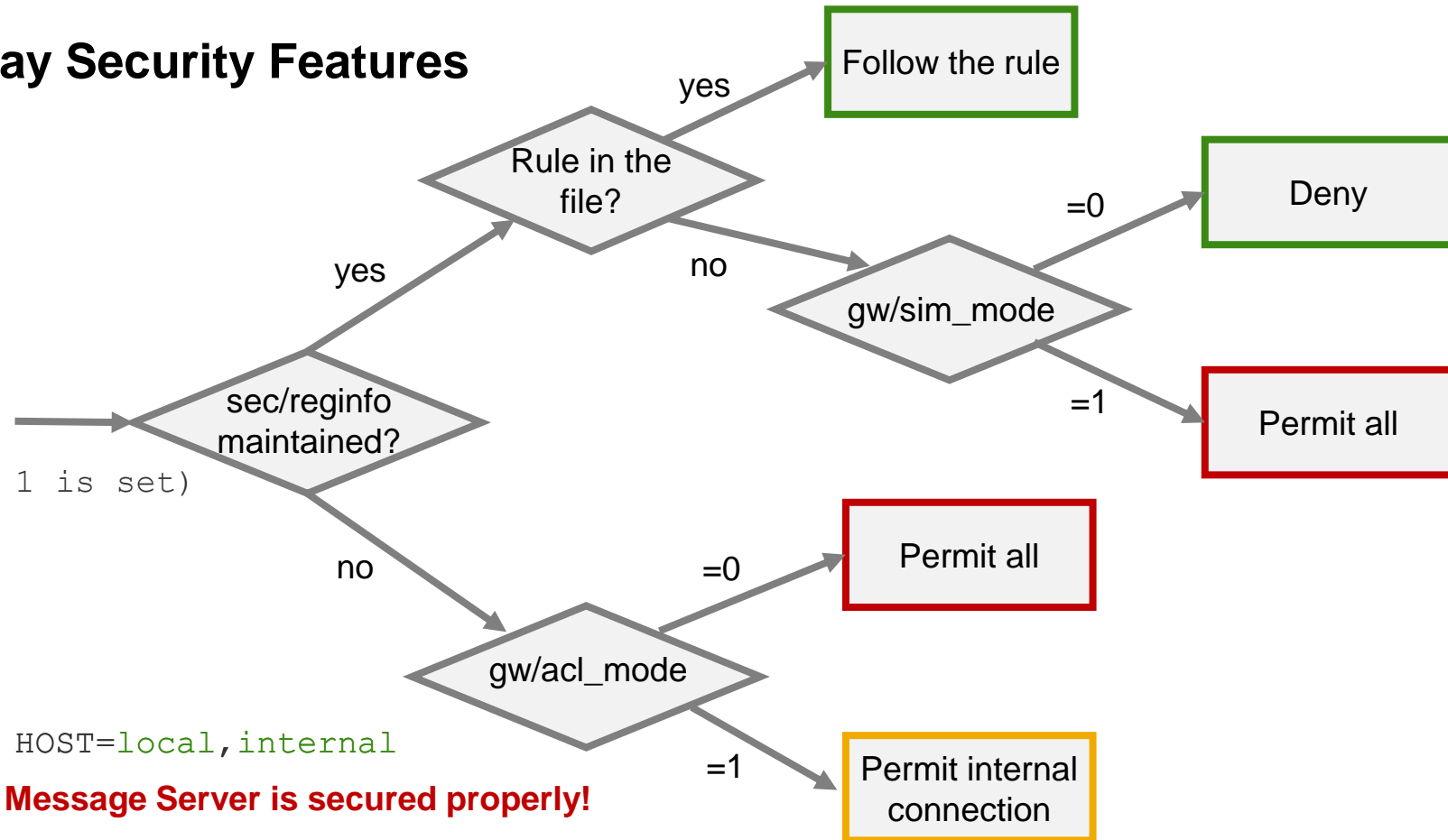
Secure default settings:

```
gw/reg_no_con_info = 255 (at least bit 1 is set)
gw/acl_mode = 1
gw/sim_mode = 0
```

Secure default rule for secinfo:

```
P TP=* USER=* USER-HOST=local,internal HOST=local,internal
```

Using “internal” is secure if, and only if the SAP Message Server is secured properly!



Message Server Security

Notes 821875, 1421005, 1495075 plus 2040644

1. **Split ports via Profile Parameters `rdisp/msserv` and `rdisp/msserv_internal`**
(which *allows* to use a firewall with port filter between server network and user network)
2. **Activate ACL list to block foreign servers**
(which requires new operational instructions i.e. in case of a changing server landscape)
 - a. Recommended: on application level via Profile Parameter `ms/acl_info` using host names, domains or IP patterns
 - b. Optional: on network level via Profile Parameters `ms/acl_file_admin`, `ms/acl_file_ext`, `ms/acl_file_extbnd`, and `ms/acl_file_int` using IP patterns (like `permit 10.18.0.0/16`)
3. **Protect and encrypt internal connections of the Message Server via Profile Parameter `system/secure_communication`**
See same topic from 2018-12
The installation tool (but not the upgrade tool) activates this automatically for new systems
4. **Close down remote monitoring and administration via Profile Parameters `ms/monitor`, `ms/admin_port` and `ms/server_port_<xx>`**
(which requires to establish other monitoring and administration procedures)

Open items

Message Server ACL `ms/acl_info` or `ms/acl_file_int`

- To accept local addresses you need to define a permit rule for address `127.0.0.1` respective the key word `local`
- To be checked: Patterns like `10.15.*.*` do not seem to work, however, `10.15.45.*` or `10.15.0.0/16` should work fine

Other components like Dispatcher, Enqueue Server, RFC Gateway, and ICman offer ACL files, too

Indirect attack via SAP Router

- Do not install a SAP Router on any application server; use a different server
- What about ACL file `saproutab` with `src *` to connect to port `33NN` ?

What else?

- ➔ **Activate System Internal Communications Security**
- ➔ **Use the EWA Solution Finder in the SAP Support Portal to view security alerts concerning the configuration of the RFC Gateway, see topic from 2018-02**

Ensure to control critical authorization for maintaining Profile Parameters

S_ADMI_FCD with S_ADMI_FCD = PADM

respective

S_RZL_ADM with ACTVT = 01

for transactions RZ10, RZ11, SMMS and RFC enabled functions

TH_CHANGE_PARAMETER

function group THFB

SPFL_PARAMETER_CHANGE_VALUE

function group SPFL_PROFILE_PARAMETER

ANST_CHANGE_PARAMETER

function group ANST_SEARCH_TRACES

Pilot Phase for Security Dashboard in the SAP EarlyWatch Alert Workspace

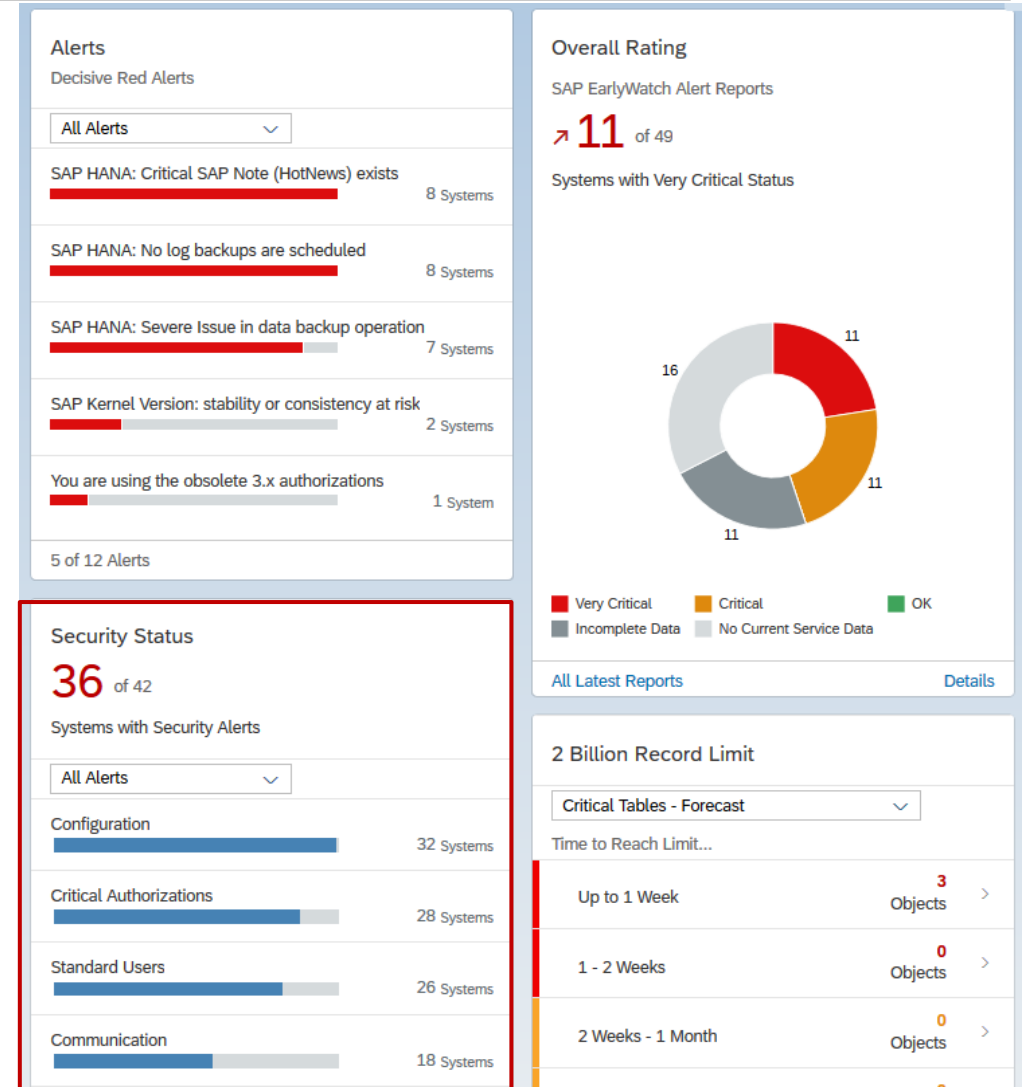
The SAP EarlyWatch Alert Workspace offers a new Security Dashboard which summarizes the security related alerts as shown by the EWA Solution Finder

When interested in the Pilot Phase apply with a brief email (with keyword **PILOT**) to:

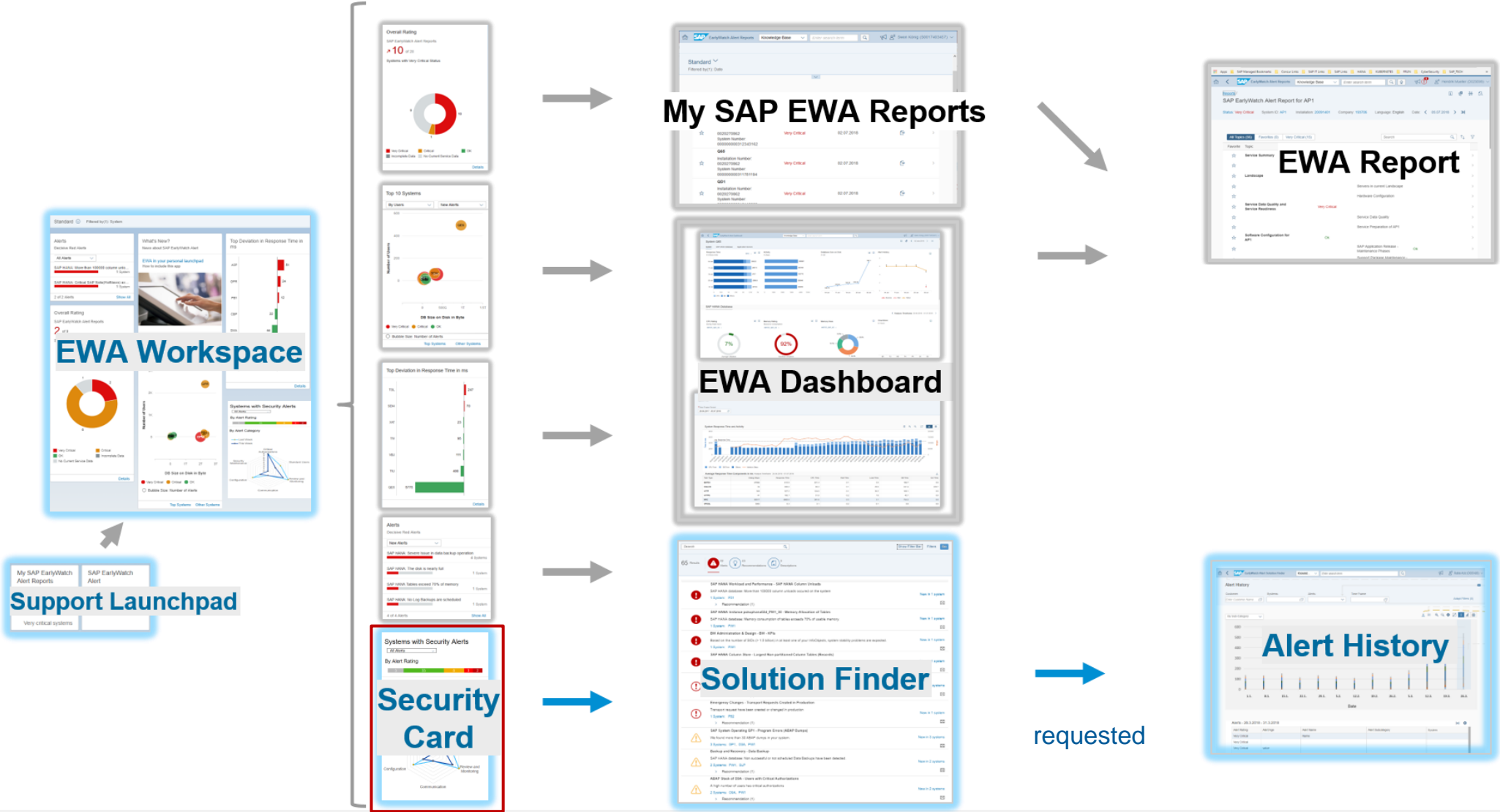
Dr. Hendrik Mueller
hendrik.mueller@sap.com

Productive mode as of October 2019

*** Active pilot use and feedback/quote on how it supports you in your security tasks or processes is mandatory. Seats for participation are limited.



Pilot Phase for Security Dashboard in the SAP EarlyWatch Alert Workspace





April 2019

Topics April 2019



SAP Solution Manager Internet Demo System (EWA, SOS, SysRec, ConfigVal)

Note [2729710](#) - XML External Entity vulnerability in sldreg on ABAP and Java Platform

Note [2772376](#) - XML External Entity vulnerability in sldreg on SAP HANA

Note [2643371](#) - Missing Authorization check in ABAP Server File Interface

Note [2643447](#) - Directory Traversal vulnerability in ABAP Server File Interface

Do not disable authority objects

Clickjacking Protection (Reloaded)

Why now? It's much easier now! (at least for user interfaces based on SAP_UI)

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

SAP Solution Manager Internet Demo System (EWA, SOS, SysRec, ConfigVal)

SolMan Internet Demo System

<https://support.sap.com/en/alm/solution-manager/demo-systems/internet-demo-system.html>

Fiori Launchpad

https://www.sapsolutionmanagerdemo.com/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html

User BAUERA (or use some other users)

Password Solman72

- **Change Management → System Recommendations**
- **SAP Solution Manager Administration → Configuration Change Database (CCDB)**
- **Root Cause Analysis → Configuration Validation and Configuration Validation Reporting**
- **SAP Engagement and Service Delivery → EWA and SOS**

Note [2729710](#) - XML External Entity vulnerability in sldreg on ABAP and Java

Note [2772376](#) - XML External Entity vulnerability in sldreg on SAP HANA

These notes solve an XML External Entity (XXE) vulnerability in SLD Registration program `sldreg.exe`

Note [2729710](#) Version 5 February 2019: Kernel patch for ABAP

Note [2729710](#) Version 7 April 2019: **Use `sldreg.exe` from same Kernel patch for Java, too**

<input type="checkbox"/>	Name	Patch Level	File Type	File Size	Release Date	Change Date	Related Info
<input type="checkbox"/>	SAPSLDREG_619-70001625.SAR	619	SAR	18350 KB	19.02.2019	19.02.2019	☰
	SAPSLDREG						

Note [2772376](#) April 2019:

Full HANA update

Attacker requires authenticated user with local access

Note 2643371 - Missing Authorization check in ABAP Server File Interface
Note 2643447 - Directory Traversal vulnerability in ABAP Server File Interface

Both notes are independent, solve different aspects and target all operating systems, i.e. Windows and Unix/Linux.

ABAP note 2643447 targets developer of custom code, too (case 2d).

Check settings in transaction SM30 for table SPTH

We do not expect issues if you do not have used 'weird' path or file names like a tilde ~ followed by digits.

Only as of Kernel 7.53, the parameter abap/path_norm_Windows has secure default 0.

Related note with documentation, relevant only if the ABAP application server runs on Microsoft Windows:

Note 2634476 - Profile parameter abap/path_norm_Windows

Do not disable authority objects

auth/object_disabling_active

Documentation: Globally Deactivating Authorization Checks

https://help.sap.com/saphelp_nwpi71/helpdata/en/52/671463439b11d1896f0000e8322d00/frameset.htm

Profile parameter auth/object_disabling_active

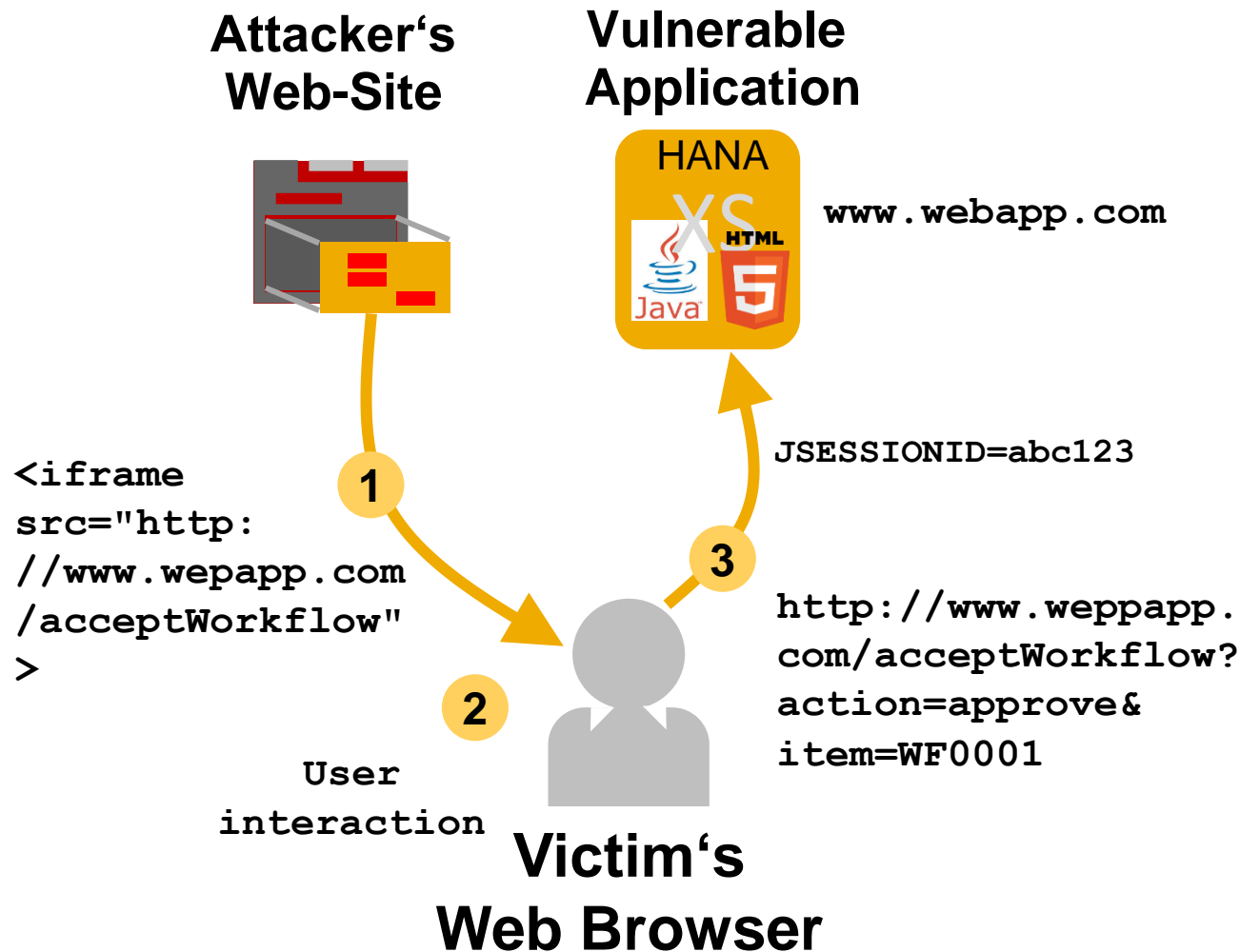
You can deactivate authorization objects globally in transaction `AUTH_SWITCH_OBJECTS` if this parameter has the value **Y (default)**. If the parameter has the value **N**, deactivation is not allowed.

Mitigation: You cannot suppress authorization checks for authorization objects that belong to Basis components (starts with `S_`) or to Human Resources (HR) (`PLOG` or starts with `P_`).

SOS Check “Global Disabling of Authority Checks Is Not Prevented” (0104) recommends `auth/object_disabling_active = N` and that table `TOBJ_OFF` (which you maintain via transaction `AUTH_SWITCH_OBJECTS`) is empty.

Clickjacking Protection (Reloaded)

Vulnerability synopsis



Clickjacking allows an attacker to manipulate transaction data like **workflow process, system state or user maintenance steps** by luring user to perform an interaction with the UI.

This is particularly dangerous when **administrators or privileged business user** are successfully attacked.

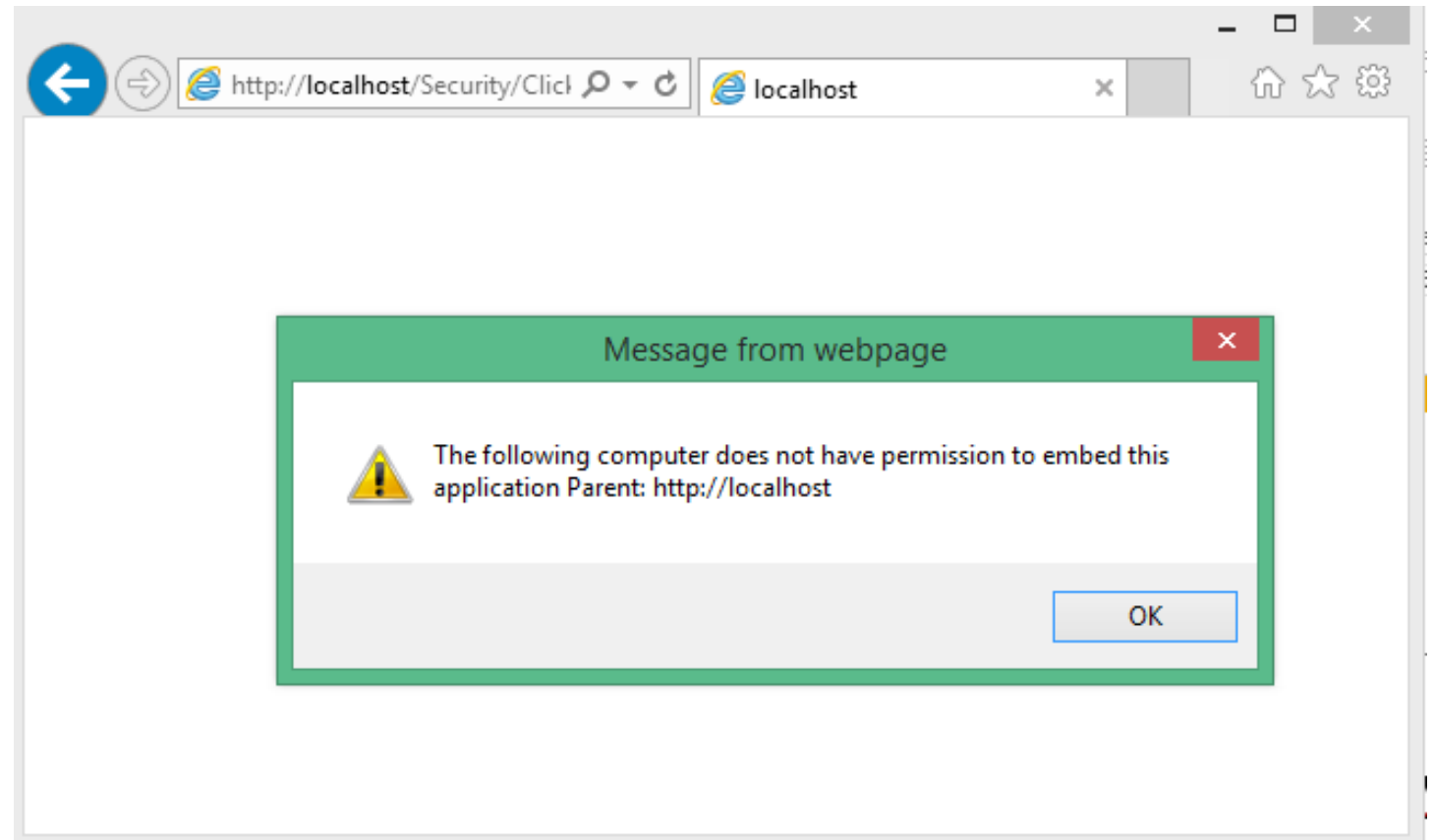
→ **Unauthorized transaction execution**

Clickjacking Protection (Reloaded)

Result for ABAP

Depending on the UI Framework you get either an empty frame or an error message if Clickjacking Protection blocks rendering a page.

Here is the error message show by WebDynpro ABAP:



Clickjacking Protection (Reloaded)

Why now? It's much easier now! (at least for user interfaces based on SAP_UI)

Note 2573569 - UCON HTTP Whitelist Downport (7.40 SP 20, 7.50 SP 12, 7.51 SP 6, 7.52 SP 1)
(February 2018)

Note 2507225 - Integration of Clickjacking Framing Protection with UCON HTTP Whitelist
(April 2018)

Note 2667053 - CX_HTTP_WHITELIST was raised
(July 2018)

Note 2667160 - Activation of client dependent UCON HTTP Whitelist - clickjacking settings are not saved correctly
(July 2018)

Note 2547381 - CORS integration in UCON HTTP Whitelist and Internet Communication Framework and and Clickjacking integration in HTTP Whitelist
(October 2018)

Transaction UCON_CHW or UCONCOCKPIT

<https://help.sap.com/viewer/1ca554ffe75a4d44a7bb882b5454236f/7.51.3/en-US/91f9f84fe8a64ce59dc29b76e47078eb.html>

Clickjacking Protection (Reloaded)

Transaction UCON_CHW or UCONCOCKPIT

Use UCON Logging to learn if any entries in Whitelist are required.

Secured with authority object S_UCON_WHI respective S_UCON_ADM for UCON_TYPE = UCHW

Activation:

QE4(1)/002 Setup HTTP Whitelist



Welcome to the new HTTP Whitelist Maintenance userinterface. The new features of the Maintenance Utility like logging of HTTP calls and simulation of whitelist patterns enables the administrator to build better user-specific whitelists. Do you want to activate the new HTTP Whitelist Maintenance?

Yes

No

QE4(1)/002 Setup of HTTP Whitelist Tool for UCON

Activation of non-client specific Whitelist Maintenance is strongly recommended for security reasons

activate non-client specific Whitelist Maintenance for Context Types 01, 02 and 03 (recommended).

For technical reasons Whitelist Maintenance of Context Type 04 CORS is always non-client specific.

activate Clickjacking Protection (Context Type 02) for all clients (recommended)

automatically import database entries from the classical whitelist HTTP_WHITELIST

Clickjacking Protection (Reloaded)

Transaction UCON_CHW or UCONCOCKPIT

Use UCON Logging to learn if any entries in Whitelist are required.

Example:

HTTP Whitelist Tool for Unified Connectivity (UCON) Display

Execute Selection(Whitelist Maintenance)

Unified Connectivity Scenario Selection

Scenario: HTTP Whitelist Scenario

Records per Page: 10.000

Context Type	Description	Mode	# not cov. by Whitelist	# total called URLs
1	Trusted Network Zone	Logging	1.033	1.033
2	ClickJacking Framing Protection	Logging	16	16
3	CSS Style Sheet	Logging	41	41

Clickjacking Protection (Reloaded)

Transaction UCON_CHW or UCONCOCKPIT

HTTP Whitelist Tool for Unified Connectivity (UCON) Change



Context Type Settings

Context Type: 02 Description: ClickJacking Framing Protection

Mode: Logging

Logged HTTP Whitelist Checks

Selection: Not covered by Whitelist (Blocked)

To Whitelist To No-Log-List Re

Covered by	Scheme	Host	Port	Path
	https	ldai1fua.wdf.sap.corp	44316	
	https	ldai1u1y.wdf.sap.corp	44355	
	https	ldai1yi3.wdf.sap.corp	44333	
	http	ldai1yi3.wdf.sap.corp	50033	
	http	ldai2yi3.wdf.sap.corp	50033	
	https	ldai3yi3.wdf.sap.corp	44334	/
	https	ldcifua.wdf.sap.corp	44316	
	https	ldciu1y.wdf.sap.corp	44355	
	https	ldciyi3.wdf.sap.corp	44333	/
	http	ldciyi3.wdf.sap.corp	50033	
	https	lu0305.wdf.sap.corp	443	
	http	lu0305.wdf.sap.corp	80	
	https	uyt928-er9001.wdf.sap.corp	443	
	https	uyt928-er9600.wdf.sap.corp	443	
	https	wdcicwd.wdf.sap.corp	1034	

Whitelist

Name	Scheme rule	Host rule	Port rule
------	-------------	-----------	-----------

YI3(1)/000 Input Window

Input entry for Whitelist:

Scheme rule:	HTTPS
Host rule:	uyt928-er++++.wdf.sap.corp
Port rule:	443
Path rule:	*
Compare rule:	ABAP expressions (*,+)
Namespace:	C Customer

Clickjacking Protection (Reloaded)

Transaction UCON_CHW or UCONCOCKPIT

HTTP Whitelist Tool for Unified Connectivity (UCON) Change

Context Type Settings
 Context Type: 02 Description: ClickJacking Framing Protection Mode

Logged HTTP Whitelist Checks

Selection: All

To Whitelist To No-Log-List

Covered by	Scheme	Host	Port	Path
	https	ldai1fua.wdf.sap.corp	44316	
	https	ldai1u1y.wdf.sap.corp	44355	
	https	ldai1yi3.wdf.sap.corp	44333	
	http	ldai1yi3.wdf.sap.corp	50033	
	http	ldai2yi3.wdf.sap.corp	50033	
	https	ldai3yi3.wdf.sap.corp	44334	/
	https	ldcifua.wdf.sap.corp	44316	
	https	ldciu1y.wdf.sap.corp	44355	
	https	ldciyi3.wdf.sap.corp	44333	/
	http	ldciyi3.wdf.sap.corp	50033	
	https	lu0305.wdf.sap.corp	443	
	http	lu0305.wdf.sap.corp	80	
	https	uyt928-er9001.wdf.sap.corp	443	
	https	uyt928-er9600.wdf.sap.corp	443	
	https	wdcicwd.wdf.sap.corp	1034	

Whitelist

Name	Scheme rule	Host rule	Port rule	Path rule
C	https	uyt928-er++++.wdf.sap.corp	443	*

Result:

HTTP is blocked

Servers uyt928-er+++ are accepted

Clickjacking Protection (Reloaded)

Required actions in a nutshell (in addition to UCON notes)

Pre-consideration

- Central Clickjacking protection information:
→ see note [2319727](#)
- Check system requirements:
→ see [below](#) (July 2016)
- Check your landscape setup and define a list of trusted domains / hosts

Custom code

- ABAP: no adaption required
Information: For BSP application solution relies on existence of HTML Tags `<head></head>`.
→ see note [2319192](#)
- JAVA: (Custom) JSP applications require adaption
→ see note [2290783](#)

Configuration ABAP

- Perform configuration for activation of Clickjacking protection ABAP
 - Central Whitelist maintenance: → see note [2142551](#)
 - **UCON HTTP Whitelist:** → see note [2507225](#)
 - BSP activation: → see note [2319192](#)
 - **What about note [2028904](#) describing a mandatory configuration activity with transaction SICF?**

Configuration JAVA

- Perform configuration for activation of Clickjacking protection JAVA
 - Central Whitelist maintenance & activation:
→ see note [2170590](#)
 - Framework activation: → see notes [2169860](#) (WDJ), [2169722](#) (EP), [2263656](#) (HTMLB), [2244161](#) (WCEM)

Clickjacking Protection (Reloaded)

References

Online Help

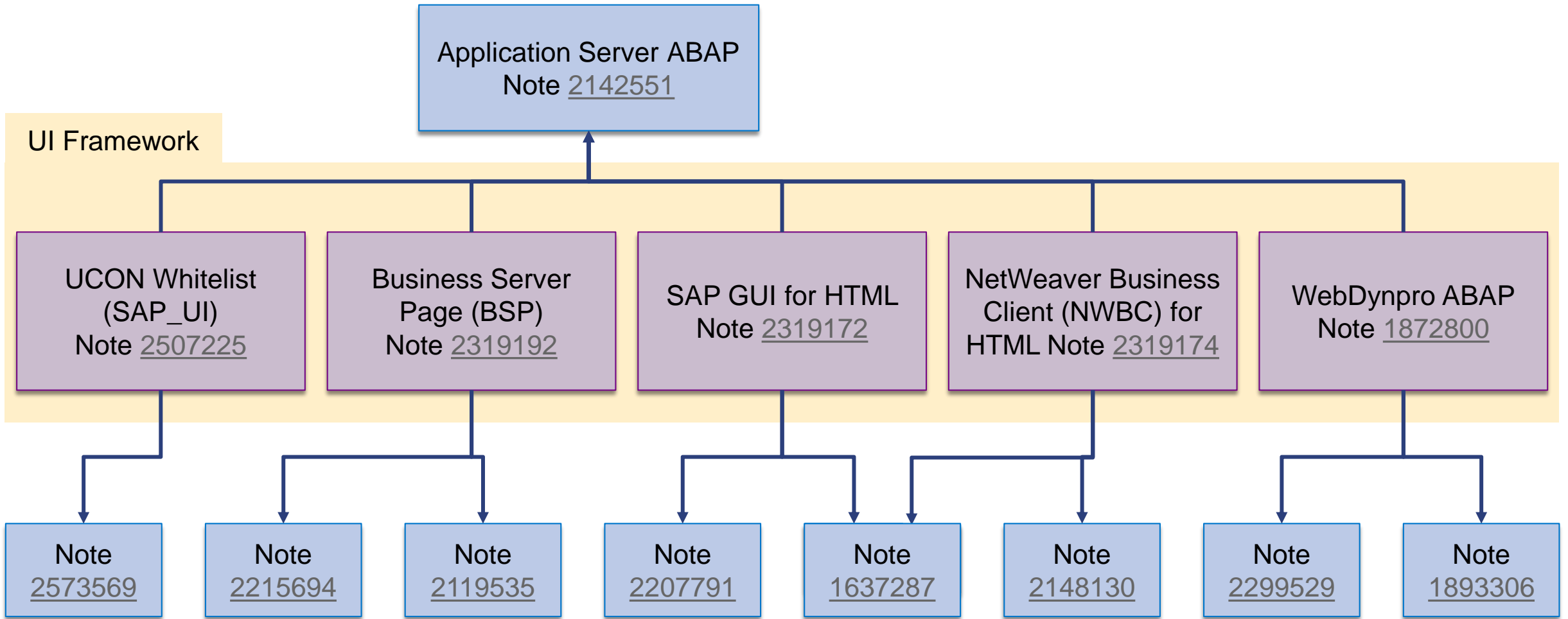
Using a Whitelist for Clickjacking Framing Protection

https://help.sap.com/saphelp_nw73ehp1/helpdata/en/96/6b6233e5404ebe80513ae082131132/frameset.htm

<https://help.sap.com/viewer/864321b9b3dd487d94c70f6a007b0397/7.4.19/en-US/966b6233e5404ebe80513ae082131132.html>

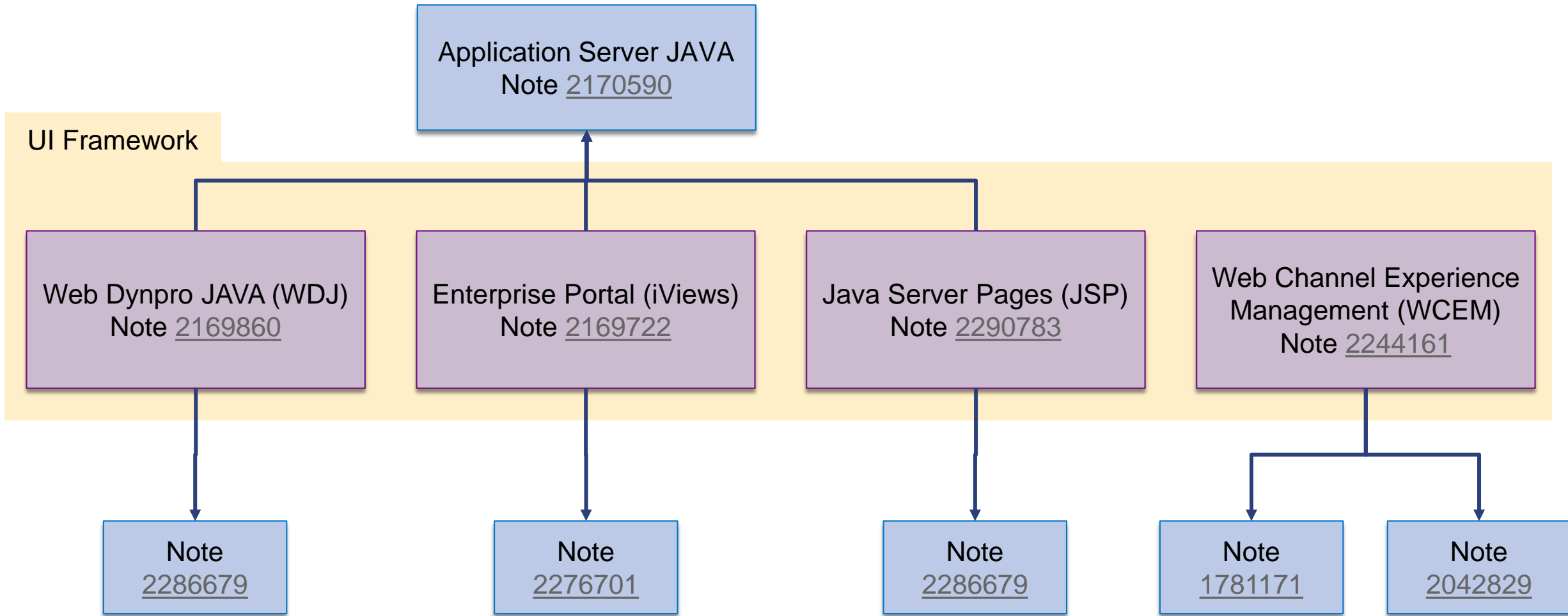
Clickjacking Protection (Reloaded)

ABAP Framework



Clickjacking Protection (Reloaded)

JAVA Framework





March 2019

Topics March 2019



WINTER IS COMING - How to keep Connectivity to SAP's Support Backbone

Note [2475591](#) - Transport Check Report

Note [2030144](#) - Switchable authorization checks for RFC in SLCM (Student Life cycle Mngmt.)

Note [2524203](#) - Switchable authorization checks for RFC in FI-CA

Notes [2764283](#) [2742027](#) [2724713](#) about XSA

Overview about recent Notes concerning System Recommendations

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
SAP Learning HUB

WINTER IS COMING - How to keep Connectivity to Support Backbone

SAP's support backbone has been updated. The legacy infrastructure remains in place to allow a safe transition for customers.

Customers need to switch to the new infrastructure before January 2020 to ensure continuous connectivity.

This impacts every ABAP-based SAP system which is connected to the support backbone:

- **Upgrade SAP Solution Manager at least to 7.2 SP 7 (+ manual activities)
(System Recommendations requires at least SolMan 7.2 SP 5)**
<https://support.sap.com/en/alm/solution-manager/sap-support-backbone-update.html>
- **Update SNOTE to handle digitally signed SAP Notes**
<https://support.sap.com/en/my-support/knowledge-base/note-assistant.html>
- **All ABAP-based SAP systems which have direct connectivity to SAP (i.e. sending EWA reports directly to SAP) need to be updated with the latest ST-PI AddOn**
Minimum versions: ST-PI 740 SP10, ST-PI 2008_1_700 SP20, ST-PI 2008_1_710 SP20, ST-A/PI 01T* SP01

WINTER IS COMING - How to keep Connectivity to Support Backbone

Connectivity to SAP's Support Backbone

<https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/connectivity-to-sap.html>

Update of SAP's Support Backbone: Frequently Asked Questions (FAQ)

<https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/connectivity-to-sap/sap-support-backbone-update-faq.html>

Note [2716729](#) - SAP backbone connectivity - SAP Parcel Box configuration

Note [2714210](#) - New communication channel to SAP Backbone for Service Content Update

Note [2740667](#) - RFC connection SAPOSS to SAP Service & Support backbone will change (latest) in January 2020

[...]

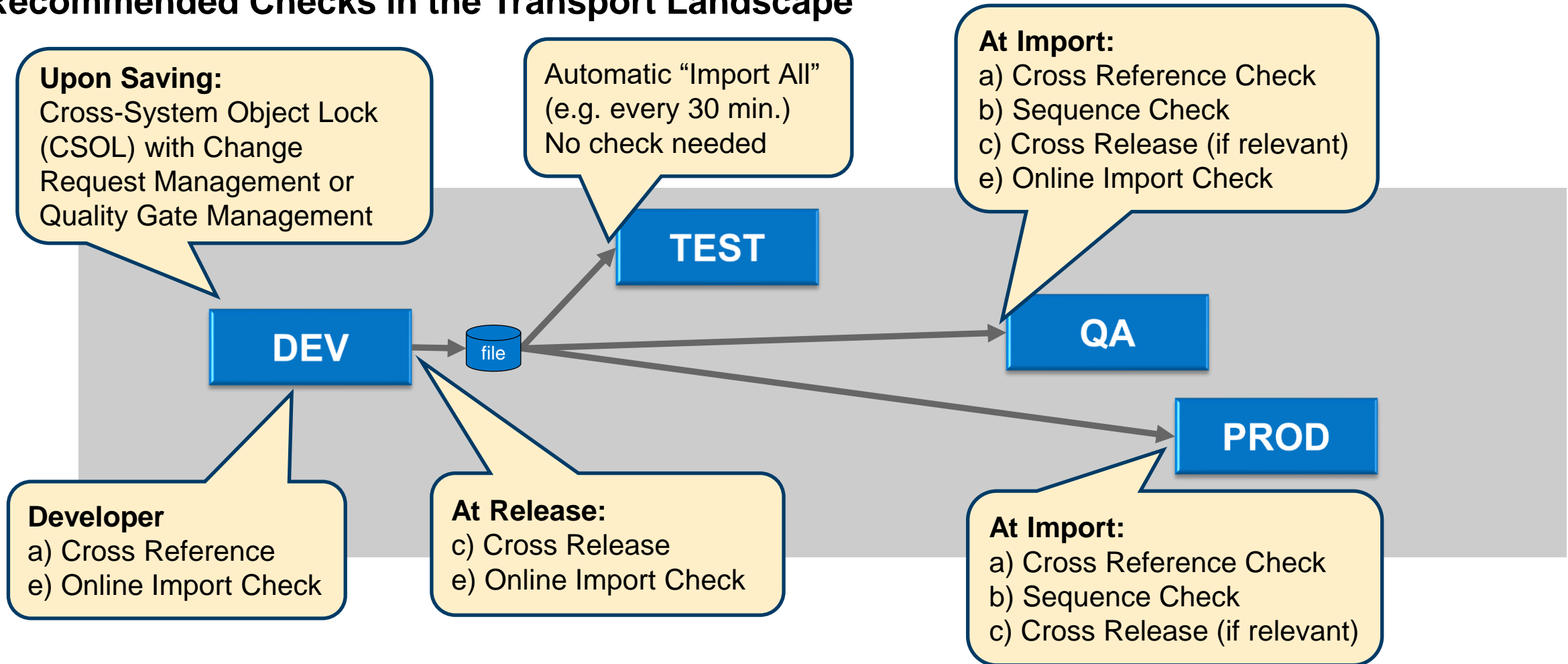
Note 2475591 - Transport Check Report

The following checks are available:

- a) Cross Reference:** For all objects in the selected transport requests the referenced objects are identified by a where-used-analysis. This check works for ABAP repository, data dictionary, customizing, SAP notes and BW objects (=prediction of return code 8).
- b) Sequence Check:** The sequence check identifies other transport requests with identical objects which have been released in the last 90 days, but have not yet been imported into the target system.
- c) Cross Release:** If the current system and the target system are on different support package levels, this check identifies critical objects in the selected transport request, which belong to inconsistent software components.
- d) Import Time in Source System:** The import time of the selected transport requests in the source system is summed up.
- e) Online Import Check:** This check estimates the criticality of an import when the end users are working in the production system. Prerequisite: activate UPL/SCMON (maybe in addition to already activated SCMON)

Note 2475591 - Transport Check Report

Recommended Checks in the Transport Landscape



Note 2475591 - Transport Check Report

Transaction /SDF/TRCHECK
= Report /SDF/CMO_TR_CHECK

RFC-Destinations are mandatory, but you can use NONE (for local checks) or SM*READ or SM*TMW (if you use the report in the SAP Solution Manager) to address the source and target system.

Check Transport Request

Usage Statistics

System Information

RFC to Source System	SM_TSTCLNT010_READ
RFC to Target System	SM_PRDCLNT010_READ

Transport Details

Transport Requests X3AK900053

Import Queue from Target System/Client

Import Queue from System/Client

Transport Checks

- Cross Reference
- Sequence Check
- Cross Release
- Import Time in Source System
- Online Import Check

Note 2475591 - Transport Check Report

Online Import Check Results

Table access or report execution per hour of a week (requires collection of usage statistics)

Prerequisite

- In order to see the hourly data you must collect usage statistics for one week.
- Run the report `/SDF/OI_ADMIN` in the production system.

Example

- In this example the best import window for objects affecting the report `SAPFV45P` (sales order) is on the weekend or in the evening from 22:00 to 23:00.

Program SAPFV45P - Executions

Hour of Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0	860.013	52.468.955	63.040.657	41.086.762	55.501.123	64.966.680	10.017.261
1	1.281.523	258.084.003	245.504.763	49.931.344	263.012.939	252.315.170	4.022.861
2	1.891.132	279.592.599	262.266.661	48.709.732	275.396.425	273.559.525	1.181.538
3	94.712	240.190.194	274.103.512	45.864.254	224.609.773	268.576.156	910.964
4	321.281	275.386.739	178.963.315	47.598.080	229.076.256	175.117.100	59.771
5	877.576	291.279.454	250.562.169	47.372.51...	290.912.925	272.495.113	62.896
6	4.590.532	280.395.926	265.889.144	44.366.562	278.228.396	260.261.703	98.208
7	10.403.819	258.464.898	269.726.310	43.259.276	264.574.771	243.084.376	210.149
8	18.675.263	200.776.324	239.596.250	50.105.347	230.136.659	176.881.336	227.843
9	21.792.317	172.434.841	203.292.626	58.837.058	187.732.772	124.959.085	169.223
10	19.161.215	99.337.142	120.051.350	42.092.272	98.365.367	72.089.584	2.008.979
11	24.033.244	44.578.060	75.569.064	24.577.888	78.137.826	16.332.932	253.817
12	21.450.678	37.516.950	48.555.908	25.272.056	60.479.811	11.647.906	880.133
13	23.382.161	43.278.638	30.380.935	33.161.443	26.449.616	7.083.735	1.178.893
14	27.086.261	45.339.126	27.289.331	27.409.630	34.610.338	8.597.278	6.005.955
15	27.923.366	28.199.781	22.618.788	20.422.421	24.805.961	18.367.688	7.200.379
16	26.501.882	34.392.968	35.734.942	23.913.250	20.087.518	11.541.123	5.393.039
17	14.948.496	19.560.348	30.144.286	18.731.347	12.762.499	7.059.319	7.247.348
18	18.055.286	27.618.053	18.992.712	13.182.881	13.979.089	566.109	7.182.667
19	26.095.793	30.969.214	13.065.676	21.061.222	12.561.001	70.016	306.784
20	15.521.590	26.415.294	19.042.915	15.377.100	12.297.554	191.761	232.688
21	23.492.383	16.925.113	15.173.150	7.268.709	10.550.515	4.545.189	229.672
22	16.917.066	6.556.826	7.331.414	1.096.558	8.855.797	7.055.925	76.330
23	25.408.512	16.005.361	11.051.921	11.893.144	20.397.472	12.677.615	157.491

Note 2030144 - Switchable authorization checks for RFC in SLCM (Student Life cycle Management)

Old note from 2014, but ...

... did you have activated the switch?

... did you have activated all other switches?

1. Activate Security Audit Log

DUO (Authorization check on object &A in scenario &B successful)

DUP (Authorization check on object &A in scenario &B failed)

DUQ (Active scenario &A was changed - &B)

2. Check transaction SACF (or SACF_INFO) as part of every Support Package upgrade and activate **all** scenarios

Report Environment:
Release/System ID/Client: 753 / EC1 / 001
Executed On: 19.03.2019/14:36:56
Number of Scenarios Found 248

Scenario Name	Component ID	Object	Short Text for Check
FI_ACE_REPORT	FI-LA	F_ACE_DST	Authorization check f
		F_ACE_PST	
		F_L_ACCRUL	
FI_AP_VENDOR_BAPI	LO-MD-BP-VM	F_LFA1_GEN	Authorization Checks
FI_AR_CM_BAPI	FI-AR-AR	F_KNKA_KKB	Authorization Check
FI_AR_CUSTOMER_BAPI		F_KNA1_GEN	Authorization Checks
FI_BL_PAYRQ_RELEASE	FI-BL-PT	F_PAYRQ	Release of Payment
FI_DOC_CHANGE	FI	F_BKPF_BED	FI Document Change
		F_BKPF_BEK	
		F_BKPF_BES	
		F_BKPF_BLA	
		F_BKPF_BUK	
		F_BKPF_GSB	
		F_BKPF_KOA	
		F_FAGL_SEG	

Note 2524203 - Switchable authorization checks for RFC in FI-CA

Old note from 2017 which is published now...

... and you already have the software part of the solution as part of a SP upgrade

... but with inactive settings

... therefore ... see previous slide

Notes 2764283 2742027 2724713 about XSA

Solution: get new software

How to check the version of existing installations?

- **Locally using the XS command line interface (ok)**

- **Centrally via ...**
 - SAP HANA 2.0 Cockpit ?
 - SAP Solution Manager
 - LMDB ?
 - System Recommendations ?
 - CCDB and Configuration Validation (Store `VERSION` of Store Group `XSA_STOREGROUP`) ?

Wiki: Maintenance of Product in the System Landscape

<https://wiki.scn.sap.com/wiki/display/SMSETUP/Maintenance+of+Product+in+the+System+Landscape>

The Wiki describes how to connect various system types to the SAP Solution Manager

- Automatic creation of Technical System?
- Automatic entry of installed software?

Application Server ABAP

Application Server Java

SAP HANA: Managed System Setup of SAP HANA in Solution Manager

SAP HANA XSA: SAP HANA XSA System Monitoring setup

SAP BusinessObjects Enterprise: Managed System Setup of BOE 4.X system in Solman 7.1 and 7.2

Web Dispatcher: Configuring Web Dispatcher for Root Cause Analysis in Solution Manager

SAP Router: Managed System Setup of SAP Router in SAP Solution Manager 7.1

Overview about recent Notes concerning System Recommendations

Release Notes

Note [2725557](#) - SysRec: Note type 'License Audit Notes' in System Recommendation as of Solution Manager 7.2 SP 8

Note [2689083](#) - SysRec: Field "Status" is replaced with "Processing Status" and "Implementation Status" as of SolMan 7.2 SP 7

Correction Notes

Note [2640996](#) - SysRec: Enhancement of UPL error message Handling

Note [2745082](#) - SysRec: NonABAP notes relevance check fix

Note [2443137](#) - SysRec: Note count is 0 in SysRec system overview

Note [2683868](#) - SysRec: Download Basket doesn't contain the files

Note [2536918](#) - SysRec: Display all systems and notes at one time

Fiori App Correction Notes

Note [2747922](#) - SysRec: Corrections for Solution Manager 720 SP 08 Fiori UI

Note [2741223](#) - SysRec: Corrections for Solution Manager 720 SP 07 Fiori UI

Note [2656937](#) - SysRec: Collective corrections for SAP Solution Manager 7.2 SP 07 Fiori UI

Note [2556623](#) - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI



February 2019

Topics February 2019



SAP Customer Engagement Initiative 2019 – Security

Note 2742027 - Missing Authentication check in SAP HANA Extended Application Services, XSA

Note 2709897 - Directory Traversal in SAP Enterprise Architecture Designer on XSA

Note 2750987 - Potential Corruption of Encrypted Root Key Backups by SAP HANA Cockpit

Note 2712210 - SysRec 7.2 SP 5 customize the calculation of security notes for unused subHR component

Recap: Security Patch Process

Recordings:
DSAG (German)
ASUG
SAP Learning HUB

SAP Customer Engagement Initiative / Customer Influence

<https://influence.sap.com>

SAP Customer Engagement Initiative 2019 – Security

Registration ends on 16.03.2019

- **Simplified SAP Notes Implementation**
<https://influence.sap.com/sap/ino/#/campaign/1754>
- **Improve security declaration consumption via CVE**
<https://influence.sap.com/sap/ino/#/campaign/1792>
- **Intelligent Authorization Handling using Responsibility Management in SAP S/4HANA**
<https://influence.sap.com/sap/ino/#/campaign/1797>
- **SAP Cloud Platform Data Lifecycle Services - Blocking Store**
<https://influence.sap.com/sap/ino/#/campaign/1798>
- **Government Risk and Compliance: SAP Cloud Identity Access Governance**
<https://influence.sap.com/sap/ino/#/campaign/1801>
- **Identity Access Management for B2B Scenarios**
<https://influence.sap.com/sap/ino/#/campaign/1834>

Note 2742027 - Missing Authentication check in SAP HANA Extended Application Services, XSA

The note solves a vulnerability of the XSA

An update of the underlying SAP HANA system is not required.

(But there is another note this month which requires a joint update.)

Affected are only SAP HANA systems running on SAP HANA 1 SPS11 or SPS12 or HANA2 SPS0 in combination with XSA runtime version 1.0.97-1.0.99.

The note recommends to update the XS advanced runtime to version 1.0.100 or later.

An update of the XS advanced runtime can be performed independently from SAP HANA database.

SAP HANA systems without XS advanced installed are not affected.

SAP HANA systems with HANA2 SPS1 or later (with or without XS advanced) are also not affected.

A configuration workaround, which blocks potential misuse of the issue, is described in the security note. There is no need to update the SAP HANA database server.

How to check the version of installed XSA?

Use the xs command line client (xs CLI) and execute command "`xs version`" to show the version of XSA.

Note 2709897 - Directory Traversal in SAP Enterprise Architecture Designer on XSA

**The note solves a vulnerability in an application running on XSA
EAD can be updated independently from the HANA database and the XSA engine.**

An update of XSA and the underlying SAP HANA system is not required.
(But there is another note this month which requires a joint update.)

Affected is any version below 1.4.3 of component SAP Enterprise Architecture Designer on XSA.

How to check the version of the installed application?

Use the xs command line client (xs CLI) and execute command "`xs lc`" to show the component info overview. Check the entry for `XSAC_HANA_EA_D (sap.com) 1.X.Y`

Note 2709897 - Directory Traversal in SAP Enterprise Architecture Designer on XSA

```
> xs login
USERNAME: XSA_ADMIN
PASSWORD>
Authenticating...
```

```
> xs lc
```

```
Getting software components in org "orgname" / space "SAP" as XSA_ADMIN...
Found software components:
```

software component	version
XSAC_ALM_PI_UI (sap.com)	1.12.6
XSAC_FILE_PROC (sap.com)	1.0.22
XSAC_HANA_EA_D (sap.com)	1.5.1
XSAC_HRTT (sap.com)	2.8.33
XSAC_MESS_SRV (sap.com)	1.3.6
XSAC_MONITORING (sap.com)	1.7.1
XSAC_PORTAL_SERV (sap.com)	1.3.2
XSAC_SAP_WEB_IDE (sap.com)	4.4.0
XSAC_SERVICES (sap.com)	1.6.12
XSAC_UI5_FESV4 (sap.com)	1.52.24
XSAC_UI5_SB (sap.com)	1.0.3
XSAC_XSA_COCKPIT (sap.com)	1.1.8

Note 2750987 - Potential Corruption of Encrypted Root Key Backups when using SAP HANA Cockpit

Do not use SAP HANA Cockpit 2 to create the root key backup as it could lead to corruption.

It is not possible to repair a corrupted root key backup.

Verify existing root key backup files, i.e. if you cannot tell how the backup was created.

Perform root key backups only using the command line as described in the SAP HANA Administration Guide:

<https://help.sap.com/viewer/6b94445c94ae495c83a19646e7c3fd56/2.0.03/en-US/b1e7562e2c704c19bd86f2f9f4feedc4.html>

Note 2750987 - Potential Corruption of Encrypted Root Key Backups when using SAP HANA Cockpit

Copy the root key backup file and validate the integrity using the following command (you will be asked for the root key backup password):

```
hdbnsutil -validateRootKeysBackup <filename>
```

If the validation fails, you need to immediately create a new root key backup for your system:

```
hdbnsutil -backupRootKeys <filename> --dbid=<dbid> | --  
database_name=<database_name> --type=ALL
```

Please note that this command must be executed for SystemDB and every tenant individually.

Note 2712210 - SysRec 7.2 SP 5 customize the calculation of security notes for unused subHR component

By default SysRec omits notes for unused HR components

After implementing this note you can activate a switch to show Security Notes for such unused components, too. Keep in mind to reset the SysRec buffer according to note 2449853 to trigger full calculation once.

Transaction SM30_DNOC_USERCFG_SR

New Entries: Details of Added Entries

68

User Name

Field Name

Sequence Number

Service Desk Customizing

Description

Field Value

Use function OCS_GET_INSTALLED_COMPS exporting parameter ET_CVERS_SUB with field UNUSED = X to see which components are „unused“:

SUBCOMP	SUBREL	MASTERCOMP	MASTERREL	U
SAP_HRC AE	608	SAP_HR	608	X
SAP_HRCAR	608	SAP_HR	608	X
SAP_HRCAT	608	SAP_HR	608	X
SAP_HRC AU	608	SAP_HR	608	X
SAP_HRCBE	608	SAP_HR	608	X
SAP_HRCBG	608	SAP_HR	608	X
SAP_HRCBR	608	SAP_HR	608	X

Note 2712210 - SysRec 7.2 SP 5 customize the calculation of security notes for unused subHR component

HR Security Notes are rather rare: Just 5 notes have been (re)-published since 2017

It's not simple to identify such notes on Support Portal because you cannot select for generic Software Components SAP_HR* or EA-HR* and you have to enter names one by one.

It might be easier to construct the URL externally:

```
https://launchpad.support.sap.com/#/mynotes?tab=Search&sortBy=ReleasedOn&filters=releaseStatus%25253Aeq~'NotRestricted'%25252BsecurityPatchDay%25253Aeq~'NotRestricted'%25252Btype%25253Aeq~'SECU'%25252BfuzzyThreshold%25253Aeq~'0.9'%25252BsoftwareComponent%25253Aeq~'SAP_HR'~'SAP_HRGXX'~'SAP_HRRXX'~'EA-HR'~'EA-HRGXX'~'EA-HRRXX'~'SAP_HRCDE'~'EA-HRCDE'
```

Note 2712210 - SysRec 7.2 SP 5 customize the calculation of security notes for unused subHR component

Link for SAP_HR, EA-HR plus all 118 components:

```
https://launchpad.support.sap.com/#/mynotes?tab=Search&sortBy=ReleasedOn&filters=releaseStatus%2523Aeq~'NotRestricted'%25252BsecurityPatchDay%25253Aeq~'NotRestricted'%25252Btype%25253Aeq~'SEC U'%25252BfuzzyThreshold%25253Aeq~'0.9'%25252BsoftwareComponent%25253Aeq~'SAP_HR'~'SAP_HRCAE'~'SAP_HRCAR'~'SAP_HRCAT'~'SAP_HRCAU'~'SAP_HRCBE'~'SAP_HRCBG'~'SAP_HRCBR'~'SAP_HRCCA'~'SAP_HRCCH'~'SAP_HRCCL'~'SAP_HRC CN'~'SAP_HRCCO'~'SAP_HRCCZ'~'SAP_HRCDE'~'SAP_HRC DK'~'SAP_HRCEG'~'SAP_HRCES'~'SAP_HRCFI'~'SAP_HRCFR'~'SAP_HRCGB'~'SAP_HRCGR'~'SAP_HRCHK'~'SAP_HRCHR'~'SAP_HRCHU'~'SAP_HRCID'~'SAP_HRCIE'~'SAP_HRCIN'~'SAP_HRCIT'~'SAP_HRCJP'~'SAP_HRCKR'~'SAP_HRCKW'~'SAP_HRCKZ'~'SAP_HRCMX'~'SAP_HRCMY'~'SAP_HRCNL'~'SAP_HRCNO'~'SAP_HRCNZ'~'SAP_HRCOM'~'SAP_HRC PH'~'SAP_HRCPL'~'SAP_HRCPT'~'SAP_HRCQA'~'SAP_HRCRO'~'SAP_HRCRU'~'SAP_HRC SA'~'SAP_HRCSE'~'SAP_HRC SG'~'SAP_HRC SI'~'SAP_HRC SK'~'SAP_HRCTH'~'SAP_HRCTR'~'SAP_HRCTW'~'SAP_HRCUA'~'SAP_HRCUN'~'SAP_HRCUS'~'SAP_HRCVE'~'SAP_HRCZA'~'SAP_HRGXX'~'SAP_HRRXX'~'EA-HR'~'EA-HRCAE'~'EA-HRCAR'~'EA-HRCAT'~'EA-HRCAU'~'EA-HRCBE'~'EA-HRCBG'~'EA-HRCBR'~'EA-HRCCA'~'EA-HRCCH'~'EA-HRCCL'~'EA-HRC CN'~'EA-HRCCO'~'EA-HRCCZ'~'EA-HRCDE'~'EA-HRC DK'~'EA-HRCEG'~'EA-HRCES'~'EA-HRCFI'~'EA-HRCFR'~'EA-HRCGB'~'EA-HRCGR'~'EA-HRCHK'~'EA-HRCHR'~'EA-HRCHU'~'EA-HRCID'~'EA-HRCIE'~'EA-HRCIN'~'EA-HRCIT'~'EA-HRCJP'~'EA-HRCKR'~'EA-HRCKW'~'EA-HRCKZ'~'EA-HRCMX'~'EA-HRCMY'~'EA-HRCNL'~'EA-HRCNO'~'EA-HRCNZ'~'EA-HRCOM'~'EA-HRC PH'~'EA-HRCPL'~'EA-HRCPT'~'EA-HRCQA'~'EA-HRCRO'~'EA-HRCRU'~'EA-HRC SA'~'EA-HRCSE'~'EA-HRC SG'~'EA-HRC SI'~'EA-HRC SK'~'EA-HRCTH'~'EA-HRCTR'~'EA-HRCTW'~'EA-HRCUA'~'EA-HRCUN'~'EA-HRCUS'~'EA-HRCVE'~'EA-HRCZA'~'EA-HRGXX'~'EA-HRRXX'
```


Recap: Security Patch Process

- **SAP Security Notes and SAP Security Patch Day**
What they are, when they're published
- **System Recommendations**
Tool to find the applicability of notes to systems
- **SAP Security Patch Process**
How to put all into a working mechanism



January 2019

Topics January 2019



Note [2699233](#) - Information Disclosure in SAP Financial Consolidation Cube Designer

Note [2727624](#) - Information Disclosure in SAP Landscape Management

Note [2696233](#) - Multiple Vulnerabilities in SAP Cloud Connector

Note [2724788](#) - Various Vulnerabilities in ADOBE PDFPRINT LIBRARY

Note [2688393](#) - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

What's new in System Recommendations 7.2 SP 8

Support for Notes which are Relevant for System Measurement / License Audit Notes
Separation between Display and Change authorizations

What's new in Configuration Validation 7.2 SP 8

Send Configuration Validation reports via email
Send System Recommendations reports via email

Recordings:
[DSAG \(German\)](#)
ASUG
SAP Learning HUB

Note 2699233 - Information Disclosure in SAP Financial Consolidation Cube Designer

Solution:

“... It now introduces a whitelist ...”

Solution options:

- Static, hard coded whitelist** → **just apply the patch**
- Empty, active whitelist** → **secure, but maybe incomplete**
- Empty, inactive whitelist because it's empty** → **manual configuration required**
- Empty, inactive whitelist because of main switch** → **manual configuration required**
- Logging / simulation available to identify required entries** → **good to know**

Solution

The fix is a change in the configuration file of the Deployer Service.

It now introduces a whitelist of Financial Consolidation URLs, configured by a Cube Designer administrator, which will no longer allow manipulation of the service call. You can find more information [here](#).

Install the patches mentioned in this security note.

Note 2699233 - Information Disclosure in SAP Financial Consolidation Cube Designer

The example shows an empty, inactive whitelist:

```
<AuthenticatedURL>
  <!-- webserver url="http://10.100.100.123/FC101WS" / -->
  <!-- webserver url="http://10.100.100.123/FC101WS_2" / -->
</AuthenticatedURL>
</AuthenticatedFinanceWebServers>
```

You need to add at least an active dummy entry:

```
<webserver url="dummy" />
```

If you add real entries do not forget to add entries for http and https.

Solution

The fix is a change in the configuration file of the Deployer Service.

It now introduces a whitelist of Financial Consolidation URLs, configured by a Cube Designer administrator, which will no longer allow manipulation of the service call. You can find more information [here](#).

Install the patches mentioned in this security note.

Note 2727624 - Information Disclosure in SAP Landscape Management

This vulnerability affects HANA installations even if the issue is located in a different component.

- 1. Implement the referenced SAP Landscape Management Patch LaMa 3.0 SPS09 PL1**
- 2. Delete old activities and log files to remove confidential information about HANA systems which you have installed via LaMa.
Delete log files once you do not need them any longer. Log and activity data may have been exported by users. Ensure proper deletion of these exports, too.**
- 3. Ensure the SAP HANA system user is disabled according to the HANA Security Guide**
- 4. Change relevant passwords of system users of tenants and other administration users**

Note 2696233 - Multiple Vulnerabilities in SAP Cloud Connector

The SAP Cloud Connector opens TLS encrypted communication channels to SAP Cloud Platform which then can be used by on-premise applications.

The Cloud Connector connects to the SAP Cloud Platform (SCP) via HTTPS and checks if the server certificate is signed by a valid and trusted CA, however the Common Name is not verified yet.

Install new version ($\geq 2.11.3$) of the SAP Cloud Connector

See linked slides to check the version of the SAP Cloud Connector and to verify more security settings.

So far, I do not see a possibility to check the version of the SAP Cloud Connector and the version of the jvm via application Configuration Validation in the SAP Solution Manager

Note 2724788 - Various Vulnerabilities in ADOBE PDFPRINT LIB

In System Recommendations, the note is visible for all ABAP systems because of its special assignment to software component BC-FES-GUI

BC-FES-GUI was added to all ABAP systems as a virtual software component of type 'Support Package Independent' as of May 2017

2724788 - Various Vulnerabilities in ADOBE PDFPRINT LIBRARY
Version 2 from Jan 8, 2019 in English

Description CVSS Software Components **Support Package Patches** Attributes Languages

Software Components

Software Component	From	To
PDFPRINT	7.50	7.50
SAPCPRINT	7.50	7.50
	7.50 BYD	7.50 BYD
BC-FES-GUI	7.50	7.50

Support Package Patches

Software Component	Support Package	Patch Level
SAP CLOUD PRINT MANAGER 750	SP000	000003
SAP CLOUD PRNT MGR 750 FOR BYD	SP000	000003
SAPPDFPRINT 7.50	SP000	000003

Note 2688393 - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

You must make sure that TLSv 1.2 is available in your system.

For TLSv 1.2, we recommend that you use at least version 8.4.49 of the CommonCryptoLib (CCL).

You must also make sure that TLSv 1.2 is included using the values maintained in the profile parameter `ssl/client_ciphersuites`.

Example: `ssl/client_ciphersuites = 150:PFS:HIGH::EC_P256:HIGH`

150 = 2(BEST) + 4(NO_GAP) + 16("blind") + 128(TLSv1.0)

Example: `ssl/client_ciphersuites = 918:PFS:HIGH::EC_P256:EC_HIGH`

918 = 2(BEST) + 4(NO_GAP) + 16("blind") + 128(TLSv1.0) + 256(TLSv1.1) + 512(TLSv1.2)

BEST + NO_GAP includes all higher versions, too. Therefore it's not necessary to list them explicitly.

The technical details are provided in section 7 of SAP Note 510007 (*Setting up SSL on Application Server ABAP*).

Note [2688393](#) - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

Cipher suites number in profile parameters `ssl/ciphersuites` and `ssl/client_ciphersuites`

Value	Description
1	"BC"- Option (accept SSL Version 2.0 CLIENT-HELLO / SSLv2Hello for TLSv1.x Handshake)
2	"BEST"- Option (activate highest available TLS protocol version, i.e. TLSv1.2 for CCL 8.4.31+)
4	"NO_GAP"- Option (no gaps between TLS protocol versions; is forced to date)
16	Allow blind sending of a client certificate
32	"Strict protocol version configuration" option--do not automatically enable TLSv1.0
64	SSLv3 (do not use)
128	TLSv1.0 (if the CommonCryptoLib is too old, you cannot disable TLSv1.0, as e.g. with note 2065806)
256	TLSv1.1
512	TLSv1.2

Note 2688393 - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

How-to deactivate TLS 1.0?

Note 2384243 - NetWeaver Application Server: How to configure strict TLS 1.2

Note 2384290 - SapSSL update to facilitate TLSv1.2-only configurations, TLSext SNI for 721+722 clients

```
ssl/ciphersuites = 801:PFS:HIGH::EC_P256:EC_HIGH
```

```
ssl/client_ciphersuites = 816:PFS:HIGH::EC_P256:EC_HIGH
```

How-to test for weak ciphersuites?

Testing for Weak SSL/TLS Ciphers, Insufficient Transport Layer Protection (OTG-CRYPST-001)

[https://www.owasp.org/index.php/Testing_for_Weak_SSL/TLS_Ciphers,_Insufficient_Transport_Layer_Protection_\(OTG-CRYPST-001\)](https://www.owasp.org/index.php/Testing_for_Weak_SSL/TLS_Ciphers,_Insufficient_Transport_Layer_Protection_(OTG-CRYPST-001))

List of tools:

[https://www.owasp.org/index.php/Testing_for_Weak_SSL/TLS_Ciphers,_Insufficient_Transport_Layer_Protection_\(OTG-CRYPST-001\)#Tools](https://www.owasp.org/index.php/Testing_for_Weak_SSL/TLS_Ciphers,_Insufficient_Transport_Layer_Protection_(OTG-CRYPST-001)#Tools)

[31] SSL service recognition via nmap

<https://nmap.org/nsedoc/scripts/ssl-enum-ciphers.html>

[32] Testing supported Cipher Suites, BEAST and CRIME attacks via TestSSLServer

<http://www.bolet.org/TestSSLServer/>

Note 2688393 - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

```
> sapgenpse tlsinfo -c DEFAULT
```

Running in client mode

Configured protocol versions:

TLSv1.0

Enabled cipher suites:

TLS_RSA_WITH_AES128_CBC_SHA
TLS_RSA_WITH_AES256_CBC_SHA
TLS_ECDHE_RSA_WITH_AES128_CBC_SHA
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES128_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA

Enabled elliptic curves:

EC_P384 [optimized: FALSE]
EC_P521 [optimized: FALSE]
EC_P256 [optimized: FALSE]
EC_X25519 [optimized: FALSE]

```
> sapgenpse tlsinfo -c 150:PFS:HIGH::EC_P256:HIGH
```

Running in client mode

Configured protocol versions:

TLSv1.0, TLSv1.1, **TLSv1.2** (Blind Client Certificate)

Enabled cipher suites:

TLS_ECDHE_RSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_RSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_RSA_WITH_AES128_CBC_SHA
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_ECDSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_ECDSA_WITH_AES128_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA
TLS_RSA_WITH_AES128_GCM_SHA256
TLS_RSA_WITH_AES256_GCM_SHA384
TLS_RSA_WITH_AES128_CBC_SHA
TLS_RSA_WITH_AES256_CBC_SHA

Enabled elliptic curves:

EC_P256 [optimized: FALSE]

Note 2688393 - SI: Deactivation of the protocols TLS 1.0 and TLS 1.1 on 12/31/2018

```
> sapgenpse tlsinfo -c 950:PFS:HIGH::EC_P256:EC_HIGH
```

Running in client mode

Configured protocol versions:

TLSv1.0, TLSv1.1, **TLSv1.2** (Blind Client Certificate, Strict Protocol Version Mode)

Enabled cipher suites:

TLS_ECDHE_RSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_RSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_RSA_WITH_AES128_CBC_SHA
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_ECDSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_ECDSA_WITH_AES128_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA
TLS_RSA_WITH_AES128_GCM_SHA256
TLS_RSA_WITH_AES256_GCM_SHA384
TLS_RSA_WITH_AES128_CBC_SHA
TLS_RSA_WITH_AES256_CBC_SHA

Enabled elliptic curves:

EC_P256 [optimized: FALSE]
EC_P384 [optimized: FALSE]
EC_P521 [optimized: FALSE]
EC_X25519 [optimized: FALSE]

```
> sapgenpse tlsinfo -c 816:PFS:HIGH::EC_P256:EC_HIGH
```

Running in client mode

Configured protocol versions:

TLSv1.1, **TLSv1.2** (Blind Client Certificate, Strict Protocol Version Mode)

Enabled cipher suites:

TLS_ECDHE_RSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_RSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_RSA_WITH_AES128_CBC_SHA
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_RSA_WITH_AES256_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES128_GCM_SHA256
TLS_ECDHE_ECDSA_WITH_AES256_GCM_SHA384
TLS_ECDHE_ECDSA_WITH_AES128_CBC_SHA
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA384
TLS_ECDHE_ECDSA_WITH_AES256_CBC_SHA
TLS_RSA_WITH_AES128_GCM_SHA256
TLS_RSA_WITH_AES256_GCM_SHA384
TLS_RSA_WITH_AES128_CBC_SHA
TLS_RSA_WITH_AES256_CBC_SHA

Enabled elliptic curves:

EC_P256 [optimized: FALSE]
EC_P384 [optimized: FALSE]
EC_P521 [optimized: FALSE]
EC_X25519 [optimized: FALSE]

What's new in System Recommendations 7.2 SP 8

Support for Notes which are Relevant for System Measurement

Similar like for HotNews, Performance Notes, or Legal Change Notes you can now identify relevant notes having the attribute „Relevancy for System Measurement“ aka „License Audit Notes“

Note:

2294328 - Measurement result for metric ID 3216 is

Description Software Components Corrections Support Packages

Attributes

Name	Value
Other Components	XX-SER-LAS License Auditing Services
Relevancy for System Measurement	Engine Measurement Correction

System recommendations:

	75	28	3	10	1	16	10	1	5	1
	All	ABAP	ATC	BOBJ	CLOUD_CONN	HANADB	JAVA	SUP	UNSPECIFIC	WEBDISP
System										
<input type="checkbox"/>	Technical System	IT Admin Role	System Priority	Security Notes	Hot News	Performance Notes	Legal Change Notes	License Audit Notes	Favorite	
<input type="checkbox"/>	AHN~ABAP	DEVELOP	High	217	120	672	564	1	★	
<input type="checkbox"/>	AHN~HANADB	Undefined	Undefined	23	49	173	477	0	☆	
<input type="checkbox"/>	BE6~ABAP	Test System	Undefined	198	125	602	550	1	★	
<input type="checkbox"/>	BEA~ABAP	Undefined	Undefined	127	69	378	548	1	★	
<input type="checkbox"/>	BEB~JAVA	Undefined	Undefined	63	89	245	479	0	☆	
<input type="checkbox"/>	BEC~ABAP	Development System	Undefined	55	60	242	504	1	☆	

Limitation: The Notes Search on SAP Support Portal <https://support.sap.com/notes> does not show a filter option for such notes

What's new in System Recommendations 7.2 SP 8

Support for Notes which are Relevant for System Measurement

You can activate a new filter field on the SAP Note Overview screen:

System Measurement:

System Measurement

- Engine Measurement Correction
- Engine Measurement Delivery
- Engine Measurement Info
- Consolidation LAW
- RFC Result Transfer
- System Measurement USMM
- Measurement Tools Info

You can display the System Measurement and System Measurement ID columns on the SAP Note Overview screen via the settings button:

SAP Notes for selected technical systems: 8

<input type="checkbox"/> Technical System	Note Number	Short text	Support Package	System Measurement ID	Processing Status	System Measurement	Correction Types	Attributes	Implementation Status
---	-------------	------------	-----------------	-----------------------	-------------------	--------------------	------------------	------------	-----------------------

See Online Help: <https://help.sap.com/viewer/34eaf25a11d54485aecf05e041f78555/107/en-US/aab02c8d37b54536bc3319521ea08eff.html>

What's new in System Recommendations 7.2 SP 8

Support for Notes which are Relevant for System Measurement








Preparation, which only required if you have previously changed the customizing, i.e. to view correction notes, too.

In this case you have to extend the settings via transaction SM30_DNOC_USERCFG_SR for table DNOC_USERCFG

SYSREC_NOTE_TYPES

HSLPCA

Change View "Service Desk Customizing": Overview

68       

Service Desk Customizing

Name	Field Name	Seq...	Field val.
	SYSREC_DELTA_DAYS	0	7
	SYSREC_NOTE_TYPES	0	HSLPCA

See Online Help: <https://help.sap.com/viewer/34eaf25a11d54485aecf05e041f78555/107/en-US/aab02c8d37b54536bc3319521ea08eff.html>

What's new in System Recommendations 7.2 SP 8

Support for Notes which are Relevant for System Measurement - Examples

Engine Measurement Correction

- Note [2621557](#) - ILM Audit Module: Introduction of additional measurement units
- Note [2512261](#) - FKKINV: Usage measurement for SAP Convergent Invoicing still includes documents for ...
- Note [2294328](#) - Measurement result for metric ID 3216 is 1 too high
- Note [2254780](#) - Enhancement of software license audit for SAP GTS
- Note [2234559](#) - Transaction USMM triggers a runtime error DBSQL_SQL_ERROR

LAW Consolidation

- Note [2407507](#) - LAW 2.0 SDCCN transfer does not work to 7.31
- Note [2164594](#) - LAW 2.0: Falsche Nutzertypen bei Konsolidierung
- Note [2112104](#) - LAW 2.0: Fehlende Sortierfunktion im RFC STATUS

System Measurement USMM

- Note [2213466](#) - System measurement: Performance during determination of user address data
- Note [2170034](#) - System measurement: Incorrect measurement date is displayed in the License Administration Workbench
- Note [1900773](#) - System measurement: Automatic measurement via RFC or as a background job

RFC Result Transfer

- Note [2498932](#) - System measurement job RSUVM017 or RSUVM007 terminates sporadically
- Note [2170036](#) - LAW 2.0: RFC results from component systems are placed in LAW1 inbox
- Note [1630359](#) - Report RSLAW_PLUGIN: Error message in case of RFC problems

What's new in System Recommendations 7.2 SP 8

Separation between Display and Change authorizations

Using authorization object `SM_FUNCS` for `SM_APPL = SYSTEM_REC` you now can distinguish between activity 03 “Display” and 02 “Change” for accessing status and comments.

Activity 06 “Delete” is checked if you are decommissioning a system.

The check for accessing status and comments does not distinguish between note types.



The template roles `SAP_SYSREC_ALL` and `SAP_SYSREC_DIS` are already adjusted accordingly in SP 7

What's new in Configuration Validation 7.2 SP 8

Send Configuration Validation reports via email

Report DIAGCV_SEND_CONFIG_VALIDATION

Target system	Target system (mandatory)
Comparison list	Comparison list (mandatory)
Config store(s)	Configuration stores (multi values)
Email recipients	Email recipients (multi values)
Email greeting, body, ending	Text (html)
Email subject	Text
Show only non-compliant items	x (default) show non-compliant only, ' ' show compliant and non-compliant, + show all including 'item not found' and 'additional in target system'
Compliance table header	Text (html)
Attachment name	File name
Send to SAP inbox	- (default) no, x send to sender, too
Attach results to email	x (default) results as attachment, ' ' results inline
Time range (today - days)	Number of days (if the query is time dependent)
Send empty validation result	x (default) send also email when validation result is empty, ' ' no mail if empty results
Use Item Description	- (default) no, x show weight and item description (instead of store group name column)

Target system	<input type="text"/>
Comparison list	<input type="text"/>
Config store(s)	<input type="text"/> 
Email recipients	<input type="text"/> 
Email greeting	Dear Sir or Madam,
Email body	Text body could contain a lot of lines.
Email ending	Yours Sincerely forename surname
Email subject	Configuration Validation Results
Show only non-compliant items	<input checked="" type="checkbox"/>
Compliance table header	Configuration Validation Results
Attachment name	cova_attachment
Send to SAP inbox	<input type="checkbox"/>
Attach results to email	<input checked="" type="checkbox"/>
Time range (today - days)	<input type="text" value="30"/>
Send empty validation result	<input checked="" type="checkbox"/>
Use Item Description	<input type="checkbox"/>

What's new in Configuration Validation 7.2 SP 8

Send System Recommendations reports via email

Report DIAGCV_SEND_SYSREC

Comparison list

Comparison list (mandatory)

Email recipients

Email recipients (multi values)

Email greeting, body, ending

Text (html)

Email subject

Text

Compliance table header

Text (html)

Attachment name

File name

Send to SAP inbox

- (default) no, **x** send to sender, too

Attach results to email

x (default) results as attachment,
' ' results inline

Release date in (today - days)


Number of days

Include HotNews, Security Notes, Performance notes, Legal Change notes, Correction notes

x select note type, ' ' do not select note type

Report uses on individual columns

- (default) show configuration validation standard report,
x show system recommendation report

Comparison list	<input type="text"/>
Email recipients	<input type="text"/> 
Email greeting	Dear Sir or Madam,
Email body	Text body could contain a lot of lines.
Email ending	Yours Sincerely forename surname
Email subject	System Recommendation Results
Compliance table header	Missing Security Notes
Attachment name	sysrec_attachment
Send to SAP inbox	<input type="checkbox"/>
Attach results to email	<input checked="" type="checkbox"/>
Release date in (today - days)	<input type="text" value="30"/>
Include hotnews notes	<input checked="" type="checkbox"/>
Include security notes	<input checked="" type="checkbox"/>
Include performance notes	<input type="checkbox"/>
Include legal change notes	<input type="checkbox"/>
Include correction notes	<input type="checkbox"/>
Report uses individual columns	<input checked="" type="checkbox"/>



December 2018

Topics December 2018



Note [2718993](#) - Cross-Site Scripting using host header in NetWeaver AS Java

Note [2721962](#) - Version Management: REMOTE comparison option is missing the "Target sys" option

Note [2530147](#) - Missing Authorization check in DFPS stock transfer process

Note [2061129](#) - Missing whitelist check in SAP Dispute Management

RFC Security Optimization Projects

Note [2040644](#) - System Internal Communications Security

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
[SAP Learning HUB](#)

Note 2718993 - Cross-Site Scripting using host header in NetWeaver AS Java

The note does not describe a software patch but a manual configuration instruction:

Configure appropriate **ProxyMappings** to disregard the information provided in the request host header and to avoid HTTP host header manipulation, even if there is no Proxy or Load balancer in front of the system. For more details see documentation about [Mapping Ports](#) and KBA [1927272](#).

Example:

You have NetWeaver AS Java including ICM installed on host `www.local.com` and ports 50000 for http respective 50001 for https.

Configure `ProxyMappings` property as follows:

```
50000=(Host:www.local.com,Port:50000,Scheme:http,Override:true) ,  
50001=(Host:www.local.com,Port:443,Scheme:https,Override:true)
```

The `Override` attribute (with default value *false*) is activated to force the host and port information from the request to be overridden by the relevant information from this property.

If you are already using a Proxy, ensure that this attribute is set.

Note 2718993 - Cross-Site Scripting using host header in NetWeaver AS Java

In application **Change Reporting** and **Configuration Validation**, respective (as shown here) in transaction **CCDB** you find the **Configuration Item ProxyMappings** in the **Configuration Store http** for Java systems:

Configuration and Change Database

Status Exception Configuration

General Technical Systems **Cross Selection**

Filters

Landscape Filters
Class: *

Store Group Filters
Component: *
Source: *
Name: *

Store Filters
Category: *
Type: *
Name:

Status Filters
Main State Type: *

Technical Filters
Store Id:
Store Template Id:
EFWK WLI-Id:

Configuration Validation Filters
Validation System List:

Element Filters
Element Pattern: **ProxyMappings**

Reset Display **Display Elements**

Element Viewer

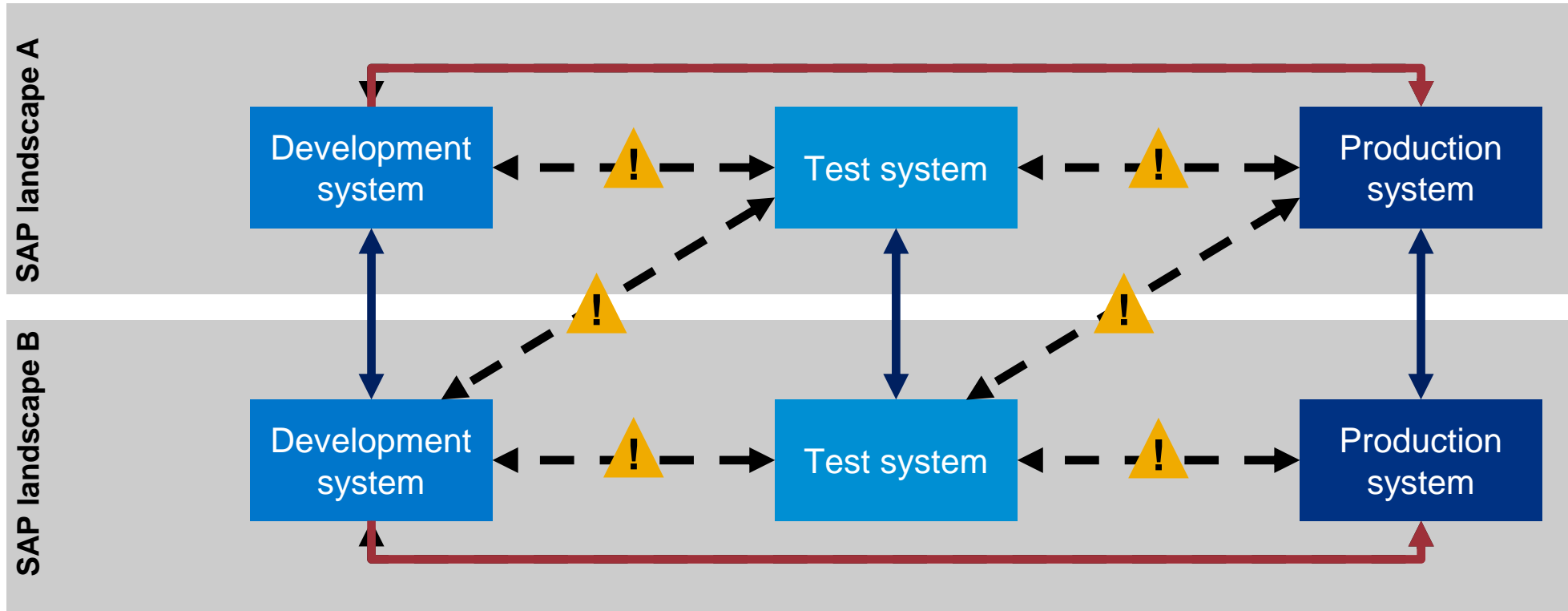
Element Value Width: Unlimited(60) Height: 5 rows

View: * [Standard View] Print Version Export Store Details

Landscape	Component Version	Store Name	Element Status	Element Class	Element Name	Element Value
Java Technical System (FTJ-JAVA)	J2EE ENGINE SERVERCORE 7.40	http	Initial (Current)	Table Row	ProxyMappings	50400=(Host:ldcifj.wdf.sap.corp,Port:50401,Scheme:https,Override:true)
Java Instance (FBJ-JAVA-Idai1fbj_FBJ_04)	J2EE ENGINE SERVERCORE 7.40	http	Initial (Current)	Table Row	ProxyMappings	50400=(Host:ldcifbj.wdf.sap.corp,Port:50401,Scheme:https,Override:true)
Java Instance (FBJ-JAVA-ldcifbj_FBJ_04)	J2EE ENGINE SERVERCORE 7.40	http	Initial (Current)	Table Row	ProxyMappings	50400=(Host:ldcifbj.wdf.sap.corp,Port:50401,Scheme:https,Override:true)
Java Technical System (FBJ-JAVA)	J2EE ENGINE SERVERCORE 7.40	http	Initial (Current)	Table Row	ProxyMappings	50400=(Host:ldcifbj.wdf.sap.corp,Port:50401,Scheme:https,Override:true)

Note 2721962 - Version Management: REMOTE comparison option is missing the "Target sys" option

Remote version comparison requires an RFC destination from DEV to PROD:



- ← **OK:** RFC destinations between systems of same security classification
- ← **! CHECK:** RFC destinations from low security level to high security level (trust relationship, stored credentials)
RFC destinations from high security level to low security level (callback)

Note 2721962 - Version Management: REMOTE comparison option is missing the "Target sys" option

Do not use Trusted RFC (which would require that PROD trusts DEV).

Use either a login-destination (which requires that the developer needs a user with password on PROD) or use a technical user with limited authorizations:

An authorization trace of the remote comparison feature using tran STAUTHTRACE shows that the user requires a role having authorizations for S_RFC with ACTVT=16 and RFC_TYPE=FUNC for the listed function modules.

It might be more stable to add some more remote enabled functions to the authorizations. You can use wildcards for function names (but do not add the complete function groups).

Some other authorizations for RFC functions (plus S_DEVELOP with ACTVT=03) are required for the 'Split-Screen-Editor' in SE38 :

```
RFC_SYSTEM_INFO
RPY_EXISTENCE_CHECK_PROG
RFC_SYSTEM_INFO
RPY_EXISTENCE_CHECK_FUNC
READ_SOURCE_WITH_ENHANCEMENTS
```

Remote-enabled function (field RFC NAME)	Description
TR_SYS_PARAMS	Read system name, type, change option
SVRS_GET_VERSION_DIRECTORY SVRS_GET_VERSION_DIRECTORY_40 SVRS_GET_VERSION_DIRECTORY_46 or SVRS GET VERSION DIRECTORY*	Read version directory
SVRS_GET_VERSION_FUNC SVRS_GET_VERSION_FUNC_40 SVRS_GET_VERSION_METH SVRS_GET_VERSION_METH_40 SVRS_GET_VERSION_REPS SVRS_GET_VERSION_REPS_40 [...] or SVRS GET VERSION *	Reads version of ABAP function, method, or program
GET_E07T_DATA GET_E07T_DATA_40 GET_E07T_DATA_46 or GET E07T DATA*	Extracts the E07T for the appropriate Read short texts for workbench requests and tasks
FUNCTION_EXISTS	Check existence of function
SVRS_GET_NOTE_CI_TCI_INFO	Get Note CI and TCI information

Note 2530147 - Missing Authorization check in DFPS stock transfer process

The corrections for software component EA-DFPS adds an unconditional authority check for authority object `DF_BAS_ALE` in a remote-enabled BAPI function.

This authority check is too strict - it only should be checked in case of an external RFC call. It is not required for local calls of the function module in the context of IDoc processing.

This is solved with another side-effect-solving normal note:

Note 2709594 - Authorization check in `/ISDFPS/BAPI_GR_RECEIVE`

➤ **Implement both notes.**

2530147 - Missing Authorization check in DFPS stock transfer process

Version 1 from Nov 20, 2018 in English

Description CVSS Software Components Corrections ▾ Support Packages This document is causing side effects ▾

This document is causing side effects

Number	Title
2709594	Authorization check in /ISDFPS/BAPI_GR_RECEIVE

Note 2061129 - Missing whitelist check in SAP Dispute Management

This note is not valid for

SAP_FIN 618

SAP_FIN 720

because the correction is already part of the initial version of these releases.

The superfluous validity assignment was removed.

System Recommendations does not show the note for these releases anymore.

Latest Changes with Version 1

1

Compare

2061129 - Missing whitelist check in SAP Dispute Management

Version	13	Type	SAP Security Note
Language	English	Master Language	English
Component	FIN-FSCM-DM (Dispute Management)	Released On	0230.1011.20152018

Symptom

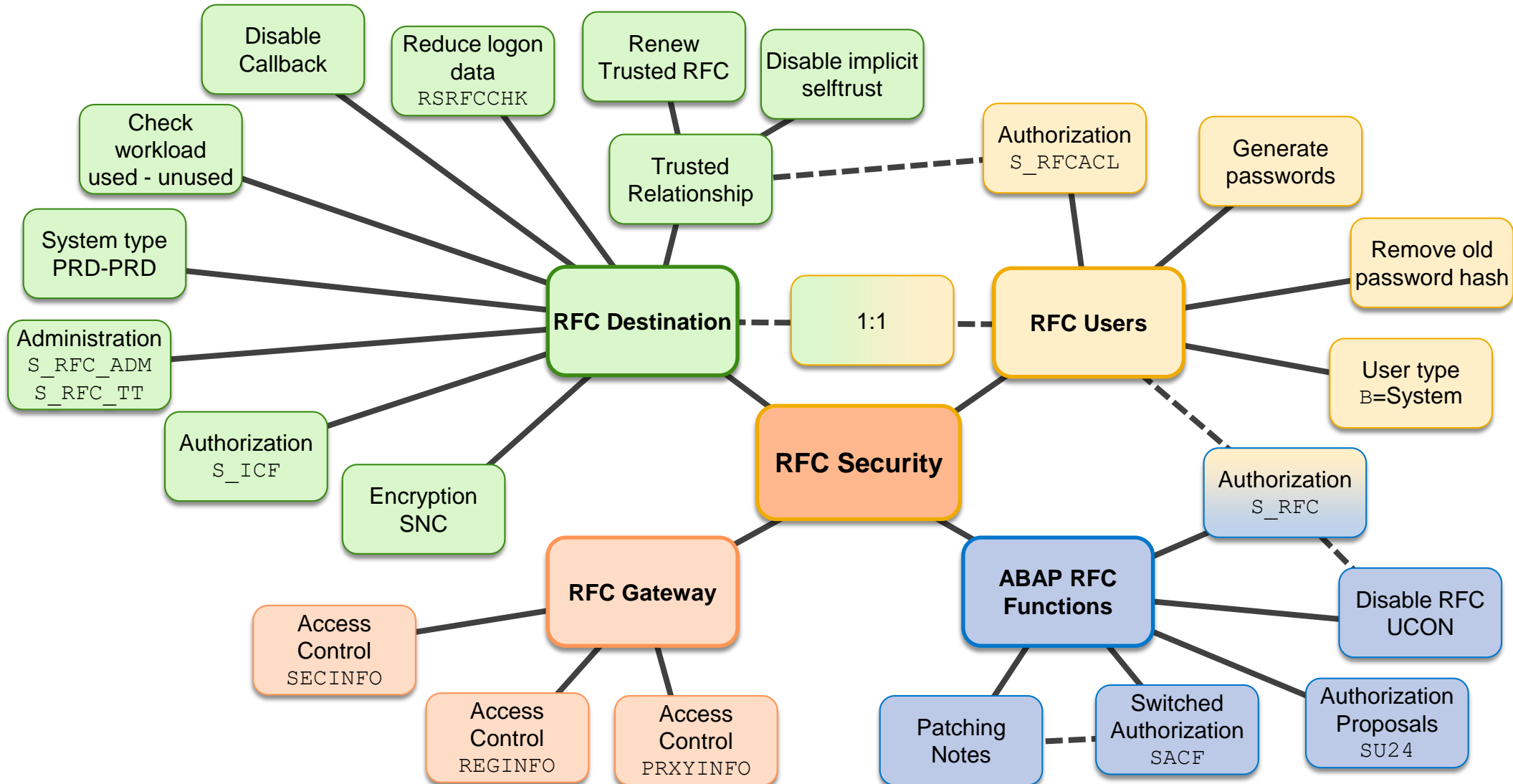
UPDATE 30th November 2018 : This note has been re-released with updated 'Correction Instruction for missing release SAP_FIN 618 and 720'. Also CVSS information has been added.

Software Components

Software Component	Release
SAP_APPL	602 - 602
SAP_APPL	603 - 603
SAP_APPL	604 - 604
SAP_APPL	605 - 605
SAP_APPL	606 - 606
SAP_APPL	616 - 616
SAP_FIN	617 - 617
SAP_FIN	618 - 618
SAP_FIN	700 - 700
SAP_FIN	720 - 720

RFC Security Optimization Projects

Security Whitepaper <https://support.sap.com/securitywp>
 → [SAP Security Recommendations: Securing Remote Function Calls \(RFC\)](#)



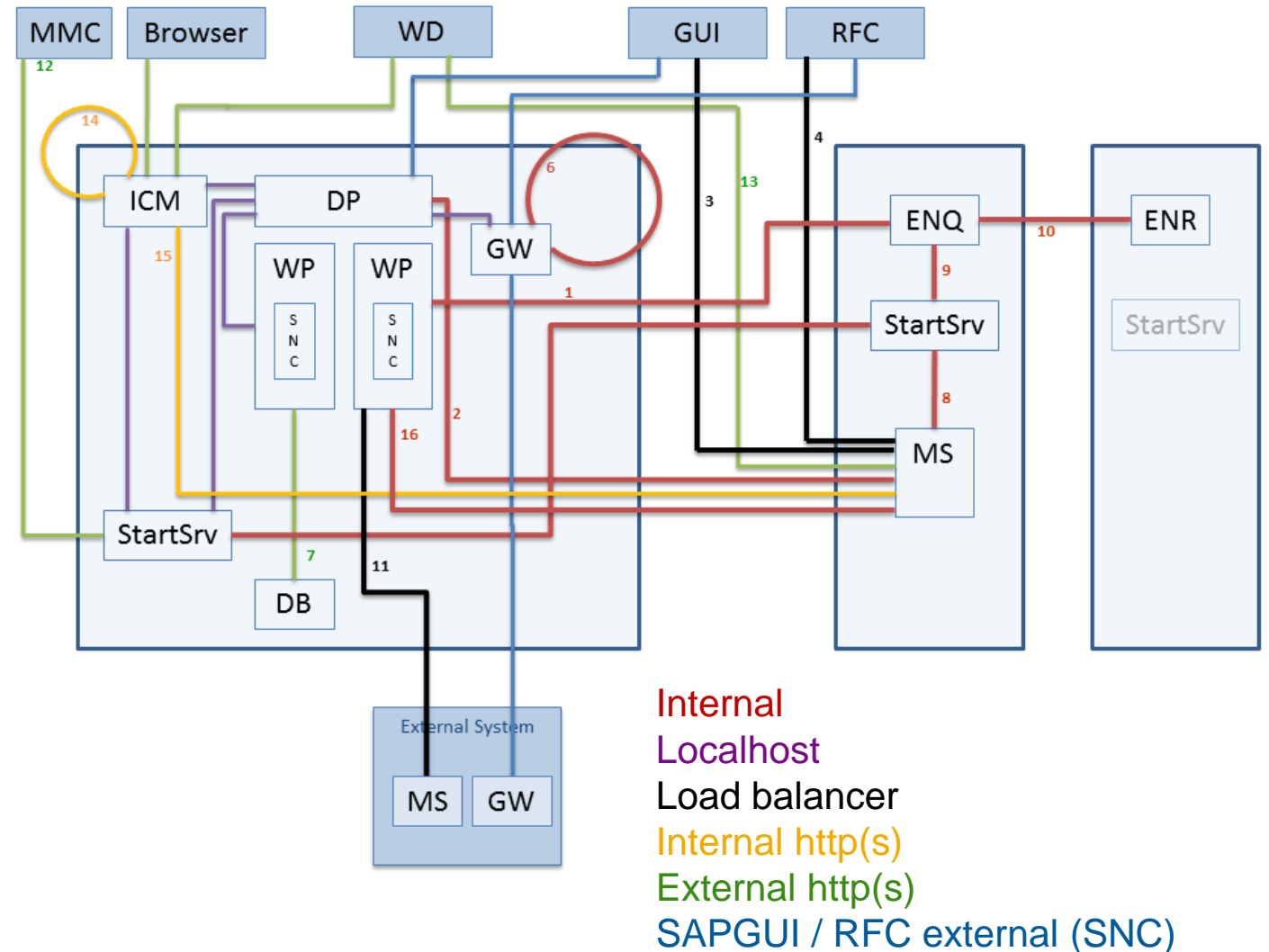
Note 2040644 - System Internal Communications Security Requirement

The SAP internal server communication is not secure:

Work Process, Dispatcher, Gateway, Enqueue, SAPStartSrv, etc. have no encrypted communication and no authentication between each other. This allows sniffing, man-in-the-middle attacks, rogue server attacks, ...

Requirements:

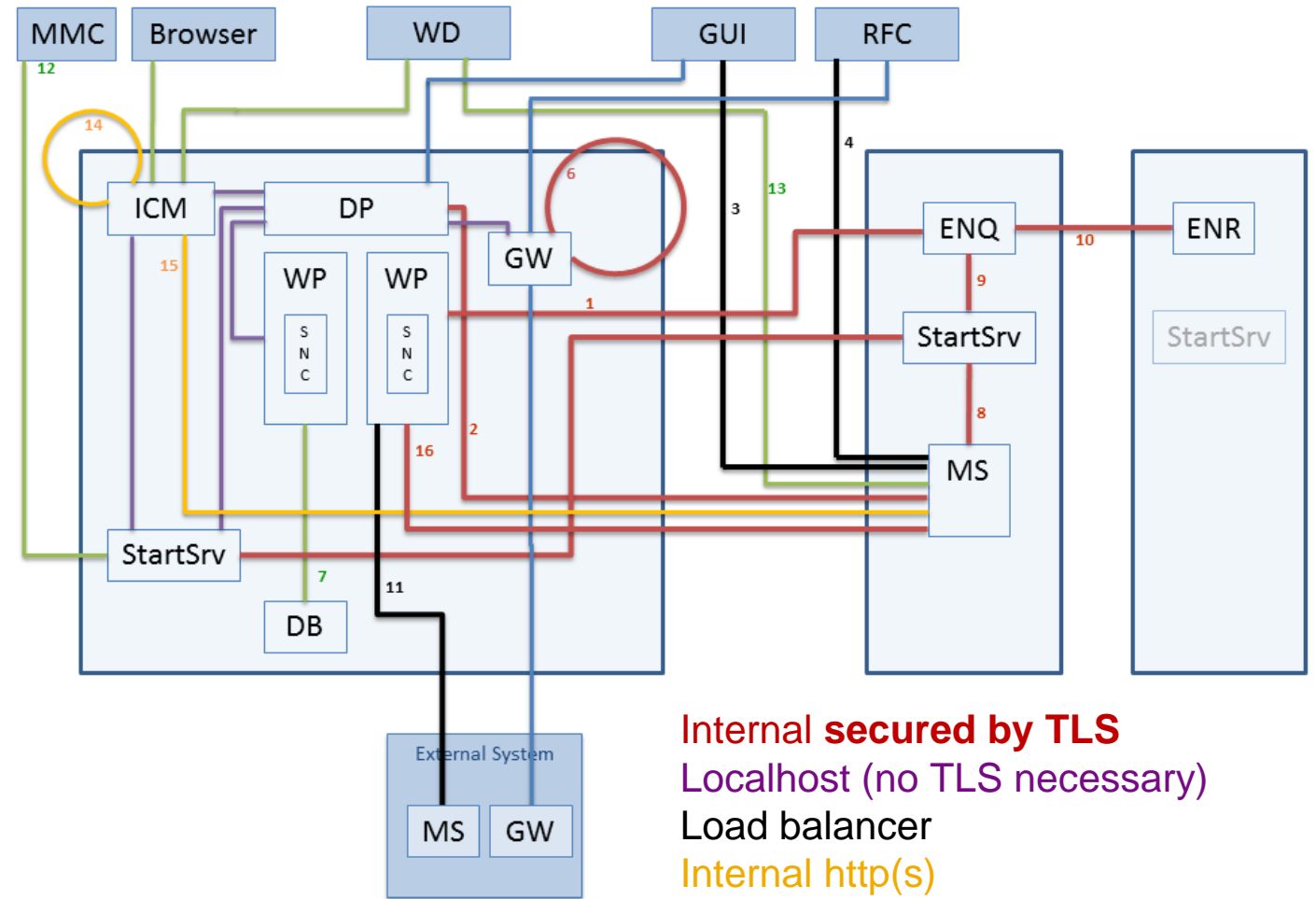
- All Server components must be authenticated
- Communication between the components must be encrypted



Note 2040644 - System Internal Communications Security Solution

Solution:

- Use **TLS** encrypted communication between internal components
- Strengthen current **Secure Store** by enabling “Service Provider Interface” for external key storage providers (also Hardware Tokens) and use this feature within the Kernel
- **Automated Trust Setup** for lower TCO and easy adoption by customers



Internal secured by TLS
 Localhost (no TLS necessary)
 Load balancer
 Internal http(s)
 External http(s)
 SAPGUI / RFC external (SNC)

Note 2040644 - System Internal Communications Security

First steps

Credits:
SAP Consulting

"The usage of this feature is currently limited to pilot customers that have previously contacted SAP. To participate in the pilot phase, open a ticket with SAP OSS component BC-SEC referring to this OS note."

Removed in
May 2019

→ Go for it – the feature is available for quite a while now. SAP just wants to track which customers are making use of it

Minimum requirement: SAP_BASIS 7.40 SP 8 (11) with Kernel release 742 or higher

Set profile parameter `system/secure_communication = ON` in **default profile DEFAULT.PFL**

- At system startup the `sapstart` service of each component requests a certificate for the component
- **Automatic setup of the PKI** at first usage (no need to configure anything in trust manager)
- **Automatic certificate renewal** (again: no need to configure anything in trust manager)
- All communication is encrypted

Note 2040644 - System Internal Communications Security

First steps

Minimum requirement: SAP_BASIS 7.40 SP 8 with Kernel release 742 or higher

Recommended minimal versions according to additional notes 2362078, 2624688, 2778519:

- SAP_BASIS 7.40 SP 11
- Kernel release 749 with patch \geq 710
- Kernel release 753 with patch \geq 416
- Kernel release 773 with patch \geq 121
- Kernel release $>$ 773

Note 2040644 - System Internal Communications Security

Check activation

Transaction SM51

AS Instances of SAP System T04

1 AS instance started. **SSL activated**

Application Server Instance	Host	Instance Services
insy-dl05_T04_01	insy-dl05	Dialog Batch Update Up

Report SSFPKITEST1

Check System PKI

Check System PKI

Work Process: 0
Root PSE is OK
Instance PSE is OK

Report SSFPKITEST2

Check System PKI

Check System PKI

Remote Appserver is OK

Check note 2131045 if this report does not work properly

Report SSFPKITEST3

Own Certificate:

Certificate:

Subject :CN=insy-dl05_T04_01, O=SAP System PKI, C=DE
Issuer :CN=root_T04, OU=sapstartsrv, O=SAP System PKI, C=DE
Serial number:0x20141007053349
Validity:
Not before :Mon Oct 6 06:33:49 2014
Not after :Fri Jan 1 03:00:01 2038
Key:
Key type :rsaEncryption (1.2.840.113549.1.1.1)
Key size :1024
PK_Fingerprint_MD5:COAB D987 9FD4 8F47 2E80 875B 1332 7951
Signature algorithm:shaWithRsaEncryption (1.2.840.113549.1.1.5)
extensions:
AuthorityKeyId:
Significance:Non critical
Value:
Key identifier (size="20"):9EBFE8E8A5753D971B4E3940D4CD3F91894B9A58
SubjectKeyIdentifier:
Significance:Non critical
Value (size="20"):423A5EF846CF397D5EC49ACA8343F14A07A257A5
Key usage:
Significance:Critical
Value:
digitalSignature
nonRepudiation
keyEncipherment
dataEncipherment
Extended key usage:
Significance:Non critical
Value:
element#no="1":ServerAuthentication (1.3.6.1.5.5.7.3.1)
element#no="2":ClientAuthentication (1.3.6.1.5.5.7.3.2)
element#no="3":Unknown (1.3.6.1.5.5.7.3.0)
Basic constraints:
Significance:Non critical
Value:

Note 2040644 - System Internal Communications Security Caveats

The setting `system/secure_communication = BEST` would allow the server to self-determine if TLS is possible for all components or not. **However, it will then allow insecure communication.**

Make sure that

- You don't use outdated Common Crypto Libraries
- The corresponding environment variables are set correctly and consistent for all components.

We've observed issues with libraries loaded twice or more through a messy environment, preventing proper operation of TLS for all server components.

Note 2040644 - System Internal Communications Security Caveats

Note that after activation, no non-internal tool will be able to access internal components (e.g. enqueue server) anymore if not secured by TLS and if not taking part in the internal PKI.

3rd party monitoring tools may fail. This is intended.

All external communication needs to use the external ports.

Other affected components:

- SAPEVT e.g. for external job scheduler (see note 2000417) and MSMON
- LM Tools
- SUM / SAPinst: Installations and upgrades seem to be working fine. To go the safe way, you may want to disable the feature before starting the upgrade and re-enable it afterwards
- **Dual-stack systems are not supported**

Note 2040644 - System Internal Communications Security

Caveats

If port filters are used directly on instances (system internal firewall), you may want to fixate the GWs SSL port using instance profile parameter `gw/internal_port` and allow access to the specified port in your firewall setup. When `gw/internal_port` is not set, the gateway will assign dynamic ports that can change after each system restart (or the restart of the `gwr` process).

Note 2040644 - System Internal Communications Security

Conclusion



- **Once it is running: no side effects**
- **In no case has a performance impact been observed so far**
- **Best point in time for implementation: After release upgrade, conversions, new installations**

Online Documentation: Encrypting Internal Server Communication of SAP NetWeaver AS for ABAP
<https://help.sap.com/viewer/e73bba71770e4c0ca5fb2a3c17e8e229/7.4.19/en-US/41ffb9eb52244e979bf7164f93fe7472.html>

Blog: Secure Server Communication in SAP Netweaver AS ABAP
<https://blogs.sap.com/2015/04/04/secure-server-communication-in-sap-netweaver-as-abap>



November 2018

Topics November 2018



Security Notes Statistics: ABAP vs. others

Spring Framework Vulnerabilities in SAP

Note [2490973](#) - Missing Authorization check in SAP SRM

Note [1517831](#) - Potential Directory Traversal in SAP HCM Payroll NPO

Notes [2392860](#) [2693083](#) - Leveraging privileges by customer transaction code (reloaded)

KBA [2709955](#) - Processor-based vulnerabilities: patch progress by solution in SAP's cloud environments

New Security Audit Log Messages (reloaded)

Notes [2299636](#) & [2332693](#) & [2360408](#) for SE06 and SCC4

News from SNOTE

Note [2258238](#) - SAP Note Assistant: Troubleshooting Reports

News about Configuration Validation

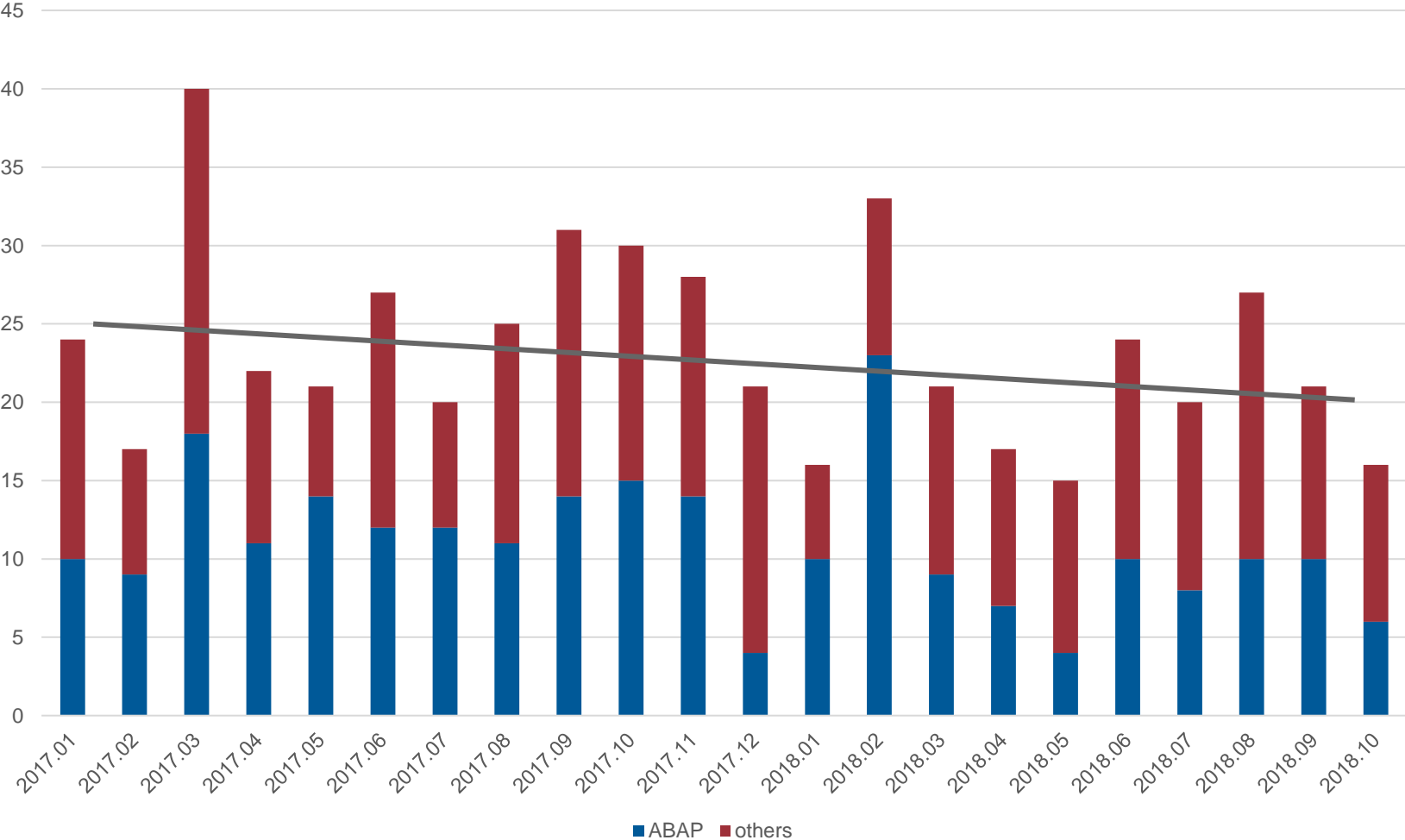
Fiori based Reporting as of SolMan 7.2 SP 6

Recordings:
[DSAG \(German\)](#)
[ASUG](#)
[SAP Learning HUB](#)

Security Notes Statistics: ABAP vs. others

The workload of a monthly patch process decreased from ~25 new or changed notes in 2017 to ~20 in 2018.

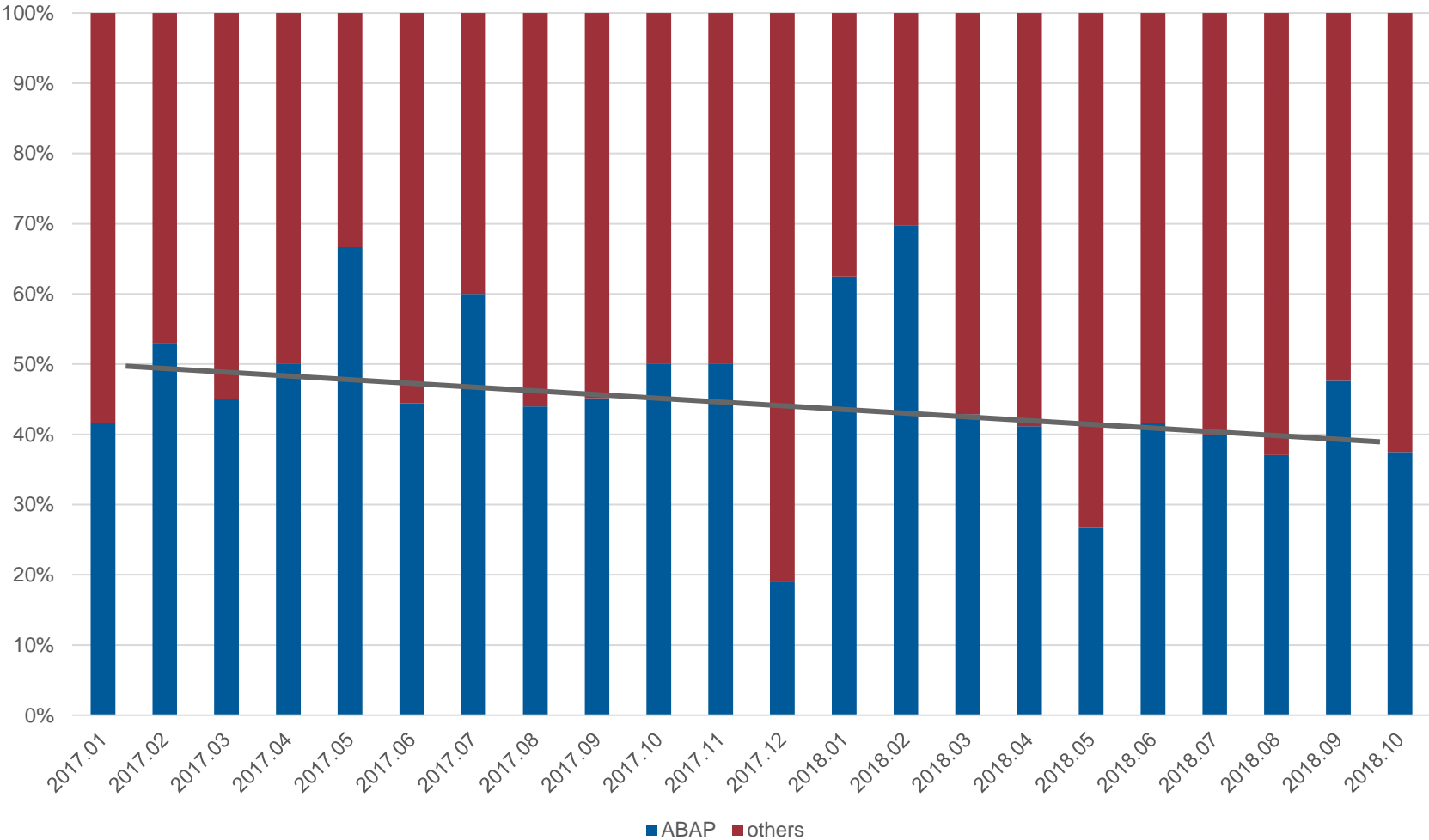
The percentage of ABAP notes decreased from ~50% in beginning of 2017 to ~40% in 2018.



Security Notes Statistics: ABAP vs. others

The workload of a monthly patch process decreased from ~25 new or changed notes in 2017 to ~20 in 2018.

The percentage of ABAP notes decreased from ~50% in beginning of 2017 to ~40% in 2018.



Spring Framework Vulnerabilities in SAP

Implement the following notes for following products affected by these vulnerabilities:

Note 2681280 - HAN-SDS - Security vulnerability in Spring Framework library used by SAP HANA Streaming Analytics

Note 2633025 - BC-XS-SEC - Update SAP Client Library 1.25.0
(use latest version 1.28.0 according to note 2710106)

Note 2656951 - CRM-CCI - SAP Contact Center Hotfix 7.0.11.13 Universal Queue: Open Source Vulnerability Fix

Note 2656955 - CRM-CCI - SAP Contact Center Hotfix 7.0.12.16 Universal Queue: Open Source Vulnerability Fix

Check this note, too:

Note 2411730 - HTTP Session can be lost when Spring framework is used

Multiple CVE reports published for the Spring Framework

<https://spring.io/blog/2018/04/05/multiple-cve-reports-published-for-the-spring-framework>

Spring Framework Vulnerabilities in SAP

No action required for the these products:

- Note 2630687 - BC-SYB-ASE** - Does SAP ASE use Spring Framework and MVC in any product modules - SAP ASE
- Note 2630766 - BC-SYB-IQ** - Does SAP IQ use Spring Framework and MVC in any product modules
- Note 2631128 - BC-SYB-SQA** - Does SAP SQL Anywhere use Spring Framework and MVC in any product modules?
- Note 2634988 - MOB-ONP-SEC** - Vulnerability of Spring Framework , MVC and Spring Data - SAP Mobile Platform
- Note 2631282 - BI-BIP-ADM** - Spring Vulnerability Data REST CVE-2017-8046 on SAP BusinessObjects XI 3.1 and Business Intelligence 4.x

Note 2490973 - Missing Authorization check in SAP SRM

Vulnerability: “Missing Authorization check”

Solution options:

- Deactivate/delete obsolete code, **no test required**
- Change code**
- Invent whitelist, **manual configuration required**
- Invent ‘old’ authorization check, **no change of roles required**
- Invent ‘new’ authorization check, **change of roles required**
- Invent ‘switched’ authorization check, **change of roles and manual configuration required**

```
FUNCTION BBPG_BUDGET_CHECK.  
  
DATA: LV_SUBRC LIKE SY-SUBRC.  
  
*>>>> START OF DELETION <<<<<<  
IF NOT IS_CAUFVD-PSPEL IS INITIAL.  
*>>>> END OF DELETION <<<<<<  
  
*>>>> START OF INSERTION <<<<<<  
* Begin of note 2490973  
* Introducing Authorization Check  
DATA: lv_external_call TYPE sap_bool.  
  
CALL METHOD cl_rfc=>check_rfc_external  
RECEIVING  
external_call = lv_external_call  
EXCEPTIONS  
kernel_too_old = 1  
unexpected_error = 2  
OTHERS = 3.  
  
IF lv_external_call = abap_true.  
EXIT.  
ENDIF.  
* End of note 2490973  
  
IF NOT IS_CAUFVD-PSPEL IS INITIAL.  
*>>>> END OF INSERTION <<<<<<
```

Note 1517831 - Potential Directory Traversal in SAP HCM Payroll NPO

No action needed.

The correction was published end of 2010 for SAP_HRCUN release 604 (and 600).

We adjusted the note ..

- **to avoid that the Note Assistant, transaction SNOTE, shows it as 'can be implemented' (and when you try to implement the note you would get the message 'all changes are already implemented')**
- **to allow application System Recommendations to omit the note**

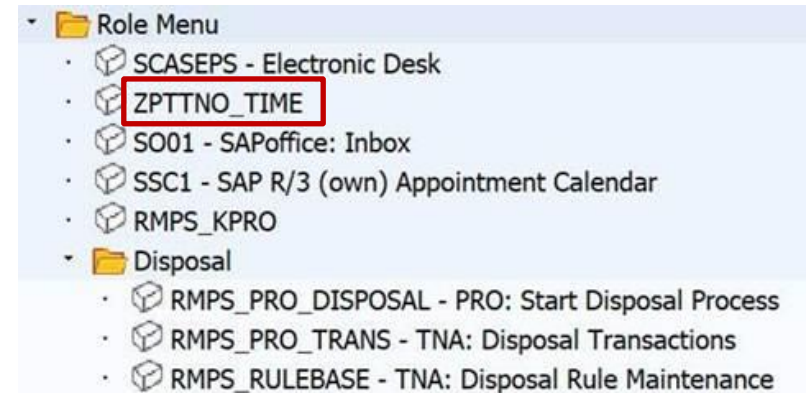
Notes 2392860 2693083 - Leveraging privileges by customer transaction code (reloaded)

SAP standard roles

- SAP_PS_RM_PRO_ADMIN
- SAP_PS_RM_PRO_REVIEWER
- SAP_PS_RM_PRO_RECMANAGER

not only contain a custom transaction in the menu and the authorizations but contain very powerful critical authorizations for **S_DEVELOP**, **S_PROGRAM**, (S_RFC), **S_TABU_DIS**, **S_USER_GRP**, etc. and a lot of other * values

→ **Do not use these roles, check authorizations first**



Authorization Object	Standard	Manually
Authorization Object S_TCODE		
Authorizat. T_SD87002602	Standard	
TCD	Standard	RMPS_DP_REP
TCD	Standard	RMPS_EVENTTYPES
TCD	Standard	RMPS_EXPDEST
TCD	Standard	RMPS_KPRO
TCD	Standard	RMPS_POST_PROCESS
TCD	Standard	RMPS_PRO DISPOSAL
TCD	Standard	RMPS_PRO_TRANS
TCD	Standard	RMPS_RECTYPE
TCD	Standard	RMPS_RECTYPEC
TCD	Standard	RMPS_RULEBASE
TCD	Standard	SCASEPS
TCD	Standard	SO01
TCD	Standard	SSC1
TCD	Standard	ZPTTNO_TIME

KBA 2709955 - Processor-based vulnerabilities: patch progress by solution in SAP's cloud environments

Meltdown and Spectre are security vulnerabilities that affect most of Intel x86 processors. The vulnerabilities concern flaws in the CPU architecture, especially caching and speculative execution, as well as CPU features intended to boost performance.

These processors are widely used, including in SAP data centers. SAP will apply available fixes to its cloud infrastructure without undue delay.

The KBA shows the status of the patch progress by solution in SAP's cloud environments.

New Security Audit Log Messages (reloaded)

Notes 2299636 & 2332693 & 2360408 for SE06 and SCC4

All three notes (2299636 to get the messages & 2332693 for SE06 & 2360408 for SCC4) are required to introduce the following messages for 7.31, 7.40, 7.50:

- EU1** **Very Critical** System changeability changed (&A to &B) *in transaction SE06*
- EU2** **Very Critical** Client setting for &A changed (&B) *in transaction SCC4*

It might be the case that you cannot implement note 2360408 even if it is still required – check the coding in include LOSZZF01 for
`CALL FUNCTION 'RSAU_WRITE_CTS_ORG_SETTINGS'`
→ If you do not find this statement but cannot implement the note (or if you do not find the statement after implementing the note) then raise a ticket on component BC-CTS-CCO.

Note 2258238 - SAP Note Assistant: Troubleshooting Reports

Report SCWN_PREREQUISITE_CALC_SWI shows which prerequisites notes have been implemented along with a particular note.

Example in case of incomplete implementations:

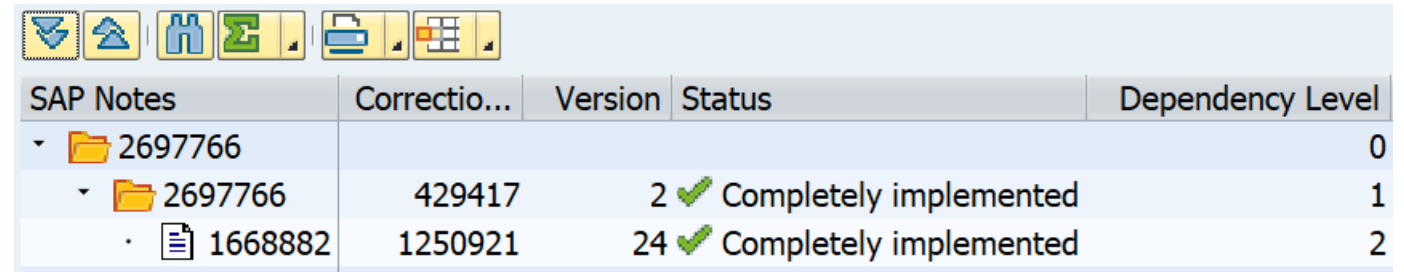
SAP Notes	Version	CI Number	Status	Dependency Level
1668882				0
1668882	24	1250921	✓ Completely implemented	1
2589309	7	312941	⚠ Incompletely implement...	2
2617883	1	315904	▶ Can be implemented	2
2624337	2	323859	▶ Can be implemented	2
2589309	7	352012	⚠ Incompletely implement...	2
2411418	2	352071	✓ Completely implemented	2
2691847	2	416027	▶ Can be implemented	2
2671774	6	419480	▶ Can be implemented	2
2697766	2	429417	▶ Can be implemented	2
2624337	2	440780	▶ Can be implemented	2
1817142	3	1573398	✓ Completely implemented	2
2589309	7	430367	⚠ Incompletely implement...	0

You can use “Print preview of entire hierarchy” followed by Copy Block into Clipboard (Strg-Y) to transfer the note numbers into the Note Browser of SNOTE:

Note	Version	Short text	Component	Status	Implementation Stat.
1817142	3	Dump IMPORT_FORMAT_ERROR during display of versions	BC-UPG-NA	Finished	Completely implemented
2411418	2	Identifying TCI in old release where SAP Note 1995550 is not	BC-UPG-NA	Finished	Completely implemented
2589309	7	Fixes to reimplementation handling - Ignore TADIR for new ob	BC-UPG-NA	Finished	Incompletely implemented
2617883	1	TLOG object read during SPDD phase	BC-UPG-NA	new	Can be implemented
2624337	2	SNOTE - Note re implementation issue due to object support i	BC-UPG-NA	new	Can be implemented
2671774	6	Error during Note implementation: Unable to find delivery ev	BC-UPG-NA	new	Can be implemented
2691847	2	Previously inactive object activated when current implementa	BC-UPG-NA	new	Can be implemented
2697766	2	SNOTE: Runtime Error CONVT_DATA_LOSS occurs while downloadin	BC-UPG-NA	new	Can be implemented

Note 2258238 - SAP Note Assistant: Troubleshooting Reports

Report SCWN_NOTES_SUCCESSORS_CALC shows which dependent notes will be affected if a note needs to be de-implemented.

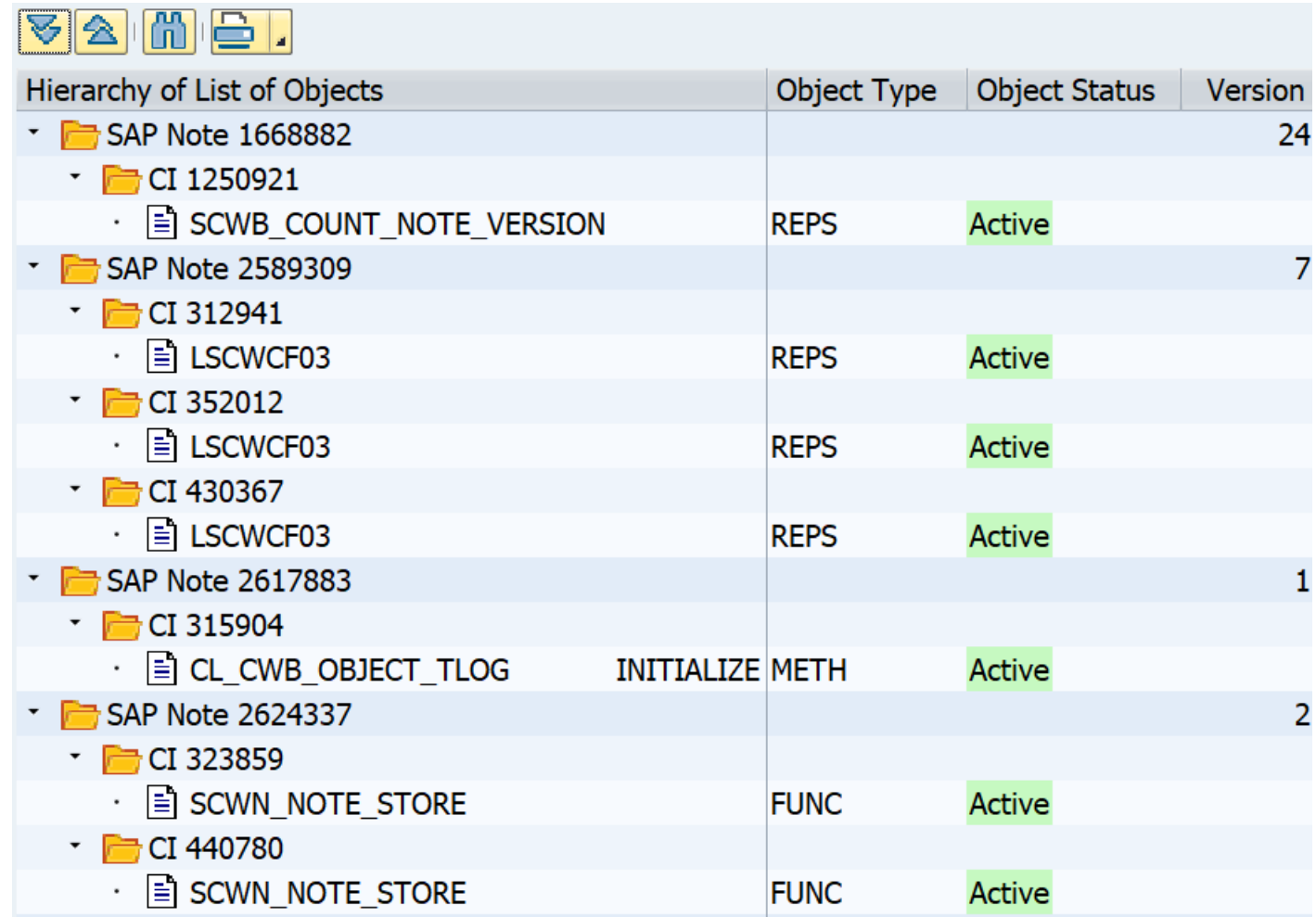


The screenshot shows the SAP Note Assistant interface. At the top, there is a toolbar with icons for navigation, search, and printing. Below the toolbar is a table with the following columns: SAP Notes, Correctio..., Version, Status, and Dependency Level. The table contains the following data:

SAP Notes	Correctio...	Version	Status	Dependency Level
2697766				0
2697766	429417	2	✓ Completely implemented	1
1668882	1250921	24	✓ Completely implemented	2

Note 2258238 - SAP Note Assistant: Troubleshooting Reports

Report SCWN_OBJECT_LIST_CALC_SWI shows which objects were touched by a note and what the status are for those objects.

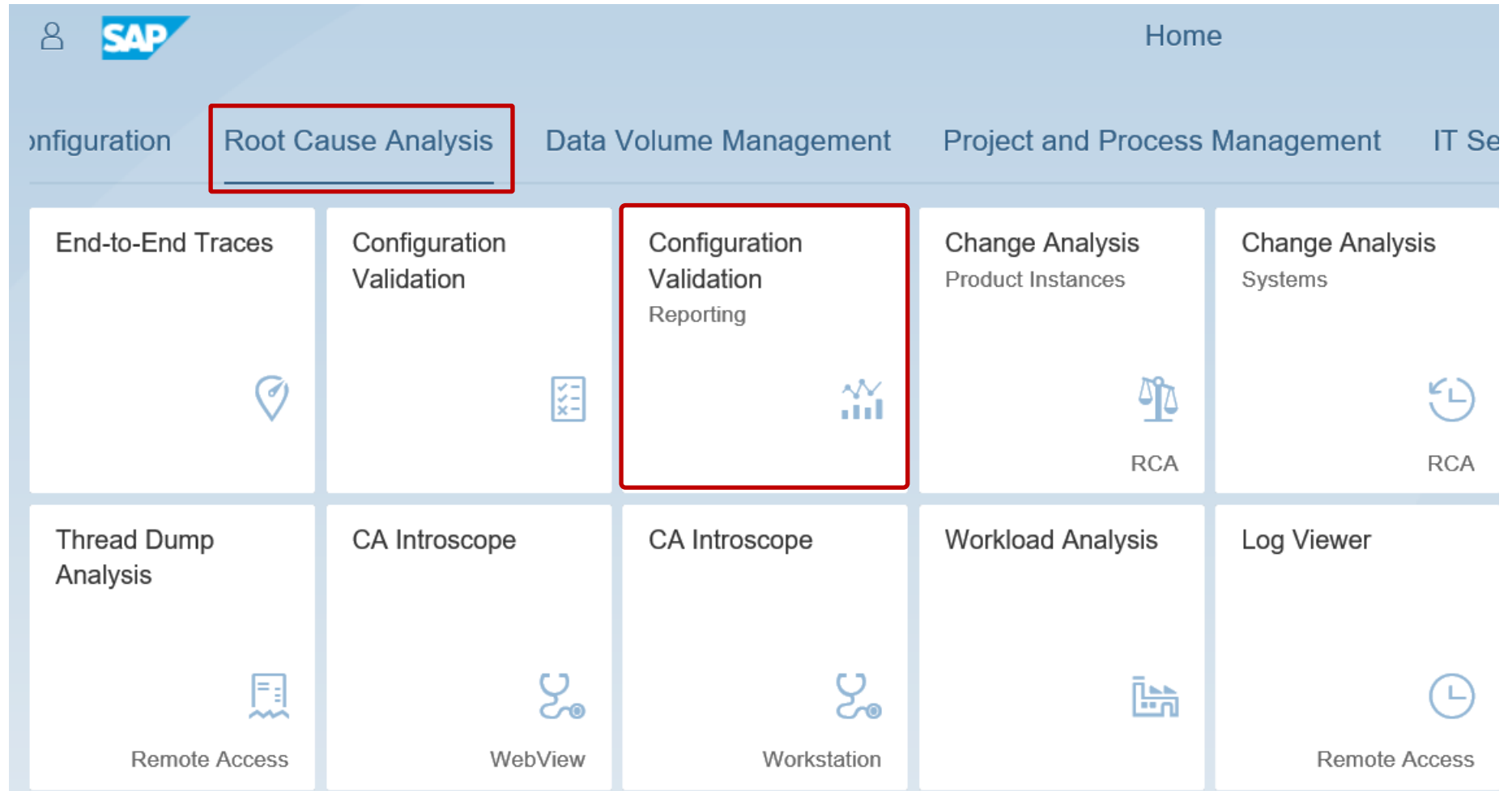


The screenshot shows the SAP Note Assistant interface. At the top, there are icons for navigation and printing. Below is a table titled 'Hierarchy of List of Objects' with columns for 'Object Type', 'Object Status', and 'Version'. The table lists several SAP Notes and their associated objects, all with an 'Active' status.

Hierarchy of List of Objects	Object Type	Object Status	Version
▼ SAP Note 1668882			24
▼ CI 1250921			
· SCWB_COUNT_NOTE_VERSION	REPS	Active	
▼ SAP Note 2589309			7
▼ CI 312941			
· LSCWCF03	REPS	Active	
▼ CI 352012			
· LSCWCF03	REPS	Active	
▼ CI 430367			
· LSCWCF03	REPS	Active	
▼ SAP Note 2617883			1
▼ CI 315904			
· CL_CWB_OBJECT_TLOG INITIALIZE	METH	Active	
▼ SAP Note 2624337			2
▼ CI 323859			
· SCWN_NOTE_STORE	FUNC	Active	
▼ CI 440780			
· SCWN_NOTE_STORE	FUNC	Active	

News about Configuration Validation Fiori based Reporting as of SolMan 7.2 SP 6

The Fiori Launchpad tile “**Configuration Validation Reporting**” points to the new reporting app:



News about Configuration Validation Fiori based Reporting as of SolMan 7.2 SP 6

The screenshot shows the SAP Configuration Validation Fiori application interface. At the top, the SAP logo and 'Configuration Validation' are visible. The main area is titled 'Technical Systems' and contains a 'Selection' section with three dropdown menus: '*Reference System: BL_O-1', '*Comparison List: ABAP', and 'Config Stores: ABAP_INSTANCE_PAHI'. A red box highlights these three dropdowns. Below the selection section is a green 'Apply selection' button. The main content area is titled 'Compliance of Technical Systems' and features a pie chart and a table. The pie chart shows the following compliance distribution: 52.6% (Yes, green), 39.5% (Item not found, orange), and 7.9% (No, red). The table below the chart shows a list of systems with their IDs, TechSystType, and Compliance status.

System ID	TechSystType	Compliance
E73	ABAP	No
EB1	ABAP	Item not found
FA7	ABAP	Yes
FBT	ABAP	Yes
FN8	ABAP	Item not found
FQ7	ABAP	Yes
FT7	ABAP	Yes
GM6	ABAP	Yes
MW5	ABAP	Yes
N52	ABAP	Yes

You select a Target System, a Comparison List and optionally a selection for a Configuration store

You get a System Overview page

News about Configuration Validation Fiori based Reporting as of SolMan 7.2 SP 6

Drilldown into system specific details:

SAP Configuration Validation

All Config Stores ABAP_INSTANCE_PAHI STANDARD_USERS

Items: 14; Reference System: BL_O-1; System ID: E73; Data retrieval: Oct 23, 2018, 8:03:01 PM - Oct 23, 2018, 8:03:04 PM

Compliance	Item Key	Item Value	Item Key Rule	Item Value Rule
No	login/no_automatic_user_sapstar	0	= login/no_automatic_user_sapstar	= 1
No	CLIENT = 000 USER = SAP*	PASSWORD_STATUS = CHANGED EXISTS = X LOCKED = VALIDTO = USERGROUP = SUPER	CLIENT Contains * USER = SAP*	PASSWORD_STATUS = CHANGED EXISTS = X LOCKED = X
Yes	CLIENT = 000 USER = DDIC	PASSWORD_STATUS = CHANGED EXISTS = X LOCKED = VALIDTO = USERGROUP = SUPER	CLIENT Contains * USER = DDIC	PASSWORD_STATUS = CHANGED EXISTS Ignore LOCKED Ignore

How-to create a specific Fiori tile

Create tile in Fiori Launchpad Designer

Start the Launchpad Designer via report `/UI2/START_URL`
respective transactions `/UI2/FLPD_CUST` (client-spc.) or `/UI2/FLPD_CONF` (cross-client)

The screenshot displays the Fiori Launchpad Designer interface. On the left, a sidebar shows a list of catalogs. The 'Root Cause Analysis' catalog, with ID 'SMRootCauseAnalysis', is highlighted with a red border. The main workspace shows the 'Root Cause Analysis' catalog selected, with the ID 'X-SAP-UI2-CATALOGPAGE:SMRootCauseAnalysis'. Below the ID, there are three icons: 'Tiles' (21), 'Tiles' (21), and 'Target Mapp...' (15). The main workspace contains a grid of tiles. The 'Root Cause Analysis' tile is highlighted with a red border. Other tiles include 'File System Browser', 'OS Command Console', 'Host Analysis', 'DBA Cockpit', 'DB Analysis', 'Configuration Exception Managem...', 'Thread Dump Analysis', 'Configuration Validation Reporting', and 'Change Analysis Systems'.

Tile Name	Icon	Label
File System Browser	Remote Access	Remote Access
OS Command Console	Remote Access	Remote Access
Host Analysis	Mobile	
DBA Cockpit	DBA	
DB Analysis	DB	
Configuration Exception Managem...	Settings	
Thread Dump Analysis	Remote Access	Remote Access
Configuration Validation Reporting	Bar Chart	
Change Analysis Systems	RCA	RCA
Root Cause Analysis	+	

How-to create a specific Fiori tile

Define „App Launcher – Static“ tile in catalog

Enter texts

Choose icon, e.g.
`sap-icon://business-objects-experience`

Deselect check box
„Use semantic object navigation”

Configure: 'Standard users (ABAP)' Instance ID: 0002TIZ535TJ7H5IWHQB9XH3Z

General

Title: Standard users (ABAP)

Subtitle: Standard users having default password

Keywords:

Icon: `sap-icon://inbox`

Information:

Navigation

Use semantic object navigation:

Semantic Object:

Action:

Parameters:

Target URL: `/sap/bc/ui5_ui5/sap/confana720/index.html?ADDRE`

Save Cancel

Enter target URL after replacing variables:

```
/sap/bc/ui5_ui5/sap/confana720/index.html?TARGET_ID=<target_system>&
COMPLIST=<comparison_list>&CONFSTORE=<configuration_store>&ADDRESTRI
CTIONS&DATERANGE&sap-client=<client>&sap-language=<language>
```

How-to create a specific Fiori tile

Add tile to group

The screenshot shows the SAP Fiori Groups page. The 'Groups' tab is selected in the top navigation bar. A search bar on the left contains 'Search for groups'. Below it, a list of groups is displayed, with 'Root Cause Analysis' (ID: SMRootCauseAnalysis) highlighted with a red box. The main area shows the 'Root Cause Analysis' group details, including the ID and the text 'Choose the Group to add the new tile'. A grid of 18 tiles is displayed, each representing a different SAP Fiori application. The bottom-right tile, which contains a plus sign (+), is highlighted with a red box, indicating it is the tile to be added to the group.

Root Cause Analysis

ID : SMRootCauseAnalysis

Choose the Group to add the new tile

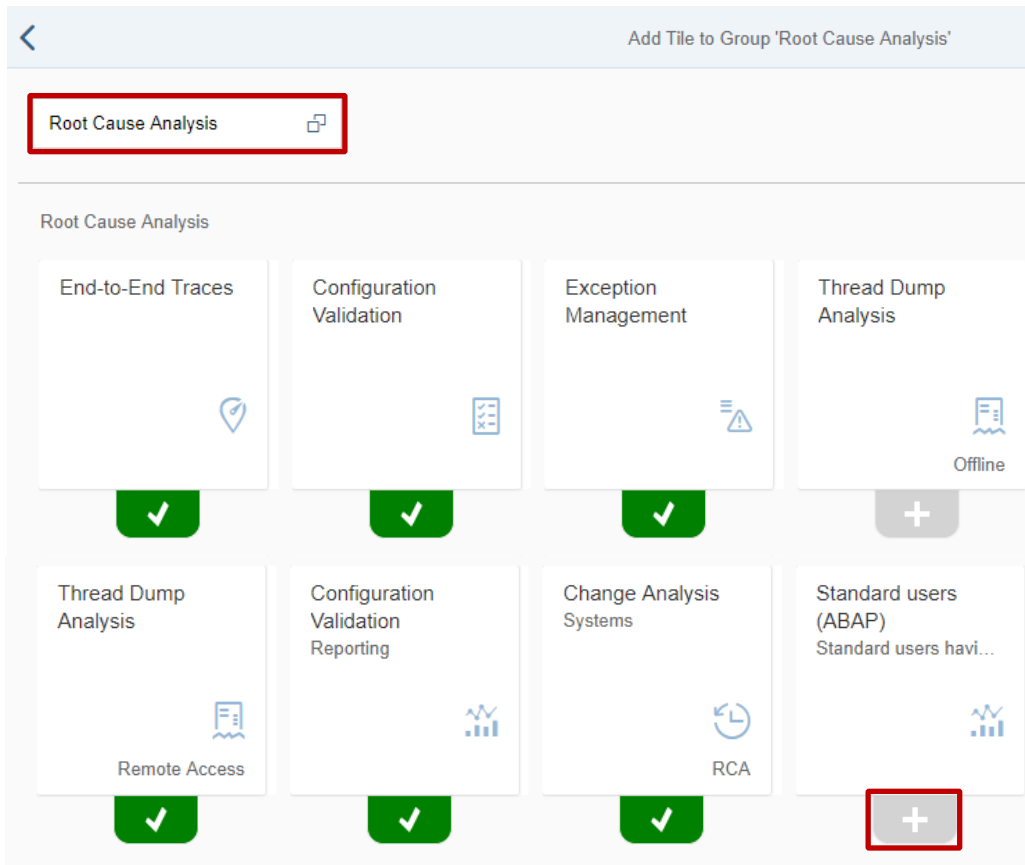
Show as Tiles

End-to-End Traces	Configuration Validation	Configuration Validation Reporting	Change Analysis Product Instances	Change Analysis Systems	Exception Management
Exception Analysis	Thread Dump Analysis	CA Introscope	CA Introscope	Workload Analysis	Log Viewer
File System Browser	OS Command Console	Host Analysis	DBA Cockpit	DB Analysis	

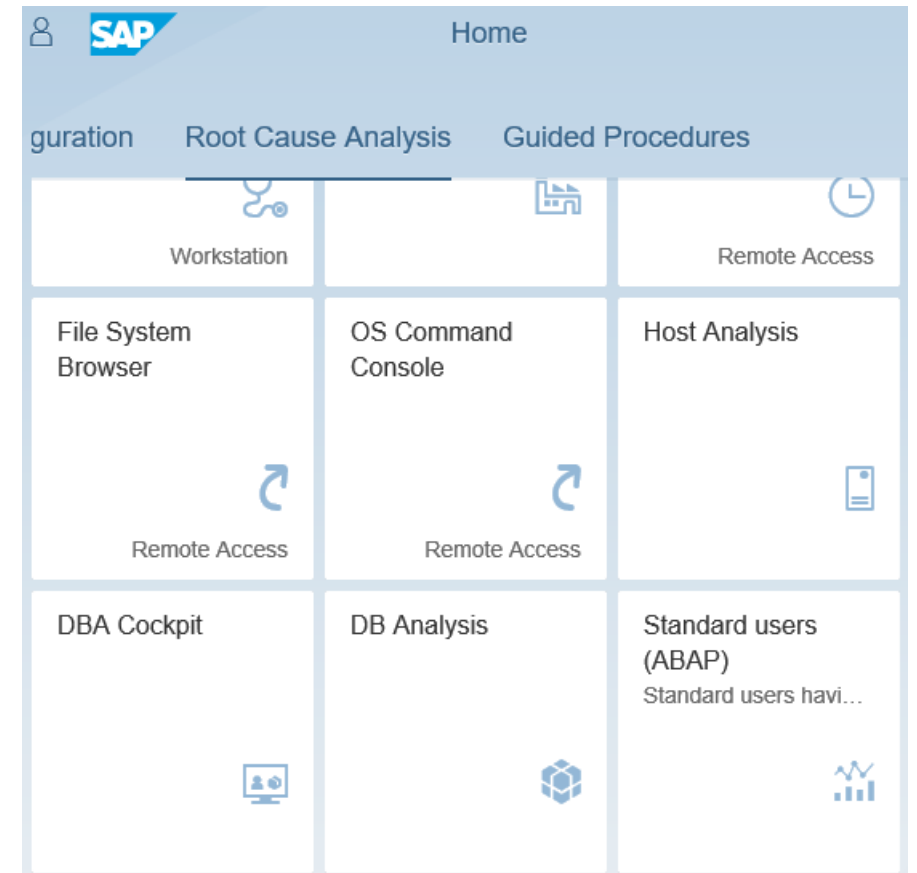
How-to create a specific Fiori tile

Add tile to group

Choose the Catalog containing the new tile and add it to the group:



Restart the Launchpad to view the new tile:





October 2018

Topics October 2018



News from Support Portal Launchpad
SAP Notes Dependency Browser

Note [2699726](#) - Missing network isolation in Gardener

Note [2392860](#) - Leveraging privileges by customer transaction code

Support Connection using Local respective Central FireFighter

Note [2442227](#) - Simulation of authorization checks

System Recommendations 7.2 SP 7 – How to find updated notes

Recordings:
[DSAG \(German\)](#)
[ASUG](#)

News from Support Portal Launchpad

SAP Notes Dependency Browser

The SAP Notes Dependency Browser helps you analyze the prerequisites for an SAP Note that you are going to implement on a particular system: Only those SAP Notes are shown that apply for the system.

You can open the SAP Notes Dependency Browser as well from the Prerequisites section and from Correction Instructions of notes:

Example: Note 2668681 requires note 2396867 and others

SAP Security Note Knowledge Center Enter search text

2668681 - Cross-Site Request Forgery (CSRF) SAP vulnerability in Manage Profit Centers

Version 4 from Sep 17, 2018 in English

Description Software Components Corrections Support Packages Attributes Languages

Correction Instructions

Software Component	Number of Correction Instructions
UIAPFI70	3
S4CORE	2

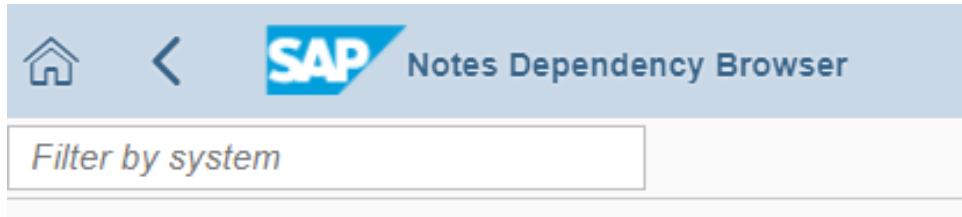
Prerequisites

Show in dependency browser

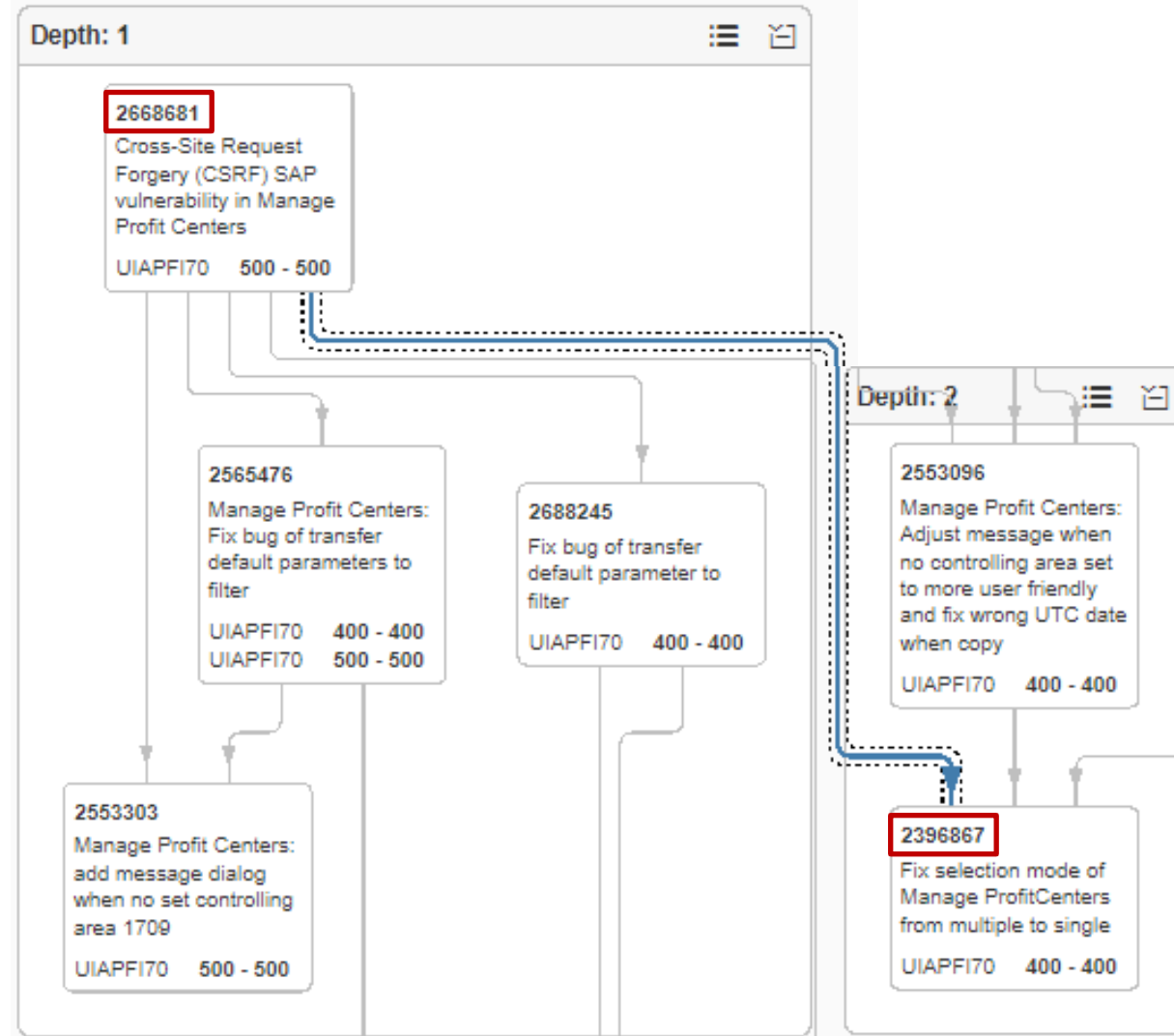
Software Com...	From	To	Number	Title	Component
UIAPFI70	400	400	2396867	Fix selection mode of Manage ProfitCenters from multiple to single	CO-FIO

News from Support Portal Launchpad

SAP Notes Dependency Browser



Example: Note 2668681 requires note 2396867 and others



ⓘ Due to the number of Prerequisites Notes being too large, they cannot be displayed completely.

Note 2699726 - Missing network isolation in Gardener

SAP's outbound Open Source project "Gardener" is a tool for providing Kubernetes clusters on various cloud providers. You can find more information about project "Gardener" in the Kubernetes Blog <https://kubernetes.io/blog/2018/05/17/gardener/> .

At SAP we consume project "Gardener" as well inbound already for providing Kubernetes clusters for several SAP products which are in a beta shipment phase like SAP Cloud Platform Continuous Integration and Delivery (indirect shipment).

The Gardener Core Team at SAP is responsible for all (security) updates of all Gardener instances and all Gardener managed Kubernetes clusters in the above-mentioned context. But because Gardener is an Open Source project and the SAP ecosystem is large, the Gardener Core Team at SAP decided to not only inform the Gardener Open Source Community directly but as well in general via this SAP security note.

No software component **Validity**
can be assigned:

This document is not restricted to a software component or software component version

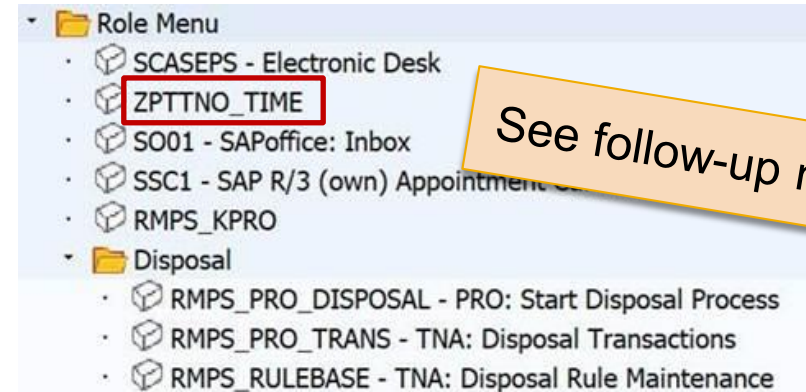
Note 2392860 - Leveraging privileges by customer transaction code

SAP standard roles

- SAP_PS_RM_PRO_ADMIN
- SAP_PS_RM_PRO_REVIEWER
- (and SAP_PS_RM_PRO_RECMANAGER and maybe others)

not only contain a custom transaction in the menu and the authorizations but contain very powerful critical authorizations for S_DEVELOP, S_PROGRAM, (S_RFC), S_TABU_DIS, S_USER_GRP, etc. and a lot of other * values

→ Do not use these roles, check authorizations first



See follow-up note 2693083, too

Authorization Object	Manually	Standard
Authorization Object S_TCODE	Manually	
Authorizat. T_SD87002602	Standard	
TCD	Standard	RMPS_DP_REP
TCD	Standard	RMPS_EVENTTYPES
TCD	Standard	RMPS_EXPDEST
TCD	Standard	RMPS_KPRO
TCD	Standard	RMPS_POST_PROCESS
TCD	Standard	RMPS_PRO DISPOSAL
TCD	Standard	RMPS_PRO_TRANS
TCD	Standard	RMPS_RECTYPE
TCD	Standard	RMPS_RECTYPEC
TCD	Standard	RMPS_RULEBASE
TCD	Standard	SCASEPS
TCD	Standard	SO01
TCD	Standard	SSC1
TCD	Standard	ZPTTNO_TIME

Support Connection using Local FireFighter

Use a custom role based on role SAP_GRIA_SUPER_USER_MGMT_USER to grant minimal authorizations for the support users which is used for initial logon.

Draft proposal for **ticket notification** (Prio: Very High, Source: Accounts):

This ticket refers to the production system, however, you cannot logon directly but you have to use the FireFighter process:

- 1. Logon to the system using the support user and call transaction /n/GRCPI/GRIA_EAM, choose a free entry and logon via the FireFighter to the system.*
- 2. Enter the reason code <code> and add the incident number / service order into the text field.*
- 3. Describe briefly the indented actions and confirm the popup to logon to the production system.*
- 4. Do not forget to logoff from the production system as well as from the FireFighter transaction after you have finished your work.*

Support Connection using Central FireFighter

Use a custom role based on role `SAP_GRAC_SUPER_USER_MGMT_USER` to grant minimal authorizations for the support users which are used for initial logon in the central system.

**Critical: Ensure to reduce authorizations for authorization object `S RFC` !
You may use transaction `STAUTHTRACE` to trace required authorizations.**

**Check following note concerning the authorizations in the production systems:
Note [2413716](#) - Setup of Trusted RFC in GRC Access Control EAM**

Ensure that the system names shown in the central system match to the names of the referenced production systems.

Example: `P00CLNT400` for system `P00` with client `400`

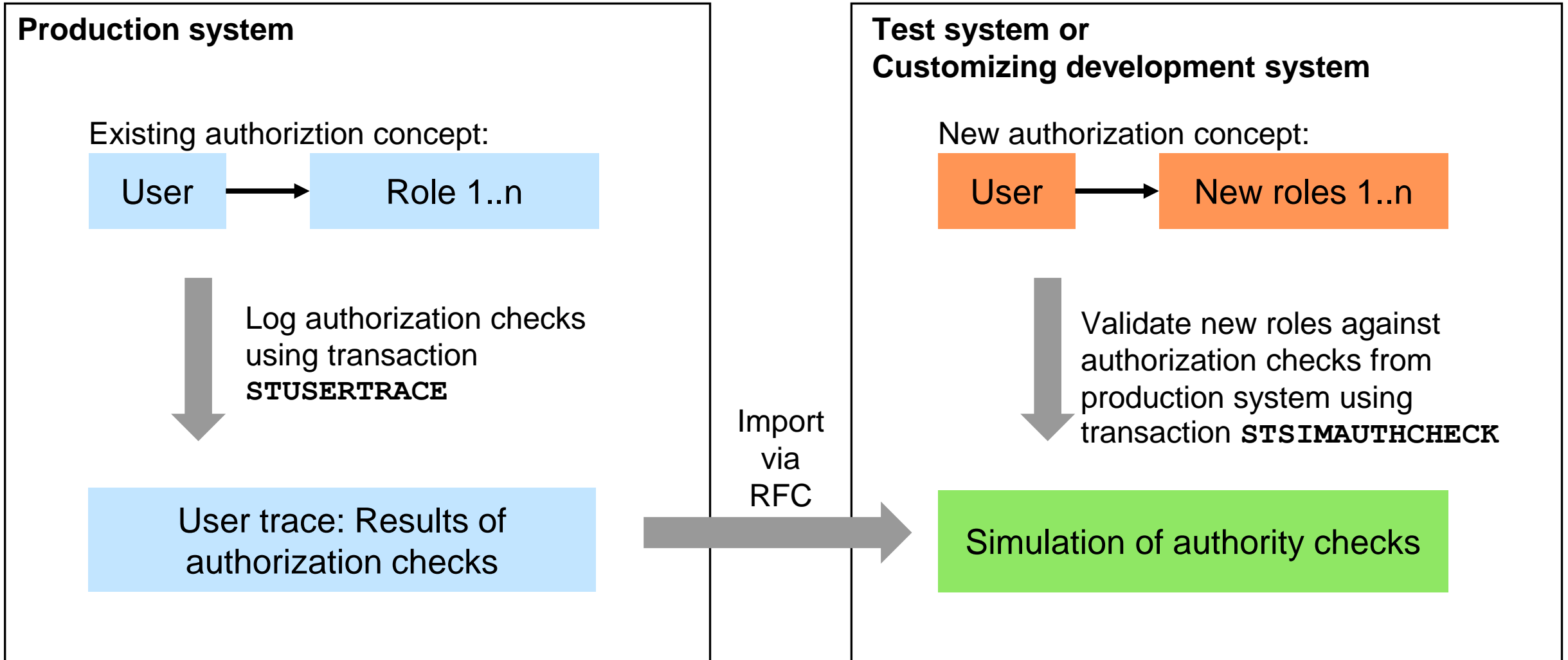
Support Connection using Central FireFighter

Draft proposal for **ticket notification** (Prio: Very High, Source: Accounts):

This ticket refers to the production system, however, you cannot logon directly but you have to use the Central FireFighter system <FFF>:

- 1. Use the Secure Area to retrieve logon data for system <FFF> with installation number <nnnnnnnnnn>.*
- 2. Search for open connections [via STFK] for system <FFF> with installation number <nnnnnnnnnn> of customer number <cccccc> and logon to that system.*
- 3. Within system <FFF> call transaction GRAC_EAM, choose a free entry targeting the production client and connect to the system.*
- 4. Enter the reason code <code> and add the incident number / service order into the text field.*
- 5. Describe briefly the indented actions and confirm the popup to logon to the production system.*
- 6. Check using the SAPGUI status bar that you have reached the correct system and client.*
- 7. Do not forget to logoff from the production system as well as from the FireFighter transaction after you have finished your work.*

Note 2442227 - Simulation of authorization checks



Note 2442227 - Simulation of authorization checks

Prerequisites:

You have activated profile parameter `auth/auth_user_trace` and transaction `STUSERTRACE`

You have recorded authorization checks using the user trace

Analysis:

Using transaction `STSIMAUTHCHECK` (= report `RSUSR_SUAUTHVALTRC_SIMU`), you can check for a selection of users whether the recorded authorization checks would run successfully with their current authorizations or not. In this simulation, either all authorizations of the users or just individual roles assigned to the users can be taken into account. The trace data can be read from the local system or from a remote system.

Usage:

For example, you can check the effects of a new role concept by comparing the result of the simulation in a role development system with the result of the authorization check from the user trace in the test or production system.

Note 2442227 - Simulation of authorization checks

Transaction STSIMAUTHCHECK - Simulation of authorization checks

Use

You have used the user trace to record a list of authorization checks. You can use this program to check whether the recorded authorization checks would run successfully or not for selected users with their current authorizations. You can run this simulation for all authorizations of the users or just for individual roles assigned to the users. The trace data can be read from a local or remote system.

For example, you can check the effects of a new role concept by comparing the result of the simulation in a role development system with the result of the authorization check from the user trace in a test system.

Requirements

The user trace for authorization checks must be active for an extended period of time so that the authorization checks for the scenarios you want to examine are logged as fully as possible.

If you want to use different user names for the simulation, choose User Mapping and assign a *User for Authorization Check* to the *User for Simulation*.

Selection

Select the users for the simulation. You have to enter users or user groups.

The following options are available for the authorizations used for the simulation:

- All authorizations of the user are used, but without the authorizations of the reference user.
- Only the authorizations of the selected roles are used, as long as they are assigned to the user.

Authorization checks are read from the trace data for each selected user of the simulation. Use the *Mapping Table* if you want to read the authorization checks of another user.

The authorization check from the user trace can be read from a remote system. To do this, enter the respective RFC destination. In the target system, the RFC function module `SUAUTH_READ_TRACE_VALUES` is used and the authorization for the object `S_ADMI_FCD` is checked with `S_ADMI_FCD = STUR`.

Additional Options:

- Only Display Differences Between Trace and Simulation Result: The result of a simulation is displayed only if it is different from the result of the authorization check.
- Also Include Check for Other User: If the ABAP language command authority-check for user is used in an authorization check, the authorization check does not run for the logged-on user, but for the user specified in user. If this option is set, the trace entries where the user was specified in the addition for user are also selected for the user.

Output

The output shows the result of the simulation for each logged authorization check from the user trace.

Note 2442227 - Simulation of authorization checks

Transaction STUSERTRACE - User Trace for Authorization Checks

Use

This long-term trace collects client-specific and user-specific authorization data, and stores it in the database.

During the execution of a program, every authorization check is recorded exactly once with the first time stamp, together with the name and type of the running application, the point in the program, the authorization object, the checked authorization values, and the result.

The trace data is used to support the maintenance of authorization default values and authorizations, in particular for users with special tasks or special authorization objects - for example, for communications users in RFC scenarios.

Activating the Authorization Trace

The authorization trace is activated using the profile parameter `auth/auth_user_trace`. The profile parameter is dynamically switchable.

You can switch on the trace either fully or only for selected authorization checks by using a filter. You can use the application type, users, and authorization objects as filters. This enables you to investigate specific scenarios such as RFC programs or background jobs over a long period.

Note the following: If you are using a trace with filters, you have to define at least one filter, otherwise recording will not take place.

Performance

Each authorization check logged by the authorization trace needs at least an additional database selection of approx. 1 millisecond. How this extends the runtime of each affected application depends on the number of recorded authorization checks. To limit the number of recorded checks, we recommend using a filter.

Activation of the authorization trace without filters has a significant effect on performance.

Authorization Concept

The functions of the STUSERTRACE transaction are protected by the authorization object S_ADMI_FCD. Checks are performed on the authorization field S_ADMI_FCD with the following values:

STUF: Change filter of user traces for authorization checks

STUR: Evaluation of user traces for authorization checks

Delete and Reorganize

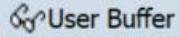
In the results list, you can delete individual data records by selecting the relevant lines and using the *Delete* function in the toolbar.

To delete large volumes of data, use the report RSUSR_SUAUTHVALTRC_REORG. To do this, call the menu function *Goto* → *Reorganize*.

Note 2442227 - Simulation of authorization checks

Analysis using transaction STUSERTRACE in production system:

User Trace for Authorization Checks: 17 Hits



Type of Application	Application Name	User	Check	Result	Result	Addit.Info	Access Filtering	Entity	Object	Field 1	Value 1
		D019687		0	Authorization chec...				/UIF/FLEX	/UIF/KEYU	X
		D019687		0	Authorization chec...				S_DEVELOP	DEVCLASS	
SAP Gateway Business Suite Enablement - Service	/UI2/INTEROP	0001	D019687		0	Authorization chec...			S_SERVICE	SRV_NAME	A15F5E180FD9799...
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			AI_LMDB_OB	ACTVT	03
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			SM_FUNCS	ACTVT	
SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV	0001	D019687		0	Authorization chec...			S_SERVICE	SRV_NAME	8A5C52B04A84DA...
SAP Gateway: Service Groups Metadata	AGS_FLP_INTEROP_0001		D019687		0	Authorization chec...			S_SERVICE	SRV_NAME	738D848517A8DC...
SAP Gateway: Service Groups Metadata	AGS_SYSREC_SRV_0001		D019687		0	Authorization chec...			S_SERVICE	SRV_NAME	BA7D9B4C27043E...

System Recommendations 7.2 SP 7 - How to find updated notes

With System Recommendations 7.2 SP 7 you get two status fields:

Implementation status set by the SysRec background job

- **New**
- **New version available**
You have implemented an older version of the notes
- **Updated**
You have set an processing status for an older version of the note

Processing status set by an administrator using status codes defined in customizing table AGSSR_STATUS

System Overview

10	4	4	2
All	ABAP	HANADB	JAVA

On the System Overview list you see the total count of notes which aren't processed yet

System	Technical System	IT Admin Role	System Priority	Security	Hot News
<input type="checkbox"/>	EC1~ABAP	Demo System	Undefined	115	193
<input type="checkbox"/>	JS4~JAVA	Test System	Undefined	137	165
<input type="checkbox"/>	NA1~ABAP	Demo System	Undefined	113	188
<input type="checkbox"/>	OHN~HANADB	Production System	Undefined	66	72
<input type="checkbox"/>	OHQ~HANADB	Demo System	Undefined	66	72

System Recommendations 7.2 SP 7 - How to find updated notes

The Note Overview list shows notes with **processing status** “undefined” by default. Notes with other status values are not shown.

Therefore you do not see notes for which you already have set a **processing status**.

New versions of notes which already got a specific **processing status** for older versions get the **implementation status** “Updated”.

Because of the filter on **processing status** you do not see these notes.

At least you get a hint showing the count of invisible updated notes.

The screenshot shows the SAP Note Overview interface. The filters are set to: Standard, Technical System: FBT~ABAP, Release Date: 13.06.2018 - 10.07.2018, Note Type: (empty), Priority: Priority, Implementation Status: (empty), and Processing Status: Undefined. Below the filters, a summary bar indicates 'SAP Notes for selected technical systems 27 (Updated: 1)'. A table lists the following notes:

Technical System	Note Number	Short text	Release Date	Application Component	Priority ID	Implementation Status	Processing Status
<input type="checkbox"/> FBT~ABAP	1646595	RE_AUDIT: Measurement for Real Estate Management	22.06.2018	RE-FX	6	New	Undefined
<input type="checkbox"/> FBT~ABAP	1690315	Electronic financial statement (EFS): Information about the taxonomies	02.07.2018	FI-GL-IS	6	New	Undefined
<input type="checkbox"/> FBT~ABAP	2138659	DM XBRL Scenario Support	20.06.2018	EPM-DSM-GEN	6	New	Undefined
<input type="checkbox"/> FBT~ABAP	2180849	Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-ADB-IFD	4	New	Undefined

System Recommendations 7.2 SP 7 - How to find updated notes

The screenshot shows the SAP MyNotes interface for 'SAP Note Overview'. The filter bar is set to 'Standard'. The filters are:

- Technical System: FBT~ABAP
- Release Date: 13.06.2018 - 10.07.2018
- Note Type: (empty)
- Priority: Priority
- Implementation Status: Updated
- Processing Status: (empty)

Two yellow callout boxes provide instructions:

- Filter for "Updated" on implementation status (pointing to the Implementation Status dropdown)
- Remove the filter for processing status (pointing to the Processing Status dropdown)

The results section shows 1 SAP Note for the selected technical system:

Technical System	Note Number	Short text	Release Date	Application Component	Priority ID	Implementation Status	Processing Status	Correction Types	Attributes
FBT~ABAP	750784	SAP Interactive Forms: Licenses	13.06.2018	BC-SRV-FP	3	Updated	To Be Implemented		No Kernel, Independent

At the bottom left, a 'Save as Tile' button is highlighted with a red box. At the bottom right, there are 'Actions' and 'Integrated Desktop Actions' buttons.

System Recommendations 7.2 SP 7 - How to find updated notes

Create a specific filter for updated (security) notes and save it as a tile into a suitable Fiori Launchpad Group:

The screenshot shows the SAP Fiori Launchpad interface. At the top, there is a user profile icon and the SAP logo on the left, and the word 'Home' on the right. Below this is a navigation bar with several tabs: 'My Home' (which is selected and underlined), 'Guided Procedures', 'Data Consistency Management', and 'Business Process Improvement'. The main area is titled 'My Home' and contains five tiles, each representing a different filter for SAP Notes. The tiles are: 'My SysRec' (0 notes), 'SysRec Many Selections' (0 notes), 'Security Notes for HANA' (0 notes), 'Review critical Notes June 2017' (4 notes), and 'Updated notes' (34 notes). The 'Updated notes' tile is highlighted with a blue border. Each tile includes a calendar icon and the text 'SAP Notes' at the bottom.

Filter Name	Number of SAP Notes
My SysRec	0
SysRec Many Selections	0
Security Notes for HANA	0
Review critical Notes June 2017	4
Updated notes	34



September 2018

Topics September 2018



Note [2585923](#) - CUA: Text comparison (callback whitelist)

Note [1640584](#) - Missing authorization check for maintenance of trust

Note [2644279](#) - Missing XML Validation vulnerability in BEx Web Java Runtime Export Web Service

Note [2522156](#) - SAL | New events for UCON_HTTP whitelists

Note [2234192](#) - Enhancement to application start lock as of 7.50

Note [2622434](#) - Information disclosure relating to password in SAProuter

Recordings:
[DSAG \(German\)](#)
[ASUG](#)

Note 2585923 - CUA: Text comparison (callback whitelist)

The CUA uses RFC callback as part of function “text comparison” which loads authorization profile names, role names and license options into the CUA main system.

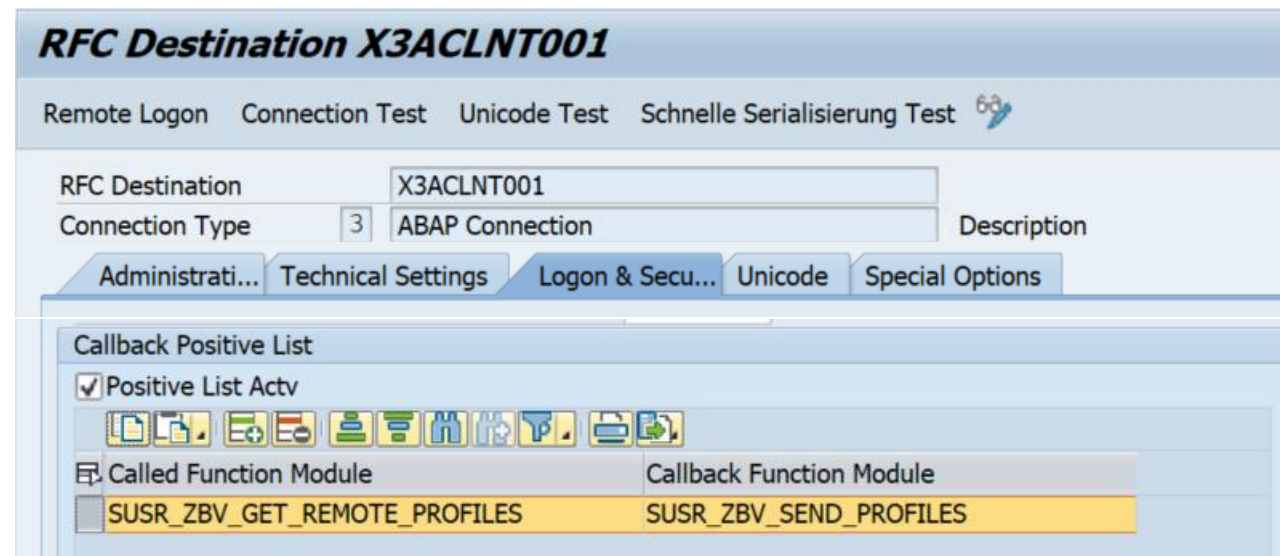
New report `RSUSR_CUA_CALLBACK_WHITELISTS` generates required RFC callback whitelist entries for all RFC destinations which connect the main system to the client systems of the Central User Administration (CUA):

Called function module in manages system:

`SUSR_ZBV_GET_REMOTE_PROFILES`

Callback function module in CUA main:

`SUSR_ZBV_SEND_PROFILES`



Note 1640584 - Missing authorization check for maintenance of trust

Validity of note: SAP_BASIS 731 (only this release)

Validity of correction instructions: - (none)

Solution via Support Package: SAP_BASIS 731 SP 17 (highest number)

<https://launchpad.support.sap.com/#/softwarecenter/search/SAPKB73117>

→ **Published end of 2015, not relevant for current systems anymore**

Related note from 2013:

Note 1416085 - PFCG: Authorization maintenance for object S_RFCACL

Note [2644279](#) - Missing XML Validation vulnerability in BEx Web Java Runtime Export Web Service

Application System Recommendations shows this note for ABAP based systems because software component SAP_BW is listed in the validity part of the note, however, the note is irrelevant for the ABAP systems because it describes Java corrections for the Java stack of an BI system only.

You will see this note for such Java systems even after patching because the note does not contain references to SP or patches containing the solution. **(Tell SAP if you do not get the note at all.)**

Related note [2470973](#) shows the correct list of software components and offers links to software packages.

Description	Software Components	This document is referenced by
BI-BASE-S	7.10	7.11
	7.20	7.20
	7.30	7.30
	7.31	7.31
	7.40	7.40
	7.50	7.50
SAP_BW	700	702
	710	711
	730	730
	731	731

Notes 2522156 and 2508918 - SAL | New events for UCON_HTTP whitelists (7.40) and CDS views (7.50)

Implement notes 2522156, 2508918, 2573779, 2573792 (to activate usage of the messages) and Implement notes 2463645, 2682603 (to get the definition and view of the messages).

Message ID	Message	Category	Weighing
EUI	Setup of UCON HTTP White List was changed	RFC Start	Severe
EUJ	Status of UCON HTTP White List for context type &A was changed	RFC Start	Severe
EUK	Access to UCON HTTP White List for context type &A was rejected	RFC Start	Critical
EUL	HTTP Security Header Register for Header &A was changed	RFC Start	Severe
EUM	Trusted Site List &A of HTTP Security Header was changed	RFC Start	Severe
EUN	Content Security Policy for Service &A was violated	RFC Start	Critical
EUO	UCON HTTP Whitelist of for context type &A was changed	RFC Start	Severe
EUV	CDS-View &A (Field &B) was published	Other	Non-Critical
EUW	Blacklisting is enabled (Connection / Table / Field : &A &B &C)	Other	Non-Critical
EUX	Blacklisting is disabled (Connection / Table / Field : &A &B &C)	Other	Non-Critical
EUY	Data Blocking enabled for &A	Other	Non-Critical
EUZ	Data Blocking disabled for &A	Other	Non-Critical

Note 2234192 - Enhancement to application start lock as of 7.50



New transactions SM01_DEV and SM01_CUS replace good old transaction SM01

Transaction SM01_DEV: maintain global application start lock in development system

Transaction SM01_CUS: maintain local application start lock
In client 000 you can maintain cross-client settings,
in other clients you maintain settings for this client

Application Start Lock (Client 001)
Application Start Lock Only for WinGUI (Client 001)
Application Start Lock Only for Non-WinGUI (Client 001)

Use Audit Information System transaction/report RSAUDITC_BCE to view the settings

Category	Name	App. Short Text	Status (S)	CORE_TCD	Pers.Resp.	Created On	Status (C)	Client	Comment	ChngdBy(C)	Date (C)	Time (C)
Dialog Transaction	SM01	Lock Transactions			SAP			001		D019687	18.09.2018	13:04:23
Report Transaction	SM01_CUS	Local App. Start Lock Maintenance			SAP	23.12.2015						
Report Transaction	SM01_DEV	Global App. Start Lock Maintenance			SAP	23.12.2015						
Dialog Transaction	SM02	System Messages			SAP							
Report Transaction	SM04	Logons to an AS Instance			SAP							
Report Transaction	SM05	HTTP Session Management: Monitoring			SAP	03.02.2009						

Install recent notes (which include prerequisite notes), too: [2367061](#), [2420609](#), [2422243](#), [2578158](#)

SAProuter

You find **SAProuter Security Notes** like all other **Security Notes** on <https://support.sap.com/notes> with Document type = **SAP Security Notes**

Let's assume we can find the name SAPROUTER in the short text of basis notes – but as there might be written as SAP ROUTER let's search for “router” giving following result:

Note 2622434 - Information disclosure relating to password in SAProuter	10.07.2018
Note 2037492 - Potential denial of service in SAP Router	14.10.2014
Note 1986895 - Potential disclosure of information in SAProuter	08.04.2014
Note 1853140 - Managing SAProuter from external host	12.11.2013
Note 1820666 - Potential remote code execution in SAProuter	08.05.2013
Note 1663732 - Potential information disclosure relating to SAProuter	03.08.2012

You get the same list if you search for application component BC-CST-NI

SAProuter

Let's double-check this list using <https://support.sap.com/notes> and search for recent notes of application component BC-CST-NI

Among several functional corrections you find some more normal notes about the SAProuter which touch security as well:

Note [2126550](#) - Saprouter crashes with active SNC trace when the saprouter trace file is renamed
04.02.2015

Note [2046942](#) - Support encrypted passwords in saproustab
25.07.2014

Note [2106963](#) - Saprouter over SNC doesn't work with CommonCryptoLib due to oversized initial SNC token
23.01.2015

SAProuter

The application System Recommendations in the Solution Manager is great to find relevant notes for

- ABAP,
- Kernel disp+work,
- Java,
- HANA
- and some other products

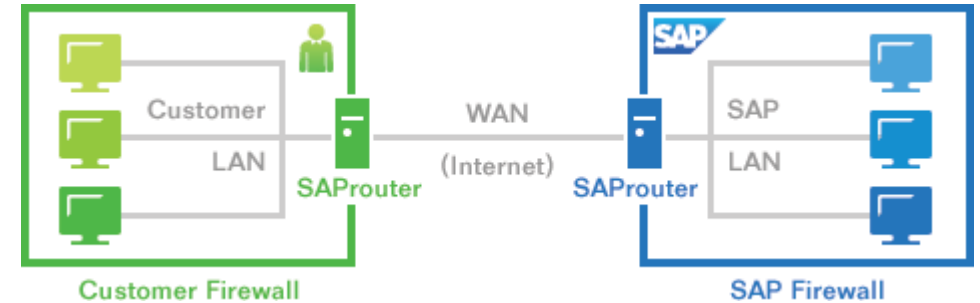
but cannot give you exact results for

- other parts of the Kernel (like CommonCryptoLib)
- or independent installations of executables (like RFC Libraries or the SAProuter).

Therefore you have to find these installations by yourself.

SAProuter

Tutorial:
[Getting Started with SAProuter - Tutorials](#)



Best practice:

<http://scn.sap.com/community/security/blog/2013/11/13/security-of-the-saprouter>

Recommended activities:

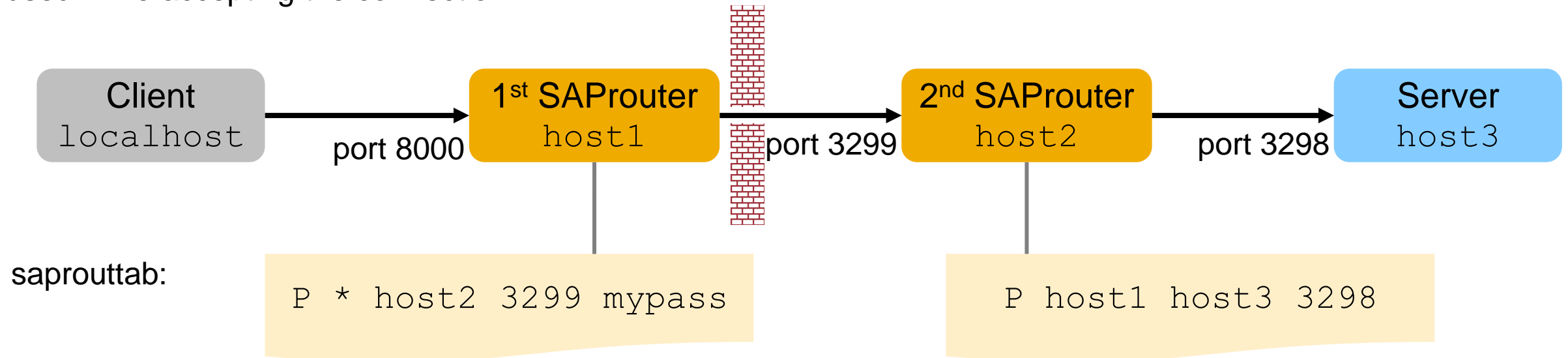
- **SAP recommends to upgrade any (active) SAProuter installation as soon as possible**
- Use an access control list (saproustab) to limit connectivity
- Activate SNC to encrypt the communication channel to SAP support and to block any other connections from the internet or use hardware encryption using IPSEC
- Integrate the SAProuter into a firewall
- Use an SAProuter password for SAP Support (and define process how to change it)
- (Change the default port)

Note 2622434 - Information disclosure relating to password in SAProuter

Note 2622434 - Information disclosure relating to password in SAProuter

Relevant only if several SAProuter are chained and one of the first SAProuters require a password

Issue example: The 1st SAProuter transmits password `mypass` to the 2nd SAProuter, even if it's already used while accepting the connection.



Connect string from client: `/H/host1/S/8000/H/host2/S/3299/W/mypass/H/host3/S/3298`



August 2018

Topics August 2018



Change Diagnostics @ Support Portal

Validate version of CommonCryptoLib

Note [2546807](#) - List of Diagnostic Agents can't be retrieved due to enforced security at API level

Secure Diagnostics Agent

Note [2614229](#) - Memory Corruption vulnerability in SAP BusinessObjects Business Intelligence platform

Note [2671160](#) - Missing input validation in ABAP Change and Transport System (CTS)

Security Baseline Template Version 1.9 (including ConfigVal Package version 1.9_CV-5)

Recordings:
[DSAG \(German\)](#)
[ASUG](#)

Change Diagnostics @ Support Portal

Change Diagnostics @ Support Portal (Overview & Capabilities)

<https://support.sap.com/en/solution-manager/sap-solution-manager-7-2/expert-portal/applications/root-cause-analysis/change-diagnostics.html>

- [Change Reporting](#)
- [Change Analysis / Product Instance](#)
- [Change Analysis / Systems](#)
- [Configuration Validation](#)
- [Configuration Validation / Reporting](#)

Configuration Validation @ WIKI (Technical Details)

https://wiki.scn.sap.com/wiki/display/TechOps/ConfVal_Home

Validate version of CommonCryptoLib

The **CommonCryptoLib** shows a specific version number which is a text which contains the version information and a date.

Examples:

8.5.9 Feb 8 2017

8.5.13 May 2017

8.5.22 Jul 25 2018

You need an authorization for AI_CCDB_SC with CONT_AUTH=SECURITY and ACTVT=03 to access configuration store CRYPTOLIB.

You cannot use the > or >= operator to validate the version using application Configuration Validation for Configuration Store **CRYPTOLIB** with Configuration Item **CCL**.

Solution: Use a Regular expression to analyze the digits

Example according to note 2444321 which asks for **8.5.10 or higher**:

```
^(8\.5\.\d{2,}|8\.[6789]\.\d+|8\.\d{2,}\.\d+|9\.\d+\.\d+|\d{2,}\.\d+\.\d+)[ ]*
```

Validate version of CommonCryptoLib

Result:

SAP System ID	ConfigStore Name	Config. Item Value	Compliance	Compliant (1=Yes, -1=No, ' '=Not valuated)
E73	CRYPTOLIB	8.5.9 Feb 8 2017	No	-1
FA7	CRYPTOLIB	8.5.18 Nov 23 2017	Yes	1
FBT	CRYPTOLIB	8.5.21 Apr 17 2018	Yes	1
FQ7	CRYPTOLIB	8.5.18 Nov 23 2017	Yes	1
FT7	CRYPTOLIB	8.5.20 Apr 5 2018	Yes	1
N52	CRYPTOLIB	8.4.48 Jan 26 2016	No	-1
Q3A	CRYPTOLIB	LIB_ID_UNKNOWN	No	-1
Q5K	CRYPTOLIB	8.5.5 Sep 23 2016	No	-1
QDD	CRYPTOLIB	8.4.49 Mar 4 2016	No	-1
QE4	CRYPTOLIB	8.5.13 May 17 2017	Yes	1
QEX	CRYPTOLIB	8.5.20 Apr 5 2018	Yes	1
QV6	CRYPTOLIB	8.4.41 Aug 18 2015	No	-1
SI7	CRYPTOLIB	8.5.21 Apr 17 2018	Yes	1
SMY	CRYPTOLIB	8.4.49 Mar 4 2016	No	-1
ST7	CRYPTOLIB	8.5.6 Nov 7 2016	No	-1
U3S	CRYPTOLIB	8.5.22 Jul 25 2018	Yes	1

See

https://wiki.scn.sap.com/wiki/display/TechOps/ConfVal_CommonCryptoLib

Note 2546807 - List of Diagnostic Agents can't be retrieved due to enforced security at API level

Security Note 2546807 (valid for ST 720) refers to Normal Note 2544779 (valid for ST 720 SP 6)

→ **System Recommendations shows Security Note 2546807 always for all SolMan 7.2 installations.**

What happens/is necessary after an upgrade from ST 720 SP 3 or SP 5 to SP 7:

Q: Is it necessary to execute the manual configuration steps described in Normal Note 2544779?

A: (No answer yet)

Manual Activity valid for Software Component ST Release 720 `SAPK-72006INSTMAIN - SAPK-72006INSTMAIN`

After implementing the automatic correction attached to this SAP Note, follow these steps :

1. Start `SOLMAN_SETUP` transaction
2. Navigate to the Infrastructure Preparation scenario under Mandatory Configuration
3. Navigate to the Define CA Introscope step
4. Remove the already discovered CA Introsopes and perform the discovery again
5. Provide the user data and save the step

Secure Diagnostics Agent



Connect the Diagnostics Agents via P4S (Transport Layer Encryption with or without Authentication) instead of P4.

- **Upgrade SAP JVM as described in Wiki [how to upgrade a SAP JVM 6.1 or 8.1 for the Diagnostics Agent](#)**
- **Configure SSL on the AS Java as described in Note [1770585](#)**
- **Configure the P4S port for the J2EE NetWeaver Application Server according to Note [2419031](#)**

Note 2614229 - Memory Corruption vulnerability in SAP BusinessObjects Business Intelligence platform

Credits:

ERP Applications Under Fire: How cyberattackers target the crown jewels

<https://www.onapsis.com/research/reports/erp-security-threat-report>

Note 2614229 - Memory Corruption vulnerability in SAP BusinessObjects Business Intelligence platform

Several Notes for Software Component ENTERPRISE respective SBOP BI PLATFORM SERVERS

➤ Go for an update according to note 2614229 which shows the highest SP/patch levels

		Note <u>2407193</u>	Note <u>2412999</u>	Note <u>2630018</u>	Note <u>2633846</u>	Note <u>2644154</u>	Note <u>2614229</u>					
SBOP BI PLATFORM SERVERS 4.0	SP012	<u>5</u>										
SBOP BI PLATFORM SERVERS 4.1	SP007	<u>11</u>	SP007	<u>12</u>								
	SP008	<u>7</u>	SP008	<u>9</u>								
	SP009	<u>1</u>	SP009	<u>3</u>	SP009	<u>12</u>	SP009	<u>13</u>				
	SP010	<u>0</u>	SP010	<u>0</u>	SP010	<u>7</u>	SP010	<u>7</u>	SP010	<u>7</u>		
					SP011	<u>0</u>	SP011	<u>200</u>	SP011	<u>200</u>	SP011	<u>200</u>
				SP012	<u>0</u>	SP012	<u>0</u>	SP012	<u>0</u>			
SBOP BI PLATFORM SERVERS 4.2	SP002	<u>9</u>	SP002	<u>11</u>								
	SP003	<u>5</u>	SP003	<u>7</u>								
	SP004	<u>0</u>	SP004	<u>1</u>	SP004	<u>9</u>	SP004	<u>9</u>	SP004	<u>9</u>		
				<u>0</u>	SP005	<u>0</u>	SP005	<u>400</u>	SP005	<u>400</u>	SP005	<u>400</u>
				<u>0</u>		SP006	<u>0</u>	SP006	<u>0</u>	SP006	<u>0</u>	SP006
SBOP BI PLATFORM SERVERS 4.3		SP000	<u>0</u>									

Note 2671160 - Missing input validation in ABAP Change and Transport System (CTS)

The extension is part of a Kernel (R3trans) update:

721 patch 1112/1119, 722 patch 625/715, 745 patch 810/824, 749 patch 521/615,
753 patch 220/312, 773 patch 11/25, 774 patch -/12
(use the higher patch level to get an additional functional correction)

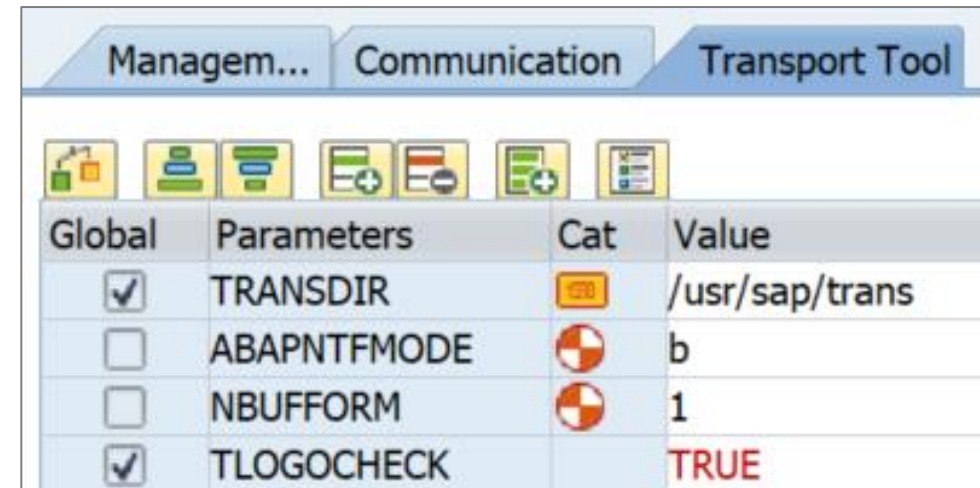
Additional manual configuration required

STMS → Overview → Systems → Change:

Set transport parameter TLOGOCHECK = TRUE as global parameter to make it effective for all systems in the transport domain

or

Keep this parameter switched off (default) in QA systems and monitor the transport return codes in the QA systems (monitoring imports with RC=0006) and switch on this parameter individually for every productive systems.



Global	Parameters	Cat	Value
<input checked="" type="checkbox"/>	TRANSDIR		/usr/sap/trans
<input type="checkbox"/>	ABAPNTFMODE		b
<input type="checkbox"/>	NBUFFORM		1
<input checked="" type="checkbox"/>	TLOGOCHECK		TRUE

Credits:

<https://blog.virtualforge.com/en/how-to-double-your-salary-in-1-minute>

Note 2671160 - Missing input validation in ABAP Change and Transport System (CTS)

Monitor parameter `TLOGOCHECK` in application `CCDB` respective Configuration Validation using configuration store `TRANSPORT_TOOL` (use this store to validate parameter `RECCLIEN` as well).

You do not see entries in transaction `CCDB` if the parameter is not set (in opposite to Profile Parameters there is no default definition).

The screenshot shows the SAP configuration validation interface. The top navigation bar includes 'Status', 'Exception', and 'Configuration'. Below this, there are tabs for 'General', 'Technical Systems', and 'Cross Selection'. The main area is titled 'Filters' and is divided into several sections:

- Landscape Filters:** Class: *
- Store Group Filters:** Component: *, Source: *, Name: *
- Store Filters:** Category: *, Type: *, Name: **TRANSPORT_TOOL**
- Status Filters:** Main State Type: *
- Technical Filters:** Store Id: , Store Template Id: , EFWK WLI-Id:
- Configuration Validation Filters:** Validation System List:
- Element Filters:** Element Pattern: **TLOGOCHECK**

At the bottom, there are buttons for 'Clear', 'Display', and 'Display Elements'.

Note 2671160 - Missing input validation in ABAP Change and Transport System (CTS)

Target System for Configuration Validation

Target System : N2671160 / Store Name : TRANSPORT_TOOL

Comparison Store: M80 / 005056 [Change](#) Find: [Find](#) [Find Next](#) Replace with:

Sel. NAME VALUE

(=) TLOGOCHECK **(=) TRUE**

Configuration Validation shows “Item not found” if parameter is not set.

Configuration Items

SAP System ID	ConfigStore Name	Config. Item	Cv. DataOperator	Config. Item Value	Compliance	Compliant (1=Yes, -1=No, ' '=Not valuated)
M10	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1
M21	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1
M26	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1
M31	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1
M36	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1
M80	TRANSPORT_TOOL	TLOGOCHECK	=VALUE:TRUE/	#	Item not found	-1

Note 2671160 - Mitigation (without solving the issue)

Option a) Checking Critical Objects in Transport Requests

Use transaction STMS → Import Overview → Extras → Critical transport objects (SM30 for table TMSTCRI) to maintain a list of forbidden transport objects

Set transport parameter `CHK_CRIOBJ_AT_EXPORT = E` within STMS to block exporting of transports containing forbidden objects.

Limitation: The check works on exports only but not on imports

see

Checking Critical Objects in Requests

http://help.sap.com/saphelp_nw70/helpdata/en/54/39d73add219573e10000000a11402f/frameset.htm

Defining Transport Objects as Critical

https://help.sap.com/saphelp_nw70/helpdata/en/60/e3fd03e36811d184810000e8a57770/frameset.htm

Note 2671160 - Mitigation (without solving the issue)

Option b) Critical Objects Check and Approval in ChaRM

Transaction SPRO → SAP Solution Manager → Capabilities (Optional) → Change Control Management → Transport Management System → Specify Critical Transport Objects (WebDynpro Application CM_COCKPIT → Tab Critical Objects)

Limitation: The check works on exports only but not on imports

See

Critical Transport Object Checks

<https://help.sap.com/viewer/8b923a2175be4939816f0981b73856c7/7.2.07/en-US/4d6fc4bdc469569be1000000a42189b.html>

Approving and Exporting Critical Objects

<https://help.sap.com/viewer/8b923a2175be4939816f0981b73856c7/7.2.07/en-US/4d6fc4c0c469569be1000000a42189b.html>

(Tipp: search for some best-practice documents on the internet)

Note 2671160 - Mitigation (without solving the issue)

Option c) Approving or Rejecting Requests (Quality Assurance)

Check requests in the QA system before they are delivered to subsequent systems

See

TMS Quality Assurance

https://help.sap.com/saphelp_nw70ehp2/helpdata/en/9c/a544c6c57111d2b438006094b9ea64/frameset.htm

Approving or Rejecting Requests (Quality Assurance)

https://help.sap.com/saphelp_nw70ehp2/helpdata/en/9c/a544d2c57111d2b438006094b9ea64/frameset.htm

Note 2671160 - Mitigation (without solving the issue)

Option d) Quality Gate Management in SAP Solution Manager

Quality gate management (QGM) provides an integrated and consistent quality process for managing changes and their deployment.

See

Quality Gate Management

<https://help.sap.com/viewer/8b923a2175be4939816f0981b73856c7/7.2.07/en-US/a90473a0d3f74adcaa6c6b4be7635867.html>

Security Baseline Template ConfigVal Package version 1.9_CV-5

Changed target systems:

- BL_I-5 Web Dispatcher Security
- BL_S-1 ABAP Profile Parameters
- BL_S-6 RFC Connectivity
- BL_O-8 Security Audit Log (ABAP)

New chapter 6. “Target Systems for individual Security Notes” describes new target systems:

- N0510007
- N1322944
- N2065596
- N2449757
- N2562089
- N2562127
- N2671160

Target System

Long SID: N* Store Name:

Description: Store Type:

Owner:

Display all Display selection Clear selection Display my last selection

Details

Select Target System

SID	Description	Del.
N0510007	Note 510007 - Setting up SSL on AS ABAP (v1.9_...	
N1322944	Note 1322944 - ABAP: HTTP security session (v1....	
N2065596	Note 2065596 - Restricting logons to server (v1.9_...	
N2449757	Note 2449757 - Add.auth.check in Trusted RFC (v...	
N2562089	Note 2562089 - Directory Traversal vulnerability (v...	
N2562127	Note 2562127 - R/3 Support Connection SNC / S...	
N2671160	Note 2671160 - Missing input validation in CTS (v...	



July 2018

No Webinar in June

Topics July 2018



Recommended Notes for System Recommendations

System Recommendations 7.2 SP 7

Trusted RFC – Whom should a SAP Solution Manager trust?

Note [2644227](#) - Command execution with SAP Internet Graphics Server (IGS) request through the multiplexer RFC listener

Note [2621121](#) - Information Disclosure in UI5 Handler

Note [2538856](#) - Cross-Site Scripting (XSS) vulnerability in SAPUI5

Note [2597913](#) - Denial of Service (DOS) in SAP Gateway

Note [2110950](#) - Potential disclosure of persisted data in ST

Note [2180849](#) - Logout Button missing in Config UI of Adobe Document Services on HCP

New Security Audit Log Messages

Notes [2299636](#) & [2332693](#) & [2360408](#) for SE06 and SCC4

Note [2535552](#) - SCU3: New authorization design for table logging

Security Audit Log as of SAP_BASIS 7.50

Recordings:
[DSAG \(German\)](#)
ASUG

Recommended Notes for System Recommendations

Note 2556623 - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI

Corrections for System Recommendations 720 Fiori UI version 1.5.22 (no change concerning calculation results):

9. ...
10. In *Object List* you export as CSV file but the field 'Usage count' is not getting exported.
In *Filter Definition* date change issue in date picker.

System Recommendations 7.2 SP 7

Separation between “Implementation Status” and “Processing Status”



The “Implementation Status” is set by the background job automatically

- New New note
- New version available Implemented ABAP note for which a new version is available
- Updated Updated note which has a processing status for an older version
- [Implemented] Implemented notes are omitted in System Recommendations

The “Processing Status” is set by the user manually

- Maintain available status values in customizing table `AGSNOTE_STATUS`
- Ensure to enter texts in all required languages
- The background job migrates existing status data into the new field once
If the old status was “New” or “New version available” then the new status becomes “Undefined”

System Recommendations 7.2 SP 7

Separation between “Implementation Status” and “Processing Status”

Standard *

Technical System:

Note Type:

Implementation Status:

Processing Status:

Release Date:

Priority:

Hide Filter Bar

SAP Status (fixed values)


User-defined Status Customizing table AGSNOTE_STATUS

SAP Notes for selected technical systems: 4


Technical System	Note Number	Short text	Release Date	Application Component	Priority ID	Support Package	Implementation Status	Processing Status	Correction Types	Attributes
<input type="checkbox"/> FBT~ABAP	2525392	[CVE-2018-2363] Update 2 to 1906212: Code injection vulnerability in Knowledge Provider.	09.01.2018	BC-SRV-KPR-DMS	3	SAPKB74020	New	Undefined	Automatic	No Kernel, Dependent
<input type="checkbox"/> FBT~ABAP	2319174	Whitelist based Clickjacking Framing Protection in NWBC for HTML	19.10.2017	BC-FES-BUS-HTML	3		New	Postpone to Maintenance	Automatic	No Kernel, Dependent
<input type="checkbox"/> FBT~ABAP	2418209	Cross-Site Scripting (XSS) vulnerability in Security Diagnostic Tool	14.03.2017	BC-SEC-LGN-SML	3		New	Irrelevant	Automatic	No Kernel, Dependent
<input type="checkbox"/> FBT~ABAP	1971397	Missing authorization check in BW-BEX-OT	23.12.2014	BW-BEX-OT	2		New	Irrelevant	Automatic, Manual	No Kernel, Dependent


System Recommendations 7.2 SP 7


New column “Support Package containing the solution” for ABAP notes


Standard * 


Hide Filter Bar


Technical System: 


Release Date: 

Note Type: 

Priority: 




Implementation Status: 

Processing Status: 

Correction Types: 

New column showing SP containing the solution

You have to activate this column manually

SAP Notes for selected technical systems: 4   

<input type="checkbox"/>	Technical System	Note Number	Short text	Release Date	Application Component	Priority ID	Support Package	Implementation Status	Processing Status	Correction Types	Attributes
<input type="checkbox"/>	FBT~ABAP	2525392	[CVE-2018-2363] Update 2 to 1906212: Code injection vulnerability in Knowledge Provider.	09.01.2018	BC-SRV-KPR-DMS	3	SAPKB74020	New	Undefined	Automatic	No Kernel, Dependent
<input type="checkbox"/>	FBT~ABAP	2319174	Whitelist based Clickjacking Framing Protection in NWBC for HTML	19.10.2017	BC-FES-BUS-HTM	3		New	Postpone to Maintenance	Automatic	No Kernel, Dependent
<input type="checkbox"/>	FBT~ABAP	2418209	Cross-Site Scripting (XSS) vulnerability in Security Diagnostic Tool	14.03.2017	BC-SEC-LGN-SML	3		New	Irrelevant	Automatic	No Kernel, Dependent
<input type="checkbox"/>	FBT~ABAP	1971397	Missing authorization check in BW-BEX-OT	23.12.2014	BW-BEX-OT	2		New	Irrelevant	Automatic, Manual	No Kernel, Dependent

System Recommendations 7.2 SP 7

New columns

Standard *

Technical System: Release Date:

Note Type: Priority:

Implementation Status: Processing Status:

Correction Types:

You have to activate column "Support Package" manually at the settings on the *Notes Overview* page

Technical System	Note Number	Short text	Release Date	Application Component	Priority ID	Support Package	Implementation Status
<input type="checkbox"/> FBT~ABAP	2525392	[CVE-2018-2363] Update 2 to 1906212: Code injection vulnerability in Knowledge Provider.	09.01.2018	BC-SRV-KPR-DMS	3	SAPKB74020	New
<input type="checkbox"/> FBT~ABAP	2319174	Whitelist based Clickjacking Framing Protection in NWBC for HTML	19.10.2017	BC-FES-BUS-	3		New
<input type="checkbox"/> FBT~ABAP	1971397	Missing authorization check in BW-BEX-OT	14.03.2017	BC-SEC-LGN-SML	3		New
<input type="checkbox"/> FBT~ABAP	1971397	Missing authorization check in BW-BEX-OT	23.12.2014	BW-BEX-OT	2		New

The columns "Implementation Status" and "Processing Status" are activated automatically

Columns

- All
- Technical System
- Note Number
- Short text
- Release Date
- Application Component
- Priority ID
- Priority
- Support Package
- Category ID
- Category
- Security Category ID
- Security Category
- Processing Status ID
- Implementation Status ID
- Implementation Status
- Processing Status
- Correction Types
- Attributes

OK Cancel

System Recommendations 7.2 SP 7

Online Help

SAP Solution Manager 7.2 SP 7

https://help.sap.com/viewer/product/SAP_Solution_Manager/7.2.07/en-US

- The new features of System Recommendations are not listed in Release Notes
- As before, the Online Help refers to corresponding Fiori pages:

System Recommendations @ SAP Fiori for SAP Solution Manager 1.0 SPS 6

<https://help.sap.com/viewer/34eaf25a11d54485aecf05e041f78555/106/en-US/a5e801557f614c55e10000000a4450e5.html>

- (no change)

Trusted RFC – Whom should a SAP Solution Manager trust?

Only following scenarios requires that the SAP Solution Manager trust a very specific managed system:

➤ **Fiori Frontend Server**

The Fiori Frontend Server needs to be trusted by the SAP Solution Manager if you do not use the embedded Fiori Frontend of the SAP Solution Manager itself only

➤ **GRC Access Control FireFighter**

The central GRC systems needs to be trusted by the SAP Solution Manager if you use FF in the SAP Solution Manager, too

➤ **Retrofit-Configuration**

A very specific system needs to be trusted by the SAP Solution Manager

Do not allow any other trusted systems!

(... except for very good reasons ... “required for testing with eCatt” is not a good reason)

Trusted RFC – Whom should a SAP Solution Manager trust?

Never activate the checkbox on the right side at “Trusted RFC Destination to SAP Solution Manager” during SolMan Setup - Managed System Configuration:

Dialog RFCs between FBT Client 200 and A24 Client 001

RFC Destination and User for Login Access to managed system (LOGIN&TRUSTED RFC)

- Create/Update SM_A24CLNT001_LOGIN
- Create/Update SM_A24CLNT001_TRUSTED

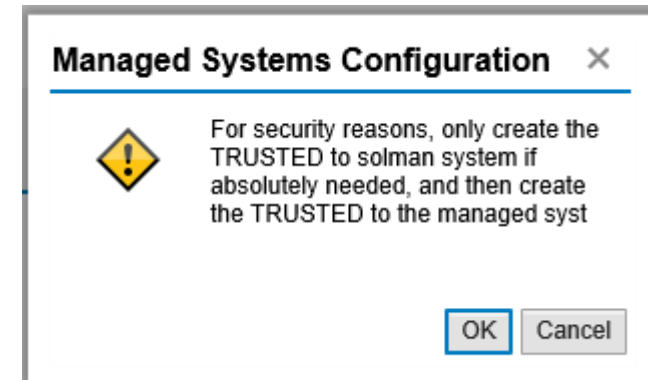
Trusted RFC Destination to SAP Solution Manager

- Create/Update SM_FBTCLNT200_TRUSTED

If you activate the checkbox, at least you a warning:

Take it serious!

(If you need this trusted relationship simply create it explicitly using transaction SMT1.)



Note 2644227 - Command execution with SAP Internet Graphics Server (IGS) request through the multiplexer RFC listener

Consulting note describing manual configuration:

Transaction `SMGW` → Goto → Expert Functions → External Security → Maintain ACL Files

Create an `reginfo` entry for the SAP Internet Graphics Server (IGS) with the following arguments:

```
P TP=IGS.<SID> HOST=local CANCEL=local ACCESS=local
```

or

```
P TP=IGS.<SID> HOST=local CANCEL=local ACCESS=internal
```

Typical content of existing ACL file:

```
P TP=* HOST=local CANCEL=local ACCESS=local  
P TP=* HOST=internal CANCEL=internal ACCESS=internal  
P TP=Trex_X3A_* HOST=* CANCEL=* ACCESS=*  
P TP=IGS.X3A HOST=local CANCEL=local ACCESS=*  
P TP=IGS.X3A HOST=internal CANCEL=internal ACCESS=*  
P TP=SLD_UC HOST=local CANCEL=local ACCESS=*  
P TP=SLD_UC HOST=internal CANCEL=internal ACCESS=*  
P TP=SLD_NUC HOST=local CANCEL=local ACCESS=*  
P TP=SLD_NUC HOST=internal CANCEL=internal ACCESS=*
```

Note 2644227 - Command execution with SAP Internet Graphics Server (IGS) request through the multiplexer RFC listener

General Technical Systems **Cross Selection**

Filters

Landscape Filters
Class: *

Store Group Filters
Component: *
Source: *
Name: *

Store Filters
Category: *
Type: *
Name: GW_REGINFO

Status Filters
Main State Type: *

Technical Filters
Store Id:
Store Template Id:
EFWK WLI-Id:

Configuration Validation Filters
Validation System List:

Element Filters
Element Pattern: P TP=IGS*

Reset Display **Display Elements**

Element Viewer
Element Value Width: Unlimited(60) Height: 5 rows

View: [Standard View] Print Version Export Store Details

Landscape	Component Version	Store Name	Element Status	Element Class	Element Name	Element Value
ABAP Instance (X3A~ABAP~mo-c81a86caf_X3A_01)	SAP BASIS 7.40	GW_REGINFO	Added (Current)	Text Line	[LINE]=4	P TP=IGS.X3A HOST=local CANCEL=local ACCESS=*
ABAP Instance (X3A~ABAP~mo-c81a86caf_X3A_01)	SAP BASIS 7.40	GW_REGINFO	Added (Current)	Text Line	[LINE]=5	P TP=IGS.X3A HOST=internal CANCEL=internal ACCESS=*
ABAP Instance (X3A~ABAP~mo-c81a86caf_X3A_01)	SAP BASIS 7.40	GW_REGINFO	Added (Current)	Text Line	[LINE]=15	P TP=IGS.X3A HOST=127.0.0.1 CANCEL=127.0.0.1 ACCESS=*

n Validation:
· Configuration

Note 2621121 - Information Disclosure in UI5 Handler Application Component CA-UI5-DLV

Simple ABAP note

Note 2538856 - Cross-Site Scripting (XSS) vulnerability in SAPUI5 Application Component CA-UI5-CTR-ROD

The note describes independent solutions for different technologies:

HANA see “Solution Text”, i.e.

- SAP HANA DATABASE 1.0 Maintenance Revision 122.16
- SAP HANA DATABASE 2.0 Maintenance Revision 012.04
- SAP HANA DATABASE 2.0 SPS 02 Maintenance Revision 024.00
- SAP HANA DATABASE 2.0 SPS 03 Initial Revision **030**.00

ABAP see “Manual Activities” which refer to other notes

- SAP_UI 7.40 SP 20 according to Note 2547009 (and for UISAPUI5 100)
- SAP_UI 7.50 SP 10 according to Note 2482210 (and for UI_700 200)
- SAP_UI 7.51 SP 05 according to Note 2493450
- SAP_UI 7.52 SP 01 according to Note 2468634

Java see “Support Package Patches”

- See Java patches

For SAP HANA platform:

SAP UI5 versions in SAP HANA platform components have been updated with the following versions.

SAP HANA PLATFORM EDITION 2.0 SPS 03:

- SAP HANA DATABASE 2.0 o >= Maintenance Revision 003.00
- SAP EXTENDED APP SERVICES 1 / XS RUNTIME 1 o >= Build 1.0.82 / Patch 82
- XS SERVICES 1 o >= SP06 Patch 5

Manual Activity

```
INVALID FOR
Software Component   UISAPUI5                               SAP_UI5_CLIENT...
Release 100          SAPK-10012INUISAPUI5 - SAPK-10019INUISAPUI5
Software Component   SAP_UI
Release 740          SAPK-74012INSAPUI - SAPK-74019INSAPUI
```

Please implement note 2547009 to get the newest UI5 version.

Support Package Patches		
Software Component	Support Package	Patch Level
SAPUI5 CLIENT RT AS JAVA 7.30	SP013	000017
	SP014	000020
	SP015	000015
	SP016	000013
	SP017	000008

Note 2597913 - Denial of Service (DOS) in SAP Gateway

Note 2597913 (Version 4 from 10.07.2018) **solves some issues but introduces a new error which gets solved with note 2647109** (Version 5 from 04.06.2018):

SAP KERNEL 7.21

SAP KERNEL 7.22

SAP KERNEL 7.45

SAP KERNEL 7.49

SAP KERNEL 7.53

Note 2597913

patch 1016

patch 610

patch 715

patch 510

patch 110

Note 2647109

patch 1020

patch 617

patch 723

patch 514

patch 201

2597913 - [CVE-2018-2433] Denial of Service (DOS) in SAP Gateway

Version 4 from 10.07.2018 in English

Description

Software Components

Support Package Patches

This document is referenced by

This document is causing side effects

This document is causing side effects

Number

Title

2647109

GW: external cpic programs do not start any more

Note 2110950 - Potential disclosure of persisted data in ST

Old note from 2014 for SolMan 7.1
SAPKITL710 - SAPKITL711

→ not relevant anymore

(Same for notes 1900259 and 1553387)

Deactivation of obsolete coding → no testing required

Coloring of ABAP correction instruction:
see SAP Note Enhancer

```
***-----$**
*$ Correction Inst.          0120061532 0001815152          $*
*$-----$**
*$ Valid for                :                          $*
*$ Software Component      ST          SAP Solution Manager $*
*$ Release 710             SAPKITL710 - SAPKITL711        $*
*$ Release 712             SAPKITL801 - SAPKITL801        $*
***-----$**
*&-----*
*& Object                   FUNC SMY_GET_ALL_SYSTEMS_BY_PRODUCT
*& Object Header            FUGR SMSY_GET_DATA
*&-----*
*& FUNCTION SMY_GET_ALL_SYSTEMS_BY_PRODUCT
*&-----*
...
FUNCTION SMY_GET_ALL_SYSTEMS_BY_PRODUCT.
*>>> START OF DELETION <<<<
data: it_systems type table of smsy_systems.
data: iv_systems type smsy_systems.
*      systemname like smsy_system-systemname,
*      end of it_systems.
DATA: select_condition TYPE linetab OCCURS 0 WITH HEADER LINE.

*>>> START OF INSERTION <<<<
*data: it_systems type table of smsy_systems.
*data: iv_systems type smsy_systems.
*      systemname like smsy_system-systemname,
*      end of it_systems.
*DATA: select_condition TYPE linetab OCCURS 0 WITH HEADER LINE.
*
```

Note 2180849 - Logout Button missing in Config UI of Adobe Document Services on HCP

This (old) note is about “HANA Cloud Platform”, which is maintained by SAP

→ Nothing to do for customers

Note is “Independent”

→ SysRec shows the note for all systems

→ set “irrelevant” status manually

The screenshot shows the SAP Note Overview interface. At the top, there are filter options: 'default' (dropdown), 'Technical System:' (dropdown), 'Release Date:' (calendar icon), 'Note Number:' (input field with '2180849' and a search icon), and 'Application Component:' (input field). A 'Filters' button is highlighted with a red box. To the right, there is a 'Go' button and a text prompt: 'Add “Note” to filter options'. Below the filters, it says 'SAP Notes for selected technical systems: 9'. A table lists the notes with columns: 'Short text', 'Release Date', 'Application Component', 'Priority ID', 'Implementation Status', 'Processing Status', 'Correction Types', and 'Attributes'. The first row is highlighted. A 'Mark all entries' checkbox is checked. At the bottom, there is a 'Save as Tile' button and an 'Actions' button highlighted with a red box, followed by 'Integrated Desktop Actions'.

<input checked="" type="checkbox"/> Mark all entries	Short text	Release Date	Application Component	Priority ID	Implementation Status	Processing Status	Correction Types	Attributes
<input checked="" type="checkbox"/> M31~ABAP	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	
<input checked="" type="checkbox"/> M26~ABAP	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	
<input checked="" type="checkbox"/> H31~HANADB	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	
<input checked="" type="checkbox"/> M36~HANADB	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	
<input checked="" type="checkbox"/> M10~ABAP	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	
<input checked="" type="checkbox"/> M21~ABAP	2180849 Logout Button missing in Config UI of Adobe Document Services on HCP	10.07.2018	XX-PART-AD B-IFD	4	New	Undefined	No Kernel, Independent	

New Security Audit Log Messages

Notes 2299636 & 2332693 & 2360408 for SE06 and SCC4

All three notes (2299636 to get the messages & 2332693 for SE06 & 2360408 for SCC4) are required to introduce the following messages for 7.31, 7.40, 7.50:

EU1 **Very Critical** System changeability changed (&A to &B) *in transaction SE06*

EU2 **Very Critical** Client setting for &A changed (&B) *in transaction SCC4*

It might be the case that you cannot implement note 2360408 even if it is still required – check the coding in include LOSZZF01 for
CALL FUNCTION 'RSAU_WRITE_CTS_ORG_SETTINGS'
→ If you do not find this statement but cannot implement the note in SAP_BASIS 7.31, 7.40, or 7.50 then raise a ticket

New Security Audit Log Messages

Note 2535552 - SCU3: New authorization design for table logging

Report RSTBPDEL writes message EU3 to SAL and Syslog

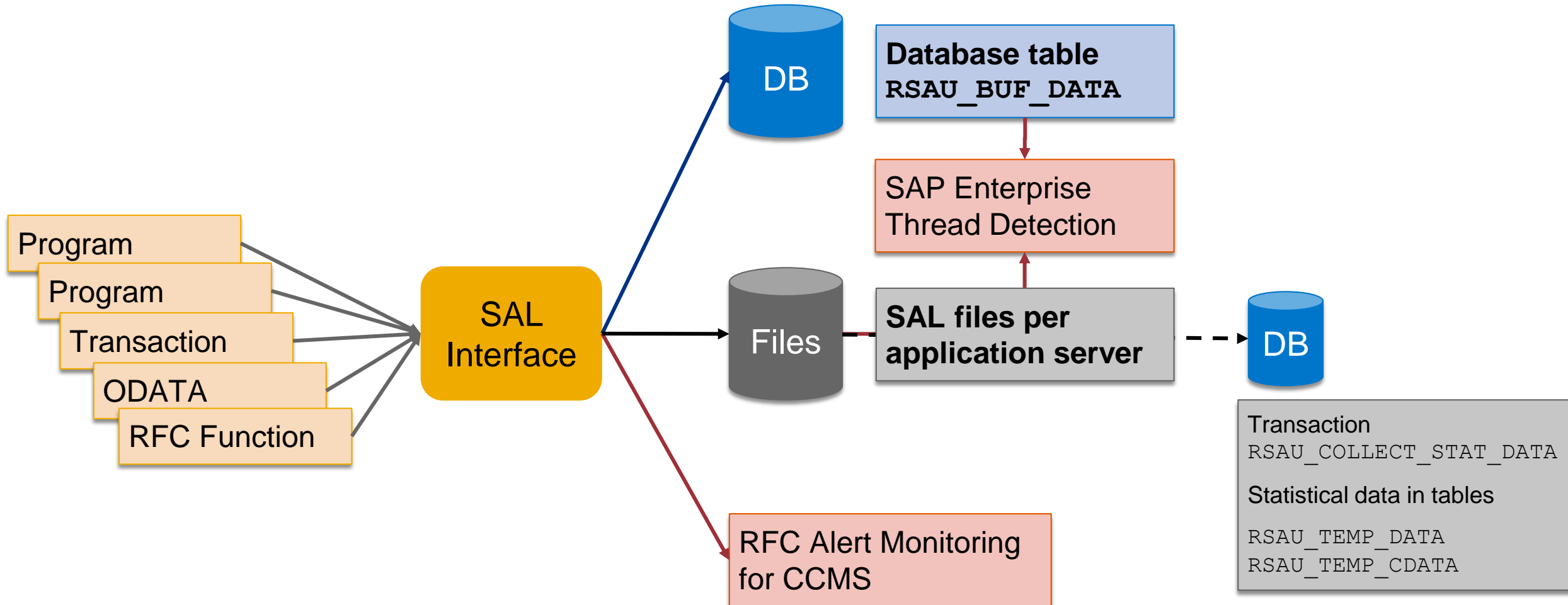
EU3 **Critical** &A change documents deleted without archiving (&B)

Note 2535552

- has manual post-installation steps
- has required notes 2525372, 1919440, 1750915, 1735308
- and has side effect solving notes 2621537, 2634844, 2639096
- Implement all these notes if required

Security Audit Log as of SAP_BASIS 7.50

Data flow / data storage



Security Audit Log as of SAP_BASIS 7.50

Maintenance

➤ Transaction RSAU_ADMIN - Log Data Administration

- = report RSAU_FILE_ADMIN
- Configure integrity protection
- Check integrity protection
- Reorganization of log files
- Reorganization of log events in database using archiving object BC_SAL

Select Activity

- Configure integrity protection format
- Check integrity of the files
- Display Last Integrity Check Status
- Reorganize log files
- Reorganize log table

SM18

➤ Transaction RSAU_CONFIG - Configuration

- = report RSAU_CONFIG_MAINT
- Maintain Kernel parameters
- Maintain dynamic configuration / filters
- Maintain static configuration / filters

SM19

➤ Transaction RSAU_TRANSFER - Download/Upload Configuration Data

- = report RSAU_TRANSFER
- Download/Upload Configuration Data

Security Audit Log as of SAP_BASIS 7.50

Show

➤ Transaction `RSAU_CONFIG_SHOW` - Show Configuration

- = report `RSAU_CONFIG_SHOW`
- Show parameters
- Show dynamic configuration / filters
- Show static configuration / filters

➤ Transaction `RSAU_READ_LOG` - Reporting

- = report `RSAU_READ_LOG`
- Show log events from files
- Show log events from database

SM20

`RSAU_SELECT_EVENTS`

➤ Transaction `RSAU_READ_ARC` – Reporting

- = report `RSAU_ARCHIVE_READ`
- Show log events from archiving object `BC_SAL`

➤ Report `RSAU_INFO_SYAG` – Show Message Definitions

- Show documentation about messages


Security Audit Log as of SAP_BASIS 7.50

Recommendation after Upgrade

Use of new transactions / parameters / features is optional (and recommended)

Avoid mixture in multiple systems especially for “Profile Parameters” vs. “Kernel Parameters” to avoid confusion

Once you maintain Kernel Parameters you get a warning after next restart of the server:

 Transaction SM19 is obsolete. Use transaction RSAU_CONFIG for maintenance.

Filters

- Up to 90 filters are available, you can transport or download/upload filter definitions
- Filters for Audit Classes cover new events automatically
- Filters for individual event messages should be analyzed if some new messages should be activated, too

Decide how to store log for audit purpose in the future

- Complete files
- Extracts
- Data retention periods

Security Audit Log as of SAP_BASIS 7.50

Links

Analysis and Recommended Settings of the Security Audit Log (SM19 / SM20)

<https://blogs.sap.com/2014/12/11/analysis-and-recommended-settings-of-the-security-audit-log-sm19-sm20/>

Note 2191612 - FAQ | Use of Security Audit Log as of SAP NetWeaver 7.50



May 2018

Topics May 2018



Note [2524107](#) - AIS | Enhancements in system audit reporting

SAP Solution Manager User Management Transaction `USR_MNGT`

Note [2081029](#) - Potentially false redirection of Web site content in Web Dynpro ABAP

Note [2449757](#) - Additional Authentication check in Trusted RFC on own system (reloaded)

Note [2610231](#) - Code Injection Vulnerability in SAP MaxDB ODBC Driver

Recommended Notes for System Recommendations

Recordings:
[DSAG \(German\)](#)
ASUG

Note 2524107 - AIS | Enhancements in system audit reporting

Report RDDPRCHK – Check Table Logging

The function for deactivating logging is available following this correction procedure via the function code =DACTVT only.

Extended version, see Note 2579568 - RDDPRCHK | Optimization for reporting

Check Table Logging									
System Environment During Runtime									
Instance-Specific Setting of Profile Parameter rec/client									
mo-872c15913_EC1_01		ALL							
Transport-Specific Setting for Table Log									
TP Parameter RECCLIENT		<system default>							
Table Name	Short text	Table Category	Cl.-Spec.	Tab. Maint	Del. class	Size cat.	Data Class	Log	Authoriz.
ZAIRC_SU53	Table maintaining the SU53 Entries	TRANSP	⊗	✎	C	8	APPL1	✗	
ZAIRC_SU53_2	Table maintaining the SU53 Entries	TRANSP	⊗	✎	C	8	APPL1	✗	
ZBRM_RTY	Business Role Types	TRANSP	✓	✎	C	0	APPL2	✓	&NC&
ZGRACBRCONFIG	Business Role Integration Configuration	TRANSP	✓	✎	C	0	APPL0	✓	&NC&
ZGRACRISKROUTING	Risk relevance for workflow routing	TRANSP	✓	✎	C	0	APPL2	✓	GRMW
ZSECPARAM	Security Evaluation Console - Recommended Parameter Value	TRANSP	⊗	✎	C	1	APPL0	✗	
ZSEC_EQ_CHECK	check table for equals values	TRANSP	⊗	✎	C	1	APPL0	✗	
ZTABL00001		TRANSP	✓	✎	C	0	USER1	✗	
ZTABL00002		TRANSP	✓	✎	C	0	USER1	✗	
ZTEST	test	TRANSP	⊗	✎	C	0	APPL1	✗	
ZUSERGROUP	D059973 - Test Table for PC Control Usergroup Assignment	TRANSP	✓	✎	G	1	APPL0	✗	

Note 2524107 - AIS | Enhancements in system audit reporting


Report RDD00DOC - Output Field Documentation with Allowed Values

Output Field Documentation with Allowed Values	
Object Hierarchy	Short Description / Property
└ Audit Information System - Field Documentation	
└ Report Environment	
└ Dictionary Structures	
└ Transparent Tables	1 Hits
└ Table ZSECPARAM	Security Evaluation Console - Recommended Parameter Value
└ Table Fields	4 Table Fields
└ PARAM_NAME	param name
└ Field Attributes	
└ Internal Type	C
└ Field Length	000100
└ Data Type	CHAR
└ Domain	
└ PARAM_EQUALS	equals values
└ Field Attributes	
└ Internal Type	C
└ Field Length	000100
└ Data Type	CHAR
└ Domain	ZSEC_STRING
└ PARAM_BETWEEN	between value range
└ Field Attributes	
└ Internal Type	C
└ Field Length	000100
└ Data Type	CHAR
└ Domain	
└ PARAM_NOT	param not
└ Field Attributes	
└ Internal Type	C
└ Field Length	000100
└ Data Type	CHAR
└ Domain	ZSEC_STRING

Note 2524107 - AIS | Enhancements in system audit reporting



Report RSCRDOMA is now replaced by report RSAUDIT_WUSL_DDIC

RSAUDIT_WUSL_DDIC




Standard Selection

Search Tables for DDIC Types
 Search Tables for Standard Types

S_DTYPE 
S_DLENG 

Additional Selection Criteria

S_TABN 

Suppress empty Tables
 Count Table Entries
Count Entries with Value

Display Options

Compressed Table List
 Standard Table/Field List

Table Name	Short Description	CNT_ALL	CNT_VAL
ZAIRC_SU53	Table maintaining the SU53 Entries	1.702	
ZARIXCA2		56	
ZCS_CC_OWNER	Companycode to Role owner mapping	2	2
ZCS_USR	ZCS_USR	3	2
ZGPM_PROJECT		4	
ZTESTHR	Test HR Payroll	2	

SAP Solution Manager User Management Transaction `USR_MNGT`

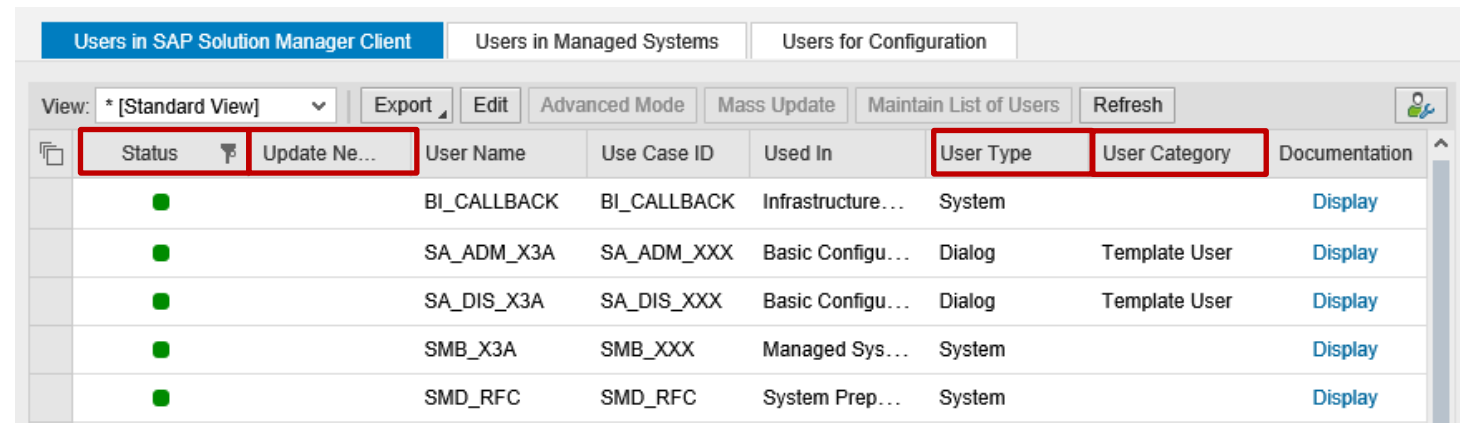
Transaction `USR_MNGT` shows an overview about users managed by `SOLMAN_SETUP`.

Existing users ● Status “Success”

To-be-updated users ▲ Status “Warning”

Missing password ● Status “Error”

Non-existing users ◇ Status “Do not exist”



Status	Update Ne...	User Name	Use Case ID	Used In	User Type	User Category	Documentation
●		BI_CALLBACK	BI_CALLBACK	Infrastructure...	System		Display
▲		SA_ADM_X3A	SA_ADM_XXX	Basic Configu...	Dialog	Template User	Display
▲		SA_DIS_X3A	SA_DIS_XXX	Basic Configu...	Dialog	Template User	Display
●		SMB_X3A	SMB_XXX	Managed Sys...	System		Display
●		SMD RFC	SMD RFC	System Prep...	System		Display

Checks / Actions:

- Do you need all these existing users, i.e. do you need “template users”?
- Does the user type match to the purpose of the user and your security policy?
- Update role assignments if needed

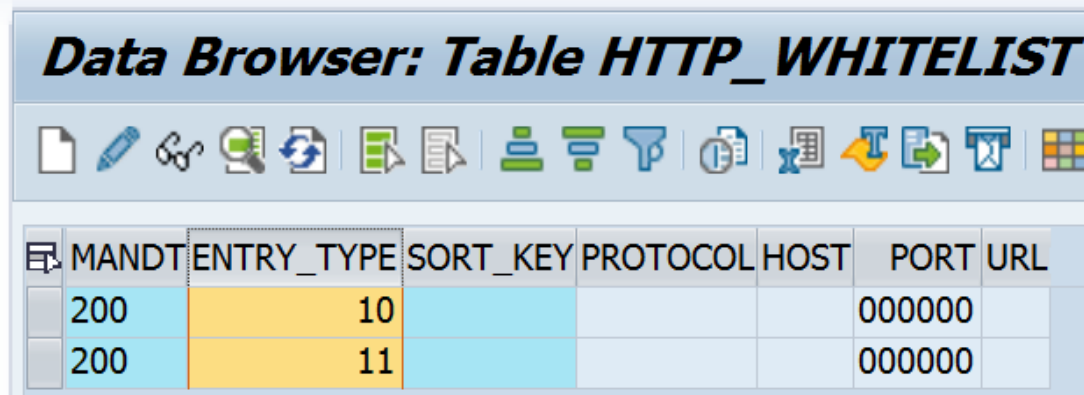
Note 2081029 - Potentially false redirection of Web site content in Web Dynpro ABAP application

ABAP corrections (automatic and manual) are old → no action needed to update software

Manual configuration of whitelist is still needed!

Use transaction SE16 to create (empty) entries in table HTTP_WHITELIST for entry types 10, 11 (and maybe some more) to block cross-domain redirection.

Data Browser: Table HTTP_WHITELIST



MANDT	ENTRY_TYPE	SORT_KEY	PROTOCOL	HOST	PORT	URL
200	10				000000	
200	11				000000	

- 01 HTTP Framework to filter for valid URLs (Note [853878](#))
- 02 Exit URL for parameter `sap-exiturl`
- 03 NWBC runtime
- 10 WebDynpro Resume URL (Note [2081029](#))
- 11 Web Dynpro Redirect URL (Note [2081029](#))
- 20 Redirect URL for parameter `sap-mysapred` of ICF (Note [612670](#))
- 21 Redirect URL for parameter `redirectURL` of ICF (Note [1509851](#))
- 30 Clickjacking Framing Protection (Note [2142551](#))
- 40 Suite Redirect
- 99 Redirect (generic)

You can use report RS_HTTP_WHITELIST instead, too, which shows the value help for the entry type field.

Note 2449757 - Additional Authentication check in Trusted RFC on own system (reloaded)

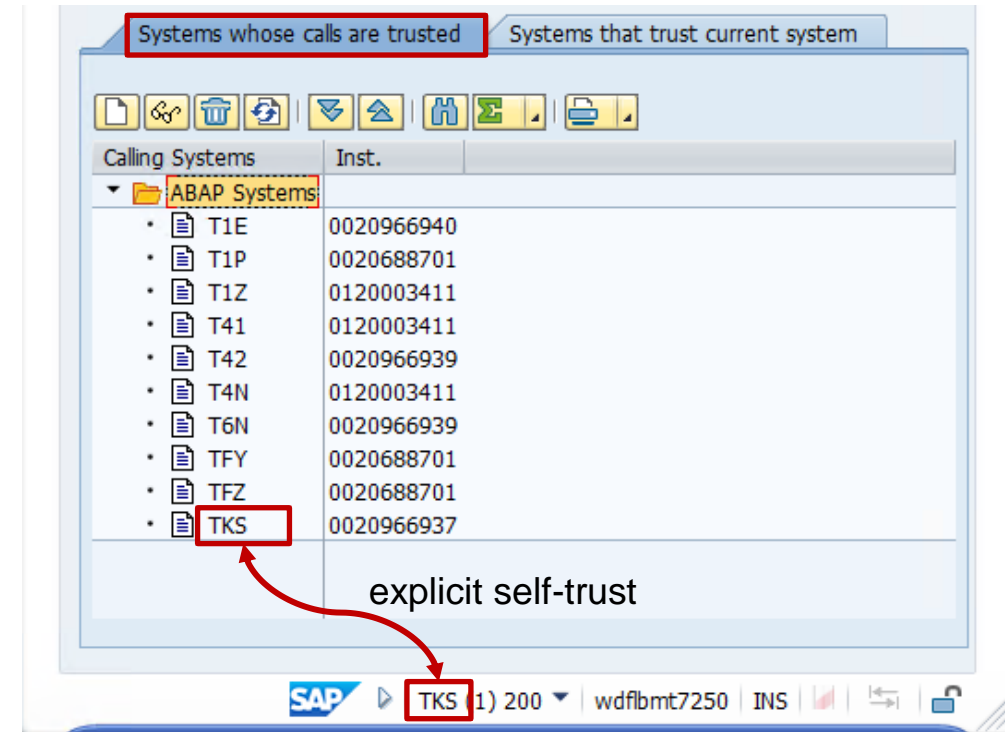
Caution: Use Kernel update as described in note 2614667 before activating parameter `rfc/selftrust` in systems where you want to define Trusted RFC destinations within the same system.

➤ **No Trusted RFC within a system required:**

**No trust relationship in transaction SMT1
Activate the profile parameter**

➤ **Trusted RFC within a system required:**

**Define the trust relationship in transaction SMT1
but do not activate the profile parameter unless you
get the Kernel update**



Note 2610231 - Code Injection Vulnerability in SAP MaxDB ODBC Driver

This note is about **client** software, not about the server part of the database.

FAQ Note 822239:

18. How can I determine which version an **SAP MaxDB client library** has?

Switch to the directory that contains the library whose version you want to determine, i.e. for version ≥ 7.8 : `/sapdb/clients/<SID>/lib`

Use the following command: `sqlwhat <library_name> -i Build`

Output, e.g.: `Rel. 7.6.6 Build: 022-123-241-261`

24. How can I determine which ODBC version is installed on the host?

You can check installed software using the **sbdregview** tool (e.g. using report RBDCOS0):
`/sapdb/programs/bin/sdbregview -l | grep -i ODBC`

For comparison:

You see the **server** version at System → Status:

Database information	
DB Client Lib	SQLDBC 7.9.7.010
DB Releases	MaxDB 7.8, MaxDB 7.9
DBSL Version	742.06
DBSL Patch-Level	009

Note 2610231 - Code Injection Vulnerability in SAP MaxDB ODBC Driver

The client library is part of the Application Runtime Package (**MAXDBART**)

MAXDB 64-BIT /
MAXDB 7.9 64-BIT

DOWNLOADS INFO ECCN INFO

<input type="checkbox"/>	Name	Patch Level	File Type
<input type="checkbox"/>	MAXDB7909_7-20009122.SAR MAXDB 7.9.09.7 Server Package	7	SAR
<input type="checkbox"/>	MAXDBART7909_7-20009122.SAR MAXDB 7.9.09.7 Application Runtime Package	7	SAR



SAP MaxDB INSTALLATION MANAGER

1 2 3 4
Select Activity Configure Installation **Review & Confirm** Install Software

SAP MaxDB Installation

- Global Installation
- Installation CL_MAXDB
 - Installation Path - C:\sapdb\clients\MAXDB
 - Description - MaxDB ODBC
 - Private Data Path - C:\sapdb\clients\MAXDB\data
 - Components (87.96 MB)
 - Base (13.19 MB)
 - Messages (0.73 MB)
 - ODBC (24.92 MB)
 - make_id - 625494
 - buildstring - 7.9.09 Build 007-123-261-455
 - ODBC 32 (22.14 MB)
 - SAP Utilities (26.99 MB)

Recommended Notes for System Recommendations

Optimization of UPL/SCMON integration:

Note [2610652](#) - SysRec: Query Execution Error when checking UPL data
plus

Note [2619312](#) - Custom Code Management (ST 7.2 SP03 or higher):
The API "CL_AGS_CC_UPL_DATA" enhancement

Note [2590592](#) - SysRec7.2 NonABAP system notes calculation (new version available)

Recommended Notes for System Recommendations



Note 2556623 - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI

Corrections for System Recommendations 720 Fiori UI version 1.5.21 (no change concerning calculation results):

1. In *Note Overview* you have saved search criteria as variant, after you re-enter System Recommendations the saved variant is not available.
2. In *System Overview* and *Note Overview* by default 20 items are loaded at one time, you need to keep on scrolling down the mouse to see more items. You want to load all items at one time.
3. When selecting technical system in *Note Overview* the dropdown list for technical systems does not show all values if there are more than 100 systems available. This list contains only 100 entries which are sorted alphabetically and after the 100th it is truncated.
4. In *Note Overview* you mark several notes and click button *Actions-Change Status* to set notes status, only the Status ID of the first note is updated.
5. The title of table in *Note Overview* is "System with SAP Notes (number)", it should read "SAP Notes for selected technical system: number".
6. In *Note Overview* you set the note status for a note, the comment entered for the last note appears in the comment textbox.
7. In *Note Overview* you execute a self-defined variant, "No data" is displayed in *Note List*.
8. In *Note Overview* you select the date range, after clicking on *Go* button, the dates automatically change to different values.
9. When you display a large number (>1000) of notes in *Note Overview*, you observe that the performance is low.

Note 2556623 - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI

Preparation to avoid error "No license to edit object R3TR WAPA SM_CM_SYSREC":

Call transaction SE80 for package
UISM_AGS_SYSREC_UI.

Navigate to BSP application
SM_CM_SYSREC and enter
change mode. This triggers the
popup to enter the registration
key.

The screenshot displays the SAP Web Application Builder interface. The left sidebar shows a tree view of the project structure, with the package `UISM_AGS_SYSREC_UI` expanded to show the `BSP Library` and `BSP Applications` folders. The `SM_CM_SYSREC` application is selected and highlighted with a red box. The main area shows the `Web Application Builder: Display BSP Application` window. The `BSP Application` field is set to `SM_CM_SYSREC` and is in `Active` mode. The `Navigation` tab is selected. A dialog box titled `X3A(2)/001 Register Object` is open, prompting the user to perform registration in the SAP Support Portal. The dialog contains the following information:

Enter Access Key	
Object	R3TR WAPA SM_CM_SYSREC
SAP Release	740
Access key	<input type="text"/>
Installation	0020230702

At the bottom of the dialog, there are buttons for `Continue`, `Display`, `Information`, and a red `X` icon.

Note 2556623 - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI

Create a workbench transport.

Now you can use report
`/UI5/UI5_REPOSITORY_LOAD`
to implement the note.


Name of SAPUI5 Application: `SM_CM_SYSREC`
Upload: Checked
Adjust Line Endings on Upload: Checked

Execute and start upload

Enter transport request: `<...>`
External Codepage: `CP1252`

Check log, you should only get info messages

Upload, Download, or Delete Apps to or from SAPUI5 ABAP Repository



Specify SAPUI5 App and Select Operation


Specify the name of the SAPUI5 app and select whether you want to upload, download, or delete it to or from the SAPUI5 ABAP repository. Source or target is the local file system of your PC.

Name of SAPUI5 App

Upload
 Download
 Delete

Adjust Line Endings on Upload

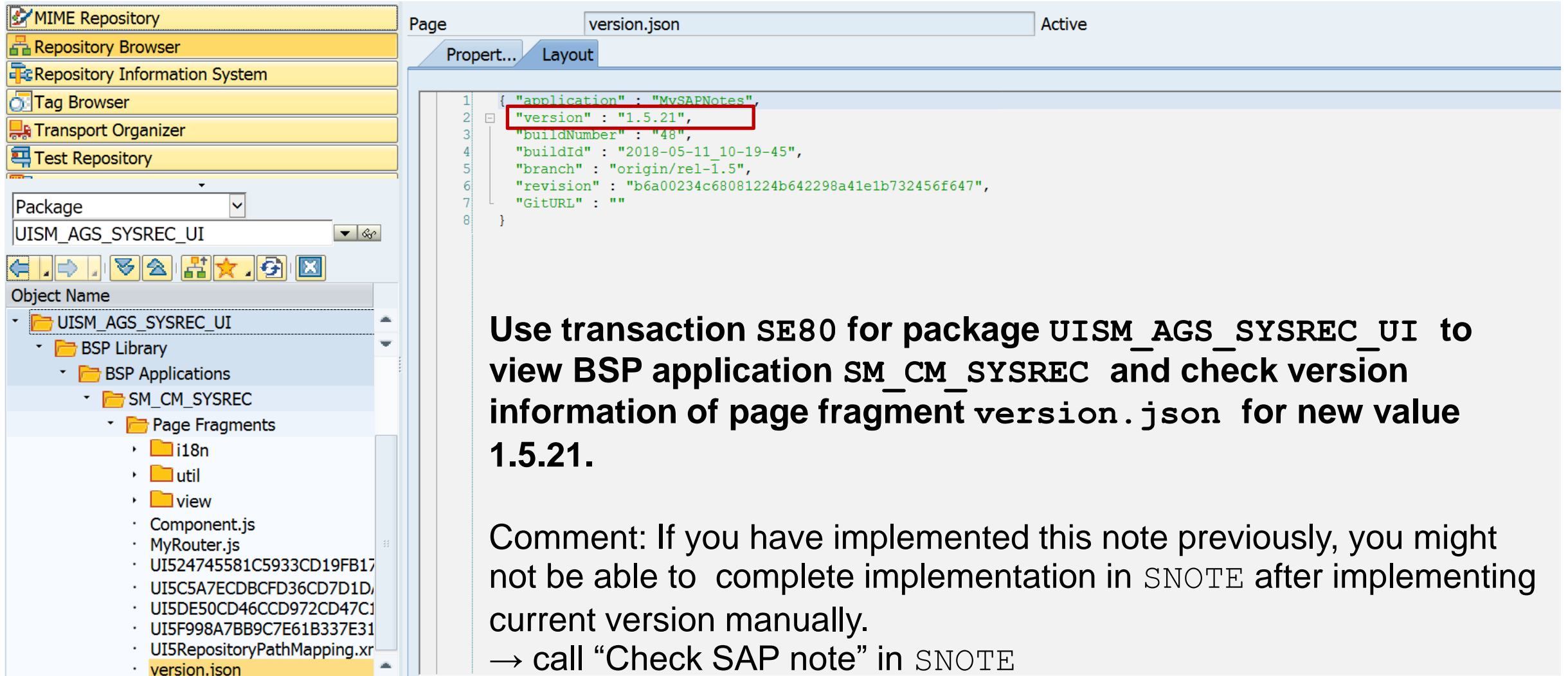
Load SAPUI5 Application from File System to the SAPUI5 ABAP Repository



This is going to happen when you confirm at the end of this list ...

```
* Update existing SAPUI5 Application SM_CM_SYSREC *
Upload File      : C:\temp\note 2556623\Component-dbg.js ( Text )
Upload File      : C:\temp\note 2556623\Component-preload-dbg.js ( Text )
Upload File      : C:\temp\note 2556623\Component-preload.js ( Text )
Upload File      : C:\temp\note 2556623\Component.js ( Text )
Upload File      : C:\temp\note 2556623\MyRouter-dbg.js ( Text )
Upload File      : C:\temp\note 2556623\MyRouter.js ( Text )
Upload File      : C:\temp\note 2556623\version.json ( Text )
Create Folder    : C:\temp\note 2556623\i18n
```

Note 2556623 - SysRec: Collective Corrections for Solution Manager 720 SP03-SP06 Fiori UI



The screenshot displays the SAP Solution Manager interface. On the left, the 'Object Name' tree shows the package structure: UISM_AGS_SYSREC_UI > BSP Library > BSP Applications > SM_CM_SYSREC > Page Fragments > version.json. The main editor area shows the content of version.json, with the 'version' field highlighted in red:

```
1 { "application" : "MySAPNotes",  
2   "version" : "1.5.21",  
3   "buildNumber" : "48",  
4   "buildId" : "2018-05-11_10-19-45",  
5   "branch" : "origin/rel-1.5",  
6   "revision" : "b6a00234c68081224b642298a41e1b732456f647",  
7   "GitURL" : ""  
8 }
```

Use transaction SE80 for package UISM_AGS_SYSREC_UI to view BSP application SM_CM_SYSREC and check version information of page fragment version.json for new value 1.5.21.

Comment: If you have implemented this note previously, you might not be able to complete implementation in SNOTE after implementing current version manually.
→ call “Check SAP note” in SNOTE



April 2018

Topics April 2018



Switchable authorization checks (SACF)

Note [2272827](#) - Check of S_PROGNAM for scheduling of job step

Note [184277](#) - Length Limitation of SNC-Names

Note [2562127](#) - R/3 Support Remote Connection with SNC / SSO

Note [2614141](#) - Improper session management when using SAP Cloud Connector

Note [2622660](#) - Security updates for web browser controls delivered with SAP Business Client

Note [2190621](#) - SAP Netweaver SAL incorrect logging of addresses

Note [2497000](#) - Missing Authorization check in XX-CSC-BR-NFEIN

Note [2497027](#) - Missing Authorization check in XX-CSC-BR-NFE

System Hardening with SAP Security Notes

Recordings:
[DSAG \(German\)](#)
ASUG

Switchable authorization checks (SACF)

Status from 2018-04:

- 80 Security Notes about SACF**
 - +108 More notes about SACF**
 - +34 Notes of application component BC-SEC-AUT* about SACF tool**
-
- 222 Notes in total (most have a part for SNOTE as well as a manual installation instruction)**
 - +12 Notes describing Release Information**

SAP Update Manager (SUM) informs you after system updates to run transaction `SACF_COMPARE` to activate switchable authorization checks required by your business processes.

SACF Maintain productive scenarios of Switchable Authorizations

Maintaining Scenarios for Switchable Authorization Checks

If SAP delivers new authorization checks for established business processes as part of corrections by SAP Note or by Support Package, these checks should be available in the customer landscape but should not disrupt productive processes. New authorization checks are identified in delivered code with scenario names. A scenario groups the new or changed authorization checks of a business process. The construct of switchable authorization checks allows you to implement tighter security requirements, in accordance with customer requirements, in a simple way. The cross-application solution of switchable authorization checks provides the necessary transparency about the degree to which tighter authorization concepts are implemented.

For scenario definitions to take effect during an authorization check, they need to be transferred to the productive scenarios area using transaction SACF_COMPARE.

Then, use transaction SACF to maintain productive scenarios to your particular requirements.

Decide about

- **Scenario status L (logging only) vs. A (active authorization check)**
- **SAL Status A (all events) vs. E (only error events)**

SACF_COMPARE Compare Active Scenarios for Switchable Authorizations

Compare Active Scenarios for Switchable Authorizations

Switchable authorization scenarios are provided by software vendors and need to be stored in the local system landscape as active scenarios. Only the active scenarios affect the process of an authorization check.

To support the initial configuration and the later (modification) comparison of scenarios, the following comparison scenarios are available with transaction `SACF_COMPARE`: (The comparison is started in simulation mode. Changes must be started from the results list.)

➤ Set Initial Values of Active Scenarios

This step allows you to perform the initial configuration of the active scenarios. The comparison starts with an analysis of the objects to be adjusted. Starting from this list, initial values are set for the comparable scenarios selected in the list.

➤ Automatic Comparison of Active Scenarios

The automatic comparison starts with an analysis of the objects to be adjusted. The automatic comparison is performed, starting from this list. All differences between the scenario definition and the active scenario where the difference in the active data record of the active scenario is not based on a manual change can be compared automatically.

➤ Manual Comparison of Active Scenarios

If there are differences between manually-adjusted data for active scenarios and the associated scenario definitions, you can use this processing option to identify and edit them.

➤ Consistency Check

This option allows you to check scenarios in active use with regard to the completeness of secure usage. This option does not have a change mode.

Notes

Additional Comparison Option: Individual Maintenance Using Transaction `SACF` (In the Maintenance Dialog of a Scenario Definition)

Since active scenarios can also run in local system landscapes in "learning mode", it is not possible to assign a status with a characteristic such as "Comparison finalized", "Checked", and so on. However, you can use the time stamp of the last change to check the comparison.

Switchable authorization checks (SACF)

Search SACF notes on SAP Support Portal and export the list to cvs file

Use Copy&Paste to download notes into SNOTE

Use Copy&Paste to create a variant in note browser of SNOTE

Check status of these notes and decide which to implement ... could be many

Individual testing required

➤ Go for Support Package update first

Note Assistant: Note Browser

Component ID	Note	Version	Short text	Status	Implementation State
BC-INS-TC-CNT	2456192	7	System Copy: Task Content (11. Improvements)	new	Can be implemented
BC-SEC-AUT	2478172	2	SU25 Adjustment of navigation panel	new	Can be implemented
	2514902	1	SACF API for information function	new	Can be implemented
	2516551	2	SACF Function "Transfer scenario definition to productive	new	Can be implemented
	2518797	2	SACF Functional enhancement and anonymization	new	Can be implemented
	2531979	1	SACF Documentation display/status display in cloud	new	Can be implemented
	2565157	1	SU21 Where-used list for switchable authorization scenario	new	Can be implemented
BC-SEC-ETD	2477281	11	Enhancements ABAP Interface for SAP Enterprise Threat Detect	new	Can be implemented
	2573113	4	ETD 1.0 SP6 - Fix for memory allocation error in SECM_LOG_2_	new	Can be implemented
	2573675	2	ETD 1.0 SP6 - UDO-Report for Note 2573113	new	Can be implemented
CRM-BF-TAX	2156422	1	Switchable authorization checks for RFC in Business Partner	new	Can be implemented
EHS-SAF	2066956	1	Switchable authorization checks for RFC in EHS	new	Can be implemented
FI-CAX-FS	2531131	2	Switchable Authorization checks for RFC BCA_DIM_WRITE_OFF in	new	Can be implemented
	2531511	1	For top include for defining global variables for scenarios	new	Can be implemented
	2537668	1	Return Lot RFC BCA_DIM_POST_PLAN_JOB: Springfield RFC Error	new	Can be implemented
IS-HER-CM	2471736	1	Switchable Authorization checks for RFC in Accounts in SLcM	new	Can be implemented
IS-PS-CA	2517501	6	Switchable Authorization checks for SAP ERP Funds Management	new	Can be implemented
LO-MD-BP	2611166	2	DEBI and KRED Search help authorization checks functionality	new	Can be implemented
LO-MD-BP-VM	2561163	2	KRED search helps authorization object F_LFA1_BEK is not pro	new	Can be implemented
MM-FIO-IV	2621636	1	Create Supplier Invoice: Value help for invoicing party with	new	Can be implemented
PA-PA-XX	2046243	1	Switchable authorization checks for RFC in Payroll, Time Man	new	Can be implemented
PY-DE	2485928	1	Switchable authorization checks for RFC in subsequent proces	new	Can be implemented
PY-US-RP	2152230	1	Switchable authorization checks for RFC in Reconciliation Re	new	Can be implemented
RE-FX-BP	2409619	1	DEBI and KRED search help # no authorization	new	Can be implemented
SCM-EWM-MON	2602547	4	/SCWM/MON: Missing authorization for the automatic refresh f	new	Can be implemented
XX-PROJ-FI-CA	2487377	1	FKKBIX: Correction of SACF scenario FKK_CI_BIT_CHANGE	new	Can be implemented
	2513468	1	FKKINV: Technische Voraussetzungen für weitere Hinweise	new	Can be implemented
	2603429	1	Switchable Authorization checks in FI-CA Adjust Receivables	new	Can be implemented
	2614558	1	FKK_DOC_AUTHORITY_CHECK: SACF-based checks for segment and	new	Can be implemented
	2614616	2	Selection of open items: Missing check for ledger group	new	Can be implemented

Proposal for Security Optimization **during normal operations**

1. Activate Security Audit Log (if not done already) i.e. **for messages DUO DUP DUQ DUU DUV**
2. Optional: Implement missing Security Notes listed in application System Recommendations and other normal notes about SACF (use the Expert Search in the SAP Support Portal)
 - But you may decide to skip SACF notes to avoid to implement manual instructions.
3. **Activate all SACF scenarios** in transaction SACF_COMPARE and transport them to PRD
Scenario status L (logging), SAL Status A (all)
This has no effect on existing business processes.
4. Repeat weekly:
 - a. Analyze logs and adjust roles if necessary (Messages **DUP DUV**)
 - b. Change **Scenario status to A (active)** for
 - Scenarios which are not in use (no log entries)
 - Scenarios which are in use and users have required authorizations (Messages **DUO DUU**)
5. Later you can reduce the **SAL Status to E (error)**

Proposal for Security Optimization **during Support Package update**

1. Activate Security Audit Log (if not done already) i.e. **for messages DUO DUP DUQ DUU DUV**
2. Run technical Support Package update
3. Implement newer Security Notes listed in application System Recommendations and other normal notes about SACF (use the Expert Search in the SAP Support Portal)
 - But you may decide to skip SACF notes to avoid to implement manual instructions.
4. **Activate all SACF scenarios** in transaction SACF_COMPARE and transport them to TST
Scenario status A (active), SAL Status A (all)
Missing authorizations lead to errors in existing business processes.
5. Perform regular complete application and acceptance testing
6. Analyze logs and adjust roles if necessary (Messages **DUP DUV**)
7. Go live with strong security settings
8. Later you can reduce the **SAL Status to E (error)**

Note 2272827 - Check of S_PROGNAM for scheduling of job step

Transaction **SACF** and **SACF_COMPARE** do not know the scenario even in a higher Support Package level.

Transaction **SACF_COMPARE** → “Consistency Check for Productive Scenarios” may show an error: “Missing scenario called by SOLMAN_BTC with the application (ACE_CALCULATION_CONTROLLER)”

To solve this issue it is necessary to upload the attachment from note 2272827 via transaction **SACF_TRANSFER** into the development system. The scenario gets registered on a transport which you can use to transport it to the production system.

Note 1922808 describes that such notes could exist:

[1] SAP has provided or corrected data for a switchable authorization scenario via an SAP Note. *The authorization scenario is attached in the form of a file to this SAP Note as an advance correction. [...]*

[2] SAP has provided or corrected data for a switchable authorization scenario via an SAP Note *and delivered it via a Support Package. [...]*

Note 184277 - Length Limitation of SNC-Names

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 184277 describes limitations concerning the maximal length of printable SNC names. For all relevant (= actively used) SAP_BASIS and Kernel releases it tells:

- Hard Limit: Release >= 6xx R/3 Kernel 254 8-bit chars for the printable name
- Warning: Do NOT use SNC-Names that are longer than **220 printable characters** with SAP Netweaver >= 6xx.

Note 2562127 describes an **additional temporary limitation** concerning the SNC names of APAP application servers if you use SNC / SSO secured Support Remote Connection

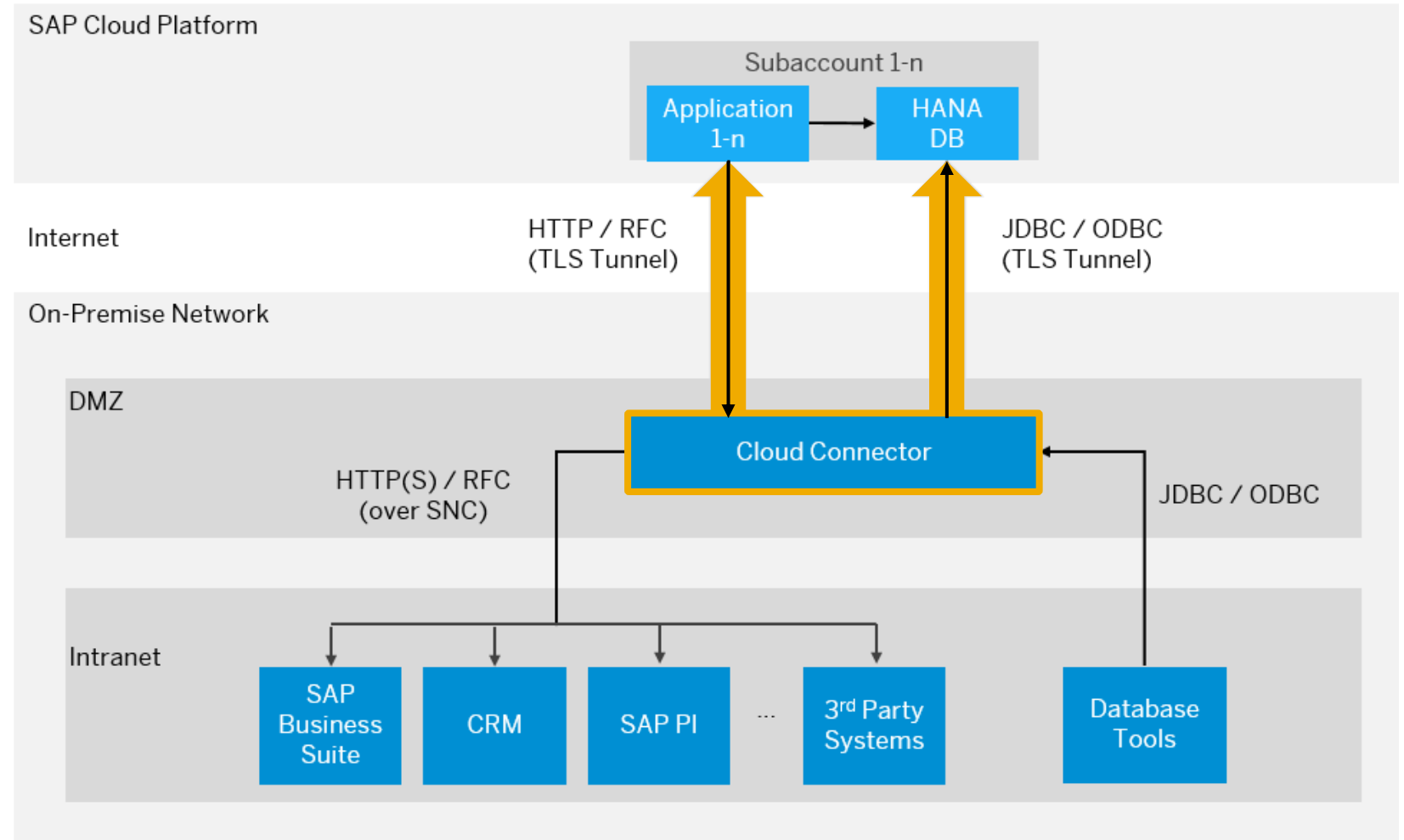
Solved in June 2018

- Please take into account, that at this point in time we do not support SNC names with a length bigger than **80 characters**. This feature will be delivered by June 2018.

Note 2614141 - Improper session management when using SAP Cloud Connector

Connectivity landscape using SAP Cloud Connector in cloud extension scenarios

The SAP Cloud Connector opens encrypted communication channels to SAP Cloud Platform which then can be used by on-premise applications.



Note 2614141 - Improper session management when using SAP Cloud Connector

Check the version centrally on <https://account.hana.ondemand.com>

- **SAP Cloud Connector**
check version ≥ 2.11
- **Java JRE**
check version $\geq 1.8.0_162$
(which match to Oracle JDK
Update 8u162)

see note 2219315 - Mapping of
SAP JVM patches to Oracle JDK
updates

The screenshot displays the SAP Cloud Platform Cockpit interface. On the left is a navigation menu with items: Overview, Applications, Services, Solutions, SAP HANA / SAP ASE, Connectivity, Destinations, Cloud Connectors (highlighted with a yellow box), Security, Trust, and Authorizations. The main content area shows the 'SAP Cloud Platform Cockpit' header, followed by breadcrumb navigation: Home [Europe (Rot) - Trial] / Europe (Rot) - Trial / d019687. Below this, it indicates 'Subaccount: d019687trial - Cloud Connectors' and a green 'Connected' status button. The 'Master Instance' section provides the following details: Description: Cloud Connector on WDFN33778176A; Connector ID: CA5CDD203CB911E8CCEBD4040A131BD3; Connected ... : 10.04.2018 12:57:11; *Initiated by: D019687; Version: 2.11.0.3 (highlighted with a green box); Java Version: 1.8.0_152 (SAP AG) (highlighted with a red box); High Availa... : inactive.

Note 2614141 - Improper session management when using SAP Cloud Connector

Check the version locally:

➤ **SAP Cloud Connector**
check version ≥ 2.11

➤ **Java JVM**
check version $\geq 8.1.036$
or date $\geq 09.02.2018$

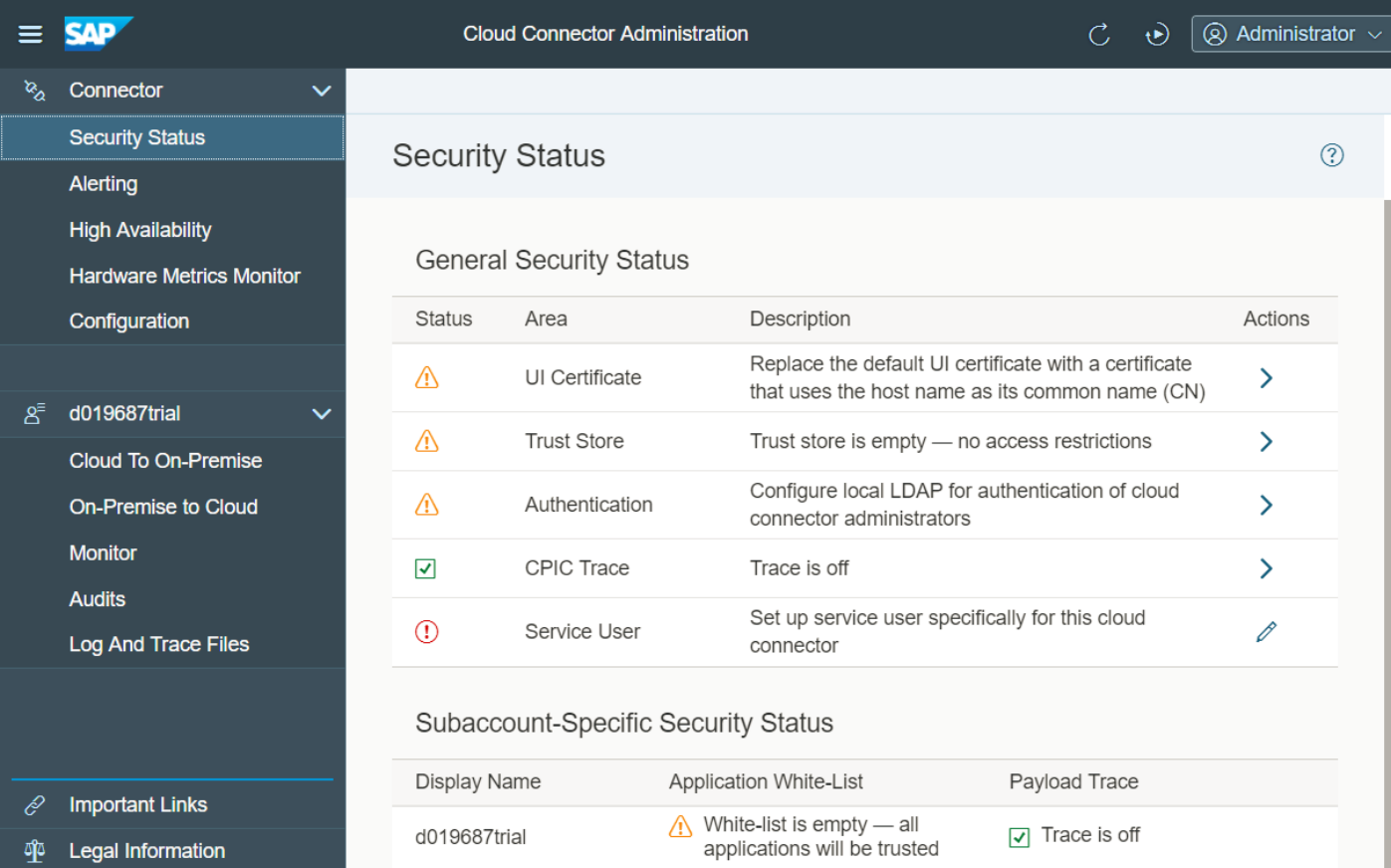
see note 2219315 - Mapping of
SAP JVM patches to Oracle JDK
updates

The screenshot displays the SAP Cloud Connector Administration web interface. The left sidebar contains navigation options: Connector, Security Status, Alerting, High Availability, Hardware Metrics Monitor, Configuration, d019687trial, Cloud To On-Premise, On-Premise to Cloud, Monitor, Audits, and Log And Trace Files. The main content area is titled 'Connector' and includes an 'About' section with the text 'SAP Cloud Connector 2.11.0.3' highlighted in a green box. Below this is a 'Component Versions' section listing various components and their versions: LJS: 1.0.0.32, Tomcat: 7.0.82.0, Tunnel: 2.69.1, Netty: 4.1.19.Final, SCC UI: 1.11.0.3, SAPUI5: 1.52.7, jQuery: 2.2.3, and JRE: 1.8.0_152 (SAP AG, C:\Program Files (x86)\Java\sapjvm_8\jre). The 'JVM Details' section at the bottom shows 'SAP Java Server VM 8.1.035' and 'Nov 29 2017' highlighted in red boxes. A user menu in the top right corner shows 'Administrator' with options for Settings, Documentation, About, and Logout.

Note 2614141 - Improper session management when using SAP Cloud Connector

Check the security status:

- Both the general and the subaccount-specific security status are aggregated on the top
- The "General Security Status" addresses security topics of the current installation that are subaccount-independent
- The "Subaccount-Specific Security Status" lists security-related information for each subaccount.
- The service user is specific to the Windows Operating System and is only visible when running the Cloud Connector on Windows. It cannot be addressed through the UI.



The screenshot shows the SAP Cloud Connector Administration interface. The left sidebar contains a navigation menu with options like Connector, Security Status, Alerting, High Availability, Hardware Metrics Monitor, Configuration, and subaccount-specific options for 'd019687trial'. The main content area displays the 'Security Status' page, which is divided into 'General Security Status' and 'Subaccount-Specific Security Status'.

Status	Area	Description	Actions
⚠	UI Certificate	Replace the default UI certificate with a certificate that uses the host name as its common name (CN)	>
⚠	Trust Store	Trust store is empty — no access restrictions	>
⚠	Authentication	Configure local LDAP for authentication of cloud connector administrators	>
✅	CPIC Trace	Trace is off	>
❗	Service User	Set up service user specifically for this cloud connector	✎

Display Name	Application White-List	Payload Trace
d019687trial	⚠ White-list is empty — all applications will be trusted	✅ Trace is off

Note: The security status is for informational purposes only and merely serves as a reminder to address security issues or as confirmation that your installation complies with all recommended security settings.

Note 2614141 - Improper session management when using SAP Cloud Connector

1. Update the Java VM

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/0eb9851c41914d379feb138bf808a18f.html>

2. Install a Failover Instance for High Availability (if not done already)

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/c697705179a24d2b8b6be038fae59c33.html>

3. Follow the Security Guideline

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/8db6945e70b44c5d8e0873c3e9fb3bf2.html>

4. Upgrade SAP Cloud Connector

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/7a7cc373019b4b6eaab39b5ab7082b09.html>

Note 2622660 - Security updates for web browser controls delivered with SAP Business Client

Internet Explorer: Security corrections for .NET framework are delivered via Microsoft Update.

Chromium: The full browser control is delivered with SAP Business Client, security corrections for this browser control are shipped with SAP Business Client patches.

SAP recommends to patch the SAP Business Client regularly via automated **workstation installation from a server**.

The installation procedure should consist of an **uninstallation of the old release** plus an installation of the new release via an adjusted Frontend Installation with SAPSetup

SAP

FRONT-END INSTALLER

- + SAP Business Client 6.5
- + Chromium for SAP Business Client 6.5

Chromium for SAP Business Client 6.5

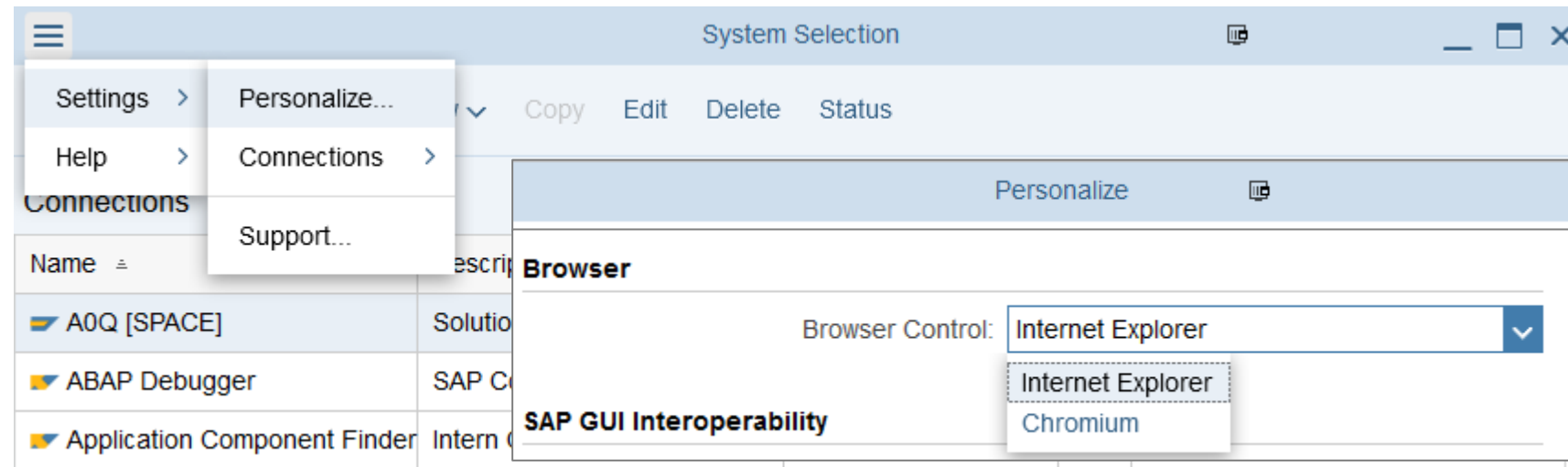
This item will be installed

With this component it is possible to use the open source framework Chromium instead of Microsoft Internet Explorer within SAP Business Client 6.5 for rendering HTML content.

2018/03/19	Taskbar previews not supported with Chromium browser control, note 2603601
2018/03/26	F12 keygesture does not work in SAPGUI tabs within SAP Business Client, note 2621830
2018/03/26	Updates for Chromium web browser control in SAP Business Client, note 2622660
2018/03/28	Follow up to 413914 / 2016 NWBC deadlock situation, note 2618335
2018/03/28	Stacking of Business Client web popups not working, note 2622696
2018/04/05	Authentication challenge for favicons requires user interaction, note 2627387

Note 2622660 - Security updates for web browser controls delivered with SAP Business Client

The user decides which browser engine, **Internet Explorer** respective **Chromium**, is used:



You can publish an administrator default via file `NwbcOptions.xml.template` as described in [SAP Business Client Settings](#) or you can use remote settings which are stored centrally as described in [Provision of Administrator Configuration File](#) (see note [2075150](#), too)

Inspect more settings in these files in sections `<WebbrowserFeatures>` (for Internet Explorer) respective `<ChromiumSettings>`

Note 2622660 - Security updates for web browser controls delivered with SAP Business Client

Related Note 2446515 - SAP Business Client 6.5: Prerequisites and restrictions

Go for regular updates of the ABAP Server part, too.
Search notes about “SAP NWBC ABAP Runtime”:

287 Document(s) found

Sort By: Relevance



[2507107 - SAP NWBC ABAP Runtime Patch 60](#)



NWBC for HTML...Certain parameters get lost in Internet Explorer. This occurs for parameters whose name start e.g. with 'reg'. IE interprets this string part as 'Registered Trademark' sign (®)....System aliases are being ignored for navigation to

BC-FES-BUS (Netweaver Business Client) 23.01.2018 SAP Note

[2481347 - SAP NWBC ABAP Runtime Patch 59](#)



NWBC for Desktop...Small fixes for theming...NWBC Runtime...BAdI implementations for NWBC_RUNTIME_EXTENSION_ROLE are no longer processed. This is because the BAdI filter is not considered....The SAP menu takes very long to be loaded. This is because the c

BC-FES-BUS (Netweaver Business Client) 16.08.2017 SAP Note

Note 2190621 - SAP Netweaver SAL incorrect logging of addresses

In some network landscape - for example containing proxy or NAT router, the IP address of the client (that is, terminal IP address) is logged in Security Audit Logging (SAL) instead of the router IP address (that is, the last routed IP address, sometimes also called peer IP address). Since the router IP address cannot be manipulated by the client (user), the router address is preferable for the purpose of audit.

Activate profile parameter

rsau/log_peer_address = 1

The screenshot shows the 'Profile Parameter Maintenance' interface. The search field contains 'rsau*' and a 'Display' button is visible. A search results window is open, showing 'Parameter Name (1) 8 Entries found'. The results are listed under the 'Restrictions' tab:

Parameter Name
rsau/enable
rsau/integrity
rsau/log_peer_address
rsau/max_diskspace/local
rsau/max_diskspace/per_day
rsau/max_diskspace/per_file
rsau/selection_slots
rsau/user_selection

Note 2497000 - Missing Authorization check in XX-CSC-BR-NFEIN



Note 2497027 - Missing Authorization check in XX-CSC-BR-NFE

These notes are relevant only for Brazil.

However, as usual we recommend to update all installed software, independently if you are using it or not.

Implementing note 2497000 might lead to implementation error:
Type "CL_J_1BNFE_AUTHORITY_CHECK" is unknown.

Solution: Implement note 2497027 first.

Type	Lo	Line	Description
		31	Function Module J_1BNFE_CREATE_GOODS_RECEIPT Type "CL_J_1BNFE_AUTHORITY_CHECK" is unknown.
		35	Function Module J_1BNFE_CREATE_GOODS_RECEIPT Type "CL_J_1BNFE_AUTHORITY_CHECK" is unknown.

If you are using this component, another legal change note 2477513 (which automatically implements notes 2497027, 2368483, too) should be implemented as well.

System Hardening with SAP Security Notes

SAP S/4HANA comes with stronger security by default, however, you should implement some additional basic security configuration settings.

See “Security Guide for SAP S/4HANA 1709 FPS01”

https://help.sap.com/doc/d7c2c95f2ed2402c9efa2f58f7c233ec/1709%20001/en-US/SEC_OP1709_FPS01.pdf#page=14

These Security Notes are relevant for other ECC installations as well.

System Hardening with SAP Security Notes

- Note [1322944](#)** ABAP: HTTP security session management
- Note [1531399](#)** Enabling SSL for Session Protection
- Notes [1585767](#), [1693981](#)**
Enabling Virus Scanning
- Note [1616535](#)** Secure configuration of ICM for the ABAP application server
- Note [1853140](#)** Managing SAProuter from external host
- Note [1973081](#)** XSRF vulnerability: External start of transactions with OKCode
- Notes [2086818](#), [2107562](#)**
Fixing POODLE SSLv3.0 (CVE-2014-3566) Vulnerability
- Notes [2142551](#), [2245332](#), [2319172](#), [2319192](#), [2333957](#), [2349128](#)**
Whitelist based Clickjacking Framing Protection
- Note [2185122](#)** Switchable authorization checks for RFC in data extraction within CA-MDG
- Note [2260344](#)** OS command injection vulnerability in SCTC_* Function modules
- Note [2421287](#)** Front-end printing with SAP GUI 750

System Hardening with SAP Security Notes

Note 1322944 - ABAP: HTTP security session management

Transaction `SICF_SESSIONS` activates/deactivates session management per client

It's always active if SAML2 is activated (see transaction `SAML2`)

(De)activation is logged with Security Audit Log Message `BUG`

You can activate/deactivate session management for individual services in transaction `SICF`

see note 1947241 for details.

Transaction `SM05` shows active sessions

Profile Parameters:

`http/security_session_timeout = 1800 (30 minutes)`



`http/security_context_cache_size = 2500`

`login/create_sso2_ticket = 3 (Generate assertion ticket)`

Online Help Activating HTTP Security Session Management on SAP NetWeaver AS for ABAP

Wiki: <https://wiki.scn.sap.com/wiki/pages/viewpage.action?pageId=462054228>

```
login/create_sso2_ticket = 3
login/accept_sso2_ticket = 1
login/ticketcache_entries_max = 1000
login/ticketcache_off = 0
login/ticket_only_by_https = 0
icf/set_HTTPOnly_flag_on_cookies = 3
icf/user_recheck = 1
http/security_session_timeout = 1800
http/security_context_cache_size = 2500
rdisp/plugin_auto_logout = 1800
rdisp/autothtime = 60
```

Client	Client Name	Current Status
000	SAP AG Konzern	
001	SAP AG Konzern	

System Hardening with SAP Security Notes

Note 1322944 - ABAP: HTTP security session management

Check Session Management using Configuration Validation

Configuration Store ABAP_INSTANCE_PAHI

Operator	Parameter	Operator	Unt. Wert
=	http/security_context_cache_size	>=	2500
=	http/security_session_timeout	<=	1800
=	login/create_sso2_ticket	Not(A or B)	1 2

Configuration Store SESSION MANAGEMENT (client specific configuration store)

NAME	VALUE
(=) <u>SESSION_MANAGEMENT</u>	(=) ACTIVE

SAP-Systemkennung	Mandant	Name des Konfigurationsspeichers	Konfigurationselement	Wert des Configitems	KonfValid: Datenoper	Compliance	Konform (1=ja, -1=nein, " "=nicht bewertet)
EC1	001	SESSION_MANAGEMENT	SESSION_MANAGEMENT	ACTIVE	=VALUE:ACTIVE/	Yes	1
	#	ABAP_INSTANCE_PAHI	Content out-of-date	Days: 286	#	Item not found	-1
X3A	000	SESSION_MANAGEMENT	SESSION_MANAGEMENT	INACTIVE	=VALUE:ACTIVE/	No	-1
	001	SESSION_MANAGEMENT	SESSION_MANAGEMENT	ACTIVE	=VALUE:ACTIVE/	Yes	1
	#	ABAP_INSTANCE_PAHI	http/security_context_cache_size	2500	>= 2500	Yes	1
			http/security_session_timeout	1800	<= 1800	Yes	1
#	ABAP_INSTANCE_PAHI	login/create_sso2_ticket	3	Not(A or B) 1 2	Yes	1	



March 2018

Topics March 2018



New old notes

Note [2597543](#) - Directory Traversal vulnerability in SAPCAR

Note [2449757](#) - Additional Authentication check in Trusted RFC on own system (reloaded)

Dashboard Builder for Configuration Validation

Recordings:
[DSAG \(German\)](#)
[ASUG](#)

New old notes

Sometimes quite old notes are released for various reasons

- Use function 'Show Version' to analyze the change history (not found = never published)
- Check age of Support Package
- If such notes describe software updates only then you will not see them in application System Recommendations, **assuming that you regularly run a Support Package update.**

SAP Component	Number	Version	Title	Category	Priority	Released On
SV-SMG-DVM	2051336	4	<u>Potential disclosure of persisted data in SV-SMG-DVM</u>	Program error	Correction with medium priority	13.03.2018
BW-SYS-DB-DB4	1974016	2	<u>Missing authorization check in function modules of BW-SYS-DB-DB4</u>	Program error	Correction with medium priority	15.02.2018
XX-CSC-RU-FI	1906841	1	<u>Potential disclosure of persisted data in XX-CSC-RU</u>	Program error	Correction with medium priority	13.03.2018
CRM-ANA-PS	1696317	2	<u>Unauthorized modification of displayed content in CRM-ANA-PS</u>	Program error	Correction with medium priority	27.02.2018

Note 2597543 - Directory Traversal vulnerability in SAPCAR

With this version `SAPCAR_1014-80000938` performs validation on file paths in an archive during extraction, for example, by removing the drive letter, stripping leading slashes, and normalizing directory traversal commands like “`../`”, in order to prevent files in question from being extracted to a directory outside the intended target directory.

Get version from latest release 7.21 (!):

<https://launchpad.support.sap.com/#/softwarecenter/search/SAPCAR%25207.21>

No implication expected as SAP always uses relative paths for files in archives that are released to customers.

Ensure to update `sapcar` everywhere, it's not only installed as part of the kernel.

Check the version using command `sapcar -version` e.g. with report `RSBDCOS0`

```
[1]sapcar -version
-----
SAPCAR information
-----
kernel release           721
kernel make variant     721_REL
DBMS client library
compiled on              NT 6.1 7601 S x86 MS VC++ 14.00 for NTAMD64
compiled for             64 BIT
compilation mode        Non-Unicode
compile time             Mar 23 2017 14:34:35
update level             0
patch number             816
```

Note 2449757 - Additional Authentication check in Trusted RFC on own system (reloaded)

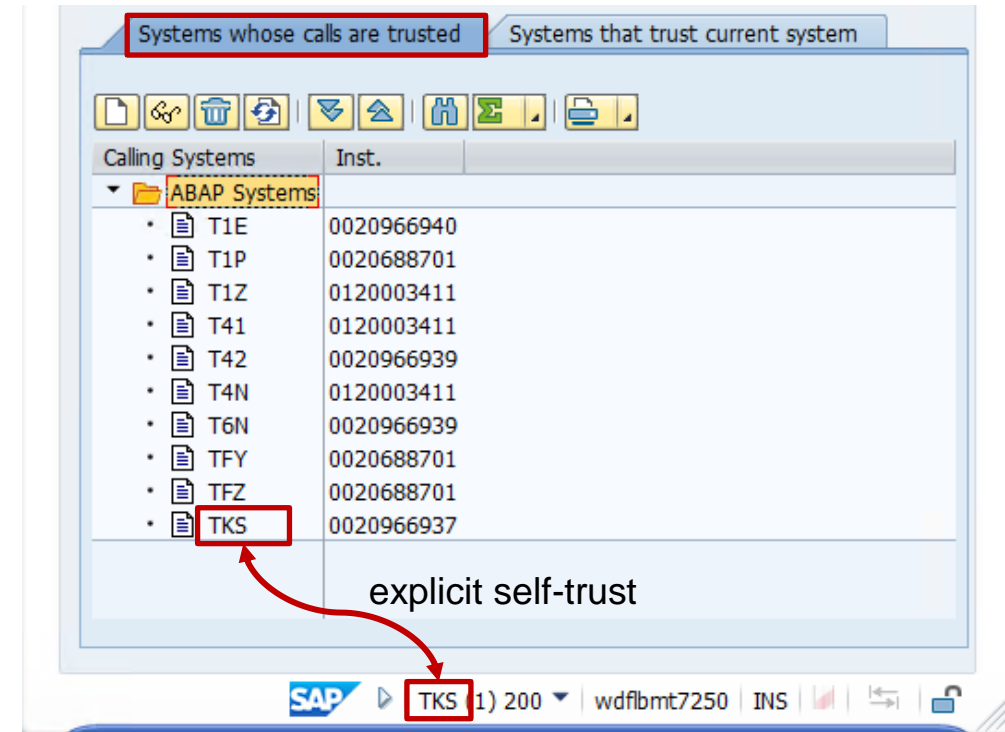
Caution: Use Kernel update as described in note 2614667 before activating parameter `rfc/selftrust` in systems where you want to define Trusted RFC destinations within the same system.

➤ **No Trusted RFC within a system required:**

**No trust relationship in transaction SMT1
Activate the profile parameter**

➤ **Trusted RFC within a system required:**

**Define the trust relationship in transaction SMT1
but do not activate the profile parameter unless you
get the Kernel update**



Dashboard Builder for Configuration Validation

Online Help: Dashboard Builder

<https://help.sap.com/viewer/82f6dd44db4e4518aad4dfce00116fcf/7.2.05/en-US/d0c91556d22c0033e10000000a44538d.html>

Blog: SAP Solution Manager 7.2 – Dashboard Builder

<https://blogs.sap.com/2017/02/28/sap-solution-manager-7.2-dashboard-builder/>

Blog: SAP Solution Manager 7.2 – Dashboard Builder configuration

<https://blogs.sap.com/2017/05/16/sap-solution-manager-7.2-dashboard-builder-configuration/>

KPI Catalog

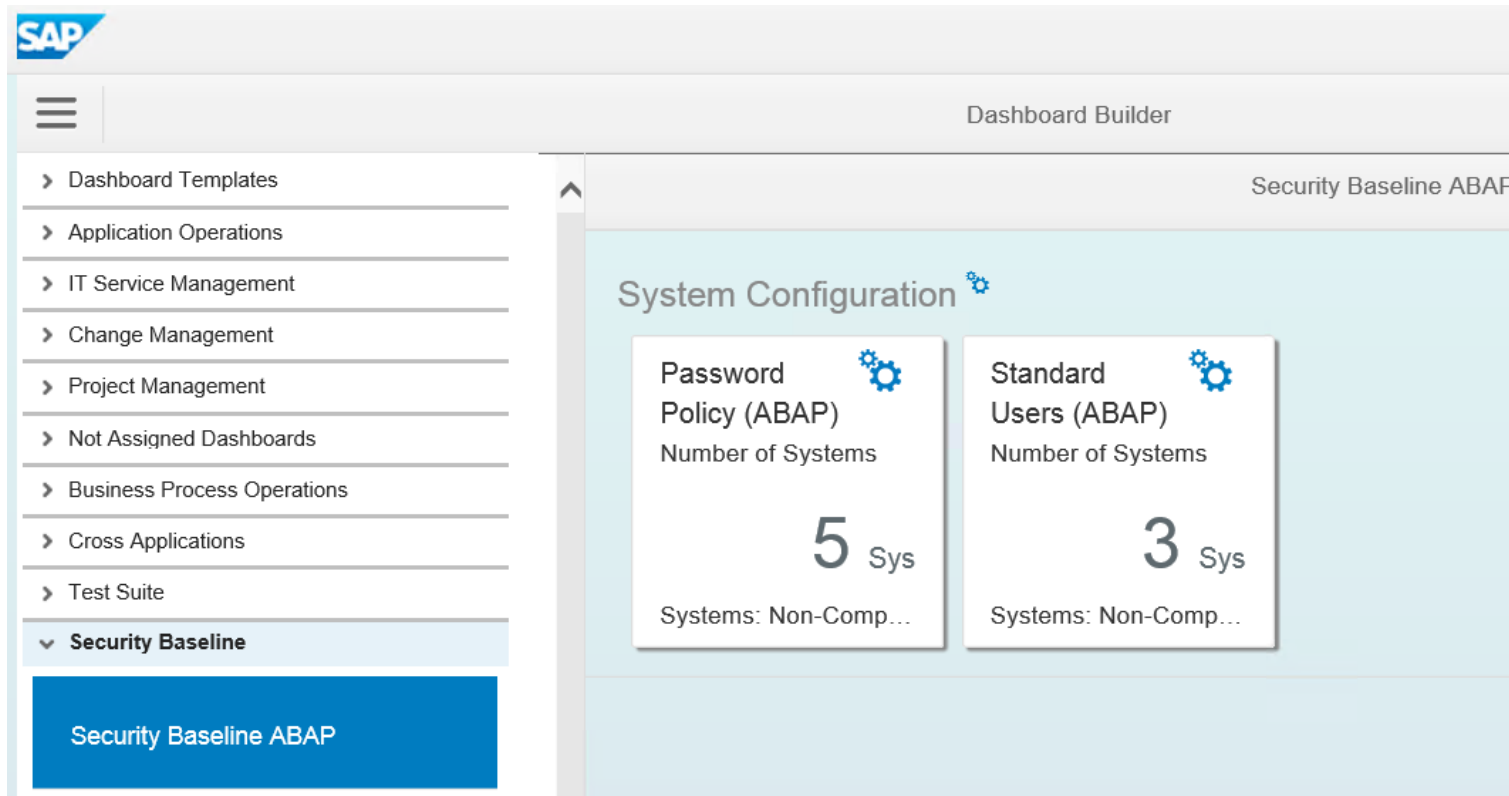
<https://go.support.sap.com/kpicatalog>

SAP Security Baseline Template Version 1.9 (including ConfigVal Package version 1.9_CV-4)

https://support.sap.com/content/dam/support/en_us/library/ssp/offerings-and-programs/support-services/sap-security-optimization-services-portfolio/Security_Baseline_Template.zip

Dashboard Builder for Configuration Validation

Dashboard



So far, two examples are part of the SAP Security Baseline Template

These examples are based on following Target Systems:

BL_S-1 Password Policy

BL_O-1 Standard Users

The numbers on the tiles show the count of non-compliant systems

Dashboard Builder for Configuration Validation

Example: Overview

The screenshot shows the SAP Dashboard Builder interface. On the left is a navigation menu with categories like Dashboard Templates, Application Operations, IT Service Management, Change Management, Project Management, Not Assigned Dashboards, Business Process Operations, Cross Applications, and Test Suite. Under 'Security Baseline', the 'Security Baseline ABAP' dashboard is selected. The main content area shows the 'Security Baseline ABAP' dashboard for 'Password Policy (ABAP)'. It features a dropdown menu for 'Password Policy (Overview)', a settings gear icon, a plus sign, and a refresh icon. Below this is a table with the following data:

Extended System ID	Compliance
T1E	No
T1E	Yes
T1P	No
T1P	Yes
T1Z	No
T1Z	Yes
T42	No
T42	Yes
T4N	Item not found
T6N	Item not found

The overview page shows partly consolidated results per system

You observe that some systems show compliant and not-compliant results. This is because we check for multiple configuration items and some of them produce a compliant result, others a non-compliant result

Dashboard Builder for Configuration Validation

Example: Details

The details page shows the result per configuration item

Dashboard Builder

Security Baseline ABAP

Password Policy (ABAP)

Password Policy (Details) [Settings] [Add] [Refresh]

Extended Sys...	Configuration Item	Configuration Item Va...	Configuration...	Compliance
T1E	login/min_password_digits	>= 1	0	No
T1E	login/min_password_lng	>= 8	6	No
T1E	login/min_password_lowercase	>= 1	0	No
T1E	login/min_password_uppercase	>= 1	0	No
T1E	login/password_compliance_to_current_policy	= 1	0	No
T1E	login/password_downwards_compatibility	= 0	0	Yes
T1E	login/password_max_idle_initial	Between 1 - 14	0	No
T1P	login/min_password_digits	>= 1	0	No
T1P	login/min_password_lng	>= 8	4	No
T1P	login/min_password_lowercase	>= 1	0	No
T1P	login/min_password_uppercase	>= 1	0	No

Dashboard Builder for Configuration Validation

Example: Definition of Dashboard

The screenshot shows the SAP Dashboard Builder interface. On the left is a navigation menu with categories like 'Dashboard Templates', 'Application Operations', 'IT Service Management', 'Change Management', 'Project Management', 'Not Assigned Dashboards', 'Business Process Operations', 'Cross Applications', 'Test Suite', and 'Security Baseline'. The 'Security Baseline' category is expanded, showing a tile for 'Security Baseline ABAP'. The main area displays the 'Edit Dashboard' dialog box for 'Security Baseline ABAP'. The dialog has fields for 'Dashboard name' (Security Baseline ABAP), 'Category' (Security Baseline), 'Auto refresh' (unchecked), and 'Global filters' (checked). A red box highlights the edit icon next to the 'Global filters' checkbox. At the bottom of the interface, a toolbar contains icons for adding, editing, deleting, and grouping tiles, with a red box highlighting the edit icon.

The Dashboard uses a Global Filter to select the system list

The Global Filter is used by all KPIs of the Dashboard

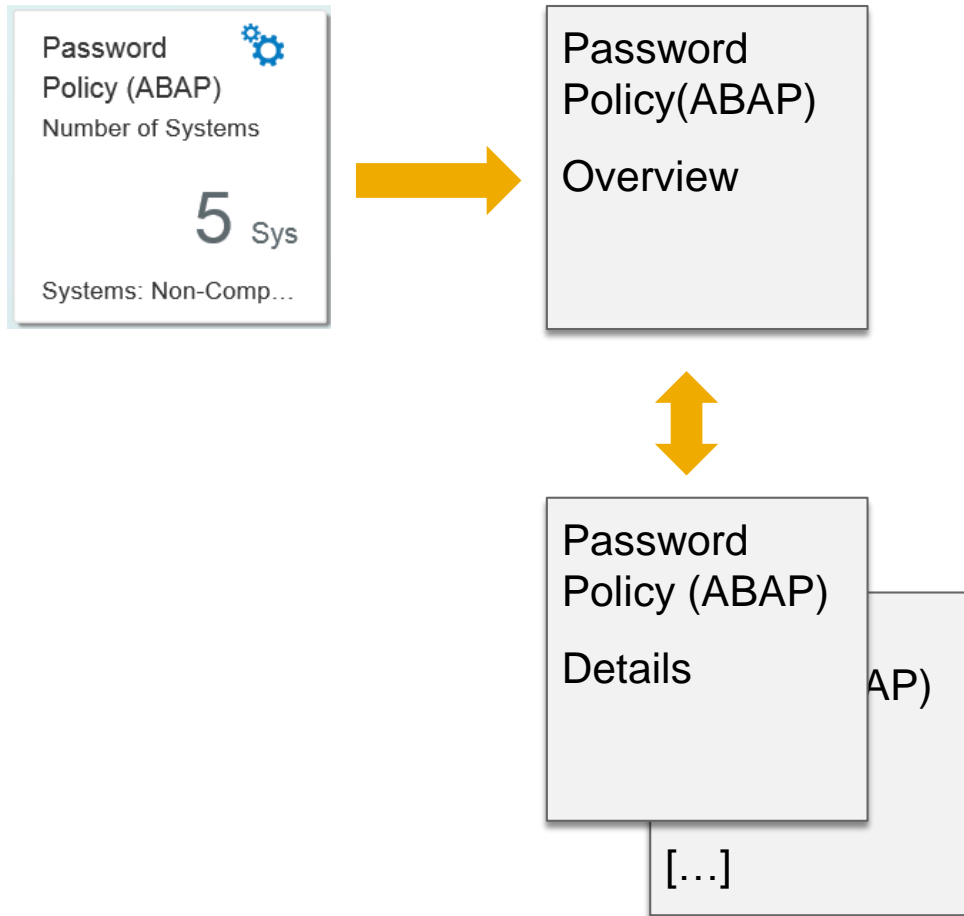
The 'Define Global Filters' dialog box is shown. It includes a dropdown for 'Direct Source of Global Filters' set to 'Config Valid for Alerting [DIAGCPL_CV_DSH]' and a 'New Data Source' button. Below this is an 'Enable latest search' checkbox. The 'Specify filters' section contains a table with the following data:

Fields	Field mapping	Operator Selection	Default Value
Comparison List of System...		(is, is not, is between)	ABAP

A red box highlights the 'ABAP' value in the 'Default Value' column.

Dashboard Builder for Configuration Validation

Example: Definition of Dashboard KPIs

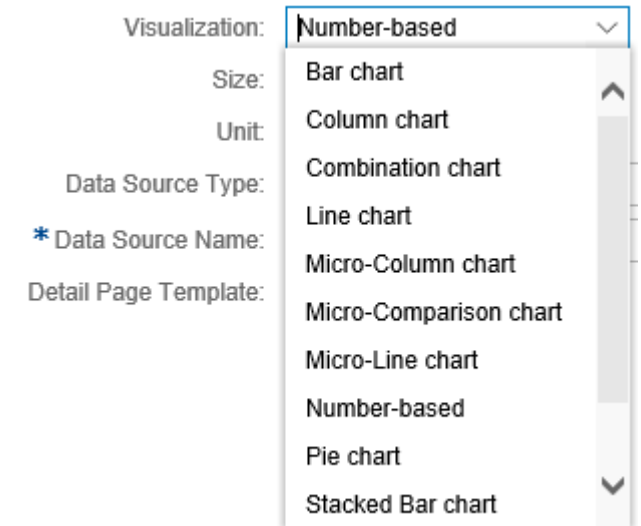


A dashboard tile shows the consolidated result of a KPI

You can drill-down into an overview view and to one or more detail views

You define all views independently with similar settings as described on next page

Various visualization types are available:



Dashboard Builder for Configuration Validation

Example: Definition of KPI

* Name: Password Policy (I)

Data Source Type: Function Module

* Data Source Name: **DIAGCPL_CV_DSH**

Visualization: Table

Disable Visualization Switch:

Jump to Application:

Available Fields

Reference SID
Comparison List of Systems
Store Name
Store Type
Technical System Install Number
Technical System Type
Store Class
Landscape API ID
Client
DataBase
Store Path
Store Timestamp
Aggregate on System Level
Configuration Item Attribute
Configuration Item Rule
Conflt.Compl. Rule Low Field
Conflt.Compl. Rule High Field
Item Timestamp
Reference Item Value
Key Figures

Rows

Extended System ID
Configuration Item
Configuration Item Value Rule
Configuration Item Value
Compliance

Filters

Key Figures	×
! All	×
Configuration Item	×
login/min_password_digits	×
login/min_password_lng	×
login/min_password_lowercase	×
login/min_password_uppercase	×
login/password_compliance_to_current_...	×
login/password_downwards_compatibility	×
login/password_max_idle_initial	×
Reference SID	×
BL_S-1	×
Store Name	×
ABAP_INSTANCE_PAHI	×

The definition of a view shows:

- The data source `DIAGCPL_CV_DSH` (= Configuration Validation)
- The selected visible fields in the rows
- The filter for the Target System
- The filters for the Configuration Stores and the Configuration Items (necessary if the Target System contains more rules than the ones which should be used here)

Dashboard Builder for Configuration Validation

Example Note 2562089 : Create Target System

Note 2562089 - Directory Traversal vulnerability in ABAP

ABAP correction: Configuration Store ABAP_NOTES for note 2562089

Configuration: Configuration Store ABAP_INSTANCE_PAHI with check rule for profile parameter abap/path_normalization = ext


Save as Target System

* System ID:

Description:

Owner:

Source System:

 Save

Dashboard Builder for Configuration Validation

Example Note 2562089 : Edit Target System

Target System : N2562089 / Store Name : ABAP_NOTES

Comparison Store: TKS / 0050560 Change Get validity information for the selected notes

Sel.	NOTE	VERSION	TEXT	PRSTATUST	PRSTA
<input checked="" type="checkbox"/>	(=) 0002562089	(>=) #	(Ignore) #	(Ignore) #	(=) #

Field Values and Operators

Apply Changes >

Field Role	Field Name	Operator	Value Low	Value High
<input checked="" type="checkbox"/>	NOTE	=	0002562089	
<input type="checkbox"/>	VERSION	>=	#	
<input type="checkbox"/>	TEXT	Ignore	#	
<input type="checkbox"/>	PRSTATUST	Ignore	#	

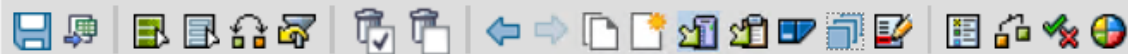
To define the rule set for ABAP notes you just enter the note number into configuration store ABAP_NOTES, select the line, and use the function “*Get validity information for the selected notes*” to populate the rule set.

Dashboard Builder for Configuration Validation

Example Note 2562089 : Edit Target System

Target System : N2562089 / Store Name : ABAP_NOTES

Comparison Store: TKS / 0050560  Change Find:  Find  Find Next Replace with: in: All colu  Replac



Sel.	NOTE	VERSION	TEXT	PRSTATUST	PRSTATUS	COMPONENT	RELEASE	EXTRELEA...
<input type="checkbox"/>	(=) 0002562089	(>=) 0008	(Ignore) #	(Ignore) Com...	(=) E	(=) SAP_B...	(=) 752	(<=) 0001
<input type="checkbox"/>	(=) 0002562089	(>=) 0008	(Ignore) #	(Ignore) Com...	(=) E	(=) SAP_B...	(=) 740	(<=) 0019
<input type="checkbox"/>	(=) 0002562089	(>=) 0008	(Ignore) #	(Ignore) Com...	(=) E	(=) SAP_B...	(=) 750	(<=) 0010
<input type="checkbox"/>	(=) 0002562089	(>=) 0008	(Ignore) #	(Ignore) Com...	(=) E	(=) SAP_B...	(=) 751	(<=) 0005

Target System : N2562089 / Store Name : ABAP_INSTANCE_PAHI

Comparison Store: TKS / 0050560  Change Find:  Find  Find Next



Sel.	Operator	Parameter	Operator	Value Low
<input type="checkbox"/>	=	abap/path_normalization	=	ext

**Result for configuration store
ABAP_NOTES**

**Enter a rule for the profile parameter for
configuration store
ABAP_INSTANCE_PAHI**

Dashboard Builder for Configuration Validation

Example Note [2562089](#) : Reporting

Configuration Items							
ConfigStore Name	Config. Item	SAP System ID	Config. Item Value	Value of Target System	Compliance	Last Check [UTC]	Compliant (1=Yes, -1=No, ''=Not valuated)
ABAP_INSTANCE_PAHI	abap/path_normalization	T1E	#	ext	Item not found	20180321101712	-1
		T1P	#	ext	Item not found	20180321101710	-1
		T1Z	#	ext	Item not found	20180321101810	-1
		T41	on	ext	No	20180316141526	-1
		T42	#	ext	Item not found	20180321104908	-1
		T4N	#	ext	Item not found	0	-1
		T6N	#	ext	Item not found	0	-1
		TKS	#	ext	Item not found	20180321102306	-1
ABAP_NOTES	0002562089	T1E	#	Version 0008 Completely implemented	No	20180320191611	-1
		T1P	#	Version 0008 Completely implemented	No	20180320191100	-1
		T1Z	#	Version 0008 Completely implemented	No	20180320191053	-1
		T41	#	Version 0008 Completely implemented	No	20180315190113	-1
		T42	#	Version 0008 Completely implemented	No	20180320191313	-1
		TKS	Version 0008 Completely implemented	Version 0008 Completely implemented	Yes	20180321102307	1

Standard reporting using Configuration Validation with adjusted layout

You can store the view as a “bookmark” for repeated reporting

Dashboard Builder for Configuration Validation

Example Note 2562089 : Definition of corresponding Dashbord Tile

KPI Type: Custom

* Name: Note 2562089

Subhead: Directory Traversal vulnerability in ,

Description: ABAP Note + Configuration

Visualization: Number-based

Size: 1 X 1

Unit: Systems

Data Source Type: Function Module

* Data Source Name: DIAGCPL_CV_DSH

Detail Page Template: Drill-Down views

Function module which implements the integration with Configuration Validation

Filters

Key Figures	! All	Required for technical reasons
Aggregate on System Level	X	For the tile we want to consolidate results on system level
Reference SID	N2562089	Target System

Dashboard Builder for Configuration Validation

Example Note 2562089 : Dashbord Tile and Drilldown View

- > Dashboard Templates
- > Application Operations
- > IT Service Management
- > Change Management
- > Project Management
- > Not Assigned Dashboards
- > Business Process Operations
- > Cross Applications
- > Test Suite
- ▼ **Security Baseline**

Security Baseline ABAP

Security Notes with Configuration

Note 2562089

Directory Trav...

5 Sys

ABAP Note + Config...

Note 2562089

+
↑↓

Configuration Item	Extended Syste...	Compliance
NOTE:0002562089	T1E	No
NOTE:0002562089	T1P	No
NOTE:0002562089	T1Z	No
NOTE:0002562089	T41	No
NOTE:0002562089	T42	No
NOTE:0002562089	TKS	Yes
abap/path_normalization	T1E	Item not found
abap/path_normalization	T1P	Item not found
abap/path_normalization	T1Z	Item not found
abap/path_normalization	T41	No
abap/path_normalization	T42	Item not found



February 2018

Topics February 2018



Recommended Notes for System Recommendations

Note [2408073](#) - Handling of Digitally Signed notes in SAP Note Assistant (reloaded)

EarlyWatch Alert Workspace and
EarlyWatch Alert Solution Finder in Support Portal Launchpad

Note [2562089](#) - Directory Traversal vulnerability in ABAP File Interface

Note [2525222](#) - [multiple CVE] Security vulnerabilities in SAP Internet Graphics Server (IGS)

Note [1584573](#) - Security Verdict in SUGM SAUS SUGM_UPG_TYPE_PLUS_DEL_XML

Note [1977547](#) - Update 1 to Security Note 1584573

Recordings:
[DSAG \(German\)](#)
ASUG

Recommended Notes for System Recommendations

Note 2585487 - SysRec7.2 notes for obsolete kernel versions are displayed for the target system

Note 2590592 - SysRec7.2 Support Package for kernel notes are missing

Note 2591182 - SysRec7.2 Display notes consistent with the `SYSREC_LAST_MONTHYEAR` customizing settings

- Customizing setting `SYSREC_LAST_MONTHYEAR` (format: `YYYY_MM`) defines the oldest age of notes which are visible (default `2009_01`)

General Customizing and Personalization

Transaction SM30_DNOC_USERCFG_SR

SYSREC_STATUS_FILTER (*)	Defines which SAP Notes are counted on the overview page: By default it only shows notes with status 'new' or 'new version available' (in use up to 7.2 SP 6).
SYSREC_UPL_ACTIVE (*)	Activate/deactivate the integration with UPL/SCMON while showing the object list of ABAP notes.
SYSREC_UPL_MONTH (*)	Count of month for which UPL/SCMON data get loaded. The default is 2 which represents the current and the previous month.
SYSREC_NOTE_TYPES	Defines for which types of notes the application calculates results. Enter the list of characters representing the note types HotNews, Security, Performance, Legal Change, Correction, and License Audit.
SYSREC_LAST_MONTHYEAR	Defines the earliest calculated notes. By default the application calculates all SAP Notes which were released between January 2009 and the current month.
SYSREC_BPCA_USER	Defines if the current user should be added as selection for BPCA.
SYSREC_BPCA_DATE	Defines the earliest filter for BPCA results. You can change the start date for this period.
SYSREC_CHARM_LOG_TYPE	Defines the text id according to table TTXID for the text object CRM_ORDERH.
SYSREC_CHARM_USER	Defines if the current user should be added as selection for ChaRM.
SYSREC_CHARM_DATE	Defines the earliest filter for ChaRM results. You can change the start date for this period.
SYSREC_OBJECT_EXP	Lifetime of the cache which contains the object list of notes. The default is 14 days.
SYSREC_REQ_EXP	Lifetime of the cache which contains the required notes of notes. The default is 14 days.
SYSREC_SIDE_EFFECT	Lifetime of the cache which contains the side-effect notes of notes. The default is 14 days.
SYSREC_UNSUPPORTED_SYSTEM (*)	System types which you want to block from SysRec (one entry per system type)
SYSREC_UNUSED_SUBHR	Calculate results for unused HR components (see note 2712210)

(*) User specific personalization

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant (reloaded)

“Upload notes file”, “upload TCI file” and “download note from Support Portal” now work quite similar. All methods deal with files and verify the digital signature using external program `sapcar`.

Required Authorizations:

Auth.-Object	Field 1	Field 2	Field 3
S_CTS_ADMI	CTS_ADMFCT=TABL		
S_C_FUNCT	PROGRAM=CL_SCWN_DS_VERIFY=====CP	ACTVT=16	CFUNCNAME=SYSTEM
S_DATASET	PROGRAM=CL_SCWN_NOTE_SAR_FILE_N=====CP	ACTVT=33	FILENAME=/usr/sap/trans/tmp/*
S_DATASET	PROGRAM=SAPLOCS_FILEMGMT	ACTVT=06, 34	FILENAME=/usr/sap/trans/tmp/*
S_RFC_ADM	RFCDEST=SAPOSS,SAPSNOTE	ACTVT=36	

Required Profile Parameter:

`rdisp/call_system = 1` (default)

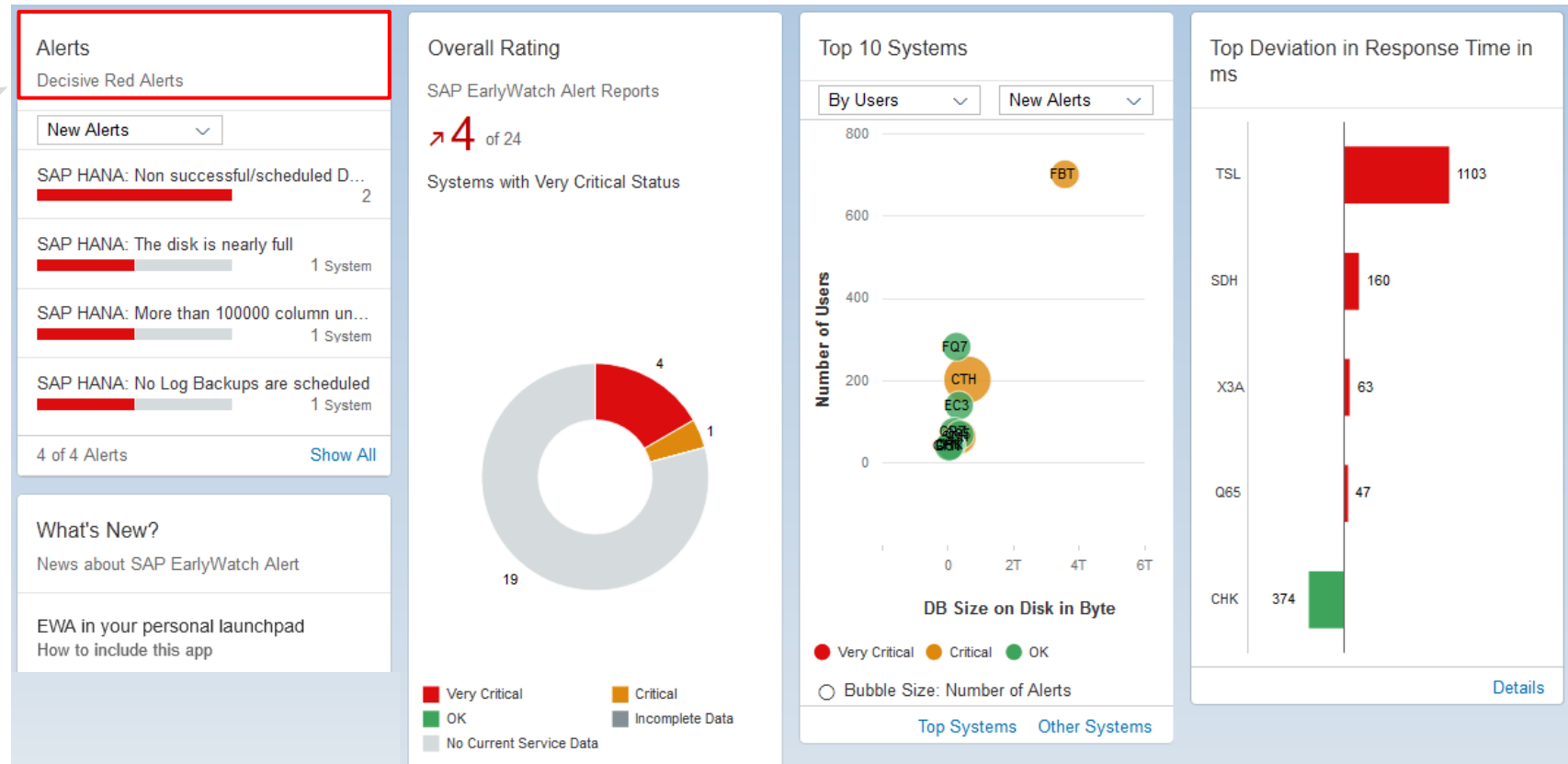
EarlyWatch Alert Workspace in Support Portal Launchpad

<https://launchpad.support.sap.com/#/ewaworkspace>

SAP EarlyWatch Alert Workspace – gain an overview on your system landscape health

<https://blogs.sap.com/2017/08/15/sap-earlywatch-alert-workspace-gain-an-overview-on-your-system-landscape-health/>

Link to Alert
Solution Finder
[ewasolutionfinder](#)















Note [2517661](#) - How to include EWA Fiori Cloud apps into customer launchpads

EarlyWatch Alert Solution Finder in Support Portal Launchpad

<https://launchpad.support.sap.com/#/ewasolutionfinder>

You can view the EWA Alerts in Support Portal Launchpad, i.e. you can search for “Security”

-  4 Systems **Gateway Security (Security → ABAP Stack → Gateway and Message Server Security)**
Gateway access control list (`reg_info / sec_info`) contains trivial entries (P TP=* USER=* USER-HOST=* HOST=*)
-  6 Systems **Default Passwords of Standard Users (Security → ABAP Stack)**
Standard users including `SAP*` or `DDIC` have default password
-  14 Systems **SAP HANA Network Settings for Internal Services (Security → SAP HANA Database HPJ)**
SAP HANA internal network configuration is insecure
-  2 Systems **SAP HANA Network Settings for System Replication Communication (listeninterface) (Security → SAP HANA Database P22)**
SAP HANA network settings for system replication is insecure
-  22 Systems **ABAP Password Policy (Security → ABAP Stack)**
Secure password policy is not sufficiently enforced (`login/min_password_lng` and `login/password_max_idle_initial`)
-  6 Systems **Gateway Security (Gateway and Message Server Security)**
Gateway Access Control List (`reg_info / sec_info`) contains trivial entries (P TP=*)
-  22 Systems **Users with Critical Authorizations (Security → ABAP Stack)**
A high number of users has critical authorizations
-  15 Systems **Default Passwords of Standard Users (Security → ABAP Stack)**
Standard users other than `SAP*` or `DDIC` have default password
-  3 Systems **Protection of Passwords in Database Connections (Security → ABAP Stack)**
Protection of passwords in database connections (note [1823566](#))
-  3 Systems **SAP HANA SSFS Master Encryption Key (Security → SAP HANA Database)**
SAP HANA SSFS master encryption key is not changed (note [2183624](#))


 12 Alerts  23 Recommendations

EarlyWatch Alert for RFC Gateway Example

Gateway Security

Enabling an Initial Security Environment

Parameter: gw/acl_mode

Rating	Instance	Current Value	Recommended Value
	sapaht_AHT_10	0	1

Evaluated Risk - Medium

Recommendation: Parameter gw/acl_mode can be set to 1 to activate a more secure default behavior if either of the access control lists defined by gw/sec_info and gw/reg_info does not exist.

SAP recommends setting gw/acl_mode to 1 to establish an additional line of defense should any of the access control lists be missing. For more information, see SAP Note [1480644](#).

Gateway Access Control Lists

Parameters: gw/sec_info gw/reg_info

Rating	Instance	Error Condition
	All instances	gw/reg_info and gw/sec_info are defined

reg_info

Rating	Instance	Error Condition	File does not exist (default)
	All instances	P TP=*	

sec_info

Rating	Instance	Error Condition	File does not exist (default)
	All instances		

Recommendation: The profile parameters gw/sec_info and gw/reg_info provide the file names of the corresponding access control lists. These access control lists are critical to controlling RFC access to your system, including connections to RFC servers. You should create and maintain both access control lists, which you can do using transaction SMGW.

See the following SAP Notes for further information:

SAP Note [1305851](#) - Overview note: "reg_info" and "sec_info"

SAP Note [1408081](#) - Basic settings for reg_info and sec_info

EarlyWatch Alert Workspace and Solution Finder Prerequisites



➤ **SAP Solution Manager sends EWA data**

or

➤ **Monitored System sends EWA data directly**
Note [207223](#) - SAP EarlyWatch Alert processed at SAP

➤ **SAP ONE Support Launchpad:**

Authorization: “Service Reports & Feedback”(English),
“Zugriff auf Servicemeldungen” (German)

Extended System ID	Extended System Type	Display Name	Language	Activate	IT Admin Role	Send to SAP	Day of the Week	Automation period	Retention Time (Days)
QE6	Application Server ABAP	QE6 on Iddbqe6	English	<input checked="" type="checkbox"/>	Production	<input checked="" type="checkbox"/>	Monday	7	0

If you don't want to have HANA Checks in your EarlyWatch Alert of a HANA Database which is connected via DBCON, then create an entry in DBACOCKPIT with this connection and add in the description field **NON_EWA_...**
Note [1985402](#).

Note [2562089](#) - Directory Traversal vulnerability in ABAP File Interface

Relevant for Security Optimization Project “Secure against Directory Traversal using SPTH”

Adjust the settings in table `SPTH` and set profile parameter `abap/path_normalization` (described in note [2551541](#)) to the value `ext`

Values:

<code>off</code>	no check for <code>SPTH</code> , not recommended
<code>res</code>	restricted check for <code>SPTH</code> (compatibility setting of note 2433777), not recommended
<code>on</code>	(default), ok
<code>ext</code>	extended check for <code>SPTH</code> replacing relative paths (introduced with note 2562089), ok

Some files are protected always: `.pse` files, `cred_v2` file, `SSFS-dat-files`, `SSFS-key-files`

Related note: Note [2433777](#) - Missing Authorization check in ABAP File Interface

Related topic: Security Optimization Project “Secure against Directory Traversal using transaction (S) FILE”, see note [1497003](#)

Security Optimization Project “Secure against Directory Traversal using SPTH”

Online Help SPTH

https://help.sap.com/doc/abapdocu_750_index_htm/7.50/en-US/abenfile_interface_authority.htm

PATH Generic filenames

SAVEFLAG (S) If the flag is set, the files specified in **PATH** are included in security procedures.

FS_NOREAD (NR) If the flag is set, this means that **no** access is allowed. This flag overrides all user authorizations. If you set **FS_NOREAD**, **FS_NOWRITE** is also automatically set.

FS_NOWRITE (RO) If the flag is set, this means that **no write** access is allowed. This flag overrides all user authorizations.

FSBRGRU The authorization group corresponds to the first field (**RS_BRGRU**) of authorization object **S_PATH**. You define authorization groups in customizing table **SPTHB**. You can use the second field of the authorization object **S_PATH** (**ACTVT**) to check whether the user has authorization to read (value 3) or change (value 2) files.

Path in file system	S	NR	RO	Auth.group
*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
/	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
/tmp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
/tmp/files	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TEMP

Note 2525222 - [multiple CVE] Security vulnerabilities in SAP Internet Graphics Server (IGS)

The note solves multiple security vulnerabilities (multiple CVE entries)

In addition a new configuration setting is introduced.

The IGS is downwards compatible in its main release. You can always use the latest IGS version. See notes 454042, 514841 (Troubleshooting when a problem occurs with the IGS), and 959358. Remember to remove the old version of the IGS before installing the new one. Your configuration files will not be removed and can be reused by the new IGS.

SAP IGS is not listed in System→Status but it may be part of an ABAP system in LMDB, therefore it could be covered by System Recommendations (but maybe miss the patch level). Some other notes about IGS might be visible in System Recommendations because of additional assignments to the Kernel.

See slides about note 2380277 to learn how to check the version of the IGS

Solution: SAP IGS 7.20 SP 15, 7.45 SP 4, 7.49 SP 2, 7.53 SP 2

Version	7450.0.2.1
Build Date	Apr 10 2017
System	AMD/Intel x86_64 with Linux (linuxx86_64)
Profile File Path	/usr/sap/X3A/SYS/profile/X3A_DVEBMGS01_mo-c81a86caf

Note 2525222 - [multiple CVE] Security vulnerabilities in SAP Internet Graphics Server (IGS)

LMDB (if SAP IGS is registered – only in this case you get a result in System Recommendations):

Technical System FBT on Iddbfbt - FBT (Application Server ABAP) - Software

Product Instances

Product Instances (Details)

Software Component Versions

Add

Delete

Repository Information

Details



Display Name	Supplier	Installation Type	System or Instance	SP L...
SAP BASIS 7.40 (SAP_BASIS 740)	automatic	Installed on System	FBT on Iddbfbt	0018
SAP BW 7.40 (SAP_BW 740)	automatic			0018
SAP CRM ABAP 7.13 (BBPCRM 713)	automatic			0014
SAP FIORI FOR SAP SOL. MGR 1.0 (ST-UI 100)	automatic			0006
SAP IGS 7.20 (BC-FES-IGS 7.20)	automatic	Installed on Instance	AppServer 00 of FBT on Idai1fbt	012
SAP IGS 7.20 (BC-FES-IGS 7.20)	automatic		AppServer 00 of FBT on Idai2fbt	012
SAP IGS 7.20 (BC-FES-IGS 7.20)	automatic		AppServer 00 of FBT on Idcifbt	012

Note 1584573 - Security Verdict in SUGM SAUS SUGM

Note 1977547 - Update 1 to Security Note 1584573

The note is about Upgrade Tools which are a quite special part of SAP_BASIS. It's not possible to restrict the validity of the note or the correction instructions as usual.

Existing disclaimer:

- If the object from these correction instructions is not available in the system, or if it contains no source code or contains only comment lines, you can ignore the correction instructions.

Disclaimer added:

- This note is only relevant for newly installed systems or systems which never have been updated using Software Update Manager 1.0 or 2.0.
If you have used Software Update Manager since 2014 you do not need to apply this note and you can set the status to ,irrelevant'.

Proposal:

- **Check the condition described in note 1977547 and/or**
- **Try to implement both notes using SNOTE, if SNOTE refuses implementation, set note to 'irrelevant'**



January 2018

Topics January 2018



Note [2562127](#) - R/3 Support Remote Connection with SNC / SSO

Note [2562154](#) - HTTP Remote Connection with SNC / SSO

Transparent Software Vulnerability Disclosure - SAP is a CVE Naming Authority

Meltdown and Spectre

Note [2576306](#) - Transport-Based Correction Instruction (TCI) for Download of Digitally Signed SAP Notes (reloaded)

Note [2554853](#) - SAP NetWeaver download service for SAP Notes

Notes [1891583](#) / [2065596](#) - Restricting logon to the application server

Note [2525392](#) - Update 2 to [2278931](#) and [1906212](#): Code injection vulnerability in Knowledge Provider

Note [2533541](#) - SQL Injection vulnerability in Olingo JPA

Note [2453871](#) - Cross-Site Scripting (XSS) vulnerability in SAP BusinessObjects Design Studio

Note [2341600](#) - SUIM | Search in role menu RSUSR_ROLE_MENU

Recordings:
[DSAG \(German\)](#)
ASUG

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

Trust Manager: Change

System PSE

- SNC SAPCryptolib
- SSL server Standard**
- SSL client SSL Client (Anonymo
- SSL client BCM
- SSL client SSL Client (Standar
- SSL client PAYPAL
- SSL client SAPGBB
- SSL client WSSE Web Service Se
- WS Security Standard
- WS Security Other System Encry
- WS Security WS Security Keys
- SMIME Standard
- File
- SSF Collaboration Integration
- SSF Logon Ticket

Certificate List

Subject
CN=X3A SSLC_DFAULT, OU=I0020230702, OU=SAP Web AS, O=SAP Trust Com..

Veri. PSE Password

Certificate

Subject	CN=SAPSUPPORT User Sub CA, O=SAP-SE, C=DE
Subject (Alt.)	
Issuer	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE
Serial Number (Hex.)	02:D3:1A:38:27:5D:30:D9:C8
Serial Number (Dec.)	52105020580534737352
Valid From	01.08.2017 13:11:55 to 01.08.2022 13:11:55
Algorithm	RSA with SHA-256 Key Length 2048
Check Sum (MD5)	A0:66:76:FF:56:43:7E:A3:99:6D:C6:7A:B4:3F:EA:5F
Checksum (SHA1)	4D:AB:47:25:85:32:3A:B5:4C:F9:BD:45:54:71:23:75:79:FE:13:59

Add to Certificate List

ificate you can
e
CA which issues
th PSE stores **SNC**
I) and **SSL-Server**
ctions)

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

You can use application Configuration Validation with Configuration Store PSE_CERT to check for the existence of one of the certificates:

APPLICATION	CONTEXT	TYPE	SUBJECT	ISSUER	SERIALNO	VALID_FROM	VALID_TO
<SNCS>	PROG	CERTIFICATE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	D9F939E522DF0B05	20170801131155	20270801131155
DFAULT	SSLS	CERTIFICATE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	D9F939E522DF0B05	20170801131155	20270801131155
<SNCS>	PROG	CERTIFICATE	CN=SAPSUPPORT User Sub CA, O=SAP-SE, C=DE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	02D31A38275D30D9C8	20170801131155	20220801131155
DFAULT	SSLS	CERTIFICATE	CN=SAPSUPPORT User Sub CA, O=SAP-SE, C=DE	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE	02D31A38275D30D9C8	20170801131155	20220801131155

▸  System PSE	<SYST> PROG	System PSE	SAPSYS.pse
▸  SNC SAPCryptolib	<SNCS> PROG	SNC SAPCryptolib	SAPSNCS.pse
▸  SSL server Standard	DFAULT SSLS	SSL server Standard	SAPSSLS.pse
▸  SSL client SSL Client (Anonymo	ANONYM SSLC	SSL client SSL Client (Anonymous)	SAPSSLA.pse
▸  SSL client BCM			
▸  SSL client SSL Client (Standar	DFAULT SSLC	SSL client SSL Client (Standard)	SAPSSLC.pse

Transparent Software Vulnerability Disclosure

SAP is a CVE Naming Authority

SAP is now a CVE Numbering Authority. Using Common Vulnerabilities and Exposures, an industry standard, as a mechanism to disclose patches to vulnerabilities reported by external sources, SAP will facilitate faster security patch consumption. This initiative will also support tools that report on vulnerabilities using CVE disclosures, thereby enabling automation of security processes and transparency for SAP customers. The release of CVE disclosures is aligned with SAP's Security Patch Day that takes place on the second Tuesday of every month.

Contact: cna@sap.com

Search for *keyword* „SAP“:

- <https://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=SAP>

Search for entries *about* vendor SAP (via NIST Advanced Search with Vendor = SAP):

- [List](#)
- [Statistics](#)

Search for entries having CONFIRM entries *by* SAP:

- <https://www.google.de/search?q=CONFIRM%3Ahttps%3A%2F%2Flaunchpad.support.sap.com+site%3Amitre.org>

Meltdown and Spectre

Who is affected?

All systems that use Intel, ARM and AMD CPU although with different impact and risks.

January 3 information on how to exploit functionalities related with the CPU architecture that can lead to information disclosure were made public.

The white papers on both issues can be found here:

<https://spectreattack.com>

<https://meltdownattack.com/meltdown.pdf>

<https://spectreattack.com/spectre.pdf>

This exploitation has 3 known variants:

Variant 1: bounds check bypass ([CVE-2017-5753](#))

Variant 2: branch target injection ([CVE-2017-5715](#))

Variant 3: rogue data cache load ([CVE-2017-5754](#))

Meltdown and Spectre

<https://www.sap.com/corporate/en/company/security.html>

What are Meltdown and Spectre?

Technically, Spectre and Meltdown are different variations of the same architectural vulnerability that affects nearly every computer chip manufactured in the last 20 years. It could, if exploited, allow attackers to get access to data previously considered protected. Security researchers have published information about these vulnerabilities in early 2018.

Are SAP systems affected?

SAP has thoroughly investigated the impact of these vulnerabilities and is closely aligning with corresponding vendors, providers, and the Open Source community. SAP Security and SAP Operations are working on investigating if where and how our platforms, databases, application and cloud operations are affected.

Taking a proactive approach

We are fixing potential flaws derived from Spectre and Meltdown without undue delay. As a consumer of affected software and hardware, we largely depend on the availability of patches provided by respective vendors, providers or the open source community. The schedule of applying appropriate patches is to a large extent determined by their availability.

Recommendation to customers

SAP recommends that all customers implement security patches provided by hardware and operating system providers as soon as they become available. We will ensure that fixes are applied to our cloud infrastructure without undue delay. SAP Global Security is constantly monitoring the situation.

Meltdown and Spectre

Search notes and other material on <https://support.sap.com/notes> for

- CVE-2017-5753 CVE-2017-5715 CVE-2017-5754
- speculative execution vulnerabilities
- Meltdown Spectre

Linux

Note [2586312](#) - Linux: How to protect against speculative execution vulnerabilities?

Note [2591472](#) - IBM Z: How to protect against speculative execution vulnerabilities?

Windows

<https://wiki.scn.sap.com/wiki/display/ATopics/SAP+on+Windows>

→ Important SAP Notes

Note [2585591](#) - How to protect against speculative execution vulnerabilities on Windows?

Meltdown and Spectre

Cloud

Note [2588225](#) - How to protect against speculative execution vulnerabilities on IBM Cloud?

Note [2588298](#) - Fixes for Speculative Execution Vulnerabilities on Alibaba Cloud

Note [2588044](#) - How to protect against speculative execution vulnerabilities on Google Cloud Platform (GCP)?

Note [2588867](#) - How to protect against speculative execution vulnerabilities on Microsoft Azure?

Note [2589580](#) - How to protect against speculative execution vulnerabilities on Amazon Web Services (AWS)?

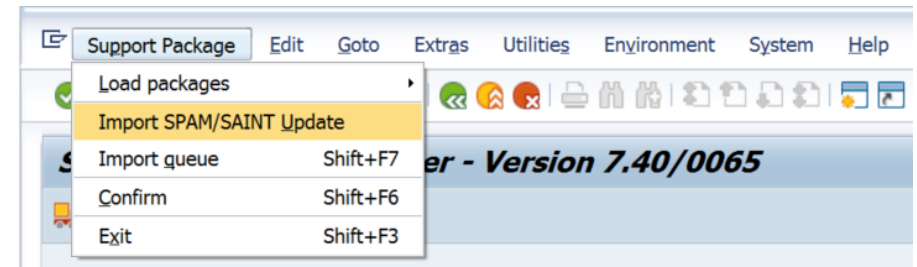
Note [2588124](#) - How to protect against speculative execution vulnerabilities on Oracle Cloud Infrastructure?

Note 2576306 - Transport-Based Correction Instruction (TCI) for Download of Digitally Signed SAP Notes (reloaded)

Good news: Instead of implementing notes 2408073, 2546220, and 2508268 manually (which would lead to multiple manual activities) you can implement the new TCI for SNOTE as described in note 2576306. You do not need to perform any manual activities in this case.

Prerequisite: Note 2187425 describes how to prepare the Note Assistant (Transaction SNOTE) to consume TCIs:

- SPAM Version 66 or higher (update SPAM via client 000)
- plus Note Assistant Bootstrapping note:
 - for SAP BASIS 700 Note 2446868
 - for SAP BASIS 701,702 Note 2444141
 - as of SAP BASIS 731 Note 1995550
- plus note 2520826



Note 2408073 still describes how to extract notes text files from digitally signed archive files in case SNOTE is not prepared in time.

Note 2554853 - SAP NetWeaver download service for SAP Notes

Note 2554853 „SAP NetWeaver download service for SAP Notes” recommends to set `ssl/client_ciphersuites = 918:PFS:HIGH::EC_P256:EC_HIGH`

This is secure and the most reasonable & equivalent recommendation as in note 510007.

Beginning with CommonCryptoLib 8.5.4 (see note 2288631), the cipher suite 3DES_EDE_CBC was demoted from class HIGH to class MEDIUM, and will also become disabled by above parameter values. (You can disable cipher suite 3DES_EDE_CBC via token !e3DES as well.)

Quite strict example (which might to lead to issues depending on the individual IT landscape):

```
ssl/ciphersuites = 550:PFS:HIGH:!e3DES:!mSHA1:TLS_FALLBACK_SCSV::EC_HIGH:+EC_OPT
ssl/client_ciphersuites = $(ssl/ciphersuites)
```

Prerequisite: Ensure that all clients and servers including legacy 3rd party software are able to work with remaining protocols and cipher suites. Enable logging about TLS properties of established TLS sessions according to note 2379540, check note 510007 first and be aware of note 2384290.

Execute `sapgenpse tlsinfo -c` to see the effective list of available protocols and cipher suites.

Notes 1891583 / 2065596 - Restricting logon to the application server

You can restrict new logons to application servers using dynamically switchable profile parameter `login/server_logon_restriction`

0: No restriction (default)

All users can log on to the application server

1/3: A logon to the application server is allowed only if the user is assigned to a security policy containing attribute `SERVER_LOGON_PRIVILEGE` with value 1 (see transaction `SECPOL`)

2/4: No logon is allowed to the application server

The recommended values 3 respective 4 allow internal logons like the execution of 'background job steps' or 'internal RFC calls'

Only new logons get blocked, existing sessions stay alive

Built-in user `SAP*` is able to logon always

Note 2525392 - Update 2 to 2278931 and 1906212: Code injection vulnerability in Knowledge Provider

The simple solution of the previous notes (check if URL starts with `www.` or `http`) gets improved (check if URL match to regular expression `^((http|https|file)(:\/\//)).*+$`).

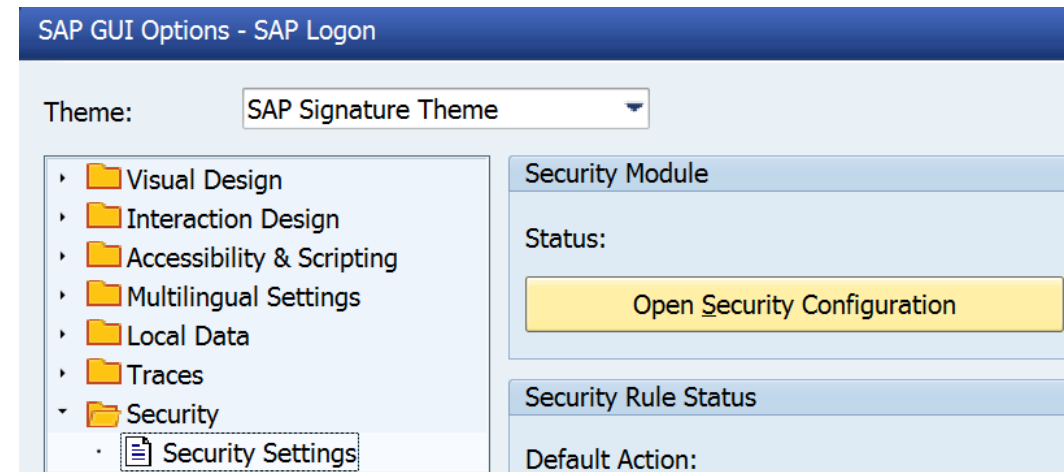
Implement this part using the Note Assistant, transaction `SNOTE`.

Notes 2278931 and 1906212 are touched with text update.

Why do we see an additional manual instruction?

The system sends the URL to the SAPGUI, which can execute additional checks before executing it (via the Browser).

The manual instruction just reminds you to run a security optimization project to develop and publish custom SAPGUI Security Settings.



Note 2533541 - SQL Injection vulnerability in Olingo JPA

The Apache Olingo Library is not part of any SAP standard product. This note is only relevant to you if you make use of the open source library in OData development processes.

Get the new version of the library from <https://olingo.apache.org/doc/odata2/download.html> in this case.

Conclusion:

➤ **Not needed for systems based on ABAP, Java, HANA, etc.**

Note 2453871 - Cross-Site Scripting (XSS) vulnerability in SAP BusinessObjects Design Studio

Note 2453871 had no validity information and was not assigned to any SP (solved now).

Because of this it is visible as a required note for all systems (ABAP, Java, HANA, ...) in application System Recommendations of the SAP Solution Manager.

The note 2453871 refers to notes 2376849 (1.6 SP 5) and 2555577 (1.6 SP 6)

Therefore, the same validity and SPs are relevant:

Validity

ANALYSISDESIGN-BIPCLNT	1.6	1.6
ANALYSISDESIGN-BIPSERV	1.6	1.6
ANALYSISDESIGN-RT-APPL	1.6	1.6
ANALYSISDESIGN-ECLIPSE	1.6	1.6
ANALYSISDESIGN-RT-CLNT	1.6	1.6
DESIGNSTUDIO-BIP-ADD-ON	1.6	1.6
DESIGNSTUDIO-CLIENT	1.6	1.6
DESIGNSTUDIO-NW	16.0	16.0
HCO_BI_AAS 16	16	

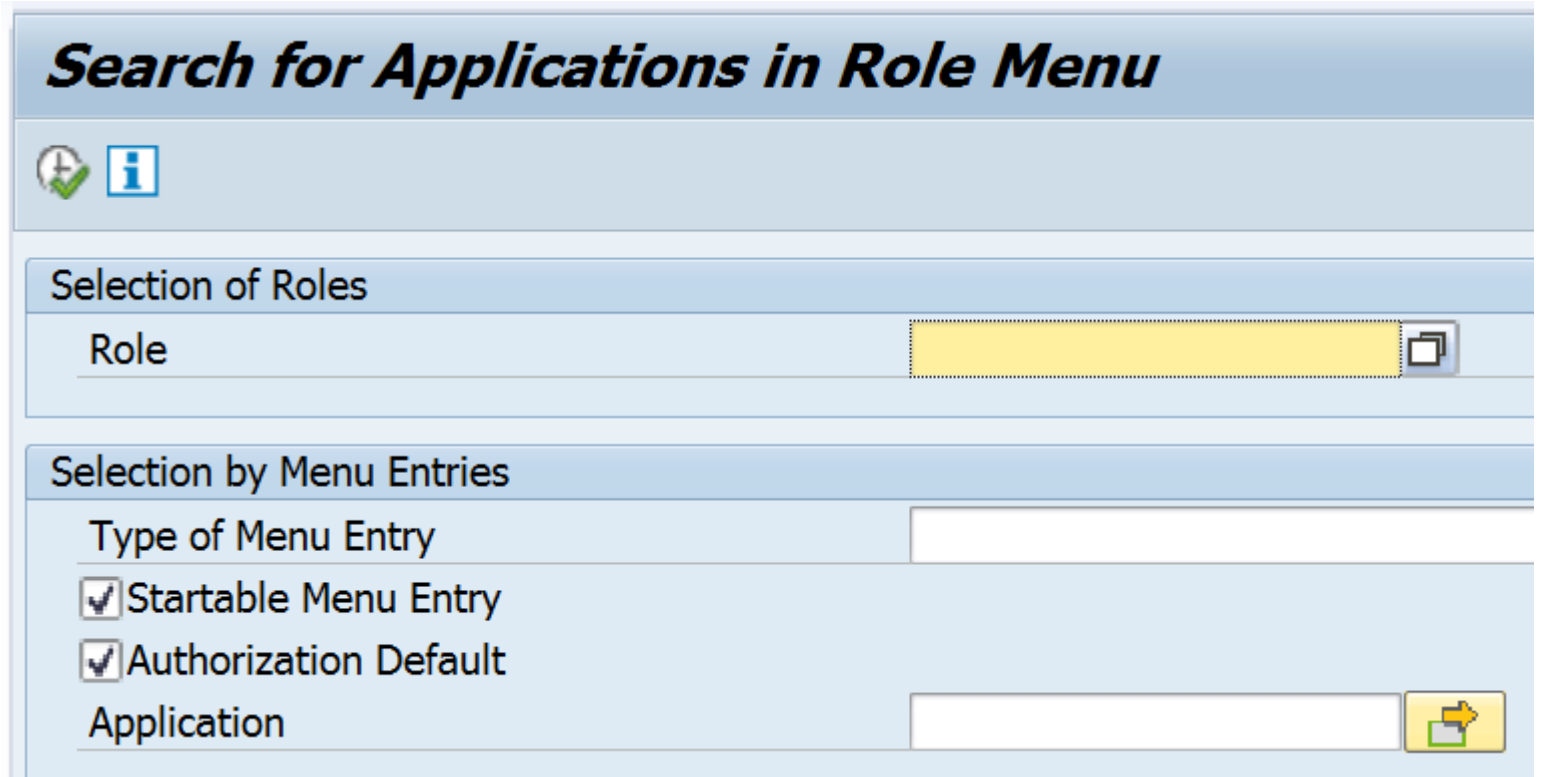
Support Packages & Patches

DESIGN STUDIO NW 1.6 SP005 respective SP006



Note 2341600 - SUIM | Search in role menu RSUSR_ROLE_MENU

Use transaction SUIM respective report RSUSR_ROLE_MENU to find applications in role menus:

- Use report RSUSR_ROLE_MENU, i.e. to search for Fiori Catalogs (which provide authorizations), Fiori Groups (which show Fiori tiles), or OData services in role menus.
- Ensure to implement following notes: 2341600, 2449011, 2356418, 2369818, 2439307
- See Note 2449011 - SUIM | Search for startable applications in roles



Search for Applications in Role Menu

Selection of Roles

Role

Selection by Menu Entries

Type of Menu Entry

Startable Menu Entry

Authorization Default

Application


Available as of SAP_BASIS 7.50

Note 2341600 - SUIM | Search in role menu RSUSR_ROLE_MENU

Tipp:

- No selection on selection screen for “Type of Menu Entry” but use ...
- Filter for “Type of Menu Entry”: *Fiori* and *Service*
- Filter for “Type of Application”: = <empty> and *Gateway*
- Show additional column “Name” (which shows the hash value)
- Save the Layout ...
- and use this Layout on selection screen

Search for Applications in Role Menu



Role	Type of Menu Entry	Type of Application	Application Name	Name
/UI2/SAP_KPIFRW5_TCR_S	SAP Fiori Tile Catalog		/UI2/SAP_KPIFRW5_TC_S /UI2/SAP_KPIFRW5_TC_R	
/UI2/SAP_KPIMOD_TCR_S			/UI2/SAP_KPIMOD_TC_R /UI2/SAP_KPIMOD_TC_S /UI2/SAP_KPIMOD_TCG_S	
SAP_BC_EPM_OIA	SAP Fiori Tile Group			
	Authorization Default Values for Services	SAP Gateway Business Suite Enablement - Service	EPM_OIA_APPS_GW_SERVICE_SRV 0001 EPM_OIA_DFG_GW_SERVICE_SRV 0001	65048F197FD300C5FF785C E6DC67C0AE2CE229EBD06
		SAP Gateway: Service Groups Metadata	EPM_OIA_DFG_GW_SERVICE_SRV_0001 EPM_OIA_APPS_GW_SERVICE_SRV_0001	5D306CDFCF5D2C82565EC 8939079DDD8C85A8B32E5



December 2017

Topics December 2017



Note [2449757](#) - Additional Authentication check in Trusted RFC on own system

Note [2357141](#) - OS Command Injection vulnerability in Report for Terminology Export

SAP HANA Security Notes

Note [2427292](#) - Information disclosure in SAP MMC Console

Note [2500044](#) - Full access to SAP Management Console

Note [2562127](#) - R/3 Support Remote Connection with SNC / SSO

Note [2562154](#) - HTTP Remote Connection with SNC / SSO

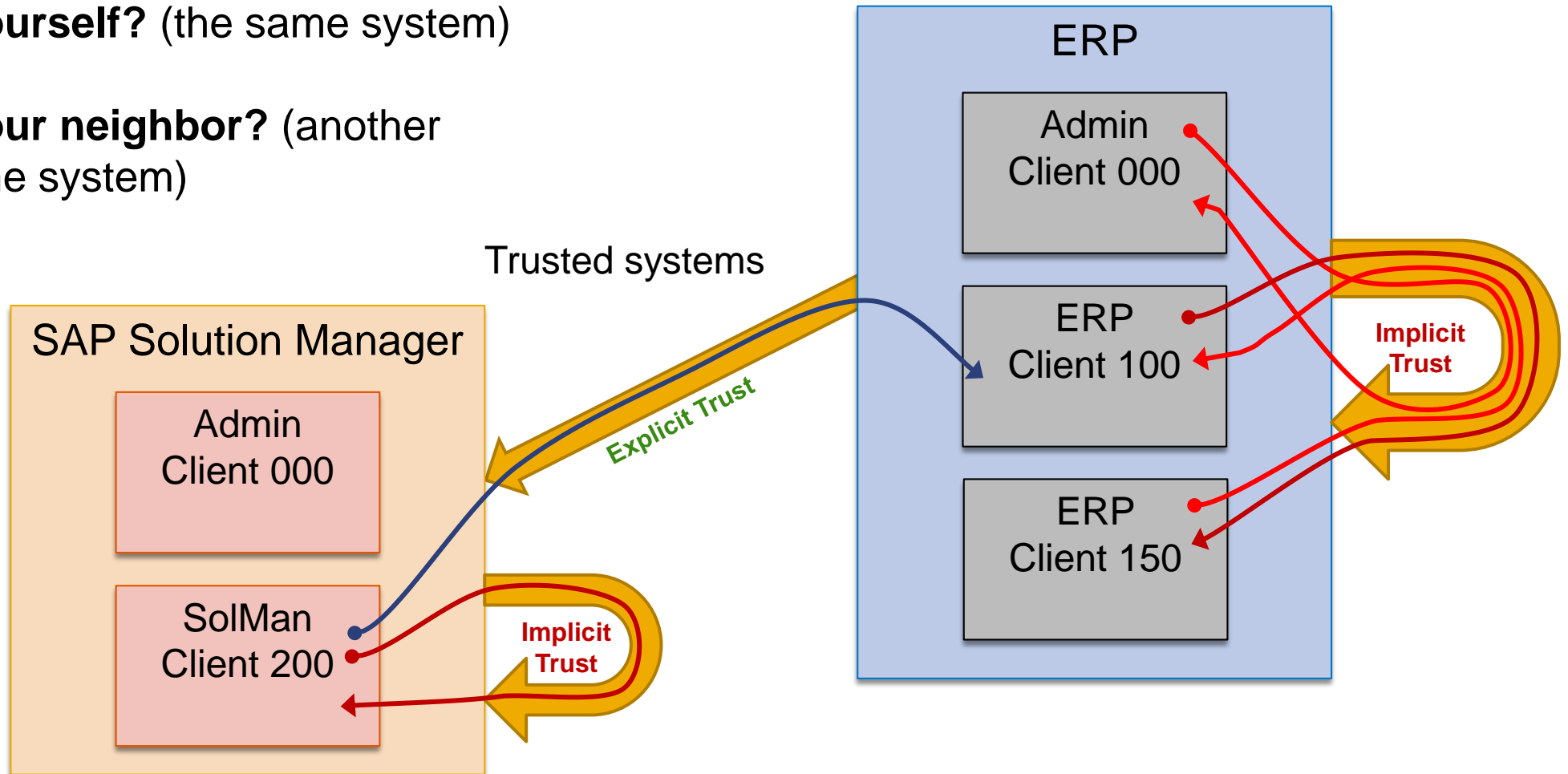
Note [2531131](#) - Switchable Authorization checks for RFC BCA_DIM_WRITE_OFF in Loans

Recommended Notes for System Recommendations

Note 2449757 - Additional Authentication check in Trusted RFC on own system

Do you trust yourself? (the same system)

Do you trust your neighbor? (another client of the same system)



Note [2449757](#) - Additional Authentication check in Trusted RFC on own system

A Trusted RFC connection can be established to a different client or a different user on the same system, although no explicit Trusted/Trusting Relation to the own system has been defined via transaction SMT1.

Mitigation: Authorizations for `S_RFCACL` are always required

As of Kernel 7.21 patch 920, 7.22 patch 417, 7.45 patch 519, 7.49 patch 310 you can activate profile parameter `rfc/selftrust` to force that Trusted RFC requires an explicit trust relationship even within the same system.

Caution: Wait for Kernel update as described in note [2614667](#) before activating the parameter in systems where you want to define Trusted RFC destinations within the same system.

Related note [2413716](#) - Setup of Trusted RFC in GRC Access Control EAM

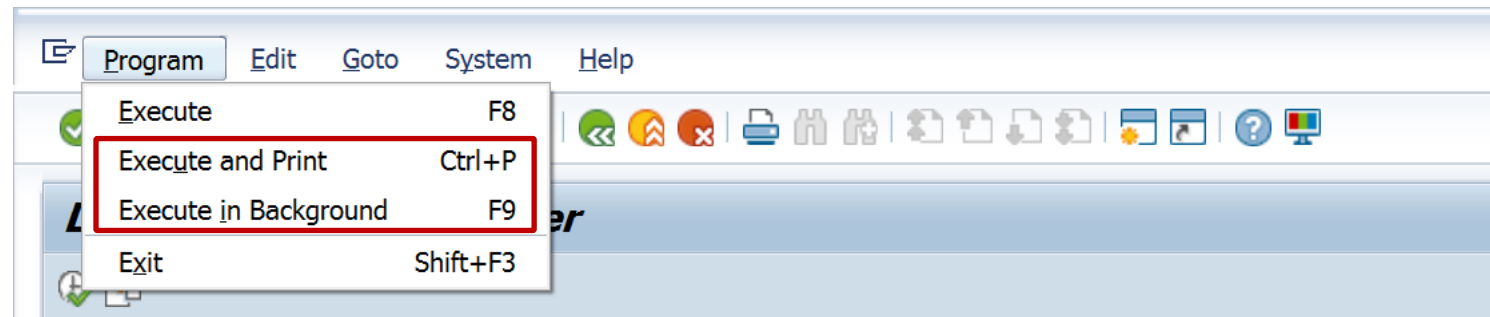
Note 2357141 - OS Command Injection vulnerability in Report for Terminology Export

Published in November 2016, updated in November 2017

No update of automatic correction instruction (which solves the OS Command Injection vulnerability).

New manual instruction to copy & modify a GUI status and to block functions 'Execute and Print' and 'Execute in Background' for submitting report `TERM_TBX_EXPORT`.

You need to implement this modification to be able to execute the report again **only if you are using report `TERM_TBX_EXPORT` (which is not the case)** and if you do not have one of the listed Support Packages.



SAP HANA Security Notes

Note 2520995 - [CVE-2017-16679] URL Redirection vulnerability in Startup Service

- Affected is the SAP Start Service/Host Agent, which is part of the SAP HANA system, too.
- The Startup Service allows an attacker to redirect users to a malicious site due to insufficient URL validation.
- The issue is fixed with SAP Host Agent/SAP Start Service in SAP HANA with the following revisions:
HANA 1.0 SPS 12 revision 122.14, HANA 2.0 SPS 01 revision 12.03, HANA 2.0 SPS 02 revision 22

Note 2549983 - [CVE-2017-16687] Information Disclosure in SAP HANA XS classic user self-service

- Affected are the user self-services, which are part of SAP HANA XS classic content. The user self-services are deactivated by default. Deactivated user self-services they are not affected by this issue. (See note how to check status of self-services.)
- An unauthenticated user could use the error messages to determine if a given username is valid.
- The issue is fixed with the following HANA revisions:
HANA 1.0 SPS 12 revision 122.10, HANA 2.0 SPS 00 revision 2.02, HANA 2.0 SPS 01 revision 12, HANA 2.0 SPS 02

Note 2522510 - [CVE-2017-16680] Potential audit log injection vulnerability in SAP HANA XS Advanced

- Affected is the XS advanced runtime.
- Attackers can inject control characters in XSA's logs. The interpretation of audit log files could be hindered or misdirected.
- Fixed with XSA 1.0.63

Note 2427292 - Information disclosure in SAP MMC Console

Note 2500044 - Full access to SAP Management Console

Both notes addresses potential security vulnerabilities about Java Reflection.

Older J2EE versions, which do not yet use a key to trigger web services, are not affected. This leads to a loose correlation between kernel and J2EE version.

Recommended settings (no business impact):

- `jstartup/service_acl = service:*; library:*; interface:*; com.sap.*; sap.com.*`
Solution available with Kernel 7.22 patch 310, 7.45 patch 411, 7.49 patch 210
(Add two more entries to block custom coding only)
- `jstartup/secure_key = 1`
Solution available with Kernel 7.45 patch 516 (600), 7.49 patch 312, 7.53 patch 14

Mitigation:

- **Strictly restrict development and deployment rights on your J2EE instance – which you should do anyway.**

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

You want to encrypt all communications channels, i.e. between user network and server network. You have activated SNC either as

- **SNC for Single Sign-On (using client certificates)**
- **SNC Client encryption (still using user/password)**

No SSO Licence required even if SAP Support uses SSO to connect to your systems!

and you want to enforce that SNC is used for all connections by deactivating profile parameter `snc/accept_insecure_gui` (old) respective activating `snc/only_encrypted_gui` (recommended).

Implement the notes to allow SAP support remote connections using the Secure Network Communication (SNC) protocol, too.

(Workaround used so far: Set `snc/accept_insecure_gui=U` to allow exceptions for such users)

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

One SNC Name `CN=SAPSUPPORT, O=SAP-SE, C=DE` is used for all SAP support users. Assign this name to all such user accounts in all relevant clients, i.e. client 000 and the productive client.

- in transaction `SU01` or via transaction `SM30` for table `USRACL` (for `SAPGUI`) (Take care to add leading `p:` to the SNC name)
- via transaction `SM30` for table `VUSREXTID` with extid type `DN` (for `HTTP` connections)

New Entries: Details of Added Entries

External ID type DN of Certificate (X.500)

External ID	<code>CN=SAPSUPPORT, O=SAP-SE, C=DE</code>
	<code>CN=SAPSUPPORT, O=SAP-SE, C=DE</code>
Seq. No.	<code>001</code>
User	<code>SUPPORT01</code>
Min. date	
<input checked="" type="checkbox"/> Activated	

Addr... Logon Data **SNC** Defaults Parameters Roles Profiles

SNC Status

SNC is active on this application server

! Unsecured logon is generally permitted

SNC Data

SNC name

Canonical name determined

Permit Password Logon for SAP GUI (User-Specific)

New Entries: Details of Added Entries

! Unsecure Logon Is Allowed (snc/accept_insecure_gui)

Users

SNC Name

Permit Password Logon for SAP GUI

SNC Data

Canonical Name Determined

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO



Trust Manager: Change

System PSE

- SNC SAPCryptolib
- SSL server Standard**
- SSL client SSL Client (Anonymo)
- SSL client BCM
- SSL client SSL Client (Standar)
- SSL client PAYPAL
- SSL client SAPGBB
- SSL client WSSE Web Service Se
- WS Security Standard
- WS Security Other System Encry
- WS Security WS Security Keys
- SMIME Standard
- File
- SSF Collaboration Integration
- SSF Logon Ticket

Certificate List

Subject
CN=X3A SSLC_DFAULT, OU=I0020230702, OU=SAP Web AS, O=SAP Trust Com..

Veri. PSE Password

Certificate

Subject	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE
Subject (Alt.)	
Issuer	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE
Serial Number (Hex.)	D9:F9:39:E5:22:DF:0B:05
Serial Number (Dec.)	15706648831726652165
Valid From	01.08.2017 13:11:55 to 01.08.2027 13:11:55
Algorithm	RSA with SHA-256 Key Length 4096
Check Sum (MD5)	6E:31:44:6B:31:18:88:06:99:54:F1:71:8E:70:4A:7D
Checksum (SHA1)	FD:7E:93:28:EC:C7:16:0C:94:A5:6F:C1:FC:66:F3:E3:70:D5:64:E7

Add to Certificate List

import the root
Root CA
SAPCryptolib
ver Standard (for

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO



Trust Manager: Change

System PSE

- SNC SAPCryptolib
- SSL server Standard**
- SSL client SSL Client (Anonymo)
- SSL client BCM
- SSL client SSL Client (Standar
- SSL client PAYPAL
- SSL client SAPGBB
- SSL client WSSE Web Service Se
- WS Security Standard
- WS Security Other System Encry
- WS Security WS Security Keys
- SMIME Standard
- File
- SSF Collaboration Integration
- SSF Logon Ticket

Certificate List

Subject
CN=X3A SSLC_DFAULT, OU=I0020230702, OU=SAP Web AS, O=SAP Trust Com..

Veri. PSE Password

Certificate

Subject	CN=SAPSUPPORT User Sub CA, O=SAP-SE, C=DE
Subject (Alt.)	
Issuer	CN=SAPSUPPORT Root CA, O=SAP-SE, C=DE
Serial Number (Hex.)	02:D3:1A:38:27:5D:30:D9:C8
Serial Number (Dec.)	52105020580534737352
Valid From	01.08.2017 13:11:55 to 01.08.2022 13:11:55
Algorithm	RSA with SHA-256 Key Length 2048
Check Sum (MD5)	A0:66:76:FF:56:43:7E:A3:99:6D:C6:7A:B4:3F:EA:5F
Checksum (SHA1)	4D:AB:47:25:85:32:3A:B5:4C:F9:BD:45:54:71:23:75:79:FE:13:59

Add to Certificate List

ificate you can
e
CA which issues
th PSE stores **SNC**
I) and **SSL-Server**
ctions)

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

Add the SNC name of your system at “Servers & SAPRouters” for your application server(s)

(EHA) ★ Edit ...

Software ▾ Servers & SAPRouters ▾ License Key

DB/Application/Other Servers +

Server Type	Host Name	Instance Number	IP Address	Operating System	Add. Router Host Name
Application Server					
Application Server	cldvmxli00183				⊗
Application Server	cieha	00	10.22.188.236	Windows NT	⊗
Database Server					
Database Server				LINUX	

Server

Application Server

*Host Name (max. 20 chara...: cieha

Host Name (Fully Qualified): cieha.wdf.sap.corp

*IP Address: 10 . 22 . 188 . 236

IPv6 Address:

Use Ipv6 Address: Yes No

*Instance Number: 0

*Operating System:

Message Server: Yes No

CPU Number: 0

RAM (MB): 0

Hard Disk (GB):

OS Version:

SNC Name: p:CN=EHA, O=IDES, C=DE

Additional Router

Host Name (max. 20 chara...:

IP Address:

IPv6 Address:

Use Ipv6 Address: Yes No

Service Port: 32 00

Save Delete Cancel

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

Add the new protocols...

... and after successful testing, remove the non-SNC protocols

The screenshot shows the SAP Remote Connectivity interface. The top navigation bar includes the SAP logo, 'Remote Connectivity', a 'Knowledge Base' dropdown, a search bar, and utility icons. The main area is divided into 'Systems (1)' and 'Remote Connections'. Under 'Systems', there is a search bar and tabs for 'Open', 'Favorites', and 'All'. The selected system is 'Test System for PRD - Remote Connectivity' with ID 'TUM'. The 'Remote Connections' section shows a summary of 16 connection types: 1 OPENED (green), 15 CLOSED (red), and 0 RESERVED (red). Below this, a table lists the connection types:

Connection Type	Status
SAProuter peter-test-AGS	Connected
R/3 Support	Status: Opened 6 days 23 h 12 min 25 s
HTTP Connect - URLAccess	Status: Closed

The screenshot shows the 'Configuration' dialog box with the 'Connection Types' tab selected. The list of connection types includes:

- R/3 Support with SSO (highlighted with a red box)
- HTTP Connect with SSO (highlighted with a red box)
- SAPGui+Browser Connect. (SAP Note: 1721448)
- SAP HANA Database (SAP Note: 1592925)
- LoadRunner (SAP N...: 850213)
- WTS Connect with NLA (SAP Note: 1912318)
- AS/400-5250 Connection (SAP ... : 79411)

A 'Cancel' button is visible at the bottom right of the dialog.

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

SAP support users do not need a password anymore

Enter some explaining text instead of a password

You still should assign the user entry to the incident to tell about the user name!

SAP Secure Area Systems Enter search t... EHA

USERS ROUTERS SERVERS CONTACTS INFO INCIDENTS HISTORY LOG

User Entries +

User ID	Password	Client	Expiration Date
No data			

Add User

*Client: 100

*User ID: SUPPORT01

*Password: <no password - use SSO>

*Expiration Date: 07.12.2017, 23:45:00

Send e-mail notification before expiry date

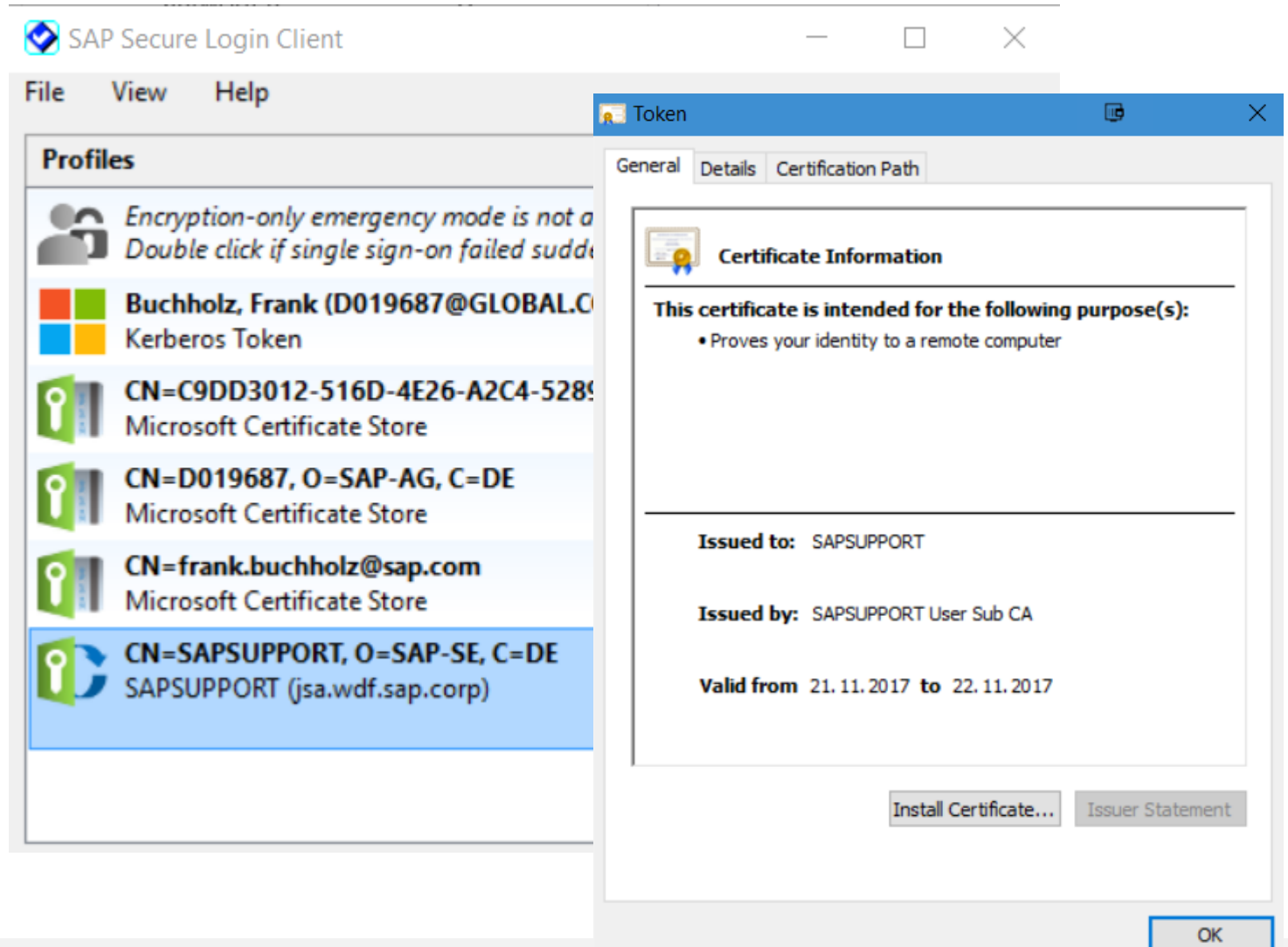
Save Cancel

Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

Now, SAP support users can use the new connection types

SAP issues temporary certificates to support users which are be used by the new connection types



Note 2562127 - R/3 Support Remote Connection with SNC / SSO

Note 2562154 - HTTP Remote Connection with SNC / SSO

Remote Support

<https://support.sap.com/remotecollection>

Related notes (maybe not updated yet):

Note 812732 - R/3 support service connection

Note 1773689 - How to add logon credentials securely to an incident - SAP ONE Support Launchpad

Blogs:

...

Note 2531131 - Switchable Authorization checks for RFC BCA_DIM_WRITE_OFF in Loans (FI-CAX-FS)

The note is not visible anymore since 2.11.2017.

Following Support Packages for Software Component FI-CAX contain the coding part of the solution:

**6.02 SP 20, 6.04 SP 20, 6.05 SP 17, 6.06 SP 20,
6.17 SP 15, 6.18 SP 9, 8.00 SP 6, 8.01 SP 4, 8.02 SP 1**

Do not forget the general manual configuration for this type of correction “SACF”:

Collective maintenance of switchable authorization scenarios is done after system updates using transaction SACF_COMPARE.

Recommended Notes for System Recommendations 7.2

Note [2563064](#) - SysRec: Kernel note is missing

Note [2461414](#) - SysRec: notes for obsolete kernel versions are displayed

Note [2556623](#) - SysRec: Corrections for Solution Manager 720 Fiori UI

Note [2536918](#) - SysRec: Display all systems and notes at one time

Note [2549846](#) - SysRec: Date in filter bar gets changed

(omit this note if implementation fails)

Note [2545616](#) - SysRec 7.2: Note is missing in Note Overview

Note [2542562](#) - SysRec: Notes are not calculated for software component with empty support package level in LMDB

In case of an upgrade from 7.1 to 7.2:

Note [2547598](#) - SysRec: check configuration data

Execute report `AGSNO_CHECK_MIG` after installing this note in all systems to show old settings

Note [2547915](#) - SysRec : copy configured systems from 7.1 to 7.2

Execute report `AGSNO_ADJUST_SYSTEM` after installing this note in all systems to migrate old settings



October 2017

Topics October 2017



Note [2408073](#) - Handling of Digitally Signed notes in SAP Note Assistant (reloaded)

Note [2371726](#) - Code Injection vulnerability in Text Conversion

Note [2269032](#) - Authorization check for S_PROGRAM

Note [2457014](#) - Missing Authorization check in PA-PA-US

Note [2531241](#) - Disclosure of Information/Elevation of Privileges LVM 2.1 and LaMa 3.0

Note [2520772](#) - Disclosure of Information/Elevation of Privileges LaMa 3.0

Check RFC Callback protection using Configuration Validation

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant (reloaded)



It's not possible to prepare `SNOTE` automatically by implementing notes 2518518 and 2408073 anymore. Note 2518518 is archived, instead you have to follow some new manual implementation steps in note 2408073:

- Create a table
- Create an application log object
- Create messages
- Change a GUI status and GUI title
- Create text elements

Note 2408073 still describes how to extract notes text files from digitally signed archive files in case `SNOTE` is not prepared in time.

Note 2371726 - Code Injection vulnerability in Text Conversion

Critical note:

(correction of old
Security Note 1673713)

```
COMMAND1(9) = 'mkdir -p '.
```

```
*>>> START OF DELETION <<<<<
* Begin note 1673713
FIND REGEX '[^A-Z a-z 0-9 _ \, \^ % $ # @ ! \~ \{ \} \[ \] \; \(\ \) \- \`]' IN DIRNAME MATCH COUNT mcnt.
*>>> END OF DELETION <<<<<<
```

```
*>>> START OF INSERTION <<<<<
* Begin note 2371726
* Begin note 1673713
* FIND REGEX '[^A-Z a-z 0-9 _ \, \^ % $ # @ ! \~ \{ \} \[ \] \; \(\ \) \- \`]' IN DIRNAME MATCH COUNT mcnt.
FIND REGEX '[^A-Z a-z 0-9 \w]' IN DIRNAME MATCH COUNT mcnt.
* End note 2371726
*>>> END OF INSERTION <<<<<<
```

First published in November 2016 with version 5 – What was changed now with version 6?

According to the Advisory we already had seen the correct solution:

Note 2371726 Version 5 - Code Injection vulnerability in Text Conversion

Function `BRAN_DIR_CREATE` now restricts the name of the directory to be created to a real name, allowing only "_" as special character.

➤ Implement the new version of the note using `SNOTE` but do not

Don't worry if you cannot apply version 6 on top of version 5.

Note 2269032 - Authorization check for S_PROGRAM

The authorization check for execution of reports S_PROGRAM associated with an report authorization group has been made stricter in SAP_BASIS 7.40 and 7.50.

Activities of authorization object S_PROGRAM:

- SUBMIT** Execute report
- BTCSUBMIT** Schedule report for background processing
- VARIANT** Edit variants (but not execute reports anymore)

Use SE16 for table AGR_1251 with OBJECT=S_PROGRAM, FIELD=P_ACTION, and LOW=SUBMIT or VARIANT to find roles which contain VARIANT but not SUBMIT:

Use report RSCSAUTH to validate and maintain report authorization group assignments.

Data Browser: Table AGR_1251 Select Entries 247

MAN	AGR_NAME	COUNT	OBJECT	AUTH	VARIA	FIELD	LOW
001	SAP_SM_DASHBOARDS_ADMIN	45	S_PROGRAM	T_F741003700		P_ACTION	SUBMIT
001	SAP_SM_ESH_ADMIN	23	S_PROGRAM	T_F760011900		P_ACTION	SUBMIT
001	SAP_SM_ICC_ADMIN	17	S_PROGRAM	T_S763018400		P_ACTION	SUBMIT
001	SAP_SM_INC_EXTRACTOR	104	S_PROGRAM	T_S790503600		P_ACTION	VARIANT
001	SAP_SM_MS_SETTINGS	57	S_PROGRAM	T_S790588800		P_ACTION	SUBMIT
001	SAP_SM_SA38	1	S_PROGRAM	T_SF05076300		P_ACTION	SUBMIT

Note 2457014 - Missing Authorization check in PA-PA-US

Application specific security correction for distributed reporting.

With this note the **RFC enabled function module** `HR_EXPORT_TO_OTHER_SYS_US_CE` calls Business Add-In `HRPAD00AUTH_DIST` with a default implementation restricting the executable reports to reports using HR logical databases – which will be successful in this case if the BAdI is active. This Business Add-In was delivered with note 1531288.

Notes 2531241 and 2520772 - Disclosure of Information/Elevation of Privileges LVM 2.1 and LaMa 3.0

Both notes target **SAP Landscape Management (LaMa)** which was formerly known as Landscape Virtualization Management (LVM).

This application automates system operations and requires to store passwords of managed systems in the Secure Store of Java.

Both notes propose following manual actions:

- **Install the patch**
 - VCM LVM 2.1 SP 10 patch 1
 - VCM LVM 3.0 SP 4 patch 1
 - VCM LVM ENTERPRISE 3.0 SP 4 patch 1

- **Identify all stored passwords and consider to**
 - Change these passwords in the managed systems
 - Delete these passwords from the store (but you cannot get rid of them from log files etc)

Collective note 2350252 - SAP Landscape Management 3.0 - Standard edition

DSAG documents and events about LaMa: <https://www.dsag.de/search/site/lama> (German)

Check RFC Callback protection using Configuration Validation

Security Whitepaper <https://support.sap.com/securitywp>

→ [SAP Security Recommendations: Securing Remote Function Calls \(RFC\)](#)

[Online Help](#)

Notes about RFC callback – Information:

Note [2058946](#) - Maintenance of callback positive lists before Release 7.31

Note [1971118](#) - No RFC callback check

Note [1686632](#) - Positive lists for RFC callback

Notes about RFC callback – Required whitelist entries:

[Comment](#) in Blog “Remote Code Analysis in ATC for Developers” (May 2019)

Note [2585923](#) - CUA: Text comparison (callback whitelist) (February 2018)

Note [2251931](#) - Runtime error CALLBACK_REJECTED_BY_WHITELIST in graphical Screen Painter

Note [2133349](#) - Error RFC_CALLBACK_REJECTED when starting tp

Note [1992755](#) - RFC callback deactivated → transport tools no longer work

Notes about RFC callback – Custom code:

Note [1515925](#) - Preventing RFC callbacks during synchronous RFC

Check RFC Callback protection using Configuration Validation

Notes about RFC callback – Kernel updates:

Note [2523719](#) - Internal RFC Callback rejected by UCON

Note [2483870](#) - RFC Callback whitelist check for destination BACK [7.45 patch 515, 7.49 patch 221]

Note [2463707](#) - RFC Callback whitelist check for internal calls [7.45 patch 515, 7.49 patch 215]

Note [2173003](#) - Short dump CALLBACK_REJECTED_BY_WHITELIST, function module name and destination missing [7.21 patch 419, 7.22 patch 2, 7.41 patch 115, 7.42 patch 29, 7.43 patch 6]
[...]

Notes about RFC callback – ABAP updates:

Note [2382935](#) - Generation of RFC Callback Whitelist fails [SAP_BASIS 7.40 SP 17, 7.50 SP 7, 7.51 SP 2]

Note [2235513](#) - External RFC callback to customer systems in SNOTE [SAP_BASIS 7.02 SP 18, 7.10 SP 21, 7.11 SP 16, 7.30 SP 15, 7.31 SP 18, 7.40 SP 14, 7.50 SP 2]

Note [1686632](#) - Positive lists for RFC callback [SAP_BASIS 7.02 SP 17, 7.10 SP 19, 7.11 SP 14, 7.20 SP 8, 7.30 SP 12, 7.31 SP 13, 7.40 SP 7]

Notes about RFC callback – Security Audit Log:

Note [2463645](#) - SE92 | Correction for SAL event definitions

Note [2128095](#) - SAL | Missing parameters in DUI, DUJ, and DUK messages

Note [1968729](#) - SAL: Message definition for RFC callback

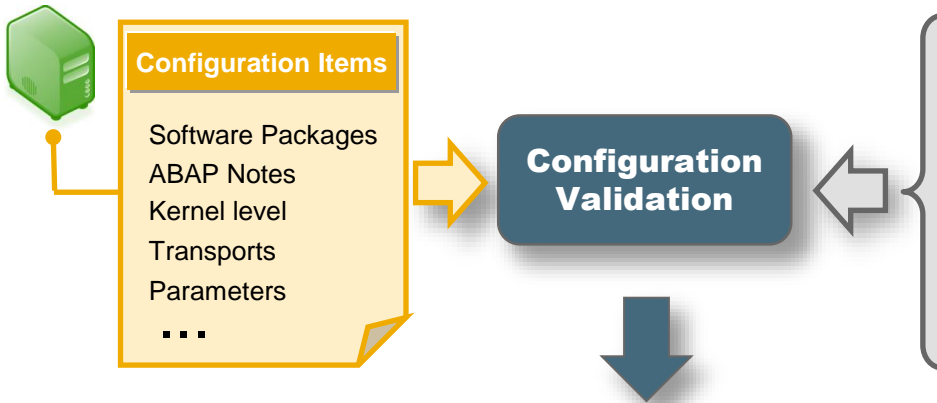
Note [539404](#) - FAQ: Answers to questions about the Security Audit Log

Check RFC Callback protection using Configuration Validation

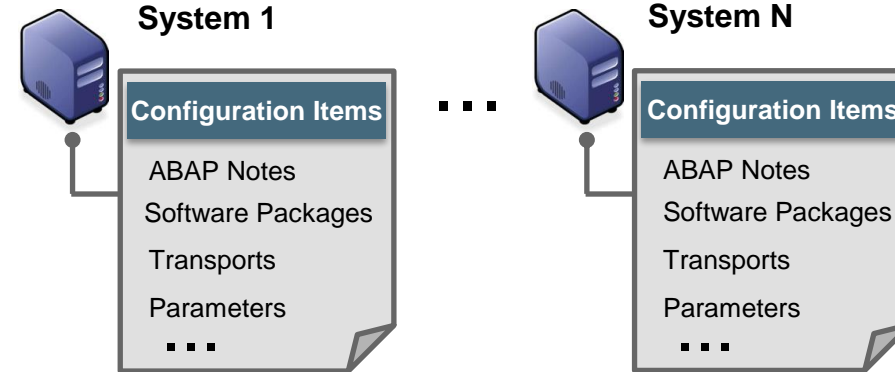
The Idea behind Configuration Validation

A reporting to understand how homogeneous the configuration of systems is

Reference System



Compared Systems



Compliance with Reference System

	System 1	System 2	...	System N
Software Packages	✓	✓		⚠
ABAP Notes	✓	✓		✓
Transports	✓	⚠		⚠
...				

Typical questions are:

- All systems on a certain OS level or DB level?
- Template configuration (SAP or DB parameter) applied on all systems?
- No kernel older than 6 month on all systems?
- Security policy settings applied? Security defaults in place?
- Have certain transports arrived in the systems?

Check RFC Callback protection using Configuration Validation

You use Configuration Reporting to show cross-system reports about configuration settings













The following Configuration Stores are used to check RFC Callback protection:

ABAP_INSTANCE_PAHI	Profile Parameters Compliance rule: rfc/callback_security_method = 3
RFCDES_TYPE_3	RFC Destinations Compliance rule: CALLBACK_WHITELIST_ACTIVE = X

Check RFC Callback protection using Configuration Validation Transaction CCDB

	Main state	Landscape	Group Source	Store Name	Group Name	Store Type	Component Version
	Correct	ABAP Technical System (M85~ABAP)	ABAP	BGRFC_CONFIGURATION	SAP_NETWEAVER_GATEWAY	Table Store	SAP NW GATEWAY FOUNDATION 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_3	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_3_CHECK	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_G	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_H	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_L	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCDES_TYPE_T	RFC-DESTINATIONS	Table Store	SAP BASIS 7.40
	Correct	ABAP Technical System (M85~ABAP)	ABAP	RFCSYSACL	ABAP-SECURITY	Table Store	SAP BASIS 7.40

Check RFC Callback protection using Configuration Validation Transaction CCDB

History	 RFCDEST	RFCTYPE	CALLBACK_WHITELIST	CALLBACK_WHITELIST_ACTIVE	LOGON_CLIENT	LOGON_USER
	BGRFC_SUPERVISOR	3			001	BGRFC_SUSR
 1	M11CLNT800_S4H262_04	3			800	GRCADM
	M85	3				
	M85CLNT001	3				
 1	SAP-OSS	3		X	001	S0005141447
 1	SAP-OSS-LIST-O01	3		X	001	S0005141447
 1	SAPCMP	3		X	001	SAPCMDB_RFC
 2	SAPNET_RTCC	3		X	001	ST14_RTCC
 1	SAPOSS	3		X	001	OSS_RFC
 1	SDCC_OSS	3		X	001	SDCC_NEW
 1	SM_M11CLNT800_LOGIN	3			800	
 1	SM_M11CLNT800_READ	3			800	SM_M85
 1	SM_M11CLNT800_TMW	3			800	SMTMM85
 1	SM_M11CLNT800_TRUSTED	3			800	
					800	

Check RFC Callback protection using Configuration Validation

Report Execution **Target System Maintenance** Comparison List Maintenance Trend Analysis

Create **Edit**

Target System

Long SID: Store Name: Customer Target Systems
 Description: Store Type: SAP Target Systems
 Owner:

Select Target System

Config. Stores of Target System:CALLBACK

SID	Description	Del.
CALLBACK	RFC Callback protection	

Store Name	Type	Group	Instance Type
ABAP_INSTANC...	PROPERTY	INSTANCE	CENTRAL
RFCDES_TYPE_3	TABLE	RFC-DESTINATI...	
RFCSYSACL	TABLE	ABAP-SECURITY	

Check RFC Callback protection using Configuration Validation

Target System : CALLBACK / Store Name : ABAP_INSTANCE_PAHI

Comparison Store: M85 / 0050561 Change Find: Find Find Next Replace with: in: All colu Replace



Sel.	Operator	Parameter	Operator	Value Low	Value High	Comparison...	T...	W...
<input type="checkbox"/>	=	rfc/callback_security_method	=	3				

Configuration Items

SAP System ID	Instance	Config. Item	Config. Item Value	Cv. DataOperator	Compliance	Compliant (1=Yes, -1=No, ''=Not valuated)
M11	wdfibmt0722_M11_10	rfc/callback_security_method	1	= 3	No	-1
	wdfibmt0723_M11_10	rfc/callback_security_method	1	= 3	No	-1
	wdfibmt8221_M11_10	rfc/callback_security_method	1	= 3	No	-1
	wdfibmt8222_M11_10	rfc/callback_security_method	1	= 3	No	-1
M24	wdfibmt0788_M24_10	rfc/callback_security_method	#	= 3	Item not found	-1
	wdfibmt8205_M24_10	rfc/callback_security_method	#	= 3	Item not found	-1
	wdfibmt8206_M24_10	rfc/callback_security_method	#	= 3	Item not found	-1
	wdfibmt8207_M24_10	rfc/callback_security_method	#	= 3	Item not found	-1
M34	lt5112_M34_10	rfc/callback_security_method	1	= 3	No	-1
M85	wdfibmt0716_M85_10	rfc/callback_security_method	1	= 3	No	-1
	wdfibmt0732_M85_10	rfc/callback_security_method	1	= 3	No	-1
	wdfibmt0742_M85_10	rfc/callback_security_method	1	= 3	No	-1

Check RFC Callback protection using Configuration Validation

Target System : CALLBACK / Store Name : RFCDES_TYPE_3

Comparison Store: M85 / 0050561 Change Find: Find Find Next Replace with: in: All colu Replace



Sel.	RFCDEST	RFCTY...	ARFC_A...	ARFC_...	ARFC_M...	AUTHO...	BASXML...	CALLB...	CALLBA...	CATEG...	W...
<input type="checkbox"/>	(Contains) *	(=) 3	(Ignore)	(Ignore) 0	(Ignore)	(Ignore)	(Ignore) 0	(Ignore) *	(=) X	(Ignore)	

Configuration Items

SAP System ID	Config. Item	Compliance	Compliant (1=Yes, -1=No, ''=Not valuated)
M85	BGRFC_SUPERVISOR	No	-1
	M11CLNT800_S4H262_04	No	-1
	M85	No	-1
	M85CLNT001	No	-1
	SAP-OSS	Yes	1
	SAP-OSS-LIST-O01	Yes	1
	SAPCMP	Yes	1
	SAPNET_RTCC	Yes	1
	SAPOSS	Yes	1
	SDCC_OSS	Yes	1
	SM_M11CLNT800_LOGIN	No	-1
	SM_M11CLNT800_READ	No	-1



September 2017

Topics September 2017



Note [2408073](#) - Handling of Digitally Signed notes in SAP Note Assistant

Note [2520064](#) - Missing Authentication check in SAP Point of Sale (POS) Retail Xpress Server

Note [2528596](#) - Hard-coded Credentials in SAP Point of Sale Store Manager

Note [2483870](#) - RFC Callback whitelist check for destination BACK

Note [2507798](#) - Bypass of email verification in e-recruiting

Note [2449011](#) - SUIM | Search for startable applications in roles - RSUSR_START_APPL

Note [2520885](#) - Logout function missing in SAP Best Practices Package Manager for Partner

Note [2051717](#) - SQL-Injection-Schwachstelle in SAP Netweaver

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant



Security Spotlight News

Digitally Signed SAP Notes – September 12, 2017

SAP is making Notes more secure by ensuring all SAP Notes **files** are digitally signed.

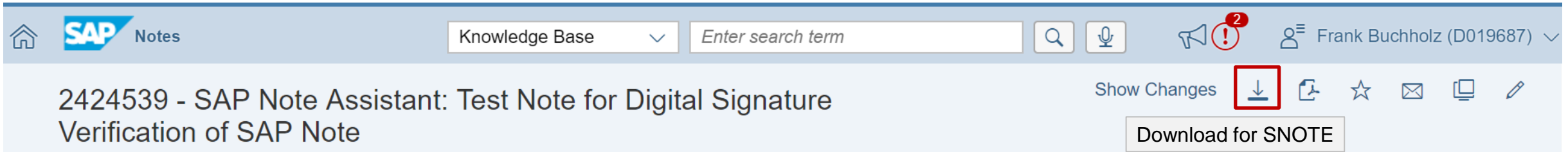
We strongly recommend customers to **upload** only digitally signed SAP Notes **files** once they are made available. To prepare your system to consume digitally signed SAP Notes **files**, please implement SAP Security Note 2408073. Without implementing this SAP Security Note, it will not be possible to upload a digitally signed SAP Note **file**.

Please also note, with SAP Security Note 2408073, the digital signature verification feature is enabled only for uploading signed SAP Notes **files**. The feature to **download** a digitally signed SAP Note **via SAPOSS connection** will be released to Customers in the coming months. It is recommended to implement SAP Note 2408073 before download functionality is released.

For details, please visit this blog. Watch the Note Assistant page on SAP Support Portal, for the latest updates

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant

SAP plans to deliver digitally signed note files on SAP Support Portal.



The screenshot shows the SAP Support Portal interface. At the top, there is a navigation bar with the SAP logo, a search bar containing 'Knowledge Base', and a user profile for 'Frank Buchholz (D019687)'. Below the navigation bar, the main content area displays the note title '2424539 - SAP Note Assistant: Test Note for Digital Signature Verification of SAP Note'. To the right of the title, there are several icons: 'Show Changes', a download icon (highlighted with a red box), a share icon, a star, an envelope, a printer icon, and an edit icon. Below these icons is a button labeled 'Download for SNOTE'.

Currently you get a .ZIP file containing a .TXT file. In the future you'll get a .SAR file instead.

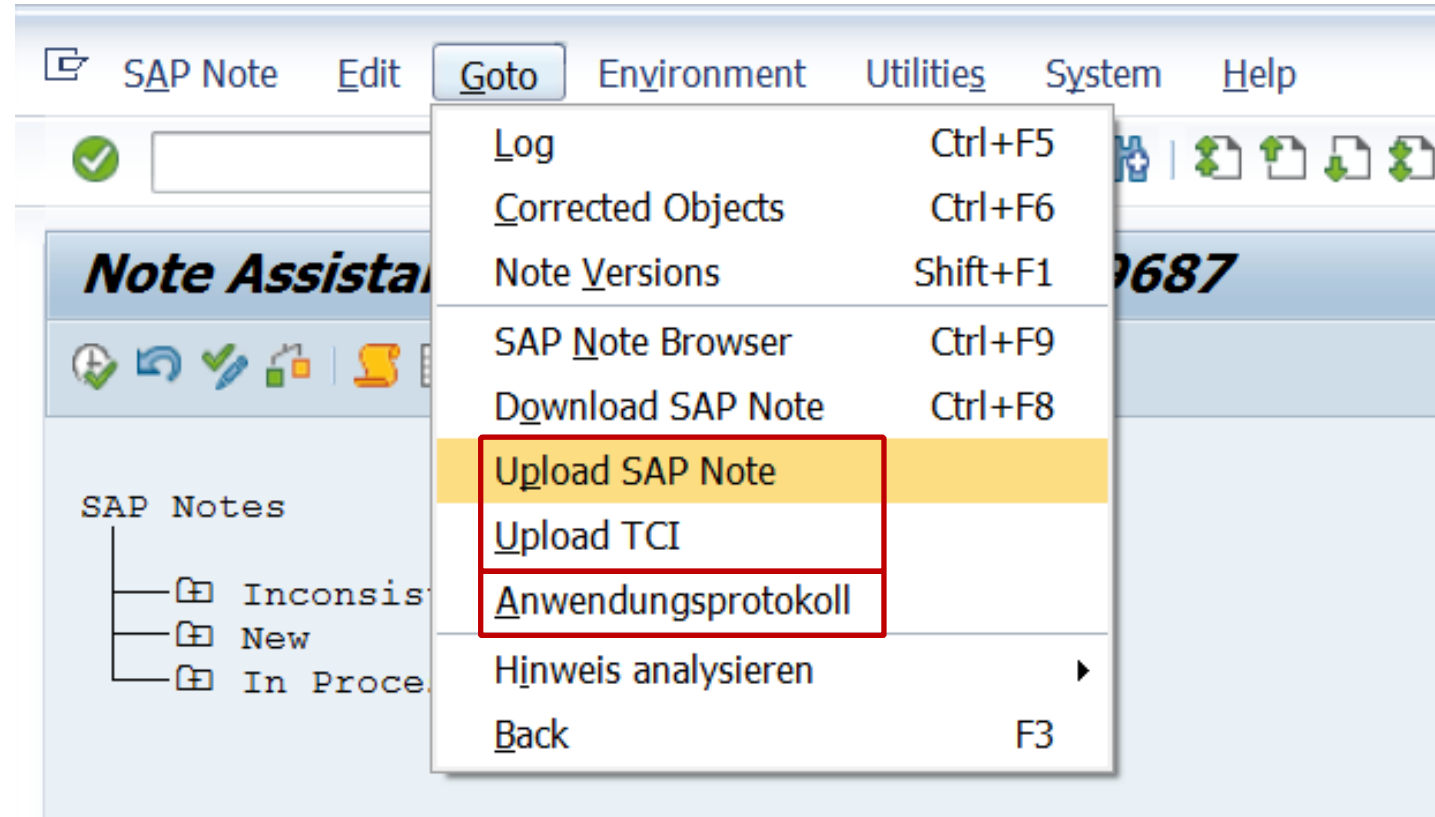
You should prepare transaction SNOTE to be able to upload such files.

- Implement notes ~~2518518~~ and 2408073, or
- update to the corresponding SAP_BASIS support package
- If you do not implement the notes or update the support package, you have to follow the process for every .SAR file as described for old releases below 7.00 (which do not verify digital signatures).

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant

You should prepare transaction **SNOTE** to consume .SAR using function **“Upload SAP Note”** or **“Upload TCI”**.

(You use function “Download SAP Note” to load notes directly from SAP Support Portal via the SAPOSS connection. This is a different function which is not affected by the current patch.)



The new function “Application Log” points to new report SCWN_FAILED_DS_VERIFICATION
The report shows failed digital signature validations logs

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant

~~Implement note 2518518 first. Run the report SCWN NOTE_2408073 delivered with this note and then proceed with implementation of note 2408073.~~

Use the attached file 0002424539_00.SAR to test the verification of a digitally signed .SAR file. After uploading the file, check the log of note 2424539 in your worklist:

The screenshot shows two windows from the SAP Note Assistant. The left window, titled "Note Assistant: Worklist for User D019687", displays a list of notes. The note "0002424539 SAP Note Assistant: Test 1" is highlighted with a red box. The right window, titled "Note Assistant: Note Display", shows the details for note 2424539. The "Note Log 2424539" section contains a table with the following data:

Date	Time	M...	Text
12.09.2017	17:15:30	i	SCWN:098 0002424539 0005

If you are using another language than German you just see the message code SCWN 098 instead of a text.

Note 2408073 - Handling of Digitally Signed notes in SAP Note Assistant

Report `SCWN_FAILED_DS_VERIFICATION` might not work after installing the note. Re-run report `SCWN_NOTE_2408073` to solve the issue. Instead of using this report, you can use transaction `SLG1` for log object `CWBDS` instead, to show failed digital signature validations logs (if there are any).

Report `SCWN_DS_CLEAR_NOTE_FILE` can be used to delete temporary files if this is not done automatically. The temporary `.ZIP` files and `.SAR` for the notes and the temporary file `SIGNATURE.SMF` are located in folder `$(DIR_TRANS)/tmp`

Related topic:

Note 2178665 - Signature validation of archives with SAPCAR

Note 1634894 - SAPCAR: Signed Archive

Note 2520064 - Missing Authentication check in SAP Point of Sale Note 2528596 - Hard-coded Credentials in POS Store Manager

Security Spotlight News

Important Security Fix for SAP Point of Sales (POS) Retail Xpress Server - August 18, 2017

In IT-Security Conference (HITB GSEC conference, 24th August, 2017), there was a presentation on vulnerabilities affecting SAP Point of Sales (POS) Retail Xpress Server.

<http://gsec.hitb.org/sq2017/sessions/get-to-the-money-hacking-pos-and-pop-systems/>

SAP Point of Sales, Software Component XPRESSBU

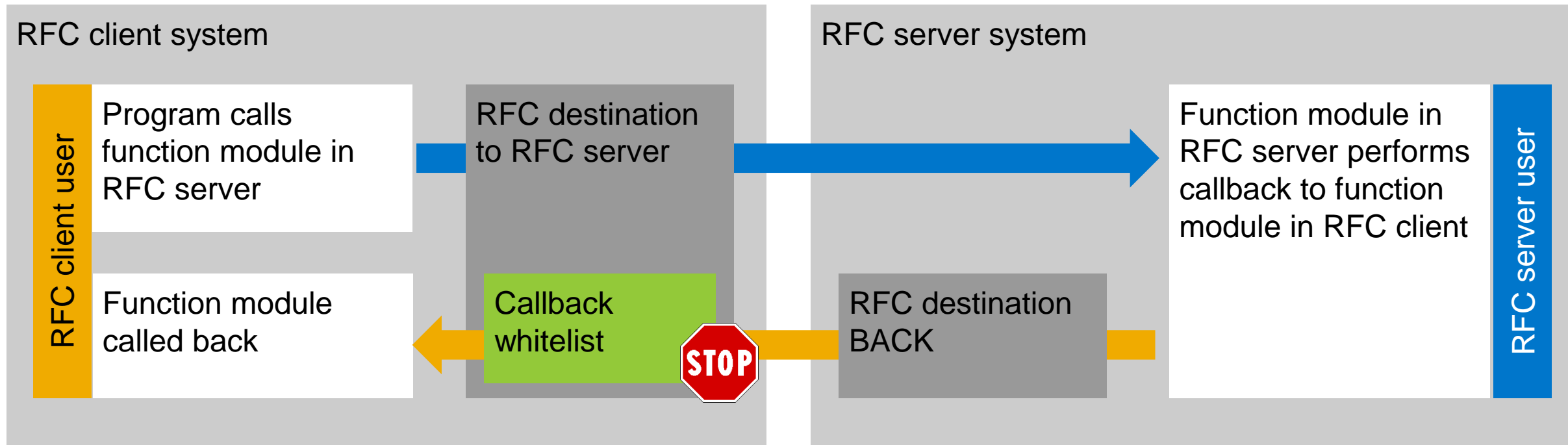
Note 2476601 with correction SAPPOS23_SP11_Build1171 had been replaced with

Note 2520064 containing SAPPOS22_Build1153 respective SAPPOS23SP11_Build1177

This note shows how to check the installed version, too.

Note 2528596 covers notes 2520232 and 2529966 and contains additional corrections.

Note 2483870 - RFC Callback whitelist check for destination BACK



Note 2483870 - RFC Callback whitelist check for destination BACK

Question: “Do I really need Kernel 7.45 patch 515 to secure RFC callback?”

Validity of note:

- Kernel releases 7.21, 7.22, 7.45, 7.49, 7.50, 7.51

Solution:

- Kernel 7.45 patch 515, 7.49 patch 221

The note solves a side effect (=bug) which was introduced with note 2463707.

Solution (and introduction of new bug) of this note 2463707:

- Kernel 7.45 patch 515, 7.49 patch 215
- **On Release 7.45 the solution is part of the same patch as the previously introduced bug → no issue**
- However, all Kernel versions before 7.45 patch 515 might be affected by the issue about internal RFC calls, which require RFC whitelist entries
- You log RFC callback using the Security Audit Log anyway → no issue (except that you might end up with some additional RFC whitelist entries which are not required in the future)

Note 2483870 - RFC Callback whitelist check for destination BACK Generate callback whitelist

Configuration of RFC Connections

Generate RFC Callback Positive Lists Activate Non-Empty Whitelists Positive List for Dynamic Connections

RFC callback check simulated

RFC Connections	Type	PL A...	Comment
▸ ABAP Connections	3		
▸ HTTP Connections to External Server	G		
▸ HTTP Connections to ABAP System	H		
▸ Internal Connections	I		
▸ TCP/IP Connections	T		
▸ Connections via ABAP Driver	X		

Transaction SM59

You can generate required whitelist entries using logged calls from the Security Audit Log messages DUI, DUJ, and DUK

Read Security Audit log entries from:

Date:

Time:

Generate Callback Positive Lists

Generate Positive List Generate and Activate Positive List

Destination	Called Function Modul...	Callback Function Module	Number
CCTP_01_...	RFC_TP	TRINT_PROGRESS_INDICATOR	136
CCTP_01_...	RFC_TP	TRINT_TP_UPDATE_TPSTAT	49

Note 2483870 - RFC Callback whitelist check for destination BACK Required whitelist entries

Note 2251931 - Runtime error CALLBACK_REJECTED_BY_WHITELIST in graphical Screen Painter (Transaction SE51 / SE80)

Destination EU_SCRP_WN32

Functions (generate them or add them manually):

RS_SCRP_GF_PROCESS* RFC_GET_FUNCTION_INTERFACE
RS_SCRP_GF_PROCESS* RS_SCRP_GF_*

Generate Callback Positive Lists

Destination	Called Function Module	Callback Function Module
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RFC_GET_FUNCTION_INTERFACE
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RBUILDINFO
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RELEMTABLE
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RICONS
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RKEYS
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RKEYTEXTS
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RMESSAGES
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RPROPTABLE
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RSTATUS_40
EU_SCRP_WN32	RS_SCRP_GF_PROCESS_640	RS_SCRP_GF_RTEXTS

Note 2133349 - Error RFC_CALLBACK_REJECTED when starting tp

Note 1686632 - Positive lists for RFC callback

Destinations CALLTP*, CCTP* and C_TP*

Functions (automatically generated as needed):

RFC_TP TRINT_PROGRESS_INDICATOR
RFC_TP TRINT_TP_UPDATE_TPSTAT

Generate Callback Positive Lists

Destination	Called Function Modul...	Callback Function Module
CCTP_01...	RFC_TP	TRINT_PROGRESS_INDICATOR
CCTP_01...	RFC_TP	TRINT_TP_UPDATE_TPSTAT

CAD Desktop might require RFC Callback, too:

https://help.sap.com/saphelp_erp60_sp/helpdata/en/f9/99c6535e601e4be10000000a174cb4/frameset.htm

Note 2507798 - Bypass of email verification in e-recruiting

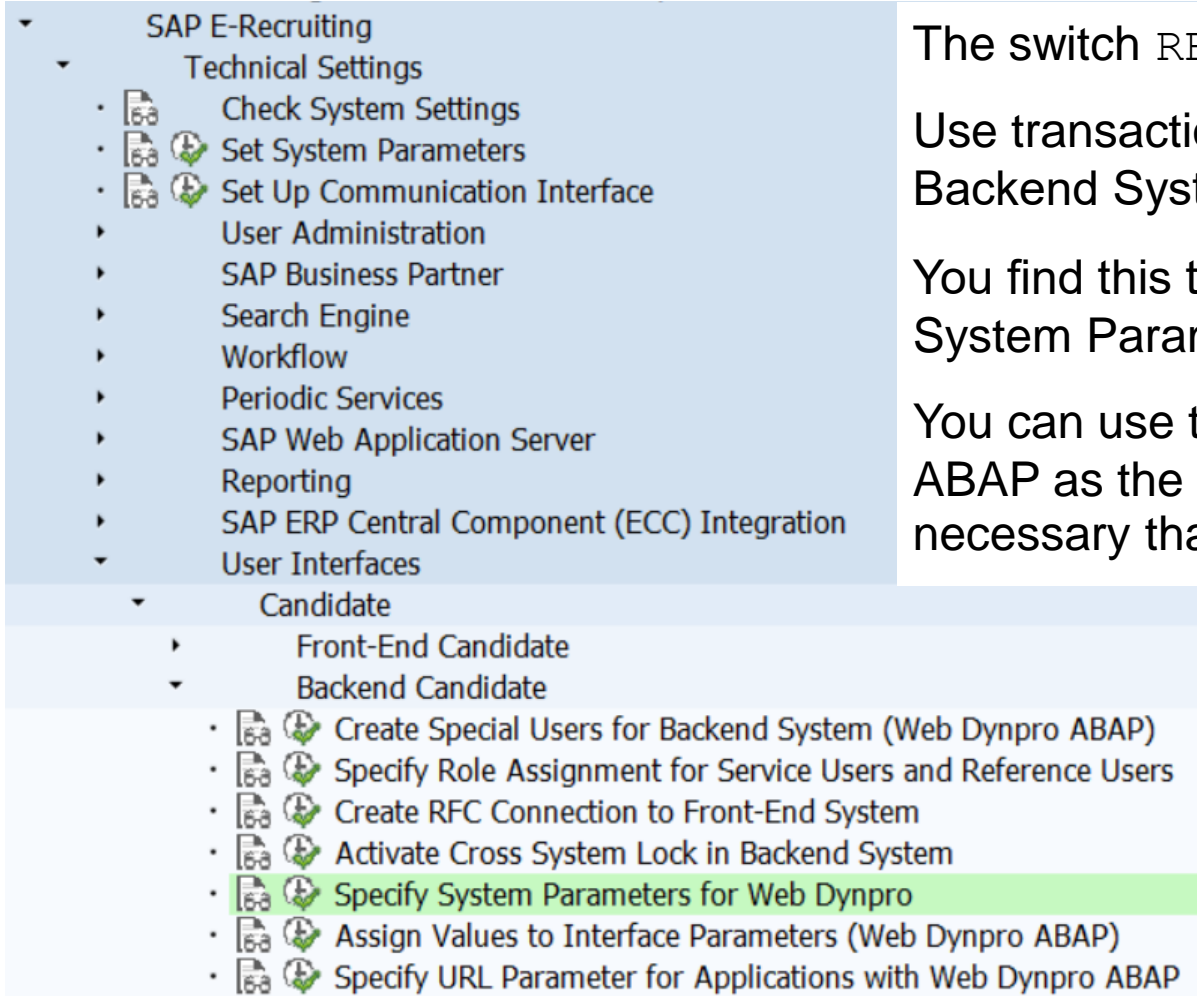
Important because

- **E-Recruiting is (of course) connected to the internet**
- **the exploit is described in the public, e.g. here:**
SEC Consult SA-20170912-0 :: Email verification bypass in SAP E-Recruiting
<http://seclists.org/fulldisclosure/2017/Sep/26>
SAP E-Recruiting bug could let you stop rivals poaching your people
http://www.theregister.co.uk/2017/09/13/sap_erecruiting_email_bug/

Relevant if

- **Switch `RECFA VERIF` is active which defines that applicants have to confirm their email addresses in order to be able to submit the application. This is the default setting.**

Note 2507798 - Bypass of email verification in e-recruiting



The switch `RECFA VERIF` is stored in customizing table `T77S0`

Use transaction `OO_HRRCF_WD_BL_CUST` “System Parameter Backend System” (or `SM30` for table `T77S0`) to view the settings

You find this transaction in the Implementation Guide at “Specify System Parameters for Web Dynpro”

You can use the verification process only if you use Web Dynpro ABAP as the interface technology for the candidate. Therefore it is necessary that the switch `RECFA WEBUI` is also set (default setting).

Note 2449011 - SUIM | Search for startable applications in roles

Use transaction SUIM respective report RSUSR_START_APPL to identify startable applications in roles:

- The roles and the generated profiles contain all of the start authorizations required for the application (S_TCODE, S_SERVICE, S_RFC, S_START, and authorizations as defined in transaction SE93)
- No application start lock in transactions SM01_DEV (global) and SM01_CUS (client).

Search for Startable Applications in Roles

System/Client: QM7 / 002
Date/Time: 02.08.2017 / 17:32:39
User: WIPPERMANN

Selection Criteria:
Role: I CP Z_TECHED2017*
Application Type: SAP Gateway Business Suite Enablement - Service
Application: I EQ FAR_CUSTOMER_LINE_ITEMS 0001
All Roles Regardless: X

Number of Startable Objects Found: 3
Number of Startable Objects Found: 1

Role	Application Type	Object/Application	Menu Option	Application...	Profile ...	Startable ...
Z_TECHED2017_ROLE_1	SAP Gateway Business ...	FAR_CUSTOMER_LINE_ITEMS ...	✓	✓	■	✓
Z_TECHED2017_ROLE_2	SAP Gateway Business ...	FAR_CUSTOMER_LINE_ITEMS ...	✓	✓	▲	✗
Z_TECHED2017_ROLE_3	SAP Gateway Business ...	FAR_CUSTOMER_LINE_ITEMS ...		✓	■	✓

Available as of SAP_BASIS 7.50

Note 2520885 - Logout function missing in SAP Best Practices Package Manager for Partner

This note is not relevant for any on-premise system → ignore it

References:

SV-RDS – Rapid Deployment Solutions

SV-RDS-PAK – Package Manager

Note 2041140 - Order SAP pre-assembled Best Practices solution software appliance as an SAP Partner

<https://blogs.sap.com/2017/05/15/partner-packaged-solutions-on-sap-best-practices-explorer-s4hana-and-beyond>

Component: SV-RDS-PAK

Priority: Correction with medium priority

Solution

Development team has provided the logout function

Software Components

Software Co...	From	To	And Subsequ...
----------------	------	----	----------------

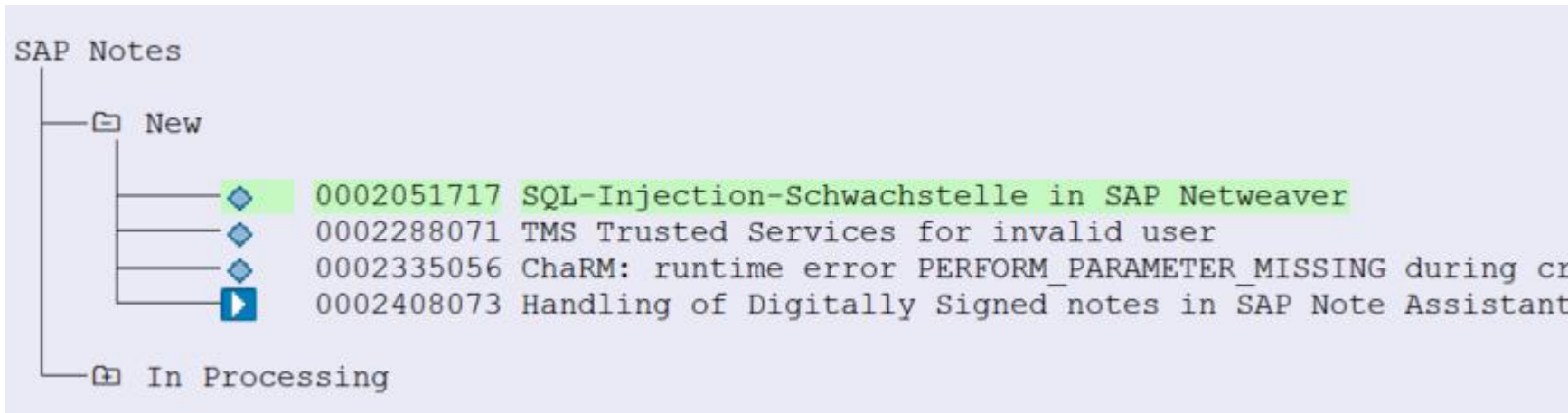
This document is not restricted to any software component

Note 2051717 - SQL-Injection-Schwachstelle in SAP Netweaver

Critical note which solves SQL injection via DBCON

Old correction form beginning of 2015 according to the assigned Support Packages

Published now, therefore transaction SNOTE shows it as “cannot be implemented”





August 2017

Topics August 2017



What's new in Configuration Validation on SolMan 7.2

What's new in System Recommendation

Note [2394536](#) - URL Redirection vulnerability in Knowledge Management and Collaboration and Web Page Composer

Note [2216306](#) - S_RFC check and profile parameter auth/rfc_authority_check

Note [2417020](#) - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver Business Client for HTML

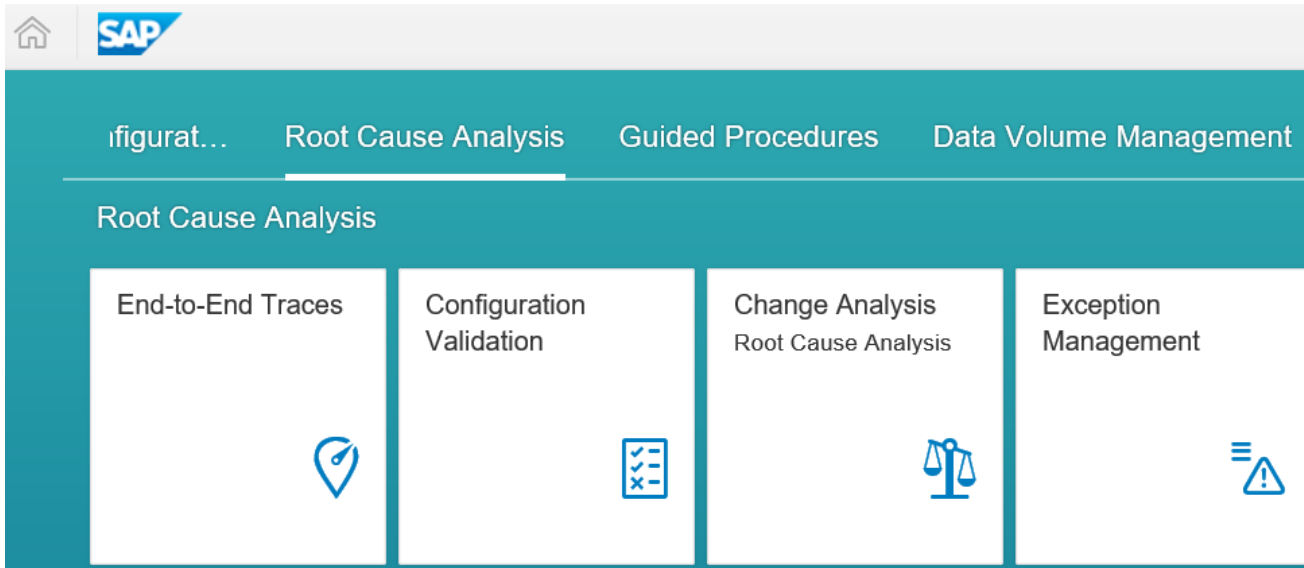
**Note [2024431](#) - TDDAT adjustment in customer landscape (reloaded)
Comparison of Table Authorization Group Assignment**

Note [2356982](#) - SE54 | Maintenance of table authorization groups

Note [1645260](#) - Extended maintenance of table authorization groups

What's new in Configuration Validation

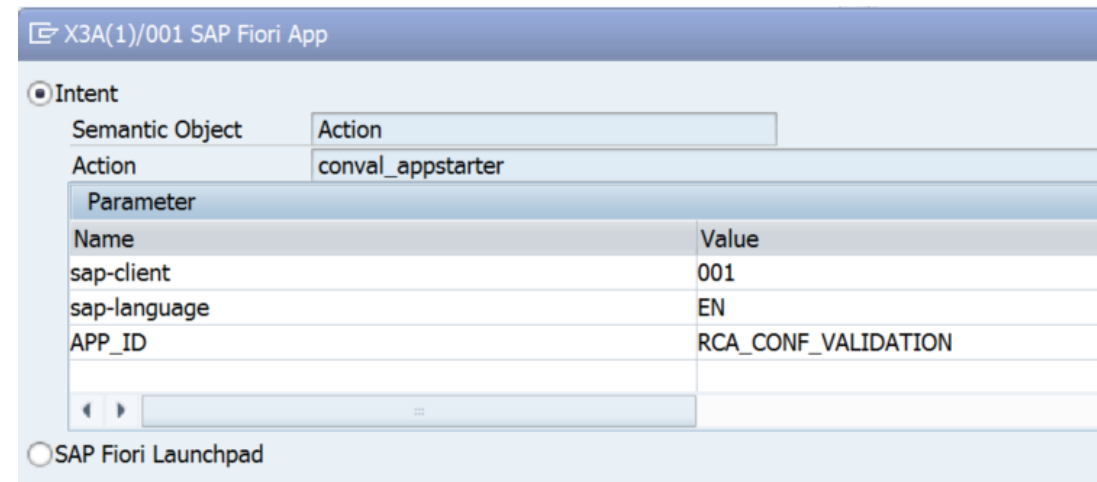
How to start it on SolMan 7.2



**SAP Fiori Launchpad
Tile Group “Root Cause Analysis”
sap-ui2-group: SMRootCauseAnalysis
which is part of role SAP_SMWORK_DIAG**

or add SAP Fiori App to the Easy Access Menu:

Semantic Object Action
Action conval_appstarter
Parameters:
APP_ID RCA_CONF_VALIDATION
sap-client 001
sap-language EN



https://<host>:<port>/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html#Action=conval_appstarter?sap-client=001&sap-language=EN&APP_ID=RCA_CONF_VALIDATION

What's new in Configuration Validation

SolMan 7.2 SP 3: More ABAP Configuration Stores

Transactions

LOCKED_TRANSACTIONS

Virus Scan Providers

VSCAN_GROUP

VSCAN_SERVER

ABAP Change Logs (*)

GLOBAL_CHANGE_LOG

COMPONENTS_CHANGE_LOG

NAMESPACES_CHANGE_LOG

AUTH_PROFILE_USER_CHANGE_DOC

(customizing possible, timestamps are extracted from

SAPUI5

SAPUI5_LIBS

SAPUI5_VERSION

System Timezone

SYSTEM_TIMEZONE

History	SCANGROUP	BADI_IMPL
1	MIME	

History	NAME	TYPE	SCANGROUP	STATUS	ASNAME	TRACELEVEL
1	VSA_LDAI1FBT	ADAPTER	MIME	ACTV	ldai1fbt_FBT_00	0
1	VSA_LDAI2FBT	ADAPTER	MIME	ACTV	ldai2fbt_FBT_00	0
1	VSA_LDCIFBT	ADAPTER	MIME	ACTV	ldcifbt_FBT_00	0
1	VSCAN_LDCIFBT	SERVER	MIME	ACTV	ldcifbt_FBT_00	0

TIMESTAMP	COMPONENT	PREVIOUS	AFTERWARDS	USER
2016/02/29 12:10:17	Repository and cross-client Cu	Not Modifiable	Modifiable	xxx
2016/02/29 12:08:10	Repository and cross-client Cu	Modifiable	Not Modifiable	xxx

TIMESTAMP	COMPONENT	PREVIOUS	AFTERWARDS	USER
2017/01/23 09:57:03	SAP_BASIS	Not Modifiable/ Not Enhanceable	Not Modifiable/ Enhanceable Only	xxx
2017/01/20 15:16:33	SAP_BASIS	Restricted Modifiability	Not Modifiable/ Not Enhanceable	xxx
2017/01/20 15:14:40	SAP_BASIS	Not Modifiable/ Enhanceable Only	Restricted Modifiability	xxx

TIMESTAMP	COMPONENT	PREVIOUS	AFTERWARDS	USER
2017/02/03 15:54:39	/UI5/	Modifiable	Not Modifiable	xxx
	/UI2/	Modifiable	Not Modifiable	xxx
	/1WDA/	Modifiable	Not Modifiable	xxx

TIMESTAMP	USER	ACTION	PROFILE	MODIFIED_BY
2017/02/02 17:05:18	TEST_WOC_114	ADDED	SAP_ALL	xxx
2017/02/02 11:33:09	NUPSTEST_119	ADDED	SAP_ALL	xxx
2017/01/31 12:50:02	I059571	ADDED	SAP_ALL	xxx
2017/01/26 15:30:13	MONTABERT	DELETED	SAP_ALL	xxx

*including integration into system monitoring and alerting

What's new in Configuration Validation

SolMan 7.1 SP 14 / 7.2 SP 3: CCDB SPML Java Extractor

The Diagnostic Agent can now read user and role data from the J2EE engine using SPML

Configuration stores:

```
sapGroupAllAssignedUsers:<group>
sapRoleAllAssignedUsers:<role>
sapRoleAssignedActions:<action>
sapUserProperties:<user>
```

Documentation how to setup SPML based extractors for CCDB:
[Configuration Validation Wiki](#)

Caution: You may need to repeat the configuration after a Support Package upgrade of the SAP Solution Manager

Target System : J_GUEST / Store Name : sapUserProperties:Guest

Comparison Store: [redacted] Change Find Find Next Replace with: [redacted]

Sel.	Operator	Parameter	Operator	Value Low
<input type="checkbox"/>	=	datasource	Ignore	PRIVATE_DATASOURCE
<input type="checkbox"/>	=	displayName	Ignore	Guest,
<input type="checkbox"/>	=	id	Ignore	USER.PRIVATE_DATASOURCE.un:Guest
<input type="checkbox"/>	=	isLocked	=	true
<input type="checkbox"/>	=	isPasswordChangeRequired	Ignore	true

Target System : J_ADMINS / Store Name : sapGroupAllAssignedUsers:Administ

Comparison Store: [redacted] Change Find Find Next Replace with: [redacted] in: All colu Replace

Sel.	ID	USER_L...	DISPLAY_NAME	DATASOURCE	VALID_UNTIL	IS_LOCKED	IS_SYSTEM_U...	IS_PASSWOR...
<input type="checkbox"/>	(=) USER.PRIVATE_DATASOURCE.un:Administrator	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)
<input type="checkbox"/>	(=) USER.PRIVATE_DATASOURCE.un:DEV SUPPORT	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)	(Ignore)
<input type="checkbox"/>	{Contains} USER.PRIVATE_DATASOURCE.un*	(Ignore)	(Ignore)	(Ignore)	(Is empty)	(Ignore)	(Ignore)	(Ignore)

Field Values and Operators

Apply Changes >

Field Role	Field Name	Operator	Value Low	Value High	Comparison Value	Field Compliance	Test Compliance
U	ID	Contains	USER.PRIVATE_DATASOURCE.un:*			No validation data	OK
T	USER_LOGON	Ignore				No validation data	OK
T	DISPLAY_NAME	Ignore				No validation data	OK
T	DATASOURCE	Ignore				No validation data	OK
T	VALID_UNTIL	Is empty				No validation data	OK
T	IS_LOCKED	Ignore				No validation data	OK
T	IS_SYSTEM_USER	Ignore				No validation data	OK
T	IS_PASSWORD_CHANG...	Ignore				No validation data	OK

What's new in Configuration Validation SolMan 7.2 SP 3: UI related features

Reporting directory

includes Bookmark now

Comparison Lists

Badi Implementation to build dynamic comparison list base on the BAdI enhancement `DIAGCV_ES1_SYSTEM_LIST`

For more information see note [2365039](#)

BI Reporting

Larger Strings in columns (up to 250 chars instead of 60 chars)

Report Execution Target System Maintenance Comparison List Maintenance Trend Analysis

Report Directory Reporting Templates Transport Reports Bookmarks

Select Report

Create New Display all Display custom reports Display predefined reports Display sin

Select	Group	Name	Description	User	Date
<input type="checkbox"/>	ANY_GROUP	BY BOOKMARK	From Bookmark	MUTH	18.11.2015

Comparison list

Cancel Save

Create

Name: NEW_LIST Dynamic

Description: New comparison list based on BAdI

Dynamic selection type

BAdI filter: MY_BADI_NAME

Parameter: JAVA

What's new in Configuration Validation

SolMan 7.2 SP 3: Send Configuration Validation reports via email

BW Information Broadcasting is no longer supported in SAP BW 7.40 (Note 2020590)

Conclusion: You cannot schedule broadcast notifications for the System Recommendations BW report in SAP Solution Manager 7.2 anymore

New reports to send Configuration Validation results via email:

Configuration Validation
DIAGCV_SEND_CONFIG_VALIDATION

System Recommendation Report
DIAGCV_SEND_SYSREC

Sends system recommendation results via configuration validation

Comparison list: FA7

Email recipients: rene.muth@sap.com

Email greeting: Dear Security Team,

Email body: these are the missing security notes calculated by Solution Manager...

Email ending: Yours Sincerely
Automated SysRec Sender

Email subject: System Recommendation Results

Compliance table header: Missing Security Notes

Attachment name: sysrec_attachment

Send to SAP inbox: -

Attach results to email: -

- Hotnews
- Security
- Performance
- Legal Change
- Correction
- Patch

Dear Security Team,

these are the missing security notes calculated by Solution Manager - System Recommendations.

Yours Sincerely
 Automated SysRec Sender

Missing Security Notes

Store Name	Landscape Key	Store Group Name	Compliance	Configuration Item	Configuration Value	Compliance Rule	Extraction Date
SYSTEM_RECOMMENDATIONS_NOTES	FA7_SM	SAP Notes	No	0050000756	SHORT_TEXT: Ready for Review FLAGS: Security THEMK: FI-AA RELEASE_DATE: 20160308 PRIORITY: Correction with high priority CATEGORY: Program error IMPL_STATUS: SYS_RECOM_STATUS: NEW VERSION: 0001 USER: LUANE AUTO_IMPL: MANU_IMPL: SUPP_NAME: SOFT_COMP: KERN_NOTE: SP_RELEV:	Exists 0050000756	17.12.2016 13:22:32

What's new in Configuration Validation

SolMan 7.2 SP 3: Send Configuration Validation reports via email

On SolMan 7.2 SP 3-4 you have to install following notes to get these reports:

Note [2427770](#) - Configuration Validation: Sending compliance results via email

Note [2401878](#) - ST7.20 SP03/04 Configuration Validation - Send mail with system recommendation results

On SolMan 7.2 SP 6-7 install following note, too:

Note [2639106](#) - Configuration Validation: Sending compliance results via email to several recipients fails

What's new in Configuration Validation SolMan 7.2 SP 5: Merge Target Systems

Report to merge several target systems into a new one:

DIAGCV_MERGE_TARGET_SYSTEMS

Usage:

Create several small target systems representing individual KPIs.

Use these target systems e.g. to create a Dashboard.

Merge these target systems into one for reporting.

Example: Merge the SAP Security Baseline target systems into one combined target system

Merge target systems into a new target system

Target systems for merge	BL_S-1	
New target system	MERGSYS1	
Target system description	MERGSYS1 – Combined from baseline template	



Select Target System			Config. Stores of Target System:MERGSYS1			
SID	Description	Del.	Store Name	Type	Group	Instance Type
MERGSYS1	MERGSYS1 based on target sytems BL-S-1 to BL-S-6		ABAP_INSTANCE_PAHI	PROPERTY	INSTANCE	CENTRAL
			AUTH_COMB_CHECK_USER	TABLE	USER-AUTHORIZATION	
			CLIENTS	TABLE	SYSTEM-CHANGE-O...	
			GLOBAL	PROPERTY	SYSTEM-CHANGE-O...	
			TDDAT	TABLE	ABAP-SECURITY	
			USER_PASSWD_HASH_USAGE	TABLE	ABAP-SECURITY	
			com.sap.security.core.ume.service	PROPERTY	SERVICES	DIALOG
			com.sap.security.core.ume.service	PROPERTY	SERVICES	
			http	PROPERTY	SERVICES	DIALOG
			http	PROPERTY	SERVICES	
			servlet_jsp	PROPERTY	SERVICES	

What's new in Configuration Validation

SolMan 7.2 SP 5: New key operator for table stores: regex

New key operator (regex) for table stores

Example: Configuration Store STANDARD_USERS:

The simplified check rules for user TMSADM which identify entries in other clients than client 000 uses the simple regular expression

`[1-9][0-9][0-9] | 0[1-9][0-9] | 0[0-9][1-9]`

The result is 'compliant' if...

- a) PASSWORD_STATUS=CHANGED and LOCKED=X or
- b) the user does not exist

CLIENT	USER	PASSWORD_STATUS	EXISTS	LOCKED
(=) 000	(=) TMSADM	(=) CHANGED	(=) X	(Not equal) X
(Contains) 002	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 002*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 003	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 003*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 004	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 004*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 005	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 005*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 006	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 006*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 007	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 007*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 008	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 008*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 009	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 009*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 01*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 01**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 02*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 02**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 03*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 03**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 04*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 04**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 05*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 05**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 06*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 06**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X
(Contains) 07*	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
(Contains) 07**	(=) TMSADM	(=) CHANGED	(Ignore)	(=) X

Target System : BL_O-1b / Store Name : STANDARD_USERS

Comparison Store: SAP / 5427FE(Change | Find: Find Find Next Replace with:

S...	CLIENT	USER	PASSWORD_STATUS	EXISTS	LOCKED
<input type="checkbox"/>	(=) 000	(=) TMSADM	(=) CHANGED	(=) X	(Not equal) X
<input type="checkbox"/>	(Regex) [1-9][0-9][0-9] 0[1-9][0-9] 0[0-9][1-9]	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
<input type="checkbox"/>	(Regex) [1-9][0-9][0-9] 0[1-9][0-9] 0[0-9][1-9]a	(=) TMSADM	(=) CHANGED	(=) X	(=) X

Target System : BL_O-1b / Store Name : STANDARD_USERS

Comparison Store: SAP / 5427FE< Change Find: Find Find Next Replace with:



S...	CLIENT	USER	PASSWORD_STATUS	EXISTS	LOCKED
<input type="checkbox"/>	(=) 000	(=) TMSADM	(=) CHANGED	(=) X	(Not equal) X
<input type="checkbox"/>	(Regex) [1-9][0-9][0-9]0[1-9][0-9]0[0-9][1-9]	(=) TMSADM	(Ignore)	(Not equal) X	(Ignore)
<input type="checkbox"/>	(Regex) [1-9][0-9][0-9]0[1-9][0-9]0[0-9][1-9]a	(=) TMSADM	(=) CHANGED	(=) X	(=) X

What's new in Configuration Validation

SolMan 7.2 SP 5: New Configuration Stores and Fields

New Configuration Store

History	PARAMETER	VALUE
	icm/server_port_0	PROT=HTTP, PORT=50000, PROCTIMEOUT=300, TIMEOUT=300
	icm/server_port_1	PROT=HTTPS, PORT=44300, PROCTIMEOUT=300, TIMEOUT=300
	icm/server_port_2	PROT=SMTP, PORT=25000, PROCTIMEOUT=300, TIMEOUT=300
	icm/server_port_3	
	icm/server_port_4	
	icm/server_port_ALL	{PROT=HTTP, PORT=50000, PROCTIMEOUT=300, TIMEOUT=300}{PROT=HTTPS, PORT=44300, PROCTIMEOUT=300, TIMEOUT=300}{PROT=SMTP, PORT=25000, PROCTIMEOUT=300, TIMEOUT=300}{}{}

ist

New Field TRAIL_TYPE in Configuration Store AUDIT_POLICIES (HANA) with values TABLE | SYSLOG | CSV



History	AUDIT_POLICY_NAME	AUDIT_POLICY_OID	EVENT_ACTION	TRAIL_TYPE
5	SAPDLM Audit - Change System Configuration	499099	SYSTEM CONFIGURATION CHANGE	SYSLOG
5	SAPDLM Audit - Create or Drop Role	499101	CREATE ROLE	TABLE
5			DROP ROLE	TABLE
3	SAPDLM Audit - Execution of Procedure 001_dlm_start_procedure	2283841	EXECUTE	TABLE

What's new in Configuration Validation

SolMan 7.2 SP 5: New Configuration Stores and Fields

New Configuration Store (ABAP): Count of users per security policy



SECURITY_POLICY_USAGE

History	 SECURITY_POLICY	USER_COUNT
 31		2002
	EMERGENCY	1
	DDIC	1

New Field RFCTCDCHK for Configuration Store RFCSYSACL

Use this field to check if the transaction flag is active for Trusted RFC definitions.

See note [2413716](#) - Setup of Trusted RFC in GRC Access Control EAM

 RFCSYSID	 TLICENSE_NR	RFCTRUSTSY	RFCDEST	RFCTCDCHK	RFCSNC	RFCSLOPT
FQ7	0020270862	FA7	SM_FQ7_TRUSTED_BACK		X	
FT7		FA7	SM_FT7_TRUSTED_BACK		X	
HF2		FA7	CWBADM_HF2_200		X	2

What's new in Configuration Validation

SolMan 7.2 SP 5: New Configuration Stores for HANA XSA

The new Store Group **XSA_STOREGROUP** contains several Configuration Stores about the HANA XSA application configuration

Store Path	Store Name	Group Name
auditlog-broker	brokeruser	XSA_STOREGROUP
	serviceurl	XSA_STOREGROUP
auditlog-odata	DEPLOY_ATTRIBUTES	XSA_STOREGROUP
	MTA_METADATA	XSA_STOREGROUP
	MTA_MODULE_METADATA	XSA_STOREGROUP
	MTA_MODULE_PROVIDED_DEPENDENCIES	XSA_STOREGROUP
	MTA_SERVICES	XSA_STOREGROUP
	TARGET_RUNTIME	XSA_STOREGROUP
auditlog-ui	DEPLOY_ATTRIBUTES	XSA_STOREGROUP
	MTA_METADATA	XSA_STOREGROUP
	MTA_MODULE_METADATA	XSA_STOREGROUP
	MTA_MODULE_PROVIDED_DEPENDENCIES	XSA_STOREGROUP
	MTA_SERVICES	XSA_STOREGROUP
	destinations	XSA_STOREGROUP
component-registry-db	DEPLOY_ATTRIBUTES	XSA_STOREGROUP
	DEPLOY_ID	XSA_STOREGROUP
	MTA_METADATA	XSA_STOREGROUP
	MTA_MODULE_METADATA	XSA_STOREGROUP
	MTA_MODULE_PROVIDED_DEPENDENCIES	XSA_STOREGROUP
	MTA_SERVICES	XSA_STOREGROUP

What's new in Configuration Validation SolMan 7.2 SP 5: Miscellaneous

Navigation within Validation to Trend Analysis (Items, Roles, and Query showing latest data)

Configuration Validation - Trend - # of Non Compl. Items

Configuration Validation - Number of Non compliant Items

BL_O_2_ALL_ABAP; BL_O-2 VIRTUAL; A24 0020137840, AHN 0020270862, BE3 SAP-INTERN, BE6 SAP-INTERN, E73 0020187823

System	Client	ConfigStore	Week	05.2017	Trend
A24 0020137840	001	AUTH_PROFILE_U	Goto	Configuration Validation (Trend) - Items	
	300	AUTH_PROFILE_U			
AHN 0020270862	504	AUTH_PROFILE_U	Query Properties	Configuration Validation (Trend) - Latest	
BE3 SAP-INTERN	#	AUTH_PROFILE_U		0	→
BE6 SAP-INTERN	001	AUTH_PROFILE_USER		0	→
E73 0020187823	001	AUTH_PROFILE_USER		0	→

Interactive search help
in CCDB Administration
and Configuration

The screenshot shows the 'Configuration' tab in the SAP interface. It features a 'Filters' section with dropdown menus for 'Landscape Filters', 'Store Group Filters', and 'Store Filters'. A search help window is open, displaying a list of configuration objects under the 'Name' field, including 'ABAP_J' and 'ABAP_INSTANCE_PAHI'. The search help window also includes a 'More Values...' link.

Validation: Additional search indexes to improve performance
for Configuration Stores with more than 4 key fields

What's new in Configuration Validation SolMan 7.2 SP 5: Dashboard Builder Integration

New interfaces to Dashboard Builder

Trend Analysis based on various queries:

Overview:

0SMD_CVA2_TR_SYSTEMS_DSH

Details:

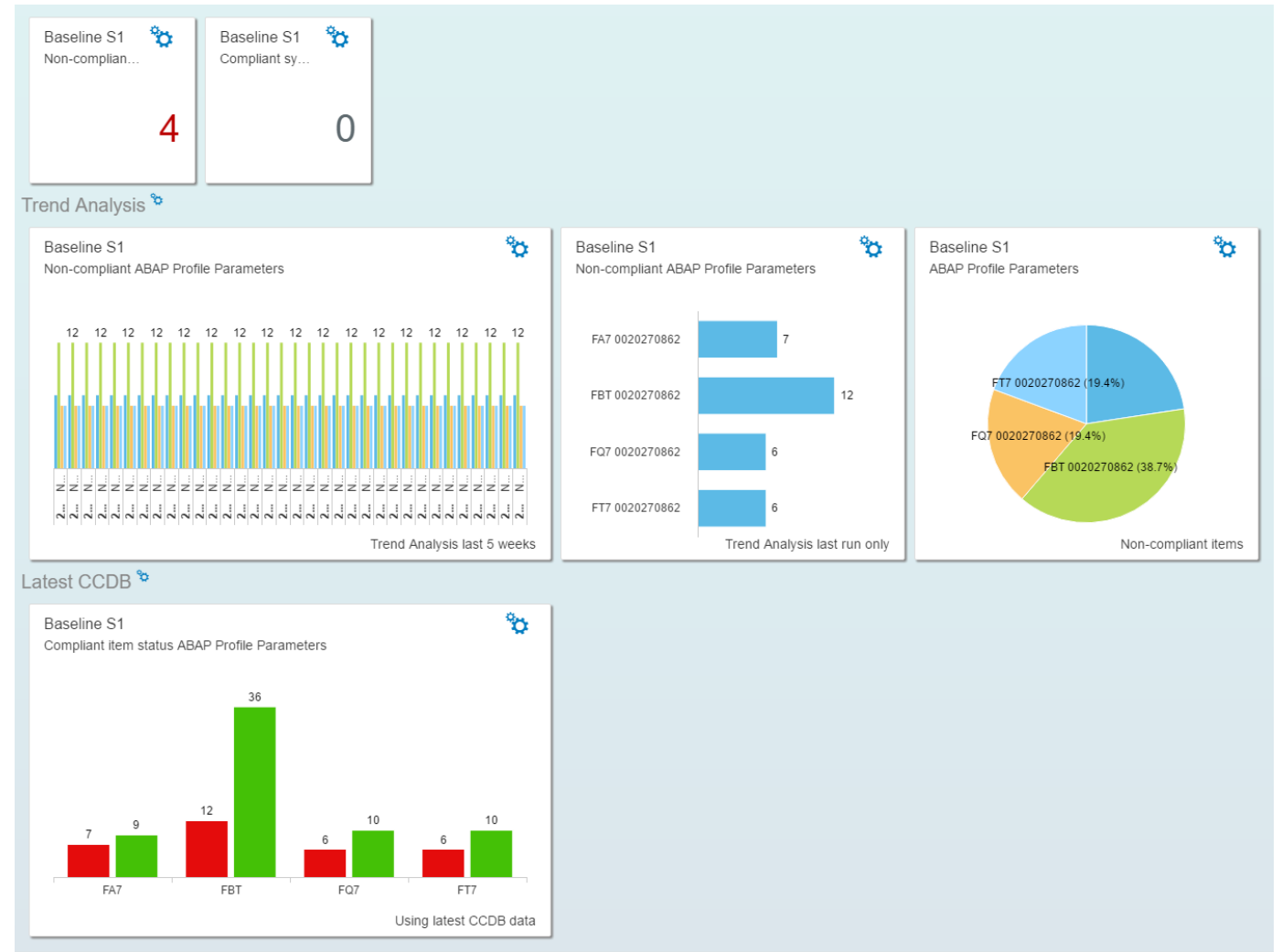
0SMD_CVA2_TR_ITEMS_DSH

Last results:

0SMD_CVA2_TR_NC_ITEMS_LAST_DSH

Configuration Validation based on function

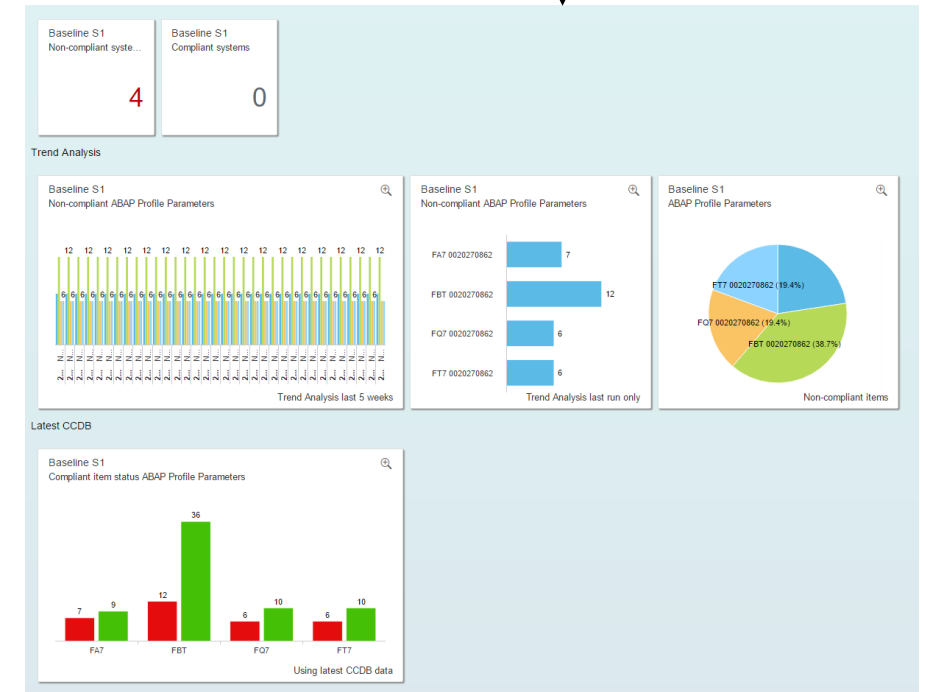
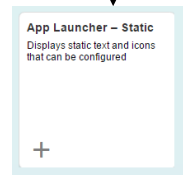
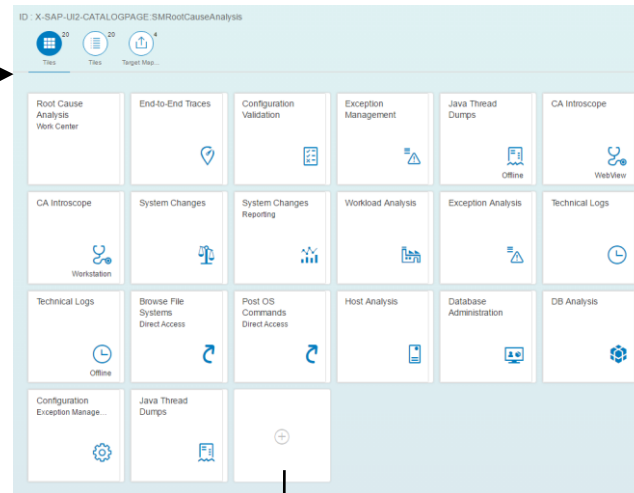
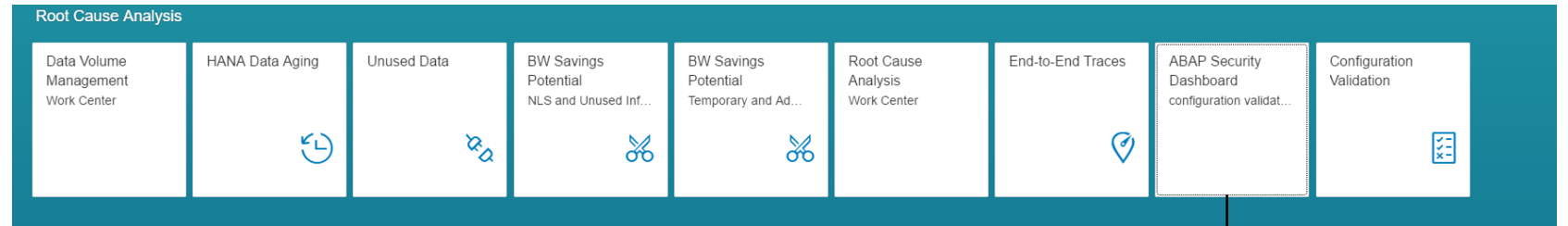
DIAGCPL_CV_DSH



What's new in Configuration Validation SolMan 7.2 SP 5: Dashboard Builder Integration

Dashboard Tile

Via Launchpad Designer and “App Launcher static” a tile could be added to the launchpad to start directly the configuration validation dashboard from there



What's new in Configuration Validation

SolMan 7.2 SP 5: Dashboard Builder Integration

Online Help: Dashboard Builder

<https://help.sap.com/viewer/82f6dd44db4e4518aad4dfce00116fcf/7.2.05/en-US/d0c91556d22c0033e10000000a44538d.html>

Blog: SAP Solution Manager 7.2 – Dashboard Builder

<https://blogs.sap.com/2017/02/28/sap-solution-manager-7.2-dashboard-builder/>

Blog: SAP Solution Manager 7.2 – Dashboard Builder configuration

<https://blogs.sap.com/2017/05/16/sap-solution-manager-7.2-dashboard-builder-configuration/>

KPI Catalog

<https://go.support.sap.com/kpicatalog>

SAP Security Baseline Template Version 1.9 (including ConfigVal Package version 1.9_CV-4)

https://support.sap.com/content/dam/support/en_us/library/ssp/offerings-and-programs/support-services/sap-security-optimization-services-portfolio/Security_Baseline_Template.zip

What's new in System Recommendation

If a Software Components are not part of ABAP/JAVA/HANA systems in SLD/LMDB you do not find corresponding notes in System Recommendation.

Special Software Components:

BC-FES-GUI	added to all ABAP systems as a virtual software component of type 'Support Package Independent' as of May 2017
CRYPTOLIB 8 SP000	added to ABAP and JAVA systems as a virtual software component as of July 2017
SAPHOSTAGENT	not covered yet

Note 2394536 - URL Redirection vulnerability in Knowledge Management and Collaboration and Web Page Composer

“Solution: The fix is provided in patches for KMC-CM and KMC-WPC components.

The portal has to be restarted after deploying the patches, and all XMLForms projects have to be regenerated.”

➤ Note 2342421 - How to Regenerate XML Form Projects

- 1. Access the xfbuilder by Navigating to Content Management → Forms Builder**
- 2. Once the XML Forms builder application has loaded go to 'File → Open Project'
Note - Here, you should see a list of the projects available in this portal environment**
- 3. Select the project you wish to regenerate and click 'open'**
- 4. Once the project is loaded you will see a folder icon in the top toolbar - hovering the mouse over this icon will display the tooltip 'Generate Project'**
- 5. Click this button to regenerate the project**
- 6. Once the regeneration is complete you should see the message 'Project has been successfully generated' displayed along the base of the window**

Note 2216306 - S_RFC check and profile parameter auth/rfc_authority_check

By default you do not need authentication and no authorization to call one of the RFC enabled function of function group SRFC:

RFC_PING

RFC_SYSTEM_INFO

shows release info

RFC_GET_LOCAL_DESTINATIONS

RFC_GET_LOCAL_SERVERS

RFC_PUT_CODEPAGE

SYSTEM_FINISH_ATTACH_GUI

SYSTEM_INVISIBLE_GUI

SYSTEM_PREPARE_ATTACH_GUI

SYSTEM_RFC_VERSION_3_INIT

The note recommends to close down some of these functions:

“We recommend the use of the value 6 [for profile parameter auth/rfc_authority_check] after the definition of the required authorizations for all users that use RFC across system borders.”

Note 2216306 - S_RFC check and profile parameter auth/rfc_authority_check

If you change profile parameter auth/rfc_authority_check, you have to analyze which roles require additional authorizations for S_RFC. In case of values 2, 4, 6, or 9 you may have to add authorizations for S_RFC FUGR SRFC respective for S_RFC FUNC <list of required functions of function group SRFC>

0 = No authorization check

1 = (default) Authorization check active (no check for same user; no check for same user context and SRFC-FUGR)

2 = Authorization check active (no check for SRFC-FUGR)

3 = Logon required for all function modules except RFC_PING and RFC_SYSTEM_INFO (no authorization check)

4 = Authorization check required for all function modules except RFC_PING and RFC_SYSTEM_INFO

5 = Logon required for all function modules except RFC_PING (no authorization check)

6 = Authorization check required for all function modules except RFC_PING

8 = Logon required for all function modules (no authorization check)

9 = Authorization check active (SRFC-FUGR also checked)

Note 2216306 - S_RFC check and profile parameter auth/rfc_authority_check

Several SAP standard roles need to be updated adding authorizations for S_RFC, too:

Role	Required functions
SAP_BC_BGRFC_SUPERVISOR	...
SAP_BI_CALLBACK	...
SAP_SOLMAN_BI_READ	...
SAP_SOLMAN_READ	...
SAP_SOLMAN_READ_702	...
SAP_SOLMAN_TMW	...
SAP_SECURITY_OPTIMIZATION	RFC_PING RFC_SYSTEM_INFO (see note <u>696478</u>)

To define roles you should list function names using S_RFC with FUNC instead of groups using S_RFC with FUGR

You can use the Workload Statistics (Transaction ST03N) → RFC Server Profile or transaction STRFTRACE to verify if these functions are used in RFC scenarios (or you use report ZRFC_STATRECS_SUMMARY).

Note 2216306 - S_RFC check and profile parameter auth/rfc_authority_check

Workload Statistics (Transaction ST03N) → RFC Server Profile shows a cross-client list of users (but not the client) who might need additional authorizations

Workload in System X3A

Instance: mo-c81a86caf_X3A_01
 Period: 08/2017
 Task type: NONE

First record: 01.08.2017 00:00:00
 Last record: 16.08.2017 23:59:59
 Time period: 16 Day(s) 00:00:00

Function Mod... Transactions User Remote Destinations Remote Server Local Server

RFC Server Statistics:Function Module

Function Module (Started over RFC)	# Calls	T Execution Ti...	Ø Time/RFC	T Time	Ø Time/RFC	Send Data	Received Data(Byte...
RFC_SYSTEM_INFO	8	0	0,5	0	5,8	6.910	1.220

calls of Function Modules RFC_SYSTEM_INFO

Trans/Rep.	Job Name	User	RFC Destination	RFC User	RFC Caller	Local Server Name	Remote Server Name
/BDL/SAPLBDL11		SMB_NA1	SM_X3ACLNT001_BACK	D049399		mo-c81a86caf_X3A_01	mo-836a1fa39_NA1_01
/SDF/IS_PROXY		SMDAGENT_X3A	mo-c81a86caf_X3A_01			mo-c81a86caf_X3A_01	mo-c81a86caf

Note 2216306 - S_RFC check and profile parameter auth/rfc_authority_check

Transaction STRFCTRACE or report ZRFC_STATRECS_SUMMARY show a cross-client list of users including available respective missing authorizations for S_RFC

1. User has authorizations for S_RFC FUNC
2. User does not need authorizations for S_RFC
3. User has no authorizations for S_RFC
4. User has critical authorizations for S_RFC *
5. User has authorizations for S_RFC FUGR


Record	Date	Clie	Account	User type	Userid	Target	Remote instance	RFC Function	Gro	Authorizations	Σ # Calls
SV	01.06.2017	001	SMB_NA1	B System	D049399	SM_X3ACLNT001_BACK	mo-1ddad0fe9_NA1_01	RFC_SYSTEM_INFO	SRFC	RFC_SYSTEM_INFO	1 4
SV	01.06.2017	001	SMB_XS2	B System	D049399	SM_X3ACLNT001_BACK	mo-1ea744416_XS2_00	RFC_SYSTEM_INFO	SRFC	RFC_SYSTEM_INFO	3
SV	01.06.2017	000	SMDAGENT_X3A	B System		mo-c81a86caf_X3A_01	mo-c81a86caf.mo.sap.corp	RFC_SYSTEM_INFO	SRFC	STOP *	12
SV	01.06.2017	001	BGRFC_SUSR	S Service	SOLMAN_BTC	BGRFC_SUPERVISOR	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	⚠	1
SV	01.06.2017	000	SAPSYS		SOLMAN_BTC	SM_X3ACLNT000_TRUSTED	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC		1
SV	01.06.2017	000	SAPSYS		SOLMAN_BTC	SM_X3ACLNT001_TRUSTED	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC		2 1
SV	01.06.2017	000	SAPSYS		SOLMAN_BTC	TRUSTING@X3A_X3A_0020230702	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC		1
SV	01.06.2017	000	SAP_WSRT	B System	SOLMAN_BTC	WS_SRV_SAP_WSRT000	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	⚠	3 1
SV	01.06.2017	000	TMSADM	B System	SOLMAN_BTC	TMSADM@X3A.DOMAIN_X3A	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	⚠	1
SV	01.06.2017	001	D019687	A Dialog	D019687	NONE	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	STOP *	4 87
SV	01.06.2017	001	D019687	A Dialog	D019687	X3ACLNT001	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	STOP *	1
SV	01.06.2017	001	SM_BW_ACT	B System	SM_BW_ACT	X3ACLNT001	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	SRFC	5 1
SV	01.06.2017	001	BI_CALLBACK	B System	SOLMAN_BTC	SM_X3ACLNT001_CALLBACK	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	SRFC	1
SV	01.06.2017	001	SMB_X3A	B System	SOLMAN_BTC	SM_X3ACLNT001_BACK	mo-c81a86caf_X3A_01	RFC_SYSTEM_INFO	SRFC	RFC_SYSTEM_INFO	1



Note 2417020 - Cross-Site Scripting (XSS) vulnerability in SAP NetWeaver Business Client for HTML

No change?


No change by this note, however, several prerequisite notes are listed → important is that the (re)-implementation of note 2453955 - SAP NWBC ABAP Runtime Patch 58 gets triggered.


→ If you are using the SAP NetWeaver Business Client than go for periodic maintenance activities concerning SAP NWBC ABAP Runtime:

Standard *  Hide Filter Bar Clear Restore Filters Go

Search Term
  

Components (Start with)

Fuzzy Threshold
 

Components (Exact)
 

```
*&-----  
*& CLASS LCL_NWBC_URL_HANDLER IMPLEMENTATION  
*&-----  
...  
    et_post_parameter      = et_post_parameter ).  
  
    if ev_url cs 'javascript:'.  
*>>> START OF DELETION <<<<<  
        raise exception type /ui2/cx_nwbc  
*>>> END OF DELETION <<<<<<<  
  
*>>> START OF INSERTION <<<<<  
        "Don't allow any URL that might perform JavaScript  
        raise exception type /ui2/cx_nwbc  
*>>> END OF INSERTION <<<<<<<
```

```
*&-----  
*& Object          METH CL_NWBC_HTML_BASE  
*&                 RENDER_REDIRECT_2_EXTERNAL_APP  
*& Object Header   CLAS CL_NWBC_HTML_BASE  
*&-----  
...  
    method render_redirect_2_external_app.  
  
    "This is a hook for note 2453955!  
*>>> START OF DELETION <<<<<  
  
*>>> END OF DELETION <<<<<<<  
  
*>>> START OF INSERTION <<<<<  
    "The fish took the bite!  
*>>> END OF INSERTION <<<<<<<
```


Note 2024431 - TDDAT adjustment in customer landscape (reloaded)

Comparison of Table Authorization Group Assignment

As part of standard corrections using SAP Notes or Support Packages, adjustments to table authorization group assignments were delivered.

However, it is not possible for SAP to change existing table entries by means of a Support Package.

The report `TDDAT_COMPARE` compares the table authorization group assignments delivered by SAP by means of Support Packages with the data in your system.

In addition to the comparison state, the result list displays the relevant SAP Note number and the corresponding application component. We recommend that you use this report after importing a Support Package to check the table authorization group assignment.

Status	Object Name	Short Description	Authoriz.	Authoriz.	SAP Note	SAP group	Appl. Component
≠	SCPRSTRANSP	Switch BC Sets: Transport Recording Tables	B0SD	SBCA	865234	SCPR	BC-CUS-TOL-BCD
≠	USH02	Change history for logon data	SC	SPWD	1484692	SUSR_KRN	BC-SEC-LGN
≠	USR02	Logon Data (Kernel-Side Use)	SC	SPWD		SUSR_KRN	BC-SEC-LGN
≠	USRPWDHISTORY	Password History	SC	SPWD		SUSR_KRN	BC-SEC-LGN
≠	VUSER001	Generierte Tabelle zu einem View	SC	SPWD		SUSR	BC-SEC-USR-ADM
≠	ECCUST_ET	Customizing Table for External Test Tools	&NC&	ECCU	1896642	SECATT_DDIC	BC-TWB-TST-ECA

Note 2024431 - TDDAT adjustment in customer landscape (reloaded) Comparison of Table Authorization Group Assignment

Get updates regularly and then execute report TDDAT_COMPARE again:

Note 2383438 - TDDAT_COMPARE | Enhancement of comparison list (Oct. 2016)
Update of Table Authorization Group Assignments

Note 2290977 - TDDAT_COMPARE | Enhancement of comparison list (March 2016)
Update of Table Authorization Group Assignments

Note 2273583 - TDDAT_COMPARE | Error in database update
Correction

Note 2079497 - Table authorization group assignment in user and authorization management (Nov. 2015)
Update of Table Authorization Group Assignments

Note 2024431 - TDDAT adjustment in customer landscape (July 2015)
Framework and Update of Table Authorization Group Assignments

(Older notes are prerequisites of newer notes → it's sufficient to implement the newest note.)

Note [2356982](#) - SE54 | Maintenance of table authorization groups

Note [1645260](#) - Extended maintenance of table authorization groups

When checking for authorizations in transactions like SE16, SM30, SM31, SM34 on the authorization object S_TABU_DIS, a table authorization group is checked for authorization to access tables or views.

Maintain client independent table authorization group definitions

➤ Transaction STBRG

Assign client independent table authorization group definitions

➤ Transaction STDDAT

Anyway: Go for S_TABU_NAM instead of S_TABU_DIS (see FAQ note [1434284](#))

Maintain Authorization Groups for Object S_TABU_DIS

Object Row Delete

Authorization Obj.: S_TABU_DIS
Authorization Field: DICBERCLS

Authorization Group	Description for Authorization Group	Client-specific	Package
SACF	Switchable Authorization Checks	<input type="checkbox"/>	SECU_ABAP
SAGRDIST	Role Distribution: Customizing	<input type="checkbox"/>	S_PROFGEN_DIST
SAL_CTEMP	Security Audit Log - Compressed Buffer	<input type="checkbox"/>	SECU
SAL_TEMP	Security Audit Log - Temporary Buffer	<input type="checkbox"/>	SECU
SCDO	Central Change Documents	<input type="checkbox"/>	SZD
SQGM	SM:QGM	<input type="checkbox"/>	AI_SOLAR_ROLES
SWHL	Tabular Positive Lists (Whitelists)	<input type="checkbox"/>	SECU_ABAP
&NC&	w/o auth. group	<input checked="" type="checkbox"/>	
/ASU	ASU Toolbox	<input checked="" type="checkbox"/>	
OSBC	Set Country Version	<input checked="" type="checkbox"/>	
AA	AM: Application Tab.	<input checked="" type="checkbox"/>	
AC	AM: User Control	<input checked="" type="checkbox"/>	
AISU	Cont. Pers. Assignm.	<input checked="" type="checkbox"/>	



July 2017

Topics July 2017



Notes about SAP ONE Support Launchpad

Transport-Based Correction Instructions (TCI)

Note 1920522 - Unauthorized modification of stored content in SCM-BAS-UIF

Note 2416119 - Improved security for outgoing HTTPS connections in SAP NetWeaver

Note 2442993 - Malicious SAP Host Agent Shutdown without Authentication

Note 2459319 - Weak encryption used in SAP Netweaver Data Orchestration Engine

Note 1854252 - Missing authorization-check in BC-SRV-ALV

Note 2252890 - User TMSADM_WF with standard password

Note 2285744 - TMS_UPDATE_PWD_OF_TMSADM_WF - password not allowed

Notes about SAP ONE Support Launchpad

Note 2371996 - SAP Security Notes app - SAP ONE Support Launchpad
<https://support.sap.com/securitynotes>

Note 2361791 - How to filter SAP Legal Change Notes, Security Notes and HotNews on SAP ONE Support Launchpad

Description how to filter the notes by systems in the tile 'SAP Security Notes', 'SAP HotNews', and 'SAP Legal Change Notes'. The system filter contents are maintained in the [System Data application](#). You need to mark systems in the System Data application as 'Favorite'.

Note 2388433 - Expert Search for SAP Notes & KBAs - SAP ONE Support Launchpad
<https://support.sap.com/notes> → Expert Search

Note 2348668 - How to activate a tile from the tile catalogue - ONE Support Launchpad
List of all Launchpad tiles currently available
<https://support.sap.com/support-programs-services/about/help-index/tile-overview.html>

Note 2416119 - Improved security for outgoing HTTPS connections in SAP NetWeaver

The property `UrlCheckServerCertificate` of the outgoing HTTP Provider service exists on Java systems only. It controls if the SSL certificate of the server gets validated by the client.

The property is maintained in the configtool, which can be found under `\usr\sap\<SID>\<Instance>\j2ee\configtool`, running the correct script in regards to the underlying OS.

Upon execution, in the GUI of the tool, from the left menu, navigate to `cluster-data → template-Usage_Type_All_in_One → services → http`

The property itself should be visible in the list on the right. Click on it at “set a custom Value” to set the value `true`.

It is strongly recommended to switch the value of the property to “true” even if you are not making any outgoing http(s) calls at present. Note that after enabling this property certain scenarios involving outgoing https calls to other resources will fail unless you have maintained proper and valid certificates for the requested resources in the client system’s keystore.

Note 2416119 - Improved security for outgoing HTTPS connections in SAP NetWeaver

How to find the property `UrlCheckServerCertificate` in Configuration Validation – just try it: Transaction CCDB

The screenshot shows the SAP NetWeaver Configuration Validation interface. At the top, there are tabs for 'Status', 'Exception', and 'Configuration'. Below these, there are sub-tabs for 'General', 'Technical Systems', and 'Cross Selection'. The 'Filters' section is active, displaying various filter categories:

- Landscape Filters:** Class: *
- Store Group Filters:** Component: *, Source: *, Name: *
- Store Filters:** Category: *, Type: *, Name: (with a copy icon)
- Status Filters:** Main State Type: *
- Technical Filters:** Store Id: (empty), Store Template Id: (empty), EFWK WLI-Id: (empty)
- Configuration Validation Filters:** Validation System List: (empty)
- Element Filters:** Element Pattern: `UrlCheckServerCertificate`

At the bottom, there are buttons for 'Clear', 'Display', and 'Display Elements'.

Transport-Based Correction Instructions (TCI)

This new method “Transport-Based Correction Instructions” (TCI) for shipping corrections is used in case of components which had published large updates regularly, e.g. the component for Unified Rendering. This way we can avoid long lists of prerequisite notes which had produced trouble regularly.

Wiki Page:

<https://wiki.scn.sap.com/wiki/x/eoWgGg>

SAP Note Transport-Based Correction Instructions

https://help.sap.com/saphelp_nw74/helpdata/en/d2/05d69422864604a487c67472cdd4ff/frameset.htm

SAP Note Transport-Based Correction Instructions

<https://help.sap.com/viewer/9d6aa238582042678952ab3b4aa5cc71/7.31.19/en-US/81a0376ed9b64194b8ecff6f02f32652.html>

SAP Notes: Introducing Transport-Based Correction Instructions (Recording)

https://service.sap.com/sap/bc/bsp/spn/esa_redirect/index.htm?gotocourse=X&courseid=70295008

Transport-Based Correction Instructions (TCI)

SAP Note transport-based correction instructions (TCI) have the following benefits compared to SAP Notes with correction instructions (CI):

- **Fast consumption of consolidated CIs**
- **Support of all transport-enabled SAP ABAP objects such as DDIC, Table Content, and MIME**
- **No adjustment activities during SP import and upgrade for SAP standard objects.**
- **Clear functional focus and less side-effects.**

Caution: When you have implemented a TCI, you can currently not deimplement it. To delete the TCI from the system, you must revert your system to the status it had before you implemented the TCI. This procedure necessarily requires a system backup.

Note [2187425](#) - Information about SAP Note Transport based Correction Instructions (TCI)

Note [1995550](#) - Enabling SNOTE for transport based correction instruction

Note [2345669](#) - Limitations/Known issues in TCI

Note [2347322](#) - Note Status of the TCI note is not shown correctly in the subsequent systems

Transport-Based Correction Instructions (TCI) Unified Rendering

Note [2090746](#) - Unified Rendering Notes - Which One To Apply - Instructions And Related Notes.

Example: Note [2493427](#) - Correction for Unified Rendering SAP_UI NW740 TCI 009

This note contains a TCI (=sar-file) which you can download at section “Correction Instruction” instead of a normal ABAP automatic correction instruction.

SAP Note [2187425](#) describes how to prepare your system and how this SAP Note can be used in the SAP Notes Assistant (transaction SNOTE) .

If your SP level is under SAPKB740SP12 SAP_UI , please upgrade your SP version first.

Prerequisite:

SPAM needs to be updated to SPAM version 63.

Additional SPAM authorization required, see new roles SAP_OCS_STD and SAP_OCS_TCI_IMPORT

Note 1920522 - Unauthorized modification of stored content in SCM

The screenshot shows the SAP Notes interface for note 1920522. The note title is "1920522 - Unauthorized modification of stored content in SCM-BAS-UIF". The version is "Version 1 from 11.07.2017 in English". The component is "SCM-BAS-UIF" and the category is "Program error". The priority is "Correction with Solution via Support Package (most likely not shown by SysRec)". The note is "Released for Customer". The statistics show "Corrections: 2", "Manual Activities: 3", and "Prerequisites: 1". The "Support Packages" tab is selected in the bottom navigation bar.

Small number = very old note

Original version published now

Do we need to care about manual activities now?

Solution via Support Package (most likely not shown by SysRec)

Possible answers:

- ✓ “No”, because note is old and we already have the Support Package and the manual activity is only required if you install the note via SNOTE
- ✓ “Yes”, because the manual activity is required in any case even in new systems
- ✓ “It depends”, because the manual activity is required even in new systems but only if you use the application

Note 1920522 - Unauthorized modification of stored content in SCM

Pre-Imp. / Post-Imp.
=
Weak indication that
it's only relevant for
implementation via
SNOTE

Manual Pre-Implement.

|VALID FOR
|Software Component SCMSNC Supply Network.
| Release 702 SAPK-70201INSCMSNC - SAPK-70212INSCMSNC
| Release 712 Until SAPK-71207INSCMSNC

To-SP limited
=
Strong indication that
it's only relevant for
implementation via
SNOTE

Customizing
transaction
=
Very strong
indication that you
need it in any case
or if you are using
the application

Log in to the SNC system in English, and perform the following steps:

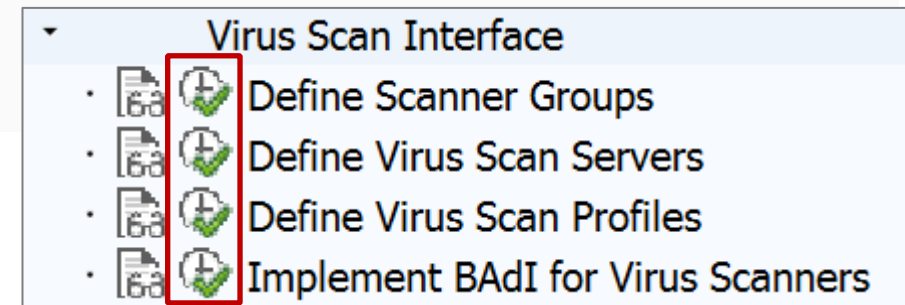
Start transaction SPRO

Navigate to Sap NetWeaver -> Application Server -> System Administration -> Virus Scan Interface

Execute Define Virus Scan Profiles

Select Create New Entries

Enter /SCA/DM_BRANDING/UPLOAD_FILE for Scan Profile



Result: If you are using the application you should consider to execute additional steps: install a Virus Scanner and activate the application specific Virus Scan Profile

Note 2442993 - Malicious SAP Host Agent Shutdown without Authentication

SAP Host Agent runs on all SAP supported platforms, i.e. ABAP, JAVA, HANA.

The issue is fixed with SAP Host Agent 721 PL25.

see

Note 1031096 - Installing Package SAPHOSTAGENT

Which SAP Notes are important for SAP Host Agent?

Note 1031096 - SAP Host Agent Installation

Note 1473974 - SAP Host Agent Auto upgrade

Note 927637 - Web service authentication in sapstartsrv

Note 1907566 - SAP Host Agent Documentation

Note 2130510 - SAP Host agent 7.21

The SAP Host Agent is part of a SAP HANA installation, too.

You can update the SAP Host Agent on HANA according to Note 1031096, too

The SAP Host Agent in SAP HANA has been updated with

- **revision 122.10 (for SAP HANA1.00 SPS12, 2017-07-01),**
- **revision 2.02 (for SAP HANA2.0 SPS00, 2017-07-06), and**
- **revision 12 (for SAP HANA2.0 SPS01, 2017-06-27).**

SAP Host Agent - Frequently Asked Questions

<https://wiki.scn.sap.com/wiki/display/ATopics/SAP+Host+Agent+-+Frequently+Asked+Questions>

How to determine the version of SAP Host Agent installed?

The SAP Host Agent is usually located in folder `/usr/sap/hostctrl/exe/`
see profile parameter `DIR_SAPHOSTAGENT`

`/usr/sap/hostctrl/exe/hostexecstart -version`

Using this command, you can use report `RSBDCOS0`
to check the version of `SAPHOSTAGENT`

The user `root` (but not `<sid>adm`) can use these
commands, too:

`saphostexec -version`

or

`saphostctrl -host <hostname> -function
ExecuteOperation -name versioninfo`

```
***** Component *****
/usr/sap/hostctrl/exe/saphostexec: 721, patch 814, changelist 1744524, linuxx86_64
/usr/sap/hostctrl/exe/sapstartsrv: 721, patch 814, changelist 1744524, linuxx86_64
/usr/sap/hostctrl/exe/saphostctrl: 721, patch 814, changelist 1744524, linuxx86_64

-----
SAPHOSTAGENT information
-----

kernel release           721
kernel make variant      721_REL
compiled on              Linux GNU SLES-9 x86_64 cc4.1.2 for linuxx86_64
compiled for             64 BIT
compilation mode         Non-Unicode
compile time             Dec 24 2016 07:36:39
patch number             22
```

SAP Host Agent

Validate the version using Configuration Validation

Transaction CCDB showing Configuration Store SAPHostAgent with Configuration Item SAPHOSTAGENT_VERSION

Filters

Store Filters

Category: *

Type: *

Name: SAPHostAgent

Store Content

History	PARAMETER	VALUE
	SAPHOSTAGENT_VERSION	721/25

Target System to check for a specific version:

Target System : SAPHOSTV / Store Name : SAPHostAgent

Sel.	Operator	Parameter	Operator	Value Low
<input type="checkbox"/>	=	SAPHOSTAGENT_VERSION	>=	721/25

SAP Host Agent

Validate the version using Configuration Validation

Result of Configuration Validation for Configuration Store SAPHostAgent

Configuration Items

System	Host Name	Config. Item	Config. Item Value	Cv. DataOperator	Compliance	Compliant (1=Yes, -1=No, '=Not valuated)
HRX	ldcin	SAPHOSTAGENT_VERSION	720/205	>= 721/25	No	-1
IN1	atgvmls5	SAPHOSTAGENT_VERSION	721/28	>= 721/25	Yes	1
IN100004	atgvmls5	SAPHOSTAGENT_VERSION	721/28	>= 721/25	Yes	1
	dfgwd01527	SAPHOSTAGENT_VERSION	720/197	>= 721/25	No	-1
	io-fbab0393f	Content out-of-date	Days: 481	#	Item not found	-1
M	hs0037	SAPHOSTAGENT_VERSION	#	>= 721/25	Item not found	-1
M	lddbmnw5	SAPHOSTAGENT_VERSION	#	>= 721/25	Item not found	-1
	lddbmnw5	SAPHOSTAGENT_VERSION	#	>= 721/25	Item not found	-1
N4Q	lddbmnw5	SAPHOSTAGENT_VERSION	#	>= 721/25	Item not found	-1
N75	ldcin75	SAPHOSTAGENT_VERSION	721/28	>= 721/25	Yes	1
	lddbmnw5	SAPHOSTAGENT_VERSION	721/28	>= 721/25	Yes	1
PJ2	vmw4307	SAPHOSTAGENT_VERSION	721/28	>= 721/25	Yes	1
PJ3	vmw4308	Content out-of-date	Days: 344	#	Item not found	-1
PJ4	vmw4309	SAPHOSTAGENT_VERSION	721/29	>= 721/25	Yes	1
PO1	nced60229921a	SAPHOSTAGENT_VERSION	721/22	>= 721/25	No	-1

Content out of date

Multiple hosts per system

No data

SAP Host Agent

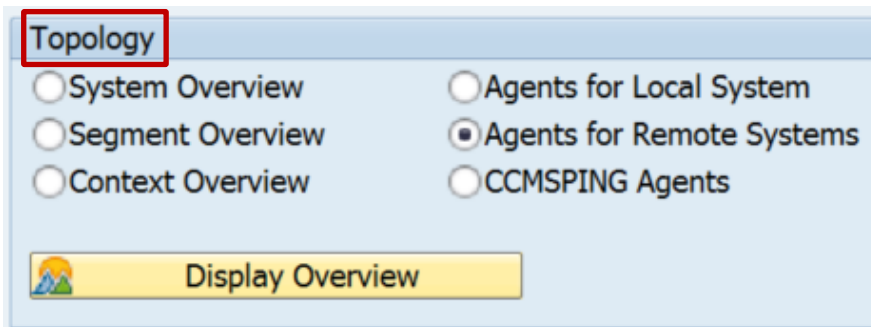
What else to do?

Do you have enabled SSL for the Host Agent?

Do you have enabled Audit Logging for the Host Agent?

Check for parameters `ssl/server_pse` and `service/auditlevel` and `service/logfile_*` in file `/usr/sap/hostctrl/exe/host_profile`

Use Configuration Store `host_profile` to check these parameters in application Configuration Validation.



The screenshot shows the 'Agents for Remote SAP Systems' table in the SAP Host Agent configuration interface. The table has four columns: 'System', 'Segment Name', 'Destination', and 'Comm. Status'. The table contains four rows of data, all with a status of 'ONLINE'. The 'Destination' column is highlighted in yellow.

System	Segment Name	Destination	Comm. Status
BPC	SAP_CCMS_lu50796763_BPC_11	SAPCCM4X.LU50796763.11	ONLINE
E1F	SAP_CCMS_ldai1e1f_E1F_15	SAPCCM4X.LDAI1E1F.15	ONLINE
E1F	SAP_CCMS_ldcie1f_E1F_15	SAPCCM4X.LDCIE1F.15	ONLINE
E2F	SAP_CCMS_ldcie2f_E2F_52	SAPCCM4X.LDCIE2F.52	ONLINE

Transaction RZ21

→ Agent Working Directory

Note 2459319 - Weak encryption used in SAP Netweaver Data Orchestration Engine

Deactivation of obsolete code, no test required.

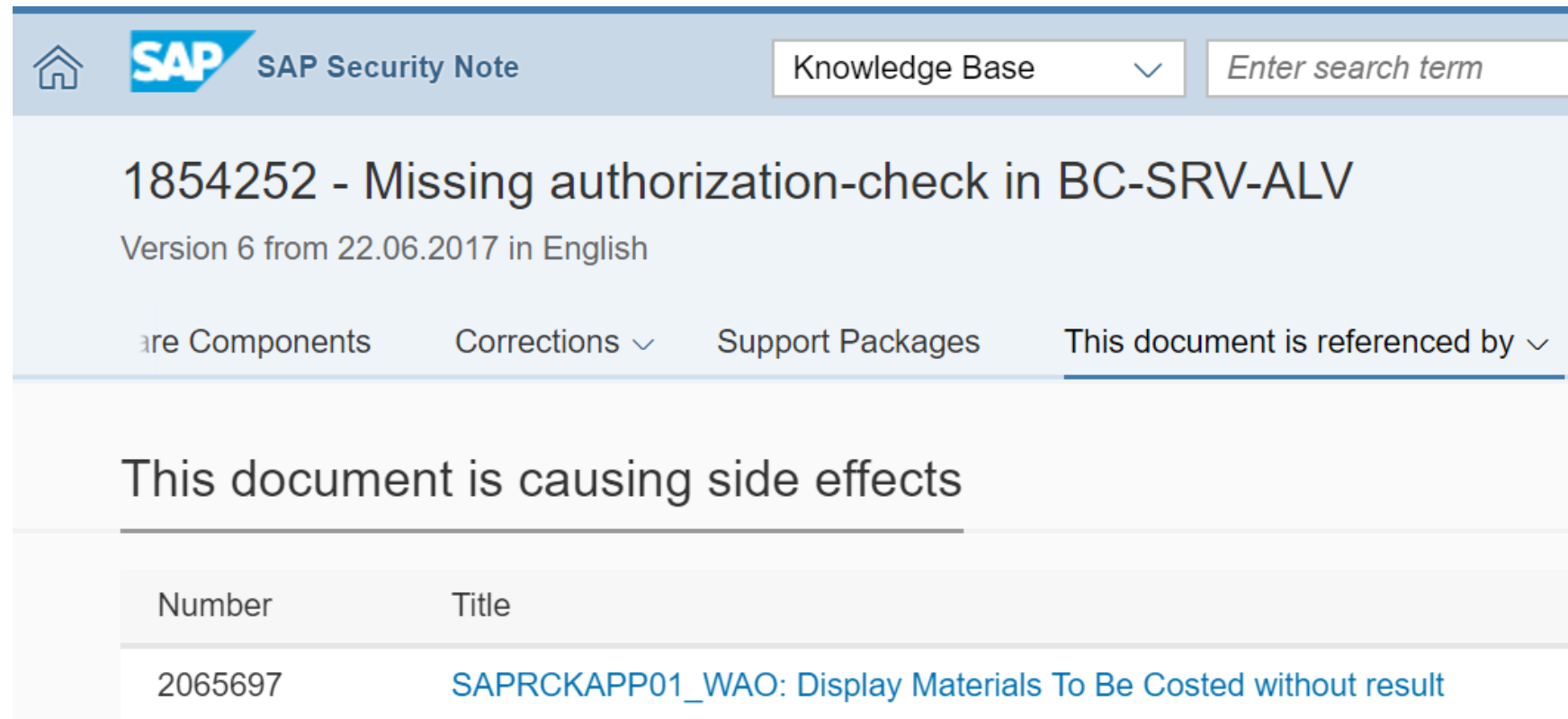
Note 1854252 - Missing authorization-check in BC-SRV-ALV

Very old note, not relevant anymore for (most) systems

Deactivation of obsolete (?) code about usage of the “MiniALV”

However, some MiniALV applications had still been in use some years ago:

See side-effect solving note 2065697 - SAPRCKAPP01_WAO: Display Materials To Be Costed without result



The screenshot shows the SAP Security Note interface. At the top, there is a navigation bar with the SAP logo, 'SAP Security Note', a 'Knowledge Base' dropdown menu, and a search input field with the placeholder text 'Enter search term'. Below the navigation bar, the main title of the note is '1854252 - Missing authorization-check in BC-SRV-ALV', followed by the subtitle 'Version 6 from 22.06.2017 in English'. A horizontal menu below the subtitle includes 'are Components', 'Corrections', 'Support Packages', and 'This document is referenced by'. The main content area displays the text 'This document is causing side effects'. At the bottom, there is a table with two columns: 'Number' and 'Title'. The table contains one row with the number '2065697' and the title 'SAPRCKAPP01_WAO: Display Materials To Be Costed without result'.

Number	Title
2065697	SAPRCKAPP01_WAO: Display Materials To Be Costed without result

Note 2252890 - User TMSADM_WF with standard password

Note 2285744 - TMS_UPDATE_PWD_OF_TMSADM_WF

The standard user TMSADM_WF only exists if you are using the TMS Workflow.

It will be created with proper profile assignments but with an standard password.

see SAP Library at

Basis Components → *Change and Transport System* → *Transport Management System* → *Configuring TMS* → *Configuring the Transport Workflow* → Resetting User TMSADM_WF

Use report TMS_UPDATE_PWD_OF_TMSADM_WF to check the profile assignments and to change the password of user TMSADM_WF in the whole domain.

Ensure that this user has only profile assignments for S_A.TMSADM and S_A.TMSWF.

Take care to execute this inside the TMS Workflow Engine and that TMS Workflow is active.

You can change the password of user TMSADM_WF manually as well if you maintain the stored password in RFC destination TMSWF@WORKFLOW_ENGINE, too.

Note 2252890 - User TMSADM_WF with standard password

Note 2285744 - TMS_UPDATE_PWD_OF_TMSADM_WF

Tipp:

Despite the validity information in the note you do not need to apply the manual correction instructions of note 2252890 about modifying a message class and about creating a function group if you update the support package.

However, after creating the function group manually you get a warning during implementation with SNOTE – in this case, ensure to set the checkbox for overwriting object REPS SAPLCTW_CONFIG.

Implement note 2285744, too, to solve an error in this report.

In case of errors while activating TMS workflow:

Note 2191190 - Could not create user TMSADM_WF error configuring workflow



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Topics June 2017



What's new in System Recommendations SolMan 7.2

Note [2461414](#) - SysRec: notes for obsolete kernel versions are displayed on SolMan 7.2

Note [2380277](#) - Memory Corruption vulnerability in IGS

Priority changes because of CVSS, e.g. Notes [2235513](#), [2235514](#), [2235515](#)

Reloaded: How to define cipher suites for SSL/TLS

Security notes for the Web Dispatcher

Note [2423429](#) - Code Injection vulnerability in SAP Web Dispatcher

What's new in System Recommendations SolMan 7.2 SP 3

Send Configuration Validation reports via email

BW Information Broadcasting is not longer supported in SAP BW 7.40 (Note [2020590](#))

Conclusion: You cannot schedule broadcast notifications for the System Recommendations BW report in SAP Solution Manager 7.2 anymore

New reports to send Configuration Validation results via email:

Configuration Validation
DIAGCV_SEND_CONFIG_VALIDATION

System Recommendation Report
DIAGCV_SEND_SYSREC

Sends system recommendation results via configuration validation

Comparison list: FA7

Email recipients: rene.muth@sap.com

Email greeting: Dear Security Team,

Email body: these are the missing security notes calculated by Solution Manager...

Email ending: Yours Sincerely
 Automated SysRec Sender

Email subject: System Recommendation Results

Compliance table header: Missing Security Notes

Attachment name: sysrec_attachment

Send to SAP inbox: -

Attach results to email: -

Release date in: Dear Security Team,

Hotnews: these are the missing security notes calculated by Solution Manager - System Recommendations.

Security: Yours Sincerely

Performance: Automated SysRec Sender

Legal Change: **Missing Security Notes**

Correction:

Patch:

Store Name	Landscape Key	Store Group Name	Compliance	Configuration Item	Configuration Value	Compliance Rule	Extraction Date
SYSTEM_RECOMMENDATIONS_NOTES	FA7_SM	SAP Notes	No	0050000756	SHORT_TEXT: Ready for Review FLAGS: Security THEMK: FI-AA RELEASE_DATE: 20160308 PRIORITY: Correction with high priority CATEGORY: Program error IMPL_STATUS: SYS_RECOM_STATUS: NEW VERSION: 0001 USER: LUANE AUTO_IMPL: MANU_IMPL: SUPP_NAME: SOFT_COMP: KERN_NOTE: SP_RELEV:	Exists 0050000756	17.12.2016 13:22:32

What's new in System Recommendations SolMan 7.2 SP 5

New in SolMan 7.2 SP 5

(SP Schedule see <https://service.sap.com/~sapidb/011000358700000588032013E>)

- ✓ **New filter option for notes:**
Navigate to a notes list and adjust the filter
entering individual note numbers.

SAP Notes

Note Number:	<input type="text" value="2235515"/>	
Application Component:	<input type="text"/>	
Priority:	<input type="text" value="Priority"/>	▼
Category:	<input type="text" value="Category"/>	▼
Correction Types:	<input type="text" value="Correction Types"/>	▼
Kernel:	<input type="text" value="Kernel"/>	▼
Release-Independent:	<input type="text" value="Release-Independent"/>	▼

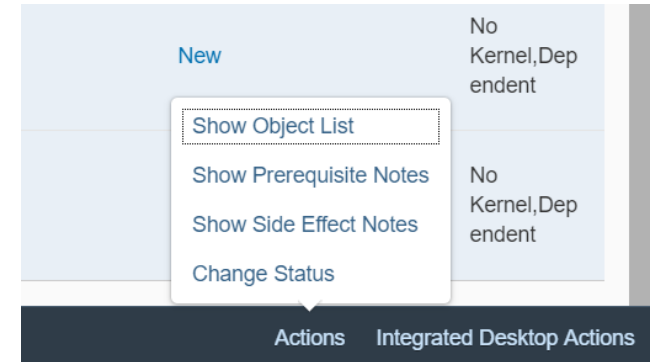
- ✓ **Tip for using the date filter**
Starting from: enter a date **01.01.2017 - 31.12.9999**
Range: enter a range **10.05.2017 - 13.06.2017**
One day: use a range **13.06.2017 - 13.06.2017**

Standard

Technical System:	<input type="text"/>	▼
Release Date:	<input type="text" value="10.05.2017 - 13.06.2017"/>	
Note Type:	<input type="text"/>	▼
Status:	<input type="text"/>	▼

What's new in System Recommendations SolMan 7.2 SP 5

Show side effect solving notes for selected list of notes:



Show side effect solving notes on detail screen of notes:

Displaying of process route logs of a case takes longer time 2136200

Priority: 3 - Correction with medium priority Version: 0001

Category: P - Performance Technical System: S5M~ABAP

Security Category: Status: New

Correction Types: Application Component: BC-SRV-RM

Release Date: 27.2.2015

Log 0 Object List 0 Prerequisite Notes 0 Side Effect Notes 1

Side Effect Notes ↓

Note Number	Short text	Application Component	Priority	Category
2095746	Load balancing on some workflow table while viewing process route logs of a case.	BC-SRV-RM	3 - Correction with medium priority	P - Performance

Recommendation:
Implement side effect solving notes right after implementation of the original notes

Note 2461414 - SysRec: notes for obsolete kernel versions are displayed on SolMan 7.2

System Recommendations might shows too many Kernel notes for ABAP and JAVA systems

Example for an ABAP system with Kernel 7.45 patch 412 and SAP_BASIS 7.50 SP 4:

Note 2074736 (only kernel up to 7.42 are affected)

Note 1553180 (only kernel up to 7.20 or SAP_BASIS up to 7.31 are affected)

Note 1453325 (only kernel up to 7.20 or SAP_BASIS up to 7.20 are affected)

[...]

Note 2461414 version 4 is required to solve the issue

After implementing the note you have to clear the buffers and re-run the System Recommendations background job according to note 2449853

Note 2380277 - Memory Corruption vulnerability in BC-FES-IGS



Which version of IGS is currently installed?

- See note 931900 - Finding the IGS patch level
- Run transaction SIGS (= report GRAPHICS_IGS_ADMIN)
- Use transaction AL11 to view file igsmanifest.mf in folder DIR_CT_RUN respective DIR_EXECUTABLE
- Use report RSDBCOS0 to execute one of the commands:
igswd_mt -version
igsmux_mt -version
igspw_mt -version

SAP Internet Graphics Service

Version	7200.0.12.1
Build Date	Jun 14 2016

```
Directory: /usr/sap/X3A/SYS/exe/uc/linuxx86_64
Name:      igsmanifest.mf
```

```
Manifest-Version: 1.0
```

```
keyname: BC-FES-IGS
keyvendor: sap.com
keylocation: SAP AG
```

```
igs os: linuxx86_64
```

```
igs release: 720
make variant: 720_EXT_REL
igs patch number: 12
```

```
R/3 X3A 001 User D019687 Date 22.05.2017 Time 14:12:47
Host mo-c81a86caf User x3aadm
Path /usr/sap/X3A/DVEBMGS01/work
```

```
Execute history command number with next command
!!.. Execute last command from history with trailing ..
$(name) replaced by logical OS commands and profile parameters
```

```
[1]igswd_mt -version
[1]ReturnCode= 1 d_mt -version
Version of igswd_mt = 7200.0.12.0 - 630676 - Jun 14 2016
```

Note 2380277 - Memory Corruption vulnerability in BC-FES-IGS

Can you update IGS independently from the whole Kernel?

- The standalone IGS needs to be updated separately in any case.

The integrated Internet Graphics Service (IGS) exists on every SAP Web AS machine and is started and stopped with SAP WebAS. However, IGS is not part of the Kernel which means it has to be patched separately.

see note 896400 - Upgrade your integrated IGS 7.x installation

https://help.sap.com/doc/saphelp_nw74/7.4.16/en-US/4e/193dbeb5c617e2e10000000a42189b/frameset.htm

Do you need downtime?

- Yes, the new version of the integrated IGS is up and running after restarting the server.

Do you need to update the SAPGUI to solve this vulnerability?

- As for the SAPGUI, it depends on the use case. Most business scenario uses the IGS server to render graphics.

In some business use cases, the SAPGUI uses an IGS-based activeX control to render charts directly in SAPGUI. For those use case, you should upgrade the SAPGUI version.

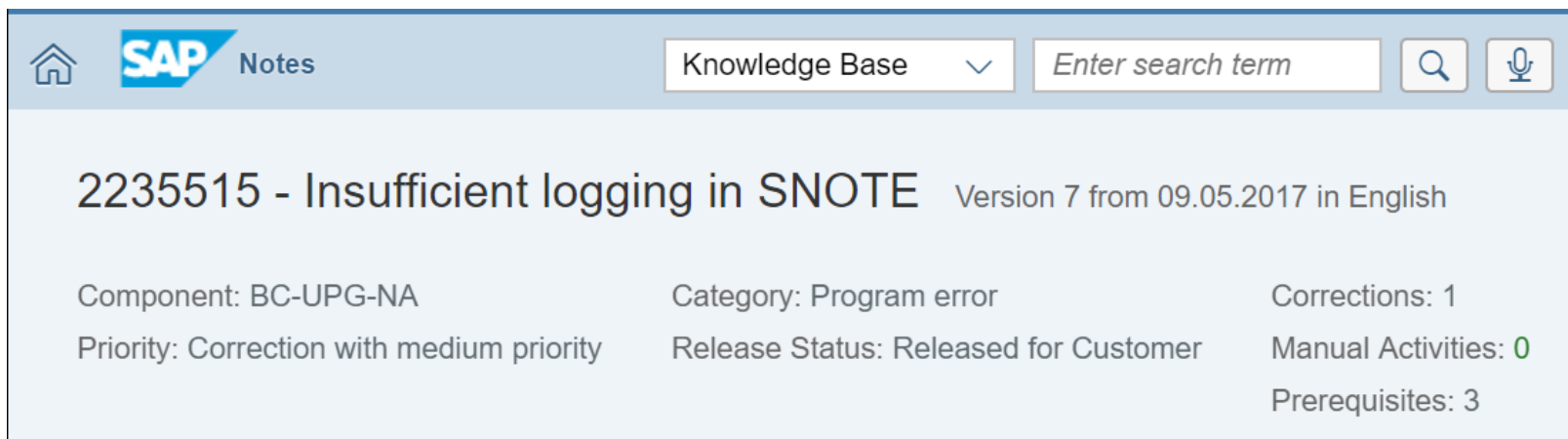
Priority changes because of CVSS, e.g. Notes 2235513, 2235514, 2235515

Notes 2235513, 2235514, 2235515 had been published in 2015 with a priority which was calculated based on CVSS 2.0.

Note 2235515 was changed in April 2017 to adjust prerequisites of the correction instruction.

This triggered re-calculation of priority based on CVSS 3.0.

Now, the priority is set to medium with CVSS v3 Base Score 4.3 NLLN|U|LNN



The screenshot shows the SAP Notes interface. At the top, there is a navigation bar with the SAP logo and 'Notes' text. To the right, there is a search bar with a dropdown menu set to 'Knowledge Base', a search input field containing 'Enter search term', and icons for search and voice search. Below the navigation bar, the main content area displays the title '2235515 - Insufficient logging in SNOTE' followed by 'Version 7 from 09.05.2017 in English'. Below the title, there are three columns of metadata: Component: BC-UPG-NA, Category: Program error, Corrections: 1; Priority: Correction with medium priority, Release Status: Released for Customer, Manual Activities: 0; and Prerequisites: 3.

Component: BC-UPG-NA	Category: Program error	Corrections: 1
Priority: Correction with medium priority	Release Status: Released for Customer	Manual Activities: 0
		Prerequisites: 3

Reloaded: How to define cipher suites for SSL/TLS

more samples

SAP ASE

Note [2478377](#) - Exposure to Sweet32 vulnerability in multiple SAP Sybase products

https://help.sap.com/doc/a6115f7abc2b1014bf21a063974f889e/16.0.2.5/en-US/Security_Administration_Guide_en.pdf

→ Cipher Suites

SAP Mobile Platform Server

Configuring TLS Protocol Versions and Cipher Suites for HTTPS Connections

https://help.sap.com/doc/saphelp_smp3010svr/3.0.10/en-US/f3/755604d74941938fec25691e90e9cd/frameset.htm

SuccessFactors

Note [2383957](#) - Supported Cipher Suites

SAP Replication Agent for Oracle

Note [2458049](#) - Support for the TLS v1.2 Protocol

SAP JVM

Note [2193460](#) - SSLv3 is disabled in SAP JVM version 4.1, 5.1, 6.1, 8.1

SAP WEB AS JAVA 6.40 / 7.0x

Note [1648045](#) - Remove particular Ciphers from the Cipher Suite

Security notes for the Web Dispatcher

Note 2423429 - Code Injection vulnerability in SAP Web Dispatcher

You *can* register a Web Dispatcher at the SLD, connect it to the SAP Solution Manager as a technical system with system type WEBDISP, and enable it in System Recommendations. This way you get *some* recommendations about the Web Dispatcher.

However, I guess to get a complete picture about security of the Web Dispatcher you need more than that.

Keep in mind, that the Web Dispatcher

- rarely gets connected to the SolMan as described above,
- could be used in front of ABAP, Java, and HANA systems,
- is a component which is independent from the Kernel,
- is a component which is an internal part of HANA,
- it is very similar to the Internet Communication Manager (ICM) which is part of the Kernel, and
- usually requires not only software updates but requires configuration as well to solve security issues.

Security notes for the Web Dispatcher

Note 2423429 - Code Injection vulnerability in SAP Web Dispatcher

Let's check the Support Portal to find security Notes about the Web Dispatcher (19.06.2017):

<https://support.sap.com/notes> → Expert search

a) Search by Application Component of the Web Dispatcher

Component (exact): BC-CST-WDP

→ 12 Security Notes

b) Search by Application Component of the Internet Communication Manager (ICM)

Component (exact): BC-CST-IC

→ 32 Security Notes

c) Search by Software Component of the Web Dispatcher

Software Component: WEBDISP

→ 6 Security Notes

Combining all results you find 39 Security Notes

Security notes for the Web Dispatcher

Note 2423429 - Code Injection vulnerability in SAP Web Dispatcher

Only few of these 39 Security Notes have assignments to

- Software Component WEBDISP, or
- Support Package Patches of type “SAP WEB DISPATCHER <release> <patch>”.

I would expect that only these notes could be found by System Recommendations.

And not all of these notes have assignments to both, the Software Component and the Patch, which would be required for System Recommendations to produce an exact result at least for the software level (System Recommendations cannot check the configuration anyway).

Therefore, my recommendation is the following:

Whenever you see a Security Note for any of your systems of type ABAP, Java or HANA which deals with the Web Dispatcher or the Internet Communication Manager (ICM), you should check if this note could be relevant for all your installations of the Web Dispatcher, too.



May 2017

Topics May 2017



WannaCrypt ransomware

Remote Code Execution vulnerability in SAP GUI

SNC Client Encryption – Do it!

Note [2443673](#) - Filter Incoming Serialization Data (JVM)

Disable start of transactions with OKCode skipping the first screen

Note [2062885](#) - SU01/SU10: New user documentation function

Note [2203672](#) - SU01/SU10: New user documentation function II

Several notes about SAL | Filter selection by user group

WannaCrypt ransomware

← **Note [2473454](#) - Customer Guidance for WannaCrypt attacks**

Note [2476242](#) - Disable windows SMBv1

Note [2473904](#) - Does RemoteWare have any patches required for the WannaCrypt ransomware attack?

Note [2473914](#) - Does SAP Mobile Platform impacted by WannaCrypt?

Note [2474540](#) - Afaria and WannaCrypt

Summary:

- **This cyber attack uses a SMB protocol bug (SMB version 1.0) in most unpatched Microsoft Windows versions to spread out in an internal network**
- **SAP Systems on Windows and of course Windows based clients could be affected**
- **Implement the patches from Microsoft which blocks spreading of the ransomware**
- **We do not have any reports that these patches have any negative influence to SAP Systems**
- **As a workaround, you can disable the support for SMB v1 to directly block this ports in the firewall, however, this might affect interfaces to other partner systems. **Careful testing required!****

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

Security Module Disabled

-- No Security, should be avoided

Security Module Enabled with SAP Standard Administrator Rules and default Action “Allow”

+ Easiest option to improve security without disturbing users

Security Module Enabled with SAP Standard Administrator Rules and default Action “Ask”

O Easy option to improve security but annoying for users who get trained to click on “Allow”

Security Module Enabled with optimized Administrator Rules and default Action “Allow”

++ Option to improve security without disturbing users but lacking of feedback to stay clean

Security Module Enabled with optimized Administrator Rules and default Action “Ask”

+++ Option for strong security but takes most effort, feedback should be used for further optimization

Security Module Enabled (with optimized Administrator Rules) and default Action “Deny”

- Only usable in very stable environments

SNC Client Encryption – Do it!

SNC Client Encryption 2.0: Licensing

Previous status

- When installing SNC Client Encryption 1.0, the setup displays the following license disclaimer:
“SNC Client Encryption allows you to encrypt the communication between application server and client, and is part of your SAP NetWeaver Application Server license. Adding Single Sign-On capabilities requires an additional license, for SAP NetWeaver Single Sign-On. [...]”
- Similar disclaimers are published on the service market place and in a number of notes

Update

- ✓ The license disclaimer will be updated and the restriction to non-SSO scenarios will be removed:
“SNC Client Encryption allows you to encrypt the communication between application server and client, and is part of your SAP NetWeaver Application Server license.”
- ✓ The Support Portal and the notes will be updated accordingly

SNC Client Encryption – Do it!

Free encryption: A word of caution

In the past, some customers pointed out that it didn't seem right to demand a license for a scenario that combines two free technologies, namely SNC Client Encryption and SAP Logon Tickets. With SNC Client Encryption, the combination with Logon Tickets does no longer require a license.

However!

- **Combining SNC Client Encryption with Logon Tickets is not a valid alternative for single sign-on solutions based on Kerberos or X.509 certificates**
- **As Logon Tickets are cookies, there are multiple ways to attack them, e.g. using vulnerable servers or browsers**
- **Logon Tickets have a very broad validity, so attacks on Logon Tickets may have severe consequences**

SAP recommends that customers rely on more secure technologies whenever implementing single sign-on!

SNC Client Encryption – Do it!

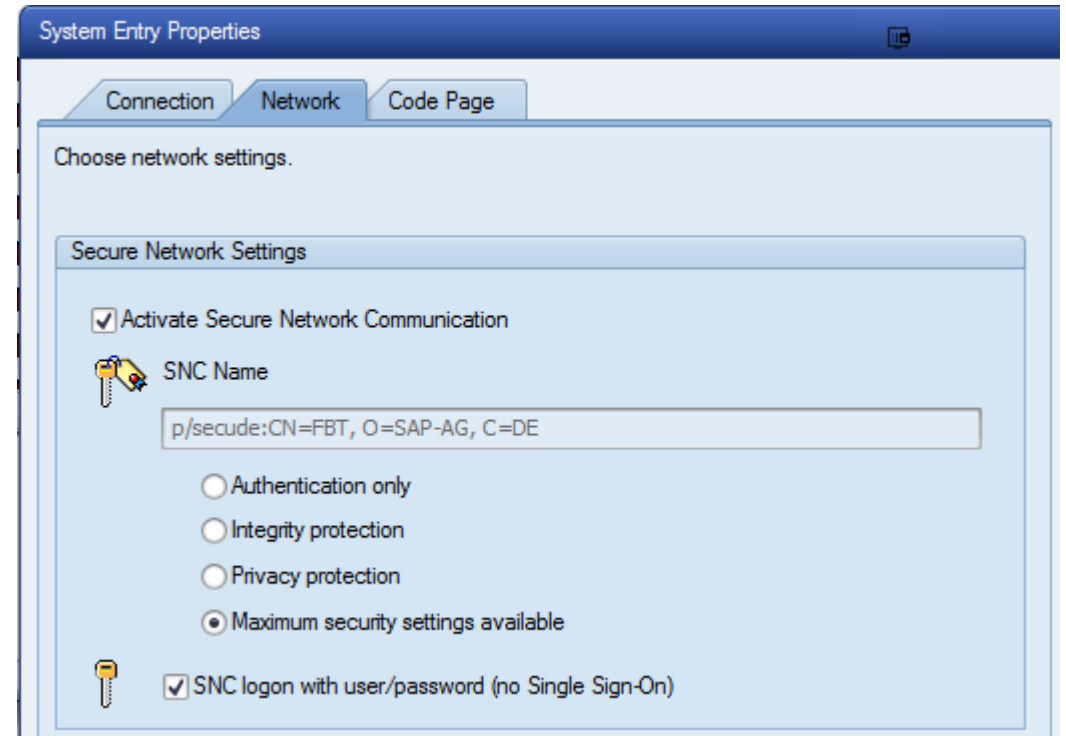
SNC Client Encryption 2.0: Supported Clients

Previous status

- **SNC Client Encryption 1.0 only supports 32bit client applications such as SAP GUI**
- **64bit clients were only supported by the Secure Login Client, requiring an SAP Single Sign-On license**

Update

- ✓ **SNC Client Encryption 2.0 will add support for 64bit applications, such as Eclipse**



SNC Client Encryption – Do it!

SNC Client Encryption 2.0: Support a TLS-like enablement of encryption

Previous status

- **SNC Client Encryption 1.0 required a Kerberos token to enable encryption**
- **In landscapes that could not rely on Kerberos, encryption was only possible based on the encryption-only mode of the Secure Login Client 3.0**

Update

- ✓ **SNC Client Encryption 2.0 will establish an encrypted connection to a backend system based on a trusted server certificate**
- ✓ **As for TLS, the required steps to configure encryption are:**
 - For each server enable protocol on the server side and install PKI signed server certificate(s) → Can be simplified by using Secure Login Server as PKI and Certificate Lifecycle Management
 - For each desktop roll-out PKI root certificate(s) and activate SNC settings

SNC Client Encryption – Do it!

SNC Client Encryption 2.0: Shipment

SNC Client Encryption 2.0 stand-alone installer

- **Windows version available as of April 2017 from the SAP Software Download Center Section „SNC CLIENT ENCRYPTION 2.0“ in „Installations & Upgrades“**
- **macOS version planned to become available by end of 2017**
- **Requires CommonCryptoLib 8.4.x or 8.5.x (preferred: 8.5.11 or newer)**

SAP GUI option

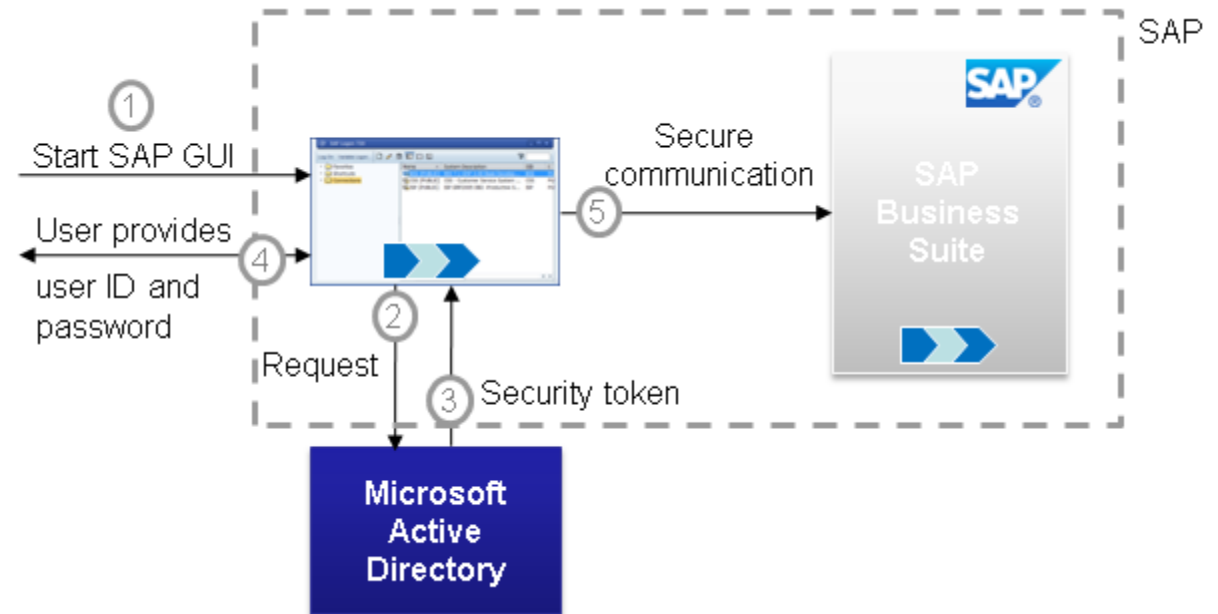
- **SNC Client Encryption 2.0 is integrated in SAP GUI 7.50**
- **Shipment as of May 2017**

SNC Client Encryption – Do it!

Architecture using Kerberos

This is the architecture of SNC Client Encryption 1.0

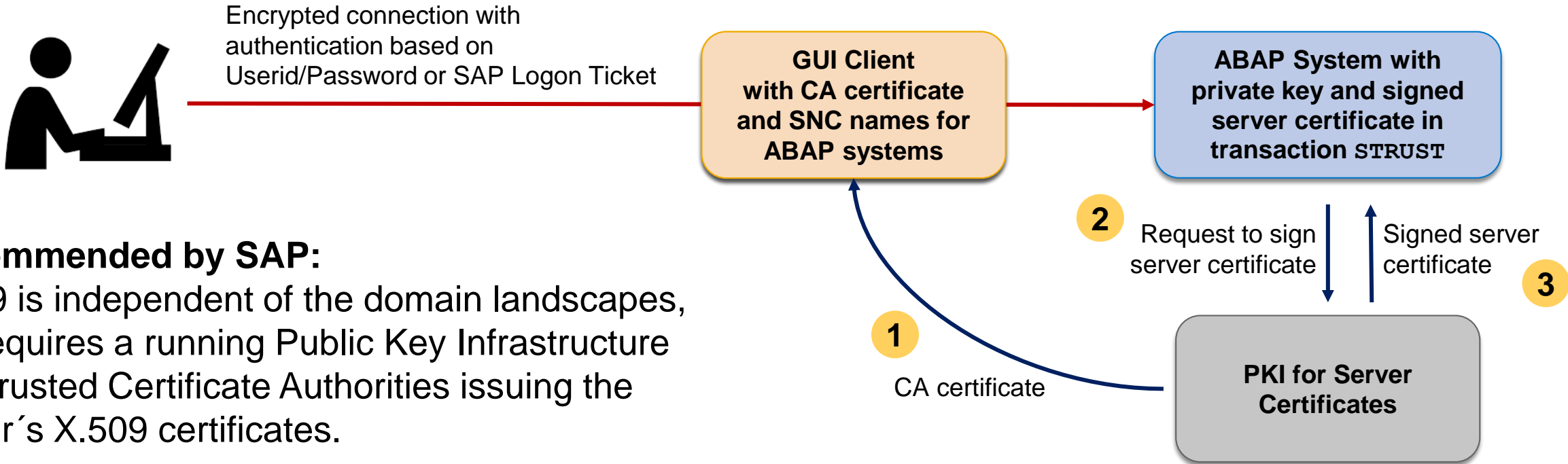
Still supported with version 2.0



While Kerberos is given in standard Microsoft Domain landscapes, it requires that clients and users are members of the respective domain. However, at least the servers do not need to be domain members.

SNC Client Encryption – Do it!

Architecture using signed server certificates in version 2.0



Recommended by SAP:

X.509 is independent of the domain landscapes, but requires a running Public Key Infrastructure with trusted Certificate Authorities issuing the server's X.509 certificates.

SAP recommends to choose X.509, as it allows a simplified client roll-out comparable to Web browsers and HTTPS server authentication.

Installation using stand-alone-installer or as part of SAPGUI 7.50

SNC Client Encryption – Do it!

Questions

One historical problem with enforcing SNC is that if you activated it to be required, SAP could no longer sign on to your system to provide support. Has this issue been resolved?

- ✓ **The local SAPGUI installation on clients owned by SAP is not trusted by your environment, therefore SAP support cannot connect with SNC. This means you can *enable* SNC but you cannot *enforce* it for *all* connections. This requires to set `snc/only_encrypted_gui = 0`**
- ✓ **Using `snc/accept_insecure_gui = U` you can define a (short) list of users who are allowed to connect without SNC.**

SNC Client Encryption – Do it!

Questions

For SNC, is there an easy way to force users to use it and is there documentation somewhere?

- **Use Logon Pad or central XML Configuration File on Server and disable editing of connection entries.**

SAP GUI for Windows 7.40 Administration Guide

<https://www.sap.com/documents/2014/10/5c33d352-5a7c-0010-82c7-eda71af511fa.html>

Chapter 7 Registry Values and Read-Only Feature of SAP GUI Options Dialog

7.2.34 SAP Logon Options - General Page

Disable editing of connection entries

[HKEY_CURRENT_USER\Software\SAP\SAPLogon\Options]

“NoEditFunctionality” (REG_DWORD) [Default: “0”] {0 = inactive; 1 = active}

7.2.36 Server Configuration Files Page

XML Configuration File on Server

Notes:

Note [2107181](#) - SAP Logon (Pad) 7.40: Collective SAP Note regarding SAP UI Landscape format

Note [2075150](#) - SAP Logon (Pad) 740: New format of configuration files as of SAP GUI for Windows 7.40

Note [2075073](#) - SAP Logon (Pad) 740: create/distribute server configuration file in the SAP UI landscape format

Note [2175351](#) - SAP Logon (Pad) 740: create/distribute the administrative core configuration file in the SAP UI landscape format

SNC Client Encryption – Do it!

Questions

How can we check if connections are encrypted?

- The transactions SM04 and AL08 show currently active connections, however, you do not find information about SNC status easily.
You can use a custom variant of SM04 which shows the SNC status, too: Get report ZSM04000 SNC
- You can uns the SMOD / CMOD user exit after logon SUSR0001 to check the status using function SNC_GET_MY_INFO and store the result in a custom table.
- You can use the Security Audit Log (SM19 / SM20) message BUJ to log unencrypted communication for SAPGUI and RFC (prerequisite note 2122578 etc).

- ✗ Client <> 000
- ✗ User missing
- ✓ Terminal

Creation Date	Date/Time	Cl.	User	Terminal name	Audit Log Msg. Text	Proc.	WP	Data	variable data
06.04.2017	08:12:35	000		dewdfm0055	Non-encrypted SAPGUI communication (TOLERATED)	D	002	SAPGUI	TOLERATED
06.04.2017	11:31:11	000		dewdfm0055	Non-encrypted SAPGUI communication (TOLERATED)	D	005	SAPGUI	TOLERATED
06.04.2017	14:43:41	000		HAJN34052233A	Non-encrypted SAPGUI communication (TOLERATED)	D	005	SAPGUI	TOLERATED
06.04.2017	15:45:18	000		dewdfm0055	Non-encrypted SAPGUI communication (TOLERATED)	D	005	SAPGUI	TOLERATED
10.04.2017	10:46:26	000		WDFN33778176A	Non-encrypted SAPGUI communication (TOLERATED)	D	007	SAPGUI	TOLERATED
18.04.2017	13:49:04	000		WDFN33778176A	Non-encrypted SAPGUI communication (TOLERATED)	D	001	SAPGUI	TOLERATED

SNC Client Encryption – Do it!

References about version 2.0

SAP Single Sign-On

<https://help.sap.com/sso20>

SAP Single Sign-On Community

<https://www.sap.com/community/topic/sso.html>

Note [2440692](#) - Central Note for SNC Client Encryption 2.0

Note [2425150](#) - Release Note SNC Client Encryption 2.0

In case you encounter problems when installing, upgrading or running SNC CLIENT ENCRYPTION 2.0, report an incident using component `BC-IAM-SSO-CCL`

SNC Client Encryption – Do it!

References about version 1.0

Using SNC Client Encryption 1.0 for Password Logon

https://help.sap.com/saphelp_nw70ehp2/helpdata/en/38/ac67ee22ef49b5818b574956532f27/frameset.htm

SNC Client Encryption 1.0

<https://wiki.scn.sap.com/wiki/display/Security/SNC+Client+Encryption>

Note 1643878 - Release Notes for SNC Client Encryption 1.0

<https://launchpad.support.sap.com/#/notes/1643878>

Note 1682957 - Downloading Patches for SNC Client Encryption 1.0

<https://launchpad.support.sap.com/#/notes/1682957>

Note 1684886 - License conditions of SNC Client Encryption 1.0

<https://launchpad.support.sap.com/#/notes/1684886>

Note 2057374 - Securing SAP GUI connections with SNC Client Encryption 1.0

<https://launchpad.support.sap.com/#/notes/2057374>

Note 2185235 - Using SNC Client Encryption 1.0 for Encrypting SAP GUI Connection with CommonCryptoLib

<https://launchpad.support.sap.com/#/notes/2185235>

Note 1690662 - Option: Blocking unencrypted SAPGUI/RFC connections

<https://launchpad.support.sap.com/#/notes/1690662>

Note 2443673 - Filter Incoming Serialization Data (JVM)

Recommendations:

- **Patch the JVM regularly from SAP Service Marketplace. Unless you haven't custom code in your system, you don't need to configure anything.**
- **For custom code, check whether you require additional filter patterns to be configured according to JDK Enhancement-Proposal (JEP) 290 and Oracle's blog post.**

A process-wide filter is configured via a system property or a configuration file. The system property, if supplied, supersedes the security property value.

- System property `jdk.serialFilter`
- Security property `jdk.serialFilter` in `conf/security/java.properties`

A filter is configured as a sequence of patterns, each pattern is either matched against the name of a class in the stream or a limit.

See Secure Coding Guidelines for Java SE, too.

Note 2443673 - Filter Incoming Serialization Data (JVM)

You can verify the version of the JVM of a managed system in transaction **LMDB** in the **SAP Solution Manager**:

System Landscape Technical System - Display Namespace: active

[Edit](#) | [Refresh](#) | [LMDB Start Screen](#) ?

Navigation Tree

- FTJ (Application Server Java)
 - Software**
 - System Database
 - Technical Instances
 - Hosts
 - Related Logical Component Groups

Technical System FTJ on Iddbftj - FTJ (Application Server Java) - Software

[Product Instances](#) | [Product Instances \(Details\)](#) | **[Software Component Versions](#)**

[Add](#) | [Delete](#) | [Repository Information](#) | [Details](#) | [Info](#) ?

Display Name	Supplier	Installation Type	System or Instance	SP L...	Patc...	Prod...
REDWOODBPA 9	automatic	Installed on System	FTJ on Iddbftj	16	2	<input type="checkbox"/>
SAP JAVA DATA DICTIONAR...	automatic			0	0	<input checked="" type="checkbox"/>
SAP JVM 6.1 (SAPJVM 6.1)	automatic	Installed on Instance	Instance 04 of FTJ on Idciftj	048		<input checked="" type="checkbox"/>
SAP KERNEL 7.42 64-BIT UN...	automatic			401	401	<input type="checkbox"/>
SAP ODATA4J+CXF-REST LI...	automatic	Installed on System	FTJ on Iddbftj	13	0	<input checked="" type="checkbox"/>
SAP SHARED JAVA APPLIC....	automatic			0	0	<input checked="" type="checkbox"/>
SAP SUPPORT TOOLS 7.40 (...)	automatic			13	0	<input checked="" type="checkbox"/>

Note 2443673 - Filter Incoming Serialization Data (JVM)

You can verify the version of the JVM using Configuration Validation by checking configuration item `vmVersion` within configuration store `jstart.jvm`

Limitation: For the operator `>=` you can only enter one target value, like `8.1.029` in this example:
(It seems that you need an additional leading space character " 8.1.029" for the value low field.)

Target System : JVM / Store Name : jstart.jvm

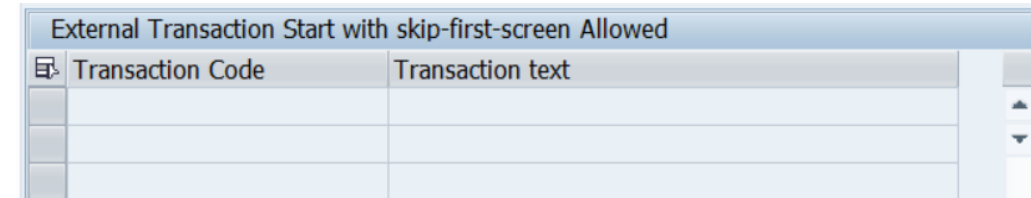
Comparison Store: FTJ / 0050568: Find: Replace with: in: All colu

S...	O...	Parameter	Operator	Value Low	Value High	Comparison Value	Item Compliance
<input type="checkbox"/>	:	vmVersion	>=	8.1.029		6.1.048 23.5-b02	(-) Not compliant

Disable start of transactions with OKCode skipping the first screen

1st test: Profile Parameter dynp/**checkskip1screen**

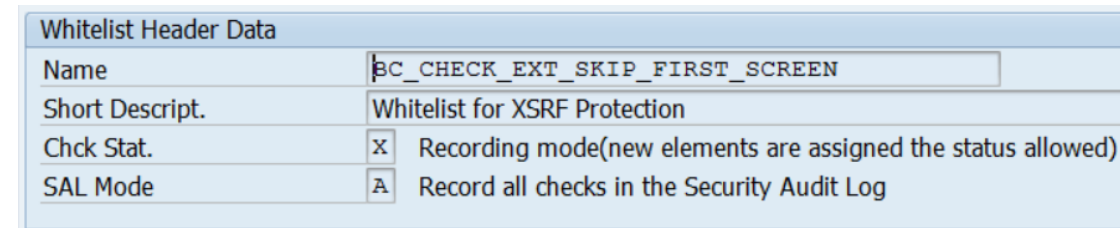
- Customizing view V_TSTCS
- Cancel message 131(00)
- General Settings for Calling Transactions
https://help.sap.com/saphelp_nwes72/helpdata/en/48/10a676486b3d1be10000000a42189d/frameset.htm
- Note [1399324](#) - Profile parameter dynp/checkskip1screen
- Note [1157137](#) - SAPShortcut: Security issue in SAPShortcut login



External Transaction Start with skip-first-screen Allowed	
Transaction Code	Transaction text

2nd test: Profile Parameter dynp/**confirmskip1screen**

- Logging option
- SLDW whitelist BC_CHECK_EXT_SKIP_FIRST_SCREEN
- Popup respective cancel message 840(00)
- (no documentation on help.sap.com)
- Note [1973081](#) - XSRF vulnerability: External start of transactions with OKCode
- Note [1956086](#) - Profile parameter for XSRF protection



Whitelist Header Data	
Name	BC_CHECK_EXT_SKIP_FIRST_SCREEN
Short Descript.	Whitelist for XSRF Protection
Chck Stat.	X Recording mode(new elements are assigned the status allowed)
SAL Mode	A Record all checks in the Security Audit Log

Note 2062885 - SU01/SU10: New user documentation function

Note 2203672 - SU01/SU10: New user documentation function II

New tab about Documentation in transaction SU01

available as of SAP_BASIS 7.31 SP 15 (optimized in SP 17) and 7.40 SP 10 (optimized in SP 13)

You can manage the fields “Description” and “Responsible” using the Central User Administration (CUA), too.

The field “Documentation” is available locally only.

You can add comments but not change or delete parts of it.

Use report RSUSR_DELETE_USERDOCU to delete field “Documentation” from selected users.

The screenshot displays the 'Maintain Users' transaction in SAP. The title bar reads 'Maintain Users'. Below the title, there are icons for a magnifying glass and a printer. The main area shows the user 'D019687' with the following details: 'Changed By' is 'D019687', the date is '20.04.2017', and the time is '10:01:04'. There is a 'Status' field to the right. Below this, there are several tabs: 'Documentation', 'Address', 'Logon Data', 'SNC', 'Defaults', 'Parameters', and 'Roles'. The 'Documentation' tab is currently selected and highlighted. Under this tab, there are two input fields: 'Description' (which is highlighted in yellow) and 'Person Responsible'. At the bottom, there is a section titled 'Documentation for User:' containing the text: '20.04.2017 10:01:04 D019687: Member of CoE Security Services Responsible for EGI SOS'.

Several notes about SAL | Filter selection by user group

The feature requires multiple notes for the Security Audit Log on SAP_BASIS 7.40 and 7.50:

Note [2285879](#) / [2090487](#)- SAL | Filter selection by user group

- You can select by user group instead of by user in your filters
- The number of maintainable filters per profile increases from 10 to 15
- Requires SAP_BASIS SP 15 or 7.50 SP 4 plus Kernel 7.41 patch 210, 7.42 patch 29, or 7.43 patch 4

Note [2300741](#) - SAL | Filter selection by user group (2)

- Extension and correction of the new feature
- The change introduces a side-effect error in SM19 on SAP_BASIS 7.40 SP 15-17 and 7.50 up to SP 7:
You cannot save multiple filters with mixed filter type (class based filter plus detail filter)

Note [2463168](#) - SM19 | Error when you save the configuration

- Correction (even required if you do not have the new Kernel and do not use the new feature)



April 2017

Topics April 2017



SAP Support Portal – What's New?

Notifications and SAP EarlyWatch Alert in the cloud

Note [2456553](#) - Frequently Asked Questions on note 2407616 - SAPGUI

Note [2407616](#) - Remote Code Execution vulnerability in SAP GUI for Windows

Note [1768979](#) - Changes to the SAP GUI security rules file saprules.xml

Note [2458890](#) - SYSREC: support of SAP GUI security notes

Note [2378090](#) - Missing Authorization check in Solution Manager

Notes [1329326](#) [1616535](#) [1823687](#) [1914778](#) [2012562](#) [2045861](#)

Server Information Disclosure

Note [2423486](#) - Missing Authorization check in ADBC Demo

Note [2417355](#) - Missing Authorization check in RFC Destination Maintenance

SAP Support Portal – What's New?

Notifications and SAP EarlyWatch Alert in the cloud

Highlights of the April 2017 Launchpad Release

On April 6th, 2017, many new features went live, some of them after successful tests with pilot customers, all of them based on your feedback:

*The **Notification Area** gives you an overview of notifications from various sources, such as your incidents or important SAP Notes.*

Documents stored in the redesigned SAP Help Portal can now be found through the central launchpad search.

*The new application **My SAP EarlyWatch Alert Reports** provides the complete SAP EarlyWatch Alert report for ABAP on SAP HANA systems.*

For pilot customers: SAP Notes and KBAs that are opened in new browser windows or tabs got a new stand-alone layout.

For pilot customers: Reports allow you to check the authorizations of users.

Learn more by clicking through the following pages. All changes are listed in our [April 2017 release notes](#).

SAP Support Portal – What's New?

Notifications

Notifications

Notifications offer you access to system-driven information that helps you become aware of critical real-time information. After a successful pilot phase, the SAP ONE Support Launchpad notification area has now become available to all visitors. It is the place where you can get an overview of notifications from various sources, such as your incidents or important SAP Notes, and take immediate action. Notifications can be sorted and grouped by date, priority, or application. If activated, notifications can call your attention to

- Incident status changes
- Changed SAP Notes or Knowledge Base Articles that you had marked as favorites
- **New matches for one of your saved Expert Search queries**


You can manage your notifications and select the applications you are interested in. Furthermore, for favorite notes and Expert Search results, you can **opt in to receive e-mail notifications**. Please make sure to maintain your user profile and specify an e-mail address.



Blog: SAP HotNews, Security or Legal Change Notes – Get notified about basically anything

<https://blogs.sap.com/2017/04/27/sap-hotnews-security-or-legal-change-notes-get-notified-about-basically-everything/>

SAP Support Portal – What's New?


Notifications at Notes Expert Search

 My SAP Notes & KBAs
 Knowledge Base



Frank Buchholz

SAP Note/KBA Number

[New](#)
[Updated](#)
[Expert Search](#)
[My Favorites](#)

Security HotNews 

[Hide Filter Bar](#)
[Clear](#)
[Restore](#)
[Filters](#)
[Go](#)



Fuzzy Threshold: <input type="text" value="Close Match (0.9)"/>	Components (Start with): <input type="text" value="No Restriction"/>	Components (Exact): <input type="text" value="No Restriction"/>
Released On (Pre-Defined): <input type="text" value="Restriction"/>	Released On (Free): <input type="text" value="No Restriction"/>	System: <input type="text" value="Enter System ID"/>
Comp.Version: <input type="text" value="Restriction"/>	Support Package (Greater Than): <input type="text" value="No Restriction"/>	Product Version: <input type="text" value="No Restriction"/>

Variants

- Standard
- Security HotNews

Manage
Save
Save As

Manage Variants

Name	Type	Default	Execute on Select	Author	Notification
Standard	Private	<input checked="" type="radio"/>	<input type="checkbox"/>	SAP	<input type="checkbox"/> 
<input type="text" value="Security HotNews"/>	Private	<input type="radio"/>	<input type="checkbox"/>	Frank Buchholz	<input checked="" type="checkbox"/> 

OK
Cancel

SAP Support Portal – What's New?

SAP EarlyWatch Alert in the cloud (for SAP HANA systems)



My SAP EarlyWatch Alert Reports: You can read the EWA report in a complete new format that can be personalized with favorite systems and favorite topics. All details on alerts and recommendations are provided. **The EWA Chapter about Security is included!**

SAP EarlyWatchAlert – Analytical Dashboard: You can gain an overview on the system status with the most important KPIs from your SAP ABAP system and the SAP HANA database. KPI history of up to 12 months is available in drill-downs. (No security specific KPIs)

You require the SAP ONE Support Launchpad **authorization “Service Reports & Feedback”** to see data in these applications **for the systems of the customer numbers to which your S-user is assigned.** To request it, contact one of your company's user administrators.

Either add the two new tiles to your SAP One Support Launchpad or use these direct links to the applications:

- <https://launchpad.support.sap.com/#/ewaviewer>
- <https://launchpad.support.sap.com/#/ewadashboard>

SAP Support Portal – What's New?

My SAP EarlyWatch Alert Reports (for SAP HANA systems)

The application My SAP EarlyWatch Alert Reports provides the complete SAP EarlyWatch Alert report for ABAP on SAP HANA systems (and systems having an additional database connection to a separate SAP HANA database). You can easily monitor the alerts and find out how to improve the system stability, performance or security.

- Check the ratings for those systems for which an SAP EarlyWatch Alert service is active.
- Check the SAP EarlyWatch Alert report for a system and the ratings of its topic or subtopic.
- In a topic or subtopic, view detailed information.
- Use favorites to keep track of the systems you want to monitor frequently, or of the topics and subtopics you visit often.
- Customize your views through a variety of sorting, grouping and filter criteria, e.g. the rating or the reports' generation date.

SAP Support Portal – What's New?

My SAP EarlyWatch Alert Reports (for SAP HANA systems)

The screenshot displays the SAP Support Portal interface for EarlyWatch Alert Reports. The top navigation bar includes the SAP logo, the page title 'EarlyWatch Alert Reports', a 'Knowledge Base' dropdown menu, a search input field with the placeholder 'Enter search term', a search icon, a user profile icon for 'Frank Buchholz', and a dropdown arrow. Below the navigation bar, there are filter options: 'Standard' with a dropdown arrow, 'Hide Filter Bar', and 'Filters'. The main filter section contains three input fields: 'System ID' with a dropdown menu showing 'PR9' and '19 More' items, 'Rating' with a dropdown arrow, and 'Date Range' with a date range of '31.03.2017 - 10.04.2017' and a calendar icon. Below the filters, there is a checkbox labeled 'Show Favorites Only' which is currently unchecked. The main content area shows a section titled 'My SAP EarlyWatch Alert Reports (1)' with a sort icon and a list icon. Below this is a table with the following columns: 'Favorite', 'System ID', 'Rating', and 'Date'. The table contains one row with the following data: 'Favorite' (star icon), 'System ID' (PR9, Installation Number: 1234567890, System Number:), 'Rating' (Very Critical), and 'Date' (03.04.2017). A right arrow icon is present at the end of the row.

Standard ⌵ Hide Filter Bar Filters

System ID: ⊗ 19 More 📄 Rating: ⌵ Date Range: 📅

Show Favorites Only:

My SAP EarlyWatch Alert Reports (1) ↕ ☰

Favorite	System ID	Rating	Date
☆	PR9 Installation Number: 1234567890 System Number:	Very Critical	03.04.2017 >

SAP Support Portal – What's New?

My SAP EarlyWatch Alert Reports (for SAP HANA systems)

Home < SAP EarlyWatch Alert Reports Knowledge Base Enter search term Search 🔊 👤 Frank Buchholz

SAP EarlyWatch Alert Report for PR9

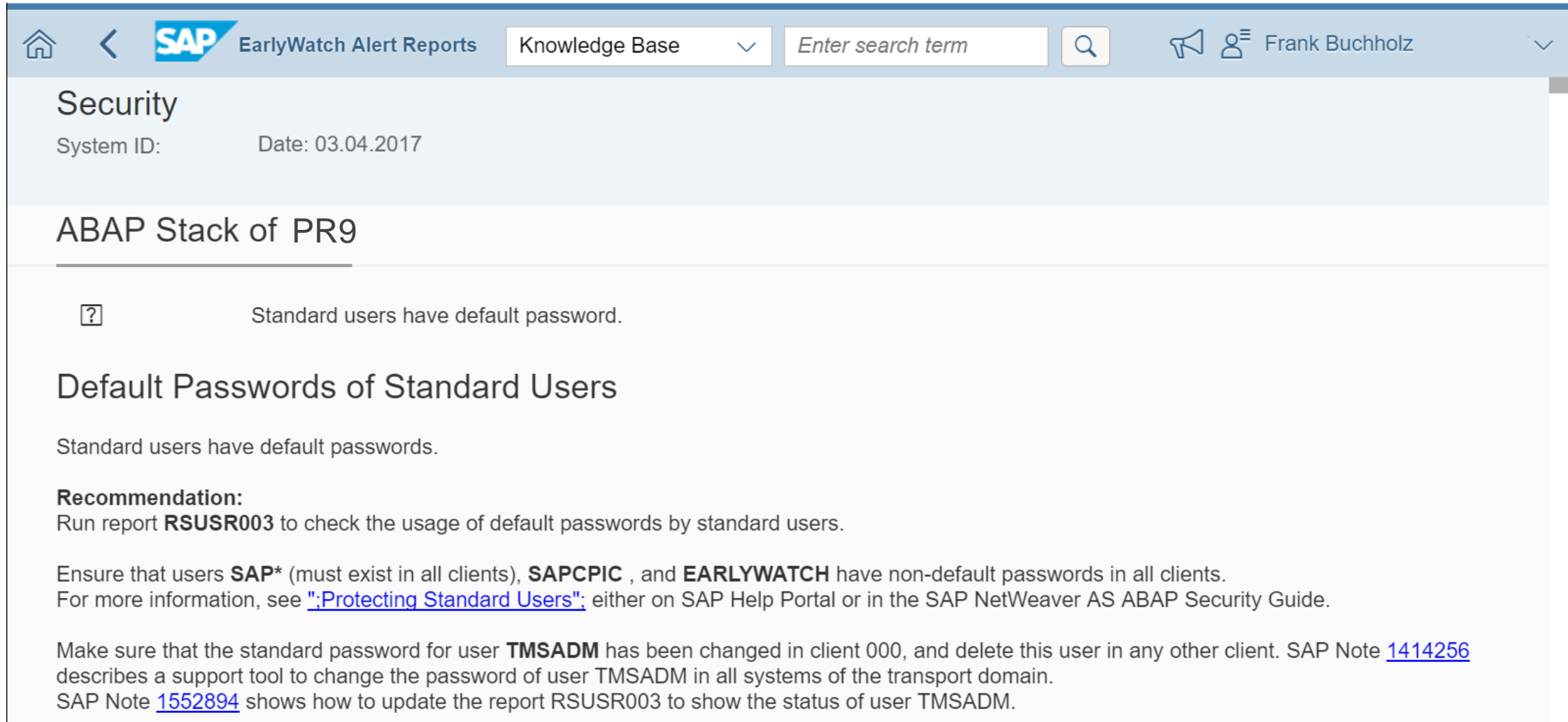
Date: 03.04.2017 Very Critical
Language: English

All Topics (59) **Favorites (6)** Search 🔍 ⬆️ ⬆️

Favorite	Topic	Topic Rating	Subtopic	Subtopic Rating	
★	Software Configuration	Very Critical	Support Package Maintenance - ABAP	Ok	>
★			HANA Database Version	Ok	>
★			SAP Kernel Release	Very Critical	>
★	Security	Critical			>
★			SAP HANA Database		>
★			ABAP Stack		>

SAP Support Portal – What's New?

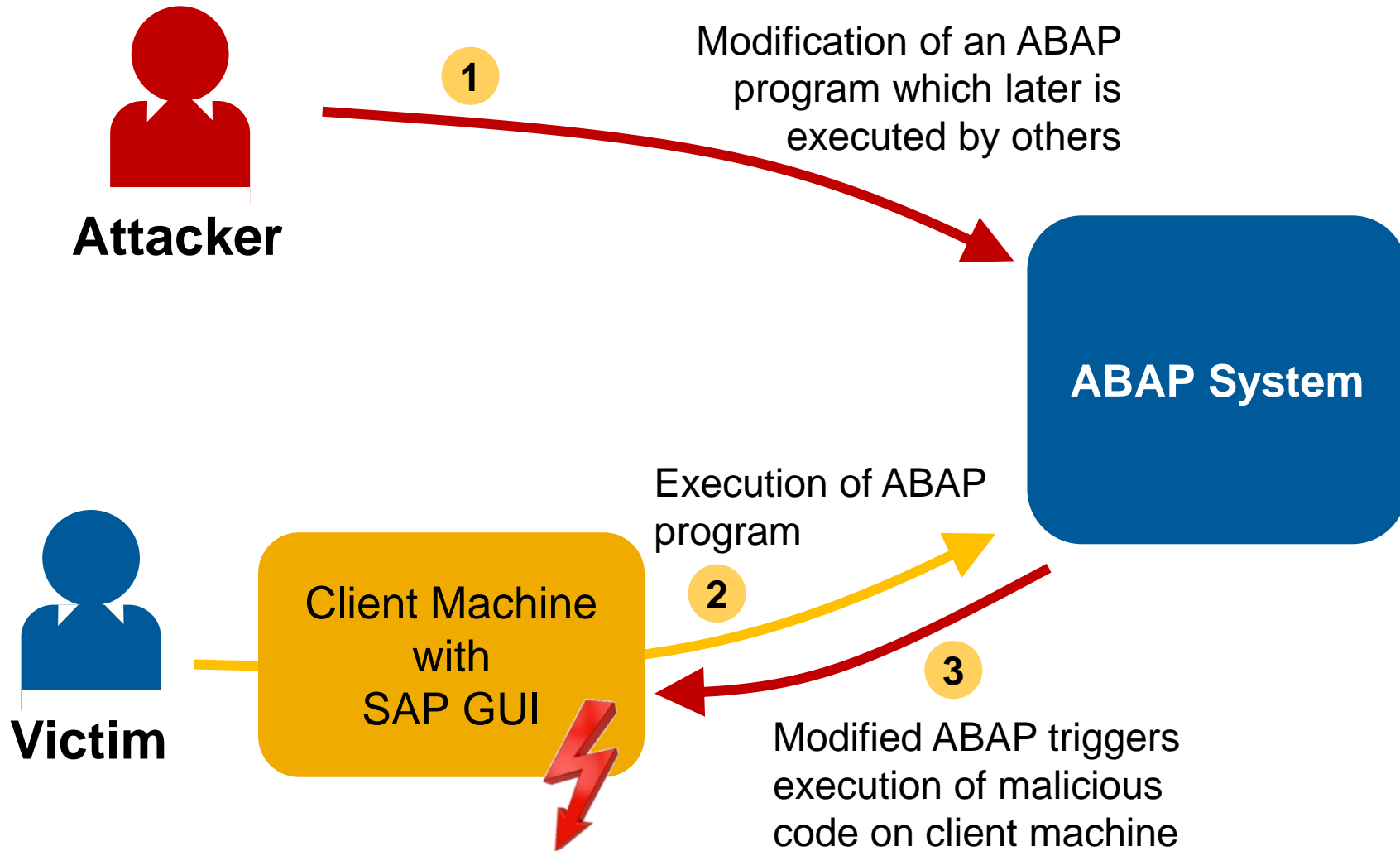
My SAP EarlyWatch Alert Reports (for SAP HANA systems)



The screenshot displays the SAP Support Portal interface. At the top, there is a navigation bar with the SAP logo, 'EarlyWatch Alert Reports', a 'Knowledge Base' dropdown menu, a search box containing 'Enter search term', a search icon, a speaker icon, and a user profile for 'Frank Buchholz'. Below the navigation bar, the main content area is titled 'Security' and includes 'System ID:' and 'Date: 03.04.2017'. The primary heading is 'ABAP Stack of PR9'. A question mark icon is followed by the text 'Standard users have default password.' Below this, the section title is 'Default Passwords of Standard Users'. The text states: 'Standard users have default passwords.' A 'Recommendation:' section follows, advising to 'Run report **RSUSR003** to check the usage of default passwords by standard users.' It further instructs to 'Ensure that users **SAP*** (must exist in all clients), **SAPCPIC**, and **EARLYWATCH** have non-default passwords in all clients.' For more information, it refers to the article '":[Protecting Standard Users](#)": either on SAP Help Portal or in the SAP NetWeaver AS ABAP Security Guide.' Finally, it notes to 'Make sure that the standard password for user **TMSADM** has been changed in client 000, and delete this user in any other client. SAP Note [1414256](#) describes a support tool to change the password of user TMSADM in all systems of the transport domain. SAP Note [1552894](#) shows how to update the report RSUSR003 to show the status of user TMSADM.'

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml



This issue is related to execution of a file/executable on the client PC via ABAP programs triggering SAP GUI commands. The impact is on the client PC and not on the SAP System.

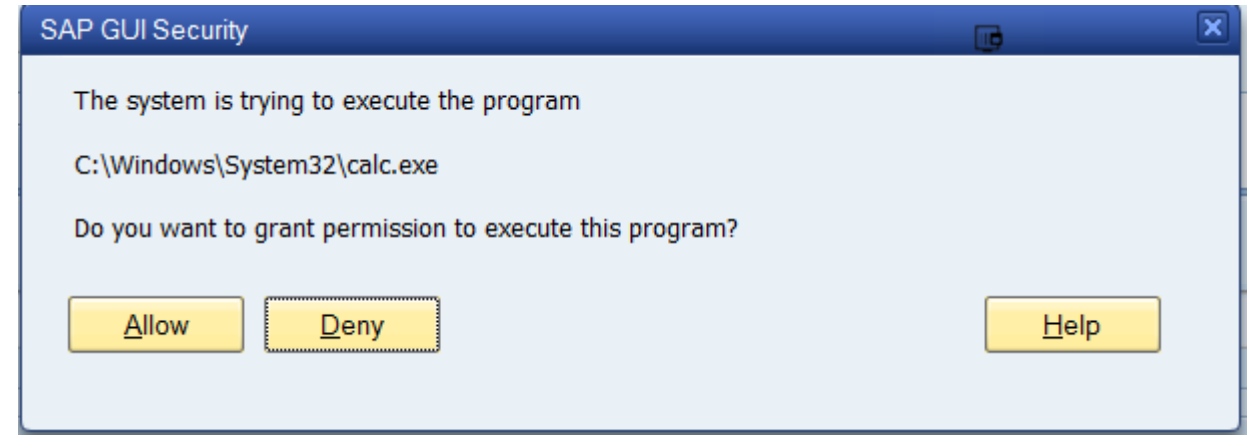
The client machines trust the ABAP servers unless the Security Module of the SAP GUI enforces strict security rules.

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

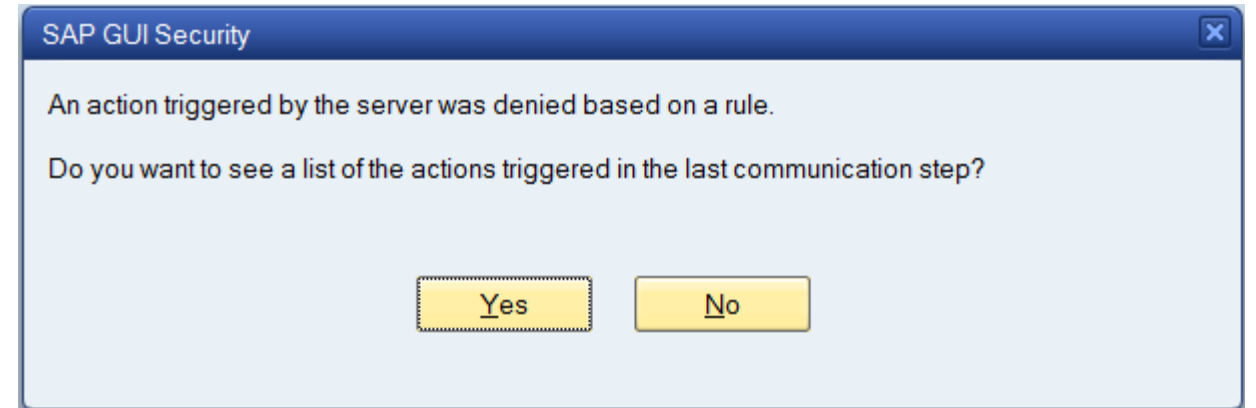
Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

Example if there does not exist any rule (respective if the rule enforces “Ask”):

Do not train your employees to click on “Allow” always → prepare reasonable Admin rules for your organization.



Example if there exist an explicit Deny rule:



Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

Security Rules

reg

Hide SAP Rules Hide Administrator Rules

Security Module
Status: Customized

Pri...	Object	Type	Access Types	Action	State	Origin	Number of Contexts
12	[HKEY_CURRENT_US...	Registry Key	Read, write, execute	Deny	Enabled	SAP	0
13	[HKEY_USERS*/Soft...	Registry Key	Read, write, execute	Deny	Enabled	SAP	0
17	*/reg.exe	File	Read, write, execute	Deny	Enabled	SAP	0
18	*/regedt.exe	File	Read, write, execute	Deny	SAP	0	
19	*/regini.exe	File	Read, write, execute	Deny	0		
73	*.reg	File Extension	Execute	Deny	0		
74	[HKEY_CLASSES_RO...	Registry Key	Read	Allow			
75	[HKEY_CURRENT_US...	Registry Key	Read	Allow			
466	[HKEY_LOCAL_MACH...	Registry Key	Write	Context-Dependent	Enabled		
467	[HKEY_USERS]	Registry Key	Write	Context-Dependent	Enabled	Administrator	
468	*/regsvr32.exe	File	Read, write, execute	Context-Dependent	Enabled	Administrator	2
469	*/regedt32.exe	File	Read, write, execute	Context-Dependent	Enabled	Administrator	2
470	*/regedit.exe	File	Read, write, execute	Context-Dependent	Enabled	Administrator	2
471	[HKEY_CLASSES_RO...	Registry Key	Read	Allow	Enabled	Administrator	0
472	[HKEY_CURRENT_CO...	Registry Key	Read	Allow	Enabled	Administrator	0

Get rid of these rules or change action to "Deny"

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

All releases of the SAP GUI are affected. You can use this updated file `saprules.xml` for old releases 7.20 or 7.30 of the SAP GUI, too.

You have to **enable the Security Module** of the SAP GUI to get any protection – this usually requires that you have collected and optimized “Administrator” rules first, which prevent that your users get annoyed by numerous popups (which simply would train them to click on “Allow” always).

It is not sufficient for users to add private “User” rules which deny the execution of the registry programs – you have to get rid of the false “Administrator” rules or change them into “Deny” rules.

You do not need to update the complete SAP GUI installation. It would be sufficient to prepare and distribute a new version of file `saprules.xml` either based on the version which is available as an attachment of note 1768979 or which is part of the SAP GUI as of release 7.40 patchlevel 12. Ensure to include your existing own “Administrator” rules.

Caution: The false “Administrator” rules are removed, which means that users usually get a popup asking for „Allow“ or „Deny“. **You may want to use explicit „Deny“ rules instead.**

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

You find files `saprules.xml` at two locations:

- **Administrator Rules**

`%ProgramFiles(x86)%\SAP\FrontEnd\SAPgui = C:\Program Files (x86)\SAP\FrontEnd\SAPgui`

- **User Rules**

`%APPDATA%\SAP\Common = C:\Users\<..>\AppData\Roaming\SAP\Common\`

You might want to collect the User Rules from an educated group of your users to produce Administrator Rules which match to the requirements of all users in your organization.

System Recommendations does not show this note for any system because the software component BC-FES-GUI is not part of the technical ABAP system.

Note 2407616 - Remote Code Execution vulnerability in SAP GUI

Note 1768979 - Changes to the SAP GUI security rules file saprules.xml

Conclusion:

- **If you (= all users in your organization) are already using the Security Module of the SAP GUI, you should update the SAP GUI client installation respective replace file `saprules.xml`**
- **If you (= no or not all users in your organization) do not use the Security Module of the SAP GUI yet, you should consider to run a security optimization project to prepare “Administrator” rules for your organization and to enforce that the Security Module gets activated**

SAP GUI 7.40 Security Guide

<https://www.sap.com/documents/2016/06/047de85d-7a7c-0010-82c7-eda71af511fa.html>

Note 2456553 - Frequently Asked Questions on note 2407616

Frequently asked questions regarding SAP Note 2407616:

1. We do not have a saprules.xml file, and we are not using SAPGUI 7.4 patch 12. Does this issue affect us?
2. The SAPGUI 7.4 patch 12 is not currently installed. However, if SAPGUI 7.4 patch 12 is installed in one test box and it creates a saprules.xml files that is pushed to all users, will the security vulnerability described in note 2407616 be solved?
3. Can SAP support check our saprules.xml file to determine if the security vulnerability described in note 2407616 is solved?
4. Which is a better solution: 1) Pushing saprules.xml or 2) Installing SAPGUI 7.4 patch 12?
5. What is the implication of this security issue?
 1. Will this issue affect the backend server as well?
 2. Or, is this totally frontend related?
 3. Can someone get access to the backend through this frontend security issue?

What about SAPGUI for Java?

SAPGUI for Java is different and not affected by this vulnerability, however, there exist Security Policy settings as well:

User Guide - SAP GUI for the Java Environment

Document Version: 7.40 – 2016-07-13

<https://assets.cdn.sap.com/sapcom/docs/2016/07/58d5dc32-7d7c-0010-82c7-eda71af511fa.pdf>

Chapter 5.1.3 Security Policy

The SAP GUI for Java 7.40 is running with a security manager enabled. It loads its policy information from several different locations.

```
<system preferences>/SAPGUI.policy  
<user preferences>/SAPGUI.policy  
<system preferences>/trustClassification  
<user preferences>/trustClassification  
<user preferences>/settings
```

Note 2458890 - SYSREC: support of SAP GUI security notes

System Recommendations does not show pure notes about the SAP GUI for any system because the software component BC-FES-GUI respective the SP software component “SAP GUI FOR WINDOWS n.nn CORE” is not part of the technical ABAP system.

<https://support.sap.com/notes>

→ Expert Search

Components (Exact): BC-FES-GUI

Document Type: SAP Security Note

Solved with note 2458890 - SYSREC: support of SAP GUI security notes
With this note all ABAP systems show SAPGUI notes, too.

Result: 37 Notes in total (some of them might be visible for ABAP systems because they are assigned to other software components, too). You find 2 notes as of 2016:

SAP Component	Number	Version	Title	Category	Priority	Released On
BC-FES-GUI	2407616	3	Remote Code Execution vulnerability in SAP GUI for Windows	Program error	Correction with high priority	14.03.2017
BC-FES-GUI	2361671	3	Information Disclosure in SAP GUI for Windows	Program error	Correction with medium priority	11.10.2016
BC-ABA-SC	1973081	2	XSRF vulnerability: External start of transactions with OKCode	Consulting	Correction with medium priority	05.01.2016
BC-CCM-PRN	2235795	1	Potential information disclosure relating to SAP Cloud Print Manager for S/4HANA Cloud Edition	Program error	Correction with medium priority	10.11.2015

Note 2458890 - SYSREC: support of SAP GUI security notes

Notes with application component BC-FES-GUI are now shown for all ABAP systems as “Support Package Independent” notes.

SolMan 7.1 no action required except optional backup of user status and refresh of cache, see note 2219377

SolMan 7.2 requires note 2458890 and optional refresh of cache see note 2449853

Filter System Recommendations by:

Solution: SAP Solution Application Component: All
Product System: XS2 Technical System: XS2 [ABAP]
Released From: To:

Apply Filter Save Filter

Technical System XS2 System Type ABAP Released From Released To Last Refresh: 19.04.2017 01:46:30 CET Refresh

BCPA Results(1) System Recommendations Report

Security Notes (174) HotNews (51) Performance Notes (106) Legal Change Notes (24) Correction Notes (4558)

View: List Set Status Create Change Request Download Selected Notes Show Object List Start BPCA Analysis Export Filter Settings

Note Number	Version	Short Text	Priority	Automati...	Manual In...	Kernel...	Support ...	Category	Date	Status	User ...	Application Co...	Software Compo...	SP Relevance
0002235515	0004	Insufficient logging in SNOTE	1	X				A - Progr...	18.04.2017	Implement...		BC-UPG-NA	SAP_BASIS 702	Support Package 17 ...
0002421287	0004	Security vulnerabilities in SAPLPD	2			X		A - Progr...	11.04.2017	New		BC-CCM-PRN	SAP_BASIS 702	Support Package Ind...
0002421287	0004	Security vulnerabilities in SAPLPD	2			X		A - Progr...		New		BC-CCM-PRN	Kernel Related Notes	
0002423486	0007	Missing Authorization check in SAP NetWeaver ADBC Demo ...	3	X			SAPKB70...	A - Progr...		Implement...		BC-DB-DBI	SAP_BASIS 702	Support Package 17 ...
0002407616	0004	Remote Code Execution vulnerability in SAP GUI for Windows	2					A - Progr...	07.04.2017	New		BC-FES-GUI	SAP_BASIS 702	Support Package Ind...
0002433458	0004	Missing Authorization check in ABAP Debugger	3	X			SAPKB70...	A - Progr...	05.04.2017	New		BC-DWB-TOO-...	SAP_BASIS 702	Support Package 17 ...
0002332977	0004	Cross site scripting (XSS) vulnerability in Web Dynpro ABAP	3					A - Progr...	14.03.2017	New		BC-WD-ABA	SAP_BASIS 702	Support Package Ind...
0002335272	0003	Cross-Site Scripting (XSS) vulnerability in SAP GUI for HTML	3			X		A - Progr...		New		BC-FES-ITS	Kernel Related Notes	

Note 2378090 - Missing Authorization check in Solution Manager

An unconditional authorization check is added to the collection of Service Data (download) in Service Data Control Center (SDCCN). If the background user is provided with the obsolete authorization object S_SDCC only, the collection fails. If SDCCN was setup with the standard role SAP_SDCCN_ALL, the required authorization was already granted to the right user. This is e.g. the case, if SDCCN was activated with the managed system setup in Solution Manager.

The authorization is required for the user running program /BDL/TASK_SCHEDULER in job /BDL/TASK_PROCESSOR. You can see the user also in logs of transaction SDCCN.

Solution: Note 2330065 - ST-PI 740 SP05, ST-PI 2008_1_7xx SP15: Enhancements

Add an authorization for S_SDCC_ADD with SDCC_RUN_N = WRITE and SDCC_DEV_N = READ to the existing role or assign the role SAP_SDCCN_ALL to the user.

Notes 1329326 1616535 1823687 1914778 2012562 2045861

Server Information Disclosure

Note 1329326 - Configuration of server header in HTTP response

`is/HTTP/show_server_header = false` (default)

As a work-around, set parameters `is/server_name` (default: "SAP NetWeaver Application Server ") and `is/server_version` (default: Kernel release) to an arbitrary value.

Note 1616535 - Secure configuration of ICM for the ABAP application server

Note 1914778 - Potential information disclosure relating to HANA host names

`is/HTTP/show_detailed_errors = false` (default)

Note 1823687 - Potential information disclosure relating to user existence

`login/show_detailed_errors = 0` (Only display general error message)

Note 2012562 - Tracing HTTP information for problem analysis

`rdisp/TRACE_HIDE_SEC_DATA = on` (default)

Note 2045861 - Hiding release information from the SMTP server banner

`icm/SMTP/show_server_header = false`

Note 2423486 - Missing Authorization check in ADBC Demo

Install the note to protect several reports all belonging to report authorization group ADBC_Q

ADBC_DEMO

ADBC_DEMO_LOBS_ORA

ADBC_DEMO_METADATA

ADBC_QUERY

ADBC_TEST_CONNECTION

Take care about critical authorizations because **report ADBC_QUERY** still offers unrestricted cross-client view on all database content (= cross-client version of SE16).

Instead of S_TABU_DIS / S_TABU_NAM following authorization checks are executed – treat this combination s critical as S_TABU_DIS with full read-access (or deactivate the report):

S_PROGRAM with P_GROUP=ADBC_Q and P_ACTION=SUBMIT

S_DBCON with DBA_DBHOST=' ', DBA_DBSID=DEFAULT, DBA_DBUSER=' ', and ACTVT= 03

Note 2423486 - Missing Authorization check in ADBC Demo

Example: Cross-client access to basis salary (table PA0008)

SAP

SELECT <selected columns> FROM "PA0008"
 WHERE ANSAL > 80000

MAN	PERNR	SUBT	OB	S	ENDDA	BEGDA	SEQ	AEDTM	UNAME	H	I	R	O	IT	PR	F	F	F	F	RE	RE	GRPV	TR	TR	TRFGR	TR
STVOR	OR	PA	WAERS	VG	VG	VGLGR	VG	VGLSV	BSGRD	DIVGV	ANSAL	FALGK	FALGR	LGA0												
BET01	ANZ01		EIN	O	LGA0	BET02	ANZ02		EIN	O	LGA0	BET03	ANZ03		EIN	O	LGA0									
800	00002120	0			99991231	19991001	000	20030225	HEATWOLE														01	02	GRD05	1
00000000			GBP				00000000	100,00	162,50			110.000,00													1002	
	9.166,67			0,00				0,00	0,00										0,00		0,00					
	0,00			0,00				0,00	0,00										0,00		0,00					
800	00007012	0			99991231	19940112	000	19960201	SCHMIDT														01	01	GRD01	
00000000			CAD				00000000	0,00	0,00			85.000,00													M003	
	3.541,67			0,00				0,00	0,00										0,00		0,00					
	0,00			0,00				0,00	0,00										0,00		0,00					

Note 2417355 - Missing Authorization check in RFC Maintenance

RFC Destination: GRC_XS2_001
Connection Type: 3 ABAP Connection
Description: GRC for XS2 client 001

Administration | Technical Settings | **Logon & Security** | Unicode | Special Options

Logon Procedure

Language:
Client: 001
User: GRC_XS2_001 Current User
PW Status: saved
Password: *****

Trust Relationship: No Yes Logon Screen

Status of Secure Protocol

SNC: Inactive Active

Authorization for Destination:

So far the authorization field was mainly checked while *using* the RFC destination. In this case an authorization check for S_ICF with ICF_FIELD = DEST and ICF_VALUE = <value> is executed.

Now it's checked within transaction SM59 while *working* (change, delete) with an RFC destination, too. In this case an authorization check for S_RFC_ADM with ICF_VALUE = <value> is executed.



March 2017

Topics March 2017



Support Portal relaunch

Support Tools for System Recommendations

Note [2427140](#) / [2423962](#) - SYSREC: Support tool for Solution Manager

Note [2418578](#) - Report to batch download solution manager trace files

Notes [2424120](#) [2424173](#) [2426260](#) [2428811](#) [2429069](#) about HANA

Note [1570399](#) - Solution Manager BI reporting (7.1)

Notes [1594475](#) [1712860](#) XML External Entities (XXE)

Note [2433458](#) - Missing Authorization check in ABAP Debugger

Note [2088593](#) - Potential disclosure of persisted data in LO-MD-BP-CM & LO-MD-BP-VM

Support Portal relaunch

The new Support Portal will be launched on March 31th, 2017

You can already test it at <http://support.sap.com/beta>

It will replace the current Support Portal as of April 26th, 2017

The DSAG offers a Webinar about the new Support Portal on April 4th 2017 (English)
<https://www.dsag.de/veranstaltungen/2017-04/webinar-neues-sap-support-portal>

You find our page /sos at
→ Offerings & Programs → Support Services → SAP Security Optimization Services

The SAP ONE Support Launchpad is not influenced by the new Support Portal.
<https://launchpad.support.sap.com>

Support Tools for System Recommendations

Note [2427140](#) / [2423962](#) - SYSREC: Support tool for Solution Manager

The new report **AGSNO_RPT_EASY_SUPPORT** records the same data sent from your solution manager system to SAP backend during note calculation but in a readable format which is more appropriate for analysis on SAP backend.

Execution of Report:

1. Run report **AGSNO_RPT_EASY_SUPPORT** and choose the system ID and the system type (e.g. ABAP or JAVA)
2. Save the generated xml file in your local directory. You can inspect the xml file with any xml viewer.
3. Compress the xml file into a `.zip` file using the common zip program
4. Create a support ticket on component `SV-SMG-SR` and add the zip file as an attachment.

```
<?xml version="1.0" encoding="UTF-8"?>
- <asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
  - <asx:values>
    - <NOTE_REQUEST>
      <RELEASE>720</RELEASE>
      <EXTRELEASE>0003</EXTRELEASE>
    + <NOTES>
      <BATCH/>
    </NOTE_REQUEST>
    <SYSNAME>TKS</SYSNAME>
    <SYSTYPE>ABAP</SYSTYPE>
  + <LS_TS_INFO>
  - <LT_SCV>
    - <AGS_SR_S_SCV>
      <NAME>BBPCRM</NAME>
      <VERSION>713</VERSION>
      <SPLEVEL>000011</SPLEVEL>
      <PATCHLEVEL/>
      <OS/>
      <DB/>
    </AGS_SR_S_SCV>
    - <AGS_SR_S_SCV>
      <NAME>BI_CONT</NAME>
      <VERSION>757</VERSION>
      <SPLEVEL>000009</SPLEVEL>
      <PATCHLEVEL/>
      <OS/>
      <DB/>
    </AGS_SR_S_SCV>
    - <AGS_SR_S_SCV>
      <NAME>CPRXRPM</NAME>
      <VERSION>610_740</VERSION>
      <SPLEVEL>000005</SPLEVEL>
      <PATCHLEVEL/>
      <OS/>
      <DB/>
    </AGS_SR_S_SCV>
```

Support Tools for System Recommendations

Note 2418578 - Report to batch download solution manager trace files

You use program **SMBI_TRACE** (see note 1394862) to trace the communication between your SAP Solution Manager system and the SAP Backbone system.

Some applications like System Recommendations (which has the application code **SOLMANNOTE**) may generate many trace files within a single transaction and it's difficult to manually download all trace files and analyze their content.

You use the new report **AGSNO_RPT_TRACE_DOWN** to batch download these trace files and to extract information from them into additional log files. An authorization to read trace file is required to run this report.

Logging of Data Transfer to SAP

Log Status: Switched On

Trace Files

From: 16.02.2017 User: *
To: 16.02.2017 Application: SOLMANNOTE

Date	Time	User Name	Application Type	Di...	Application Action	Vers..
16.02.20...	16:35:37	SOLMAN_BTC	SOLMANNOTE	RQ	NOTECHECK	2
16.02.2017	16:35:35	SOLMAN_BTC	SOLMANNOTE	RP	NOTECHECK	2
16.02.2017	16:24:41	SOLMAN_BTC	SOLMANNOTE	RP	NOTECHECK	2
16.02.2017	16:24:41	SOLMAN_BTC	SOLMANNOTE	RQ	NOTECHECK	2
16.02.2017	16:24:41	SOLMAN_BTC	SOLMANNOTE	RP	NOTECHECK	2
16.02.2017	16:24:41	SOLMAN_BTC	SOLMANNOTE	RQ	NOTECHECK	2
16.02.2017	16:24:40	SOLMAN_BTC	SOLMANNOTE	RQ	NOTECHECK	2

Notes [2424120](#) [2424173](#) [2426260](#) [2428811](#) [2429069](#) about HANA

Blog on <https://hana.sap.com/security>

Helping Customers Keep Their SAP HANA Systems Secure – Latest Security Updates

Posted by [Holger Mack](#) in March 2017

<https://blogs.saphana.com/2017/03/13/helping-customers-keep-their-sap-hana-systems-secure-latest-security-updates/>

[...]

with the latest [SAP Security Patch Day](#), on March 14th, 2017 SAP released five security notes for SAP HANA.

Of the five security notes, only two are rated with a Very High and High criticality. These criticality ratings indicate that affected customer systems could be at serious risk if an attacker exploits one of these vulnerabilities. Both issues affect only customers who:

- Are running on a specific version of the SAP HANA software, or
- Have enabled and exposed an optional component that is disabled by default

We expect few SAP HANA customers to be affected by these issues.

Notes 2424120 2424173 2426260 2428811 2429069 about HANA

Note 2424120 - Information disclosure in SAP HANA cockpit for offline administration

The improvements are included in SAP HANA revision 122.07 for SAP HANA 1.00 SPS 12 and revision 001 for SAP HANA 2.0 SPS 00.

The <sid>adm of an SAP HANA system is a very powerful user. Ensure that this user and the SAP HANA cockpit for offline administration are secured and only usable in emergency situations.

Note 2424173 - Vulnerabilities in the user self-service tools of SAP HANA

The vulnerabilities have been fixed with revision 122.07 for SAP HANA 1.00 SPS 12 and revision 001 for SAP HANA 2.0 SPS 00.

Alternatively, the user self-services can be deactivated if the service is not needed or as temporary workaround.

Note 2426260 - SQL Injection vulnerability in SAP HANA extended application services, classic model

The vulnerability has been fixed with Revision 122.07 for SAP HANA 1.00 SPS 12 and Revision 001 for SAP HANA 2.0 SPS 00.

Workaround: Revoke the role "sap.hana.xs.formLogin::ProfileOwner" from users.

Note 2428811 - SQL Injection vulnerability in SAP HANA Web Workbench

The issue has been fixed with Revision 122.06 for SAP HANA 1.00 SPS 12 and Revision 001 for SAP HANA 2.0 SPS 00.

Note 2429069 - Session fixation vulnerability in SAP HANA extended application services, classic model

HANA 1.00 is not affected. The vulnerability has been fixed with revision 001 for SAP HANA 2.0 SPS 00

All solutions are part of

- HANA 1.0 SPS12 Revision **122.07**
- HANA 2.0 SPS00 Revision **001**

Notes 2424173 - Vulnerabilities in User Self-Services of SAP HANA

External Blog of Onapsis:

<https://www.onapsis.com/threat-report-understanding-sap-hana-user-self-service-vulnerability>

The User Self-Services have been introduced with SPS 09 (out of maintenance):

SAP HANA SPS 09: New Developer Features; XS Admin Tools

<https://blogs.sap.com/2014/12/09/sap-hana-sps-09-new-developer-features-xs-admin-tools/>

SAP HANA SPS 09 - What's New about Security?

https://cloudplatform.sap.com/content/dam/website/saphana/en_us/Technology%20Documents/SPS09/SAP%20HANA%20SPS%2009%20-%20Security.pdf

Example how to activate and use User Self Service:

SAP Hana User Self-Service Configuration

<https://blogs.sap.com/2016/11/09/sap-hana-user-self-service-configuration/>

Vulnerability

The vulnerability allows an attacker to take control of the system. However, this affects only customers if the optional User Self Service component (**disabled by default**) has been enabled and exposed to an untrusted network.

The solution is part of HANA 1.0 SPS12 (in maintenance) Revision 122.07

Notes 2424173 - Vulnerabilities in user self-services of SAP HANA

Check if a system is affected

As described in the note check if the component is active using following SQL statement:

```
SELECT NAME, STATUS FROM "_SYS_XS"."SQL_CONNECTIONS"  
WHERE NAME = 'sap.hana.xs.selfService.user::selfService'
```

Use the HANA Studio or transaction DBACOCKPIT:

The screenshot shows the SAP HANA Studio interface. On the left, the 'System FQ7' is selected, and the 'SQL Editor' is open. The 'History' pane shows the executed SQL query. The 'Result' pane displays the output of the query, which is a single row with the name 'sap.hana.xs.selfService.user::selfService' and the status 'INACTIVE'. The 'INACTIVE' status is highlighted with a red box.

NAME	STATUS
sap.hana.xs.selfService.user::selfService	INACTIVE

Notes 2424173 - Vulnerabilities in user self-services of SAP HANA

Check if a system is affected (continued)

Administrators are assigned to role

```
sap.hana.xs.selfService.user.roles::USSAdministrator
```

and a technical user exists which is assigned to role

```
sap.hana.xs.selfService.user.roles::USSExecutor
```

according to the Documentation about User Self-Service Roles

<https://help.sap.com/doc/1c837b3899834ddcbae140cc3e7c7bdd/1.0.11/en-US/ab4837b5fe3e41b0ad2a5319e1593b2b.html>

Workaround

- Disable user self-services as described in the note via
`https://<hostname>:43<xx>/sap/hana/xs/admin/#/package/sap.hana.xs.selfService.user/sqlcc/selfService`
- Block user self-service using an URL filter behind the TLS endpoint:
`https://<hostname>:<port>/sap/hana/xs/selfService/user/requestAccount.html?...`
`https://<hostname>:<port>/sap/hana/xs/selfService/user/verifyAccount.html?...`

Note 1570399 - Solution Manager BI reporting (7.1)

This note contains SAP Standard Roles which get updated regularly.

Version 51 takes away full **S_RFC *** authorizations from role SAP_SM_TWB_EXTRACTOR.

This role (copied to a Z role) is assigned to user SM_EFWK automatically in SAP Solution Manager Basic Configuration.

Steps to perform in SAP Solution Manager:

- Delete roles SAP_SM_TWB_EXTRACTOR and ZSAP_SM_TWB_EXTRACTOR
- Upload the role SAP_SM_TWB_EXTRACTOR from the file attachment of the note.
- Rerun the step „Maintain Users“ in SAP Solution Manager Basic Configuration (or copy the role and assign it manually)

Note 1570399 - Solution Manager BI reporting (7.1)

SAP Solution Manager Configuration: Basic Configuration Personalize

Technical System XS2-ABAP-001 User Name D019687 Create Support Message Help

1 Specify Solution 2 Specify User & Connectivity Data 2.1 Specify SAP BW System 2.2 Set Up Credentials 2.3 Maintain Users

Edit Previous Next Save Reset

Help

Users Create all Users Advanced Mode Refresh Filter

Status	Update Needed	Current ID	Standard ID	User Type	System	Last Refreshed ...	Documentation	Login
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SAPSUPPORT	SAPSUPPORT	Dialog	XS2	17.02.2017 05:...	Display	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SMD_RFC	SMD_RFC	System	XS2	17.02.2017 05:...	Display	Test
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CONTENTSERV	CONTENTSERV	System	XS2	17.02.2017 05:...	Display	Test
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SM_AMSC	SM_AMSC	System	XS2	17.02.2017 05:...	Display	Test
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SM_EFWK	SM_EFWK	System	XS2	17.02.2017 05:...	Display	Test
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SM_BW_ACT	SM_BW_ACT	System	XS2	17.02.2017 05:...	Display	Test
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SAPSERVICE	SAPSERVICE	Dialog	XS2	17.02.2017 05:...	Display	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	ES_REP_XS2	ES_REP_XS2	Dialog	XS2	17.02.2017 05:...	Display	

Click "Refresh" to check the users

Note 1570399 - Solution Manager BI reporting (7.1)

Users

Create all Users Advanced Mode

Refresh Filter

Status	Update Needed	Current ID	Standard ID	User Type	System	Creation Date	Creation Time	Role	Login
	<input type="checkbox"/>	SAPSUPPORT	SAPSUPPORT	Dialog	XS2	17.02.2017	11:36:55	Display	
	<input type="checkbox"/>	SMD_RFC	SMD_RFC	System	XS2	17.02.2017	11:36:55	Display	Test
	<input type="checkbox"/>	CONTENTSERV	CONTENTSERV	System	XS2	17.02.2017	11:36:56	Display	Test
	<input type="checkbox"/>	SM_AMSC	SM_AMSC	System	XS2	17.02.2017	11:36:56	Display	Test
	<input type="checkbox"/>	SM_EFWK	SM_EFWK	System	XS2	17.02.2017	11:36:56	Display	Test

Click "Refresh" to check the users

SM_EFWK Technical User (in SAP Solution Manager System)

User SM_EFWK exists but not with all required roles

Action: Update User Roles

Accept manually created user without checking role assignments

User: SM_EFWK Display User

Password:

Repeat Password:

Role Namespace: ZSAP_

Needed Roles

Adjust Role

Action	Delivered SAP Source Role	Target Role	Upd...	Type	Start Transaction PFCG	Role Description
Do nothing	SAP_SM_ICI_EXTRACTOR	ZSAP_SM_ICI_EXTRACTOR	<input type="checkbox"/>	Mandatory	Display	Display
Do nothing	SAP_SM_INC_EXTRACTOR	ZSAP_SM_INC_EXTRACTOR	<input type="checkbox"/>	Mandatory	Display	Display
Do nothing	SAP_SM_MAI_EXTRACTOR	ZSAP_SM_MAI_EXTRACTOR	<input type="checkbox"/>	Mandatory	Display	Display
Assign Target Role (Created if Not Existing)	SAP_SM_TWB_EXTRACTOR	ZSAP_SM_TWB_EXTRACTOR	<input type="checkbox"/>	Mandatory	Display	Display
Do nothing	SAP_SOLMANDIAG_E2E	ZSAP_SOLMANDIAG_E2E	<input type="checkbox"/>	Mandatory	Display	Display

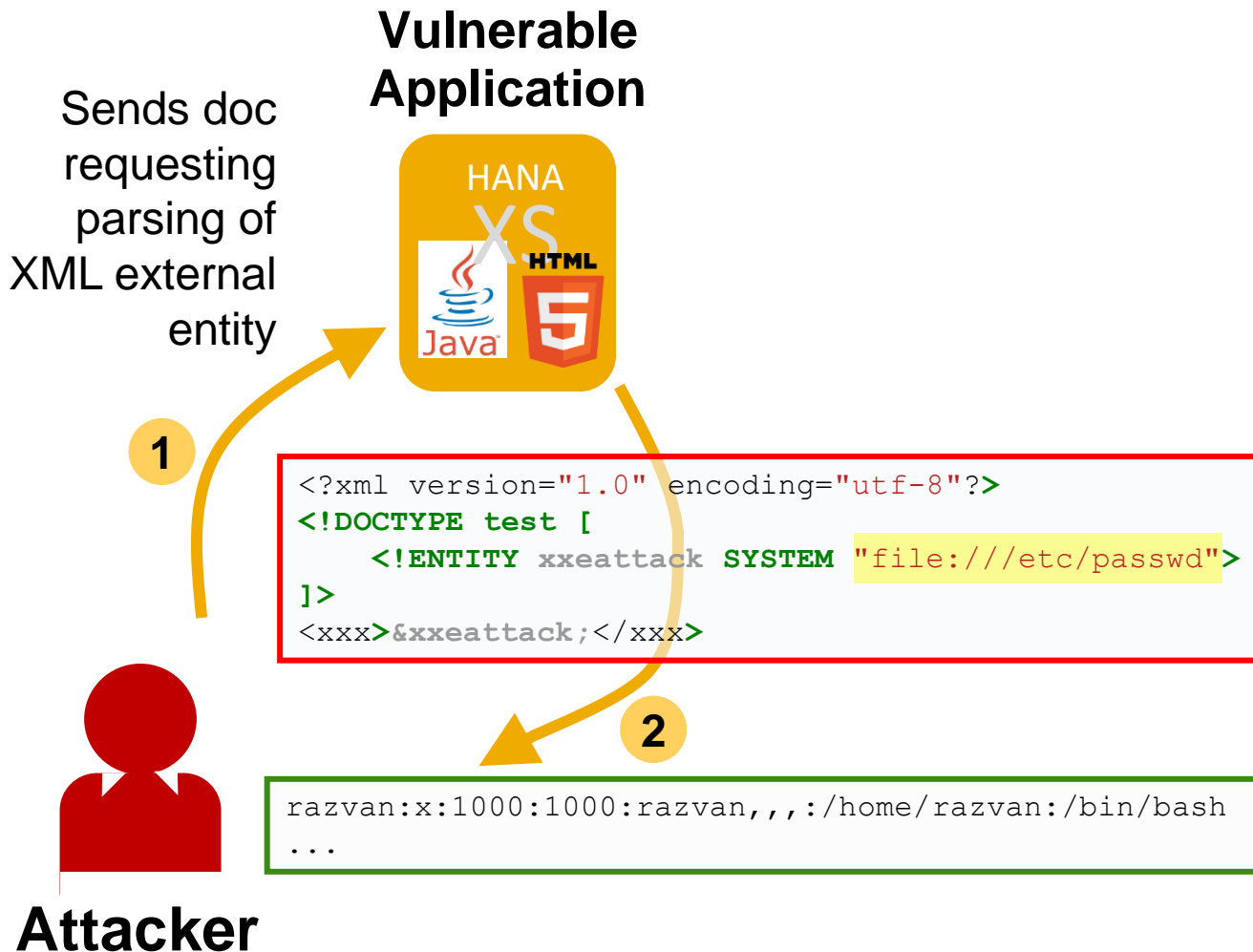
Execute

Now user SM_EFWK misses roles. Choose the action to update the roles of the user.

Execute the action

Notes 1594475 1712860 XML External Entities (XXE)

Vulnerability synopsis



The XML standard includes the idea of an external general parsed entity (an external entity). During parsing of the XML document, the parser will expand these links and include **the content of the URI** in the returned XML document.

External Entity Attacks allow an adversary to **disclose sensitive data stored on filesystem and network level**.

Furthermore, excessive resource consumption is possible when accessing special files and running XML bombs.

→ **Critical data leaked**

→ **Denial of service**

Notes 1594475 1712860 XML External Entities (XXE)

Solution concept (ABAP)

SAP NetWeaver ABAP provides the option of prohibiting the use of a DTD in XML or activating a heuristic to automatically identify a potential attack via an XML bomb:

Profile parameter:

`ixml/dtd_restriction`

Values: `none` – no DTD restriction

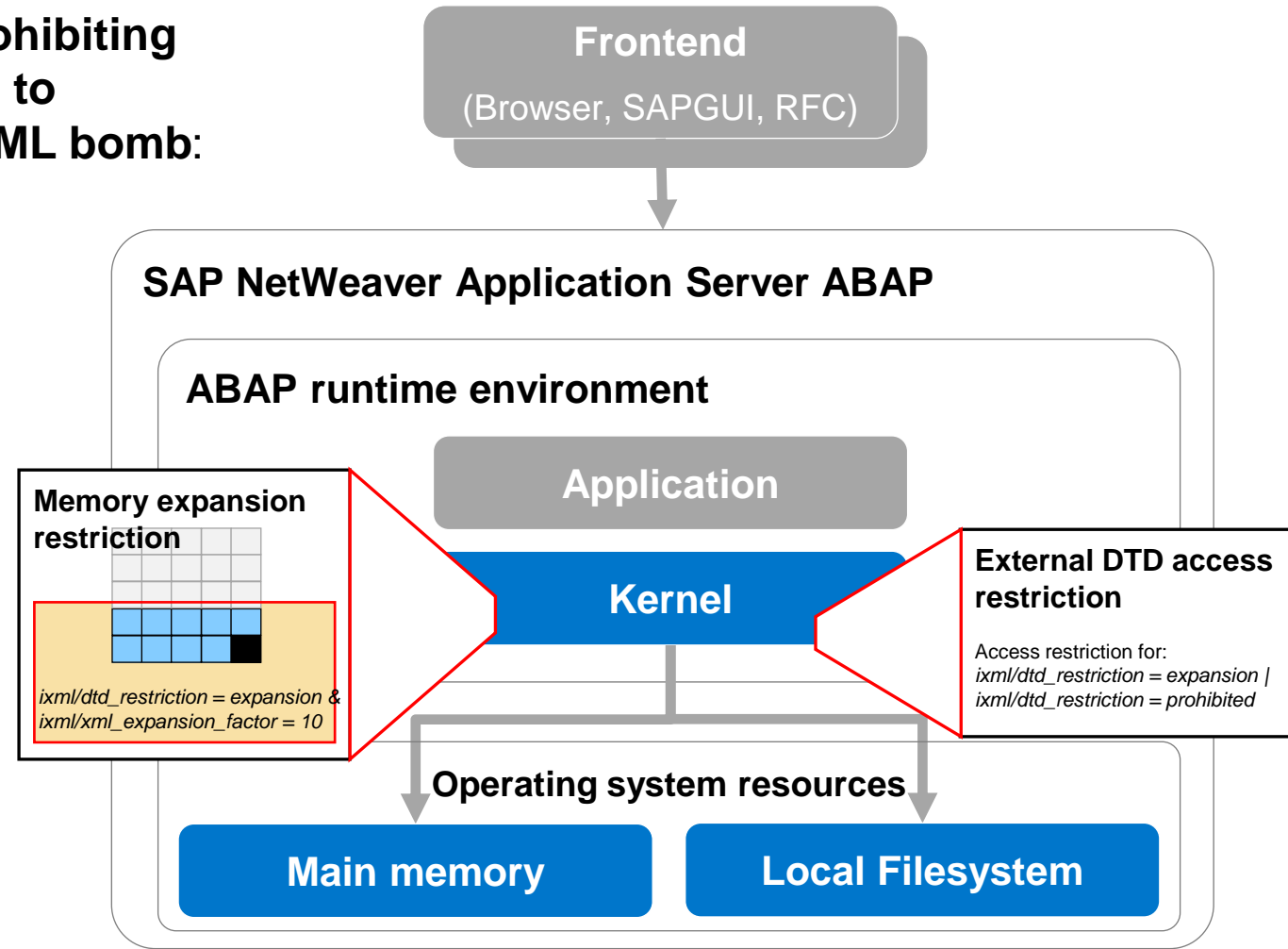
`expansion` – expansion of XML is limited*

`prohibited` – DTDs are prohibited**

* Default value for Kernel ≥ 7.45

** External DTD can be programmatically granted by adapted application coding:

```
DATA l_dtd type string value '\\myserv\mydtd.dtd'.
DATA lo_istream_2 TYPE REF TO if_ixml_istream.
lo_istream->set_dtd_restriction( level =
if_ixml_istream=>DTD_RESTRICTED ).
lo_istream_2 = lo_stream_factory->create_istream_uri(
system_id = l_dtd ).
lo_parser->register_entity( istream = lo_istream_2
public_id = '' system_id = l_dtd ).
```



■ Memory occupied by XML ■ Max. accessible memory ■ Non-accessible memory

Notes 1594475 1712860 XML External Entities (XXE)

Required actions in a nutshell (ABAP)

Pre-consideration

Check system requirements according to note 1594475

Solution is active by default for kernel versions ≥ 7.45
(value `expansion`)

Run your XML processing scenarios in test environment
before activating in productive landscape

Custom code

Custom code using full capabilities of XML DTD processing
or external DTDs requires adaption according to note
1712860

Configuration settings

Set profile parameter:

<code>ixml/dtd_restriction:</code>	<code>none</code> <code>expansion</code> <code>prohibited</code>
<code>ixml/xml_expansion_factor:</code>	<code><numeric value></code> (default 10)

Additional information

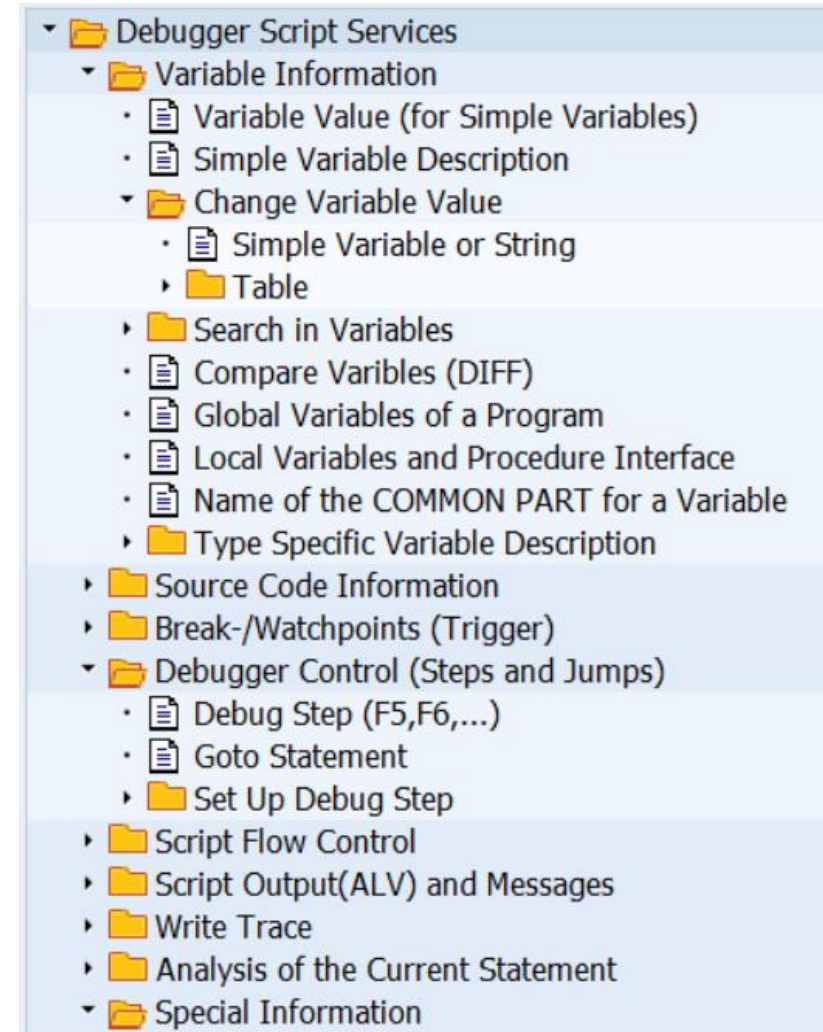
Enable error logging (available for kernel versions ≥ 7.45):
Syslog A35: DTD parsing attempt forbidden by configuration
Syslog A36: DTD expansion exceeds valid limit
SAL FU2: Parsing of a XML document stopped because of
security reasons

Note 2433458 - Missing Authorization check in ABAP Debugger

New authorization check for executing scripts within ABAP Debugger:

```
AUTHORITY-CHECK OBJECT 'S_DEVELOP'  
  ID 'DEVCLASS' DUMMY  
  ID 'OBJTYPE' FIELD 'DEBUG'  
  ID 'OBJNAME' FIELD i_name  
  ID 'P_GROUP' DUMMY  
  ID 'ACTVT' FIELD '16'.
```

Check roles, i.e. for developers in development systems and emergency users in production systems, containing authorizations **debug-display** (S_DEVELOP DEBUG 03), or **debug-change** (S_DEVELOP DEBUG 02) if authorizations for **debug-execute** should be added or removed – **and treat this authorization as critical as debug-change.**



Note 2433458 - Missing Authorization check in ABAP Debugger

Transactions SAS can be used to manage debugger scripts

Blogs:

ABAP Debugger Scripting: Basics

<https://blogs.sap.com/2010/12/14/abap-debugger-scripting-basics/>

ABAP Debugger Scripting: Advanced

<https://blogs.sap.com/2010/12/14/abap-debugger-scripting-advanced/>

Note 2088593 - Potential disclosure of persisted data in LO-MD-BP

The solution combines two security configuration methods:

- **Switchable Authorization Checks for RFC Functions (SACF)**

FI_AP_VENDOR_BAPI	authorization for F_LFA1_GEN in function BAPI_VENDOR_FIND
FI_AR_CUSTOMER_BAPI	authorization for F_KNA1_GEN in function BAPI_CUSTOMER_FIND

- **Switchable Whitelist (SLDW)**

LO_MD_BP_VENDOR_BAPI	for table search in function BAPI_VENDOR_FIND
LO_MD_BP_CUSTOMER_BAPI	for table search in function BAPI_CUSTOMER_FIND

Recommendation: Implement the note and activate the SACF and SLDW scenarios but adjust authorization roles and maintain the whitelist only if you are using these functions via RFC.

You can use the Workload Statistics (Transaction ST03N) → RFC Profiles or transaction STRFCTRACE to verify if these functions are used in RFC scenarios (or you use report ZRFC_STATRECS_SUMMARY).

Note 2088593 - Potential disclosure of persisted data in LO-MD-BP

Transaction ST03N (no specific prerequisites)

Workload in System FBT

← → 🖨️ Full screen on/off 📄 Save view 🗑️

Expert mode

- Workload
 - Idai1fbt_FBT_00
 - Idcifbt_FBT_00
 - Total
- Detailed Analysis
- Load History and Distribution
- BI Workload
- CRM Workload
- Collector and Performance DB

Transaction Profile

- Time Profile
- Ranking Lists
- Memory Use Statistics
- RFC Profiles
 - RFC Client Profile
 - RFC Server Profile
 - RFC Client Destination Profi
 - RFC Server Destination Prof
- User and Settlement Statistics
- Frontend Statistics

Instance: TOTAL
Period: 13.07.2015
Task type: NONE

Function Module Transactions User

Task type

RFC Server Statistics:Function Module

Function Module (Started over RFC)	No. of Calls
BAPI_EXT_JOB_STATUS_CALLBACK	1.808
/SDF/E2E_DISPATCHED_COLLECTOR	34.032
DBA_ALERT_EFWK RFC_WRAPPER	2.172
/SDF/MON_COLLECT_DATA	2
/SDF/SMON_COLLECT_DATA	2
E2E_DPC_PULL_CORE	13.983
/SDF/E2E_EFWKE_DATA_CONNECTOR	4.942
/SDF/MON_COLLECT_GLOBAL_DATA	1
RRW3_GET_QUERY_VIEW_DATA	887
E2E ME RFC ASYNC NO RR 255	1.468

Evaluate RFC Statistics Records

📄 ⓘ

Selection for Calling System (Remote System)

Caller SID to

User Name of Caller to

Selection for Called System (Local System)

User Name to

Function Module to

Function Group to

Transaction STRFCTRACE (Verify prerequisites as described in the information)



February 2017

Topics February 2017



System Recommendations failure – solved as of 21.02.2017

Note [2418823](#) - Update 1 to Note 2319506

Note [2413716](#) - Setup of Trusted RFC in GRC Access Control EAM

Note [2374165](#) - Missing Authorization check in BW-BPS

Note [2405256](#) - PFCGMASVAL: Adding a manual authorization

The SAP Security Baseline Template & Configuration Validation

System Recommendations failure – solved as of 21.02.2017

The screenshot shows the SAP System Recommendations interface. At the top, there is a filter section with dropdowns for Solution (SAP Solution), Product System (XS2), and Technical System (XS2 [ABAP]). Below this are buttons for 'Apply Filter' and 'Save Filter'. A search bar contains the text 'Currently almost all Security Notes and HotNews are added to the list and'. Below the search bar, a yellow callout box contains the following text:

The issue is solved!

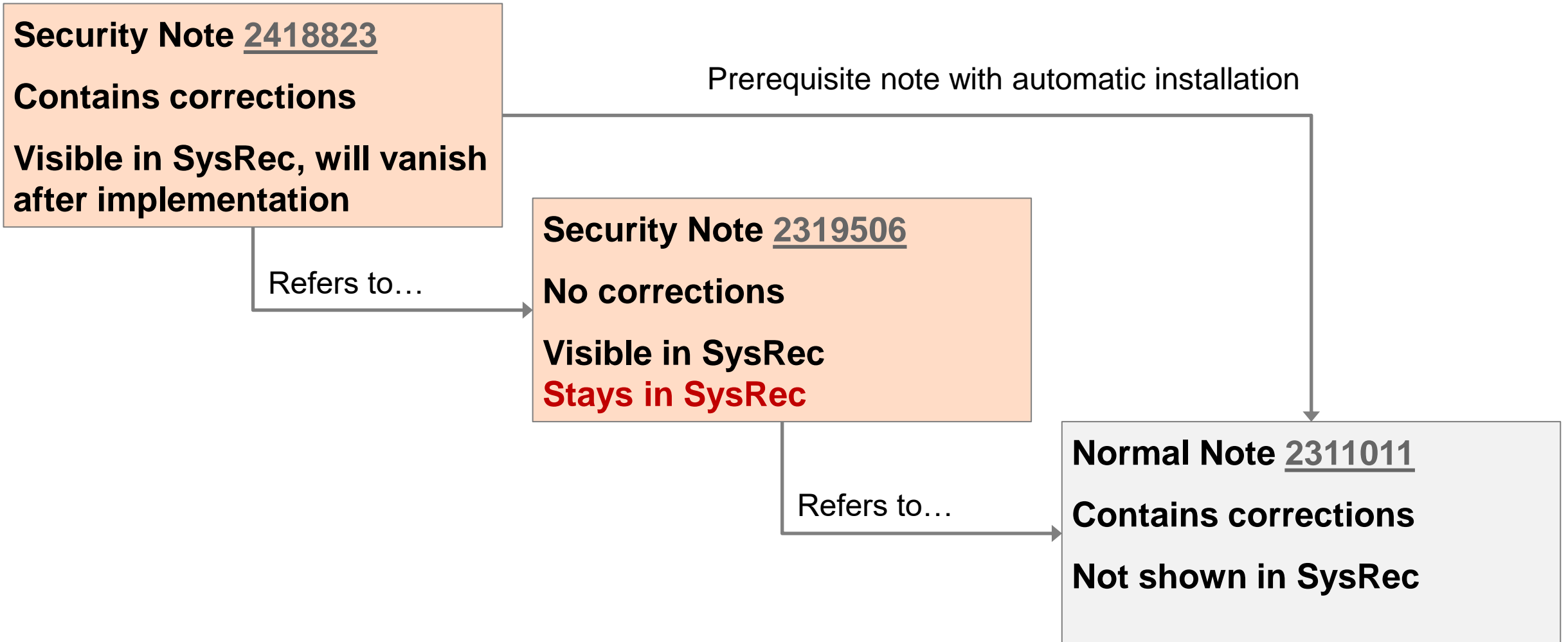
Please restart the background job SM:SYSTEM RECOMMENDATIONS, e.g. by copying an older job and schedule the new job „immediately“. The wrongly shown Security Notes and HotNews are removed. The application log, transaction SLG1 for log object AGS_SR, shows the removal of the superfluous notes. Status values which you might have entered into System Recommendations are not touched.

Below the callout box, the interface shows a table of Security Notes (3697) with columns for Note Number, Version, and Status. The table is partially visible, showing the following data:

Note Number	Version	Status
0000186119	0007	Re
0000400241	0054	Pr
0000412309	0023	Au
0000493107	0024	SS
0000577736	0005	Users
0000602194	0004	SAP FSC...
0000604816	0002	Lockout b...

At the bottom right of the table, there are two rows with status values: 'Release Independent Notes' and 'Release Independent Notes'.

Note 2418823 - Update 1 to Note 2319506



Note 2418823 - Update 1 to Note 2319506

Is the vulnerability limited to ORA? (Can I omit implementation in case of other databases?)

Yes, because of tests like this:

```
IF SY-DBSYS(3) <> 'ORA'.  
  RAISE WRONG_DATABASE.  
ENDIF.
```

... but this test is commented in one of the functions.

Yes, because the following fails if ORA specific table V\$INSTANCE does not exist:

```
EXEC sql .  
  select instance_name  
  into :localdbname  
  from V$INSTANCE  
ENDEXEC .
```

... but I do not like to rely on this in case of very critical INSERT REPORT ... PERFORM IN PROGRAM ...

 **Implement such corrections in any case.**

Note 2413716 - Setup of Trusted RFC in GRC Access Control EAM

This how-to note (which is based on updated material from this webinar from October 2016) replaces and corrects old note 1694657.

To secure Trusted RFC for GRC Access Control EAM you should execute following configuration changes:

1. Enhance the trust relationship to transmit the transaction code of the calling transaction
2. Maintain authorizations for authorization object `S_RFCACL` in managed systems
3. Adjust RFC destinations to utilize the authorization object `S_ICF` to secure the usage of RFC destinations
4. Deactivate the password of FFIDs
5. Strictly control critical basis authorizations for managing trust relationships and RFC destinations
6. Restrict authorizations for `S_RFC` included in SAP roles from GRC

See Blog: Secure Trusted RFC in GRC Access Control EAM and other Applications

<https://blogs.sap.com/2017/02/14/secure-trusted-rfc-in-grc-access-control-eam-and-other-applications>

Note 2374165 - Missing Authorization check in BW-BPS

This is just another example about potential critical functions and methods which could be misused if you do not control development authorizations.

You easily can apply the note, just do it,...



... but it is more important to

- **strictly control access to SE37 and to authorizations for S_DEVELOP for object type FUGR and activity 16 = execute (and all change activities)**
- **strictly control access to SE24 and to authorizations for S_DEVELOP for object type CLAS and activity 16 = execute (and all change activities)**


Note 2405256 - PFCGMASVAL: Adding a manual authorization



Mass Maintenance of Authorization Values

Standard Selection

Roles to 

Simulation
 Execution with Previous Simulation
 Direct Execution

Type of Field Change

Change Organizational Levels
 Change Field Values of Authorizations for an Object
 Change Field Values of Authorizations for a Field (Cross-Object)
 Add manual authorization for one object

Add manual authorization for one object

Change

Authorization Object

Field 1	<input type="text" value="RFC_TYPE"/>	<input type="text" value="Values to Be Replaced"/>	<input checked="" type="checkbox"/>	<input type="text" value="Values"/>
Field 2	<input type="text" value="RFC_NAME"/>	<input type="text" value="Values to Be Replaced"/>	<input checked="" type="checkbox"/>	<input type="text" value="Values"/>
Field 3	<input type="text" value="ACTVT"/>	<input type="text" value="Values to Be Replaced"/>	<input checked="" type="checkbox"/>	<input type="text" value="Values"/>
Field 4	<input type="text"/>	<input type="text" value="Values to Be Replaced"/>	<input type="checkbox"/>	<input type="text" value="Values"/>

New option to add an authorization manually

KBA 2253549 - The SAP Security Baseline Template & ConfigVal

An SAP Security Baseline is a regulation on minimum security requirements to be fulfilled for all SAP systems in your organization.

"Baseline" means: These requirements must be fulfilled by all SAP systems regardless of any risk assessments. They are general best practices and apply to all systems, regardless of their security level.

The SAP Security Baseline Template is a template document provided by SAP on how an organization-specific SAP Security Baseline could be structured. It is pre-filled with selected baseline-relevant requirements and corresponding concrete values as recommended by SAP.

<https://support.sap.com/sos>

→ Media Library

CoE Security Services - Security Baseline Template Version

https://support.sap.com/dam/library/SAP%20Support%20Portal/support-programs-services/support-services/security-optimization-service/media/Security_Baseline_Template.zip

KBA 2253549 - The SAP Security Baseline Template & ConfigVal

The package contains files to configure the application Configuration Validation according to the SAP Security Baseline Template.

The basics of Configuration Validation are described here:

<https://support.sap.com/sos>

→

[SAP CoE Security Services – Checking Security Configuration and Authorization](#)

Wiki:

https://wiki.scn.sap.com/wiki/display/TechOps/ConfVal_Home

Select Target System	
SID	Description
BL_I-13	SAP HANA Security
BL_I-5	Web Dispatcher Security
BL_O-1	Handling of ABAP Default Users in ABAP Systems
BL_O-2	No use of authorization profiles SAP_ALL and other critical
BL_O-3	Segregation of Basis and Business Authorizations
BL_O-4	Restricted Assignment of Critical Basis Authorizations
BL_O-5	RFC Authorizations
BL_O-6	Java Systems Administrators
BL_O-8	Security Audit Log (ABAP)
BL_O_8_0	Security Audit Log (ABAP) Switch
BL_O_8_1	Security Audit Log (ABAP) slot for SAP(*) users
BL_S-1	ABAP Profile Parameters
BL_S-2	Protection of Password Hashes in ABAP Systems
BL_S-3	Modification Protection for Production Systems
BL_S-4	Secure Configuration of Java Systems



January 2017

Topics January 2017



News from SAP Support Portal – Filter for Security Notes

System Recommendations – Silent migration to new SAP backbone

How to analyze unimportant updates

Note [2379540](#) - User defined HTTP logging with TLS information

Note [2265385](#) - Switchable authorization checks for RFC in Product Catalog

Overview about Authorization Trace Options

Note [1854561](#) - Authorization trace with filter

Note [2220030](#) - STUSERTRACE: User trace for authorization checks

News from SAP Support Portal – Filter for Security Notes

My SAP Notes & KBAs Application

<https://support.sap.com/notes> → Expert Search

- **New Filters: The Expert Search in the My SAP Notes & KBAs application now features even more filter options:**
 - Document Type with the options SAP Notes, SAP Knowledge Base Articles, **SAP Security Notes**, and SAP Partner Notes;
 - SAP Security Patch Day with the options Patch Day SAP Security Notes and Support Package SAP Security Notes.
 - Using these filters (in combination with others like Priority), you can easily identify SAP HotNews, SAP Security Notes, SAP Legal Change Notes and more and save these queries (as so-called “variants”) for future reuse.


SAP Security Notes Application

<https://support.sap.com/securitynotes>

- **The status handling for work lists has been improved: It is possible to move for example an Security Note from status ‘Confirmed’ back to status ‘To Be Reviewed’**
- **The comma-separated value (CSV) file that you can download to your local computer now includes the URLs to the notes in the list.**

News from SAP Support Portal – Filter for Security Notes

<https://support.sap.com/notes> → Expert Search

 **SAP** My SAP Notes & KBAs Knowledge Base ?

New Updated Expert Search My Favorites

Standard *

Hide Filter Bar Clear Restore Filters

Search Term: <input type="text" value="Enter search term"/> <input type="button" value="Q"/>	Fuzzy Threshold: <input type="text" value="Close Match (0.9)"/> <input type="button" value="v"/>	Components (Start with): <input type="text" value="No Restriction"/>	Components (Exact): <input type="text" value="No Restriction"/>
Excluded Components (Exact): <input type="text" value="No Restriction"/>	Released On (Pre-Defined): <input type="text" value="No Restriction"/> <input type="button" value="v"/>	Released On (Free): <input type="text" value="13.12.2016 - 10.01.2017"/> <input type="button" value="Calendar"/>	System: <input type="text" value="Enter System ID"/>
Soft.Comp.: <input type="text" value="No Restriction"/>	Soft.Comp.Version: <input type="text" value="No Restriction"/>	Support Package (Greater Than): <input type="text" value="No Restriction"/>	Product Version: <input type="text" value="No Restriction"/>
Priority: <input type="text" value="Hot News"/> <input type="text" value="Correction with high priority"/> <input type="button" value="v"/>	Category: <input type="text" value="..."/> <input type="button" value="v"/>	Release Status: <input type="text" value="No Restriction"/> <input type="button" value="v"/>	Document Type: <input type="text" value="SAP Security Notes"/> <input type="button" value="v"/>
Country: <input type="text" value="..."/> <input type="button" value="v"/>	SAP Security Patch Day: <input type="text" value="No Restriction"/> <input type="button" value="v"/>		

5 document(s) found

SAP Component	Number	Version	Title	Category	Priority	Released On
BC-SYB-SAM	2407862	5	Multiple buffer overflows in Flexera Flexnet Publisher (CVE-2015-8277) Sybase Asset Management	Program error	Hot News	10.01.2017
BC-IAM-SSO-OTP	2389042	6	Denial of service (DOS) in SAP Single Sign On	Program error	Correction with high priority	10.01.2017

System Recommendations – Silent migration to new SAP backbone

Due to technical reasons SAP starts a silent, staged migration to a new SAP backbone which calculates results for System Recommendations.

The old backbone does not get information about latest Support Packages anymore which lead to incorrect results (too many notes = false-positive). Example: After upgrading a system to SAP_BASIS 7.20 SP 16, which was recently released to customers in November 2016, you see several superfluous notes in System Recommendations.

Please raise a ticket on component SV-SMG-SR if you face any issues about

How to analyze unimportant updates

Use the 'Compare version' function to analyze changes on Support Portal:

Note 2319172 - Whitelist based Clickjacking Framing Protection in SAP GUI for HTML

Version	12	Type	SAP Security Note
Language	English	Master Language	English
Component	BC-FES-ITS (SAP Internet Transaction Server)	Released On	1218.0701.20162017

➤ No change

Note 1541716 - Potential Denial of Service in translation tools funct.

Version	24	Type	SAP Security Note
Language	English	Master Language	English
Component	BC-DOC-TTL (Translation Tools)	Released On	1317.1201.20122017

➤ Unimportant change (removal on superfluous release assignment)

Software Component	Release
SAP_BASIS	702 - 702
SAP_BASIS	711 - 730
SAP_BASIS	72L - 800

Note 2379540 - User defined HTTP logging with TLS information



Security Optimization Projects often show two stages:

(1) Enable improved security

Install software, configure logging / simulation mode, prepare configuration, still accept insecure processing

(2) Enforce improved security

Log errors only, disable simulation mode, finalize configuration, refuse insecure processing

How to decide when you can enter stage (2)?

Example project “Encrypt all communication channels” for work stream “web based communication”.

First you enable TLS on all servers and clients and start encrypting http sessions. You enter stage (2) as soon as you can prove, that all (important business relevant) communication channels are in fact using https.

How can you log if and which encryption schema is in use?

Note 2379540 - User defined HTTP logging with TLS information

Use profile parameters `icm/HTTP/logging_<xx>` (incoming) and `icm/HTTP/logging_Client_<xx>` (outgoing) to log information about TLS properties of established TLS sessions.

Available as of Kernel 7.22 patch 223, 7.45 patch 410, or 7.49 patch 111

Example:

```
icm/HTTP/logging_2 = PREFIX=/, LOGFILE=ssl_info.log, LOGFORMAT=%a %y1 %y2
```

This could lead to following log entries (the 1st line shows a non-encrypted connection):

```
10.97.12.81 - -  
10.97.12.81 TLSv1.0 TLS_RSA_WITH_AES128_CBC_SHA  
10.97.10.26 TLSv1.2 TLS_ECDHE_RSA_WITH_AES128_CBC_SHA  
10.97.10.26 TLSv1.2 TLS_ECDHE_RSA_WITH_AES128_GCM_SHA256
```

Documentation of placeholders for profile parameter `icm/HTTP/logging_<xx>`

https://help.sap.com/saphelp_nw75/helpdata/en/48/442541e0804bb8e10000000a42189b/frameset.htm

Note 2379540 - User defined HTTP logging with TLS information

Proposal (If the string is too long for entering it in RZ10, then maintain the profile file directly):

```
icm/HTTP/logging_0 =  
PREFIX=/  
LOGFILE=access-$(SAPSYSTEMNAME) -$(SAPLOCALHOST) -%y-%m-%d.log,  
MAXSIZEKB=1500000,SWITCHTF=day,  
LOGFORMAT=%t %a %y1 %y2 %u "%r" %s %b %L %{Host}i %w1 %w2
```

Explanation:

%t	Time specification in CLF format: [15/Dec/2007:16:18:35 +0100]
%a	IP address of the remote host (this might be a load balancer, therefore we add placeholder %{Host}i)
%y1	TLS protocol version (only useful if SSL termination happens here)
%y2	TLS cipher suite as string (only useful if SSL termination happens here)
%u	User name of a basic authentication or the "common name" of an X.509 certificate
%r	First line of an HTTP request with the original path and form fields
%s	OK code of the response
%b	Length of the response in bytes
%Lms	The duration of a request in milliseconds (followed by "ms")
%{Host}i	Name of a request header field
%w1	SID of the back-end system (from wdisp/system) to which an HTTP request was sent.
%w2	Instance of the back-end system to which an HTTP request was sent.

Note 2265385 - Switchable authorization checks for RFC in Product Catalog

Step 5: Maintain RFC Function Modules default values using transaction SU22/SU24
... instructions for many functions ...

This step is only required if you plan to maintain roles using authorization defaults for RFC enabled functions.

Adding RFC functions to a role menu allows to pull authorization defaults into the role.

Change Roles

Other role

Role: ZCRM_PRODUCT_CATALOG

Description: Note 2265385 - Switchable authorization checks for RFC in Product Catalog

Target System: No destination

Navigation: Descri... | **M...** | Authorizations | User | Personalization

Tools: Authorization Default | Copy Menu

Hierarchy: Role Menu

Node Details: Type

XS2(1)/001 Service

Authorization Default: **RFC Function Module**

Function Module	Text
COM_PCAT_CVIEW_UNLOCK	
COM_PCAT_GETCVIEWS_FOR_VAR	
COM_PCAT_GETVIEWS_FOR_BP	
COM_PCAT_IMS_CA_PRC_CHNG	
COM_PRDCAT_AREA_ACTIVATE	
COM_PRDCAT_AREA_ADDDESC	
COM_PRDCAT_AREA_CHANGE	

Note 2265385 - Switchable authorization checks for RFC in Product Catalog

Another option is to find and analyze existing roles containing these authorization objects.

User Information System

Structure

- ▾ User Information System
 - User
 - ▾ Roles
 - ▾ Roles by Complex Selection Criteria
 - Roles by Complex Selection Criteria
 - By Role Name
 - By User Assignment
 - By Transaction Assignment
 - By Profile Assignment
 - **By Authorization Object**
 - By Authorization Values
 - By Change Dates

Roles by Complex Selection Criteria

Selection by Profiles and Authorization Objects

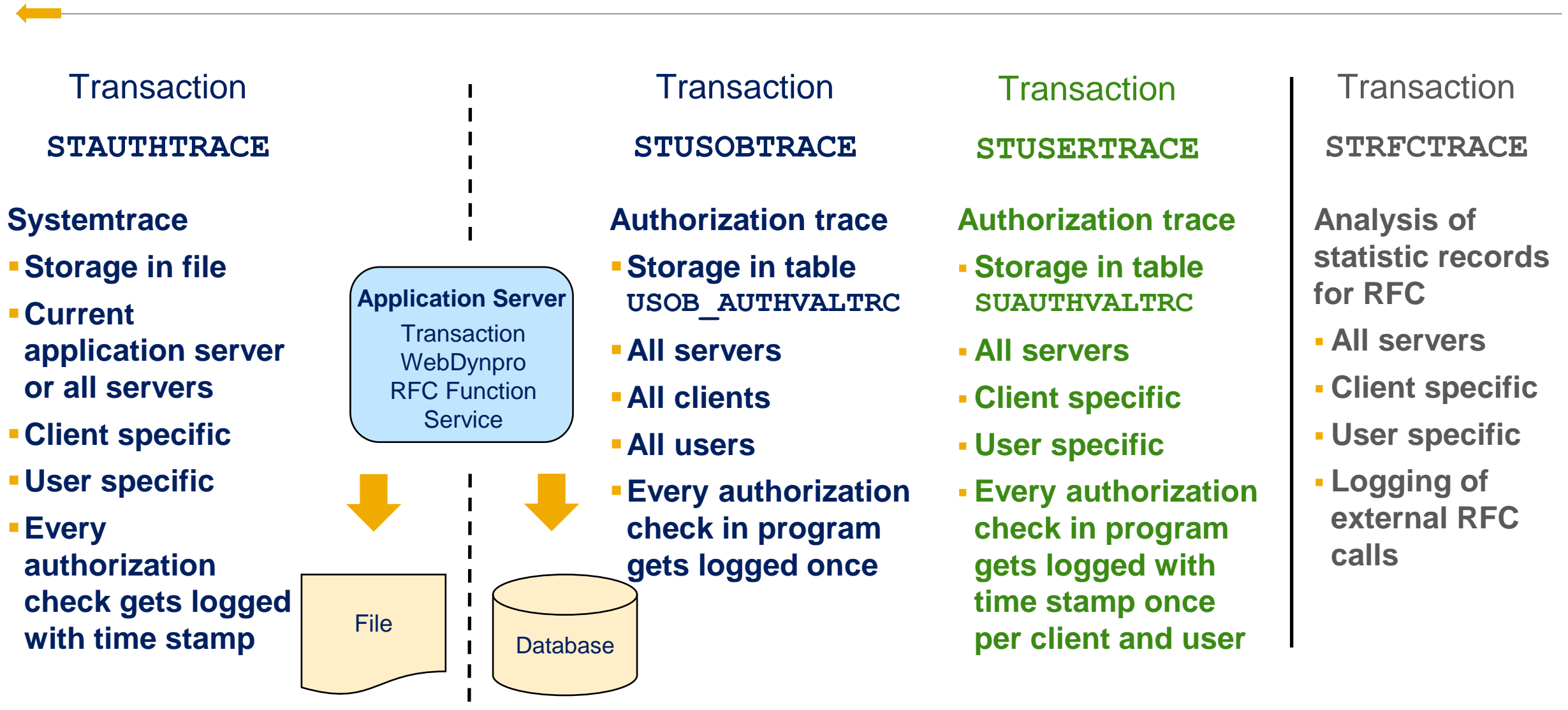
Authorization Object:

Roles by Complex Selection Criteria

In Accordance with Selection Transaction Assignments

Role	Type	Short Description
SAP_CRM_ECO_WEBSHOP_MANAGER		CRM-ECO: ISA Internet User for User Management
SAP_CRM_UIU_HT_CHM_CHANNEL_MAN		CRM UIU High Tech Channel Manager
SAP_PCC_CMS_CHANNEL_MGR		Channel Manager for HT
SAP_PCC_CMS_CHANNEL_PARTNER		Channel Partner for HT
SAP_PCC_COL_CHANNELMANAGER		Channel Management: Channel Manager

Overview about Authorization Trace Options



Note 1854561 - Authorization trace with filter


Transaction STUSOBTRACE requires activation using profile parameter `auth/authorization_trace`

- Storage in table `USOB_AUTHVALTRC`
- All servers
- All clients
- All users
- Every authorization check in program gets logged once

Evaluate Authorization Trace (Table USOB_AUTHVALTRC)

🔍 Evaluate Number of Entries ✎ Change Filter

Trace Information





Authorization Trace Active (No Filters) 

Filters for the Recording

Last Changed BUCHHOLZF 09.01.2017 15:28:38

Filter	Value
Type of Application	RFC Function Module

Restrictions for the Evaluation

Type of Application	<input type="text"/>			
Authorization Object	<input type="text"/>	to	<input type="text"/>	
Created On	<input type="text"/>	to	<input type="text"/>	
Created At	<input type="text" value="00:00:00"/>	to	<input type="text" value="00:00:00"/>	
Created By	<input type="text"/>	to	<input type="text"/>	
Maximum Number of Hits	<input type="text" value="200"/>			

Note 2220030 - STUSERTRACE: User trace for authorization checks

The long-term trace collects data for all clients and all users and stores it in the database.

It is available as of **SAP_BASIS 7.40 SP 14** or **7.50 SP 02** and requires **Kernel 7.45 patch 112**.

Note 2220030 is required to activate the transaction on the lowest of these SP.

During the execution of a program, each authorization check is recorded with the name and type of the running application, the location in the program, the authorization object, the checked authorization values, and the result exactly once for each user. This is done with the first time stamp.

The authorization trace is activated using the **profile parameter** `auth/auth_user_trace`. You can switch the profile parameter dynamically.

You can activate the trace either completely or only for selected authorization checks using a filter indicator. Application type, user, and authorization objects can be used as filters. In this way, you can examine special scenarios, such as RFC programs or batch jobs, over a longer period of time.

Note 2220030 - STUSERTRACE: User trace for authorization checks

Note 2220030 is required to activate the transaction on the lowest of these SP:

```
...
*&-----*
form init.

*>>>> START OF DELETION <<<<<<
  " Transaction not active
  message i319(01) with 'Transaction is not active.' 'Please refer to SAP Note 2220030.' space space ##NO_TEXT .
  leave program.

  " New authorization check for user trace
*>>>> END OF DELETION <<<<<<

*>>>> START OF INSERTION <<<<<<
  " New authorization check for user trace
*>>>> END OF INSERTION <<<<<<

...
```

Note 2220030 - STUSERTRACE: User trace for authorization checks

Evaluation of User Trace for Authorization Checks

Evaluate Number of Entries **Change Filter** ⓘ

FBT(1)/200 Change Filter

Filter for Application Type

Type of Application ⓘ

Type of Application

Exclude Generic Transactions

Filter for User

Selection Option	User Name

Filter for Authorization Objects

Selection Option	A


FBT(1)/200 Change Filter

Type of Application (Detailed)	Type of Application
Web Dynpro Application	TADIR Service
Web Dynpro Application Configuration	TADIR Service
IDoc Type	TADIR Service
Workflow templates	TADIR Service
SAP Gateway: Service Groups Metadata	TADIR Service
SAP Gateway Business Suite Enablement - Service	TADIR Service
BSP (Business Server Pages) Application	TADIR Service
JCO iView	External Service
People Centric UI Service (CRM)	External Service
WebService	External Service
CRM UIU Component	External Service
CRM Web Channel Experience Management Module	External Service

Note 2220030 - STUSERTRACE: User trace for authorization checks

Result for calling the Fiori Launchpad and the Fiori App System Recommendations

User Trace for Authorization Checks: 34 Hits



Time	Type of Application	Application Name	Result	Resu	Object	Field 1	Value 1	Field 2	Value
12:18:30	SAP Gateway Business Suite Enablement - Service	/UI2/PAGE_BUILDER_PERS 0001	0	Auth	S_SERVICE	SRV_NAME	DE0699A8407F658	SRV_TYPE	HT
	SAP Gateway: Service Groups Metadata	ZPAGE_BUILDER_PERS_0001	0	Auth	S_SERVICE	SRV_NAME	E50E80F6434D75C	SRV_TYPE	HT
12:18:31	SAP Gateway Business Suite Enablement - Service	/UI2/PAGE_BUILDER_PERS 0001	0	Auth	/UI2/CHIP	/UI2/CHIP	X-SAP-UI2-CHIP*	ACTVT	03
	SAP Gateway Business Suite Enablement - Service	/UI2/PAGE_BUILDER_PERS 0001	0	Auth	/UI2/CHIP	/UI2/CHIP	X-SAP-UI2-PAGE*	ACTVT	03
12:18:35	SAP Gateway Business Suite Enablement - Service	/UI2/INTEROP 0001	0	Auth	S_SERVICE	SRV_NAME	A15F5E180FD9799	SRV_TYPE	HT
	SAP Gateway: Service Groups Metadata	ZAGS_FLP_INTEROP_0001	0	Auth	S_SERVICE	SRV_NAME	A3B118EC9607F7F	SRV_TYPE	HT
12:18:45	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	AI_LMDB_OB	ACTVT	03	LMDB_DOMA	LDB
	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	COM_IL	ACTVT	01	RELTYPE	PRDBP
	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	COM_IL	ACTVT	02	RELTYPE	PRDBP
	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	COM_IL	ACTVT	03	RELTYPE	PRDBP
	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	S_SERVICE	SRV_NAME	8A5C52B04A84DA	SRV_TYPE	HT
	SAP Gateway: Service Groups Metadata	ZAGS_SYSREC_SRV_0001	0	Auth	S_SERVICE	SRV_NAME	92AA3BAD7AC812	SRV_TYPE	HT
12:18:46	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	AI_LMDB_OB	ACTVT	03	LMDB_DOMA	LDB
	SAP Gateway Business Suite Enablement - Service	AGS_SYSREC_SRV 0001	0	Auth	AI_LMDB_OB	ACTVT	03	LMDB_DOMA	LDB



December 2016

Topics December 2016



Transparent Software Vulnerability Disclosure - SAP as a CVE Naming Authority

Patch Day Notes vs. Support Package Implementation Notes (reloaded)

Note [2351486](#) - SAP HANA cockpit: Information disclosure in offline administration

Authorizations for SAP Solution Manager RFC users

Notes [2257213](#) for SolMan 7.2, note [1830640](#) for SolMan 7.1, (and old note [1572183](#))

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

SAP to become a CVE Naming Authority for SAP issues

Tentative Proposal

Soenke Eggers

**Product Security Response Team
December, 2016**

Proposal – For
Customer Feedback

Common Vulnerabilities and Exposures (CVE)

CVE is a dictionary of publicly known information security vulnerabilities and exposures.

CVE's common identifiers enable data exchange between security products and provide a baseline index point for evaluating coverage of tools and services.

The MITRE Corporation maintains CVE, manages the compatibility program, oversees the CVE Numbering Authorities (CNA), and provides impartial technical guidance to the CVE Editorial Board throughout the process to ensure CVE serves the public interest.

MITRE is a not-for-profit organization that operates research and development centers sponsored by the United States federal government.

A CVE entry example



Common Vulnerabilities and Exposures

The Standard for Information Security Vulnerability Names

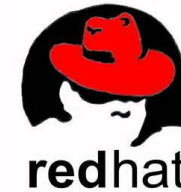
[Full-Screen View](#)

CVE-ID	
CVE-2016-4249	View at National Vulnerability Database (NVD) • Severity Rating • Fix Information • Vulnerable Software Versions • SCAP Mappings
Description	
Heap-based buffer overflow in Adobe Flash Player before 18.0.0.366 and 19.x through 22.x before 22.0.0.209 on Windows and OS X and before 11.2.202.632 on Linux allows attackers to execute arbitrary code via unspecified vectors.	
References	
Note: References are provided for the convenience of the reader to help distinguish between vulnerabilities. The list is not intended to be complete.	
• CONFIRM:https://helpx.adobe.com/security/products/flash-player/apsb16-25.html	
Date Entry Created	
20160427	Disclaimer: The entry creation date may reflect when the CVE-ID was allocated or reserved, and does not necessarily indicate when this vulnerability was discovered, shared with the affected vendor, publicly disclosed, or updated in CVE.
Phase (Legacy)	
Assigned (20160427)	
Votes (Legacy)	

Define CNA

CVE Numbering Authorities (CNAs) are major OS vendors, security researchers, and research organizations that assign CVE Identifiers to newly discovered issues without directly involving MITRE in the details of the specific vulnerabilities, and include the CVE Identifiers in the first public disclosure of the vulnerabilities.

Some Software Vendors who are CNAs for their own issues



Not every software vendor is a CNA...but

Rank	Organisation	Revenue**	FY	Market cap**	Publish to CVE?	Security Notice available to Public?
1	 Microsoft	\$93.58	2015	\$439	Y	Y
2	 Oracle	\$38.27	2015	\$194.7	Y	Y
3	 SAP	\$23.3	2015	\$94.5	N – researcher publishes	N? Login Required?
4	 Salesforce.com	\$6.61	2015	\$52.9	N	N/A
5	 Symantec	\$6.58	2015	\$17.7	Y	Y
6	 VMware	\$6.57	2015	\$20.82	Y*	Y
7	 Fiserv	\$5.25	2015	\$21.53	N	N/A
8	 CA Technologies	\$4.26	2015	\$112.59	Y	Y
9	 Intuit	\$4.19	2015	\$26.0	N – researcher publishes	N – no note or advisory
10	 Amadeus IT Group	\$4.1	2013	\$17.7	N	N

Top 10 public software vendors by revenue (Forbes 2000)

*Not a recognized CNA

** in USD Billion

SAP mention in CVE

SAP products are mentioned in CVE Data Sources and Coverage:

https://cve.mitre.org/cve/data_sources_product_coverage.html

TOTAL CVE-IDs: 77028

RESULTS

Search Results

There are **326** CVE entries that match your search.

Name	Description
CVE-2016-4018	The Data Provisioning Agent (aka DP Agent) in SAP HANA does not properly restrict access to service functionality, which allows remote attackers to obtain sensitive information, gain privileges, and conduct unspecified other attacks via unspecified vectors, aka SAP Security Note 2262742.
CVE-2016-4017	The Data Provisioning Agent (aka DP Agent) in SAP HANA allows remote attackers to cause a denial of service (process crash) via unspecified vectors, aka SAP Security Note 2262710.
CVE-2016-4016	Cross-site scripting (XSS) vulnerability in SAP Manufacturing Integration and Intelligence (aka MII, formerly xMII) allows remote attackers to inject arbitrary web script or HTML via vectors related to UR Control, aka SAP Security Note 2201295.
CVE-2016-4015	The Enqueue Server in SAP NetWeaver JAVA AS 7.1 through 7.4 allows remote attackers to cause a denial of service (process crash) via a crafted request, aka SAP Security Note 2258784.
CVE-2016-4014	XML external entity (XXE) vulnerability in the UDDI component in SAP NetWeaver JAVA AS 7.4 allows remote attackers to cause a denial of service via a crafted XML request, aka SAP Security Note 2254389.
CVE-2016-3980	The Java Startup Framework (aka jstart) in SAP JAVA AS 7.4 allows remote attackers to cause a denial of service via a crafted HTTP request, aka SAP Security Note 2259547.

When we do not submit, our researchers do...

[Full Entry View](#)

CVE-ID	
CVE-2016-4018	Learn more at National Vulnerability Database (NVD) • Severity Rating • Fix Information • Vulnerable Software Versions • SCAP Mappings
Description	
The Data Provisioning Agent (aka DP Agent) in SAP HANA does not properly restrict access to service functionality, which allows remote attackers to obtain sensitive information, gain privileges, and conduct unspecified other attacks via unspecified vectors, aka SAP Security Note 2262742.	
References	
Note: References are provided for the convenience of the reader to help distinguish between vulnerabilities. The list is not intended to be complete.	
<ul style="list-style-type: none">MISC:https://erpscan.com/press-center/blog/dos-vulnerabilities-on-the-rise-sap-security-notes-april-2016/	
Date Entry Created	
20160414	Disclaimer: The entry creation date may reflect when the CVE-ID was allocated or reserved, and does not necessarily indicate when this vulnerability was discovered, shared with the affected vendor, publicly disclosed, or updated in CVE.
Phase (Legacy)	

Researchers control how to describe a SAP vulnerability.

Always point to their blogs for marketing purposes

Always point to the researcher's blog in CVE...



HOME

SAP Security Notes April 2016 – DoS vulnerabilities on the rise

April 12, 2016/[Blog](#)

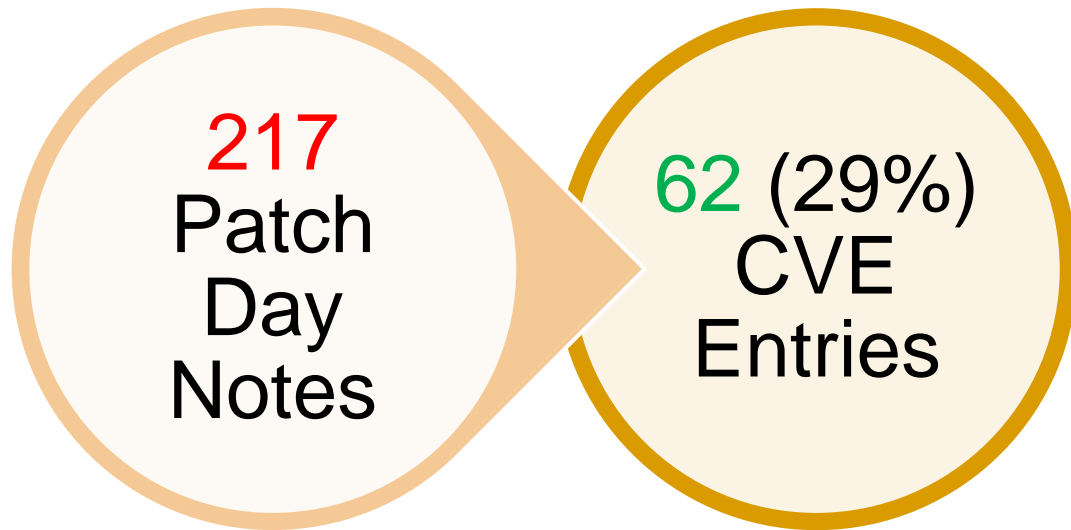


SAP has released the monthly [critical patch update for April 2016](#). This patch update closes 26 vulnerabilities in SAP products including 19 SAP Security Patch Day Notes and 7 Support Package Notes. 8 of all Notes were released after the second Tuesday of the previous month and before the second Tuesday of this month.

10 of all closed SAP Security Notes have a high priority rating. The highest CVSS score of the vulnerabilities is 7.5.

Stacking up the numbers...in 2015

Researchers don't submit all SAP vulnerabilities to CVE, especially those with little marketing values to them.



Our customers and researchers *demand* change

- *Just some examples*

Citi has a requirement for all vendors to follow Responsible Vulnerability disclosure as described within the Citi Information Security Standards (CISS). All vendors must follow these disclosure processes to notify the global public of vulnerability releases as outlined in the links below. Once these procedures are followed, our content provider can then collect this data and provide to us. Privately disclosing vulnerabilities creates exponential amounts of unnecessary work for everyone in Citi because this information is not freely available.

- *Citi escalation to SAP in regards to our 'lack of' CVE submission*

We are interested in knowing when would SAP releases CVE.

- *Northrop Grumman question in an ASUG webcast on CVSS*

We are constantly working on preventing and responding to (possible) cyber security incidents for the Dutch government and vital infrastructure... 1) Is there any additional information available with more information about products and vulnerabilities? 2) Could you share that information with us?

- *Dutch National Cyber Security Centre on sec. note transparency*

Our customers and researchers *demand* change

- *Just some examples*

I'm not seeing corresponding CVE numbers on SAP for reported vulnerabilities. Where do I find this. For example, for ASE file creation vulnerability I found this CVE in google :

[https://www.trustwave.com/Resources/SpiderLabs-Blog/SAP-ASE-file-creation-vulnerability-\(CVE-2016-6196\)/](https://www.trustwave.com/Resources/SpiderLabs-Blog/SAP-ASE-file-creation-vulnerability-(CVE-2016-6196)/)

However, we don't see it in Imperva. We also do not see a CVE mentioned in the notes:













<https://launchpad.support.sap.com/#/notes/2329738>

- *E*TRADE FINANCIAL comment on CVE compatibility*

After the issue will be resolved it is possible to ask MITRE for a CVE-ID?
It is very important for me to have it for my resume.

- *A researcher's response after SAP confirmation of his reported vulnerability.*

Anticipated benefit of adopting CVE

Benefits to:	Customer	SAP	
Transparent communication on security patches			
Standardize vulnerability notification and formatting			
Better integration in to customer's existing risk management tools and processes			
Align with industry peers as CVE is the industry standard to publish vulnerabilities			
Increase awareness and adoption of SAP published security notes			
Reduce or eliminate communication overhead by adopting standard channels			
Ensure SAP's position on vulnerabilities is represented (and not interpreted by Onapsis, ERPScan etc.)			
Allow SAP to scale out vulnerability management (e.g. cloud data centers)			

To summarize...

1. We adopt CVE to be in line with industry standard
2. CVE-ID is an addition to our landscape/tools of vulnerability notification
3. There is a 1:1 relationship between CVE and SAP vulnerabilities disclosed
4. We expect the adoption of CVE will benefit customers, and SAP
5. We expect the adoption of CVE will increase awareness of SAP security patches and customer satisfaction

By moving to CVE:

1. We want to be transparent.
2. We want to take control of our vulnerability disclosure.
3. We want our customers to apply patches.



**This is a tentative proposal.
We welcome your feedback.**

Contact information:

Vic Chung
vic.chung@sap.com

SAP Product Security Response

Transparent Software Vulnerability Disclosure

SAP as a CVE Naming Authority



Common Vulnerabilities and Exposures
The Standard for Information Security Vulnerability Names

[Home](#) | [CVE IDs](#) | [About CVE](#) | [Com](#)

Current status:
SAP does not produce CVE records but others create advisories about SAP

HOME > CVE > SEARCH RESULTS

Section Menu

CVE IDs

- Coverage Goals
- Reference Key/Maps
- Updates & Feeds

CVE List (all existing CVE IDs)

- Downloads
- Search CVE List
- Search Tips
- View Entire CVE List (html)

NVD Advanced CVE Search

- CVE ID Scoring Calculator

Request a CVE ID

- CVE Numbering Authorities (CNAs)

Search Results for “SAP”

There are **350** CVE entries that match your search.

Name	Description
CVE-2016-7437	SAP Netweaver 7.40 improperly logs (1) DUI and (2) DUJ events in the SAP Security Audit Log as non-critical, which might allow local users to hide rejected attempts to execute RFC function callbacks by leveraging filtering of non-critical events in audit analysis reports, aka SAP Security Note 2252312.
CVE-2016-7435	The (1) SCTC_REFRESH_EXPORT_TAB_COMP, (2) SCTC_REFRESH_CHECK_ENV, and (3) SCTC_TMS_MAINTAIN_ALOG functions in the SCTC subpackage in SAP Netweaver 7.40 SP 12 allow remote authenticated users with certain permissions to execute arbitrary commands via vectors involving a CALL 'SYSTEM' statement, aka SAP Security Note 2260344.
CVE-2016-6150	The multi-tenant database container feature in SAP HANA does not properly encrypt communications, which allows remote attackers to bypass intended access restrictions and possibly have unspecified other impact via unknown vectors, aka SAP Security Note 2233550.
CVE-2016-6149	SAP HANA SPS09 1.00.091.00.14186593 allows local users to obtain sensitive information by leveraging the EXPORT statement to export files, aka SAP Security Note 2252941.
CVE-2016-6148	SAP HANA DB 1.00.73.00.389160 allows remote attackers to cause a denial of service (process termination) or execute arbitrary code via vectors related to an IMPORT statement, aka SAP Security Note 2233136.

Transparent Software Vulnerability Disclosure

SAP as a CVE Naming Authority

Adopting Public Disclosure via CVE

- Transparent communication on security patches
- Standardize vulnerability notification and formatting
- Better integration in to customer's existing risk management tools and processes
- Reduce or eliminate communication overhead by adopting standard channels
- Allow SAP to scale out vulnerability management (e.g. cloud data centers)

Proposal asking for Customer Feedback
SAP Product Security Response
Email: vic.chung@sap.com

By adopting CVE:

- SAP will comply with an industry standard and customer expectation on software vulnerability disclosure
- SAP will not replace any existing mechanism, rather encourage the adoption of critical security notes
- We increase awareness on SAP security patches, especially to vulnerabilities known to external sources

Common Vulnerabilities and Exposures (CVE) is an industry standard in sharing information on software vulnerabilities

Patch Day Notes vs. Support Package Implementation Notes (reloaded)

Patch Day Notes

- SAP Security Notes mostly published on Security Patch Day
- Contain very important security corrections *or* address security issues reported from external sources
- Have CVSS scoring in most cases

Re-classification in March 2016 covering “minor, medium or high”

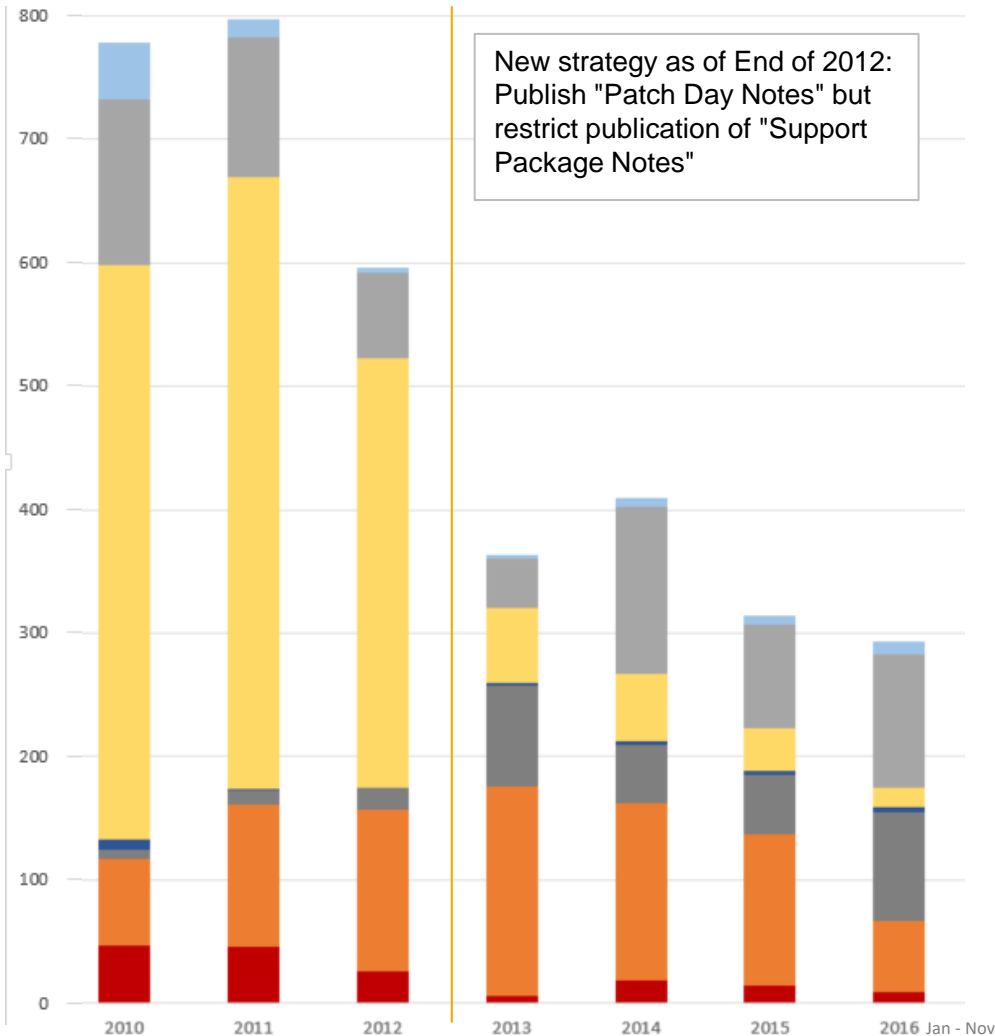
SPIN

- Typically address security issues of minor impact which are found SAP internally
- Should not be published in the first place but just be contained in Support Packages
- Have to be published as notes and often outside the Patch Day schedule if some customer production issue depended on it to be implemented first
- SPIN might be published on Patch Day dates as well!

SAP Component	System	Category	Priority	Patch Day	Released On
3794 Document		Support Package Security Notes			2381
SAP Component		Patch Day Security Notes			1413
WEC-FRW					
BC-MID-RFC	2245130	3		RFC	

<https://blogs.sap.com/2016/10/12/sap-security-patch-day-october-2016/>
* Patch Day Security Notes are all notes that fix vulnerabilities reported by external sources and internal findings with priority “Very High”.
* Support Package Security Notes fix vulnerabilities found internally with priority “Low”, “Medium” and “High”.

Patch Day Notes vs. Support Package Implementation Notes (reloaded)



Are Support Package Implementation Notes really different ... as soon as they are published?



Use Priority, CVSS, and risk assessment to judge about notes but don't use the type as a major differentiator.

- SPIN Priority low
- SPIN Priority medium
- SPIN Priority high
- PatchDay priority low
- PatchDay priority medium
- PatchDay priority high
- PatchDay priority very high

Note 2351486 - SAP HANA cockpit: Information disclosure in offline administration

The “SAP HANA cockpit for offline administration” is a tool to solve emergency issues only which only should be used if HANA is offline. In such a case it’s acceptable to login using the very powerful <sid>adm user.

This user has access to all server-local resources of the SAP HANA system. Only the emergency administrators of the database should know the credentials of this user. A user who knows the password of the <sid>adm user can directly log into the server at operating system level.

During normal operation administrators can use the HANA Studio using their personal users instead to view trace files of the database.

Authorizations for SAP Solution Manager RFC users

The template roles `SAP_SOLMAN_READ` and `SAP_SOLMAN_TMW` for the managed systems and the role `SAP_SOLMAN_BACK` for the SAP Solution Manager are updated regularly. In addition to extensions which are required to run new scenarios, we reduce the authorizations, too, omitting critical authorizations which are not needed (anymore).

Review the notes regularly and use transaction `SOLMAN_SETUP` to update your Z-roles:

- Note [2257213](#) - Authorizations for RFC users as of SAP Solution Manager 7.2 SP02
- Note [1830640](#) - Authorizations for SAP Solution Manager RFC users 7.1 SP09
- Ignore old note [1572183](#)

Example: you might want to update role `Z_SOLMAN_BACK` in the SAP Solution Manager ensuring that there are no active authorizations for `S_BTCH_ADM`, `S_RZL_ADM`, `S_TABU_CLI`, `S_TABU_DIS`, or `S_USER_GRP` for activity 05.

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Note [1989587](#) - GW: Interface for maintenance of gateway security files

Note [2325191](#) - GW: Maintenance of gateway ACL files

Use transaction SMGW → Goto → External Security → Maintenance of ACL Files

Or (if this navigation path is not available)

use transaction SA38 to submit report RSMONGWY_ACL_FILES_ALV directly.

The new report is available as of new Support Packages
[SAP_BASIS 7.40 SP 16](#) and [SAP_BASIS 7.50 SP 05](#)

Comments:

- The SP assignment in note [1989587](#) seems to be wrong as the new report is available as of SP 16.
- The profile parameter gw/display_acl_new (with values 0 / 1) and the Kernel patch mentioned in note [1989587](#) do not seem to be important.

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Project plan:

1. Preparation in transaction SMGW → Goto → Expert functions → Logging (=report RGWMON_LOGGING)
 - Activate logging `gw/logging = ACTION=SZ` (example)
 - Activate simulation mode `gw/sim_mode = 1`
 - Then remove any * entries from the ACL files
 - Restart the system once during logging phase to trigger re-registration of external server programs
2. Maintain ACL entries regularly
 - Use relaxed rules for IP-ranges instead of host names and generic rules for users
 - You will observe that the count of new log entries showing active simulation mode decrease down to zero
3. Switch to production mode
 - Optional: Reduce logging `gw/logging = ACTION=SsZ` (example)
 - Deactivate simulation mode `gw/sim_mode = 0`
 - Validate simulation mode parameter using Configuration Validation

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

The screenshot shows the SAP Gateway Monitor interface. The main window displays 'Active Connections' for gateway 'Idai1y5h_Y5H_20'. A summary box indicates 'Number of Starts : 1', 'Logged on Clients : 36 / 1000 (Current / Maximum)', and 'Remote Gateways : 36 / 1000 (Current / Maximum)'. Below this is a table of active connections.

Connection ID	Connection Status	Symbolic Destination	ConvID	Protocol	Last Request	SAP RC
ET	Connected	GTABKEY_SERVER	42347357	Internal Communicati...	01.09.2016 12:31:34	0
ET	Connected	CWBADM_Y5H_000	42066321	Internal Communicati...	01.09.2016 12:28:52	0
		BKEY_SERVER	50156549	Internal Communicati...	01.09.2016 14:42:27	0
		000_	46769037	Internal Communicati...	01.09.2016 14:43:36	0

The 'Goto' menu is open, showing 'Expert Functions' selected. The 'External Security' sub-menu is also open, highlighting 'Maintenance of ACL Files'. Other options in the 'External Security' menu include 'Display Ni ACL', 'Display Ni ACL (SSL)', 'Re-Read Ni ACL', and 'Re-Read Ni ACL Globally'.

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway ACL Files of AS Instance Idai1y5h_Y5H_20

Secinfo ... Reginfo File Prxyinfo File



```
USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=local HOST=10.67.19.96/28 TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=10.67.19.96/28 HOST=local TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=local HOST=10.67.20.96/28 TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=10.67.20.96/28 HOST=local TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=local HOST=10.67.18.96/28 TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=10.67.18.96/28 HOST=local TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=local HOST=10.67.16.96/28 TP=* # CMP in Protected SAP IT Network
P USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protected SAP IT Network
# STANDARD Template
P USER=* USER-HOST=local HOST=local TP=*
P USER=* USER-HOST=local HOST=internal TP=*
P USER=* USER-HOST=internal HOST=local TP=*

P USER=* USER-HOST=local HOST=dewdfgld05687.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05687b.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05687v.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691b.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691v.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05696.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05696b.wdf.sap.corp TP=*
```

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway Log Analysis



Filters

Change Date: To:
Change Time: To:
 SystemWide Search



Logs from 01.06.2016 00:00:00 to 01.09.2016 23:59:59

Instance	Value
ldai1y5h_Y5H_20	/usr/sap/Y5H/D20/work/gw_log-2016-06-30
ldai1y5h_Y5H_20	/usr/sap/Y5H/D20/work/gw_log-2016-07-04
ldciy5h_Y5H_20	/usr/sap/Y5H/DVEBMGS20/work/gw_log-2016-06-30
ldciy5h_Y5H_20	/usr/sap/Y5H/DVEBMGS20/work/gw_log-2016-07-04
ldciy5h_Y5H_20	/usr/sap/Y5H/DVEBMGS20/work/gw_log-2016-08-16
ldai2y5h_Y5H_20	/usr/sap/Y5H/D20/work/gw_log-2016-06-30
ldai2y5h_Y5H_20	/usr/sap/Y5H/D20/work/gw_log-2016-07-04

After selecting the time interval and the option to read log files from all active application servers, you select these files and start the log analysis.

Hints:

- Selection of files should work if you use the standard proposal `LOGFILE=gw_log-%y-%m-%d` as well if you use the proposal from the RFC Whitepaper `LOGFILE=gw_log_${SAPSYSTEMNAME}_${SAPLOCALHOST}_%y-%m-%d`
It might be the case that you need a correction via note
- On a sandbox you could use RZ11 to change the value of `gw/logging` temporarily to access different files which you have copied from other servers into the folder of `DIR_HOME` of this sandbox

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway ACL Files of AS Instance Idai1y5h_Y5H_20

You see the count for consolidated connects and failed connect attempts and if the connect was successful because of simulation mode.

Secinfo ... Reginfo File Prxyinfo File

Log Analysis

USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protecte...
 P USER=* USER-HOST=local HOST=10.67.19.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.19.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=local HOST=10.67.20.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.20.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=local HOST=10.67.18.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.18.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.16.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protect...
 # STANDARD Template
 P USER=* USER-HOST=local HOST=local TP=*
 P USER=* USER-HOST=local HOST=internal TP=*
 P USER=* USER-HOST=internal HOST=local TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687b.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687v.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691b.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691v.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05696.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05696b.wdf.sap.corp TP=*

Connection Attempts from 01.06.2016 00:00:00 to 01.09.2016 23:59:59

ACL	Sim	Conn	User	Source Host	Destination Host	TP Name	Count	Last Request
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DLM_BTCH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2.442	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMSADM	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	765	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RFC_CORR	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	265	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TSANTILIS	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	5	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SHAFIQ	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	KERBACH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Wed Jul 27
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HAFERKORN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	4	Fri Jul 29 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ADAMSDAL	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	2	Mon Jul 25
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EICHMANNH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	3	Wed Jul 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SOWAN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Thu Jul 21 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DECKWER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	2	Wed Aug 03
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ROEHER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2	Fri Aug 05 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SONINI	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Tue Aug 02

The log entries are marked if the current ACL contains a matching rule.

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway ACL Files of AS Instance Idai1y5h_Y5H_20

Now you can copy an entry from the log to the ACL file and adjust the rule.

Secinfo ... Reginfo File Prxyinfo File

Log Analysis

Y5H(1)/500 Create Line in Secinfo File

P/D (*) P

TP (*) /usr/sap/Y5H/DVEBMGS20/exe/sapxpg

USER (*) *

HOST (*) 10.96.46.*

USER-HOST 10.96.46.*

Comment

Connection Attempts from 01.06.2016 00:00:00 to 01.09.2016 23:59:59

ACL	Sim	Conn	User	Source Host	Destination Host	TP Name	Count	Last Request
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DLM_BTCH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2.442	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMSADM	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	765	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RFC_CORP	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	265	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	5	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Wed Jul 27
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	4	Fri Jul 29 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	2	Mon Jul 25
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	3	Wed Jul 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Thu Jul 21 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	2	Wed Aug 03
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2	Fri Aug 05 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>				/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Tue Aug 02

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway ACL Files of AS Instance ldai1y5h_Y5H_20

Secinfo ... Reginfo File Prxyinfo File

Log Analysis

USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protecte...
P USER=* TP=/usr/sap/Y5H/DVEBMGS20/exe/sapxpg HOST=10.96.46.* US...
P USER=* USER-HOST=local HOST=10.67.19.96/28 TP=* # CMP in Protect...
P USER=* USER-HOST=10.67.19.96/28 HOST=local TP=* # CMP in Protect...
P USER=* USER-HOST=local HOST=10.67.20.96/28 TP=* # CMP in Protect...
P USER=* USER-HOST=10.67.20.96/28 HOST=local TP=* # CMP in Protect...
P USER=* USER-HOST=local HOST=10.67.18.96/28 TP=* # CMP in Protect...
P USER=* USER-HOST=10.67.18.96/28 HOST=local TP=* # CMP in Protect...
P USER=* USER-HOST=local HOST=10.67.16.96/28 TP=* # CMP in Protect...
P USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protect...
STANDARD Template
P USER=* USER-HOST=local HOST=local TP=*
P USER=* USER-HOST=local HOST=internal TP=*
P USER=* USER-HOST=internal HOST=local TP=*
P USER=* USER-HOST=local HOST=dewdfgld05687.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05687b.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05687v.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691b.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05691v.wdf.sap.corp TP=*
P USER=* USER-HOST=local HOST=dewdfgld05696.wdf.sap.corp TP=*

Connection Attempts from 01.06.2016 00:00:00 to 01.09.2016 23:59:59

ACL	Sim	Conn	User	Source Host	Destination Host	TP Name	Coun	Last Reque
P	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DLM_BTCH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2.442	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMSADM	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	765	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RFC_CORR	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	265	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TSANTILIS	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	5	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SHAFIQ	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	KERBACH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Wed Jul 27
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HAFERKOR	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	4	Fri Jul 29 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ADAMSDAL	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	2	Mon Jul 25
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EICHMANN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	3	Wed Jul 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SOWAN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Thu Jul 21
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DECKWER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	2	Wed Aug 0
P	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ROEHER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2	Fri Aug 05
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SONINI	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Tue Aug 02

All other log entries which now match to the new ACL rule get marked.

How to manage RFC Gateway Access Control lists as of SAP_BASIS 7.40

Gateway ACL Files of AS Instance ldai1y5h_Y5H_20

Secinfo ... Reginfo File Prxyinfo File

Log Analysis

USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protecte...
 P USER=* TP=/usr/sap/Y5H/DVEBMGS20/exe/sapxpg HOST=10.96.46.* US...
 P USER=* USER-HOST=local HOST=10.67.19.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.19.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=local HOST=10.67.20.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.20.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=local HOST=10.67.18.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.18.96/28 HOST=local TP=* # CMP in Protect...
 P USER=* USER-HOST=local HOST=10.67.16.96/28 TP=* # CMP in Protect...
 P USER=* USER-HOST=10.67.16.96/28 HOST=local TP=* # CMP in Protect...
 # STANDARD Template
 P USER=* USER-HOST=local HOST=local TP=*
 P USER=* USER-HOST=local HOST=internal TP=*
 P USER=* USER-HOST=internal HOST=local TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687b.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05687v.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691b.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05691v.wdf.sap.corp TP=*
 P USER=* USER-HOST=local HOST=dewdfgld05696.wdf.sap.corp TP=*

Connection Attempts from 01.06.2016 00:00:00 to 01.09.2016 23:59:59

ACL	Sim	Conn	User	Source Host	Destination Host	TP Name	Coun	Last Reque
P	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DLM_BTCH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2.442	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMSADM	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	765	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RFC_CORR	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	265	Tue Aug 16
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TSANTILIS	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	5	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SHAFIQ	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	1	Thu Aug 11
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	KERBACH	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Wed Jul 27
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HAFERKOR	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	4	Fri Jul 29 2
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ADAMSDAL	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	2	Mon Jul 25
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EICHMANN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	3	Wed Jul 20
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SOWAN	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Thu Jul 21
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DECKWER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/tp	2	Wed Aug 0
P	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ROEHER	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	/usr/sap/Y5H/DVEBMGS20/exe/sapxpg	2	Fri Aug 05
-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SONINI	ldciy5h.wdf.sap.corp	ldciy5h.wdf.sap.corp	gnetx.exe	1	Tue Aug 02

You can select a log entry and call the 'where-used' function to see which ACL rule match to this connect.

How to manage RFC Gateway Access Control lists in older ABAP releases or in Java

The same profile parameters, ACL files, and log files are used in ABAP releases below SAP Basis 7.40 or in Java, however, you have to analyze the logs manually to find necessary ACL entries.

Keep in mind that you only need ACL entries in `secinfo` or `reginfo` if the caller is external relative to the current system. All servers which belong to the current system are covered by the `internal` rule.

Hints:

- Selection of files should work if you use the standard proposal `LOGFILE=gw_log-%y-%m-%d` as well if you use the proposal from the RFC Whitepaper `LOGFILE=gw_log_$(SAPSYSTEMNAME)_$(SAPLOCALHOST)_%y-%m-%d`
It might be the case that you need a correction via note
- On a sandbox you could use `RZ11` to change the value of `gw/logging` temporarily to access different files which you have copied from other servers into the folder of `DIR_HOME` of this sandbox

How to manage RFC Gateway Access Control lists

Dynamic Log Settings: SMGW → Goto → Expert functions → Logging

Profile parameter gw/logging

ACTION=...

Log Events

<input type="checkbox"/> Network	<input type="checkbox"/> Dynamic Parameter Changes
<input checked="" type="checkbox"/> Start/Stop/Signals	<input type="checkbox"/> Open RFC Connection
<input checked="" type="checkbox"/> Security	<input checked="" type="checkbox"/> RFC Actions (Open/Close/Send/Receive)
<input checked="" type="checkbox"/> Ss (denied accesses only)	<input checked="" type="checkbox"/> External Programs
<input checked="" type="checkbox"/> Z (denied accesses without rules)	<input checked="" type="checkbox"/> Registered Programs
<input checked="" type="checkbox"/> Monitoring Commands	<input checked="" type="checkbox"/> Create/Delete Conversation IDs

SWITCHTF=[hour|day|week|year]

Time-Driven Toggle

MAXSIZEKB=on

Describe Old File Again

MAXSIZEKB=<value>

Maximum Size of File (KByte)

(No new file created)

Toggle Criteria

Simulation Mode

All programs are permitted provided no explicit rule is defined

On

Off

Profile parameter gw/sim_mode

Profile parameter gw/logging_name = file name pattern with special characters for generating file name:
%y=year, %m=month, %d=day, %h=hour, %t=minute, %s=second

Note [910919](#)

How to manage RFC Gateway Access Control lists



Related tools:

- Report RSGWREGP lists currently gateway-registered external server programs
- Report RSGWRLST lists all RFC Gateways addressed by this system
- Report RSMONGWY_REGINFO creates ACL File for registered servers
- Report RSMONGWY_SECINFO creates ACL File for started servers

Configuration Validation

- Configuration Store ABAP_INSTANCE_PAHI to validate profile parameters
- Configuration Store GW_REGINFO
- Configuration Store GW_SECINFO



November 2016

Topics November 2016



News about the Support Launchpad: How to define the filter for Security Notes

SAP Solution Manager 7.2 - What's new in Configuration Validation

Note [2288631](#) - Fixes in CommonCryptoLib 8.5.4

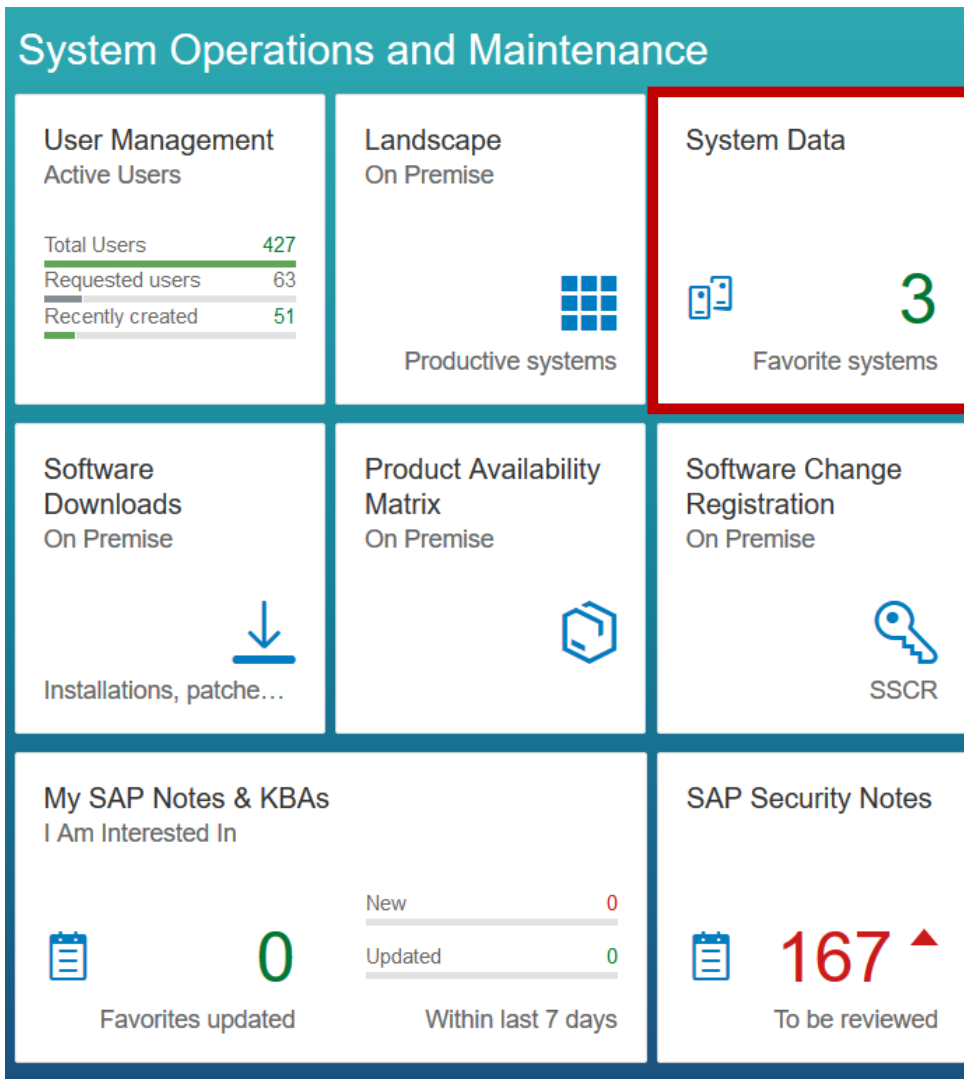
Note [2356480](#) - GW: Several Fixes in RFC Gateway

Note [2367193](#) - Missing Authorization check in Cash Flow Statement report

Note [2197830](#) - Missing authorization check in Account Management

Note [2368873](#) - Missing Authorization check in Banking Services / Standing Order

News about the Support Launchpad: How to define the filter for Security Notes



Choose your Favorites at “System Data”

Prerequisites:

- Connect Systems to the SAP Support Portal
- Ensure to have enabled “**Automated Update**” of data (for example through an SAP EarlyWatch Alert service).
- Ensure to see up-to-date information about
 - Product Versions & Usage Types
 - Kernel
 - Software Component Version and Support Packages

News about the Support Launchpad: How to define the filter for Security Notes

System Operations and Maintenance

User Management Active Users Total Users 427 Requested users 63 Recently created 51	Landscape On Premise Productive systems	System Data Favorite systems 3
Software Downloads On Premise Installations, patche...	Product Availability Matrix On Premise	Software Change Registration On Premise SSCR
My SAP Notes & KBAs I Am Interested In Favorites updated 0	SAP Security Notes New 0 Updated 0 Within last 7 days	167 [▲] To be reviewed

Now you can choose **Systems** from the **Favorites** at **“SAP Security Notes”**:

The screenshot shows the SAP Security Notes interface. At the top, there are three status filters: 'To Be Reviewed' (selected), 'Confirmed', and 'Not'. Below this, there are tabs for 'SAP Component', 'System (3)', 'Category', 'Priority', and 'Released On'. A dropdown menu is open under the 'System (3)' tab, showing a list of systems with checkboxes:

- All
- QT1
- SM2 - SAP Solutionmanager 7.0 EHP1 / AIX / Ora
- H41

An 'OK' button is visible at the bottom of the dropdown menu.

SAP Solution Manager 7.2 SP 3

What's new in Configuration Validation

In a nutshell: We basically kept Configuration Validation as in SAP Solution Manager 7.1.

- New Configuration Stores in CCDB Content / Monitoring and Alerting
 - LOCKED_TRANSACTIONS
 - VSCAN_GROUP, VSCAN_SERVER
 - GLOBAL_CHANGE_LOG, COMPONENTS_CHANGE_LOG, NAMESPACE_CHANGE_LOG, AUTH_PROFILE_USER_CHANGE_DOC
 - SYSTEM_TIMEZONE
 - SAPUI5_LIBS, SAPUI5_VERSION
 - Java: critical group and role assignments, critical user names, critical actions in roles
- Configuration Validation UI
 - BW Reporting Templates allow strings up to 250 chars
 - Reporting Directory including Bookmarks
- Comparison Lists
 - Implemented a Badi to build dynamic comparison lists based on customer attributes. See note [2365039](#)
- Fiori Launchpad
 - Using SAP Solution Manager 7.2 Launchpad navigate to group *Root Cause Analysis* or to group *SAP Solution Manager Administration*

Note 2288631 - Fixes in CommonCryptoLib 8.5.4

CommonCryptoLib default configuration does no longer support 3DES because 3DES was downgraded to configuration string "MEDIUM".

When using a customized cipher suite configuration using profile parameters `ssl/ciphersuites` and `ssl/client_ciphersuites` you should prevent using configuration strings less than HIGH and you should not include e3DES.

For any version of CommonCryptoLib you can block 3DES if you append !e3DES to your current cipher suite string, e.g. HIGH: !e3DES

Check your customized string with

```
sapgenpse tlsinfo <cipher_suite_configuration_string>
```

So far there does not exist a log option to show which cipher suites are actually used. This is going to become changed.

Note 2356480 - GW: Several Fixes in RFC Gateway

The Kernel default is still `gw/reg_no_conn_info = 1`

→ You should set your own value in all instance profiles.

Depending on the release and patch level of the Kernel, some of the flags are not used (anymore). It does not matter if you set or not set these flags.

You can activate even higher flags to activate every future option. You would get a trace message telling about it.

→ You can always use the value 255 to activate all flags, i.e. for newly installed systems.

Other notes:

Note 1444282 - `gw/reg_no_conn_info` settings

Note 2123405 - GW: `gw/reg_no_conn_info` in 74X kernel releases

Note 2269642 - GW: Validity of parameter `gw/reg_no_conn_info` as of kernel release 74X

Note 2356480 - GW: Several Fixes in RFC Gateway

Overview (based on my own research – which is maybe not exact):

Value	Note	Description	721	740	741
+1	1298433	Bypassing security in reginfo & secinfo			
+2	1434117	Bypassing sec_info without reg_info USER-HOST mandatory if flag +1 is set			
+4	1465129	CANCEL of reg. by any program	not used	not used	not used
+8	1473017	Uppercase/lowercase in the files reg_info and sec_info		not used	not used
+16	1480644 2123409	"gw/acl_mode" and "gw/reg_no_conn_info" GW: reg_no_conn_info 16 for dynamic change			not used
+32	1633982	ACCESS Option in reginfo file		not used	not used
+64	1697971	GW: Enhancement when starting external programs			
+128	1848930	GW: Strong gw/proxy_check			

Note 2367193 - Missing Authorization check in Cash Flow Statement report

Good news:

- **“Solution: [...] No new authorization checks added, no need to update roles.”**

The authorization check for `F_BKPF_BUK` is moved from `FORM BUILD_DOCUMENT_LIST` to the beginning of `START_OF_SELECTION`.

But:

- **29 other notes are prerequisites. 6 of them are newer than 1 year.**

→ **Business might be affected. Testing is recommended.**

Note 2197830 - Missing authorization check in Account Management

Bad news:

- **Several prerequisites**
- **Manual modification of DDIC structure**
- **Manual creation of authorization object F_RFC in old BANK-TRBK release 40**
In this case you have to update roles if you are using this scenario. It does not matter if you install the note or if you upgrade the support package.
(That's not a *“Manual Pre-Implement.”* action.)

Note 2368873 - Missing Authorization check in Banking Services / Standing Order

This is an application specific correction for application component FS-AM-OM-SO.

Transaction BCA_SO_CHANGE (Standing Order Change), and similar functions now run an unconditional authorization check for authorization object F_SOR_TRT which checks for the org. unit of the employee i.e. for users with active flag "employee authority check on account level".



October 2016

Topics October 2016



**News about the Support Launchpad and System Recommendations:
Released On = Latest change date**

Note [2141744](#) - SysRec: manual status is lost and replaced with status 'new'

News about the Security Community

**Note [2078596](#) - Further improvements for RFC security (reloaded)
Switchable authorization checks (SACF)
plus 24 + 7 more notes**

Note [2029397](#) - Missing authorization checks for RFC in E-commerce ERP applications

Note [1694657](#) - GRC SPM RFC Destination Call and FFID Passwords

Note [1498973](#) - Renewing trust relationships to a system

News about the Support Launchpad and System Recommendations: Released On = Latest change date

*„SAP has changed its way to show release dates for Security Notes in the SAP Support Launchpad Security Notes Search, compared to the old Support Portal Security Notes Search. The Notes are now shown with the **date of the last update** SAP has released.”*

The tool System Recommendations still show the **first released as a security note dates** known from the Service Marketplace, but will change its result as soon as caches are resetted and SysRec refreshes the calculation.

If a customer wants to base any information or reporting on the very date on which SAP has first published a vulnerability, he may do so with own custom tools. He may also look into each Note individually for the first released version, but this information is not reliable either. Customers should not work with any “first released” date of Security Notes at all. They should adapt their processes to consume the “last updated” date only.

News about the Support Launchpad Released On = Latest change date

SAP Security Notes

Knowledge Base

Frank Buchholz (D019687)

SAP Security Notes





All SAP Security Notes To Be Reviewed Confirmed Not Relevant



SAP Component System Category Priority Released On

3733 Document(s) Export List as CSV File


SAP Component	Number	Version	Title	Category	Priority	Released On
CRM-ISA-R3	2029397	7	Missing authorization checks for RFC in E-commerce ERP applications	Program error	Correction with medium priority	29.09.2016
XX-PROJ-FI-CA	2251513	1	Fehlende Berechtigungsprüfung in XX-PROJ-FI-CA	Program error	Correction with medium priority	27.09.2016
BC-CCM-MON	1511193	6	XSRF protection for the CCMS Monitoring Console	Program error	Correction with high priority	22.09.2016
CRM-SLC	2335687	4	Whitelist based Clickjacking Framing Protection in Solution Sales Configuration	Program error	Correction with medium priority	22.09.2016

News about the Support Launchpad Released On = Latest change date


 **SAP** Notes Knowledge Base   Frank Buchholz (D019687) 




[Back](#) / Confirm Not Relevant Show Changes  

2029397 - Missing authorization checks for RFC in E-commerce ERP applications

Version 7 from 29.09.2016  English

Component: CRM-ISA-R3 Category: Program error Corrections: 8
Priority: Correction with medium priority Release Status: Released for Customer Manual Activities: 1
Prerequisites: 0



Description Software Components Corrections  Support Packages This document refers to  This document is causing side effects  Attachments Languages

Symptom

This SAP note describes information related to new authorization checks added to RFC function modules used in E-commerce application with ERP scenario.

Other Terms

Internet Sales, isa, ECo, E-Commerce, E Commerce, WebChannel, Web Channel, ERP, r3, r3, r/3, ECC, authorization objects, pfcg, su21, ISA_R3, S_RFC.

Reason and Prerequisites

Remote calls to RFC function modules are protected by checks on the authorization object S_RFC. Authorizations for S_RFC must be limited to the required minimum authorizations for all users to ensure system security. Many RFC function modules can be sufficiently protected using S_RFC authorization checks. These RFC function modules often do not perform additional functional authorization checks. Please see SAP Note [2008727](#) for further information on RFC Security.

News about the Support Launchpad

Compare versions

SAP Knowledge Base Frank Buchholz (D019687) Latest Changes with Version 2

2029397 - Missing authorization checks for RFC in E-commerce ERP applications

Version	27	Type	SAP Security Note
Language	English	Master Language	English
Component	CRM-ISA-R3 (Internet Sales (R/3 Edition))	Released On	1129.1109.20142016

It is now possible to compare the current version of an SAP Note/KBA with any previous version.

By default, the newest version is compared with the latest version that you read before or the previous version of the note if you haven't read it before.

...d to RFC function modules used in E-commerce application with ERP

...nel, ERP, r3, r\3, r/3, ECC, authorization objects, pfcg, su21, ISA_R3, S_RFC.

...ation object S_RFC. Authorizations for S_RFC must be limited to the required

...ules can be sufficiently protected using S_RFC authorization checks. These

...modules often do not perform additional functional authorization checks. Please see SAP Note [2008727](#) for further information on RFC Security.

News about System Recommendations in SolMan 7.1

About “status management” with System Recommendations in SolMan 7.1

Note [2141744](#) - SysRec: manual status is lost and replaced with status 'new'
New version 4 from 28.07.2016

Limitation: This correction cannot give you status values back which you already have lost.

News about the Security Community

<http://go.sap.com/community/topic/security.html>

ANNOUNCEMENT: [The SCN space retired on October 10.](#)

On October 10, [a new community platform has replaced SCN.](#) Spaces will not be part of this new community experience. Instead, the community platform will categorize and consolidate content using tags. In some cases, these tags will be associated with community topic pages dedicated to a specific subject. Due to its popularity, the Security space has a dedicated community topic page, [Security Community](#), that will include highlights, related resources, and the latest blogs and questions about security.

In addition, you'll be able to follow the [associated tag "Security"](#). This will allow you to get notifications whenever someone publishes content with this tag. You can also search for other tags and related content on the [Browse Community page](#):

[SAP Identity Management](#)

[SAP Single Sign-On](#)

[Security](#)

[SAP Solution Manager](#)

[SAP TechEd](#)

News about the Security Community

My Blogs about Security

Security Patch Process FAQ

<https://blogs.sap.com/2012/03/27/security-patch-process-faq/>

How to remove unused clients including client 001 and 066

<https://blogs.sap.com/2013/06/06/how-to-remove-unused-clients-including-client-001-and-066/>

Life (profile SAP_NEW), the Universe (role SAP_NEW) and Everything (SAP_ALL)

<https://blogs.sap.com/2014/02/17/life-profile-sapnew-the-universe-role-sapnew-and-everything-sapall/>

Analysis and Recommended Settings of the Security Audit Log (SM19 / SM20)

<https://blogs.sap.com/2014/12/11/analysis-and-recommended-settings-of-the-security-audit-log-sm19-sm20/>

SAP CoE Security Services – Tools

<https://wiki.scn.sap.com/wiki/display/Snippets/SAP+AGS+Security+Services+-+Tools>

How to get RFC call traces to build authorizations for S_RFC for free!

<https://blogs.sap.com/2010/12/05/how-to-get-rfc-call-traces-to-build-authorizations-for-srfc-for-free/>

Export/Import Critical Authorizations for RSUSR008_009_NEW

<https://blogs.sap.com/2012/08/14/exportimport-critical-authorizations-for-rsusr008009new/>

Authorizations for user DDIC?

<http://archive.sap.com/discussions/thread/3171373>

SAP HANA Audit Trail - Best Practice

<http://archive.sap.com/documents/docs/DOC-51098>

News about the Security Community

Other Blogs about Security

Secure Your System Communications with Unified Connectivity

<http://scn.sap.com/docs/DOC-53844>

Securing Remote Function Calls (RFC) at <https://support.sap.com/securitywp>

https://support.sap.com/dam/library/SAP%20Support%20Portal/kb-incidents/notes-knowledge-base-notification/security-notes/white-papers/securing_remote-function-calls.pdf

This is still a hot topic but not new, see

RFC Security v1.1 from 2004

<http://go.sap.com/docs/download/2016/08/7e5ba4c9-817c-0010-82c7-eda71af511fa.pdf>

Why you should really get rid of old password hashes *NOW*

<https://blogs.sap.com/2014/05/08/why-you-should-really-get-rid-of-old-password-hashes-now/>

Configuration Validation

http://wiki.sdn.sap.com/wiki/display/TechOps/ConfVal_Home

Note 2078596 - Further improvements for RFC security (reloaded) Switchable authorization checks (SACF)

Display Productive Scenario BC_MI_RFC_CHECK

Information Show scenario definition

2 selected scenario

Scenario Name	Status	Short Descr. for Che
BC_GENERIC_REPORT_START		Generic Report Start
BC_MI_RFC_CHECK		Scenario For Author

Scenario Header Data

Scenario Name	BC_MI_RFC_CHECK
Short Text	Scenario For Authorization Check In RFC enabled Function Modu
Scenario Status	L Scenario in Status "Logging" (check val. always successful)
SAL Status	A Record all checks in the Security Audit Log

Scenario Documentation

SAP Note Number 2053788

Entries for BC_MI_RFC_CHECK (1)

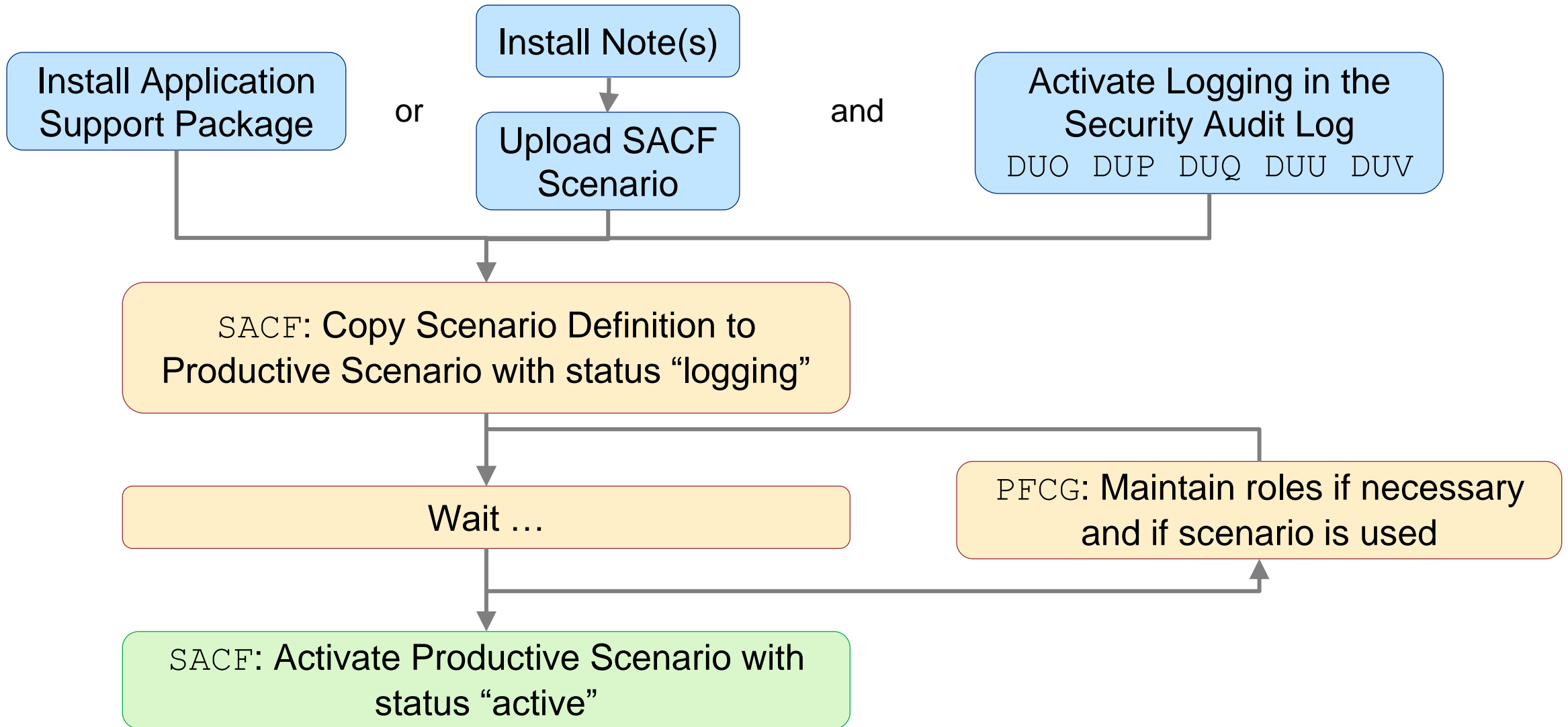
Object	Status (Prod.)	Short description of object
S_MI_ADMCO		MI: Authorization for RFC connection

Note 2078596 - Further improvements for RFC security (reloaded) Switchable authorization checks (SACF)

The following SAP Notes contain new switchable authorization checks in RFC functions
October 2016:

2266687	CRM-BF	Switchable authorization checks for RFC in CRM Counters
2255642	CRM-BF-BRF	Switchable authorization checks for RFC in Rule Builder BRFplus
2276601	CRM-IM	Switchable authorization checks for RFC in CRM-Sales of Subscription based Series
2248790	CRM-IM-IPM	Switchable authorization checks for RFC in Intellectual Property Management
2265976	CRM-ISA	Switchable authorization checks for RFC in Internet Sales
2265385	CRM-ISA-CAT	Switchable authorization checks for RFC in Product Catalog
2252568	CRM-ISE	Switchable authorization checks for RFC in Internet Service
2273147	CRM-IT-BTX	Switchable authorization checks for RFC in CRM-IT-BTX
2258027	CRM-ITT-ETC-BTX	Switchable authorization checks for RFC in CRM-Travel&Transportation-Electronic Toll Collection-Business Transaction
2271839	CRM-IU	Switchable authorization checks for RFC in CRM-IU
2233831	CRM-LAM	Switchable authorization checks for RFC in Leasing / Account Origination
2303421	CRM-LOY	Switchable authorization checks for RFC in Loyalty Management (CRM-LOY)
2272055	CRM-MD-CON-XIF	Switchable authorization checks for RFC in Conditions Master Data
2271802	CRM-MKT-EAL	Switchable authorization checks for RFC in External List Management (CRM-MKT-EAL)
2262131	CRM-MSA	Switchable authorization checks for RFC in CRM-MSA-ADP and CRM-MT-MAS-ARS
2261768	CRM-MW-ADM	Switchable authorization checks for RFC in CRM-MW-ADM
2275009	CRM-MW-ADP	Switchable authorization checks for RFC in CRM-MW-ADP
2264976	CRM-MW-BDM	CRM_Switchable authorization checks for RFC in CRM-MW-BDM
2266040	CRM-MW-CCO	Switchable authorization checks for RFC in CRM-MW-CCO
2264949	CRM-MW-GEN	Switchable authorization checks for RFC in CRM-MW-GEN
2268252	CRM-MW-GWI-GWA	Switchable authorization checks for RFC in CRM-MW-GWI-GWA
2270084	CRM-MW-MFW	Switchable authorization checks for RFC in CRM-MW-MFW
2266967	CRM-MW-MON	Switchable authorization checks for RFC in CRM-MW-MON
2264948	CRM-MW-SRV	Switchable authorization checks for RFC in CRM-MW-SRV



Note 2078596 - Further improvements for RFC security (reloaded) Switchable authorization checks (SACF)



Similar Transactions / Similar Projects

Switchable Whitelists (SLDW) and Authorization Checks (SACF)

Similar transactions for SACF and SLDW:

- ▾  Switchable Whitelists (SLDW)
 -  SLDW - Switchable Whitelists
 -  SLDW_COMPARE - Compare Switchable Whitelists
 -  SLDW_TRANSFER - Transport Switchable Whitelists (Files)
 -  SLDW_INFO - Info. Sys. for Switchable Whitelists
- ▾  Switchable Authorization Checks (SACF)
 -  SACF - Switchable Authorization Checks
 -  SACF_COMPARE - Compare Scenario-Based Checks
 -  SACF_TRANSFER - Transport Scenarios (Files)
 -  SACF_INFO - Info. Sys. for Scenario-Based Checks

Activate logging via Security Audit Log for Switchable Whitelists (SLDW) and Authorization Checks (SACF)

Messages are only written if the Security Audit Log is active and the current filter settings contain the required messages. You can activate and check this with transaction SM19.

Choose 'Detail Configuration', sort the entries, and select messages DUL, DUM and DUN for Switchable Whitelists (SLDW) and DUO, DUU, DUP, DUV, and DUQ for Authorization Checks (SACF). You find all messages in section "Other Events"

Security Audit: Change Audit Profile

Filter 1 | Filter 2 | Filter 3 | Filter 4 | Filter 5 | Filter 6 | Filter 7 | Filter 8 | Filter 9

Filter active Reset **Detail Configur**



Selection criteria

Client *
User *

DUL	Check for &A in whitelist &B was successful
DUO	Authorization check for object &A in scenario &B successful
DUP	Authorization check for object &A in scenario &B failed
DUU	Authorization check for user &C on object &A in scenario &B successful
DUV	Authorization check for user &C on object &A in scenario &B failed
DUM	Check for &A in whitelist &B failed
DUN	Active whitelist &A changed (&B)
DUQ	Active scenario &A for switchable authorization checks changed - &B

Activate logging via Security Audit Log for Switchable Whitelists (SLDW) and Authorization Checks (SACF)

Selection of Audit Events from the Audit Files (Background Variant)

Time Restrictions

From Date/Time	12.10.2016	13:00:00
To Date/Time	12.10.2016	


Audit Classes

- Dialog Logon
- RFC/CPIC Logon
- RFC Call
- Transaction Start
- Report Start
- User Master Changes
- Other Events
- System Events

Events

- Only Critical
- Severe and Critical
- All

Selection by Individual Events

Events (Audit Messages)	DUL	
-------------------------	-----	---

Use report `RSAU_SELECT_EVENT` to show the log.

SLDW: Use the results about missing but accepted entries to update whitelists.

SACF: Use the results about failed but accepted authorization checks to update existing roles respective new roles which you create for groups of scenarios.

Keep on working this way until you do not get these log messages anymore. Then turn the whitelist / the scenario into active state.

Note 2078596 - Further improvements for RFC security (reloaded)

The following SAP Notes provides solution which do not require a switch:

October 2016:

<u>2257328</u>	CRM-BF	Missing authorization checks in CRM Portal Content function modules
<u>2271018</u>	CRM-BF-CFG	Missing authorization checks in function modules related to CRM knowledgebases for configurable products
<u>2246269</u>	CRM-BTX	Missing authorization check in CRM-BTX
<u>2271740</u>	CRM-BTX-LEA	Missing authorization check in CRM-BTX-LEA
<u>2263132</u>	CRM-CHM	Missing authorization check in CRM-CHM
<u>2276488</u>	CRM-IC-HCM-BF	Missing authorization check in CRM-IC-HCM
<u>2241871</u>	WEC-APP-SRV	Missing authorization check in WEC-APP

No adjustment of authorization concept (roles) necessary. The solution is either different than introducing authorization checks or uses an authorization check which can be fulfilled by all legal users.

Note 2078596 - Further improvements for RFC security (reloaded) Comments about unconditional authorization checks

Note 2257328 – CRM-BF Missing authorization checks in CRM Portal Content function modules

MESSAGE TYPE 'E' without RAISING in a function, therefore I expect trouble (runtime error) if a user does not have required authorizations.

Note 2263132 – CRM-CHM Missing authorization check in CRM-CHM

Missing authorization checks were implemented using Access Control Engine (ACE). The RFC user might need such authorizations.

Note 2276488 CRM-IC-HCM-BF Missing authorization check in CRM-IC-HCM

Authorization for CRM_ORD_OP with PARTN_FCT = '*' and PARTN_FCTT = '*' for activity 03=display required.

See also:

Note 2251513 – Missing Authorization Check in XX-PROJ-FI-CA

Exceptions of CALL FUNCTION 'AUTHORITY_CHECK_TCODE' are not caught, therefore I expect trouble (runtime error) if a user does not have required authorizations.

Note 2029397 - Missing authorization checks for RFC in E-commerce ERP applications (reloaded)

Which changes had happened between current version 7 (October 2016) and previous published version 5 (October 2015)?

- **Text changes: yes, but not important**
- **ABAP correction instructions: No**

All support packages are from May 2015 or older.

→ No need to install the note.

But: You need the described authorizations if you are using the application.

Note 2029397 - Missing authorization checks for RFC in E-commerce ERP applications (reloaded)

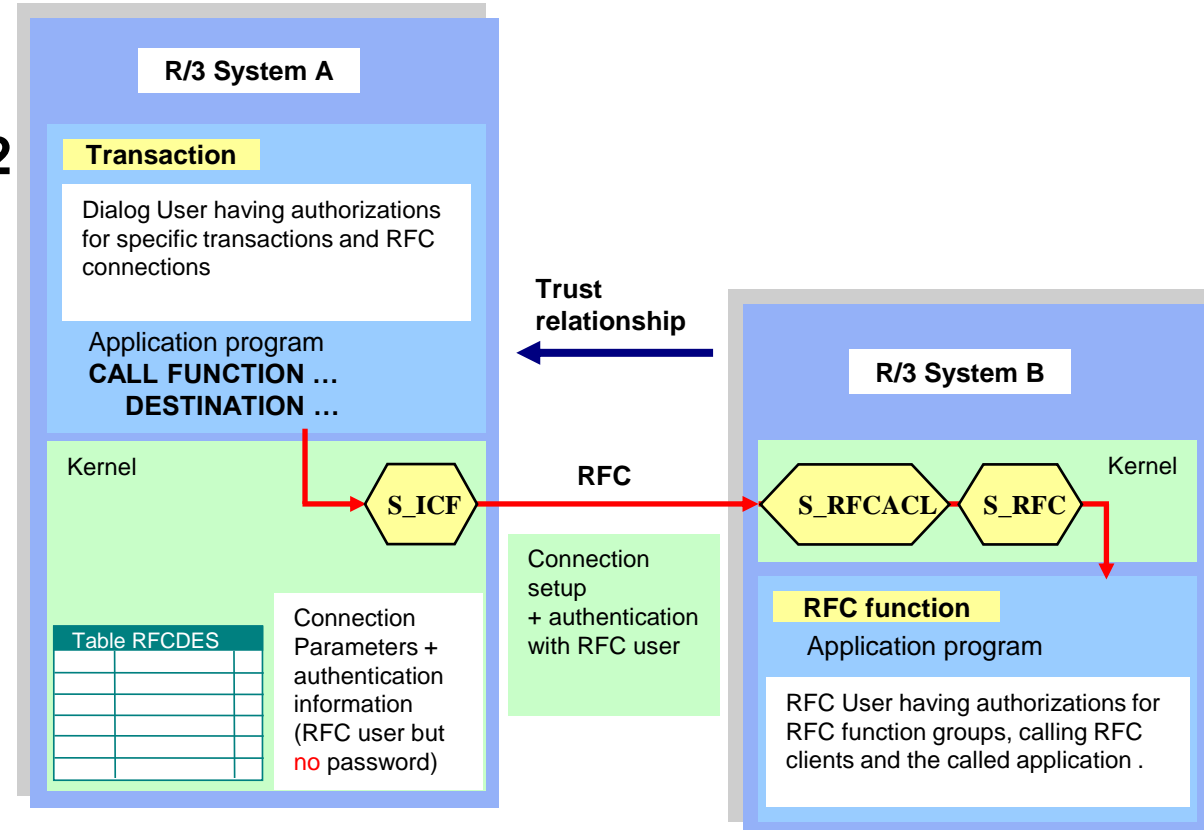
No change between version 5 (October 2015) and version 7 (October 2016)

Software Component	From	To	Version	Changed on	ID
SAP_APPL	600604600	6042	3	2812.0805.2014 19:2015 18:1144:56	0001796923 0001796927
SAP_APPL	606600606	6003	2	1228.0508.2015 2014 19:18:41:4211	0001796940 0001796923
SAP_APPL	602606602	6062	3	2812.0805.2014 192015 18:2441:1342	0001796924 0001796940
SAP_APPL	617602617	6023	2	1228.0508.2015 182014 19:3824:3613	0001796942 0001796924
SAP_APPL	603617603	6172	3	2812.0805.2014 192015 18:2738:3536	0001796925 0001796942
SAP_APPL	616603616	6033	2	1228.0508.2015 182014 19:3927:4635	0001797916 0001796925
SAP_APPL	604616604	616	3	12.05.2015 18:4439:5646	0001796927 0001797916
SAP_APPL	605	605	4	25.09.2015 15:09:39	0001796939

Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

The note describes additional settings to secure the usage of FireFighters of GRC AC (5.3).

- However, most parts are valid for GRC 10.x as well.
- **Implement the Code fixes from SNOTE 1690942**
 - The software updates described in this note are old and most likely are not required anymore.
- **Main idea (see note 128447):**
Implement a strict authorization concept about authorization objects S_ICF and S_RFCACL
- **Side comment:**
Take special care about authorizations for S_ADMI_FCD with value NADM, S_RFC_ADM (maintain RFC Destinations), and S_RFC_TT (maintain trust relationship)



Source: Presentation RFC Security v1.1 from 2004
respective Teched 2012 session SIS264 Securing RFC


Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

On the GRC Box (local / central):

- **Modifications to Trust Relationship in transaction SMT1**
 - Activate the setting which enables sending the transaction code
 - You can check this with transaction SE16 for table RFCSYSACL with field RFACTCDCHK = X

- Optionally, you can enable SNC

Trusted-Trusting Connections

Maintain Destination Authorization Check 

Configurat... Technical Settings Administration

Configuration

Validity Period 00:00:00

Use transaction code

Configurat... Technical Settin... Administration

Technical Settings

RFC Destination SM_EC1_TRUSTED_BACK

Application Server mo-9051190e8_EC1_01

Message Server mo-9051190e8

SNC

Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

On the GRC Box (local / central):

- **Modifications to RFC Destinations in transaction SM59**

- You do not need to switch off SNC
- Use the field 'Authorization for Destination' to utilize authorization object S_ICF.
Enter a specific value, e.g. GRC_FF
- Add authorizations for S_ICF to the role of the Firefighters
Do not enter * values for this authorization!
Enter 'DEST' for field ICF_FIELD and enter the name, which you have chosen for 'Authorization for Destination', for field ICF_VALUE, e.g. 'GRC_FF'.

The screenshot shows the SAP SM59 transaction interface. The 'Logon & Sec...' tab is selected. The 'Logon Procedure' section contains the following fields:

Language	EN	
Client	001	
User	FFID02	<input type="checkbox"/> Current User
PW Status	is initial	

The 'Trust Relationship' section has radio buttons for 'No' and 'Yes' (selected), and a checkbox for 'Logon Screen'.

The 'Status of Secure Protocol' section has a button for 'SNC' and radio buttons for 'Inactive' and 'Active' (selected).

The 'Authorization for Destination' field is highlighted with a red box and contains the value 'GRC_FF'.

Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

On the managed systems:

- **De-activate the password for FFIDs**
 - These users get called via Trusted-RFC and therefore do not need a password
- **Add authorizations for S_RFCACL to the role of FFIDs**
 - Role Z_SAP_GRC_SPM_FFID (respective the role which you define in parameter 4010 in the GRC box)

Do not enter full * authorizations - this would kill security.

Fields of the authorization object:

RFC_SYSID : SID of the calling system. **Do not enter a * value!**

RFC_CLIENT: Client of the calling system. **Do not enter a * value!**

RFC_USER: User ID of the calling users – these are the users which calls the RFC destination. Usually the full authorization ‘*’ is used for this field in case of RFC_EQUSER = ‘N’, because it is too costly to determine the list of calling users and to keep it up to date.

RFC_EQUSER: Flag that indicates whether the user can be called by a user with the same ID (Y = Yes, N = No) **Do not enter a * value!**
GRC FF uses dedicated FireFighter-IDs, therefore enter ‘N’.

RFC_TCODE: Calling transaction code – the transaction in the GRC application. **Do not enter a * value!**

Prerequisite: Activate the use of the transaction code in transaction SMT1.

Dependig on the operation mode different transactions are used:

5.3: /VIRSA/VFAT , 10.X decentral: /GRCP1/GRIA_EAM , 10.X central: GRAC_EAM

RFC_INFO : Installation number of the calling system (as of SAP_BASIS release 7.02). The installation number is shown in the calling system in transaction SMT1. If there is no value here, then RFC_INFO is not used to check the authorization. We already have field RFC_SYSID, therefore we can treat this field less important. Use the field but I would accept it if you enter a * here.

ACTVT: Activity. Currently, this field can take the value 16 (Execute).

Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

Authorizations for S_RFCACL on the managed systems:

Do not enter * values for RFC_SYSID, RFC_CLIENT, RFC_EQUSER, and RFC_TCODE !

	AC 5.3	AC 10.x, decentral	AC 10.x, central
Role	/VIRSA/Z_VFAT_FIREFIGHTER	Z_SAP_GRC_SPM_FFID	
RFC_SYSID	<local SID>	<local SID>	<SID of GRC box>
RFC_CLIENT	<local client>	<local client>	<client of GRC box>
RFC_USER	*	*	*
RFC_EQUSER	N	N	N
RFC_TCODE	/VIRSA/VFAT	/GRCPI/GRIA_EAM	GRAC_EAM
RFC_INFO	* (or local installation number)	* (or local installation number)	* (or installation number of GRC box)
ACTVT	16	16	16

Note 1694657 - GRC SPM RFC Destination Call and FFID Passwords

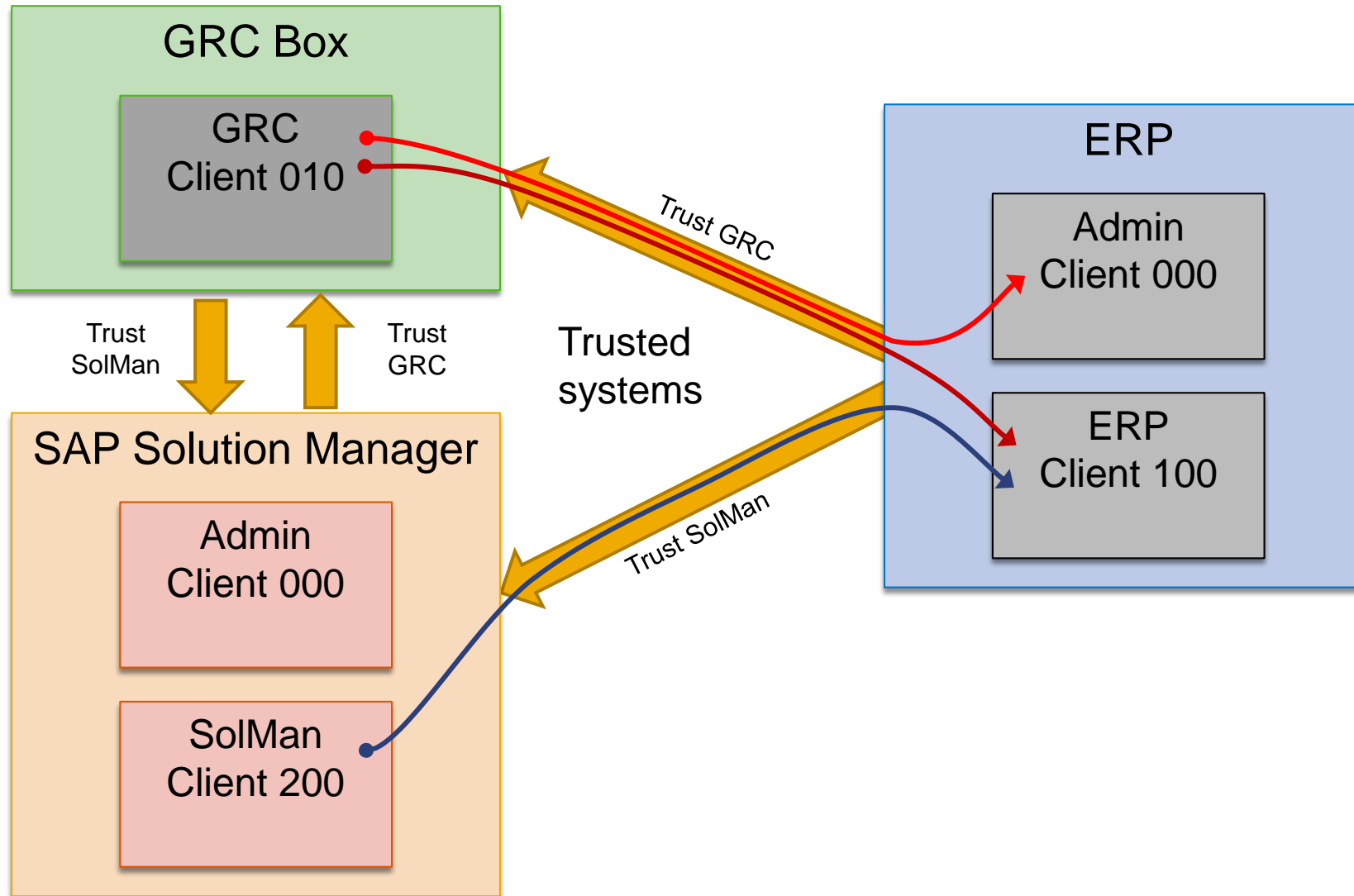
Authorizations for S_RFCACL on the managed systems:

Do not enter * values for RFC_SYSID, RFC_CLIENT, RFC_EQUSER, and RFC_TCODE !

	AC 5.3	AC 10.x, decentral	AC 10.x, central
Role	/VIRSA/Z_VFAT_FIREFIGHTER	Z_SAP_GRAC_SUPER_USER_MGMT_USER	
RFC_SYSID	SAME_SYSTEM	SAME_SYSTEM	<SID of GRC box>
RFC_CLIENT	SAME_CLIENT	SAME_CLIENT	<client of GRC box>
RFC_USER	*	*	*
RFC_EQUSER	N		
RFC_TCODE	/VIRSA/V		GRAC_EAM
RFC_INFO	SAME_LICENCE_NR	SAME_LICENCE_NR	* (or installation number of GRC box)
ACTVT	16	16	16

Alternate solution if Note 2150269 - SAME_SYSTEM for S_RFCACL-RFC_SYSID in trusted RFC does not work can be extended and downported

System Landscape – SolMan and Central FireFighter



FireFighter:

Identical authorizations for S_RFCACL in all clients in all systems:

```

RFC_SYSTEM   = GRC (GRC system)
RFC_CLIENT   = 010 (GRC client)
RFC_EQUUSER  = N
RFC_USER     = *
RFC_TCODE    = GRAC_EAM
    
```

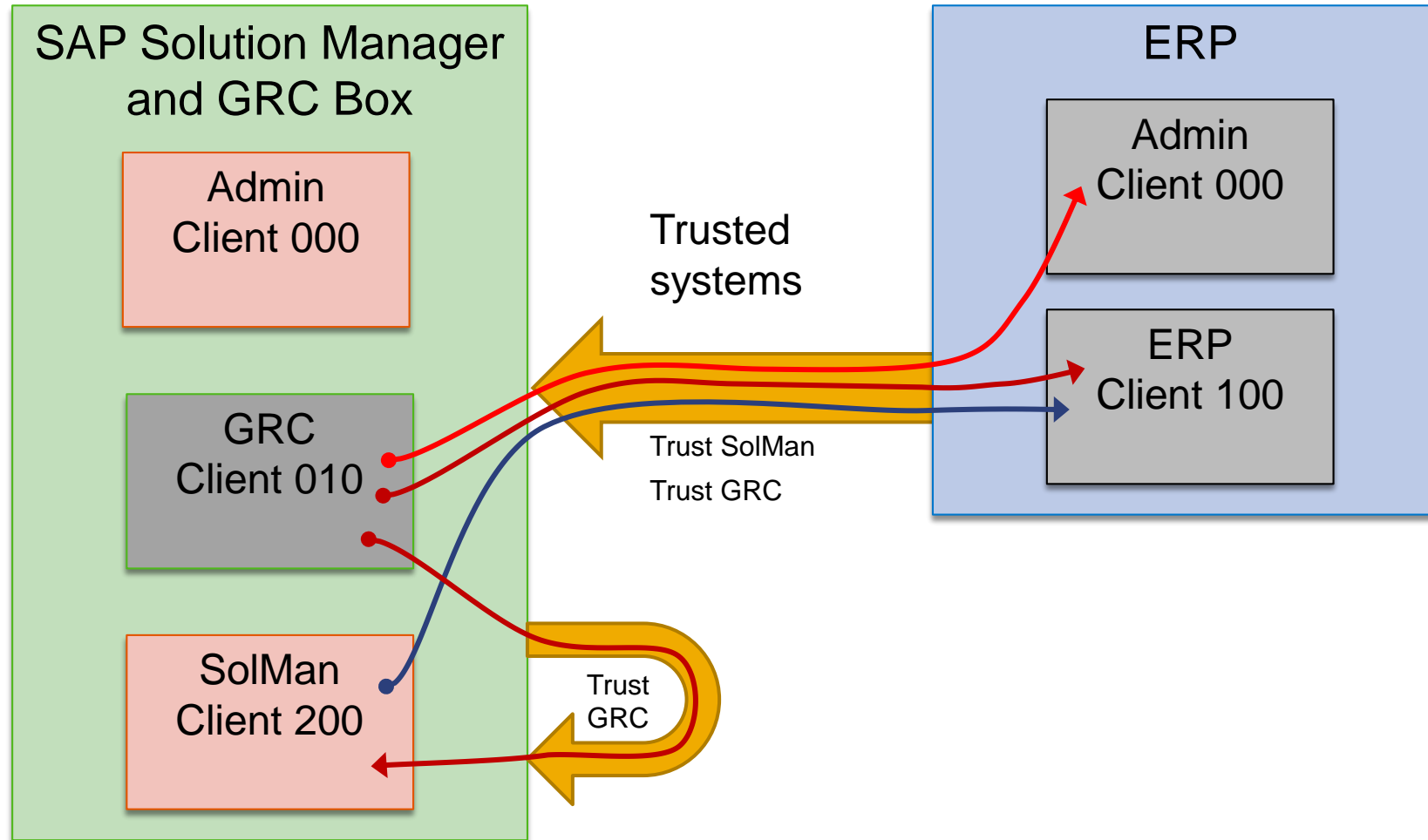
SolMan Admin Users:

Identical authorizations for S_RFCACL in all clients in all systems:

```

RFC_SYSTEM   = SOL (SolMan system)
RFC_CLIENT   = 200 (SolMan client)
RFC_EQUUSER  = Y
RFC_USER     = ' '
RFC_TCODE    = *
    
```

System Landscape – SolMan and Central FireFighter



FireFighter:

Identical authorizations for S_RFCACL in all clients in all systems:

```

RFC_SYSTEM   = SOL (SolMan system)
RFC_CLIENT   = 010 (GRC client)
RFC_EQUUSER  = N
RFC_USER     = *
RFC_TCODE    = GRAC_EAM
    
```

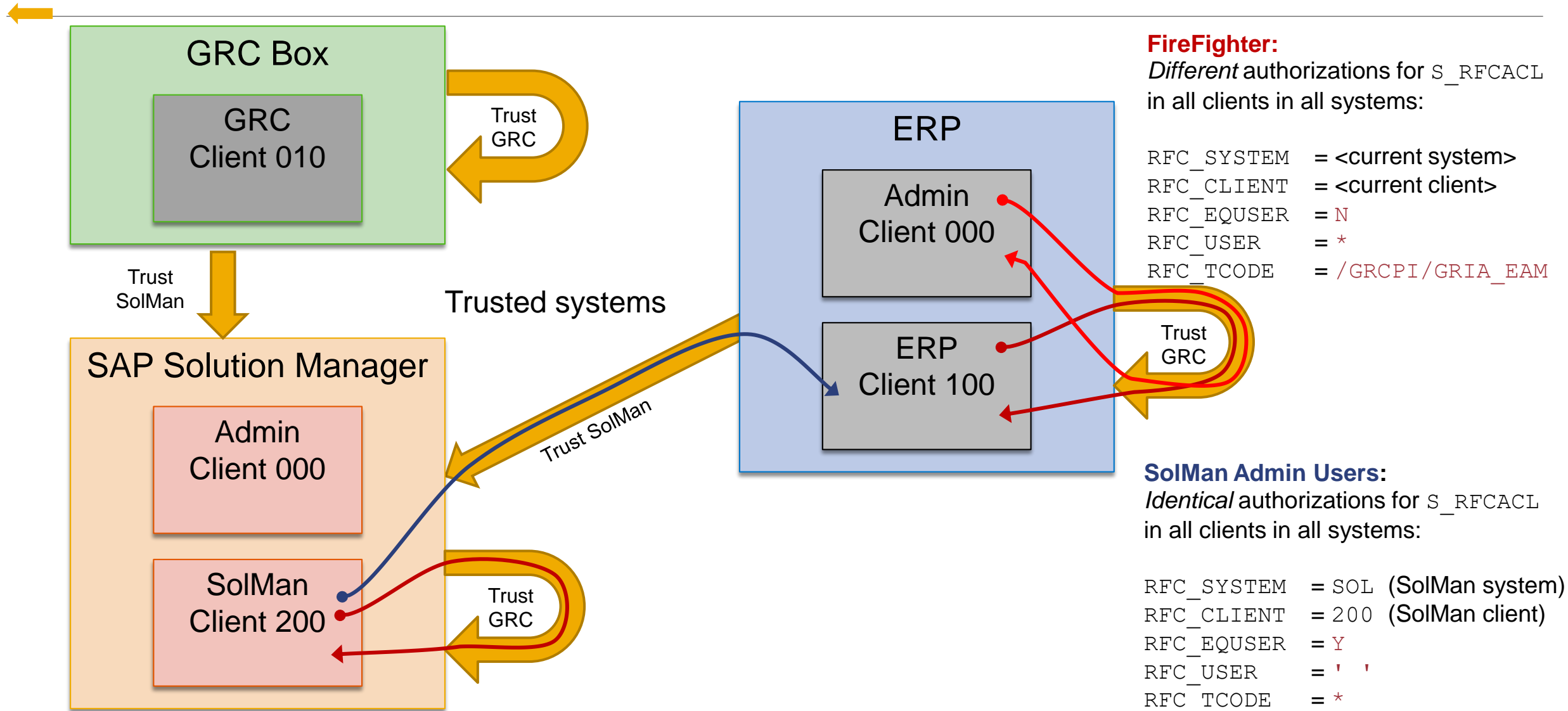
SolMan Admin Users:

Identical authorizations for S_RFCACL in all clients in all systems:

```

RFC_SYSTEM   = SOL (SolMan system)
RFC_CLIENT   = 200 (SolMan client)
RFC_EQUUSER  = Y
RFC_USER     = ' '
RFC_TCODE    = *
    
```

System Landscape – SolMan and decentral FireFighter



Note 1498973 - Renewing trust relationships to a system



Report RS_SECURITY_TRUST_RELATIONS

The report lists all trust relationships

- a) to system trusted by the current system (first list, left of screen)
- b) from systems that trust the current system (second list, right of screen).

For each trust relationship, the report specifies the security procedure used, either security procedure 1 (not recommended) with a red light or security procedure 2 (recommended) with a green light. The procedure-1 relationships to trusted systems (left list) can be deleted by double-clicking the delete icon in the "Delete" column. Procedure-1 relationships to systems that trust the current system, on the other hand, can be updated by running the report RS_UPDATE_TRUST_RELATIONS.

XS2/0020230702 trusts these systems:

System	Install.no	Security Method	Evaluation	Delete
EC1	SAP-INTERN	Security Method 1 (Not Recommended)		
NA1	INITIAL	Security Method 1 (Not Recommended)		
XS2	SAP-INTERN	Security Method 2 (Recommended)		

These systems trust XS2/0020230702:

System	Install.no	Security Method	Evaluation
EC1	SAP-INTERN	Security Method 1 (Not Recommended)	
NA1	INITIAL	Security Method 1 (Not Recommended)	
XS2	SAP-INTERN	Security Method 1 (Not Recommended)	



August 2016

no Webinar

September 2016

live from TechEd Las Vegas (Frank Buchholz):

Wednesday, September 21, 2016 02:00 PM-04:00 PM

respective on DSAG Jahreskongress Donnerstag, 22.9.2016

(Birger Toedtman)

Topics September 2016



Onapsis Issues 15 Advisories Affecting SAP HANA and SAP Trex

Note [1477597](#) - Unauthorized modification of stored content in NW KMC

Old Update Notes

Note [2227969](#) - SAP_NEW profile exists despite SAP Note 1711620

Note [1711620](#) - Role SAP_NEW replaces profile SAP_NEW

Reloaded: How to define cipher suites for SSL/TLS in ABAP, Java, and HANA

Onapsis Issues 15 Advisories Affecting SAP HANA and SAP Trex

<http://www.onapsis.com/onapsis-issues-15-advisories-affecting-sap-hana-and-sap-trex>

In SAP HANA SPS 11 and above all coding correction corresponding to these advisories are already included.

Additionally the parameters `password_lock_for_system_user (*)` and `detailed_error_on_connect` in section `[password_policy]` according to SAP Note [2216869](#) and parameter `file_security` in section `[import_export]` according to note [2252941](#) are available in the configuration file `indexserver.ini` and need to be configured for corresponding protection.

You can check these parameters using application Configuration Validation in the SAP Solution Manager, too. The parameters are stored in the configuration store `HDB_PARAMETERS`.

(*) Keep in mind that user `SYSTEM` should be deactivated in production systems anyway

Onapsis Issues 15 Advisories Affecting SAP HANA and SAP Trex

<http://www.onapsis.com/onapsis-issues-15-advisories-affecting-sap-hana-and-sap-trex>

Use the following sql statement in the HANA studio to check all three parameters:

```
SELECT 'indexserver.ini' AS FILE_NAME, LAYER_NAME, 'password_policy' AS SECTION,
'password_lock_for_system_user' AS KEY, VALUE
  FROM DUMMY D LEFT OUTER JOIN M_INIFILE_CONTENTS P ON
  P.file_name = 'indexserver.ini' AND p.section = 'password_policy' AND p.key =
'password_lock_for_system_user'
UNION
SELECT 'indexserver.ini' AS FILE_NAME, LAYER_NAME, 'password_policy' AS SECTION,
'detailed_error_on_connect' AS KEY, VALUE
  FROM DUMMY D LEFT OUTER JOIN M_INIFILE_CONTENTS P ON
  P.file_name = 'indexserver.ini' AND p.section = 'password_policy' AND p.key =
'detailed_error_on_connect'
UNION
SELECT 'indexserver.ini' AS FILE_NAME, LAYER_NAME, 'import_export' AS SECTION, 'file_security'
AS KEY, VALUE
  FROM DUMMY D LEFT OUTER JOIN M_INIFILE_CONTENTS P ON
  p.file_name = 'indexserver.ini' AND p.section = 'import_export' AND p.key = 'file_security'
```


Onapsis Issues 15 Advisories Affecting SAP HANA and SAP Trex

<http://www.onapsis.com/onapsis-issues-15-advisories-affecting-sap-hana-and-sap-trex>

More details as well as coverage for lower SPS can be found in following notes:

2176128 - Potential information disclosure relating to server information (solution with revision 95)

2148905 - Potential information disclosure relating to passwords in SAP Web Dispatcher trace files (solution with rev. 97)

2197459 - Potential log injection vulnerability in SAP HANA audit log (solution with rev. 85.05, rev. 97.02, rev. 102)

2216869 - Security improvement of HANA authentication (solution with rev. 97.03, rev. 102)

2233136 - Potential termination of running processes triggered by IMPORT statement (solution with rev. 102.02, rev. 110)

2252941 - Potential information disclosure relating to files exported from SAP HANA with EXPORT statement (solution with rev. 102.03, rev. 110)

2233550 - Communication encryption for HANA multi tenant database containers does not work as expected (solution with rev. 102.02, rev. 110)

Note 1477597 - Unauthorized modification of stored content in NW KMC

Update note 2351001 points out that there is a new manual activity in this old note for all Java Systems having NW KMC for all releases and SP:

Navigate to "System Administration → System Configuration → Knowledge Management → Content Management → Protocols → (Show Advanced Options) → WebDAV" in the portal, open "WebDAV Protocol" configuration for edit and activate parameter "**Force Text Download**".

When parameter "Force Text Download" is activated, the system does not allow you to open files containing executable scripts with your Web browser, thus preventing the execution of potentially malicious scripts. Instead, when trying to open the file with a Web browser, you are prompted to choose between "Open", "Download" or "Cancel".

This setting is described in the documentation:

WebDAV Protocol

https://help.sap.com/saphelp_nw74/helpdata/en/95/c3744f7143426e8f99c362244e0b55/content.htm

→ Force Text Download

Note 1477597 - Unauthorized modification of stored content in NW KMC

Alternate solution:

If a **malicious script filter** is activated for the repository containing the file with executable script, this parameter “Force Text Download” is ignored. For more information, see

Malicious Script Filter

https://help.sap.com/saphelp_nw74/helpdata/en/84/4da32a99254685aa62aedf6f132429/content.htm

Old Update Notes

Old Update Notes may miss validity information about the relevant software component versions. System Recommendations shows such notes for all systems.

Some of these notes are corrected now using the text similar to this: “This note has been re-released after adding the required validity. The update contains no new corrections.”

Examples:

Note 1540408 - Update #1 for security Note 1505368

Note 1542033 - Update #1 for security note 1497003

Note 1678072 - Update #1 to Security Note 1579673

Note 1724922 - Update 1 to Security Note 1653474

Note 1727640 - Update 1 to security note 1520101

Limitation: The validity information for SP ranges is not added (only for software component and release).

Note 2227969 - SAP_NEW profile exists despite SAP Note 1711620

Note 1711620 - Role SAP_NEW replaces profile SAP_NEW

The composite **profile SAP_NEW** is obsolete (no longer required with the use of transactions PFCG and SU25) and should no longer be used. However, if you still require the SAP_NEW algorithm, use the program REGENERATE_SAP_NEW and create a corresponding **role SAP_NEW**.

The rules of the game:

- Forget profile SAP_NEW as it is critical and outdated
- Inspect role SAP_NEW to optimize your active roles during upgrade preparation
- Do not assign the profile or the role to users

See blog

Life (profile SAP_NEW), the Universe (role SAP_NEW) and Everything (SAP_ALL)

<http://scn.sap.com/community/security/blog/2014/02/17/life-profile-sapnew-the-universe-role-sapnew-and-everything-sapall>

Reloaded: How to define cipher suites for SSL/TLS in ABAP, Java, and HANA

Note [2110020](#) is a how-to guide about the configuration of desired cipher suites.

ABAP (ICM, Web Dispatcher, MSG Server, SAP_HTTP) and Java *incoming* connections (ICM)

- You can configure the desired cipher suites through the two profile parameters `ssl/ciphersuites` and `ssl/client_ciphersuites` according to the description and recommended settings in Section 7 of note [510007](#) respective in note [2253695](#).
- Example to use TLS 1.2 only: `ssl/ciphersuite = 544:HIGH`

Java *outgoing* connections

- You can configure the desired cipher suites through the two configuration properties `client.minProtocolVersion` and `client.maxProtocolVersion` according to the description and recommended settings in note [2284059](#).

HANA

- Note [2312071](#) describes how to define the profile parameter `ssl/ciphersuites` for the web dispatcher of HANA



July 2016

Topics July 2016



News about the SAP ONE Support Launchpad

News about System Recommendations in SolMan 7.1

Security Whitepaper: SAP's Standards, Processes, and Guidelines for Protecting Data and Information

Note [2220030](#) - STUSERTRACE: User trace for authorization checks

**Tips for the Upgrade of a system with a CUA central system
i.e. if CUA main system is still running on SolMan 7.1**

Note [2288530](#) - System internal logons are not properly logged in Security Audit Log

Note [2223635](#) - Fixes in CommonCryptoLib 8.4.43

Note [991968](#) - List of values for "login/password_hash_algorithm"

Clickjacking (~~25~~ 38 notes)

News about the SAP ONE Support Launchpad

Since April 2016, the new SAP ONE Support Launchpad is the default for users accessing SAP support applications online. The links to **legacy applications will remain in place until August 15th, 2016** to accommodate any major feature gaps or access issues that may arise in the meantime.

The SAP Support Portal (support.sap.com) will continue to be the main entry point for all customers but will now seamlessly direct the customer into their new Launchpad and redesigned applications. Traditional support applications that do not yet have a replacement, will continue to be accessible in the SAP Support Portal.

More information can be found on [SAP ONE Support Launchpad Application Overviews](#).

Report issues with Launchpad and new applications using the **Feedback button** or create an incident:

<https://support.sap.com/contactus>

→ **Report an incident for component XX-SER-SAPSMP-LAUNCH**

News about System Recommendations in SolMan 7.1

← Update:
 Use Note [2141744](#) - SysRec: manual status is lost and replaced with status 'new', New version 4 from 28.07.2016
 Limitation: This correction cannot give you status values back which you already have lost.

Security Notes (343) | HotNews (238) | Performance Notes (216)

Set Status | Create Change Request

Version	Short Text	Manual I...
86...	Restricti...	
00...	Problem.	
0000412...	Authoriz...	4

(SysRec in SolMan 7.2 is fine)

If you have used it, try to save your work with report ZSYSREC NOTELIST downloading the complete list.

ZSYSREC_NOTELIST

Note	SID	Appl.area	Pri	Note short text	Rel.date	SysRec Status
850306	EC1	BC-DB-ORA	2	Oracle Critical Pa...	17.11.2015	Irrelevant
	NA1	BC-DB-ORA	2	Oracle Critical Pa...	17.11.2015	Irrelevant
	XS2	BC-DB-ORA	2	Oracle Critical Pa...	17.11.2015	Irrelevant
14393	NA1	BC-CST-ST5	2	Extended securit...	14.12.2010	New

Reason: SysRec on SolMan 7.1 does not handle the user status for **updated ABAP** notes correctly – you might lose any user status which you have entered earlier. Unfortunately many notes get touched these days because of some technical updates.

Security Whitepaper: SAP's Standards, Processes, and Guidelines for Protecting Data and Information

Security Whitepapers: <https://support.sap.com/securitywp>

SAP's Standards, Processes, and Guidelines for Protecting Data and Information

https://support.sap.com/dam/library/SAP%20Support%20Portal/kb-incidents/notes-knowledge-base-notification/security-notes/white-papers/ags-sec-mgmt_en.pdf

Table of Contents

- Security as a Top Priority at SAP
- General Security at SAP
- Security Management at SAP
- Security in the SAP Digital Business Services Organization
- Appendix - Relevant Security Certifications / Important Links / FAQ

Note 2220030 - STUSERTRACE: User trace for authorization checks

New transaction STUSERTRACE as of SAP_BASIS 7.40 SP 14 or 7.50 SP 03 with Kernel as of 7.45 patch 112 allows a long-time trace for authorization checks of an user.

Each authorization check is recorded only once with the first time stamp for each user!

You can (de)-activate the authorization trace using the profile parameter `auth/auth_user_trace`. The profile parameter can be switched dynamically.

You can activate the trace either completely or for a filter about application type, user, or authorization objects. This way, you can examine special scenarios, such as RFC programs or batch jobs, over a longer period of time.

The trace is stored in table SUAUTHVALTRC

Auswertung Berechtigungstrace (Tabelle SUAUTHVALTRC)

Auswerten Anzahl Einträge Filter ändern

Traceinformation
Berechtigungstrace Aktiv mit Filter

Filter für die Aufzeichnung
Letzte Änderung STUSER01 13.10.2015 17:55:11

Filter	Selektieren	Wert
Typ der Anwendung	<input checked="" type="checkbox"/>	RFC-Funktionsbaustein
Typ der Anwendung	<input checked="" type="checkbox"/>	Transaktion
Benutzer	<input checked="" type="checkbox"/>	STUSER01
Benutzer	<input checked="" type="checkbox"/>	STUSERS*
Benutzer	<input type="checkbox"/>	SAP*
Berechtigungsobjekt	<input type="checkbox"/>	S_DATASET

Einschränkungen für die Auswertung

Typ der Anwendung	<input type="text"/>	bis	<input type="text"/>
Benutzer	<input type="text"/>	bis	<input type="text"/>
Berechtigungsobjekt	<input type="text"/>	bis	<input type="text"/>
Von	<input type="text"/>	00:00:00	
Bis	<input type="text"/>	00:00:00	
Maximale Trefferzahl	<input type="text"/>	200	

Tips for the Upgrade of a system with a CUA central system

If CUA main system is still running on SolMan 7.1 you should consider an upgrade to SolMan 7.2 to get the latest updates for the CUA. (The same is true for any other system with SAP_BASIS 7.02 or older.)

<https://wiki.scn.sap.com/wiki/display/Security/Upgrade+of+a+system+where+a+CUA+central+system+resides>

Summary:

An upgrade of the CUA main system to SAP_BASIS 7.40 or higher is valuable to get

- better performance (delta data distribution instead of full data distribution)
- better user interface in SU01
- new option to add documentation to users

Do not forget to open the CUA landscape in transaction `SCUA` and simply save it to activate some of these new features.

Note 2288530 - System internal logons are not properly logged in Security Audit Log

Internal logon	Profile parameter	Comment
AutoABAP	<code>rdisp/autoabapuser</code>	Empty user in client 000!
Server Startup Procedure	<code>rdisp/server_startup/user</code>	
SAP Startservice	<code>rdisp/start_service_user</code>	
Java Virtual Machine	<code>rdisp/autojavauser</code>	
BGRFC Watchdog	<code>rdisp/bgrfc_watchdog_user</code>	

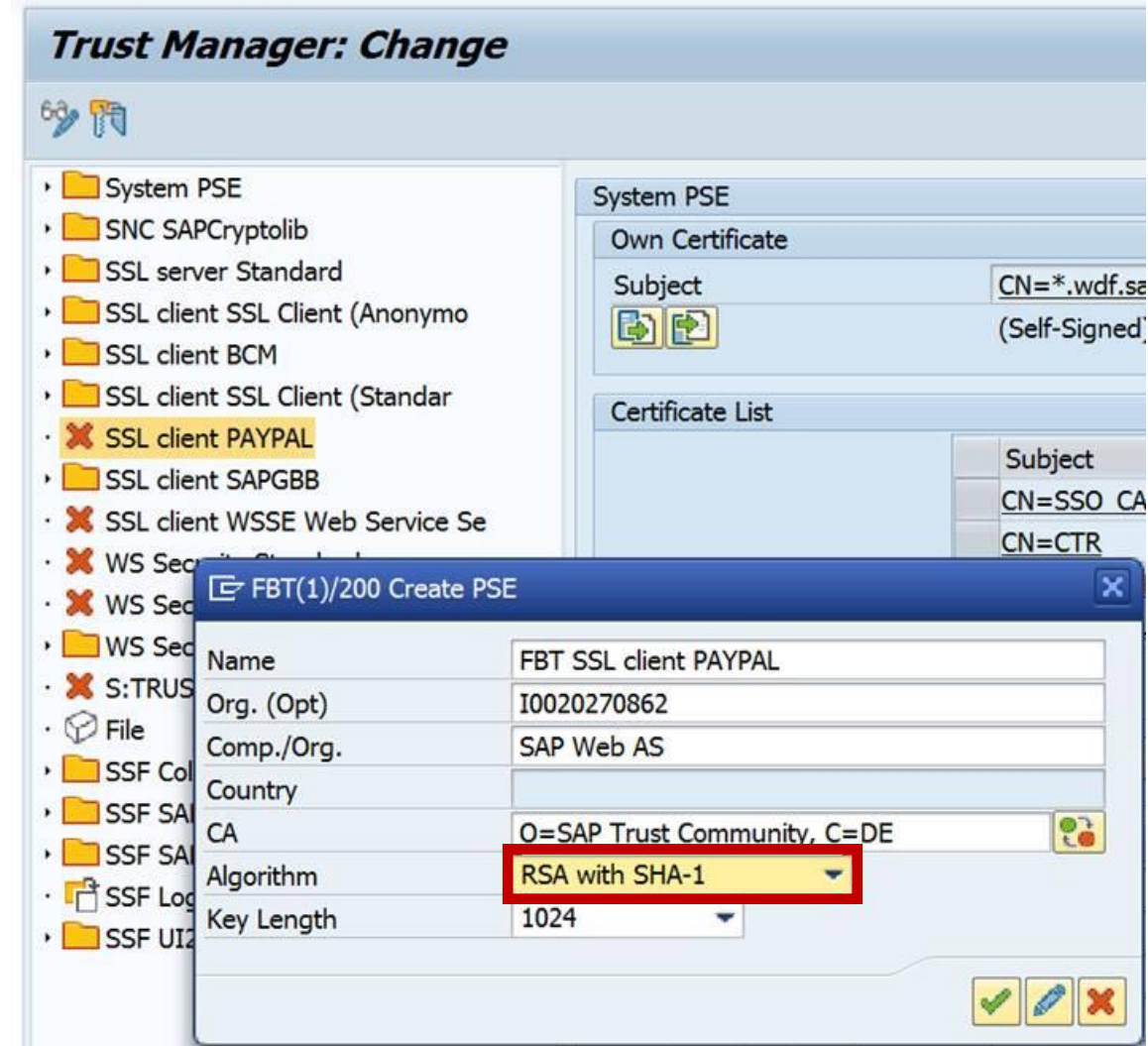
Note 2223635 - Fixes in CommonCryptoLib 8.4.43

To strengthen encryption, i.e. with SNC or SSL, you may want to choose a stronger encryption algorithm.

Note 2223635 claims that the default algorithm is changed:

“4. A PSE is created with transaction STRUST, but the outdated SHA-1 hash algorithm was used as default. Default is SHA-256 now.”

However, the note updates the CommonCryptoLib but not the ABAP coding of transaction STRUST: You still need to choose the algorithm “RSA with SHA-256” manually while creating new PSEs.




Note 2223635 - Fixes in CommonCryptoLib 8.4.43

Tipp from an ASUG Member:

Use transaction SHD0 to create the „Standard Transaction Variant“ (respective use GUIXT) which forces STRUST to use a different default.

Caution: the important fields are prefilled by ABAP, therefore it is not sufficient to set the values but you have to turn the fields into output-only fields as well.

Change screen variant

GuiXT Script 

Screen variants for transaction STRUST

Screen values 0010 Program S_TRUSTMANAGER

Copy settings

Name of screen variant: ZSTRUST_SHA-256

Do not display screen

Screen variant short txt Create PSE with SHA-256

Field	Contents	W. content	Output only	Invisible
Name		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Org. (Opt)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comp./Org.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Country		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CA		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
@9B\QNamespace Activ(Pushbutton)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Algorithm	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Key Length	2048	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Algorithm		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copy Certificate Lis(Check box)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XS2(5)/001 Create PSE

Name	XS2 SSL client BCM
Org. (Opt)	I0020230702
Comp./Org.	SAP Web AS
Country	
CA	O=SAP Trust Community, C=DE
Algorithm	RSA with SHA-256
Key Length	2048

Note 991968 - List of values for "login/password_hash_algorithm"

For password hashing you can keep on using SHA-1 but you may want to make it harder for an attacker to perform brute-force or dictionary attacks by increasing the count of iterations.

Profile parameter `login/password_hash_algorithm` denotes which password hash algorithm is used for new / changed passwords.

Note 991968 - List of values for "login/password_hash_algorithm"

Note 2076925 - Additional SHA password hash algorithms supported

Note 2140269 - ABAP password hash: supporting salt sizes up to 256 bits

[Online Help](#)

Value ranges:

Encoding: RFC2307

Algorithm: iSSHA-1 | iSSHA-256 | iSSHA-384 | iSSHA-512 default = iSSHA-1 is ok

Iterations: 1 – 4294967294 (2^{32}) default = 1024 → 10000

Saltsize: 32 – 256 (divisible by 8) default = 96 is ok

Clickjacking Overview



<https://www.owasp.org/index.php/Clickjacking>

Test page file:///C:/temp/clickjack_test.htm

```
<html>
  <head>
    <title>Clickjack test page</title>
  </head>
  <body>
    <h1>Clickjack test page</h1>
    <p style="color:#FF0000;">The website in the frame below is vulnerable to clickjacking!</p>
    <iframe src="http://www.target.site" width="1200" height="800"></iframe>
  </body>
</html>
```

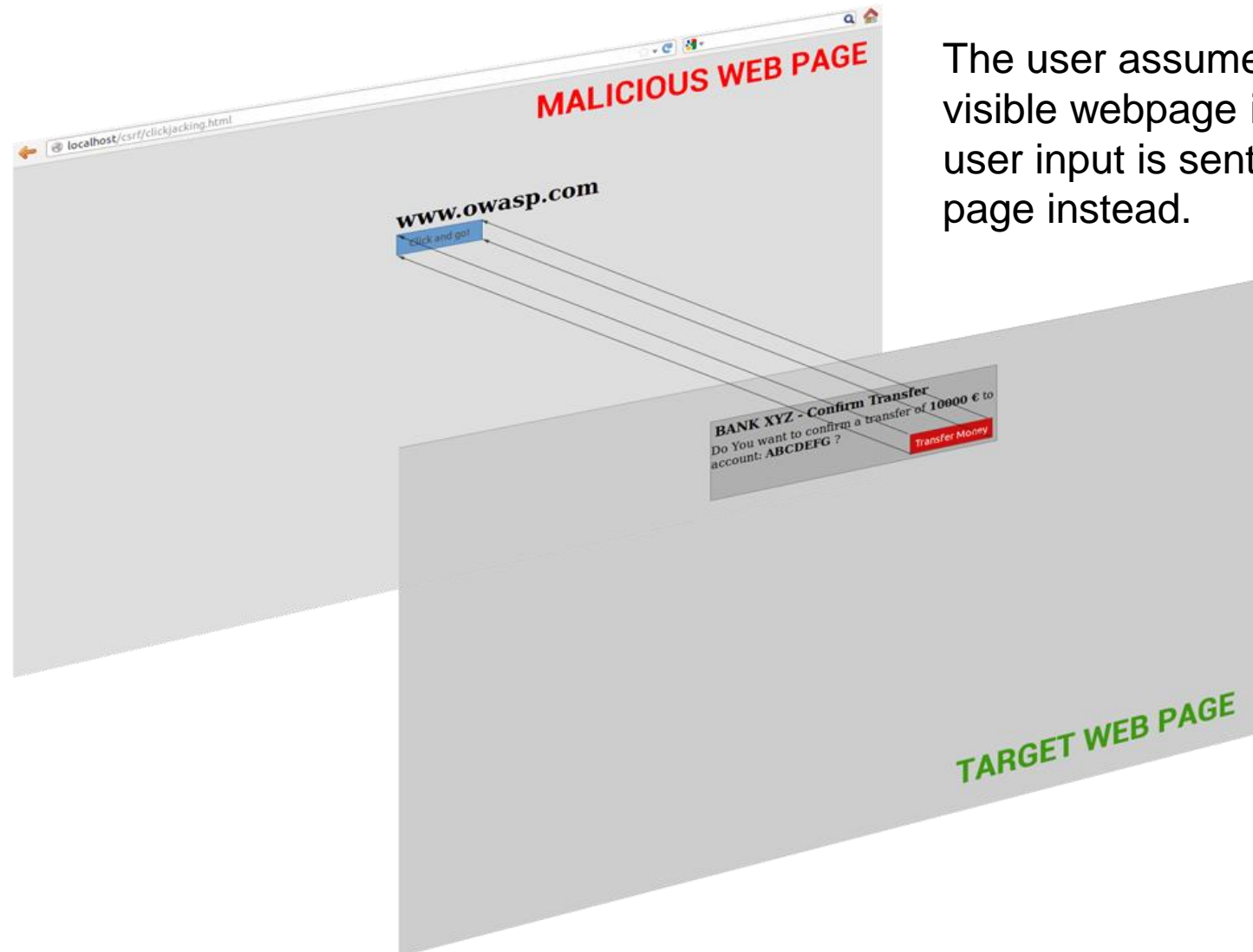
**Use such a test page to validate your configuration
or use the [Transaction Launcher URL IFAME Testing](#)**

Central note with overall description of the protection framework

- Note [2319727](#) - Clickjacking protection framework in SAP Netweaver AS ABAP and AS Java

Clickjacking

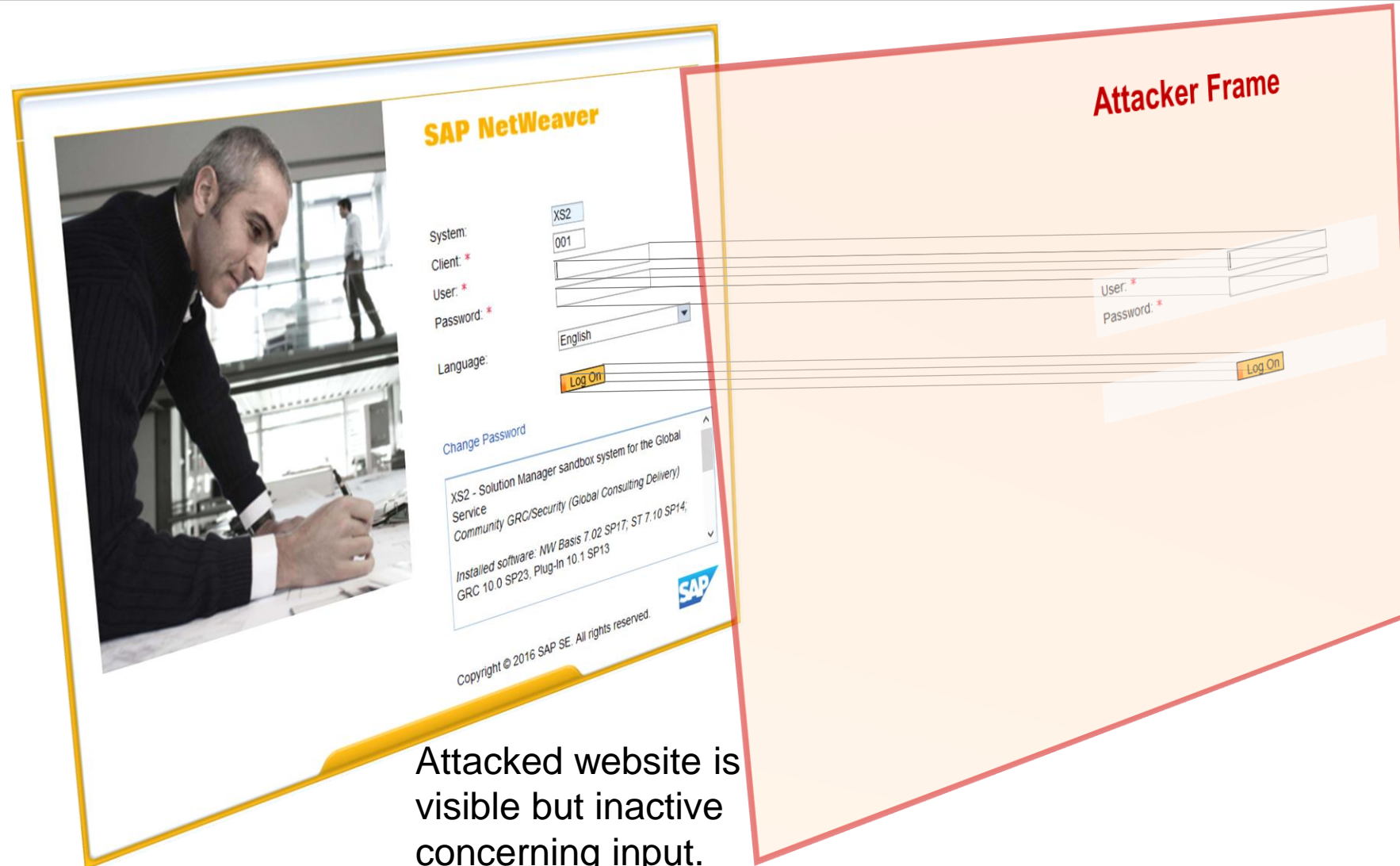
Example (variant with victim on top)



The user assumes to interact with the visible webpage in the background, but his user input is sent to the invisible target web page instead.

Clickjacking

Example (variant with attacker on top)



Fake input controls on attacker frame are positioned above the hijacked controls of the webpage.

Victim provides data, e.g. username and password, which is hijacked by the frame of the attacker.

Clickjacking

new notes (compared with first publication in July 2016; marked red on next slide)

Note [1888001](#) - Error "This content cannot be displayed in a frame" is shown on CRM WebUI page

Note [2299560](#) - Issue with the SHL report creation

Note [2350711](#) - Targetgroup List of Hybris Marketing can't be displayed inside CRM

Note [2080913](#) - Error "This content cannot be displayed in a frame" on SRM-MDM in Internet Explorer

Note [2242128](#) - Clickjacking protection works only with limitations

Note [2354565](#) - ClickJacking notes for Fiori and downloading UI NW Add-On

Note [2327506](#) - Shared Service Framework: Enabling SAP Fiori Transaction Launch

More notes (not checked yet)

Note [2321867](#) - Extending or replacing functionalities in Web Channel / E-Commerce

Note [2327541](#) - Configuring ClickJacking protection in Web Channel / E-Commerce applications (HTMLB)

Note [2325497](#) - Clickjacking Framing Protection in MII (JSP)

Note [2338446](#) - Clickjacking Framing Protection in MII (JSP)

Note [2337225](#) - Clickjacking vulnerability in LSO Content Player


Note [2339506](#) - Whitelist based Clickjacking Framing Protection in Utility Customer E-Services

[...]

Clickjacking

ABAP

Note 2142551 - Whitelist service for Clickjacking Framing Protection in AS ABAP

- Note 1872800 - Whitelist based Clickjacking Framing Protection in Web Dynpro ABAP
- Note 2245332 - Automatic usage of Whitelist Service for Clickjacking Framing Protection in SAPUI5 Apps
- Note 2319172 - Whitelist based Clickjacking Framing Protection in SAP GUI for HTML
- Note 2319174 → 2148130 - Whitelist based Clickjacking Framing Protection in NWBC for HTML
- Note 2319192 - Whitelist based Clickjacking Framing Protection in BSP 
- and Note 2090746 - Unified Rendering Notes - Which One To Apply - Instructions And Related Notes
- Note 2242128 - Clickjacking protection works only with limitations
- Note 2354565 - ClickJacking notes for Fiori and downloading UI NW Add-On
- Note 2350711 - Targetgroup List of Hybris Marketing can't be displayed inside CRM

Clickjacking

General switch / whitelist

Table HTTP_WHITELIST field ENTRY_TYPE (maintenance using SE16 only)

01	HTTP Framework to filter for valid URLs (Note 853878)
02	Exit URL for parameter <code>sap-exiturl</code>
03	NWBC runtime
10	WebDynpro Resume URL (Note 2081029)
11	Web Dynpro Redirect URL (Note 2081029)
20	Redirect URL for parameter <code>sap-mysapred</code> of ICF (Note 612670)
21	Redirect URL for parameter <code>redirectURL</code> of ICF (Note 1509851)
30	Clickjacking protection (Note 2142551)
40	Suite Redirect
99	Generic

You can use report `RS_HTTP_WHITELIST` instead, too, which shows the value help for the entry type field.

Clickjacking

Recommended SP for ABAP

Required SP for ABAP (mainly according to notes [2142551](#) and [2319184](#))

„Implementing UR SAP Notes via SNOTE may be a time consuming process.”

SAP_BASIS	700	SAPKB700	33
SAP_BASIS	701	SAPKB701	18
SAP_BASIS	702	SAPKB702	18
SAP_BASIS	710	SAPKB710	21
SAP_BASIS	711	SAPKB711	16
SAP_BASIS	730	SAPKB730	15
SAP_BASIS	731	SAPKB731	18
SAP_BASIS	740	SAPKB740	14
SAP_BASIS	750	SAPK-750	02INSAPBASIS

SAP_UI	740	SAPK-740	16INSAPUI	with SAPUI5 version 1.28.35
SAP_UI	750	SAPK-750	03INSAPUI	with SAPUI5 version 1.36.11
UISAPUI5	100	SAPK-100	16INUISAPUI5	with SAPUI5 version 1.28.35
UI_700	200	SAPK-200	03INUI700	with SAPUI5 version 1.36.11

Now you can activate
Clickjacking protection via
SE16 for client specific table
HTTP_WHITELIST with
ENTRY_TYPE = 30
**Some UI frameworks
require additional activation**

Table HTTP_WHITELIST Insert

Reset

MANDT	<input type="text" value="001"/>
ENTRY TYPE	<input type="text" value="30"/>
SORT KEY	<input type="text" value="0001"/>
PROTOCOL	<input type="text" value="*"/>
HOST	<input type="text" value="*.sap.corp"/>
PORT	<input type="text"/>
URL	<input type="text" value="*"/>

**Tipp: This should
not be the domain
of the PC network**

Clickjacking

Additional Information for ABAP

About note [2142551](#) - Whitelist service for Clickjacking Framing Protection in AS ABAP

- a) The manual prerequisite “create package `SUICS`” leads to the error “Transport layer `SDWB` does not exist”. Solution: Use transport layer `SAP` instead.
- b) The manual post installation step requires to create services in transaction `SICF`. Use package `SUICS` to create these services.
- c) Activate the created services `/sap/bc/uics` and `/sap/bc/uics/whitelist` in transaction `SICF`
- d) Choose user type “System” to create the technical user for the external alias. Keep in mind that you have to create the same user with same password in all clients which you want to protect.
- e) Step a) – d) are only relevant if you apply the note but not if you get the SP. Later, after the next upgrade you can remove both services, the external alias and the technical user because you get different public services with the SP.
- f) You have to create an entry in `HTTP_WHITELIST` with `ENTRY_TYPE = 30` in all clients which you want to protect - including client `000`. You have to run this step in any case, i.e. even if you upgrade the Support Package or the Release instead of applying the note
- g) Consider to set the undocumented profile parameter `abap/http/whitelist_strict_check = X`

Clickjacking

Additional Information for ABAP

Note 1872800 requires Unified Rendering note 2090746 which might require many other notes.

Note 2319172 might require to create empty methods `BUILD_HTML_FRAMESETPAGE` and `START_TRANSACTION` in class `CL_HTTP_EXT_ITS` using transaction `SE80` as a preparation.

Notes 2319192 and 2327506 requires additional activation in table `BSPGLOBALSETTING` with an entry showing `CLICKJACKING = ON`

Note 2327506 asks for a generic * entry in table `HTTP_WHITELIST` with `ENTRY_TYPE = 30` which (as I assume) would make Clickjacking Protection worthless. Do not create such entry.

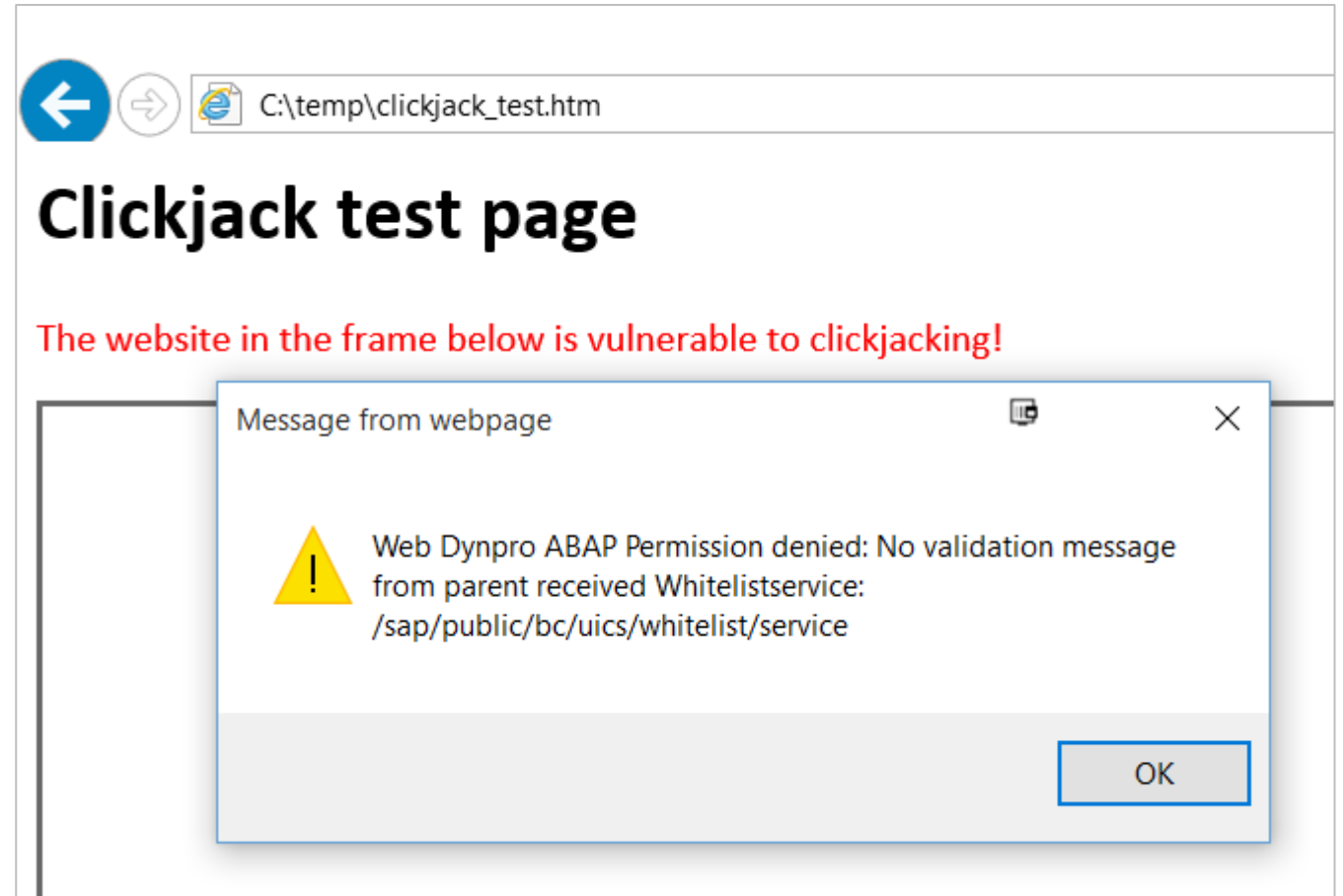
Clickjacking

Result for WebDynpro ABAP

Depending on the UI Framework you get either an empty frame or an error message if Clickjacking Protection blocks rendering a page.

Here is the error message show by WebDynpro ABAP:

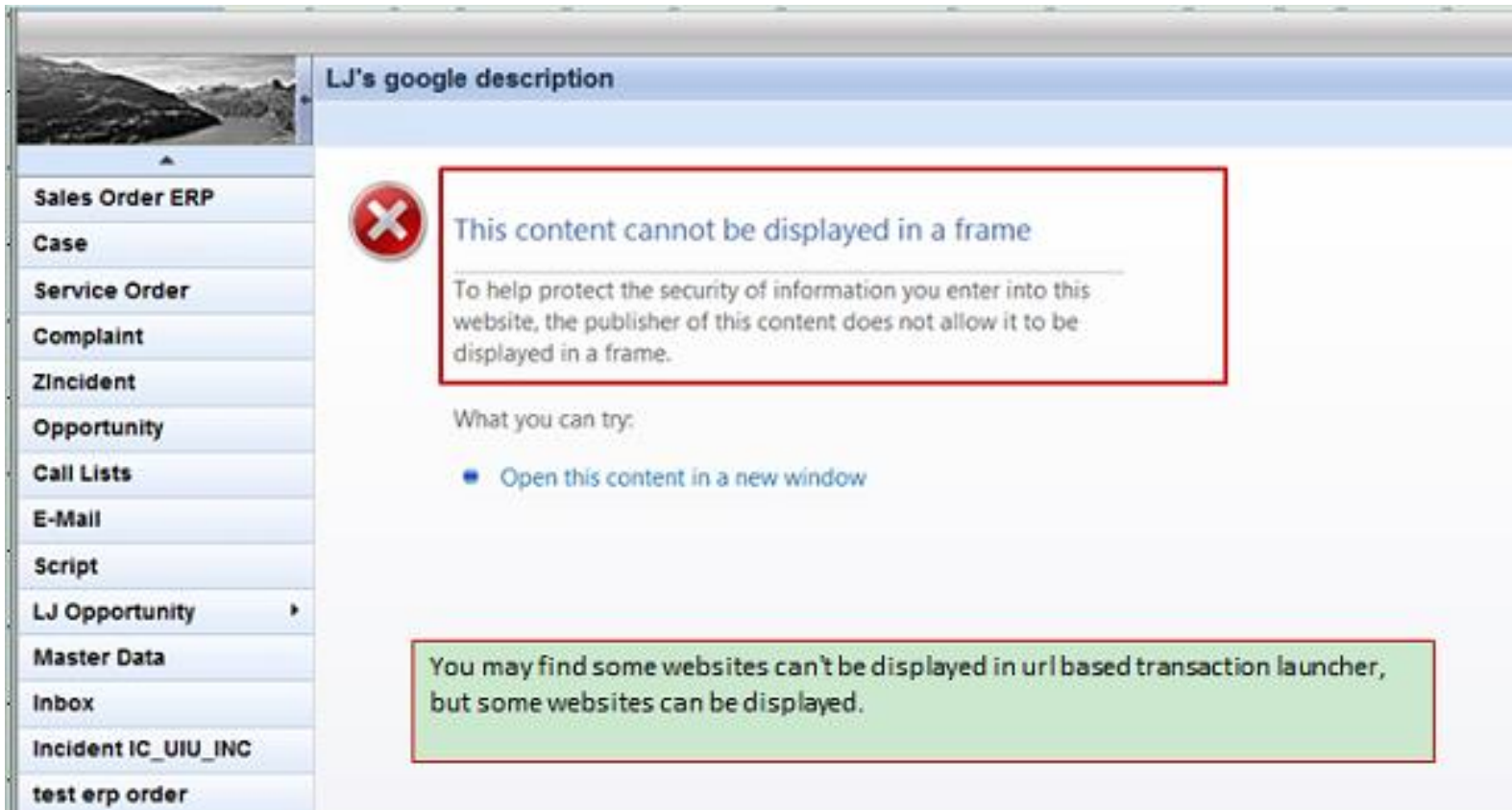
Limitation: It seems that the logon page is not protected.



Clickjacking

Result for CRM Widget, Web Links or URL based transaction launcher

When launching an external website(For example: www.google.com) in CRM Widget, Web Links or URL based transaction launcher, you may not be able to display the content due to following error:



Before adding a URL to a Widget or the Transaction Launcher, you need to make sure it can be run by the Iframe.

Try the [Transaction Launcher URL IFAME Testing](#)

ClickJacking Notes

Additional information for Java

Note 2170590 - Whitelist service for Clickjacking Framing Protection in AS JAVA

- Note 2169860 - Whitelist based Clickjacking Framing Protection in Web Dynpro Java
- Note 2169722 - Whitelist based Clickjacking Framing Protection in Enterprise Portal
 - Note 2276701 - BCM Not showing messages after upgrade
- Note 2290783 - Whitelist based Clickjacking Framing Protection for Java Server Pages
- Note 2244161 - Clickjacking Protection in Web Channel Experience Management (WCEM)
- Note 2286679 - Whitelist Service API required for the Clickjacking Framing Protection in JAVA
- Note 2263656 - Whitelist based Clickjacking Framing Protection in HTMLB Java
- Note 1781171 - ClickJacking vulnerability in WebDynpro Java
- Note 2042819 - ICM - HTTP Response Header Rewriting
- Note 2198329 - Clickjacking issue in CMC- Security Issue
- Note 2339167 - Whitelist based Clickjacking Framing Protection in FSCM Biller Direct
- Note 2080913 - Error "This content cannot be displayed in a frame" on SRM-MDM



Not checked yet

 mandatory settings

ClickJacking Notes

Additional information for Java

Note 2170590 - Whitelist service for Clickjacking Framing Protection in AS JAVA

- Set the Java System Property `ClickjackingProtectionService = true` of application `tc~lm~itsam~service~clickjacking`
- Maintain the ClickJacking Whitelist Configuration at NWA application → Configuration → Security

Note 2169722 - Whitelist based Clickjacking Framing Protection in Enterprise Portal

- Set the property `EPClickjackingProtectionEnabled = true` of the service `EPClickjackingProtectionService` in application `com.sap.portal.runtime.clickjackingprotection`

Note 2169860 - Whitelist based Clickjacking Framing Protection in Web Dynpro Java

- Set the property `ClickjackingProtection = true` of the Application Module `tc~wd~dispwda`
- Maintain the ClickJacking Whitelist Configuration at NWA application → Configuration → Security

ClickJacking Notes

Additional information for Java

Note 2290783 - Whitelist based Clickjacking Framing Protection for Java Server Pages

- Adopt the impacted custom application based on JSP

ClickJacking Notes

Additional information for Java

Question: What about notes which do not match to my release or SP – are they relevant?

Example: Do I need note 2263656 for a system which runs with LIFECYCLE MGMT TOOLS 7.01 SP 17 (to take one of the components as an example)?

Answer: Yes, older SP are usually also affected by security vulnerabilities (and older Releases often, too)!

The note offers patches for following releases and SP:

On 7.01 there is a patch for SP 18 available and SP 19 contains the solution. SP 17 is affected as well – especially in case of a general issue like Clickjacking, however, you have to run an SP upgrade to get the solution.

Release	SP	Patch
LIFECYCLE MGMT TOOLS 7.00	SP033	000002
LIFECYCLE MGMT TOOLS 7.00	SP034	000000
LIFECYCLE MGMT TOOLS 7.01	SP018	000002
LIFECYCLE MGMT TOOLS 7.01	SP019	000000
LIFECYCLE MGMT TOOLS 7.02	SP018	000003
LIFECYCLE MGMT TOOLS 7.02	SP019	000000

On the other hand, newer releases could be safe automatically – but only if only software updates give you the complete solution. A manual configuration step most likely is relevant for newer releases as well!



June 2016

Topics June 2016



Security Notes on the Support Portal and the Launchpad – Reloaded

Note [2021789](#) - SAP HANA revision und maintenance strategy

How to use SAP HANA Mini Checks for Security Validation

Note [2252312](#) - Insufficient logging of RFC in SAL

Note [2306709](#) - Code Injection vulnerability in Documentation and Translation Tools

Note [2160790](#) - Missing authorization check in FS-CML

Note [2195409](#) - Potential modif./disclosure of persisted data in SAP CPQ Solution Configuration

Note [1882254](#) - Authorization check for logon data not based on passwords

Security Notes on the Support Portal

<https://support.sap.com/securitynotes>

The screenshot shows the SAP Support Portal interface. At the top, there's a navigation bar with the SAP logo, the slogan 'The Best-Run Businesses Run SAP', and links for 'Please Login or Register to get full access', '日本語', 'About', and 'Help'. A search bar is also present. Below this is a main navigation menu with categories like 'Knowledge Base & Incidents', 'Release, Upgrade & Maintenance Info', 'Software Downloads', 'Keys, Systems & Installations', 'Support Programs & Services', 'Remote Support', 'Users & Authorizations', 'Documentation', and 'SAP Solution Manager'. The current page is 'SAP Security Notes', which includes a sub-section 'SAP Notes on Security Issues' and a 'Start using the new Security Notes application within the SAP ONE Support Launchpad today!' button. A sidebar on the left contains a list of filters, with 'Important SAP Notes - Help' highlighted. A 'Related Topics' section on the right lists 'Secure Business with SAP' and 'SAP Security Optimization Service'. A 'Contact us' button is also visible.

New app showing

- A filtered list similar to the old app “My Security Notes”
- Navigation to “All SAP Security Notes”

Traditional support application

Search all SAP Security Notes

How to define the filter

- Search all SAP Security Notes in a particular time-frame specified by you.
- Display all SAP Security Notes according to your filter preferences.

Personalization

- Adding a new filter
- By system (recommended)
- By product
- Editing an existing system
- Deleting a filter
- Displaying important SAP Notes
- How to find archived SAP HotNews

Security Notes in the Launchpad

“General Search”
(not related to current app)

The screenshot shows the SAP Security Notes interface. At the top, there is a search bar with a dropdown menu and a search button. Below the search bar, there are three status icons: a blue diamond for 'To Be Reviewed', a green checkmark for 'Confirmed', and a red X for 'Not Relevant'. A table of security notes is displayed, with columns for SAP Component, Number, Version, Title, Category, Priority, and Released On. The table contains several rows of data, including notes about Cross-Site Scripting (XSS) vulnerabilities and Denial of Service (DOS) attacks. At the bottom right, there are buttons for 'Confirm' and 'NotRelevant'.

All SAP Security Notes

Views

Download list

Filter

You can confirm notes which you do not need anymore or mark them as 'not relevant'.

Feedback

<input type="checkbox"/>	SAP Component	Number	Version	Title	Category	Priority	Released On
<input type="checkbox"/>	EP-KM-TLS-PP	2254648	3	Cross-Site Scripting (XSS) vulnerability in KM People Finder	Program error	Correction with medium priority	14.06.2016
<input type="checkbox"/>	BI-RA-AD	2255588	2	Cross-Site Scripting (XSS) vulnerability in SAP BusinessObjects Design Studio	Program error	Correction with medium priority	14.06.2016
<input type="checkbox"/>	BC-TWB-TST-ECA	2256178	3	Cross-Site Scripting (XSS) vulnerability in ecattping	Program error	Correction with high priority	14.06.2016
<input type="checkbox"/>	BW-PLA-IP	2197262	5	Information Disclosure in BI Reporting and Planning			16
<input type="checkbox"/>	BC-JAS-SEC-LGN	2246608	11	Cross Site Scripting (XSS) vulnerability in the Logon Application			16
<input type="checkbox"/>	BC-SYB-SQA	2308778	7	Denial of service (DOS) in Sybase SQL Anywhere MobiLink Synchronization Server			16
<input type="checkbox"/>		2308217	6	Missing XML Validation vulnerability in Web-Survey	Program error	Correction with high priority	16

SAP HANA Security Maintenance Strategy, Revision Management and Patching

Holger Mack, SAP SE

June 2016

secure information access

secure system setup

secure software



HANA Patching – Customer Questions & Pain-Points

Could we have individual security patches?

How to find HANA security patches?

What is the HANA security patching approach?

It is difficult to assess impact of security issue?

Could you provide workarounds?

We struggle to apply patches due required downtime and mandated testing?

What is the HANA maintenance strategy?

What are the HANA maintenance timelines?

HANA SPS maintenance window is too short?

How can we patch without downtime!

How can we reduce efforts/risks or applying patches?

Maintain security of your SAP HANA systems and stay up-to-date

Prevent – Detect – React

- SAP secure software development lifecycle (secure SDL)
- Security patches and updates
- Security services by SAP



Security patches

Keep up to date by installing the latest security patches and monitoring SAP security notes

Security improvements/corrections ship with SAP HANA revisions

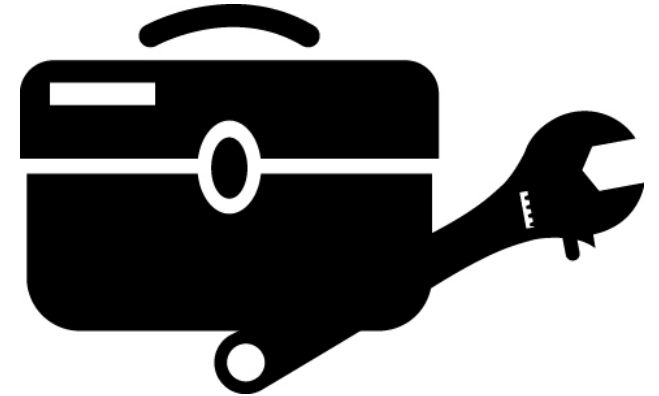
- Installed using SAP HANA's lifecycle management tools
- See also SAP Note [2021789](#) – SAP HANA revision und maintenance strategy

SAP security notes contain further information

- Affected SAP HANA application areas and specific measures that protect against the exploitation of potential weaknesses
- Released as part of the monthly **SAP Security Patch Day**
- See also <https://support.sap.com/securitynotes> and [SAP Security Notes – Frequently asked questions](#)

Operating system patches

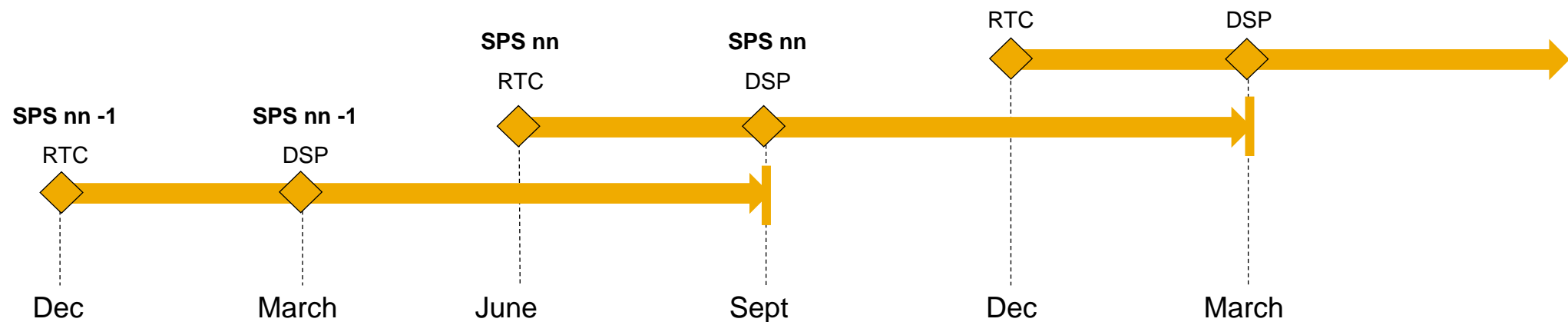
- Provided by the respective vendors SuSE/Redhat



SAP HANA Maintenance Strategy

Overview Timeline

- New capabilities are introduced twice a year, every time a new SAP HANA **Support Package Stack** (SPS) is released. This happens normally in December and June
- **Datacenter Service Point** is declared about 3 month after RTC, normally in March and September
- SAP is not providing maintenance revisions for previous SPS anymore once the DSP of the next SPS is declared
- Critical bug fixes and security patches are provided as SAP HANA revisions for all HANA SPS that are still in maintenance
- We recommend that maintenance timelines and project go live dates are adjusted to this release schedule



See SAP Note [2021789](#) for further details

SAP HANA Maintenance Strategy

Overview SAP Note 2021789

Support Package Stack	Start Revision	Revision as of Datacenter Service Point - DSP Revision (SAP production system verified SAP HANA Revision)	Last revision in SPS (before switch to Maintenance Revision)	Last Maintenance Revision in SPS
SAP HANA Platform SPS 06 Release Note 1848976	SAP HANA Revision 60	n.A.	SAP HANA Revision 69	SAP HANA Revision 69.07 (final)
SAP HANA Platform SPS 07 Release Note 1921675	SAP HANA Revision 70	SAP HANA Revision 73	SAP HANA Revision 74	SAP HANA Revision 74.04 (final)
SAP HANA Platform SPS 08 Release Note 2004651	SAP HANA Revision 80	SAP HANA Revision 82	SAP HANA Revision 85	SAP HANA Revision 85.05 (final)
SAP HANA Platform SPS 09 Release Note 2075266	SAP HANA Revision 90	SAP HANA Revision 96	SAP HANA Revision 97	SAP HANA Revision 97.03 (final)
SAP HANA Platform SPS 10 Release Note 2165826	SAP HANA Revision 100	SAP HANA Revision 102	SPS10 DSP Revision: SAP HANA Revision 102	SAP HANA Revision 102.06 (final)
SAP HANA Platform SPS 11 Release Note 2227464	SAP HANA Revision 110	SAP HANA Revision 112	SPS11 DSP Revision: SAP HANA Revision 112	SAP HANA SPS11 Database Maintenance Revision 112.03
SAP HANA Platform SPS 12 Release Note 2298750	SAP HANA Revision 120	n.A.	n.A.	n.A.

As part of its Going Live Service SAP offers continuous SAP HANA quality checks services for planned go lives and upgrades. Please refer to SAP Note [1892593](#) for more preparation details.

SAP further recommends to ensure that SAP EarlyWatch Alert (EWA) has been activated in your SAP HANA environment to ensure that you will get the latest up-to-date technical recommendation related to your SAP HANA landscape. For more information, please refer to SAP Note [1958910](#).

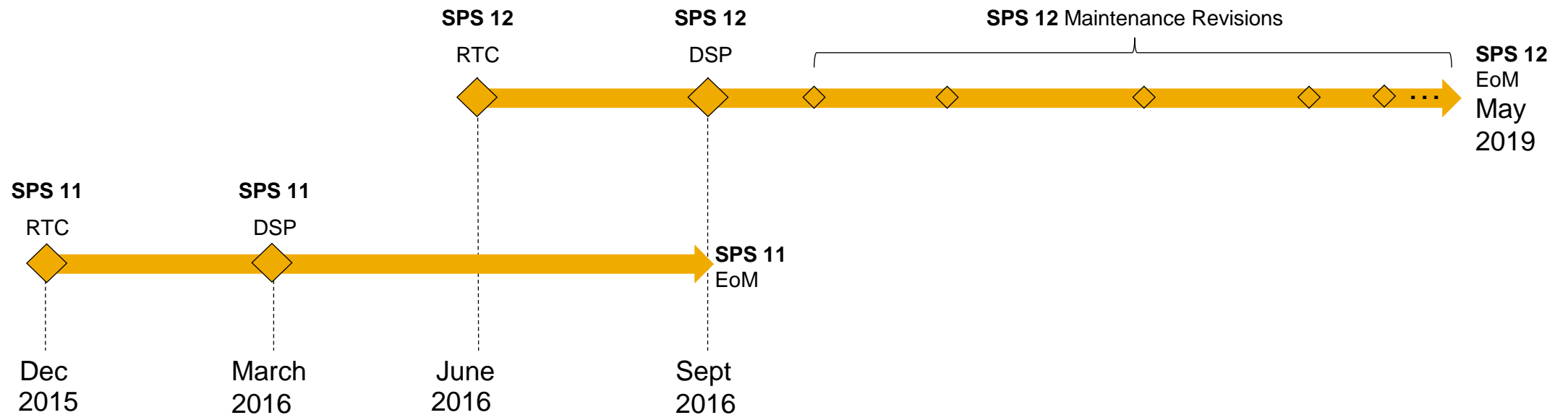
For any emergency corrections, please report the issue by sending the related incident ticket back to SAP. Any open issues and questions in regards to whether upgrading to a certain release or upgrading to a certain SAP HANA Maintenance Revision, please open a customer message under component XX-SER-RU-SHIP.

SAP HANA Maintenance Strategy

Revision Strategy for SPS12

Customers running mission critical systems demand a *longer provisioning of Maintenance Revisions*
For SAP HANA SPS12:

- SAP will provide Maintenance Revisions for a period of 3 years after SPS12 RTC
- There will be regular upgrade paths from SPS12 to any newer SPS



• See SAP Note [2021789](#) for further details

HANA Security Note Example (1/2)

SAP Security Note

Statistic | Printer-Friendly Version | PDF Version | Add to favorites | Subscribe | Quick link | Can't see edit button

Open Document

SAP 2165583 - SAP HANA secure configuration of internal communication

Version 7 | Validity: 16.11.2015 - active | Language: English (Master) | Show Change Log | Compare versions | Download | Hide Corr.Instr. | Close

Content: Summary | Header Data | Validity | References

Symptom

SAP HANA internal services could be accessed without authentication if the HANA system is insecurely configured and no other security measures are in place. This could endanger system availability, data confidentiality and integrity.

CVSS Information

CVSS Base Score: 6.6 / 10
CVSS Base Vector:

AV : Access Vector (Related exploit range)	Network (N)
AC : Access Complexity (Required attack complexity)	High (H)
Au : Authentication (Level of authentication needed to exploit)	None (N)
C : Impact to Confidentiality	Partial (P)
I : Impact to Integrity	Partial (P)
A : Impact to Availability	Complete (C)

SAP provides this CVSS base score as an estimate of the risk posed by the issue reported in this note. This estimate does not take into account your own system configuration or operational environment. It is not intended to replace any risk assessments you are

SAP Security Note

Statistic | Printer-Friendly Version | PDF Version | Add to favorites | Subscribe | Quick link | Can't see edit button

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SAP 2165583 - SAP HANA secure configuration of internal communication

Version 7 | Validity: 16.11.2015 - active | Language: English (Master) | Show Change Log | Compare versions | Download | Hide Corr.Instr. | Close

Content: Summary | Header Data | Validity | References

Other terms

HANA, encryption, network, hostname, listeninterface, TrexNet

Reason and Prerequisites

The internal SAP HANA services communication can be attacked,

- if the HANA system is not located behind a firewall that blocks the access to HANA internal communication channels,
- and if SSL/TLS with mutual host authentication is not enabled for distributed HANA systems or HANA system replication,
- and if the configuration of the internal HANA network is not correct.

Solution

Follow the recommendations to configure HANA internal service communication in

- HANA Master Guide: chapter "SAP HANA Architecture"
- SAP HANA Security Guide: chapter "SAP HANA Network and Communication Security"
- SAP HANA Security Guide: chapter "Security Configuration Checklist" -> "Network"

The referred documentation can be found under http://help.sap.com/hana_platform

Check the internal network configuration of SAP HANA and correct the settings if necessary. To check the configuration of your HANA system please follow the instructions in SAP Note 2183363.

HANA Security Note Example (2/2)

SAP Security Note

Statistic | Printer-Friendly Version | PDF Version | Add to favorites | Subscribe | Quick link | Can't see edit button? | Open Document

SAP 2241978 - Log injection and missing size restriction in SAP HANA Extended Application Services Classic (XS)

Version 2 | Validity: 08.01.2016 - active | Language: English (Master) | Show Change Log | Compare versions | Download | Hide Corr.Instr.

Content: [Summary](#) | [Header Data](#) | [Validity](#) | [Support Packages & Patches](#) | [References](#)

log injection, SAP HANA, trace, XS classic model

Reason and Prerequisites

An unauthenticated attacker might be able to create specially crafted HTTP requests to SAP HANA Extended Application Services Classic debug function.

This can lead to forged additional entries in the trace files of the XS process and consume disk space of the HANA system. The additional space consumption is limited due to the trace file rotation which is enabled by default in SAP HANA systems (see the SAP HANA Administration Guide for details).

In addition specially crafted HTTP requests can consume the available memory buffers and lead to a crash of the XS process. The XS process will be restarted automatically by the SAP HANA system.

Existing data cannot be changed or read by this vulnerability.

Solution

The debug function has been improved with SAP HANA revision 102.02 for SPS10 or later. Update to this or a later version. SPS 11 is not affected.

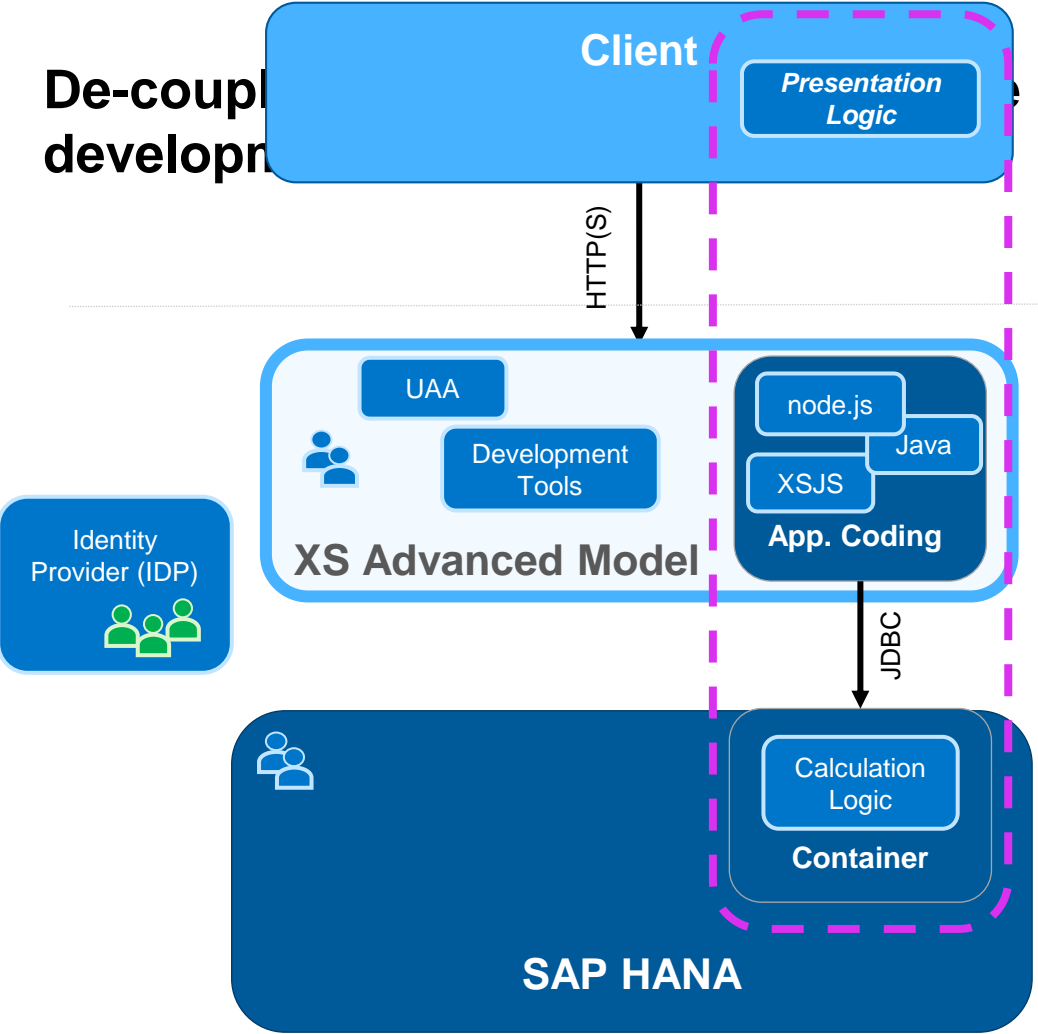
Workaround: The internal HANA Web Dispatcher can be used to block debugger requests. To achieve this, add the parameter `icm/HTTP/auth_1` with the content `PREFIX=/sap/hana/xs/debugger`, `PERMFILE=/dev/null` in the webdispatcher.ini configuration section [profile]. As an alternative, you can block access to the URLs `/sap/hana/xs/debugger/*` on network layer (e.g. with a firewall or reverse proxy).

Please be aware that with this workaround the debugging of SAP HANA Extended Application Services (XS) will not be available (including the XS debugging via SAP HANA Studio).

Applications built on SAP HANA XS advanced model (SPS11)

De-coupled development

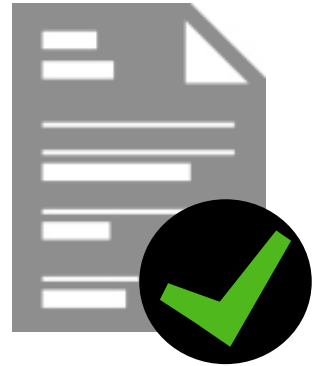
Decoupling of database, application server and



What is preventing you from upgrading your systems?

SAP HANA offers features that support you in making revision upgrades as painless as possible

Reduced testing effort



- **Capture and replay**

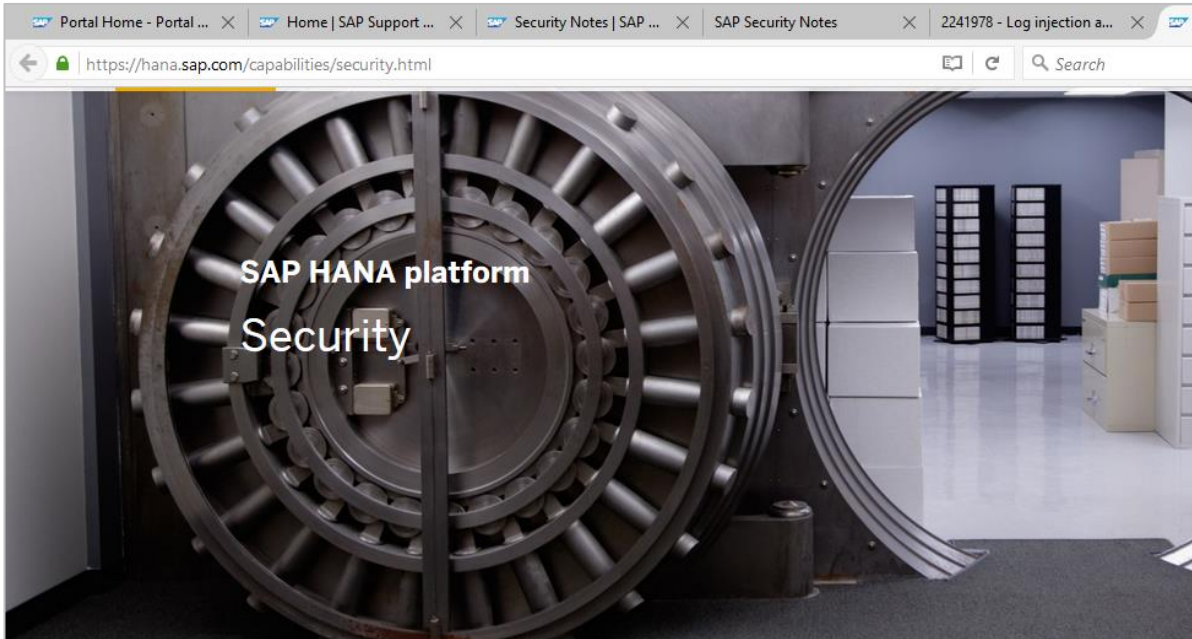
No/reduced downtime



- **SAP HANA zero downtime maintenance (based on system-replication)**
- **Upgrade by moving tenants (based on multi-tenant database container scenarios)**

Stay Informed!

<http://hana.sap.com/security>



Manage secure data access and keep your SAP HANA protected

Protecting corporate information is one of the most important topics for you as an SAP customer. You need to meet the ever increasing cyber-security challenges, keep your data secure and stay on top of the compliance and regulatory requirements of today's digital world.

SAP HANA allows you to securely run and operate SAP HANA in a variety of environments and to implement


Manage software security and patching

Prevent – Detect – React

Fundamentally, the security of your environment depends on two things: security in how the underlying products are developed, and all systems being kept up to date with the latest security patches and updates.

As the global leader in business software, SAP takes the security of its customer data seriously. At the core of our development processes is a comprehensive security strategy based on three pillars: Prevent – Detect – React.

SAP stands for secure and reliable software solutions.



► Security Patches & Updates

It is important that customers are always aware of the newest security fixes provided for SAP HANA!

Security fixes are delivered as SAP HANA revisions and can be applied using SAP HANA's lifecycle management tools. Security fixes are announced on the monthly SAP security patch day according to the general SAP security patch strategy in SAP security notes.

For more information visit:

- [SAP Product Security Response Team](#)
- [SAP Security Notes](#) (requires customer login)
- [SAP HANA Revision Strategy visit SAP Note](#) (requires customer login)

► Security Services by SAP

SAP offers a wide range of security tools and services to ensure the smooth operation of your SAP solution by taking action proactively, before security issues occur.

Learn more:

- [Visit: SAP Support Portal - EarlyWatch Alert](#)
- [Visit: SAP Security Optimization Services](#)

► Learn how SAP develops secure software

An important component of SAP's product security strategy is the secure software development lifecycle (secure SDL), which provides a comprehensive framework of processes, guidelines, tools and staff training, and ensures that security is an integral component of the architecture, design, and implementation of SAP solutions.

The secure SDL is a risk-based approach, which uses threat-modeling and security risk assessment methods to determine the security controls enforced during software provisioning and operations, including comprehensive security testing with automated and manual tests.

Learn more how SAP develops secure software:

- [SAP Security @ http://www.sap.com/security](http://www.sap.com/security)

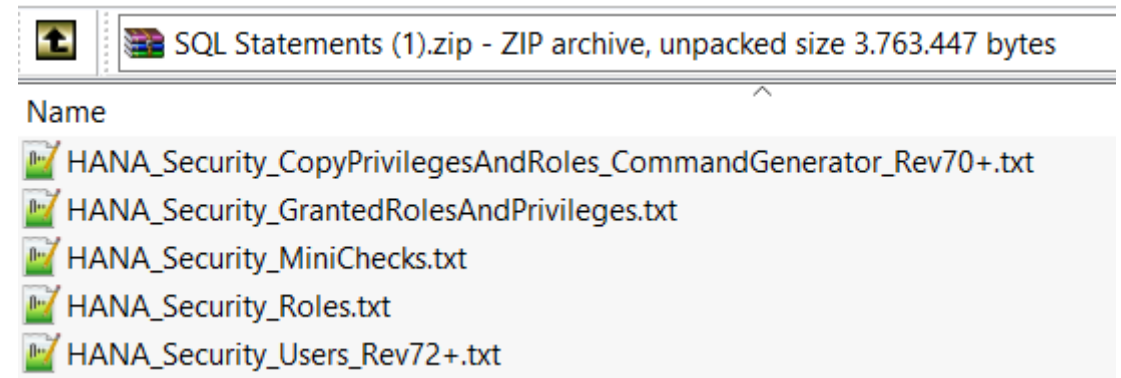
How to use SAP HANA Mini Check for Security Validation

SAP HANA Security Checklists and Recommendations For SAP HANA Database

http://help.sap.com/hana/SAP_HANA_Security_Checklists_and_Recommendations_en.pdf

Note 1969700 - SQL statement collection for SAP HANA

see files HANA_Security_*.txt



Note 1999993 - How-To: Interpreting SAP HANA Mini Check Results

see Area SECURITY

Note 2252312 - Insufficient logging of RFC in SAL

This note has several other notes as prerequisites ([2176138](#), [2128095](#), 2124538, [2025307](#), [1970644](#), 1968729, ...)

Most likely you will run into trouble if note [2025307](#) is required. This note is related to note [1970644](#) and vice versa and it's quite difficult to implement both together.

Recommendation: Get at least the Support Packages of note [2025307](#):

700	SAPKB70032
701	SAPKB70117
702	SAPKB70217
710	SAPKB71019
711	SAPKB71114
730	SAPKB73013
731	SAPKB73115
740	SAPKB74010

Note 2306709 - Code Injection vulnerability in Documentation and Translation Tools

Deactivation of critical but obsolete coding.

Logical filename `BC_T9N_EXT` is used in this report `TERM_TBX_IMPORT` which creates a log file.

Not relevant for Windows Servers:

Unix command `chmod 666` set file permission to „all users can read and write the file (but cannot execute it)”

Note 2160790 - Missing authorization check in FS-CML

Standard authorization checks for `S_TCODE` added in case of `CALL TRANSACTION`

→ ok, we do not expect that roles have to be changed. In case users need new authorizations they usually get a nice error message.

However, take care with this note as the correction is untypical: some calls do not show error messages in case of missing authorizations.

Note 2195409 - Potential modif./disclosure of persisted data in SAP CPQ Solution Configuration (SME)

Authorization check for S_TABU_NAM added (instead of calling function VIEW_AUTHORITY_CHECK which checks for S_TABU_DIS and S_TABU_NAM).

Manual activity to update specific roles – is it correct that the validity is restricted? Maybe...

Keep in mind that you have to deal with your roles in the customer name space as well.

Strange: one of the forms is called UPDATE_TABLE but the authorization check is for activity 03 = display.

Note 1882254 - Authorization check for logon data not based on passwords

Normal note – not a security note!

The note introduces a customizing switch `CHECK_NONPW_LGNDATA` in customizing table `USR_CUST` to separate authorization checks within `SU01 / SU10`:

Change of passwords	<code>S_USER_GRP</code> activity 05 = change password
New: Change of other authentication related data like SNC name or certificate mapping	<code>S_USER_GRP</code> activity 36 = extended maintenance
Change of other user account data	<code>S_USER_GRP</code> activity 02 = change

The customizing tables `PRGN_CUST`, `SSM_CUST`, and `USR_CUST` contain several security related customizing switches. Use table `SSM_CID` to show the complete value help for all customizing switches. Have a close look to switches which show a note number in the short text.

Note 1882254 - Authorization check for logon data not based on passwords

Samples for PRGN_CUST

ASSIGN_ROLE_AUTH	ASSIGN (Default), CHANGE: Checks When Assigning Users to Functions (Note 312682)
CHECK_S_USER_SAS	YES (Default), NO - Activation of Authorization Object S_USER_SAS (Note 536101)
GEN_PSW_MAX_DIGITS	Values between login/min_password_digits and 40 (default) - max. number of digits in generic password (Note 662466)
GEN_PSW_MAX_LENGTH	Values between login/min_password_lng - 40 (default)- max. password length of generated password (Note 915488)
GEN_PSW_MAX_LETTERS	Values between login/min_password_letters and 40 (default) - max. number of letters in generated password (Note 662466)
GEN_PSW_MAX_SPECIALS	Values between login/min_password_specials and 40 (default) - max.number of special characters in generated password (Note 662466)
REF_USER_CHECK	W (Default), E , S, I (Ignore) - Message Type When Assigning Reference Users with Other User Type (Note 513694)

Samples for USR_CUST

CHECK_NONPW_LGNDATA	<SPACE> (default), x - Check for activity 36 during change of non-password-based logon data (Note 1882254)
USER_GRP_REQUIRED	Default user group; due to this, the user group becomes a required entry field (Note 1663177)



May 2016

Topics May 2016



News about invoker servlet (TA16-132A)

Introduction to CVSS v3

Security Notes on the Support Portal and the Launchpad

Note [2264239](#) - Failed Trusted System logon is reported as successful logon in the audit log

How to analyze old Support Package Notes which become visible now

RFC Gateway Settings

Note [1444282](#) - gw/reg_no_conn_info settings

Note [1933375](#) - RU ERP for Banking. Missing authorization check. Potential modification of persisted data

Note [2051717](#) - [MUNICH] Review of Testcase 100 / Report RSORAVCR of component BC-CCM-MON-ORA

Note [2195409](#) - Potential modif./disclosure of persisted data in SAP CPQ Solution Configuration (SME)

News about invoker servlet Alert (TA16-132A)

Alert (TA16-132A)

Exploitation of SAP Business Applications

<https://www.us-cert.gov/ncas/alerts/TA16-132A>

Solution from 2010:

Note [1445998](#) - Disabling invoker servlet

Good news: The Invoker Servlet has been disabled by default as of release 7.20.

But: In case of older systems – including some double stack systems – you have to disable the vulnerable feature manually by changing the value of `EnableInvokerServletGlobally` property of `servlet_jsp` service on the global server node (and the instance server nodes) to `false`.

The screenshot shows the SAP System Management Configuration interface. The 'System Properties' section is expanded to show 'Global server configuration'. The 'Details' section is open to 'Services', showing a table of services. The 'servlet_jsp' service is highlighted, and its 'Extended Details' are shown below, where the 'EnableInvokerServletGlobally' property is set to 'false'.

Name	Startup Mode
security	core
servlet_jsp	always
shell	always

Name	Value
Invoker	
EnableInvokerServletGlobally	false

News about invoker servlet

Related notes

Old applications - either from SAP or created as a custom application - may rely on using the invoker servlet. The attachment of note [1445998](#) describes how to identify such use of the invoker servlet.

After disabling the invoker servlet you may get the following 403 response code:

Error: Servlet with class <class name> cannot be loaded.

SAP had updated several applications to use individual servlets instead and does not use it anymore for productive applications:

Note [1460635](#) - RWB link "Index Administration" shows error 403 - forbidden

Note [1463661](#) - Open SQL monitors: Servlets cannot be loaded

Note [1467771](#) - Disabling invoker servlet in the portal

Note [1488846](#) - CRM ECO. Security - Invoker Servlet

Note [1535301](#) - Invoker Servlet Fix for IS-M/AMC

Note [1537663](#) - Biller Direct, Security - Invoker Servlet

Note [1589525](#) - Verb Tampering issues in CTC

Note [1598246](#) - Servlet declaration missing for LWC SOAP Dispatcher servlet

Note [1802092](#) - PDF display error due to invoker servlet disabled in NW 7.3

Note [1900752](#) - VSCANTEST Application returns 403 response code

News about invoker servlet

Remote Java SOS

The parameter is checked by the Remote SOS Java (no Self-Service; not in EWA):

Invoker Servlet (JE165)

Procedure:

1. NWA: → Configuration → Infrastructure → Java System properties.
2. Select the "Services" tab.
3. Search for the Web Container (`servlet_jsp`).
4. Find the parameter `EnableInvokerServletGlobally`.

You may want to validate this file, too.

Evaluated Risk - High

Description: The invoker servlet is intended only to be used for rapid prototyping and allows HTTP clients to invoke servlets that have not been declared in the application's `/WEB-INF/web.xml` file.

A specially crafted URL using the invoker servlet feature can allow unauthenticated access to arbitrary servlets. In addition, there is no authentication needed in order to invoke these servlets.

Recommendation: The invoker servlet feature should be disabled to close the security gap described above.

News about invoker servlet SAP Solution Manager - Configuration Store

How to find elements in a Configuration Store:

- Transaction CCDB → Cross Selection
- Enter search term(s)
- Choose configuration store
- Show Store Details
- Search for element

Now, knowing the Configuration Store `servlet_jsp` we can construct a Target System for Item `EnableInvokerServletGlobally` in Configuration Validation

The screenshot displays the SAP Solution Manager Configuration Store interface. The top navigation bar includes 'Status', 'Exception', and 'Configuration'. The 'Configuration' section is active, with sub-tabs for 'General', 'Technical Systems', and 'Cross Selection'. The 'Cross Selection' tab is selected, showing a 'Filters' section with various input fields for filtering configuration stores. Below the filters is a 'ConfigStores' table with columns for Main state, Landscape, Group Source, Store Name, Group Name, Store Type, and Component Version. The table shows two entries for 'servlet_jsp' in the 'SERVICES' group, both with 'Property Store' type and 'SAP J2EE ENGINE 7.02' component version. Below the table, the 'Store Content' section is visible, showing a search for 'EnableInvokerServletGlo' and a table with columns for History, PARAMETER, and VALUE. The table shows one entry for 'EnableInvokerServletGlobally' with a value of 'true'.

Main state	Landscape	Group Source	Store Name	Group Name	Store Type	Component Version
Correct	Java Technical System (BQ7~JAVA)	CTC	servlet_jsp	SERVICES	Property Store	SAP J2EE ENGINE 7.02
Correct	Java Technical System (SQ7~JAVA)	CTC	servlet_jsp	SERVICES	Property Store	SAP J2EE ENGINE 7.02

History	PARAMETER	VALUE
	EnableInvokerServletGlobally	true

News about invoker servlet

SAP Solution Manager - Configuration Validation

Create Target System from selected store

Maintain Target System:

- Remove all other parameters
- Set target value

Sel.	Op...	Parameter	Opera...	Value Low
<input type="checkbox"/>	=	EnableInvokerServletGlobally	=	false

Reporting, e.g. using a 'dynamic comparison list' for systems having the store `servlet_jsp`

SAP System ID	ConfigStore Name	Config. Item	Config. Item Value	Value of Target System	Compliance	Compliant (1=Yes, -1=No, ''=Not valuated)
CCC	servlet_jsp	EnableInvokerServletGlobally	#	false	Item not found	-1
PJ2	servlet_jsp	EnableInvokerServletGlobally	false	false	Yes	1
SQ7	servlet_jsp	EnableInvokerServletGlobally	true	false	No	-1
U3Y	servlet_jsp	EnableInvokerServletGlobally	#	false	Item not found	-1
X3E	servlet_jsp	EnableInvokerServletGlobally	#	false	Item not found	-1

Introduction to CVSS v3

As of March 01, 2016, SAP Security Note prioritization is based on CVSS v3 Base score. The revised prioritization scheme is aligned with the industry's best practice, and to provide better transparency to our customers.

From March 2016 security patch day, all *patch day security notes* will carry CVSS v3 Base score and vector information to assist our customers in their risk assessment.

For further details, please refer to our [blog](#) on CVSS v3.

Security Note Priority	CVSS v3 Base score
Low	0.1 - 3.9
Medium	4.0 - 6.9
High	7.0 - 8.9
Hot News	9.0 - 10.0

Introduction to CVSS v3 & how it is used in SAP

Renchie Joan Abraham, SAP Product Security Response

Member of CVSS Special Interest Group

May 2016

All slides see on
other presentation

Base metric scoring changes in CVSS v3 (compared to CVSS v2)

CVSS v2 Base Scoring

Metric Group	Metric Values
Access Vector (AV):	Local, Adjacent Network, Network
Access Complexity (AC):	High, Medium, Low
Authentication (Au):	Multiple, Single, None
Confidentiality Impact (C):	None, Partial, Complete
Integrity Impact (I):	None, Partial, Complete
Availability Impact (A):	None, Partial, Complete



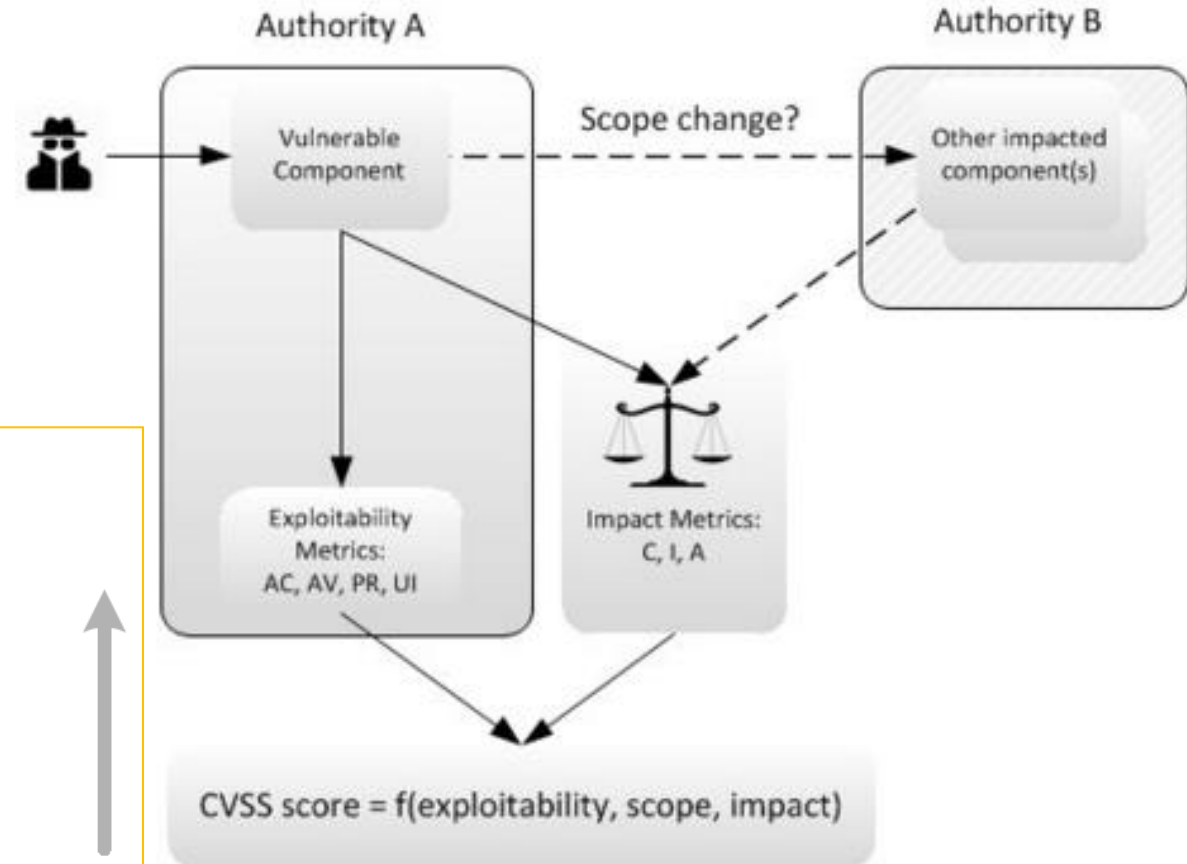
CVSS v3 Base Scoring

Metric Group	Metric Values
Attack Vector (AV): NEW	Physical, Local, Adjacent Network, Network
Attack Complexity (AC): NEW	High, Low
Privileges required (PR): NEW	High, Low, None
User Interaction (UI): NEW	None, Required
Scope (S): NEW	Unchanged, Changed
Confidentiality (C):	None, Low, High NEW
Integrity (I):	None, Low, High NEW
Availability (A):	None, Low, High NEW

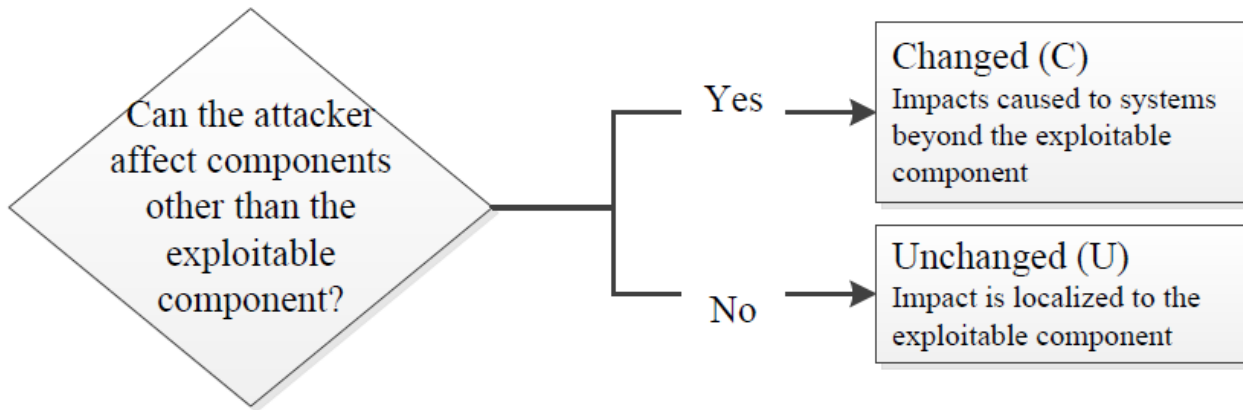
- Revision in base metric group
- Significant changes in the meaning of CIA impact metric vectors
 - CVSS v3 considers data privacy in impact calculation, which affects the resulting CVSS score (For example, Heartbleed)

Key conceptual changes in CVSS v3: Introduction of Scope metric

- Vulnerability scores are more specific now, not scored against the entire host OS
 - The score factors in, the impact on the component having the vulnerability & the impact on component(s) affected by the vulnerability.



Scope



How CVSS v3 is used in SAP ?

The security note priority is now calculated entirely based on CVSS v3 Base metric score.

Note Priority	CVSS v3 Base score
Low	0.1 - 3.9
Medium	4.0 - 6.9
High	7.0 - 8.9
Hot News	9.0 - 10.0

Simple and transparent prioritization scheme based on an open standard.

CVSS has 2 additional sets of metric groups, which can be derived by SAP customers using tools by FIRST or NVD:



Temporal: represents the characteristics of a vulnerability that change over time but not among user environments.

Environmental: represents the characteristics of a vulnerability that are relevant and unique to a particular user's environment.

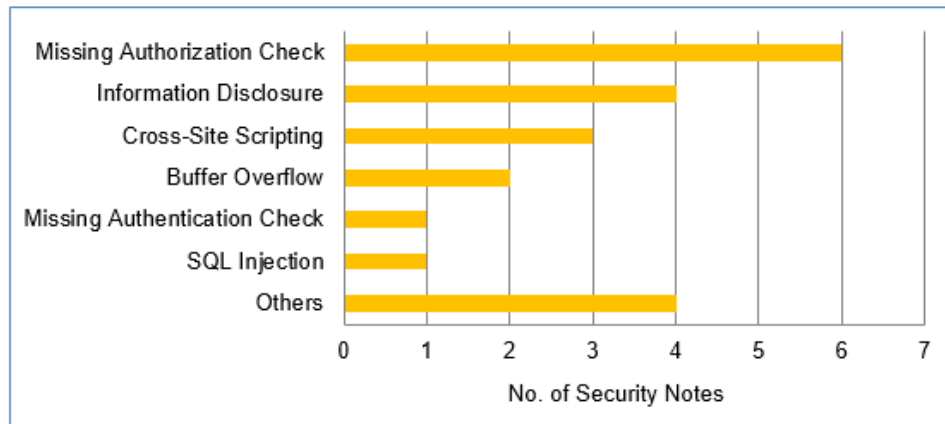
Publications by PSRT:

1. The Official SAP Product Security Response Space

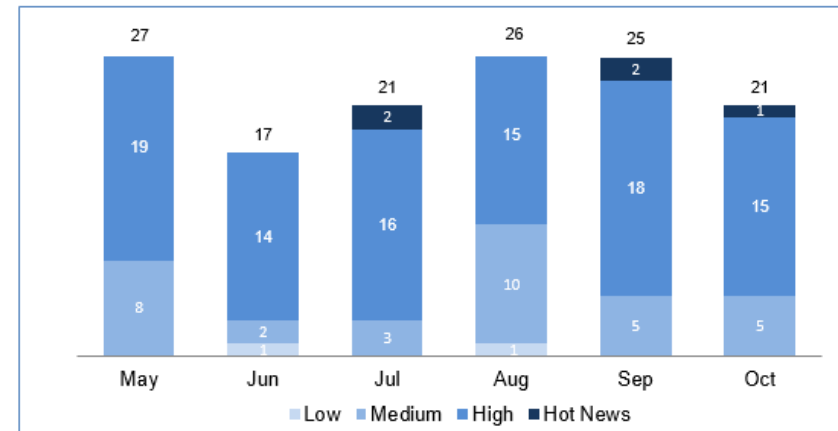
<https://scn.sap.com/docs/DOC-65837>

Example:

Security Notes vs Vulnerability Type - October 2015



Security Notes vs Priority Distribution (May - October 2015)**



2. CVSS blog posts

<https://scn.sap.com/community/security/blog/2016/04/12/introduction-to-cvss-how-sap-uses-it>

<https://scn.sap.com/community/security/blog/2016/04/15/changes-to-cvss-in-version-30>

<https://scn.sap.com/community/security/blog/2016/04/20/how-to-interpret-saps-cvss-score>

“General Search” on the Launchpad

“General Search”
(within text of notes)

The screenshot shows the SAP ONE Support Launchpad search interface. At the top, the breadcrumb navigation is 'Solutions' > 'Security', both highlighted with a red box. Below this is a navigation bar with icons for SAP Notes (8854), SCN Forums (38274), SCN Wiki (2391), Support Portal (1585), SF Community (1323), and Sybase Solved Cases (0). The main search area has filters for Component (All), Type (All), Priority (All), Category (All), and Release Date (Last 3 Years). A search dropdown menu is open, showing options: All, SAP Note (4626), SAP Knowledge Base Article (3341), SAP Security Note (796), and SAP Business One Notes (91). Another dropdown menu for Release Date is open, showing: Last 3 Months, Last 6 Months, Last Year, Last 3 Years, and All Dates. A language dropdown menu is open, showing: English (2268), Japanese (502), German (423), and Italian (1). The search results list includes entries like '20.08.2014 PP-SOP SAP Note' and '29.05.2013 XX-CSC-CN-EFI SAP Note'. At the bottom, there are buttons for 'Launch Notes Search' and 'Contact SAP Support', both highlighted with a red box. A 'Feedback' button is also visible in the bottom left corner.

Feedback

Choose the type

Choose the time

Choose the language

“Notes Search”

“Notes Search” in the Support Portal

<https://support.sap.com/notes>

Search options

Used Template: no template used

Language: German English Japanese

Search Term: FILE_VALIDATE_NAME FILE_GET_NAME 1497003

Search Method: At Least One Term (OR)

Search Range: All

Search behavior: All

Application Area: Only short text

Restrictions: Only SAP Objects
Coding (ABAP/4)

Additional Criteria: Default selection

Example to identify notes related to a Directory Traversal project by searching for:

```
FILE_VALIDATE_NAME FILE_GET_NAME 1497003
```

View	Sort	Download	
Language: English			
You search for: FILE_VALIDATE_NAME FILE_GET_NAME 1497003 , Search Method At Least One Term (OR) , Search criteria: no criteria			
1212 SAP Notes found			
		1 2 3 4 5 6 7 8 9 10 ... ▶	
Ranking	Application Area	Number	Short text
<input type="checkbox"/> 1. 0.430	FI-GL-GL-F1	1906110	RFIDHU DSP: Error in FILE_VALIDATE_NAME
<input type="checkbox"/> 2. 0.420	BC-CCM-FIL	1543851	Potential directory traversals in applications
<input type="checkbox"/> 3. 0.360	SV-SMG-ASU	2021095	ASU Toolbox - Function module "FILE_VALIDATE_NAME
<input type="checkbox"/> 4. 0.360	BC-CCM-FIL	2239115	FILE_VALIDATE_NAME dumps with CX_FS_PATHS_INCC

This traditional support app searches in ABAP correction instructions, too.

Note 2264239 - Failed Trusted System logon is reported as successful logon in the audit log

Issue: Last logon date (table `USR02` / report `RSUSR200`) is updated in case of an unsuccessful Trusted-RFC connection because of missing authorizations for `S_RFCACL`

The Kernel patch solves the issue

The ABAP corrections updates the Security Audit Log

Related note:

Note 320991 - Error codes during logon (list)

How to analyze old Support Package Notes which become visible now

Filter criteria

Released On

All Time

In the Last 30 Days

From To

Category

Patch Day Notes

Support Package Notes

Both Types

date with “Valid from” date

are visible now and are re-released

Released SAP Security Notes list based on the date range selected

10 SAP Security Note(s) found.

Number	Application Area	Short text	Priority	Released On
1444282	BC-CST-GW	gw/reg_no_conn_info settings	Correction with medium priority	29.04.2016
1850010	CRM-CM	Potential modif./disclosure of persisted data in CRM-CM	Correction with medium priority	27.04.2016
1933375	XX-CSC-RU-FI	RU ERP for Banking. Missing authorization check. Potential modification of persisted data	Correction with medium priority	25.04.2016
2043447	SV-SMG-TWB-BCA	Missing authorization check in SV-SMG-BPCA	Correction with medium priority	22.04.2016
2051717	BC-CCM-MON-ORA	[MUNICH] Review of Testcase 100	Correction with medium priority	21.04.2016
2195409	LO-SLC	Potential modif./disclosure of persisted data in SAP CPQ Solution Configuration (SME)	Correction with medium priority	06.05.2016
2201916	XX-CSC-IN-FI	Missing authorization check in XX-CSC-IN-FI	Correction with medium priority	21.04.2016

Translation is possibly not up-to-date

SAP Security Note

1444282 - gw/reg_no_co

Version 11

Validity: 29.04.2016 active

SAP Security Note

1850010 - Potential mod

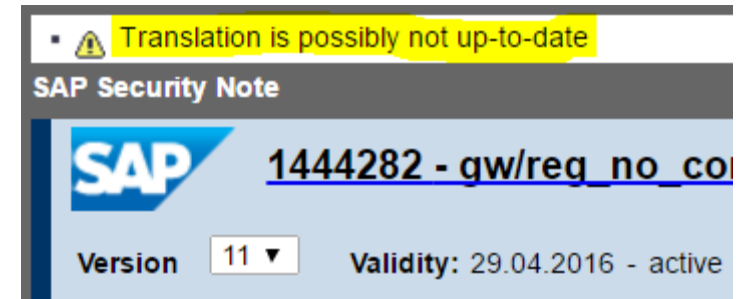
Version 2

Validity: 19.06.2013 active

RFC Gateway Settings

Note 1444282 - gw/reg_no_conn_info settings

Re-released note to describe new setting with value 128 according to note 1848930 - Strong gw/prxy_info check (June 2013)



- Maintain file `/usr/sap/<SID>/<instance>/data/prxyinfo` to use RFC Gateway proxy rules (respective the file defined by `gw/proxy_info`)
- Set `gw/reg_no_conn_info settings = 255` to activate all RFC Gateway security settings

Configuration Parameters (incl. `gw/proxy_info`)

https://help.sap.com/saphelp_nw70ehp2/helpdata/en/48/b0e64ba49c2883e10000000a42189c/content.htm

Note 1933375 - RU ERP for Banking. Missing authorization check. Potential modification of persisted data

This is an old note which is completely part of a Support Package.

The note solves a vulnerability issue about CALL TRANSACTION (plus some more) but introduces a new error which was solved with normal note 1946751. Do not forget to to implement this 2nd note if you apply the 1st note.

Later we see normal note 2033155 changing the correction.

All theses notes are old notes, which are completely part of a Support Package.

→ not important anymore

Note 2201916 - Missing authorization check in XX-CSC-IN-FI

The note solves a vulnerability issue about CALL TRANSACTION but introduces a new error which was solved now with normal note 2304353. Do not forget to to implement this 2nd note if you apply the 1st note.

Note 2051717 - [MUNICH] Review of Testcase 100 / Report RSORAVCR of component BC-CCM-MON-ORA

This seems to be an Oracle specific note. Do you need it if you use another database?

Using this report you execute following fixed database statements for the local or a remote database via ADBC calls:

```
analyze index <owner>."<segname>" validate structure
```

```
alter index <owner>."<segname>" coalesce
```

```
alter index <owner>."<segname>" rebuild online
```

The security vulnerability allows to modify these statements. Can you prove that your other database is not affected if such statements are executed?

→ Implement the note independently from your database

Tipp: Secure SA38, SE38 etc. as this report does not contain any authorization check.

Note 2195409 - Potential modif./disclosure of persisted data in SAP CPQ Solution Configuration (SME)

Strange correction:

- **Authorization check for a generic authorization object instead of an application specific authorization object**
 - **Authorization check for S_TABU_NAM instead of calling function VIEW_AUTHORITY_CHECK**
 - **Forms are called UPDATE_TABLE and similar but the authorization check is about activity 03=display**
- **If you implement this note then adjust roles for modelers that export configuration knowledge bases from the solution modeling environment into ECC**
Or wait – maybe there will be an update ... or create a ticket to ask for advice



April 2016

Topics April 2016



Note [2293011](#) - Upgrade Information: Default Users within SAP Solution Manager

Note [2285879](#) - SAL | Filter selection by user group as of NetWeaver 7.40

Note [2090487](#) - SAL | Enable recording of user groups (kernel part)

Note [2191612](#) - FAQ | Use of Security Audit Log as of NetWeaver 7.50

Note [2201295](#) - Unauthorized modification of displayed content in UR Control

Note [2284952](#) - Update 2 to Security Note 1971238

Note [2221657](#) - Code injection vulnerability in SAP Internet Communication Manager

How to identify HANA Security Notes

Note [2277492](#) - Configuration Validation: How-to transport Target Systems

Note [2177996](#) - Transaction PFCGMASVAL Mass maintenance of authorization values in roles

Release 7.31 & 7.40: Improvement for ABAP Role Management

Note 2293011 - Upgrade Information: Default Users within SAP Solution Manager



About SAP Solution Manager 7.1 and 7.2 (if system was upgraded from older release)

The default passwords of the users being created by the former *Diagnostics Configuration* wizard (7.0) or transaction `SOLMAN_SETUP` (with 7.0 EHP1) are commonly known and might not have been changed in your system.

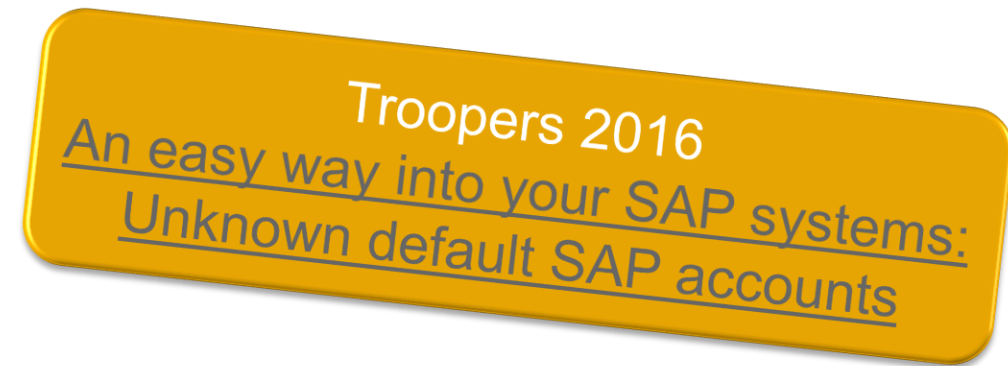
On the Solution Manager system

- `SOLMAN_BTC` (type system user)
- `CONTENTSERV` (type system user)
- `SMD_RFC` (type system user)
- `SMD_ADMIN` (type system user)

Delete this user if you run SolMan 7.1 SP10 or higher. For lower version see note 2119627.

On the Managed systems (including the Solution Manager system itself)

- `SMDAGENT_<SAPSolutionManagerSID>` (type system user)
- `SAPSUPPORT` (type dialog)

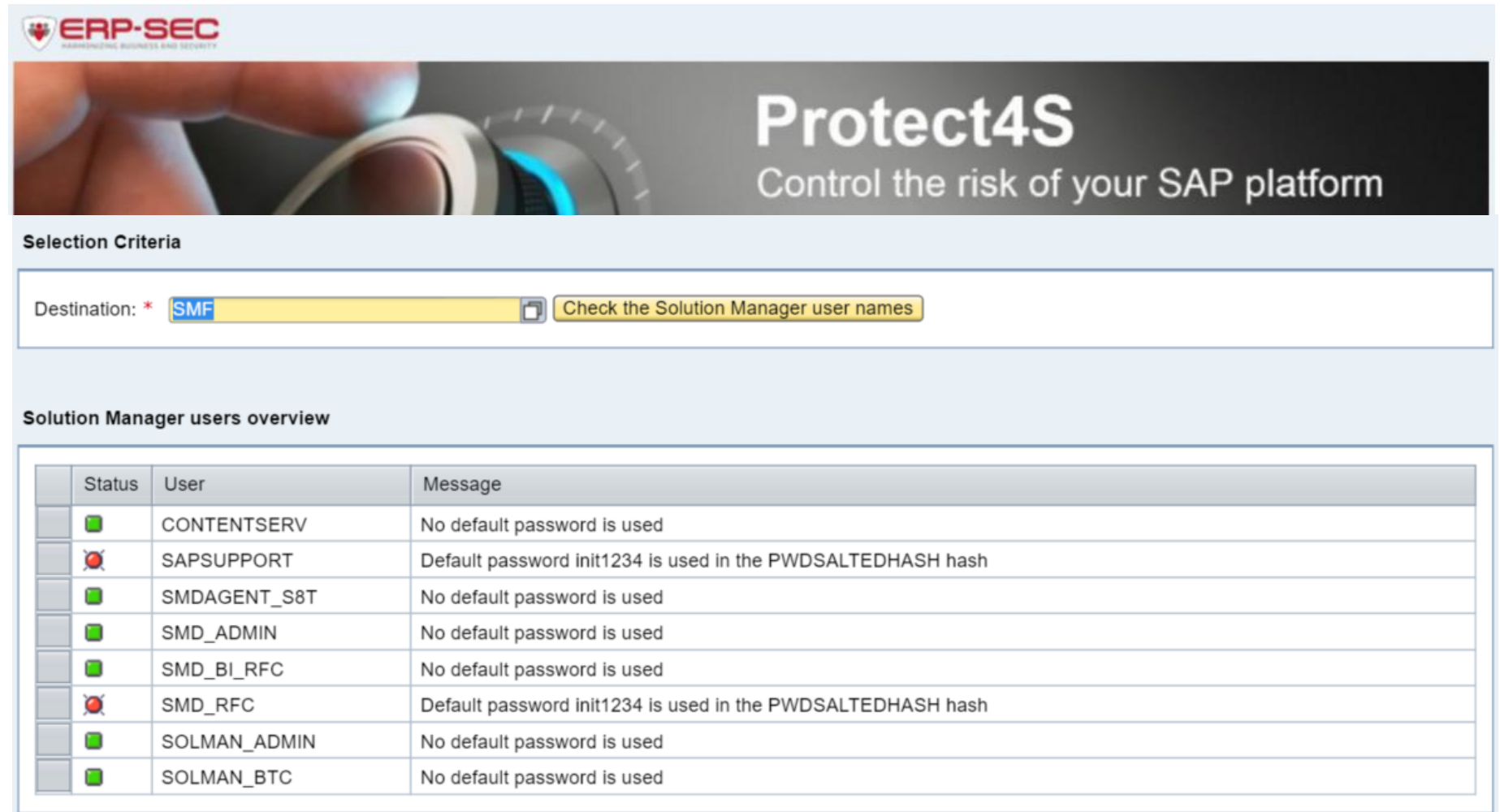


Note 2293011 - Upgrade Information: Default Users within SAP Solution Manager

ERP-SEC released a free tooling to check your SAP platform for default Solution Manager user passwords

March 9, 2016

<https://protect4s.com/erp-sec-releases-free-tooling-check-sap-platform-default-solution-manager-users/>



The screenshot displays the Protect4S tool interface. At the top left is the ERP-SEC logo. The main header reads "Protect4S Control the risk of your SAP platform". Below this is a "Selection Criteria" section with a dropdown menu set to "SMF" and a button labeled "Check the Solution Manager user names". The "Solution Manager users overview" section contains a table with the following data:

	Status	User	Message
<input type="checkbox"/>	🟢	CONTENTSERV	No default password is used
<input type="checkbox"/>	🔴	SAPSUPPORT	Default password init1234 is used in the PWDSALTEDHASH hash
<input type="checkbox"/>	🟢	SMDAGENT_S8T	No default password is used
<input type="checkbox"/>	🟢	SMD_ADMIN	No default password is used
<input type="checkbox"/>	🟢	SMD_BI_RFC	No default password is used
<input type="checkbox"/>	🔴	SMD_RFC	Default password init1234 is used in the PWDSALTEDHASH hash
<input type="checkbox"/>	🟢	SOLMAN_ADMIN	No default password is used
<input type="checkbox"/>	🟢	SOLMAN_BTC	No default password is used

(The program works only if default of profile parameter `login/password_hash_algorithm` was used while creating the users.)

Note 2285879 - SAL | Filter selection by user group, NetWeaver 7.40

Note 2090487 - SAL | Enable recording of usergroups (kernel part)



Prerequisites:

- Note 2285879 - SAL | Filter selection by user group
SAP_BASIS 7.40 SP 15 (no implementation via SNOTE)
SAP_BASIS 7.50 SP 04
- Note 2090487 - SAL | Enable recording of user groups (kernel)
Kernel 7.41 patch 210
Kernel 7.42 patch 29
Kernel 7.43 patch 4

Comments:

- Patterns for users are possible (`FF*` , `SAP#*`)
- Patterns for user groups are not possible
- You can include or exclude a user group
- You can define up to 15 filters
- Kernel parameters replace the profile parameters

The screenshot shows the SAP filter configuration interface. At the top, there are tabs for 'Filter 2', 'Filter 3', 'Filter 4', and 'Filter 5'. The 'Filter active' checkbox is checked. The 'Selection criteria' section includes a 'Client' field with an asterisk, and radio buttons for 'User Name', 'User Group (Incl.)', and 'User Group (Excl.)'. The 'Usergroup' field is set to 'SUPER'. The 'Audit classes' section has several checked options: 'Dialog logon', 'RFC/CPIC logon', 'RFC call', 'Transaction start', 'Report start', 'User Master Record', 'System', and 'Other events'.

Note 2191612 - FAQ | Use of Security Audit Log as of NetWeaver 7.50



Configuration (Transaction RSAU_CONFIG)

The configuration of the Security Audit Log (SAL) takes place via the maintenance of general parameters and the maintenance of the events to be logged in profiles.

Administration of log data (Transaction RSAU_ADMIN)

Use this transaction to configure integrity protection for file-based log data and to reorganize obsolete files. In accordance with the parameterization of the recording type in the database, you can use this tool to reorganize the table `RSAU_BUF_DATA` by means of deletion or archiving.

Evaluation of log data (Transaction RSAU_READ_LOG)

Use this application to evaluate the logs both online and in the background.

Archived log data is read with transaction `RSAU_READ_ARC`.

SAL: Configuration (Transaction RSAU_CONFIG)

Security Audit Log - Display of Current Configuration

Configuration

- Security Audit Log Configuration
 - Parameter
 - Dynamic Configuration
 - Filter 01
 - Filter 02
 - Filter 03
 - Filter 04
 - Filter 05
 - Static Configuration
 - Current Profile TESTUB
 - Profile DGTEST_Y
 - Profile MEIER

General Parameters

- Static security audit active
- Recording Target: Record in Database and File System
- Number of Filters per Profile: 20
- Generic user selection
- Log peer address not terminal ID

Configuration for File System

- Protection format active
- One audit file per day
- Maximum Size of Audit File: 0 MB
- Multiple audit files per day
- Maximum Size of One Audit File: 100 MB
- Maximum Size of All Audit Files: 4.000 MB per Day
- Local Profile Parameter DIR AUDIT: /usr/sap/Y5H/D20/log
- Local Profile Parameter FN AUDIT: audit_+++++++

Configuration for Database

- Recording Type: Audit Log with Archive Interface

Note 2201295 - Unauthorized modification of displayed content in UR Control

This corrections contain parts for Web Dynpro ABAP, Web Dynpro JAVA and the Kernel and settings.

a) Web Dynpro ABAP

7.50: note 2207387, 7.40: note 2154957, 7.31: note 2156710, 7.30: note 2454726

7.11: note 2159126, 7.02: note 2097342, 7.01: note 2154821,

Each note points to several other notes containing ABAP parts and recommends a manual task.

b) Web Dynpro JAVA

This note 2201295 shows required Java patches

c) SAP GUI for HTML / Kernel

SAP kernel 745/742/722: note 2203088

SAP kernel 721: note 2214695

Conclusion:

- get latest ABAP SP of SAP_UI, Java patches, and Kernel and consider to adjust memory settings as described by note 2180736.

Note 2284952 - Update 2 to Security Note 1971238

It's a side-effect note: This note does not solve an additional security vulnerability but corrects an error introduced with previous note.

Note 1971238 March 2014 → Note 2017050 March 2016 → Note 2284952 April 2016

Note [2221657](#) - Code injection vulnerability in SAP Internet Communication Manager (and WebDispatcher)

ICM of the Kernel and Webdispatcher are very similar

Set profile parameter `icm/HTTP/allow_invalid_host_header` to activate the settings

Combining both notes [2221657](#) and [2256185](#) you get following required patch level for disp+work respective the WebDispatcher:

SAP KERNEL 7.21 patch 623

SAP KERNEL 7.22 patch 110

SAP KERNEL 7.42 patch 325

SAP KERNEL 7.44 patch 39

SAP KERNEL 7.45 patch 100

SAP KERNEL 7.46 patch 25

SAP KERNEL 7.47 patch 12

SAP KERNEL 8.04 patch 110

see also Note [2292019](#) - SAP Support Package Stack Kernel 7.22 (EXT) Patch Level 101

see also Note [276394](#) - SAP Support Package Stack Kernel 7.45 Patch Level 100

respective

SAP WEB DISPATCHER 7.42 patch 319




SAP WEB DISPATCHER 7.45 patch 31

Note 2221657 - Code injection vulnerability in SAP Internet Communication Manager (and WebDispatcher)

Now let's check another release of the WebDispatcher:

<https://support.sap.com/patches> → Search for Software → SAP WEB DISPATCHER
→ e.g. SAP WEB DISPATCHER 7.21 → choose any OS → show Info file

The following objects are available for download:

File Type	Download Object	Title	Patch Level	Info File	File Size [kb]	Last Changed
<input type="checkbox"/>  SAR	SAPWEBDISP_SP_623-20009446.SAR	SAP WEB DISPATCHER 7.21	623	Info	49183	04.03.2016
<input type="checkbox"/>  SAR	SAPWEBDISP_SP_624-20009446.SAR	SAP WEB DISPATCHER 7.21	624	Info	49333	20.03.2016
<input type="checkbox"/>  sar	sapwebdisp_624-20009446.sar	sapwebdisp	624	Info	49333	20.03.2016

Result:

both notes 2221657 and 2256185 are part of the patch for 7.21, too

<input type="checkbox"/>	(104)	(0.620)	Loss of icm/server_port_XX specific CIPHERS settings on SS (note 2259889)
<input type="checkbox"/>	(105)	(0.621)	Potential denial of service in SAP Internet Communication (note 2256185)
<input type="checkbox"/>	(106)	(0.621)	Dispatcher and ICM get blocked (note 2267327)
<input type="checkbox"/>	(107)	(0.622)	Content Filter match traced wrong data (note 2271975)
<input type="checkbox"/>	(108)	(0.623)	Code injection vulnerability in SAP Internet Communication (note 2221657)
<input type="checkbox"/>	(109)	(0.624)	Request (type DIA) cannot be processed due to mode 0 in st (note 2240265)

How to identify HANA Security Notes

Number	Application Area	Short text	Priority	Released On
	?		*	*
2262742	HAN-DP-SDI	Missing Authentication check in HANA DP Agent	Correction with high priority	12.04.2016
2262710	HAN-DP-SDI	Denial of service (DOS) vulnerability in HANA DP Agent	Correction with high priority	12.04.2016
2258784	BC-CST-EQ	Denial of service (DOS) vulnerability in Enqueue Server	Correction with high priority	12.04.2016
2254389	BC-ESI-UDDI	XXE vulnerability in SAP UDDI	Correction with high priority	12.04.2016
2252191	BC-XS-JAS	Deserialization of untrusted data in SAP HANA XS Advanced Java Runtime	Correction with high priority	12.04.2016
2201295	BC-WD-UR	Cross-Site Scripting (XSS) vulnerability in UR Control	Correction with medium priority	12.04.2016
2280054	HAN-DP-SDI	Information Disclosure in Data Provisioning Agent	Correction with medium priority	12.04.2016
2274560	BC-CST-GW	Arbitrary Log File Injection vulnerability in SAP Gateway	Correction with medium priority	12.04.2016

Which of these notes are relevant for the HANA database installation?

BC-XS is in, HAN-DP is out.

Security Notes per Application Component:

BC-XS 1
 HAN-AS 15
 HAN-DB 18
 HAN-LM 1
 HAN-WDE 6
 (HAN-DP 3)

Note 2277492 - Configuration Validation: How-to transport Target Systems

You want to transport custom defined Target Systems of the application Configuration Validation in the SAP Solution Manager.

The required transport keys are described in the wiki: [ConfigVal: Transport Target Systems](#)

Use this new report `DIAGCV_TRANSPORT_TARGET_SYSTEM` to add custom defined Target Systems to a transport order.

Do you know the [Security Baseline Template Version 1.8](#) at the media library of <https://support.sap.com/sos> ?

The new version 2 of the corresponding ConfigVal Package offers transport files to import the template target systems easily.

Note 2177996 – Transaction PFCGMASVAL

Mass maintenance of authorization values in roles



Mass maintenance of authorization values

Standard Selection

Role to

Simulation
 Execution with preceding simulation
 Direct Execution

Kind of field change

Change organizational level
 Change field values of authorizations for one object
 Change field values of authorizations for one field

Change field values of authorizations for one field

Change

Object for value help

Fieldname

Example:

Let's ensure, that display-roles have display-activities (ACTVT = 03) only.

Note 2177996 – Transaction PFCGMASVAL

Mass maintenance of authorization values in roles

Simulation: Mass maintenance of authorization values

Role	Object	Activ/Inact	Old maintenance st.	Authorization comparison	Value comparison	Field Name	'From'
ZSAP_SM_BP_DISPLAY	B_USERSTAT	◇	Standard	Changed authorization		ACTVT	01
		◇	Standard	Changed authorization			06
		◇	Standard	Changed authorization	=	BERSL	
		◇	Standard	Changed authorization	=	OBTYP	BUS
		◇	Standard	Changed authorization	=	STSMA	
	COM_ASET		Manually		=	ACTVT	03
	COM_IL		Manually		=		03
			Manually		=	RELTYPE	IOBWTI
			Manually		=		IOBWTY
			Manually		=		PRDBP
COM_PRD		Manually		=	ACTVT	03	
ZSD_SAP_SM_BP_DISPLAY	B_BUPA_ATT		Changed		=		03
			Changed		=	AUTHTYP	*
			Changed		=	AUVAL1	*
			Changed		=	AUVAL2	*
	◇	Standard	Changed authorization			ACTVT	01
	◇	Standard	Changed authorization				02
	◇	Standard	Changed authorization	=			03

Note 2177996 – Transaction PFCGMASVAL

Mass maintenance of authorization values in roles



Caution:

- **Run Simulation first always**
- **Use the selection options carefully – most likely you do not want to turn status ,Standard‘ and ,Maintained‘ into ,Changed‘.**
- **You can adjust derived roles using PFCG → Authorizations → Adjust derived roles**

Old Authorization Status (Irrelevant for Organizational Levels)
<input checked="" type="checkbox"/> Standard
<input checked="" type="checkbox"/> Maintained
<input checked="" type="checkbox"/> Changed
<input checked="" type="checkbox"/> Manual
Options
<input checked="" type="checkbox"/> No Switch to Status 'Changed' (Irrelevant for Organizational Levels)
<input type="checkbox"/> Exclude Derived Roles

Available with Support Packages for SAP_BASIS:

- 7.02 SP 18
- 7.31 SP 18
- 7.40 SP 14
- 7.50 SP 02
- Implement note 2263899, too.

Or use SNOTE plus manual modifications as of:

- 7.02 SP 14
- 7.31 SP 09
- 7.40 SP 04
- 7.50 SP –
- see note 1842231

Release 7.31 & 7.40: Improvement for ABAP Role Management

New ALV Tree User Interface in transaction PFCG

→ Utilities → Settings

→ Set the option to use ALV Tree

FBT(2)/200 Define Settings for User

Icons in tree structure

- For Overview of Authorization Object Use
- For Merging Several Authorizations
- For Copying Authorizations
- For Deleting Field Contents

Display

- Use ALV Tree (Call Authorization Maintenance Again)

Other settings

- Show Technical Names
- Activate Confirmation Prompts

Change Role: Authorizations

Selection criteria Manually Organizational levels... Trace Information

Role: SAP_SYSREC_ALL
Maint.: 0 Unmaint. org. levels 3 open fields
Status: Unchanged

Status Edit Search Values

Group/Object/Authorization/Field	Maintenanc...	A...	Value
Object class AAAB	Manually		
Authorization Object CA_POWL	Manually		
Authorization. T_S790192300	Manually		
POWL_APPID	Manually		AGS_SD_SOLUTION, AGS_WORKC...
POWL_QUERY	Manually		01, 02, 03, 04, 05, 06, 07, 08, 09, 1...
POWL_CAT	Manually		01, 02, 03, 04, 05, 06, 07, 08, 09, 1...
POWL_LSEL	Manually		Allowed
POWL_TABLE	Manually		Allowed
POWL_RA_AL	Manually		Allowed
Authorization Object S_SERVICE	Standard		
Authorization. T_S790192300	Standard		
SRV_NAME	Standard		8A5C52B04A84DA4823FE1CC75AF...
SRV_TYPE	Standard		Hash Value for TADIR Object
Authorization Object S_TCODE	Standard		
Object class BC_A	Standard		
Object class SM	Manually		

Release 7.31 & 7.40: Improvement for ABAP Role Management

Note [2086293](#) - PFCG: Display of deleted authorizations and values for merging of authorizations

Change Role: Authorizations

Selection criteria | Manually | Organizational levels... | Trace | Information

Role: SAP_SYSREC_ALL
Maint.: 0 Unmaint. org. levels 3 open fields

Status | Edit | Search | Values

Group/Object/Authorization/Field	Maintenanc...	Update...	A...	Value
Object class AAAB	Manually	Old		
Authorization Object CA_POWL	Manually	Old		
Authorizat. T_S790192300	Manually	Old		
POWL_APPID	Manually			AGS_SD_SOLUTION, A
POWL_QUERY	Manually			01, 02, 03, 04, 05, 06,
POWL_CAT	Manually			01, 02, 03, 04, 05, 06,
POWL_LSEL	Manually			X
POWL_TABLE	Manually			X
POWL_RA_AL	Manually			X
Authorization Object S_SERVICE	Standard	Old		
Authorization Object S_TCODE	Standard	Old		
Object class BC_A	Standard	Old		
Object class SM	Manually	Old		

Deleted Authorizations and Values (Merge)

Search

Group/Object/Authorization/Field	Maintenanc...

Display deleted authorizations and values for merging of authorizations

- Authorization maintenance indicates if a value range has been added or changed at field level
- Second window at the right shows deleted authorizations

Release 7.31 & 7.40: Improvement for ABAP Role Management

In addition to the standard subtree options Collapse/Expand, Print, and Layout, the toolbar of the ALV tree contains the following pushbuttons:

- **Edit:** A submenu with various functions appears, depending on the selected row. The most significant of these are:
- **Mass Changes for Authorizations:** You can use mass maintenance to change the field values of multiple authorizations for an authorization field, with the exception of authorization objects and authorization fields whose authorizations can only be maintained using special dialogs.
- **Search & Expand:** You use this function to search for authorization objects or fields. The authorizations that are found are automatically expanded. You also have the option of expanding all 'Open', 'New', 'Changed', or 'Maintained' authorizations.
- **Table View of Authorization Values:** All authorization values of a field are displayed in a row. However, each from-to value is displayed in its own row in the table view.
- **Full Screen On/Off:** When authorization data is merged, an additional window is displayed with deleted authorizations and values. You can hide or show the window and define whether to arrange it vertically or horizontally.

Release 7.31 & 7.40: Improvement for ABAP Role Management

Drag and Drop

In change mode it is possible to copy field values of an authorization to another authorization using drag and drop. For example, you can copy values that were deleted by the merge into an existing authorization. However, copying the data in this way is only possible under the following conditions:

- **The authorization field of the data source is identical to the target.**
- **The 'Activity' field of the object must also be identical.**
- **The authorization field must be able to be changed using a standard dialog.**



March 2016

Topics March 2016



Switchable Whitelists (SLDW)

Note [1973081](#) - XSRF vulnerability: External start of transactions with OKCode

Note [870127](#) - Security note for SAP Web Dispatcher

Note [2260323](#) - Internet Communication Manager (ICM) 7.20 security settings

Note [2258786](#) - Potential information disclosure relating to SAP Web Administration Interface

Note [2260344](#) - Code injection vulnerability in SCTC_* Function modules

Note [2251231](#) - File validation enforcement switch for empty physical path

Note [2282338](#) = [2235412](#) = [2074276](#) - SAP Download Manager Password Weak Encryption

Note [1553180](#) - Missing authorization check in TH_POPUP

Note [1488609](#) - Missing Authorization Check in remote ABAP Config Access

Optimizing SACF

Switchable Whitelists (SLDW)

Note 1973081 - XSRF vulnerability: External start of transactions with OKCode



Whitelist BC_CHECK_EXT_SKIP_FIRST_SCREEN

Purpose: Disable start of transactions with OKCode skipping the first screen.

All GUI variants are affected: SAPGUI for Windows (SAP Shortcuts), SAPGUI for Java, HTML-GUI

White listing is available in NetWeaver 740 SP08 and for releases 700 to 731 by

Note 2055468 - XSRF protection downport (SAP_BASIS Support Package + Kernel as of 7.21)

For documentation refer to

Note 1956086 - Profile parameter for XSRF protection (`dynp/confirmskip1screen = ALL`)

Recommendation: Activate empty whitelist with status D (All transactions and function codes that are executed using shortcuts, start transactions, and URLs in the system are logged. New entries are flagged as not permitted.)

Whitelist Header Data	
Name	BC_CHECK_EXT_SKIP_FIRST_SCREEN
Short Descript.	Whitelist for XSRF Protection
Chck Stat.	D Recording mode(new elements assigned the status not allowed)
SAL Mode	A Record all checks in the Security Audit Log

Spotlight News

Important security fixes for Startup Service, Startup Framework and Internet Communication Manager (March 2016)

In an upcoming IT- Security Conference this week (Troopers, 14th – 18th March 2016), there is a presentation planned on vulnerabilities affecting SAP NetWeaver.

SAP Security Note 2259547 – Potential Denial of Service in jstart

An attacker can remotely exploit jstart, rendering it, and potentially the resources that are used to serve jstart, unavailable.

SAP Security Note 2256185 – Potential Denial of Service in SAP Internet Communication Manager

An attacker can remotely exploit SAP Internet Communication Manager, rendering it, and potentially the resources that are used to serve SAP Internet Communication Manager, unavailable.

Important security fix for SAP Visual Enterprise Author, Generator, and Viewer 8.0 (February 2016)

2281195 - Potential remote termination of running processes in SAP Visual Enterprise Author, Generator and Viewer

An attacker can remotely exploit SAP Visual Enterprise Author, Generator and Viewer version 8.0, which may lead to application termination.

Notes 870127 2260323 2258786 - Internet Communication Manager (ICM)

Note 2260344 - Code injection vulnerability in SCTC_* Function modules

The prerequisite notes 1454575 and 1454576 are quite old .

Therefore, you easily can apply the note, just do it,...

... but it is more important to

- **strictly control access to SE37 and to authorizations for S_DEVELOP for object type FUGR and activity 16 = execute (and all change activities)**
- **strictly control access to SE24 and to authorizations for S_DEVELOP for object type CLAS and activity 16 = execute (and all change activities)**

Similar case from November 2015: Note 2197100 - OS injection through call of function by SE37

Note 2251231 - File validation enforcement switch for empty physical path

Project “Secure File Access”

By default all pathes and filenames are accepted within a scenario if you do not have maintained the corresponding logical path and logical filename. It is not possible to block all unmaintained entries.

Using this note – which is only available via support package - you can change the default:

Maintain new table `FILECMCUST` (customizable table for `FILE` configuration) using transaction `SM30` and add there a new entry with

SFIL Customizing Parameter = `REJECT_EMPTY_PATH`

and

SFIL Customizing Value = `ON`.

Use the Security Audit Log with messages `CUQ` `CUR` `CUS` `CUT` `DU5` to trace sucessful and unsuccessful file access.

Available with SAP_BASIS	
700	<u>SAPKB70033</u>
701	<u>SAPKB70118</u>
702	<u>SAPKB70218</u>
710	<u>SAPKB71021</u>
711	<u>SAPKB71116</u>
730	<u>SAPKB73015</u>
731	<u>SAPKB73118</u>
740	<u>SAPKB74015</u>
750	<u>SAPK-75003INSAPBASIS</u>

Note 2251231 - File validation enforcement switch for empty physical path

1. Project “Secure File Access” according to note 1497003

2. Activate logging using Security Audit Log :

Other events	CUQ	Severe	Logical file name &A not configured. Physical file name &B not checked.
Other events	CUR	Severe	Physical file name &B does not fulfill requirements from logical file name &A
Other events	CUS	Severe	Logical file name &B is not a valid alias for logical file name &A
Other events	CUT	Severe	Validation for logical file name &A is not active
RFC Function Call	DU5	Critical	There is no logical file name for path &A

3. **Decide about new file access strategy:**

- Which applications use / should use which folders?
- Change processes, interfaces, customizing, scripts etc. based on new file access strategy

4. **Maintain logical pathes and files in transaction FILE for active scenarios**

5. **Change the default to block unmaintained entries**

Note 2282338 = 2235412 = 2074276 - SAP Download Manager Password Weak Encryption

Both notes basically ask for the same like note 2233617 - **Security Vulnerabilities in SAP Download Manager:**

Tell your IT team

- to delete / deinstall any existing version `DLManager.jar` of the SAP Download Manager from their PCs

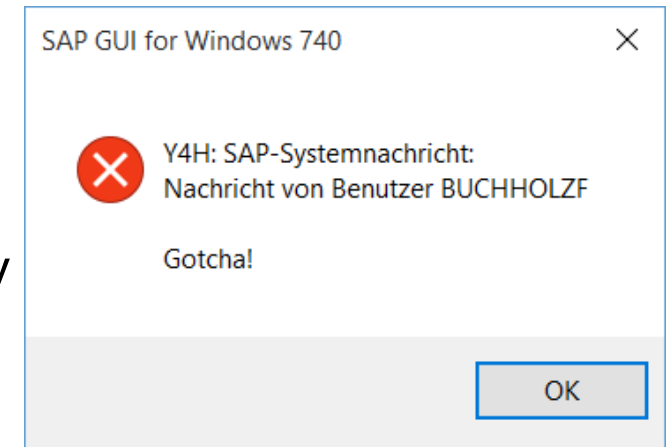
and

- get and use only the new version from <https://support.sap.com/software/download-manager.html>

Note 1553180 - Missing authorization check in TH_POPUP

ABAP note with

- a) automatic correction instruction
- b) manual pre-implementation correction instruction to maintain dictionary
(In this special case no harm would be done if this is done after implementing the note with SNOTE.)
- c) manual description in text to maintain profile parameter



What to do now?

- Automatic correction instruction and manual pre-implementation correction are covered by Support Package or Release upgrade.
(Hints to judge on this: Same SP validity as the automatic correction instruction. Change will be recorded on a transport.)
- Profile parameter `rdisp/th_popup/strict_check` needs to be set to 1 to activate the authorization check for `S_ADMI_FCD` while sending taskhandler popup messages to other users.
- The profile parameter is still not documented within the system!

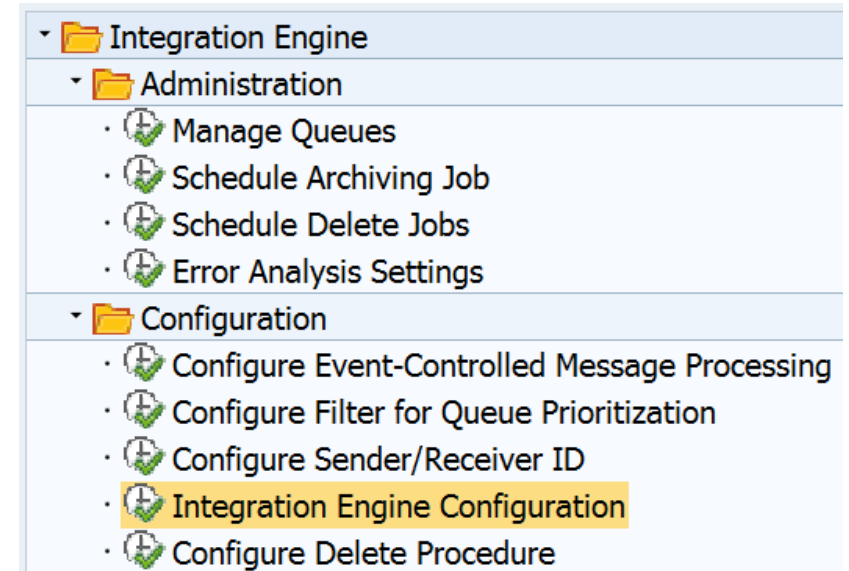
Note 1488609 - Missing Authorization Check in remote ABAP Config Access

ABAP note with

- a) automatic correction instruction
- b) manual pre-implementation correction instruction
(In this special case no harm would be done if this is done after implementing the note with SNOTE.)
- c) manual description in text to maintain profile parameter

What to do now?

- Automatic correction instruction and manual pre-implementation correction are covered by Support Package or Release upgrade.
(Hints to judge on this: Same SP validity as the automatic correction instruction. Change will be recorded on a transport.)
- Use transaction `SXMB_ADM` → Integration Engine Configuration → Specific Configuration to set RUNTIME parameter `EX_PROFILE_READ_AUTH = 1`
- Documentation in the system may be misleading if it claims to have active default settings!



Optimizing SACF

Implement recent functional notes of component `BC-SEC-AUT` to improve transaction SACF:

Note [2253930](#) - SACF | Error in scenario status check

Note [2248439](#) - SACF | Database problems for update of table SACF_ALERT

Note [2241352](#) - SACF | Optimization of input help and documentation

Note [2225225](#) - SACF | New attribute for default scenario status

Note [2124003](#) - SACF | Optimization of log function



February 2016

Topics February 2016



Note 2141744 - SysRec: manual status is lost and replaced with status 'new'

Note 2281111 - SysRec: recover the status

Note 2236289 BC-DB-MSS Missing authorization check in SMSS_GET_DBCON

Notes 1491645 1498973 2187502 - Renewing RFC trust relationships

Note 2266565 - SAPSSOEXT process crash during ticket verification

Note 2024431 - TDDAT adjustment in customer landscape

Note 2141744 - SysRec: manual status is lost and replaced with status 'new'

Note 2281111 - SysRec: recover the status (if possible)

Within application System Recommendations of the SAP Solution Manager 7.1 you have set manually the status of a note to status 'to be implemented', 'irrelevant', or 'postponed'. After some time the status is resetted to status 'new'.

You manual status is lost if following events had happened:

1. You set the status manually in SysRec.
2. SAP changes the note (with or without creating a new version of the note).
3. SAP triggers full re-calculation for SysRec on the SAP backbone.
4. The background job of SysRec is executed in the SAP Solution Manager.

Solution:

- Implement the note correction or update the support package.
- No manual status is touched anymore with following exception for notes having automatic correction instructions for ABAP: If you have implement a specific version of a note using the Note Assistant, transaction SNOTE, you will get the status 'implemented (new version available)'.



Note 2236289 BC-DB-MSS Missing authorization check

New check for S_TCODE for transaction DBACOCKPIT?

```
FUNCTION SMSS_GET_DBCON.  
*>>>> START OF DELETION <<<<<<  
  SELECT * FROM DBCON INTO TABLE MSS_DBCON  
*>>>> END OF DELETION <<<<<<<<<<<<  
  
*>>>> START OF INSERTION <<<<<<  
  
  authority-check object 'S_TCODE'  
    id 'TCD' field 'DBACOCKPIT'.                                     "#EC NOTEXT
```

No, there is another correction instruction:










```
FUNCTION SMSS_GET_DBCON.  
  
*>>>> START OF DELETION <<<<<<  
  authority-check object 'S_TCODE'  
    id 'TCD' field 'DBACOCKPIT'.                                     "#EC NOTEXT  
*>>>> END OF DELETION <<<<<<<<<<<<  
  
*>>>> START OF INSERTION <<<<<<  
  authority-check object 'S_RZL_ADM'  
    id 'ACTVT' field '03'.                                         "#EC NOTEXT  
*>>>> END OF INSERTION <<<<<<<<<<<<
```

Missing authorizations stop the calling program, e.g. in case of report MSSINJECT.

Notes 1491645 1498973 2187502 - Renewing RFC trust relationships

Report RS_SECURITY_TRUST_RELATIONS shows the existing RFC trust relationships of and for the system with the specification of the security level and the option to delete individual trust relationships to systems that your own system trusts.

Report RS_UPDATE_TRUST_RELATIONS renews (converts) the trust relationships of systems that trust your own system. Prerequisites get checked automatically.

	Status	System ID	Install.no	Precheck Result	Information / Recommendation
		FB7	0020270862	Already updated	Trust relationship already updated
		FBT	0020270862	Already updated	Trust relationship already updated
		SQ7	0020270862	Ready to update	To update, choose "Update"
		ST7	0020270862	Ready to update	To update, choose "Update"
		CXG		Connection Error	To display details, select a line and choose "Error Details"
		MW3		Connection Error	To display details, select a line and choose "Error Details"
		A24		Logon error	To log on, select a line and choose "Manual Logon"
		AHN		Logon error	To log on, select a line and choose "Manual Logon"

Note 2266565 - SAPSSOEXT process crash during ticket verification

Single Sign-On to Non-SAP Systems and Applications

http://help.sap.com/saphelp_nw70ehp2/helpdata/en/12/9f244183bb8639e10000000a1550b0/content.htm

The problem occurs in SAPSSOEXT version prior to patch 15. If you use SAPSSOEXT as library in a non-SAP environment you can check for the version with API method "**MySapGetVersion**".

Maybe it's faster to check the file version, e.g. for Win 64 Release 721:


- sapssoext version 14 = file version 7210.617.24.58424 changelist 1631288
- sapssoext version 15 = file version 7210.621.25.4608 changelist 1643008

The library API is compatible to older versions, therefore you can simply replace the shared library "sapssoext.dll" (windows) / "libsapssoext.so" (linux/unix) in your system. See also SAP Note 304450.

<https://support.sap.com/swdc>

- Support Packages and Patches
- Browse our Download Catalog
- SAP Technology Components
- SAPSSOEXT

The following objects are available for download:

File Type	Download Object	Title	Patch Level	Info File	File Size [kb]	Last Changed
 SAR	SAPSSOEXT_15-20001138.SAR	SAP SSO EXT lib for SAP logon ticket verification	15	Info	10127	09.02.2016

Note 2024431 - TDDAT adjustment in customer landscape

Comparison of Table Authorization Group Assignment

As part of standard corrections using SAP Notes or Support Packages, adjustments to table authorization group assignments were delivered.

However, it is not possible for SAP to change existing table entries by means of a Support Package.

The report `TDDAT_COMPARE` compares the table authorization group assignments delivered by SAP by means of Support Packages with the data in your system.

In addition to the comparison state, the result list displays the relevant SAP Note number and the corresponding application component. We recommend that you use this report after importing a Support Package to check the table authorization group assignment.

Status	Object Name	Short Description	Authoriz.	Authoriz.	SAP Note	SAP group	Appl. Component
≠	SCPRSTRANSP	Switch BC Sets: Transport Recording Tables	B0SD	SBCA	865234	SCPR	BC-CUS-TOL-BCD
≠	USH02	Change history for logon data	SC	SPWD	1484692	SUSR_KRN	BC-SEC-LGN
≠	USR02	Logon Data (Kernel-Side Use)	SC	SPWD		SUSR_KRN	BC-SEC-LGN
≠	USRPWDHISTORY	Password History	SC	SPWD		SUSR_KRN	BC-SEC-LGN
≠	VUSER001	Generierte Tabelle zu einem View	SC	SPWD		SUSR	BC-SEC-USR-ADM
≠	ECCUST_ET	Customizing Table for External Test Tools	&NC&	ECCU	1896642	SECATT_DDIC	BC-TWB-TST-ECA

Note 2024431 - TDDAT adjustment in customer landscape

Comparison of Table Authorization Group Assignment

Correction notes:

Note 2273583 - TDDAT_COMPARE | Error in database update

Note 2079497 - Table authorization group assignment in user management and authorization management

Note 1645260 - Extended maintenance of table authorization groups

Note 2024431 - TDDAT adjustment in customer landscape

Comparison of Table Authorization Group Assignment

For more fine granular access control we recommend to remove authorization on `S_TABU_DIS` for business users at all and use the authorization object `S_TABU_NAM` instead.

Related notes:

1481950 - New authorization check for generic table access

1434284 - FAQ| Authorization concept for generic table access

1500054 - Additional tools for `S_TABU_NAM` authorization concept

Report `SUSR_TABLES_WITH_AUTH` shows which tables can be accessed by a user (if `SE16` can be called).

Transaction `SU24_S_TABU_NAM` reduces the effort required for maintaining authorization default values during the introduction of an authorization concept with `S_TABU_NAM`.

Note 2024431 - TDDAT adjustment in customer landscape

Comparison of Table Authorization Group Assignment

Report `RDDPRCHK` (or old report `RDDTDDAT_BCE`) or checks technical properties of tables and views.

If you maintain assignments to table authorization groups, we recommend to have a look to the environment of the tables as well:

- Check not only specific tables but all tables of a package or application component
- The authorization groups of views usually should match to the authorization groups of the corresponding base tables
- Validate assignment of table authorization group (Which authorization gets checked for `S_TABU_DIS`? – But go for `S_TABU_NAM` anyway.)
- Validate table maintenance options (Can you use `SE16/SM30` to maintain table content?)
- Validate table logging settings (see profile parameter `rec/client`)

Important packages:

<code>SUSR*</code>	User account data including password hash
<code>SCRX</code>	RFC Destinations including secret key for Trusted RFC
<code>SECF</code>	Content of PSEs



January 2016

Topics January 2016



KBA [2253549](#) - The SAP Security Baseline Template & ConfigVal

Switchable Whitelists (SLDW)

Note [1976303](#) - Missing authorization check in BW-BEX-OT

Notes [1972646](#), [1971397](#) - Potential modif./disclosure of persisted data in BW-BEX-OT

Note [1973081](#) - XSRF vulnerability: External start of transactions with OKCode

Note [2248735](#) - Code injection vulnerability in System Administration Assistant

Note [2221986](#) - Too many privileges assigned to HANA hdbrole

Note [2151237](#) - Potential remote code execution in SAP GUI for Windows

KBA 2253549 - The SAP Security Baseline Template & ConfigVal

An SAP Security Baseline is a regulation on minimum security requirements to be fulfilled for all SAP systems in your organization.

"Baseline" means: These requirements must be fulfilled by all SAP systems regardless of any risk assessments. They are general best practices and apply to all systems, regardless of their security level.

The SAP Security Baseline Template is a template document provided by SAP on how an organization-specific SAP Security Baseline could be structured. It is pre-filled with selected baseline-relevant requirements and corresponding concrete values as recommended by SAP.

<https://support.sap.com/sos>

→ Media Library

CoE Security Services - Security Baseline Template Version

https://support.sap.com/dam/library/SAP%20Support%20Portal/support-programs-services/support-services/security-optimization-service/media/Security_Baseline_Template.zip

KBA 2253549 - The SAP Security Baseline Template & ConfigVal

The package contains files to configure the application Configuration Validation according to the SAP Security Baseline Template.

Select Target System	
SID	Description
BL_I-13	SAP HANA Security
BL_I-5	Web Dispatcher Security
BL_O-1	Handling of ABAP Default Users in ABAP Systems
BL_O-2	No use of authorization profiles SAP_ALL and other critical
BL_O-3	Segregation of Basis and Business Authorizations
BL_O-4	Restricted Assignment of Critical Basis Authorizations
BL_O-5	RFC Authorizations
BL_O-6	Java Systems Administrators
BL_O-8	Security Audit Log (ABAP)
BL_O_8_0	Security Audit Log (ABAP) Switch
BL_O_8_1	Security Audit Log (ABAP) slot for SAP(*) users
BL_S-1	ABAP Profile Parameters
BL_S-2	Protection of Password Hashes in ABAP Systems
BL_S-3	Modification Protection for Production Systems
BL_S-4	Secure Configuration of Java Systems

Switchable Whitelists (SLDW)

Project plan

1. Get Framework (via SP)
2. Activate logging via Security Audit Log
3. Copy SAP definition to active whitelist and adjust log settings (log all / accept)
4. ...
5. Check recorded whitelist entries, and adjust log settings (log error / do not accept)

Some scenarios come with a complete whitelist → go to step 5. at once

Switchable Whitelists (SLDW) Get Framework

Documentation note [1922712](#) - SLDW: FAQ: Supplementary notes for whitelist maintenance
and http://help.sap.com/saphelp_nw74/helpdata/en/0d/4e0a72085a43a08d66e1e128365156/content.htm

Installation instructions:

- note [1919573](#) - SLDW: Environment for maintaining switchable whitelists
- note [1922705](#) - SLDW: Supplementary corrections
- note [2054522](#) - SP implementation dependency with BASIS (SACF) corrections
- note [2061628](#) - SLDW: Transport connection for new whitelists

(You may want to implement

- note [2211884](#) - SLDW|Optimization when saving whitelists

on top of it.)

These notes lead to following minimal `SAP_BASIS` Support Packages which give you the complete framework:

SAP_BASIS SLDW framework	
700	SAPKB70032 (33)
701	SAPKB70117 (18)
702	SAPKB70217 (18)
710	SAPKB71019 (21)
711	SAPKB71114 (16)
730	SAPKB73013 (15)
731	SAPKB73114 (18)
740	SAPKB74009 (14)
750	SAPK-75001INSAPBASIS

Switchable Whitelists (SLDW)

Activate logging via Security Audit Log

Messages are only written if the Security Audit Log is active and the current filter settings contain the required messages. You can activate and check this with transaction SM19.

The screenshot shows the configuration for a Whitelist Header Data. The 'SAL Mode' is set to 'A', which is highlighted with a red box. A dropdown menu is open, showing the 'Recording Mode for Security Audit Log (2)' with 3 entries found. The entries are:

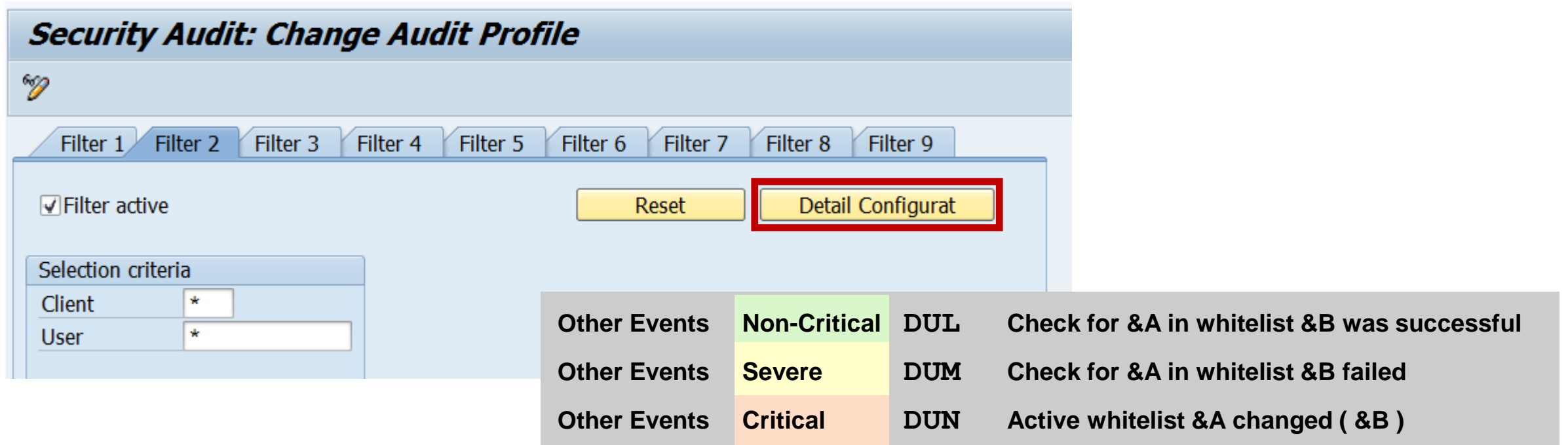
SAL Mode	Short Descript.
N	No recording in the Security Audit Log
E	Record failed checks in the Security Audit Log
A	Record all checks in the Security Audit Log

Switchable Whitelists (SLDW)

Activate logging via Security Audit Log

Messages are only written if the Security Audit Log is active and the current filter settings contain the required messages. You can activate and check this with transaction SM19.

Choose 'Detail Configuration', sort the entries, and select messages DUL, DUM and DUN.



The screenshot shows the 'Security Audit: Change Audit Profile' interface. It features a tabbed menu with 'Filter 1' through 'Filter 9'. Below the tabs, there is a 'Filter active' checkbox (checked), a 'Reset' button, and a 'Detail Configuration' button highlighted with a red border. A 'Selection criteria' section contains input fields for 'Client' and 'User', both with asterisks. Below the interface is a table of event messages.

Other Events	Non-Critical	DUL	Check for &A in whitelist &B was successful
Other Events	Severe	DUM	Check for &A in whitelist &B failed
Other Events	Critical	DUN	Active whitelist &A changed (&B)

Switchable Whitelists (SLDW)

Copy SAP definition to active whitelist and adjust log settings

Transaction SLDW

View / maintain whitelists
(definition from SAP / active whitelist of customer)

Transaction SLDW_COMPARE

Modification adjustment
You can use transaction SLDW_COMPARE to create active versions of a whitelist from an existing SAP definition and to adjust them to the local application scenario.

Transaction SLDW_TRANSFER

Upload / Download
You log data in test systems and production systems but you construct whitelists in development systems. Use transaction SLDW_TRANSFER to transfer data from test or production to development.

Transaction SLDW_INFO

Infosystem

Switchable Whitelists (SLDW)

How to identify notes for installed scenarios

Transaction SLDW shows notes respective documentation:

Display Whitelists

Information

Whitelist Header Data

Name	RSDRI_DF_READ
Short Descript.	Read of data via Datafederator
Chck Stat.	N White list check inactive
SAL Mode	N No recording in the Security Audit Log

Documentation

Document class	NT
Documentation Object	1971397

Switchable Whitelists (SLDW)

How to identify notes for not installed scenarios

If you do not have the Support Package yet, you can search notes for `sldw` or `cl_sldw` or `check_white_list`

Search options

Used Template no template used ▶ Load Template

Language German English Japanese

Search Term Search

Search Method ▶

Search Range ▶

Search behavior Linguistic search Exact search

Typical ABAP call:

```
IF cl_sldw=>check_white_list( id_wl_name   = '<name>'
                             id_wl_ename = lv_string
                             id_silent   = 'X'           ) NE 0.
```

Switchable Whitelists (SLDW)

Applications using SLDW

Note	Scenario Whitelist	Recommendation Chck Stat. / SAL Mode
<u>1976303</u>	Missing authorization check in BW-BEX-OT RSDPL_CUBE_DATA_READ_FUNC RSDRI_DF_READ	analyze first X / A
<u>1972646</u> <u>1971397</u>	Potential modif./disclosure of persisted data in BW-BEX-OT RSDRV_TABLE_COPY_RFC_WL RSDRV_TC_COPY_RFC_WL	activate entries A / E
<u>1956086</u>	Profile parameter for XSRF BC_CHECK_EXT_SKIP_FIRST_SCREEN	activate empty list D / A

Switchable Whitelists (SLDW)

Note 1973081 - XSRF vulnerability: External start of transactions with OKCode

Whitelist BC_CHECK_EXT_SKIP_FIRST_SCREEN

Purpose: Disable start of transactions with OKCode skipping the first screen.

All GUI variants are affected: SAPGUI for Windows (SAP Shortcuts), SAPGUI for Java, HTML-GUI

White listing is available in NetWeaver 740 SP08 and for releases 700 to 731 by

Note 2055468 - XSRF protection downport (SAP_BASIS Support Package + Kernel as of 7.21)

For documentation refer to

Note 1956086 - Profile parameter for XSRF protection (`dynp/confirmskip1screen = ALL`)

Recommendation: Activate empty whitelist with status D (All transactions and function codes that are executed using shortcuts, start transactions, and URLs in the system are logged. New entries are flagged as not permitted.)

Whitelist Header Data	
Name	BC_CHECK_EXT_SKIP_FIRST_SCREEN
Short Descript.	Whitelist for XSRF Protection
Chck Stat.	D Recording mode(new elements assigned the status not allowed)
SAL Mode	A Record all checks in the Security Audit Log

Note 2248735 - Code injection vulnerability in System Administration Assistant

Deactivation of obsolete code.

Transaction SSAA_TOP

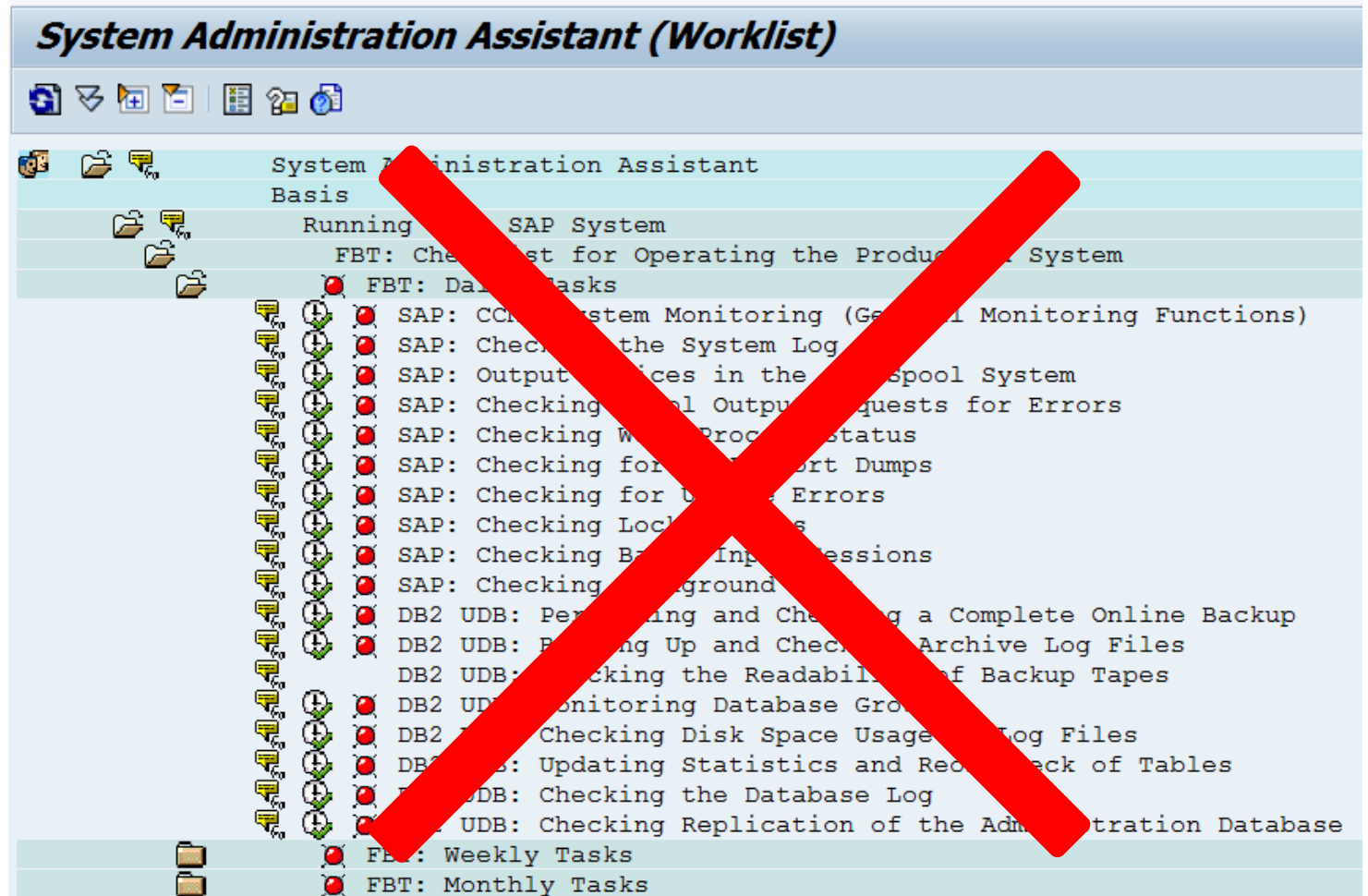
Transaction SSPC = Report RSSPECCA

Report RSRRRSAA

Report RSSAA_CALLEXTERN

Report SAPSAA_HELP

...



Tipp: Performing Configuration Tasks with Task Manager

Transaction STC01

Perform configuration tasks in an automated way by using the task manager for technical configuration (task manager). The task manager guides you through extensive configuration processes by means of predefined task lists and offers the possibility to customize them according to your needs.

Automated Initial Setup of ABAP-Based Systems

<http://scn.sap.com/docs/DOC-41405>

Note [1923064](#) - Initial Setup: System Configuration using ABAP Task Manager

Transaction STC01, STC02

Note 2221986 - Too many privileges assigned to HANA hdbrole

Different software component HCO_RULE_FW (instead of HDB)

Different software component version HANA RULES FRAMEWORK 1.0 (instead of SAP HANA DATABASE 1.00).

- You install the SAP HANA Rules Framework add-on on top of SAP HANA platform.
- You can install or upgrade it independently from a HANA revision upgrade.
- References:
 - Note 2219894 - SAP HANA Rules Framework 1.0 SPS06 Release Note
 - Documentation about SAP HANA Rules Framework incl. Installation & Upgrade Guide and Security Guide
- System Recommendations may or may not know about the software component and therefore may not show the note.

Note [2151237](#) - Potential remote code execution in SAP GUI for Windows

SAP uses libraries from Microsoft (Windows common controls) which are bundled with the SAPGUI installation.

Related Microsoft Security Bulletin: [MS12-060](#)

More security notes about SAPGUI:

- Note [1564042](#) - Security Module: Registry WRITE enabled by default
- Note [1678732](#) - SAP GUI for Windows 7.20: Client Side Remote Execution
- Note [1770722](#) - Potential logon information disclosure in SAP GUI
- Note [1771201](#) - Potential logon information disclosure in SAP Portal & WinGUI
- Note [2124806](#) - Potential remote termination of running processes in SAP GUI

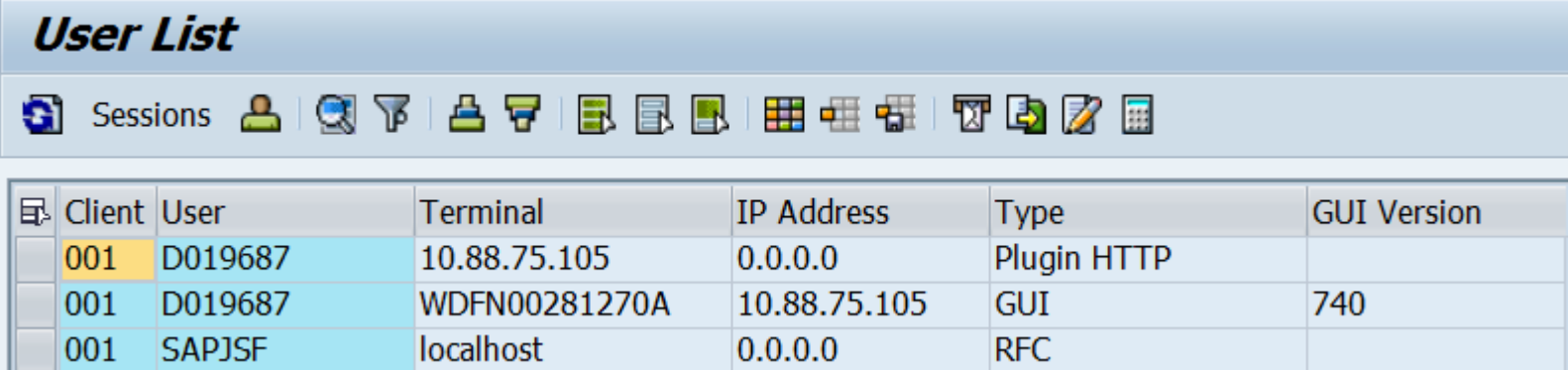
➤ **Schedule regular SAPGUI updates**

Note [2151237](#) - Potential remote code execution in SAP GUI for Windows

How to check SAPGUI version

Transaction SM04 = report
RSM04000_ALV respective
RSM04000_ALV_NEW

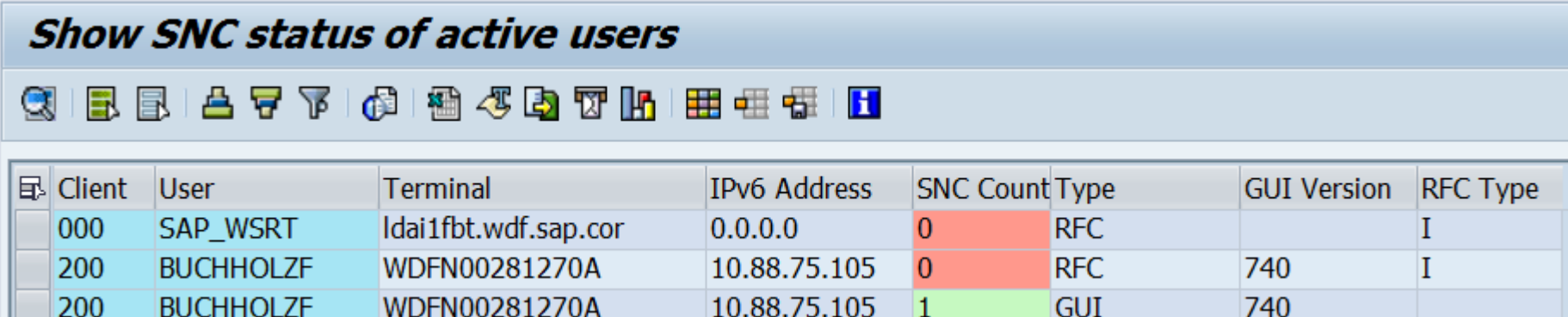
User List



Client	User	Terminal	IP Address	Type	GUI Version
001	D019687	10.88.75.105	0.0.0.0	Plugin HTTP	
001	D019687	WDFN00281270A	10.88.75.105	GUI	740
001	SAPJSF	localhost	0.0.0.0	RFC	

Report
ZSM04000_SNC from
[SCN Blog](#)

Show SNC status of active users



Client	User	Terminal	IPv6 Address	SNC Count	Type	GUI Version	RFC Type
000	SAP_WSRT	ldai1fht.wdf.sap.cor	0.0.0.0	0	RFC		I
200	BUCHHOLZF	WDFN00281270A	10.88.75.105	0	RFC	740	I
200	BUCHHOLZF	WDFN00281270A	10.88.75.105	1	GUI	740	

Limitation: The reports inspects the current sessions on the current application server only.

... or use z-reports from note [748424](#) - Evaluation of SAP GUI versions and patches



December 2015

Topics December 2015



System Recommendations in SAP Solution Manager 7.2

How to transport note implementation status for SNOTE?

KBA [2253549](#) - The SAP Security Baseline Template

Note [2233617](#) - Security Vulnerabilities in SAP Download Manager (reloaded)

Note [2108479](#) - Missing authorization check in FI-GL-GL-G

Latest questions

Note 2234226 - TREX / BWA: Potential technical information disclosure / host OS compromise

No patch available; use separated network segments to protect internal communication between parts of the server

Note 2204160 - Unauthorized modification of displayed content in SAPUI5

The note does not contain any ABAP correction – you cannot implement it with SNOTE.

The note shows links to Java patches for SAPUI5 CLIENT RT AS JAVA and references related notes having patches for SAPUI5 CLIENT RUNTIME.

Note 850306 - Oracle Critical Patch Update Program

Yes, this collective note get's updated whenever SAP creates a new (normal) note about security of the Oracle DB.

General rule: There might exist more security advisories for the DB which you can get directly from the DB vendor.

Ramp-Up for SAP Solution Manager 7.2

SAP Solution Manager 7.2 Product Roadmap

<https://service.sap.com/roadmaps>

→ Product and solution roadmaps → Database and Technology → Platform → SAP Solution Manager.

Direct link (Road Map Revision 15.10.2015):

<https://service.sap.com/~sapidb/011000358700001435482012E.pdf>

SAP EARLY ADOPTER CARE PROGRAM

[SAP Solution Manager 7.2](#)

Contact the Early Adoption Program Lead: [Tim Steuer](#)

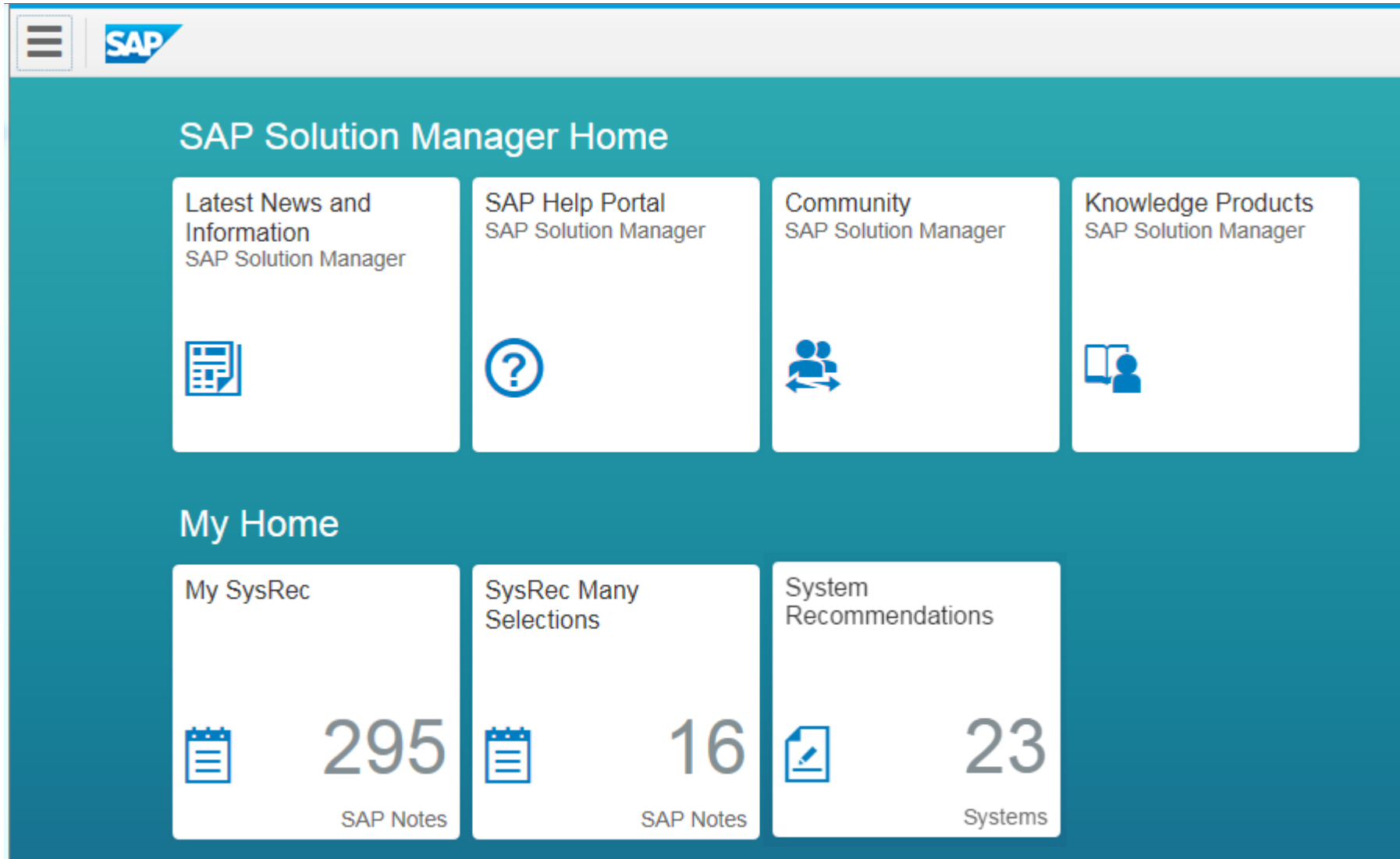
Regional contacts:

[Ursula Glas](#) (EMEA/MEE), [Lee Gutherman](#) (US/LA), [Helen Ding](#) (APA), [Imari Okamoto](#) (Japan),

System Recommendations in SAP Solution Manager 7.2

- **User Interface based on Fiori**
- **Individual views and selections as Fiori tiles**
- **Cross-system view**
- **Customizing for status values**
- **Status with history and cumulative comments**
- **Hide Application Components which do not match to used DB or OS installations**
- **General Customizing and Personalization**
- **Online Documentation**

System Recommendations in SAP Solution Manager 7.2 Personnel Launchpad



You can store individual views and selections as Fiori tiles.

The example shows security notes for these systems for which you are responsible having selected status values ('new').

System Recommendations in SAP Solution Manager 7.2

System Overview

23

All

12

ABAP

5

HANADB

3

JAVA

1

BOBJ

2

ATC

System

<input type="checkbox"/>	Technical System	IT Admin Role	Priority	Security Notes	Hot News	Performance Notes	Legal Change Notes	Favorite
<input type="checkbox"/>	SD7~ABAP	Undefined	Undefined	295	202	343	64	☆
<input type="checkbox"/>	FBT~ABAP	Production System	Undefined	189	189	189	30	★
<input type="checkbox"/>	A24~ABAP	Undefined	Undefined	637	239	363	84	☆
<input type="checkbox"/>	WNX~ABAP	Development System	Medium	462	222	455	89	☆
<input type="checkbox"/>	HRX~HANADB	Test System	Medium	54	58	11	0	☆
<input type="checkbox"/>	HRX~ABAP	DEVELOP	Undefined	313	212	759	61	★
<input type="checkbox"/>	SMA~ABAP	Undefined	Undefined	758	244	809	105	★
<input type="checkbox"/>	ZQX~ABAP	DEVELOP	Undefined	899	283	1664	4999	☆
<input type="checkbox"/>	ZNX~ABAP	Undefined	Undefined	900	285	1664	4999	★
<input type="checkbox"/>	FQJ~JAVA	DEVELOP	Undefined	177	198	77	1	★
<input type="checkbox"/>	FQ7~ABAP	Demo System	Very High	206	202	192	31	★

System Recommendations in SAP Solution Manager 7.2

Note Overview

» Advanced Search

System with SAP Notes



<input type="checkbox"/>	Technical System	Note Number	Short text	Release Date	Application Component	Priority	Category	Security Category	Status	Correction Types	Attributes
<input type="checkbox"/>	SD7~ABAP	2195595	Multiple security vulnerabilities in SAP NetWeaver BSP Logon	10/13/2015	BC-BSP	2 - Correction with high priority	A - Program error	P - Patch Day Notes	New		No Kernel,Dependent
<input type="checkbox"/>	FBT~ABAP	2195595	Multiple security vulnerabilities in SAP NetWeaver BSP Logon	10/13/2015	BC-BSP	2 - Correction with high priority	A - Program error	P - Patch Day Notes	New		No Kernel,Dependent
<input type="checkbox"/>	A24~ABAP	2195595	Multiple security vulnerabilities in SAP NetWeaver BSP Logon	10/13/2015	BC-BSP	2 - Correction with high priority	A - Program error	P - Patch Day Notes	New		No Kernel,Dependent
<input type="checkbox"/>	SD7~ABAP	2193214	Potential false redirection of Web site content in SAP Internet Communication Framework	10/13/2015	BC-MID-ICF	3 - Correction with medium priority	A - Program error	S - Support Package Notes	New	Automatic	No Kernel,Dependent

System Recommendations in SAP Solution Manager 7.2

Advanced Search

SD7~ABAP ⓘ FBT~ABAP dd.MM.yyyy - dd.MM.yy 📅 Search

Advanced Search

Application Component: 📄

Priority: ▼

Category: ▼

Security Category: ▼

Correction Types: ▼

Status: New ⓘ New version available ⓘ ▼

Kernel: Kernel ▼

Release Independent: ▼

System Recommendations in SAP Solution Manager 7.2

Status and Comments

The screenshot displays the SAP Solution Manager interface. On the left, a system recommendation is shown with the title "Potential false redirection of Web site content Framework". Below the title, it lists details: "Priority: 3 - Correction with medium priority", "Category: A - Program error", "Security Category: S - Support Package Notes", and "Correction Types: Automatic". At the bottom of this panel are navigation icons for "Log" (0), "Object List" (5), and "Prerequisite Notes" (0).

On the right, a "Change Status" dialog is open, listing several status options, each with a radio button:

- Directory Traversal Project
Postponed for specific Directory Traversal Project
- To Be Implemented
To Be Implemented
- New version available
New version available
- New
New
- Irrelevant
Irrelevant
- Project "Rob"
Project "Rob"

At the bottom of the dialog is a text input field with the placeholder text "Enter your comment here".

Individual and cross-system mass status management possible

You can customize user status values, e.g. for 'fast track transport', 'normal transports', or specific projects.

Status records and comments are stored with timestamp and user and never get modified or deleted.

System Recommendations in SAP Solution Manager 7.2

Status and Comments

Change View "User Status": Overview of Selected Set

 New Entries      

User Status

Lang.	Status ID	Short Text	Long Text
EN	DONE	Done	Done
EN	ET	Erica test	Erica test2
EN	FILE	Directory Traversal Project	Postponed for specific Directory Traversal Project
EN	IMP	To Be Implemented	To Be Implemented
EN	INP	New version available	New version available
EN	ISW	Isoldes Test	Isoldes Test
EN	NEW	New	New
EN	NOR	Irrelevant	Irrelevant
EN	NQR	Irrelevant	Irrelevant
EN	PSP	Postponed	Postponed
EN	ROB	Robs Shorttext	Robs Longtext

Customizing table
AGSSR_STATUS

System Recommendations in SAP Solution Manager 7.2

Status and Comments



Show System Recommendations results

SR ID	Requester	Requester Role	Status	Requester	SR Title	Created	Time	Comments
0001487330	FBT	ABAP	NEW	ROB	SR_TST_01	04.09.2015	14:41:24	test with rob#
0001487606	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001488406	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001490172	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001494879	FBT	ABAP	NEW	PSP	SAVELSBERGW	21.06.2015	17:37:57	please postpone this note..
	SD7	ABAP	PSP	PSP	SR_TST_01	16.07.2015	11:14:33	
			PSP	PSP	SR_TST_01	16.07.2015	11:12:27	
			PSP	PSP	SR_TST_01	16.07.2015	11:12:05	
			PSP	PSP	SR_TST_01	16.07.2015	11:11:48	
			NEW	PSP	SAVELSBERGW	21.06.2015	17:37:57	please postpone this note..
0001497104	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
			NEW	NEW	SR_TST_01	24.06.2015	12:12:58	The change request 8000005935 is created for the following
0001501945	FQJ	JAVA	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001502781	FBT	ABAP	NEW	ROB	SR_TST_01	04.09.2015	14:41:24	test with rob#
0001507721	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001509604	FBT	ABAP	NEW	ROB	SR_TST_01	04.09.2015	14:41:24	test with rob#
	FQJ	JAVA	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
			NEW	NEW	SR_TST_01	24.06.2015	12:12:58	The change request 8000005935 is created for the following
0001523254	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001523839	FBT	ABAP	NEW	NEW	LUANE	10.11.2015	14:44:51	A change impact analysis has been started in Business Proc
0001526853	SD7	ABAP	NEW	IMP	SR_TST_01	23.06.2015	10:15:25	Implement me! :)
0001528905	FQ7	HANADB	NEW	NEW	SR_TST_02	11.09.2015	13:11:46	Der Änderungsauftrag 8000011640 wird für die folgenden SAP
0001542033	FQJ	JAVA	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001543851	SD7	ABAP	NEW	ET	SR_TST_01	12.08.2015	14:59:15	
0001550925	SD7	ABAP	NEW	NEW	SR_TST_01	24.06.2015	12:12:58	The change request 8000005935 is created for the following
0001552405	FBT	ABAP	NEW	NEW	LUANE	10.11.2015	14:44:51	A change impact analysis has been started in Business Proc
0001555144	SD7	ABAP	NEW	PSP	SR_TST_01	23.06.2015	14:42:52	Das ist ein Test von Gordon - zurück auf New... dann New v
			ISW	NEW	SR_TST_01	23.06.2015	14:42:29	Das ist ein Test von Gordon - zurück auf New... dann New v
			INP	ISW	SR_TST_01	23.06.2015	14:41:46	Das ist ein Test von Gordon - zurück auf New... dann New v

System Recommendations in SAP Solution Manager 7.2

Usage count from UPL/SCMON

HTTP_SERVER_GROUPS: Funktionsbaustein liest am Datenbankpuffer vorbei

2198564

Priority: 3 - Correction with medium priority

Version: 0002

Category: P - Performance

Technical System: FBT-ABAP

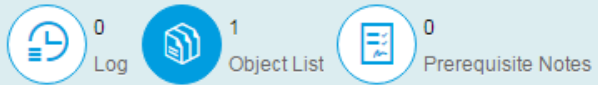
Security Category:

Status: New

Correction Types: Automatic

Application Component: BC-MID-ICF

Release Date: 8/26/2015



Object List



Transport Program ID	Transport Object Type	Transport Object Name	Program ID(TADIR)	Object Type(TADIR)	Object Name(TADIR)	Usage count
LIMU	FUNC	HTTP_GET_SERVER_GROUPS	R3TR	FUGR	HTTPTREE	3742

Hide Application Components which do not match to used DB or OS installations

SysRec: OS/DB Filter					
Typ	Pattern	Application Component	Vendor	Active	
Database	DB6	BC-DB-DB6	SAP	Active	▲
Database	DB6	BW-SYS-DB-DB6	SAP	Active	▼
Database	HDB	BC-DB-HDB	SAP	Inactive	
Database	HDB	BW-SYS-DB-HDB	SAP	Inactive	
Database	HDB	HAN-DB	SAP	Inactive	
Database	INF	BC-DB-INF	SAP	Inactive	
Database	INF	BW-SYS-DB-INF	SAP	Inactive	
Database	LVC	BC-DB-LVC	SAP	Inactive	
Database	MSS	BC-DB-MSS	SAP	Inactive	
Database	MSS	BW-SYS-DB-MSS	SAP	Inactive	
Database	ORA	BC-DB-ORA	SAP	Inactive	
Database	ORA	BW-SYS-DB-ORA	SAP	Inactive	
Operation System	AIX	BC-OP-AIX	SAP	Inactive	
Operation System	AIX	BC-OP-BUL	SAP	Inactive	
Operation System	HP-UX	BC-OP-HPX	SAP	Inactive	
Operation System	LINUX	BC-OP-LNX	SAP	Active	
Operation System	LINUX	BC-OP-PLNX	SAP	Active	
Operation System	LINUX	BC-OP-ZLNX	SAP	Active	
Operation System	LINUX OS/3	BC-OP-LNX	SAP	Inactive	

**Customizing table
AGSSR_OSDB**

Overview about Application Components for DB/OS:

Databases

ADA	BC-DB-SDB	LVC	BC-DB-LVC
ADA	BW-SYS-DB-SDB		
		MSS	BC-DB-MSS
DB2	BC-DB-DB2	MSS	BW-SYS-DB-MSS
DB2	BC-DB-DB2-CCM		
DB2	BW-SYS-DB-DB2	ORA	BC-DB-ORA
		ORA	BW-SYS-DB-ORA
DB4	BC-DB-DB4		
DB4	BW-SYS-DB-DB4	SAP	BC-DB-SDB
		SAP	BW-SYS-DB-SDB
DB6	BC-DB-DB6		
DB6	BW-SYS-DB-DB6	SYB	BC-DB-SYB
		SYB	BW-SYS-DB-SYB
HDB	BC-DB-HDB		
HDB	BW-SYS-DB-HDB	TD	BC-DB-TD
HDB	HAN-DB	TD	BW-SYS-DB-TD
INF	BC-DB-INF		
INF	BW-SYS-DB-INF		

Operating Systems

AIX	BC-OP-AIX	SINIX	BC-OP-FSC-REL
AIX	BC-OP-BUL		
		SOLARIS	BC-OP-FSC-SOL
HP-UX	BC-OP-HPX	SOLARIS	BC-OP-SUN
LINUX	BC-OP-LNX	SUNOS	BC-OP-SUN
LINUX	BC-OP-LNX-SUSE		
LINUX	BC-OP-PLNX	TRU64-UNIX	BC-OP-CPQ
LINUX	BC-OP-ZLNX	TRU64-UNIX	BC-OP-TRU64
LINUX OS/3	BC-OP-LNX	UNIX	BC-OP-CPQ
LINUX OS/3	BC-OP-LNX-SUSE	UNIX	BC-OP-TRU64
LINUX OS/3	BC-OP-PLNX		
LINUX OS/3	BC-OP-ZLNX	WIN-NT	BC-OP-NT
OS/400	BC-OP-AS4	Z/OS	BC-OP-S390

General Customizing and Personalization

Transaction SM30_DNOC_USERCFG_SR

SYSREC_STATUS_FILTER (*)	Defines which SAP Notes are counted on the overview page: By default it only shows notes with status 'new' or 'new version available' (in use up to 7.2 SP 6).
SYSREC_UPL_ACTIVE (*)	Activate/deactivate the integration with UPL/SCMON while showing the object list of ABAP notes.
SYSREC_UPL_MONTH (*)	Count of month for which UPL/SCMON data get loaded. The default is 2 which represents the current and the previous month.
SYSREC_NOTE_TYPES	Defines for which types of notes the application calculates results. Enter the list of characters representing the note types HotNews, Security, Performance, Legal Change, Correction, and License Audit.
SYSREC_LAST_MONTHYEAR	Defines the earliest calculated notes. By default the application calculates all SAP Notes which were released between January 2009 and the current month.
SYSREC_BPCA_USER	Defines if the current user should be added as selection for BPCA.
SYSREC_BPCA_DATE	Defines the earliest filter for BPCA results. You can change the start date for this period.
SYSREC_CHARM_LOG_TYPE	Defines the text id according to table TTXID for the text object CRM_ORDERH.
SYSREC_CHARM_USER	Defines if the current user should be added as selection for ChaRM.
SYSREC_CHARM_DATE	Defines the earliest filter for ChaRM results. You can change the start date for this period.
SYSREC_OBJECT_EXP	Lifetime of the cache which contains the object list of notes. The default is 14 days.
SYSREC_REQ_EXP	Lifetime of the cache which contains the required notes of notes. The default is 14 days.
SYSREC_SIDE_EFFECT	Lifetime of the cache which contains the side-effect notes of notes. The default is 14 days.
SYSREC_UNSUPPORTED_SYSTEM (*)	System types which you want to block from SysRec (one entry per system type)
SYSREC_UNUSED_SUBHR	Calculate results for unused HR components (see note 2712210)

(*) User specific personalization

System Recommendations in SAP Solution Manager 7.2

Online Documentation

You find the Online Documentation about System Recommendations in the App section for Fiori

Navigation path, e.g. starting at SolMan documentation:

System Recommendations in SolMan 7.2

http://help.sap.com/saphelp_sm72_sp03/helpdata/en/61/d626565b13e121e10000000a4450e5/frameset.htm

→ **Fiori**

http://help.sap.com/solman_fiori

→ **Application Help** → **SAP Solution Manager Fiori Apps** →

System Recommendations

https://help.sap.com/saphelp_smfiori_102/helpdata/en/cb/e401557f614c55e10000000a4450e5/frameset.htm

SAP Support Portal <https://support.sap.com/sysrec>

How to transport note implementation status for SNOTE for notes which cannot be implemented via SNOTE?

Preparation: Ensure that note [1788379](#) is installed in the system.

1. Load note into SNOTE. You observe that you cannot implement the note.
2. Set status manually to ,completed‘
3. Run report SCWN_TRANSPORT_NOTES to add notes to an existing or new transport.
4. Export the transport and import it into the target system.

You will see the following in the transport log (table [CWBNTCUST](#) contains the implementation status in field NTSTATUS):

```
Start export R3TRNOTE0001584548 ...
 1 entry from TADIR exported (R3TRNOTE0001584548 ).
 3 entries from CWBNTCI exported (0001584548*).
 0 entries from CWBNTCONT exported (0001584548*).
 1 entry from CWBNTCUST exported (0001584548*).
 3 entries from CWBNTDATA exported (NT0001584548*).
 [...]
End of export R3TRNOTE0001584548
```

5. Run the note browser of SNOTE, report SCWN_NOTE_BROWSER, and validate the implementation status.
6. With the next run of SysRec's background job the note will vanish from the result list.

Manual transport (but without correction instructions):
Create workbench-transport or transport-of-copies and add the transport keys manually (including leading zeroes).

Example:

```
R3TR NOTE 0001584548
R3TR NOTE 0001628606
R3TR NOTE 0001631072
etc.
```

KBA 2253549 - The SAP Security Baseline Template



An SAP Security Baseline is a regulation on minimum security requirements to be fulfilled for all SAP systems in your organization.

"Baseline" means: These requirements must be fulfilled by all SAP systems regardless of any risk assessments. They are general best practices and apply to all systems, regardless of their security level.

The SAP Security Baseline Template is a template document provided by SAP on how an organization-specific SAP Security Baseline could be structured. It is pre-filled with selected baseline-relevant requirements and corresponding concrete values as recommended by SAP.

<https://support.sap.com/sos>

→ Media Library

CoE Security Services - Security Baseline Template Version

https://support.sap.com/dam/library/SAP%20Support%20Portal/support-programs-services/support-services/security-optimization-service/media/Security_Baseline_Template.zip

Note 2233617 - Security Vulnerabilities in SAP Download Manager (reloaded)

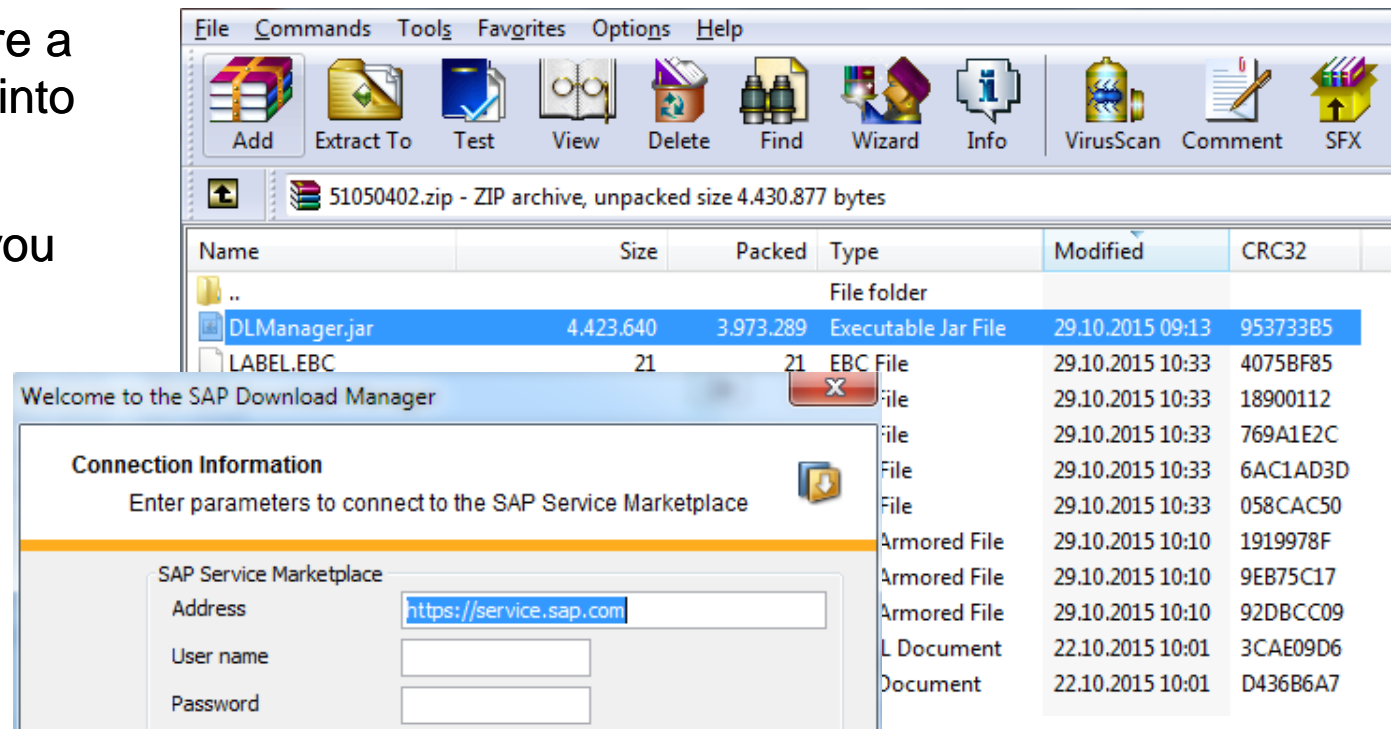
These vulnerabilities can potentially be abused by an attacker to launch man-in-the-middle attacks. Attackers thus could tamper with the content of software downloads and submit malware of their own while the administrator assumes to get software from SAP.

Employees who are using the SAP Download Managers should deinstall the existing version and get the new version from <https://support.sap.com/software/download-manager.html>

This is a executable jar-file which does not require a special installation procedure – you simply put it into any folder:

The most visible change (among others) is that you **connect to the Service Marketplace via an SSL encrypted channel** and **that you cannot store the password anymore (no SSO available)**:

In addition users can validate the digital signatures of downloads as described in note 2178665.



Note 2108479 - Missing authorization check in FI-GL-GL-G

Relevant for application New General Ledger Accounting

**Report FAGL_YEC_POSTINGS_EHP4 = transaction FAGL_<country>_02
gets new authorization checks**

for F_BKPF_BUK activities 03 and 10

and

for F_BKPF_BLA activity 10

and

**via BAdI FAGL_AUTHORITY_CHECK (optional)
respective for authorization object F_FAGL_LDR activities 03 and 01.**

An error message stops the report for the first missing authorization check.

(In classic General Ledger Accounting report RFSUMB00 is used which is not touched by this note.)



November 2015

Topics November 2015



ONAPSIS Advisories 2015 up to 044 about SAP HANA (TrexNet)

Security Fixes to Vulnerabilities Reported in SNOTE Application

Note 2233617 - Security Vulnerabilities in SAP Download Manager

Note 2197428 - Potential remote code execution in HANA

Note 2197100 - OS injection through call of function module by SM37

Note 1611408 - Missing authorization check in SD-SLS

Delta-mode vs. full calculation in System Recommendations

ONAPSIS Advisories 2015 about SAP HANA (TrexNet)

The solutions are available with several notes:

Older notes [2140700](#) [2153765](#) [2153892](#) [2153898](#)

Note [2148854](#) - Potential information disclosure relating to server information, July 2015

Solution: (SPS 8 is not affected), revision 97 for SPS 9, or SPS 10

Note [2165583](#) - SAP HANA secure configuration of internal communication, August 2015

Release independent solution according to manual instruction, see note [2183363](#), too

Note [2175928](#) - Potential remote termination in SAP HANA text engine, August 2015

Solution: revision 85.05 for SPS 8, revision 95 for SPS 9, or SPS 10

Note [2197397](#) - Potential remote code execution in SAP HANA XS, September 2015

Solution: revision 85.05 for SPS 8, or revision 92 for SPS 9, (SPS 10 is not affected)



Note [2197428](#) - Potential remote code execution in HANA, October 2015

Solution: no fix for SPS 8, revision 97.03 for SPS 9, or revision 102.01 for SPS 10

Note 2165583 / 2183363 – Secure Configuration of SAP HANA internal network

The EarlyWatch Alert checks for the SAP HANA Network Settings for Internal Services since mid of 2015 (see EWA note 863362):

10.1.5 SAP HANA Network Settings for Internal Services

Rating	File Name	Layer	Section	Key	Current Value
	global.ini	SYSTEM	communication	listeninterface	.global
	global.ini	DEFAULT	internal_hostname_resolution		

Your system internal network configuration is not secured against unauthorized access. Immediate action is required.

Recommendation: Follow the instructions in the [SAP Note 2183363](#).

10.1.6 SAP HANA SSFS Master Encryption Key

The parameter `ssfs_key_file_path` is not set in the section `[cryptography]` of the `global.ini` file. Most likely your SSFS Master Encryption Key has not been changed from its default value.

Recommendation: Change your SSFS Master Encryption Key as described in [SAP Security Note 2183624](#) and [SAP HANA Administration Guide, Section 'Change the SSFS Master Key'](#).

Note [2165583](#) / [2183363](#) – Secure Configuration of SAP HANA internal network

The EarlyWatch Alert checks for the SAP HANA Network Settings for Internal Services since mid of 2015 (see EWA note [863362](#)):

The settings for the internal network must be configured in accordance with SAP Note [2183363](#) for systems on one or several hosts. The check checks for obvious violations against these recommendations.

The parameter `listeninterface` in the section `[communication]` must have neither the value `.global` nor the value `.all`. If `listeninterface` has the value `.internal`, in the section `[internal_host_resolution]`, no IP addresses must be maintained that can be reached externally.

The check is carried out by comparing against the values of `net_publicname` in the view `M_HOST_INFORMATION`.

The check triggers EWA alert 21 “SAP HANA Internal Network Configuration is insecure” (red rating), respective 22 “SAP HANA Internal Network Configuration may lead to future security risks” (yellow rating).

Note 2197428 - Potential remote code execution in HANA

Fixing the issue requires to upgrade at least to revision 97.03 or 102.1 or higher.

However, in the interim time, the risk can be mitigated by the following measures:

- **If possible, block direct user access to the HANA system on the network layer**, e.g. by appropriate firewall configuration.
 - This especially is normally possible for scenarios in which only indirect access to the HANA system is required e.g. via Business Suite or NetWeaver Gateway.
 - To our knowledge, attackers who want to exploit the corresponding vulnerabilities, require direct access to the SAP HANA system, which can be blocked if users need only indirect access via NetWeaver Work Processes (e.g. Business Suite or BW) or via NetWeaver Gateway.
- **Actively monitor and respond to HANA dumps.**
 - Attackers are likely to try several attempts which may lead to dumps and thus allow to get alerted on such activities.
- **Configure, actively monitor and respond to suspicious activities recorded in the HANA Audit Trail.**
 - Unexpected or malicious activities can be discovered and suitable countermeasures can be taken, if the HANA Audit Trail (best practice) is set-up and monitored properly.

Security Fixes to Vulnerabilities Reported in SNOTE Application

Customers are advised to implement these notes immediately.

Note [2235513](#) - External RFC callback to customer systems in SNOTE

Note [2235514](#) - Standard RFC destination for note download can be overridden
Table `CWBRFCUSR` is not used in customer systems anymore

Note [2235515](#) - Insufficient logging in SNOTE

These corrections are in the same SP per release:

700 SP 33	701 SP 18	702 SP 18	710 SP 21	
711 SP 16	730 SP 15	731 SP 18	740 SP 14	750 SP 2

Re-run of SysRec background job necessary because validity of correction instructions was updated.

For obvious reasons: No testing in test systems or production systems necessary.

Note 2233617 - Security Vulnerabilities in SAP Download Manager

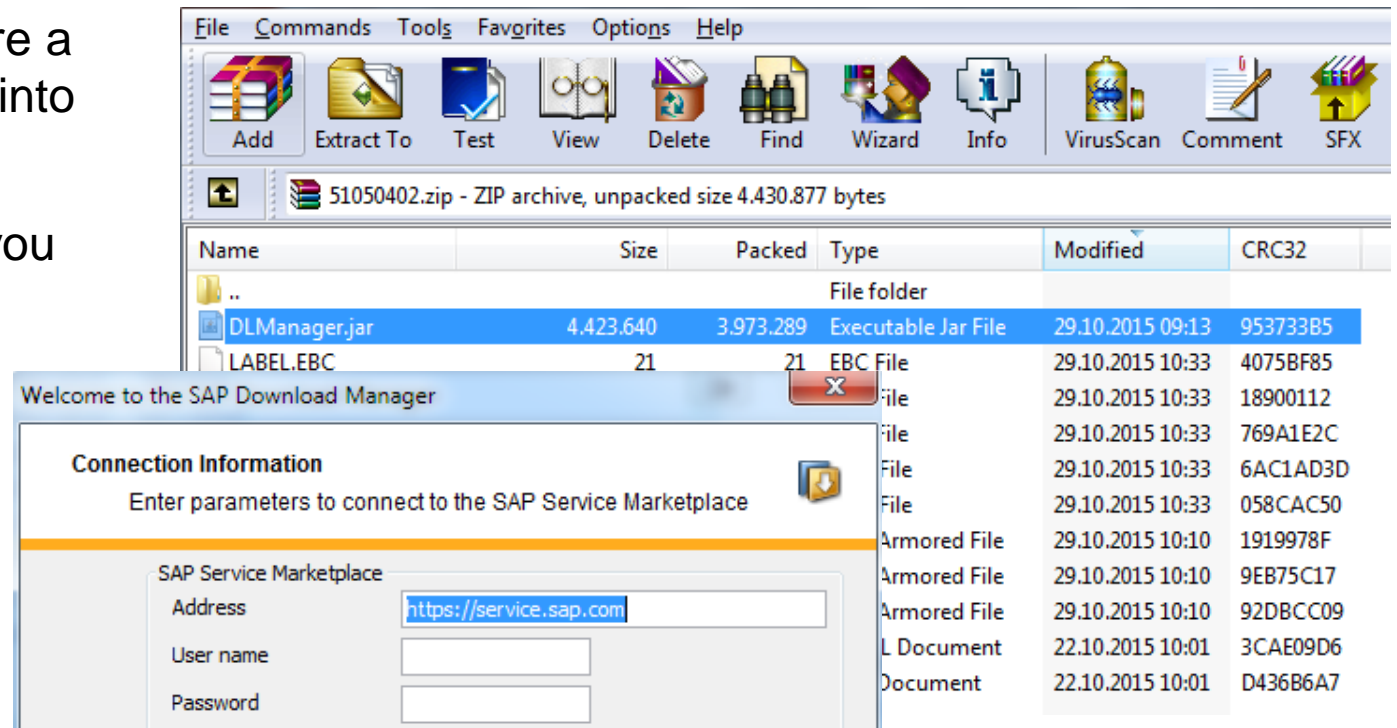
These vulnerabilities can potentially be abused by an attacker to launch man-in-the-middle attacks. Attackers thus could tamper with the content of software downloads and submit malware of their own while the administrator assumes to get software from SAP.

Employees who are using the SAP Download Managers should deinstall the existing version and get the new version from <https://support.sap.com/software/download-manager.html>

This is a executable jar-file which does not require a special installation procedure – you simply put it into any folder:

The most visible change (among others) is that you **connect to the Service Marketplace via an SSL encrypted channel and that you cannot store the password anymore (no SSO available)**:

In addition users can validate the digital signatures of downloads as described in note 2178665.



Note 2197100 - OS injection through call of function by SE37

Should you implement this note (see note 2039075) as described?

Is this function the only one which executes OS commands?

Is this function much more dangerous than the other multiple 100.000 function modules and class methods?

Think big: “No development activities or low level test tools in production systems”

- Strictly control access to SE37 and to authorizations for S_DEVELOP for object type FUGR and activity 16 = execute (and all change activities)
- Strictly control access to SE24 and to authorizations for S_DEVELOP for object type CLAS and activity 16 = execute (and all change activities)
- Control access to authorization object S_C_FUNCT and function name SYSTEM
- Try to control access to authorization object S_DATASET (but that's a quite different story)

Note 1611408 - Missing authorization check in SD-SLS

SysRec showed the note as false-positive in release ECC SAP_APPL 606.

Old version 1 was relevant for this release.

Current version 2 is not relevant for this release anymore but SysRec still showed the note if it was on the list with version 1.

SAP triggered re-calculation in the SAP backbone on 15.10.2015.

This note and other similar notes should have vanished after the next run of the background job.

Delta-mode vs. full calculation in System Recommendations

Usually System Recommendations runs in delta-mode and checks new notes since previous run of the job only:

If necessary SAP triggers a full calculation on the SAP backbone which replaces all data:

See application log, transaction `SLG1` for log object `AGS_SR`

Example for the log of a daily job:

Type	Message Text
■	Start the automatic check for technical system XS2-ABAP on 14.10.2015 23:02:38 CET
■	Read RFC destination SM_XS2CLNT000_READ is used for technical system XS2-ABAP
■	Notes from 20151013 to 20151014 are calculated for technical system XS2-ABAP
■	End the automatic check for technical system XS2-ABAP on 14.10.2015 23:03:06 CET

Type	Message Text
■	Start the automatic check for technical system XS2-ABAP on 15.10.2015 15:21:03 CET
■	Read RFC destination SM_XS2CLNT000_READ is used for technical system XS2-ABAP
■	XS2-ABAP: reupdate security notes and hotnews for2015
■	XS2-ABAP: reupdate security notes and hotnews for2014
■	XS2-ABAP: SAP Note 0002064610 is obsolete according to the calculation
■	XS2-ABAP: reupdate security notes and hotnews for2013
■	XS2-ABAP: reupdate security notes and hotnews for2012
■	XS2-ABAP: reupdate security notes and hotnews for2011
■	XS2-ABAP: reupdate security notes and hotnews for2010
■	XS2-ABAP: reupdate security notes and hotnews for2009
■	Notes from 20151014 to 20151015 are calculated for technical system XS2-ABAP
■	End the automatic check for technical system XS2-ABAP on 15.10.2015 15:22:07 CET



October 2015

Topics October 2015



Note 1677810 - Unauthorized modification in ITS-Service in IS-U-WA

Note 2189853 - SAP Internet Communication Framework fails to validate HTTP_WHITELIST

Note 2103389 - Missing authorization check in BC-VMC

Example for very old note having manual instructions:

Note 1445998 - Disabling invoker servlet

Note 2192982 - Potential information disclosure relating to TLS 1.1/1.2

Note 2080378 - Transaction STRFCTRACE: Evaluation of RFC statistic records

Note 1677810 - Unauthorized modification in ITS-Service in IS-U-WA

- **Note about security vulnerability in a web interface of an Industry Solution**
- **Solution published via Support Package in March 2012**
 - The related note refer to Kernel Patches from 2010 and 2011
- **Update in September 2015 to tell that the repair report which you get via the note has to be executed (if you do not use the Support Package)**
 - Only necessary in development system because the correction will be added to a transport
 - Do not use the XPRA tip at all (I guess it will not work for this note anyway)
- **If you never have installed a Support Package since 3 years, you have many more security risks than this one**
- **Conclusion: Nothing to do now – except to check if you regularly run Support Package upgrades**

Note 2189853 - SAP Internet Communication Framework fails to validate HTTP_WHITELIST

“Attention: Before applying the correction make sure that the configuration of table HTTP_WHITELIST in the target clients other than client "000" meets your requirements!”

- Check entries in client 000 using SE16(*) and decide which you have to move to the productive client(s).
- Keep in mind that public services from node default_host/sap/public stay in client 000 !

Note 853878 - HTTP WhiteList Check (Introduction to the topic)

WebDynpro ABAP - Security Risk List

https://help.sap.com/saphelp_nw70ehp2/helpdata/en/48/69f794e8a607d6e10000000a42189c/content.htm

NWBC - 7.9.2 Defining Whitelist in HTTP_WHITELIST in ABAP Back-End

http://help.sap.com/saphelp_nw70ehp3/helpdata/EN/ee/984daaa3834eeaa77d5edb822570f6/content.htm

(*) SM30 does not work for tables containing string fields. Instead of SE16 you can use report RS_HTTP_WHITELIST as of release 7.31.

Note 2189853 - SAP Internet Communication Framework fails to validate HTTP_WHITELIST

Related notes:

- Note 2032237 - Using CHECK_HTTP_WHITELIST for server-relative URLs
- Note 2193214 - Potential false redirection of Web site content in SAP Internet Communication Framework
- Note 2223891 - How to configure HTTP_WHITELIST table for public services

Available entry types:

- 01 Portal CSS Theme URL
- 02 sap-exiturl
- 03 NWBC (*open a ticket if you need this for release <= 7.02*)
- 10 Web Dynpro Resume URL
- 20 Redirect URL for /sap/public/myssocontl (Note 612670)
- 21 Redirect URL for /sap/public/bc/icf/logoff (Note 1509851)

Table HTTP_WHITELIST Insert	
Reset	
MANDT	<input type="text" value="001"/>
ENTRY TYPE	<input type="text"/>
SORT KEY	<input type="text"/>
PROTOCOL	<input type="text"/>
HOST	<input type="text"/>
PORT	<input type="text"/>
URL	<input type="text"/>

Note 2103389 - Missing authorization check in BC-VMC

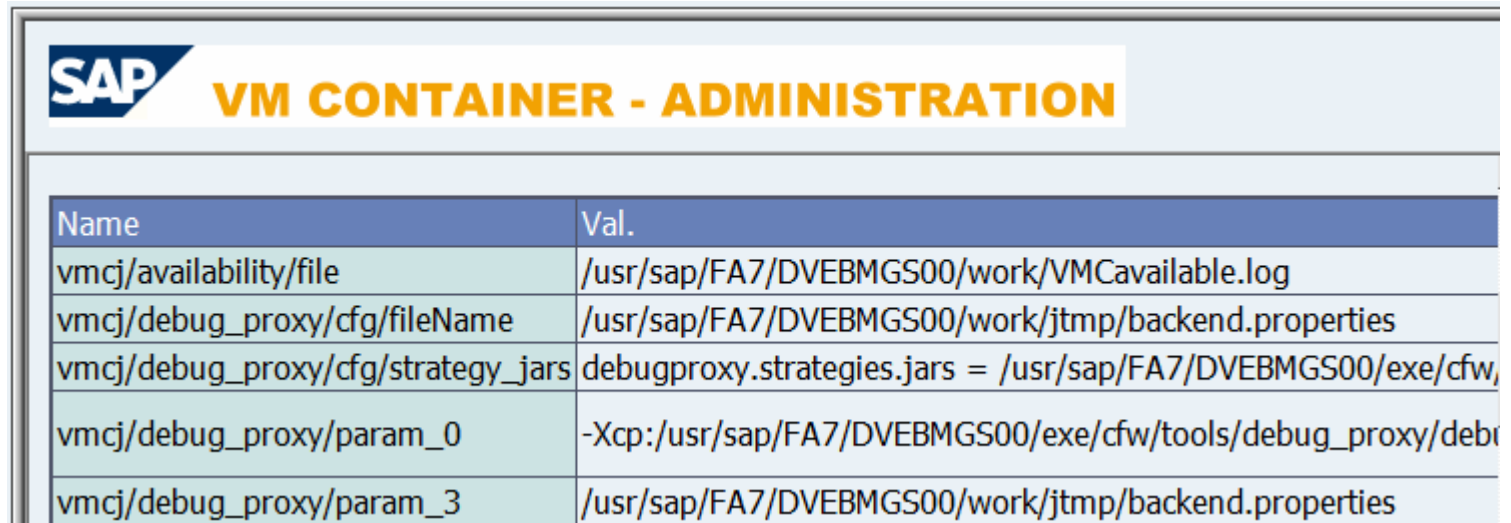
Solution:

- Kernel patch as of release 7.21
- Set profile parameter `vmcj/property/Admin_Security_Active = on`

The profile parameter is not documented in transaction RZ11

Transaction SM53 would show it:

The authorization check gets added on the Java part of that transaction.



Name	Val.
vmcj/availability/file	/usr/sap/FA7/DVEBMGS00/work/VMCavailable.log
vmcj/debug_proxy/cfg/fileName	/usr/sap/FA7/DVEBMGS00/work/jtmp/backend.properties
vmcj/debug_proxy/cfg/strategy_jars	debugproxy.strategies.jars = /usr/sap/FA7/DVEBMGS00/exe/cfw,
vmcj/debug_proxy/param_0	-Xcp:/usr/sap/FA7/DVEBMGS00/exe/cfw/tools/debug_proxy/debr
vmcj/debug_proxy/param_3	/usr/sap/FA7/DVEBMGS00/work/jtmp/backend.properties

Example for very old note having manual instructions: Note 1445998 - Disabling invoker servlet

HotNews from 2010 – Is it still valid?

Good news: The Invoker Servlet has been disabled by default as of release 7.20.

But: In case of older systems you have to disable the vulnerable feature manually by changing the value of `EnableInvokerServletGlobally` property of `servlet_jsp` service on the server nodes to `false`.

Open questions:

- **How to ensure security in old systems?**
- **How to identify old security notes which are still relevant?**
- **How to identify manual configuration steps in general?**

Note 2192982 - Potential information disclosure relating to TLS 1.1/1.2

Solution:

“To fix the vulnerability of CommonCryptoLib version 8.4.38, install CommonCryptoLib version 8.4.39 or later. CommonCryptoLib versions 8.4.37 or previous are not affected.”

Comments:

Only a single version of the CommonCryptoLib is affected.

The application System Recommendations cannot show this note because the CommonCryptoLib is not known in LMDB/SLD.

Note 2080378 - Transaction STRFCTRACE

Evaluation of RFC statistic records

Do you know the Blog [How to get RFC call traces to build authorizations for S_RFC for free!](#)

with the report ZRFC_STATRECS_SUMMARY ?

Now you can use the standard transaction



STRFCTRACE

**if you have SAP_BASIS 700 SP 32, 701 SP 17,
702 SP 17, 730 SP 13, 731 SP 15, or 740 SP 10
and Kernel 721 patch 411**

The system checks whether the start authorization check for the RFC function module was recorded using the authorization trace (transaction STUSOBTRACE).

See SAP Note [1847663](#).

Evaluate RFC Statistics Records

Selection for Calling System (Remote System)

Caller SID

User Name of Caller

Selection for Called System (Local System)

User Name

Function Module

Function Group

Options

Display Authorizations of User

Display Server

Display Authorization Trace (STUSOBTRACE)

Note 2080378 - Transaction STRFCTRACE

Evaluation of RFC statistic records

Remote RFC client calls local RFC function module

Called System SID:FBT Client:200 (Local Server)
Profile Parameter auth/rfc_authority_check=1

Caller...	Caller...	User (Caller)	Caller Destination	User (Executing)	User Type	Called RFC Function Module	Function Group (Called Function)	Functi...	Group	In...	Information	# Calls
			ldcifbt_F	SMD_RFC_TEST	B System	FM_DIAGLS_GET_TECH_SYST	FG_DIAGLS_LANDSCAPE	<input type="checkbox"/>	<input type="checkbox"/>		Generic Authoriz...	103
			ldcifbt_F	SMD_RFC_TEST	B System	FM_DIAGLS_GET_TECH_SYST_F_I...	FG_DIAGLS_LANDSCAPE	<input type="checkbox"/>	<input type="checkbox"/>		Generic Authoriz...	16
			ldcifbt_F	SMD_RFC_TEST	B System	FM_GET_ISEMS	FG_DIAGSTP_WILY	<input type="checkbox"/>	<input type="checkbox"/>		Generic Authoriz...	2
			ldcifbt_F	SMD_RFC_TEST	B System	RFC_GET_FUNCTION_INTERFACE	RFC1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			3
			ldcifbt_F	SMD_RFC_TEST	B System	SYSTEM_RESET_RFC_SERVER	SYSU	<input type="checkbox"/>	<input checked="" type="checkbox"/>			354
			ldcifbt_FBT_00	SMD_RFC_TEST	B System	RFCPING	SYST	<input type="checkbox"/>	<input checked="" type="checkbox"/>			1
		SAPJSF	UMEBackendConnection	SAPJSF	B System	BAPI_USER_EXISTENCE_CHECK	SU_USER	<input type="checkbox"/>	<input checked="" type="checkbox"/>			75
		SAPJSF	UMEBackendConnection	SAPJSF	B System	BAPI_USER_GET_DETAIL	SU_USER	<input type="checkbox"/>	<input checked="" type="checkbox"/>			75
		SAPJSF	UMEBackendConnection	SAPJSF	B System	PRGN_J2EE_USER_GET_ROLENAM...	PRGN_J2EE	<input type="checkbox"/>	<input checked="" type="checkbox"/>			50
		SAPJSF	UMEBackendConnection	SAPJSF	B System	RFCPING	SYST	<input type="checkbox"/>	<input checked="" type="checkbox"/>			3
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	RFCPING	SYST	<input type="checkbox"/>	<input checked="" type="checkbox"/>			25
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	RFC_READ_TABLE	SDTX	<input type="checkbox"/>	<input checked="" type="checkbox"/>			13
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	RFC_SYSTEM_INFO	SRFC	<input type="checkbox"/>	<input type="checkbox"/>		No Check (SRFC)	8
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	SUSR_GENERATE_PASSWORD	SUSO	<input type="checkbox"/>	<input checked="" type="checkbox"/>			2
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	/SDF/RFC_READ_R3_DESTINATION	/SDF/COMUSER_UPDATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Generic Authoriz...	1
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	FUNCTION_EXISTS	SUNI	<input type="checkbox"/>	<input checked="" type="checkbox"/>			1
CTR	001	D007157	0050569B02731ED58DA...	SM_ADMIN_CTR	B System	RFCPING	SYST	<input type="checkbox"/>	<input checked="" type="checkbox"/>			1
CTR	001	D007157	0050569B02731ED58DA...	AGS_SM_SETUP	S Service	RFCPING	SYST	<input type="checkbox"/>	<input type="checkbox"/>		Full Authorization	1
CTR	001	D007157	0050569B02731ED58DA...	AGS_SM_SETUP	S Service	SUSR_LOGIN_CHECK_RFC	SUSO	<input type="checkbox"/>	<input type="checkbox"/>		Full Authorization	1
CTR	001	D007157	0050569B02731ED58DA...	AGS_SM_SETUP	S Service	/SDF/DELETE_USER_ROLES	/SDF/COMUSER_UPDATE	<input type="checkbox"/>	<input type="checkbox"/>		Full Authorization	1



August 2015

Topics August 2015



Some words about System Recommendations

SAP Note Enhancer

Note [1611408](#) - Missing authorization check in SD-SLS

Note [1922205](#) - Authorization default value in component BC-XI-IS-WKB

Note [1952092](#) - Code injection vulnerability in IDES systems

Note [2179384](#) - Traffic control: Wrong request transfer rate calculation

Note [2182842](#) - Potential information disclosure relating to SAP Customizing

SAP Security Notes Advisory by SAP Consulting

Note [1830797](#) - Missing authorization check in BC-MID-ICF

Note [2174357](#) - Reflected File Download Vulnerability in KM Documents Servlet

Some words about System Recommendations

Q: Can I use SysRec to find all missing notes?

Frank: Yes, if you just use ABAP, Java and HANA but for other types of systems you still have to check the Support Portal at <https://support.sap.com/securitynotes>

Q: Can I use SysRec to create worklists for IT basis to implement notes?

Frank: Well, you can use the status field and the integration with ChaRM, but that does not replace some more sophisticated worklist management. Therefore I would use the Excel export as a starting point. (But stay tuned for next version of SolMan.)

Q: Can I use SysRec to verify if notes have been implemented in production?

Frank: Partially, it works fine for notes having exact patch information like ABAP notes having automatic correction instructions, or Kernel or Java or HANA patches but not for other notes.

Q: Can I use SysRec to verify service level agreements about the speed on notes implementation?

Frank: Not without some manual activities

Some words about System Recommendations

Q: Which worklists should I feed with notes?

Frank: Use a bunch of them, e.g. the following:

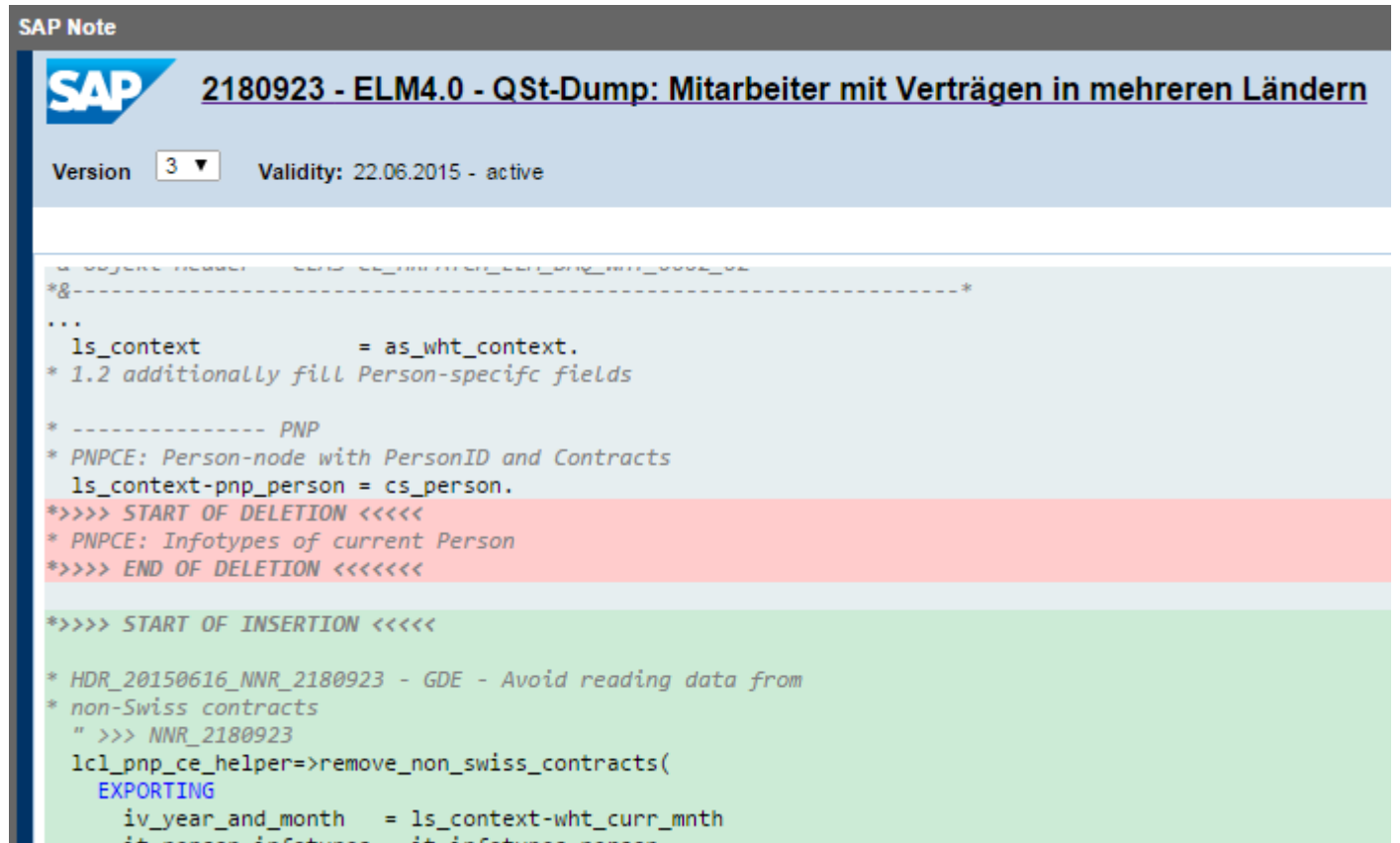
1. ABAP Notes having automatic correction instructions which should reach productions as fast as possible using a separate security patch transport
2. ABAP Notes having correction instructions which should reach productions as part of your normal transport cycle
3. ABAP Notes which require extensive testing because of potential influence to business
4. ABAP Notes which require update of roles first, i.e. notes about SACF
5. Notes which describe postponed security optimization activities which you can do during next maintenance activity
6. Kernel notes just for information as there is a scheduled update of the Kernel anyway (same for Java or HANA)
7. Special project 'Directory Traversal' to collect notes which you may implement and configure later
8. Notes which you can ignore and for which you want to document this decision
9. Selected critical notes for which audit should get reports after some time, that production is safe

SAP Note Enhancer

This Google Chrome extension enhances the visualization of correction instructions of notes when viewed in the SAP Marketplace.

The ABAP portions of the correction instructions are highlighted and the background of insertions and deletions are shown in different colors.

This makes it easier to understand the involved code changes.



The screenshot shows the SAP Note interface for note 2180923. The title is "2180923 - ELM4.0 - QSt-Dump: Mitarbeiter mit Verträgen in mehreren Ländern". The version is 3 and it is active as of 22.06.2015. The code is displayed with several corrections highlighted in different colors: a red background for a deletion and a green background for an insertion. The code includes comments and function calls like `remove_non_swiss_contracts`.

```
SAP Note
2180923 - ELM4.0 - QSt-Dump: Mitarbeiter mit Verträgen in mehreren Ländern
Version 3 Validity: 22.06.2015 - active

* &-----*
...
ls_context          = as_wht_context.
* 1.2 additionally fill Person-specific fields
* ----- PNP
* PNPCE: Person-node with PersonID and Contracts
ls_context-pnp_person = cs_person.
*>>>> START OF DELETION <<<<<
* PNPCE: Infotypes of current Person
*>>>> END OF DELETION <<<<<<

*>>>> START OF INSERTION <<<<<
* HDR_20150616_NNR_2180923 - GDE - Avoid reading data from
* non-Swiss contracts
" >>> NNR_2180923
lcl_pnp_ce_helper=>remove_non_swiss_contracts(
EXPORTING
  iv_year_and_month = ls_context-wht_curr_mnth
  it_person_infotypes = it_infotypes_person
```

<https://scn.sap.com/community/abap/blog/2015/06/28/chrome-extension-to-highlight-abap-correction-instructions-in-sap-notes>

<https://chrome.google.com/webstore/detail/sap-note-enhancer/keibkcomemkcceddcdjdlnacidohgedk>

Note 1611408 - Missing authorization check in SD-SLS

Deletion of obsolete but critical parameter transactions OVRC, OVRE

Valid for Software Component `SAP_APPL`

Release 311 Until SAPKH31IB8
Release 40B Until SAPKH40B88
Release 45B Until SAPKH45B66
Release 46B Until SAPKH46B61
Release 46C Until SAPKH46C62
Release 470 Until SAPKH47036
Release 500 SAPKH50001 - SAPKH50025
Release 600 SAPKH60001 - SAPKH60020
Release 602 Until SAPKH60209
Release 603 Until SAPKH60308
Release 604 SAPKH60401 - SAPKH60409
Release 605 Until SAPKH60505
~~Release 606 From SAPKH60601~~

The note was re-released because the false assignment for release 606 was deleted

→ Very old note, no need to care about it anymore

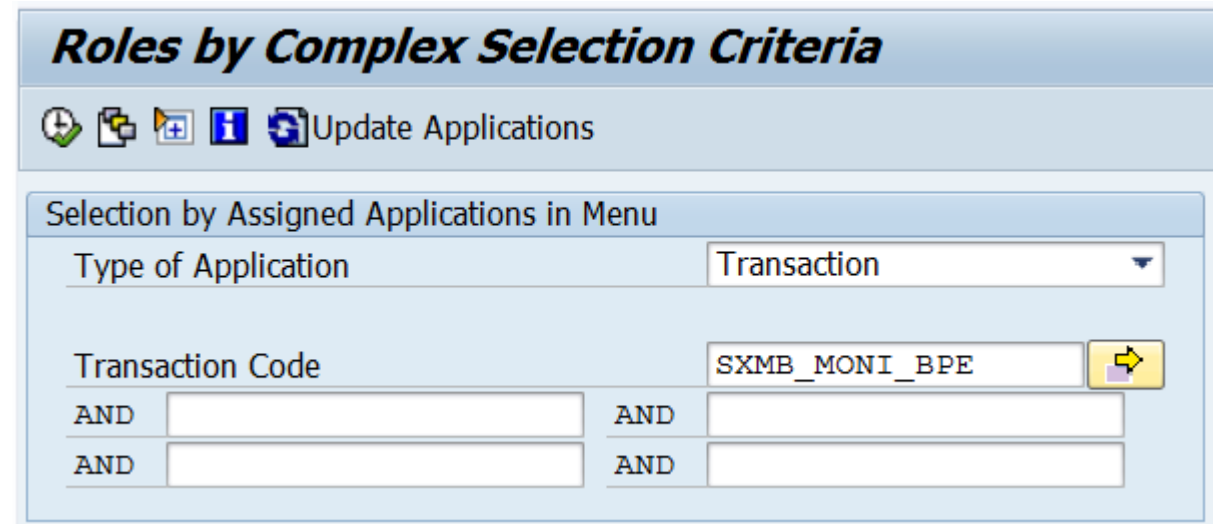
Note 1922205 - Authorization default value in BC-XI-IS-WKB

Correction of authorization proposals for transaction SXMB_MONI_BPE .

If you don't apply the note but upgrade the Support Package you get the new authorization proposals only into the SAP tables (transaction SU22 only but not SU24).

Changing authorization proposals has only an effect if you re-generate standard authorization values in roles via PFCG. You can search for such roles having transaction SXMB_MONI_BPE in the role menu using transaction SUIM:

The only change is that you get S_TCODE authorizations for transaction SU01D instead of SU01 but both still require additional authorizations for S_USER_GRP which are not part of the authorization proposals.



The screenshot shows the 'Roles by Complex Selection Criteria' dialog box in SAP. It features a toolbar with icons for back, forward, search, and help, along with an 'Update Applications' button. The main section is titled 'Selection by Assigned Applications in Menu' and contains the following fields:

- 'Type of Application' dropdown menu set to 'Transaction'.
- 'Transaction Code' text input field containing 'SXMB_MONI_BPE'.
- Two rows of 'AND' logical connectors followed by empty text input fields for additional criteria.

Note 1952092 - Code injection vulnerability in IDES systems

Only relevant for IDES Demo Systems.

The correction deletes report ZVUJLOG0, however, there are many hundreds of other Z-reports in an IDES Demo Systems.

Did you ever have applied security patches or other security controls to such systems?

Depending on the answer, you know what to do with this note.

General rule for Demo Systems: No connections in SM59 from/to productive systems

Note 2179384 - Traffic control: Wrong request transfer rate calculation

J. G.: Hallo Herr Buchholz, beim letzten Webinar im April hatten wir über den Hinweis 1981955 - "Minimale Datenübertragungsraten für Anfragen in SAP Web Dispatcher und ICM erzwingen" gesprochen. Anfang Juni habe ich vom AGS die Aussage, dass die Implementierung seit ihrer Auslieferung fehlerhaft ist. Die Übertragungsrate wird nicht korrekt ermittelt und somit werden die meisten Verbindungen mit "Traffic control condition" (im dev_icm) abgeblockt. Der Hinweis ist immer noch verfügbar und noch nicht aktualisiert.

Updated correction for

Note 1981955 - Enforcing minimal request transfer rates in SAP Web Dispatcher and ICM

SAP KERNEL

7.21 patch 523

7.22 patch 10

7.42 patch 210

7.43 patch 26

7.44 patch 14

7.45 patch 3

Note 2182842 - Potential information disclosure relating to SAP Customizing

Security Note 2182842 refers to normal note 1859065 which undo's the critical change made by note 1814956.

If you haven't implements note 1814956 you need note 1859065 only in SAP_BASIS release 731 SP 8 and 740 SP 3 because both notes are part of the same SP in other releases:

Support Package assignments:

Note 1814956

700 SAPKB70029
701 SAPKB70114
702 SAPKB70214
710 SAPKB71017
711 SAPKB71112
720 SAPKB72008
730 SAPKB73010
731 SAPKB73108
740 SAPKB74003

Note 1859065

700 SAPKB70029
701 SAPKB70114
702 SAPKB70214
710 SAPKB71017
711 SAPKB71112
720 SAPKB72008
730 SAPKB73010
731 SAPKB73109 → SP 8 is affected
740 SAPKB74004 → SP 3 is affected

SAP Security Notes Advisory by SAP Consulting

When publishing Security Notes on <https://support.sap.com/securitynotes>, SAP also publishes a prioritization. This prioritization is based on certain criteria from a development / product point of view, also incorporating CVSS scores where applicable.

With the **SAP Security Notes Advisory**, SAP Global Service & Support offers an additional prioritization.

This prioritization is no contradiction to the original priorities given by the SAP product development. It supplements these priorities with a field view, adding experiences from both practical security and implementation of SAP applications and operation of systems by SAP Global Service & Support. The Advisory also gives hints on side-effects to expect and recommends an implementation approach for the Security Notes published each month.

Important note: This service is delivered by the SAP Consulting (part of SAP Global Service & Support). Please address any questions about this Advisory to security.consulting@sap.com

If you have issues with individual SAP Note implementation steps, please open a message on the component of the SAP Note.

You can find the latest version of the Advisory on SAP Support Portal /sos
<https://support.sap.com/sos>
→ Media Library → [SAP Security Notes Advisory](#)

Note 1830797 Missing authorization check in BC-MID-ICF

Authorization check for authorization object S_ICF_ADM changed in transaction SICF.

It's a functional note as just non-existing activity 04 get replaced with activity 06=delete.

You do not have to update roles as your administrators most likely have authorizations for all activities for that authorization object S_ICF_ADM anyway.

Note 2174357 - Reflected File Download Vulnerability in KM Documents Servlet

Note shows “Causes – Side Effects”:

Causes - Side Effects

Notes / Patches corrected with this note					
Note Reason	From Version	To Version	Note Solution	Version	Support Package
The table does not contain any entries					

The following SAP Notes correct this Note / Patch					
Note Reason	From Version	To Version	Note Solution	Version	Support Package
2174357	0	0	2199306	1	

Go for the Support Packages as listed in note 2199306:

KMC CONTENT MANAGEMENT 7.00 SP033 patch 0
KMC CONTENT MANAGEMENT 7.01 SP018 patch 0
KMC CONTENT MANAGEMENT 7.02 SP018 patch 0
KMC CONTENT MANAGEMENT 7.30 SP015 patch 0
KMC CONTENT MANAGEMENT 7.31 SP018 patch 0
KMC CONTENT MANAGEMENT 7.40 SP013 patch 0



July 2015

Topics July 2015



Note [2122578](#) - New: Security Audit Log event for unencrypted GUI / RFC connections

Note [2029397](#) - Missing authorization checks for RFC in E-commerce ERP applications

Note [2057982](#) - Hardcoded credentials in BC-SRV-DX-DXW

Note [2059659](#) - Hardcoded credentials in BC-CUS-TOL-CST

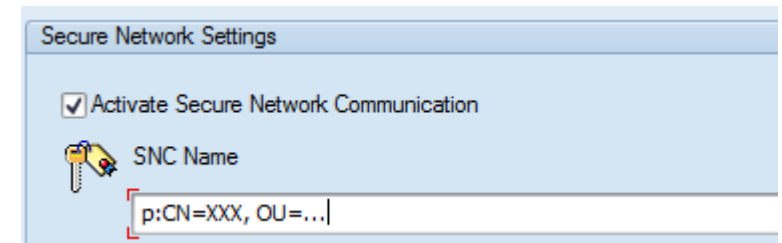
Note [2122247](#) - Data missing from table TCDOB following import of EHPs

Note 2122578 - Security Audit Log event for unencrypted GUI / RFC



Let's assume you run a staged project to encrypt all communication channels (Example: GUI):

1. Enable servers to accept encrypted communication requests
... but unencrypted communication is still allowed
(`snc/enable = 1` and `snc/accept_insecure_gui = 1`)
2. Enable clients to initiate encrypted communication requests
... but unencrypted communication is still allowed
3. After checking that all communication channels are encrypted:
Enforce servers to only accept encrypted communication requests
(`snc/enable = 1` and `snc/accept_insecure_gui = 0`)



How can you verify if all SAPGUI sessions use SNC?

Note 2122578 - Security Audit Log event for unencrypted GUI / RFC

Transaction SM04 → User → Technical Information shows the SNC status of active connections on one application server.

Show SNC status of active users

Clnt	Benutzer	SNC Cou...	Type	Version	RFC T...
000	PFEIFFERT	1	GUI	720	
000	REDWOOD	0	RFC		E
000	SAMDANI	0	Plugin HTTPS		
000	SAP_WSRT	0	RFC		I
000	SAP_WSRT	0	RFC		I
000	SEIFERTHA	0	Plugin HTTPS		
000	SEIFERTHA	9	GUI	730	
000	SIEGMUNDS	0	RFC		I
000	WF-BATCH	0	RFC		I
000	WF-BATCH	0	RFC		I
000	WOJCICKA	1	GUI	730	
000	ZABLOTSKIY	0	RFC	730	I
000	ZABLOTSKIY	4	GUI	730	

Detailed User Info

Field	Value
iaddr (gui host)	10.16.33.178
recv_count	28
send_count	30
snc_count	1
auto_logout	36000
server_plugin_protocol	DP_PLUGIN_PROTOCOL_NONE

The custom reports ZSM04000_SNC (based on SM04) and ZRSUSR000_620 (based on AL08) which you can find on SCN show an overview about the SNC status but have the same restrictions as the original transactions.

Note 2122578 - Security Audit Log event for unencrypted GUI / RFC

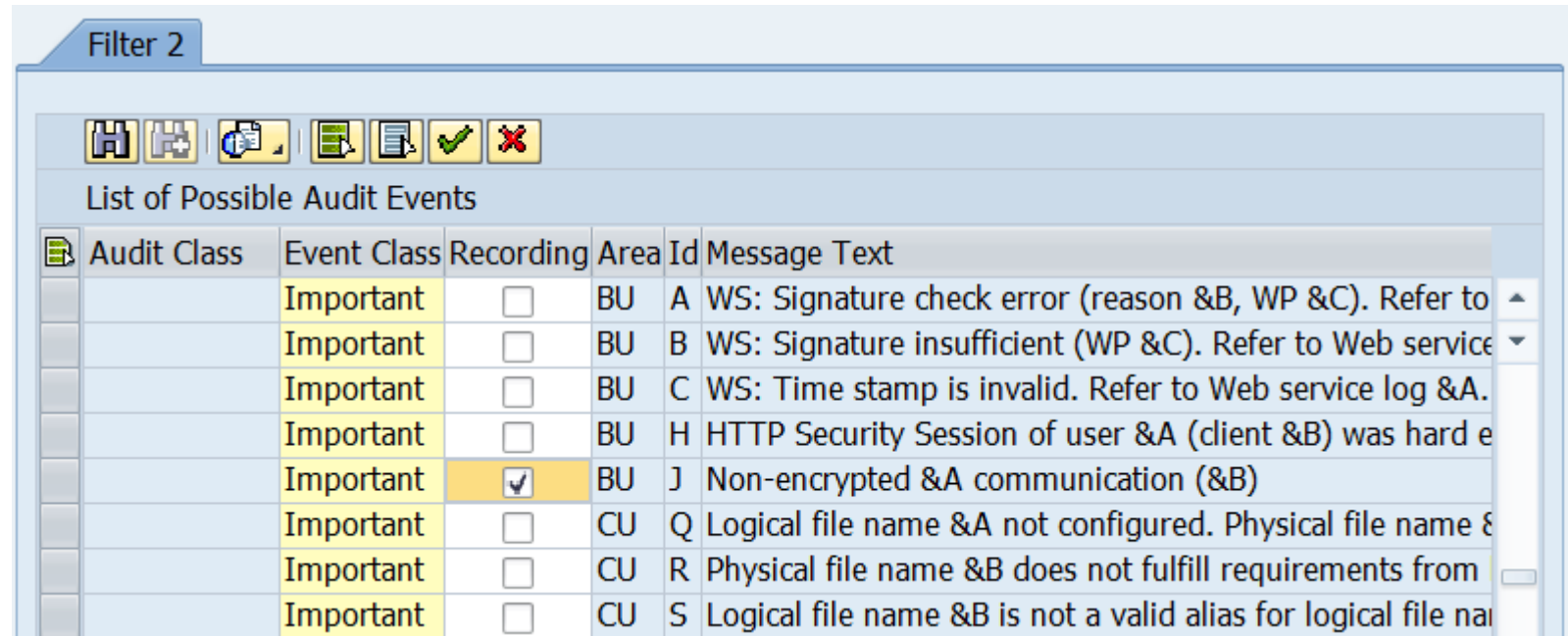
Now you can use the Security Audit Log (SM19 / SM20) to log unencrypted communication for SAPGUI and RFC.

Transaction SM19

→ ...

→ Detailed Configuration

→ Log Message BUJ



Audit Class	Event Class	Recording	Area	Id	Message Text
	Important	<input type="checkbox"/>	BU	A	WS: Signature check error (reason &B, WP &C). Refer to
	Important	<input type="checkbox"/>	BU	B	WS: Signature insufficient (WP &C). Refer to Web service
	Important	<input type="checkbox"/>	BU	C	WS: Time stamp is invalid. Refer to Web service log &A.
	Important	<input type="checkbox"/>	BU	H	HTTP Security Session of user &A (client &B) was hard e
	Important	<input checked="" type="checkbox"/>	BU	J	Non-encrypted &A communication (&B)
	Important	<input type="checkbox"/>	CU	Q	Logical file name &A not configured. Physical file name &
	Important	<input type="checkbox"/>	CU	R	Physical file name &B does not fulfill requirements from
	Important	<input type="checkbox"/>	CU	S	Logical file name &B is not a valid alias for logical file na

Prerequisite: Note 2104732 - SAL - event definition for SNC client encryption

Analysis and Recommended Settings of the Security Audit Log (SM19 / SM20)

<http://scn.sap.com/docs/DOC-60743>

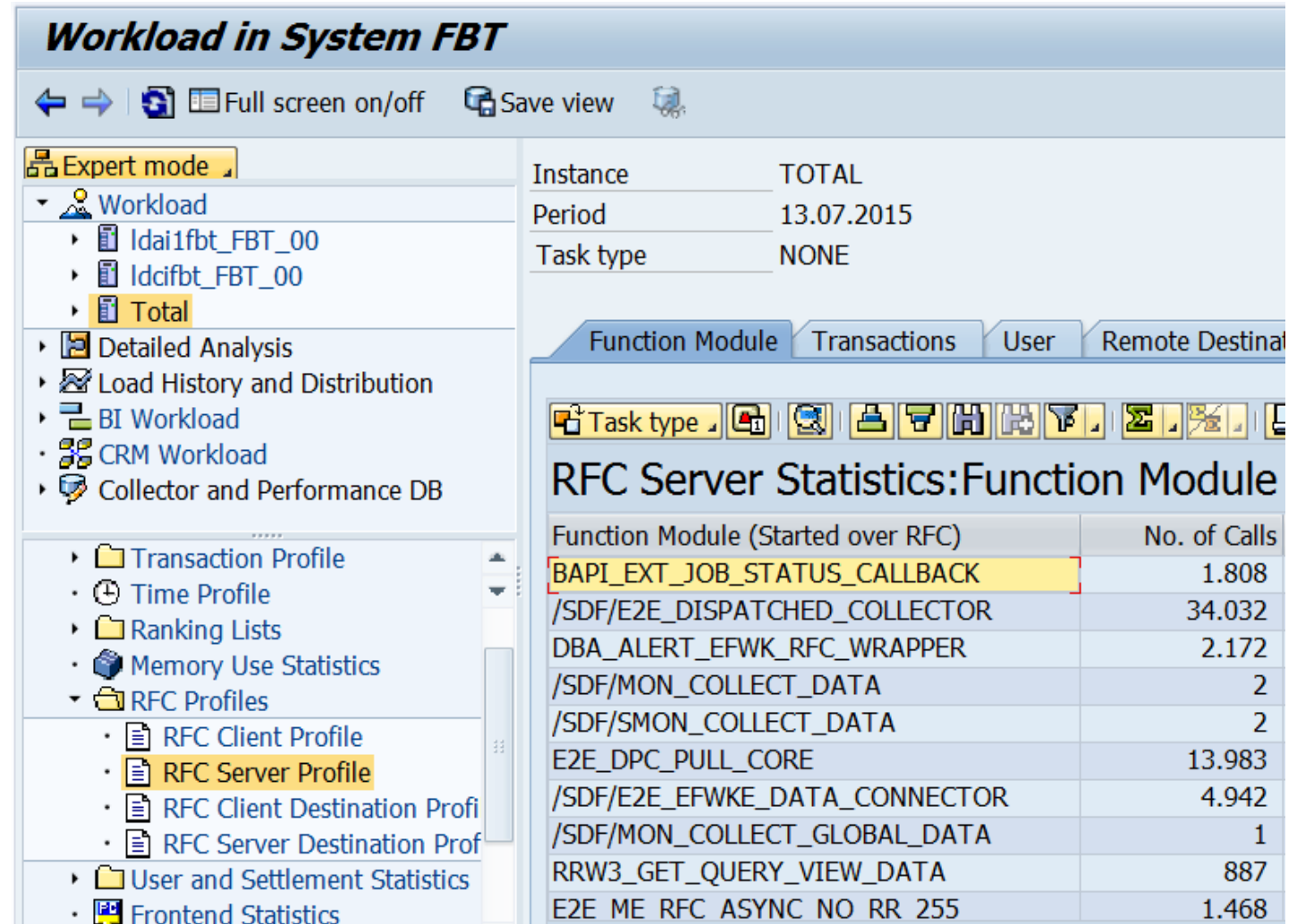
Note 2029397 - Missing authorization checks for RFC in E-commerce ERP applications

New authorization concept for remote access to E-commerce.

- Various RFC enabled functions
- Multiple authorization objects including a new one

Use Workload Statistics, transaction ST03N, or **transaction STRFTRACE** to verify if some of the listed RFC functions have been executed.

You can use UCON as well.



The screenshot displays the 'Workload in System FBT' interface. The left sidebar shows a tree view with 'Workload' expanded to 'Total'. The main area shows a table with the following data:

Instance	TOTAL
Period	13.07.2015
Task type	NONE

Below this, the 'RFC Server Statistics:Function Module' table is shown with the following data:

Function Module (Started over RFC)	No. of Calls
BAPI_EXT_JOB_STATUS_CALLBACK	1.808
/SDF/E2E_DISPATCHED_COLLECTOR	34.032
DBA_ALERT_EFWK_RFC_WRAPPER	2.172
/SDF/MON_COLLECT_DATA	2
/SDF/SMON_COLLECT_DATA	2
E2E_DPC_PULL_CORE	13.983
/SDF/E2E_EFWKE_DATA_CONNECTOR	4.942
/SDF/MON_COLLECT_GLOBAL_DATA	1
RRW3_GET_QUERY_VIEW_DATA	887
E2E ME RFC ASYNC NO RR 255	1.468

Note 2057982 - Hardcoded credentials in BC-SRV-DX-DXW

Note 2059659 - Hardcoded credentials in BC-CUS-TOL-CST

Deactivation of obsolete, unused code.

Note 2122247 - Data missing from table TCDOB and TDDAT following import of EHPs

Table TCDOB Change document object definition

Table TDDAT Assignments of tables and views to table authorization groups

Fallback: Unassigned tables and views are checked with S_TABU_DIS for group &NC&

You should use authorizations for S_TABU_NAM instead of S_TABU_DIS anyway.

Solution

Use at least SUM 1.0 SP12 Patch Level 4 or a higher SUM version.

If you are affected, change documents may be incomplete, as well as the authorization checks for generic table access. In this case, contact SAP Support directly.

Logging of table access using standard tools like SE16, SM30, SM31, SM34, SQVI:

Activate the message DU9 (of group transaction start, not critical) in the Security Audit Log.

Message: „Generic table access call to &A with activity &B (auth. check: &C)”



June 2015

Topics June 2015



Note [2183624](#) - Potential information leakage using default SSFS master key in HANA

Note [1997734](#) - Missing authorization check in Trusted-RFC runtime

Note [2144333](#) - Missing authorization check in CRM-LAM

Note [2163306](#) - Fixing FREAK vulnerability in CommonCryptoLib and SAPCRYPTOLIB

Note [2099484](#) - Missing authorization check in Payment Engine

Note [1749142](#) - How to remove unused clients including client 001 and 066

Note [2183624](#) - Potential information leakage using default SSFS master key in HANA

Spotlight-News

Last week we saw a conference talk and a few press articles related to an alleged default security configuration in SAP HANA installations.

Our recommendation is to change the default main keys that are issued with SAP HANA installations as described in SAP security note [2183624](#). This is valid as of HANA SPS 06.

The SSFS main key is used to encrypt the root encryption keys of your SAP HANA database. It is a default key that is the same for all installations unless explicitly changed. SAP therefore highly recommends that you change this key immediately after installation or after you have received SAP HANA pre-installed from a database vendor.

If the key was not changed after installation, we recommend that you perform the key change in the next available maintenance window.

For more detailed information we recommend you create a customer incident on component HAN-DB-SEC. Customers requiring consulting support in regards to their installations are welcome to contact SAP Security Consulting following SAP Note [114045](#).

Note [2183624](#) - Potential information leakage using default SSFS master key in HANA

The EarlyWatch Alert (EWA) checks if the parameter `ssfs_key_file_path` is not set in the section `[cryptography]` of the `global.ini` file. If this is the case most likely your SSFS Main Encryption Key has not been changed from its default value.

See:


Note [863362](#) - Security checks in SAP EarlyWatch Alert, EarlyWatch and GoingLive sessions

1 Service Summary









This EarlyWatch Alert session detected issues that could potentially affect your system.
Take corrective action as soon as possible.

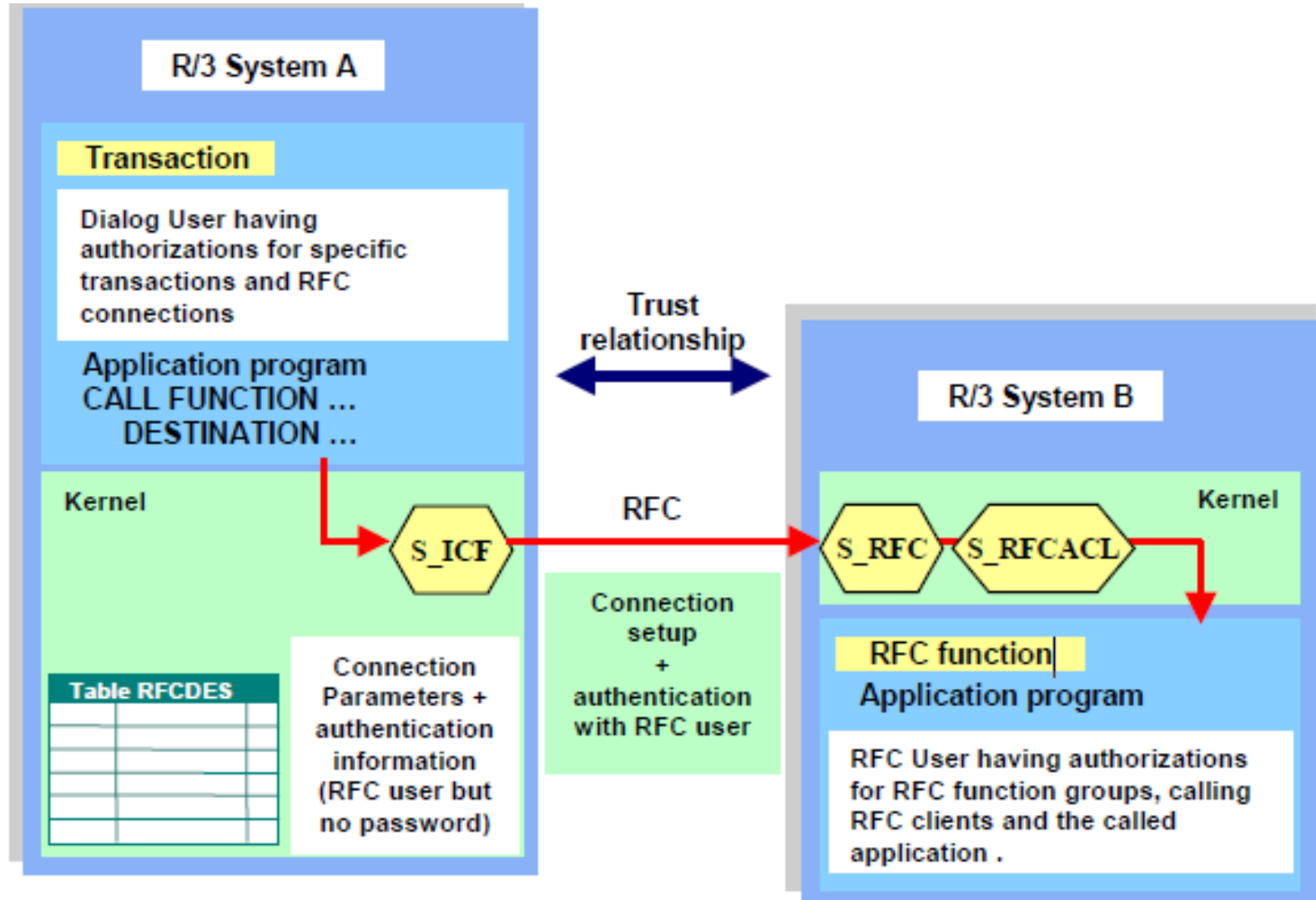
ALERT OVERVIEW

	SAP HANA SSFS Master Encryption Key is not changed
---	--

CHECK OVERVIEW

Topic Rating	Topic	Subtopic Rating	Subtopic
	Security		
			SAP HANA System Privilege DATA ADMIN
			SAP HANA Password Policy
			SAP HANA Audit Trail
			SAP HANA SQL Trace Level
			SAP HANA SSFS Master Encryption Key

Note 1997734 - Missing authorization check in Trusted-RFC runtime



Note 1997734 - Missing authorization check in Trusted-RFC runtime

There exist two working modes with Trusted-RFC:

1. Trusted-RFC with same-user

```
AUTHORITY-CHECK OBJECT 'S_RFCACL'  
  ID 'RFC_SYSID' FIELD <sysid>  
  ID 'RFC_CLIENT' FIELD <cclient>  
  ID 'RFC_USER' DUMMY  
  ID 'RFC_EQUSER' FIELD 'Y'  
  ID 'RFC_TCODE' DUMMY          "respective FIELD <tcode>  
  ID 'RFC_INFO' DUMMY          "respective FIELD <license_nr>  
  ID 'ACTVT' FIELD '16'.
```

The screenshot shows the 'Logon & Security' tab in the SAP configuration interface. Under the 'Logon Procedure' section, the 'User' field is empty, and the 'Current User' checkbox is checked. The 'Trust Relationship' is set to 'Yes'.

Field	Value
Language	
Client	100
User	
PW Status	is initial

Trust Relationship: No Yes Logon Screen

2. Trusted-RFC with dedicated user as defined in the RFC destination

```
AUTHORITY-CHECK OBJECT 'S_RFCACL'  
  ID 'RFC_SYSID' FIELD <sysid>  
  ID 'RFC_CLIENT' FIELD <cclient>  
  ID 'RFC_USER' FIELD <whoami>  
  ID 'RFC_EQUSER' FIELD 'N'    "this was not checked (dummy)  
  ID 'RFC_TCODE' DUMMY        "respective FIELD <tcode>  
  ID 'RFC_INFO' DUMMY        "respective FIELD <license_nr>  
  ID 'ACTVT' FIELD '16'.
```

The screenshot shows the 'Logon & Security' tab in the SAP configuration interface. Under the 'Logon Procedure' section, the 'User' field is set to 'REMOTEUSER', and the 'Current User' checkbox is unchecked. The 'Trust Relationship' is set to 'Yes'.

Field	Value
Language	
Client	100
User	REMOTEUSER
PW Status	is initial

Trust Relationship: No Yes Logon Screen

Note 1997734 - Missing authorization check in Trusted-RFC runtime

Authorization Field	Meaning
ACTVT	Activity 16=Execute
RFC_SYSID	Caller system id (SID) Avoid * entry!
RFC_INFO	Optional caller license number (provided both communication partners are at least 7.02 SAP_BASIS Release)
RFC_CLIENT	Caller client. Avoid * entry!
RFC_USER	Caller user. Avoid * entry for RFC_EQUSER = N
RFC_EQUSER	'Y' Same user (RFC_USER not considered) 'N' Dedicated user (RFC_USER is checked) Avoid * entry!
RFC_TCODE	Optional caller transaction code, checked if „Use transaction code“ is activated in SMT1 (Trust Configuration).

Note that due to its highly critical nature, S_RFCACL is not part of SAP_ALL.

Note 1997734 - Missing authorization check in Trusted-RFC runtime

Example: Trusted-RFC-same-User

Authorization Field	Authorization Value
ACTVT	Activity: 16=Execute
RFC_SYSID	S1P, S2P, ...
RFC_INFO	*
RFC_CLIENT	200
RFC_USER	' '
RFC_EQUUSER	Y
RFC_TCODE	*

Example: RFC-user for specific application

Authorization Field	Authorization Value
ACTVT	Activity: 16=Execute
RFC_SYSID	S1P, S2P, ...
RFC_INFO	*
RFC_CLIENT	200
RFC_USER	USER1, USER2, ...
RFC_EQUUSER	N
RFC_TCODE	*

Note 1997734 - Missing authorization check in Trusted-RFC runtime

How to find critical authorizations, profiles, roles, uses:

Use transaction **SUIM** and search for authorization values **#***

	RFC_USER - RFC User (SAP)
Value	#*
AND	

SAP_TRANSLATOR Role for Translators

Manually Cross-application Authorization Objects AAAB

- Manually Authorization Check for RFC Access S_RFC
- Manually Authorization Check for RFC User (e.g. Trusted System) S_RFCACL
- Manually Authorization Check for RFC User (e.g. Trusted System) T_TRANSLAT00
 - Activity 16
 - RFC client or domain *
 - RFC same user ID **Y**
 - RFC information *
 - System ID (for SAP and External) *
 - RFC transaction code *
 - RFC User (SAP or External) *****
- Manually Administration for RFC Destination S_RFC_ADM
- Manually Transaction Code Check at Transaction Start S_TCODE

This authorization fulfilled the check for RFC destinations having dedicated users, too.

Note 1997734 - Missing authorization check in Trusted-RFC runtime



Note 2008727 - Whitepaper: Securing Remote Function Calls
<http://scn.sap.com/docs/DOC-60424>

Check reports about RFC:

RSRFCCHK

RS_SECURITY_TRUST_RELATIONS

RS_UPDATE_TRUST_RELATIONS (see note 1491645)

Note 2144333 - Missing authorization check in CRM-LAM

The note introduces the transaction start authority check for S_TCODE for some reports which have corresponding report transactions.

Report	New authorization check for Transaction	
CRM_FS_ASSET_CREATE	CRM_FS_ASSET	Asset Handling and Depreciation
CRM_FS_CALC_CASH_FLOW	CRM_FS_CALC	Calculation of Cash Flow
CRM_FS_FRA_EXECUTE	CRM_FS_FRA	Floating Rate Adjustment
CRM_FS_INTEREST_ADJUSTMENT	CRM_FS_INTADJ	Interest Rate Adj. of Leasing Docs
CRM_FS_INTADJ_ANALYSIS_DISPLAY	CRM_FS_INTADJ_DISP	Disp. Eval. for Interest Rate Adj.
CRM_FS_TQ_MASS_RUN	CRM_FS_TQ_MASS_RUN	Mass Run for Termination Quotation
CRM_FS_MASS_CHANGE	CRMC_FS_MASS_CHANGE	Start Mass-Changes

Other security note about same topic "Report Transactions": Note 2157877, 2157877

Note 2144333 - Missing authorization check in CRM-LAM

Display Report Transaction

Transaction code: CRM_FS_ASSET

Package: CRM_PRODUCT_FS_ASSET_APPL

Transaction text: Asset Handling and Depreciation

Program: CRM_FS_ASSET_CREATE

Selection screen: 1000

Start with variant:

Authorization Object:

Example

ABAP Editor: Display Report CRM_FS_ASSET_CREATE

Report: CRM_FS_ASSET_CREATE Active

```
50
51 CALL FUNCTION 'AUTHORITY_CHECK_TCODE'
52 EXPORTING
53   TCODE = 'CRM_FS_ASSET'
54 EXCEPTIONS
55   OK      = 1
56   NOT_OK = 2
57   OTHERS = 3.
58 IF SY-SUBRC <> 1.
59   MESSAGE e077 (s#) WITH 'CRM_FS_ASSET'.
60 ENDIF.
61
```

Mitigation:

Do not allow access to transactions like SA38 which allow to submit any report.

Note 2163306 - Fixing FREAK vulnerability in Crypto-Library

Assigned Software Component: CRYPROLIB

(but not KERNEL or HANA in opposite to similar note 2067859)

→ **not visible in System Recommendations**

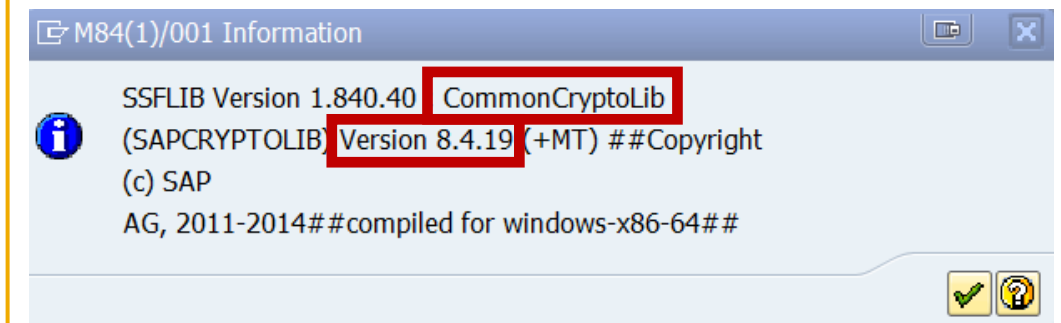
Affected products:

- NetWeaver AS ABAP, any version
- NetWeaver AS Java, version 7.1x and higher
- SAP HANA XS, any version

Solution:

- CommonCryptoLib 8.4.36
- SAPCRYPTOLIB 5.5.5 PL39
(use it only if system currently uses SAPCRYPTOLIB 5.5.5)
- It is sufficient to replace these libraries.
You do not need to update the complete Kernel.

Determine the type and release of the SAP Cryptographic Library on your system using transaction STRUST → Environment → Display SSF Version



Other Products:

Note 2152703 - Fixing FREAK vulnerability in Sybase Products

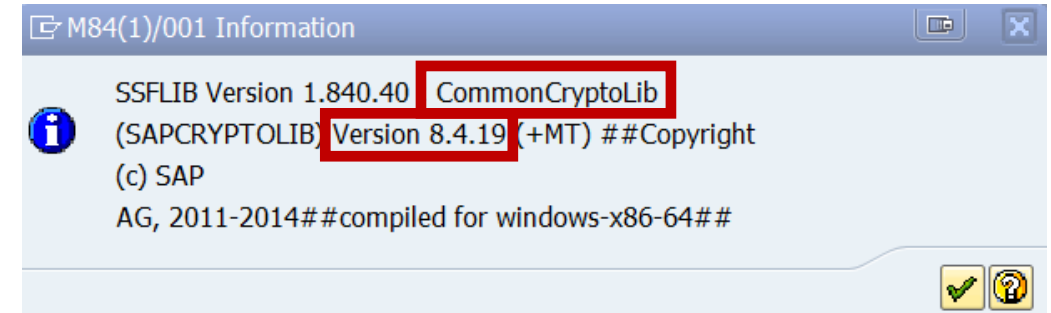
Note 2067859 - Potential Exposure to Digital Signature Spoofing

There is a critical vulnerability in versions of SAPCRYPTOLIB, SAPSECULIB and CommonCryptoLib components of SAP NetWeaver AS for ABAP and SAP HANA applications. The vulnerability may enable an attacker to spoof system digital signatures based on the DSA algorithm.

Determine the type and release of the SAP Cryptographic Library on your system using transaction STRUST → Environment → Display SSF Version. If your version is lower than those versions listed below, then replace your SAP Cryptographic Library.

Replace the affected libraries.

- SAPCRYPTOLIB, upgrade to version 5.5.5.38 or later.
- SAPSECULIB, upgrade to SAPCRYPTOLIB
- CommonCryptoLib, upgrade to version 8.4.30 or later.



It is sufficient to replace these libraries – you do not need to update the complete Kernel.

The main preventive measure is to replace the libraries. Do this first. You may consider to renew DSA keys, too. See note 2068693.

Note 2068693 - Replacing Key Pairs in ABAP and HANA

Report execution in Application Configuration Validation for Config Stores PSE_CERT and J2EE_PSE_CERT:

Report Execution | Target System Maintenance | Comparison List Maintenance

Report Directory | Reporting Templates | Transport Reports | Bookmarks

Reference system and comparison systems

Choose Reference System

Select Reference System | Select Reference Item

Refresh List | Only Target Systems

System	Install ...	Description
0ALERT	VIRTUAL	TARGET SYSTEM FOR E2E ALERTING
0SEC_NEW	VIRTUAL	TARGET SYSTEM WITH THE SECURITY RELEVANT CONTENT

Operator validation | Consistency validation | Configuration reporting | Weighted validation

Save selections

Choose a operator validation report

Configuration operators report	Description
0TPL_0SMD_VCA2_NCOMPL_CI_REF	Shows non-compliant configuration items (config stores and configuration
0TPL_0SMD_VCA2_TRANSPORTS	ABAP_TRANSPORTS validation (default Config Store ABAP_TRANSPORTS
0TPL_0SMD_VCA2_TRANSPORTS_EXP	ABAP_TRANSPORTS validation (default Config Store ABAP_TRANSPORTS
0TPL_0SMD_VCA2_NOTES	ABAP Note Validation (default Config Store ABAP_NOTES, others possible
0TPL_0SMD_VCA2_ROLES	ABAP Role Validation (Config Repository AUTH..ROLE Selection in Selectio
0CONFIG_STORE_TABLE_VIEWER	Shows a configuration store with all attributes, each as a single column
0TPL_0SMD_VCAC_1CS_MULT_COLUMN	Displays a config. repository with all attributes as columns (BeX)

Start operator validation reporting

Result:

Display compliance Yes/No only | Display all

SID	LANDSCAPEID	COMPLIANCE	APPLICATION	CONTEXT	TYPE	SUBJECT	VALID_FROM	VALID_TO
T01	T01~ABAP~insy-vm23_T01_00	Yes	WSSCRT	WSSE	OWN-CERTIFICATE	CN=T01 WS Security Other System Encryption Certificates, OU=ISAP-INTERN, OU=SAP Web AS,	20141102 61401	20380101000001
		Yes	<SNCS>	PROG	CERTIFICATE	CN=SSO_CA, O=SAP-AG, C=DE	19980504 25933	20230831120000
		Yes	<SNCS>	PROG	OWN-CERTIFICATE	CN=T01, OU=MEE Service Community GRC/Security, O=SAP Consulting, L=Walldorf, C=DE	20131204 221412	20231115221412
		Yes	<SYST>	PROG	CERTIFICATE	CN=SSO_CA, O=SAP-AG, C=DE	19980504 25933	20230831120000
		Yes	<SYST>	PROG	CERTIFICATE	CN=T01, OU=ISAP-INTERN, OU=SAP Web AS, O=SAP Trust Community, C=DE	20141102 44601	20380101000001

Note 2099484 - Missing authorization check in Payment Engine

Software Components: PAY-ENGINE, PECROSS

One part of the correction is about turning external callable RFC function modules into internal callable functions only (not relevant concerning authorization concepts):

```
*>>>> START OF INSERTION <<<<
* Only allowed to be called internally
CHECK /pe1/cl_bpe_authority_checks=>check_external_rfc( ) = abap_false.
```

Another part is about adding authorization checks to functions (see manual correction instruction, too):

```
*>>>> START OF INSERTION <<<<
* Check Authorizations.
CHECK /pe1/cl_bpe_authority_checks=>check_authority_order(
    i_requested_activity = con_actvt_create
    i_clearing_area      = space ) = abap_true.
```

➤ Check if you are using remote interfaces which call the Payment Engine and verify if the (technical) users calling these BAPIs have authorizations for /PE1/* authorization objects

Note 1749142 - How to remove unused clients including client 001 and 066

You have to secure any client even if it is not used. This includes the security settings of standard users like `SAP*` or `DDIC` or `EARLYWATCH` which might still have well-known standard passwords as well as the security of any other (powerful) users.

Because of this you can reduce maintenance effort and increase the security of a system if you **remove unused clients**.

See blog: How to remove unused clients including client 001 and 066

<http://scn.sap.com/community/security/blog/2013/06/06/how-to-remove-unused-clients-including-client-001-and-066>

Client 066 is not used by SAP for a while and will not be used anymore.

Meanwhile the final obstacle which had hindered us to publish the official note 1749142 is solved:

Software Update Manager 1.0 SP13 does not request client 066 anymore during upgrade.



May 2015

Topics May 2015



Note [1595582](#) - Deletion of temporary RFC destinations

Note [1750618](#) - RFC destinations created in SMSU_MANAGED_SYSTEM not delete

Note [2113995](#) - Missing authentication check in SAP ASE

Note [2078596](#) - SACF: Switchable Authorization (RFC) Scenarios (reloaded)

Current notes about System Recommendations

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

Note 1595582 - Deletion of temporary RFC destinations

Note 1750618 - RFC destinations created in SMSU_MANAGED_SYSTEM

RFC Destination 51F8BC66AFA804B0E1008000245510A0

Remote Logon Connection Test Unicode Test

RFC Destination:

Connection Type: ABAP Connection Description

Description

Description 1	Temporary Destination
Description 2	
Description 3	

Temporary RFC Destination in the Solution Manager

Find them using report RSRFCCHK

Security Validation using Configuration Validation shows these entries, too.

ConfigStore Name	Goto	Config. Item	Config. Item Value
RFCDES_TYPE_3_CHECK	CR: Changes (last 28 days)	51F8BB8CAFA804B0E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		51F8BC66AFA804B0E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		51F971133BED2B80E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		5204393058F30F80E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		520E87CB4D281AB0E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		5285CAF84F831110E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		5272C5D48EEE05A0E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
		527502834CC30900E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H
52E0C908993714F0E1008000245510A0	LOGON_CLIENT:002/LOGON_USER:DDIC/PASSWORD_STATUS:S/H		

The job SM:REMOVE TEMPORARY RFC removes such temporary RFC destinations. It should be scheduled every hour. In general the scheduling is done in Basic Configuration.

Workaround: Directly delete the RFC destination in transaction SM59.

Note 2113995 - Missing authentication check in SAP ASE

HotNews for Sybase ASE Database Platform

Getting Started with SAP Sybase Adaptive Server Enterprise (ASE)

<http://scn.sap.com/docs/DOC-36181>

This issue has been fixed in the following SAP ASE versions:

- SAP ASE 16.0 SP01
- SAP ASE 15.7 SP132

Install the fixed SAP ASE versions most appropriate for your production environments.

Note 2078596 - SACF: Switchable Authorization (RFC) Scenarios (reloaded)

The following SAP Notes contain new switchable authorization checks in RFC:

May 2015:

Note 2152230 - Switchable authorization checks for RFC in Reconciliation Report Scheduler Scenario HRPAYUS_RECON

Note 2072357 - Switchable authorization checks for RFC in SRM application Scenarios BBP_UPDATE_DOC, BBP_DOC_CREATE, BBP_VEND_UPADTE, BBP_CONF_GETDETAIL, BBP_CTR_GETDETAIL, BBP_INV_GETDETAIL, BBP_VL_GETDETAIL

Note 2053788 - Missing authorization check in RFC enabled function module - BC-MOB-MI-SER Scenario BC_MI_RFC_CHECK

Note 2078596 - SACF: Switchable Authorization (RFC) Scenarios (reloaded)

The following SAP Notes provides solution which do not require a switch:

May 2015:

- Note 2043447 - Missing authorization check in SV-SMG-BPCA
- Note 2052677 - Possible code injection and missing RFC authentication
- Note 2053043 - Missing RFC authorization in eCATT Extended Computer Aided Test Tool
- Note 2053197 - ChaRM: Missing authorization check in SV-SMG-CM
- Note 2058351 - Missing authorization check in BC-VMC
- Note 2066851 - Missing authority-check vulnerability in the OCS functionality
- Note 2066943 - New authorization check for RFC in component WEC-APP-UM
- Note 2067630 - DBA Cockpit: Missing authorizations during administration of jobs
- Note 2105620 - Missing authorization check in Calendar Interface
- Note 2105633 - Missing authorization check in Alert Management Interface
- Note 2105634 - Missing authorization check in ALE Interface
- Note 2118500 - Missing authorization check in SAP Records Management
- Note 2122022 - Missing authorization check in function RSPO_R_SAPGPARAM
- Note 2131334 - Missing authorization check in Process Monitoring Infrastructure
- Note 2138031 - Missing authorization check in BC-BMT-WFM
- Note 2138219 - Missing authorization check in BC-BMT-WFM
- Note 2140238 - Missing authorization check in BC-XI-IS-BPE
- Note 2143329 - Missing authorization check in RDDPUTJZ_COPY_TRANSPORT
- Note 2149278 - Missing authorization check in SAP Records Management

No adjustment of authorization concept (roles) necessary. The solution is either different than introducing authorization checks or uses an authorization check which can be fulfilled by all legal users.

Current notes about System Recommendations

Note [2099728](#) - SysRec: Object list for ABAP notes does not show Usage Procedure Logging

Note [2137673](#) - SysRec: filter completed implemented SAP Notes

Note [2141744](#) - SysRec: changed status lost

reloads [2025144](#) - SysRec: enhancement for RFC to managed system and switch framework

Note [2146340](#) - SysRec: dump in automatic check

Note [2150787](#) - SysRec: missing system in reporting

KBA [2126621](#) - SysRec: Requirement before opening incident for System Recommendation

KBA [2117439](#) - SysRec: Notes related to HR sub component are not presented

KBA [2041071](#) - SysRec: How to download latest Java patches using System Recommendation
SysRec → Choose Java Patches, then use MopZ

Tipp: Call System Recommendations for the Solution Manager System, filter by Application Component `SV-SMG-SR` and search for Correction Notes

KBA 2126621 - SysRec: Requirement before opening incident for System Recommendation

Ensure that the following points have been checked.

- The RFC destination SAP-OSS is working fine. If not, refer to note 982045 for rectification.
- The managed systems are correctly registered in LMDB and have been assigned to a product system and solution.
- Working READ RFC to the managed system has been created and actual installed software component version info (SP level etc) has been synchronized into LMDB software component list.
- Managed systems have been included in SysRec automatic check following note 1942291. This is essential due to reason explained in note 2046605.
(Tip: copy job SM:SYSTEM RECOMMENDATIONS and execute it once instead if using 'Refresh')
- Follow the recommendation in note 2043295 and 2137673 if SysRec presents non relevant notes.
- In the event that no data (0 count) is listed for UPL/SCMON in "Show Object List", refer to the note 2099728.

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

Note [2121661](#) - Potential remote termination of running processes in ABAP & Java Server

Note [2124806](#) - Potential remote termination of running processes in SAP GUI

Note [2125316](#) - Potential termination of running processes in SAPCAR

Note [2127995](#) - Potential remote termination of running processes in Content Server

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

Component	Solution	Notes
Kernel jstart	SAP KERNEL 7.20 patch 719 SAP KERNEL 7.21 patch 416 SAP KERNEL 7.22 patch 2 SAP KERNEL 7.41 patch 210	2121661
R3trans	11.02.15	19466
R3load	SAP KERNEL 7.21 patch 419 SAP KERNEL 7.22 patch 2 SAP KERNEL 7.41 patch 215 SAP KERNEL 7.42 patch 110 SAP KERNEL 7.43 patch 18	2136942 , 1724496
SAP NetWeaver RFC SDK	7.21 patch 34	1025361
SAP RFC SDK	SAP KERNEL 7.20 patch 720 SAP KERNEL 7.21 patch 420	413708

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

Component	Solution	Notes
SAP Java Connector	JCo 3.0.13 SAP Business Connector Service Release 11	2155739
SAP .NET Connector	3.0.15 Advanced Analysis Office (AO 1.4 SP 12, AO 2.0 SP 2) Plant Connectivity (PCo 15.0 SP04)	2095394
ABAP development tools for SAP NetWeaver	2.41	2126477
Hana Studio	HANA Studio 2.0.12 HDB 1.0 revision 94	
SAP GUI	SAP GUI 730 Patch Level 13 SAP GUI 740 Patch Level 2	2124806
SAPCAR	version after March 16, 2015	2125316
SAP Content Server	SAP Content Server 6.50 SP03	2127995 , 514500

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

SAP software download center at

<https://support.sap.com/swdc>

→ Support Packages and Patches

→ Browse Download Catalog

→ Additional Components

ADDITIONAL COMPONENTS

- [JAVA LOG VIEWER](#)
- [MaxDB](#)
- [NW ESH CLIENT LIBRARIES JAVA](#)
- [SAP DB](#)
- [SAP Kernel](#)
- [SAP CR CONTENT](#)
- [SAP EXCHANGE CONNECTOR](#)
- [SAP NW RFC SDK](#)
- [SAP REVERSE BUSINESS ENGINEER](#)
- [SAP RFC SDK](#)
- [SAP RFC SDK UNICODE](#)
- [SAP SPAM/SAINT UPDATE](#)
- [SAPCAR](#)
- [SAPCRYPTOLIB](#)
- [SAPROUTER](#)
- [SAPSSOEXT](#)
- [SL CONTROLLER](#)
- [SUM INTERNAL](#)
- [SYSTEM COPY TOOLS](#)
- [SYSTEM COPY TOOLS GEN](#)
- [Upgrade Tools](#)

The following objects are available for download:

	File Type	Download Object	Title	Patch Level	Info File	File Size [kb]	Last Changed
<input type="checkbox"/>	 EXE	SAPCAR_721-20010450.EXE	SAPCAR	721	Info	4433	20.04.2015

LZC/LZH Compression Multiple Vulnerabilities

Memory corruption vulnerabilities CVE-2015-2282, CVE-2015-2278

<http://www.coresecurity.com/advisories/sap-lzc-lzh-compression-multiple-vulnerabilities>

The published example refers to the Open Source versions of MaxDB but not the SAP MaxDB.

SAP MaxDB does not use the affected code which means it is not affected, therefore MaxDB is not listed in the notes.

4. VULNERABLE PACKAGES

- SAP Netweaver Application Server ABAP.
- SAP Netweaver Application Server Java.
- SAP Netweaver RFC SDK
- SAP RFC SDK
- SAP GUI
- SAP MaxDB database
- SAPCAR archive tool

Other products and versions might be affected, but they were not tested.

5. VENDOR INFORMATION, SOLUTIONS AND WORKAROUNDS

SAP published the following Security Notes:

- 2124806
- 2121661
- 2127995
- 2125316

They can be accessed by SAP clients in their Support Portal [15].

Developers who used the Open Source versions of MaxDB 7.5 and 7.6 for their tools should contact SAP.

7.1. LZC decompression stack-based buffer overflow

The vulnerability [CVE-2015-2282] is caused by an out-of-bounds write to a stack buffer used by the decompression routine to write the output characters.

The following snippet of code shows the vulnerable function [file vpa106cslzc.cpp in the MaxDB source code [12]]. This piece of code can be reached by decompressing a specially crafted buffer.

```
1  [..]
2  int CsObjectInt::CsDecomprLZC (SAP_BYTE * inbuf,
3                               SAP_INT   inlen,
4                               SAP_BYTE * outbuf,
5                               SAP_INT   outlen,
6                               SAP_INT   option,
7                               SAP_INT * bytes_read,
8                               SAP_INT * bytes_written)
9
10     [..]
11     /* Generate output characters in reverse order .....*/
12     while (code >= 256)
13     {
14         *stackp++ = TAB_SUFFIXOF(code);
15         OVERFLOW_CHECK
16         code = TAB_PREFIXOF(code);
17     }
18     [..]
```



April 2015

Topics April 2015



Notes [1769064](#) und [931252](#)

Profile Parameter `auth/rfc_authority_check`

[Troopers 2015] RFC callback - A Backdoor in Wonderland

Note [2084037](#) - Potential information disclosure relating to RFC SDK

Note [2140700](#) - Potential termination of HANA client (hdbsql)

Note [2121869](#) - Potential information disclosure relating to NW Application Server and BW

Note [1966655](#) - Potential denial of service in ICM

Note [1981955](#) - Enforcing minimal request transfer rates in SAP Web Dispatcher and ICM

Note [2179384](#) - Traffic control: Wrong request transfer rate calculation

Notes 1769064 und 931252

Profile Parameter `auth/rfc_authority_check`

0 = No authorization check

**1 = Authorization check active (no check for same user)
(no check for same user context and function group SRFC)**

2 = Authorization check active (no check for function check SRFC)

**3 = Logon required for all function modules except RFC_PING and RFC_SYSTEM_INFO
(no authorization check)**

**4 = Authorization check required for all function modules except RFC_PING and
RFC_SYSTEM_INFO**

5 = Logon required for all function modules except RFC_PING (no authorization check)

6 = Authorization check required for all function modules except RFC_PING

8 = Logon required for all function modules (no authorization check)

9 = Authorization check active (SRFC-FUGR also checked)

With check of
function group
SRFC

Notes 1769064 und 931252

Profile Parameter auth/rfc_authority_check

Repository Info System: Find Function Modules

Standard Selections

Function Module	<input type="text"/>	<input type="button" value="→"/>
Short Description	<input type="text"/>	<input type="button" value="→"/>
Function Group	<input type="text" value="SRFC"/>	<input type="button" value="→"/>
Package	<input type="text"/>	<input type="button" value="→"/>
Application Component	<input type="text"/>	<input type="button" value="→"/>

Take into Account Generated Funct.Modules

Additional Selections

Person Responsible	<input type="text"/>	<input type="button" value="→"/>
Application	<input type="text"/>	<input type="button" value="→"/>

All Released Function Modules

All Update Modules RFC Modules

All Active Modules Inactive Modules

All Global Interface Local Interface

RFC enabled function modules of function group SRFC :

RFC_GET_LOCAL_DESTINATIONS

RFC_GET_LOCAL_SERVERS

RFC_PING

RFC_PUT_CODEPAGE

RFC_SYSTEM_INFO

SYSTEM_FINISH_ATTACH_GUI

SYSTEM_INVISIBLE_GUI

SYSTEM_PREPARE_ATTACH_GUI

SYSTEM_RFC_VERSION_3_INIT

[Troopers 2015] RFC callback - A Backdoor in Wonderland

Presentation by Hans-Christian Esperer & Frederik Weidemann from Virtual Forge

March 18, 2015 (at 5 p.m.) in Special Track: SAP Security

This talk demonstrates how a single, fundamental backdoor in SAP's RFC protocol allows external attackers to penetrate even the strongest SAP security fortress. This severe security vulnerability was reported to SAP in January 2012 and has recently been fixed.

https://www.troopers.de/events/troopers15/494_a_backdoor_in_wonderland/

Recording (31 minutes)

<https://www.youtube.com/watch?v=IG1VKaKD2wE>

References:

Note [1686632](#) - Positive lists for RFC callback (at 24:43)

Note [2008727](#) - Whitepaper: Securing Remote Function Calls (at 25:35)

<http://scn.sap.com/docs/DOC-60424>

Note [2058946](#) - Maintenance of callback positive lists before Release 7.31 (at 26:30)

Note 2084037 - Potential information disclosure relating to RFC SDK

Replace the existing “Classical RFC Library” (librfc32) with the corresponding patch listed in this note.

You do not need to upgrade the whole Kernel. However, you not only should replace the library which is installed together with the Kernel in folder `DIR_EXECUTABLE` but any “Classical RFC Library” which is used by any external RFC server or RFC client anywhere in the file system.

Actually it's more important to update these other installations!

References:

Note 27517 explains the installation of the “Classical RFC Library”

Note 413708 explains how to verify the version of the RFC library.

Note 1005832 shows an Overview on all RFC Libraries and SDKs.

SAP KERNEL 7.20 patch 715

SAP KERNEL 7.21 patch 332

SAP KERNEL 7.43 patch 11

The “SAP NetWeaver RFC Library” is different and not affected by the security vulnerability.

Note 1025361 describes the Installation, Support and Availability of the “NetWeaver RFC library”.

Note 2084037 - Potential information disclosure relating to RFC SDK

Example (Linux) how to check the version of the RFC library using report RSBDCOS0 :

Show list of files: `ls $(DIR_EXECUTABLE)/librfc*`

Show version: `strings $(DIR_EXECUTABLE)/librfcum.so grep "LIBRFC"`

```
Execute OS Command (Logged in SYSLOG and Trace Files)
Reset list Change current directory
R/3 SI7 200 User BUCHHOLZF Date 05.02.2015 Time 15:02:29
Host ldailsi7 User si7adm
Path /usr/sap/SI7/D88/work

Execute history command number with next command
Execute last history command with next command ..
$(name) replaced by logical OS commands and profile parameters

[1]ls $(DIR_EXECUTABLE)/librfc*
[1]ls /usr/sap/SI7/D88/exe/librfc*
/usr/sap/SI7/D88/exe/librfcum.so
/usr/sap/SI7/D88/exe/librfcum.so.old
[2]strings $(DIR_EXECUTABLE)/librfcum.so | grep "LIBRFC"
[2]strings /usr/sap/SI7/D88/exe/librfcum.so | grep "LIBRFC"
@(#)LIBRFC (c) SAP AG: Version: 720 Patch level: 0 Patch number: 611 thread-safe UNICODE build 64 bit
```

Command on
Unix: what
Linux: strings

Note 2084037 - Potential information disclosure relating to RFC SDK

Example (Windows) how to check the version of the RFC library using report RSBDCOS0 :

Show list of files: `dir $(DIR_EXECUTABLE)\librfc*.dll`

Show version: `find "LIBRFC" $(DIR_EXECUTABLE)\librfc32u.dll`

Execute OS Command (Logged in SYSLOG and Trace Files)

```
[1]dir $(DIR_EXECUTABLE)\librfc*.dll
[1]dir D:\usr\sap\M84\D10\exe\librfc*.dll
Volume in drive D is Application
Volume Serial Number is 7213-C0CC

Directory of D:\usr\sap\M84\D10\exe

29.06.2014  19:30          5.264.896 librfc32u.dll
             1 File(s)          5.264.896 bytes
             0 Dir(s)  43.700.584.448 bytes free
[2]find "LIBRFC" $(DIR_EXECUTABLE)\librfc32u.dll
[2]find "LIBRFC" D:\usr\sap\M84\D10\exe\librfc32u.dll



----- D:\USR\SAP\M84\D10\EXE\LIBRFC32U.DLL
@(#)LIBRFC (c) SAP AG: Version: 721 Patch level: 0 Patch number: 314 thread-safe UNICODE build 64 bit
```

Note 2084037 - Potential information disclosure relating to RFC SDK

Example (Windows) how to check the version of the RFC library using report RSBDCOS0 :

```
for %f in ($(DIR_EXECUTABLE)\librfc*.dll) do find "LIBRFC" %f
```

Execute OS Command (Logged in SYSLOG and Trace Files)

 Reset list  Change current directory

```
R/3 M84 001      User      D019687      Date 05.02.2015 Time 12:49:04
Host wdf1bmt8218 User      m84adm
Path D:\usr\sap\M84\D10\work
```

```
Execute history command number with next command
Execute last history command with next command ..
$(name) replaced by logical OS commands and profile parameters
```

```
[1] for %f in ($(DIR_EXECUTABLE)\librfc*.dll) do find "LIBRFC" %f
[1] for %f in (D:\usr\sap\M84\D10\exe\librfc*.dll) do find "LIBRFC" %f
```

```
D:\usr\sap\M84\D10\work>find "LIBRFC" D:\usr\sap\M84\D10\exe\librfc32u.dll
```

```
_____ D:\USR\SAP\M84\D10\EXE\LIBRFC32U.DLL
@(#)LIBRFC (c) SAP AG: Version: 721 Patch level: 0 Patch number: 314 thread-safe UNICODE build 64 bit
```


Note 2140700 - Potential termination of HANA client (hdbsql)

- hdbsql is a client which connects to a HANA server.
HANA Developer Edition-SAP HANA Client
<http://sdn.sap.com/irj/scn/go/portal/prtroot/docs/webcontent/uuid/402aa158-6a7a-2f10-0195-f43595f6fe5f>
- It is sufficient to update HANA clients (hdbsql) – you do not need to update the HANA server.
 - How to identify HANA clients (hdbsql)?
 - How to validate the version of HANA clients (hdbsql)?
- *“An attacker who can start hdbsql can crash it through specifying invalid command line parameters.”*
The system is already on risk if an attacker already can execute operating system commands including arbitrary command line parameters.

Note 2121869 - Potential information disclosure relating to NW Application Server and BW

What happens if only one or two of these parts (BEx backend, BEx frontend, SAP GUI) are installed? Does the order of implementation matters?

- If only the SAP GUI part is available, there's no improvement at all.
- If only the BEx part is available without the SAP GUI part, in worst case the connection will not be established automatically via t-code `RRMX`. We assume this is still better than establishing an unencrypted connection.
- Both BEx parts are needed: Implement note with transaction `SNOTE` and execute an frontend upgrade. If only a part of the BEx Correction is available, let's say only the backend part,
 - in case of SNC + SSO, the connection will be established using the the assertion ticket only and therefore will be unencrypted
 - in case of SNC w/o SSO, the connection via `RRMX` will fail and the logon screen will be displayed.

Note 2096517 describes the SAP GUI part.

Related Note 2122840 - Logon Control: Issue with login when SNC configuration is done.

Note 1966655 - Potential denial of service in ICM

Note 1981955 - Enforcing minimal request transfer rates in ICM

← Updated by Note 2179384 - Traffic control: Wrong request transfer rate calculation

Mitigating Slowloris Attacks

http://help.sap.com/saphelp_nw74/helpdata/en/f9/591344bde245d5afa323b48d5c0dc5/content.htm

Apply the kernel patch level specified in this SAP Note and configure the ICM in accordance with SAP Note 1981955. Alternatively, you can also use an upstream SAP Web Dispatcher with a corresponding configuration to protect the system. **SAP Web Dispatcher** and **ICM** offer the same mechanism to enforce a minimum request data rate to prevent flooding the server with tons of low data rate requests (DoS). All connections that do not satisfy the required rate are closed.

Define parameter **MIN_RECEIVE_RATE** of profile parameter `icm/server port <xx>`

How to find reasonable values for **MIN_RECEIVE_RATE**?

„Choosing useful values depends on your scenario. As a general rule, chose the highest min_rate possible that does not lead to abortion of legitimate connections. A value of 10 KB/sec can be a good starting point. If you want to improve the protection, experiment with higher values and observe whether connections get aborted by searching for "Traffic control condition" in the security log or dev trace. Use this feature with care.“

→ If you use it, check the ICM security log and the dev trace

“This mechanism replaces the previous one configured by parameter `icm/traffic_control`“ which offers a timeout only.



March 2015

Topics March 2015



Note [2110020](#) - Enabling TLS or disabling SSLv3 protocol versions on SAP WebDispatcher, or SAP WebAS (AS ABAP 6xx, 7xx or AS Java >= 710)

Note [1944155](#) - Missing authority check in Report RKEDELE1

Note [1970644](#) - SAL: Missing overview of message definitions

Security Configuration Validation using SAP Solution Manager
for: [Why you should really get rid of old password hashes *NOW*](#)

Note [2110020](#) - Enabling TLS or disabling SSLv3 protocol versions on SAP WebDispatcher, or SAP WebAS



The motivation to disable SSLv3 might be to mitigate POODLE attacks (CVE-2014-3566) against Web Browsers.

The motivation to get TLSv1.0 support may be newly occurring interop problems with communication peers that have recently disabled/removed support for SSLv3 (e.g. the Web Browsers Mozilla Firefox 35 and Google Chrome 40), or Servers where SSLv3 was disabled to mitigate POODLE attacks.

This note [2110020](#) is a how-to guide about...

- **how to determine the Netweaver component version of your sapwebdisp or icman**
- **how to determine the version of your SAPCRYPTOLIB**
- **where to get software updates for SAPCRYPTOLIB 5.5.5 / CommonCryptoLib 8 and SAP WebDispatcher (or the entire Kernel including icman)**

You can configure the desired SSL&TLS protocol versions through the two SAP profile parameters `ssl/ciphersuites` and `ssl/client_ciphersuites` according to the description and recommended settings in Section 7 of SAP Note [510007](#).

Note 1944155 - Missing authority check in Report RKEDELE1

Report deletes content from tables CE1<erks> (erks = operating concern).

→ Application specific security vulnerability within application component CO-PA (Profitability Analysis)

If you do not use this component (which is the case if no CE1<erks> tables exist), then blindly apply the note and skip testing.

If you are using this component, raise priority to maximum and apply the note at once.

Note 1970644 - SAL: Missing overview of message definitions report **RSAU_INFO_SYAG**

Note 1970644 is a normal note (not a security note)

More notes about new messages:

Note <u>2128095</u>	SAL Missing parameters in DUI, DUJ, and DUK messages
Note <u>1963882</u>	SAL: Problems with evaluation of audit log files (+ manual steps)
Note <u>1968729</u>	SAL: Message definition for RFC callback
Note <u>2025307</u>	SAL Function module RSAU_GET_AUDIT_CONFIG (+ manual steps)
Note <u>2124538</u>	SM19 Error during event selection
Note <u>2104732</u>	SAL - event definition for SNC client encryption
Note <u>1917367</u>	SACF: supplementary corrections
Note <u>1995667</u>	SACF: Navigation error
Note <u>2012767</u>	SACF: Switchable authorization check for other users
Note <u>2073809</u>	SAL Optimization of event documentation (only in SP)

Tips about the Security Audit Log

<http://scn.sap.com/docs/DOC-60743>

Using note [1970644](#) you can get report **RSAU_INFO_SYAG** which shows all events of the Security Audit Log including the current status of activation. The detail view allows you to create an HTML-based event definition print list including the full documentation.

Activate all critical events. Activate other events to support various security improvement projects:

Topic	Description and references	Messages	Project
BACK	RFC callback (note 2128095)	DUI DUJ CUK	Secure RFC Callback
FILE	Directory Traversal (note 1497003)	CUQ CUR CUS CUT DU5	Secure File access
REPORT	Report start	AUW AUX	Avoid SA38 by using custom report transactions
RFC-TABLE	Generic table access via RFC using functions like RFC_READ_TABLE (note 1539105)	CUZ	Secure standard table access (authorization object S_TABU_RFC)
SACF	Switchable authorization scenarios, transaction SACF (note 2078596)	DUO DUP DUQ DUU DUV	Secure RFC functions
SAP FTP	FTP server whitelist using table SAPFTP_SERVERS (note 1605054)	DU1 DU2 DU3 DU4 DU5 DU6 DU7 DU8	Secure SAP FTP
SE16	Generic table access using transactions like SE16, SE16N, SM30, SM31, SM34, or SQV (note 2041892)	DU9	Secure standard table access (authorization object S_TABU_DIS, S_TABU_NAM)

Security Configuration Validation using SAP Solution Manager for: Why you should really get rid of old password hashes *NOW*

Target System : SOSHASH / Store Name : ABAP_INSTANCE_PAHI

Comparison Store: M84 / 00505615 Change | Find: Find Find Next Replace with:

Sel.	Operator	Parameter	Operator	Value Low	Value High
<input type="checkbox"/>	=	login/password_downwards_compatibility	=	0	

Target System : SOSHASH / Store Name : USER_PASSWD_HASH_USAGE

Comparison Store: M84 / 00505615 Change | Find: Find Find Next Replace with:

Sel.	USER_TYPE	BCODE	PASSCODE	PWDSALTEDHASH	NUM_USER	PERC_USER
<input type="checkbox"/>	(=) DIALOG	(=) USED	(Ignore) UNUSED	(Ignore) UNUSED	(Ignore)	(<) 5.00
<input type="checkbox"/>	(=) SYSTEM	(=) USED	(Ignore) USED	(Ignore) USED	(Ignore)	(<) 5.00

Security Configuration Validation using SAP Solution Manager for: Why you should really get rid of old password hashes *NOW*

Result in Configuration Validation reporting:

Configuration Store **ABAP_INSTANCE_PAHI** configuration item `login/password_downwards_compatibility`

Configuration Store **USER_PASSWD_HASH_USAGE**

Configuration Items					
SAP System ID	ConfigStore Name	Config. Item	Config. Item Value	Value of Target System	Compliance
M11	ABAP_INSTANCE_PAHI	login/password_downwards_compatibility	1	0	No
	USER_PASSWD_HASH_USAGE	DIALOG/USED/UNUSED/UNUSED/	#	NUM_USER:/PERC_USER:5.00	Item not found
		SYSTEM/USED/USED/USED/	#	NUM_USER:/PERC_USER:5.00	Item not found
M84	ABAP_INSTANCE_PAHI	login/password_downwards_compatibility	1	0	No
	USER_PASSWD_HASH_USAGE	COMMUNICATION/USED/USED/USED/	NUM_USER:2/PERC_USER:100.00	Target value not found	Additional in Comparison System
		DIALOG/UNUSED/UNUSED/UNUSED/	NUM_USER:1/PERC_USER:0.21	Target value not found	Additional in Comparison System
		DIALOG/USED/USED/USED/	NUM_USER:481/PERC_USER:99.79	NUM_USER:/PERC_USER:5.00	No
		REFERENCE/UNUSED/UNUSED/UNUSED/	NUM_USER:1/PERC_USER:100.00	Target value not found	Additional in Comparison System
		SERVICE/USED/USED/USED/	NUM_USER:3/PERC_USER:100.00	Target value not found	Additional in Comparison System
		SYSTEM/USED/USED/USED/	NUM_USER:19/PERC_USER:100.00	NUM_USER:/PERC_USER:5.00	No

How to find Configuration Stores and Documentation?

- **Configuration Validation Wiki**
http://wiki.scn.sap.com/wiki/display/TechOps/ConfVal_Home
- **Internet search for e.g.**
[USER_PASSWD_HASH_USAGE site:wiki.scn.sap.com](#)
- **Transaction CCDB**

How to find Configuration Stores and Documentation?

Transaction CCDB shows Configuration Stores of a specific system:

Technical System M84 ABAP

View: * [Standard View] | Print Version | Export | Delete selected Stores | Store Details | Delete Filter Settings

Main state	Landscape	Group Source	Store Name	Group Name	Store Type	Component Version
Correct	ABAP Client (M84~ABAP~001)	ABAP	USER_PASSWD_HASH_USAGE	ABAP-SECURITY	Table Store	SAP BASIS 7.02

Details | Log | Content | Statistics | Template definition

Store Content

Search: | History filter | History | Incl. Deleted | Deleted

History	USER_TYPE	BCODE	PASSCODE	PWDSALTEDHASH	NUM_USER	PERC_USER
1	COMMUNICATION	USED	USED	USED	2	100.00
4	DIALOG	UNUSED	UNUSED	UNUSED	1	0.21
10		USED	USED	USED	481	99.79
	REFERENCE	UNUSED	UNUSED	UNUSED	1	100.00
1	SERVICE	USED	USED	USED	3	100.00
1	SYSTEM				19	100.00



February 2015

Topics February 2015



Note [2128095](#) - SAL Missing parameters in DUI, DUJ, and DUK messages

Note [2015232](#) - Missing authorization check in XX-PART-OPT-INV (from September 2014)

Note [1902611](#) - Potential information disclosure relating to BC-SEC (from November 2013)

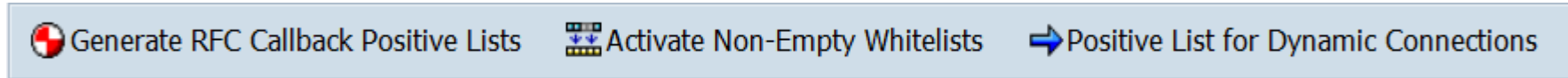
Note [2074736](#) - Directory traversal in GW (from November 2014)

Note 1686632 - Positive lists for RFC callback (extended)

Questions from users

- Is it possible to use wildcards in whitelists?
 - By using '*' in the whitelist table `RFCCBWHITELIST` for field `CALLED_FM` or `CALLED_BACK_FM`, you can allow all called/callback function modules for the specified system. (see [documentation](#) of release 7.40)

- Does SAP plans to deliver a standard whitelist for SAP standard functions / remote scenarios?
 - Not really as we do not know your destination names and your active scenarios
 - Transaction SM59 gets an options to generate the whitelist using the Security Audit Log



**Preparation:
Implement note
2128095 - SAL
Missing parameters
in DUI, DUJ, and
DUK messages**

- Would it be possible to define a blocklist instead of a allowlist?
 - No, you only have allow entries and profile parameter `rfc/callback_security_method`:
 - 0: All entries are ignored, even the active ones.
 - 1: Only active entries are valid
 - 2: Only active entries are valid. However, also (invalid) inactive entries generate an entry in the security audit log if a callback is received from this destination that would have been rejected by the entry is active.
 - 3: All entries are valid, even the inactive ones.

Note 2015232 - Missing authorization check in XX-PART-OPT-INV

System Recommendations shows the note for all systems because it's classified as a release independent (= product independent) note, which has no "Support Package assignment", no "Automatic Correction Instruction", no "Manual Activity"

The Application Component XX-PART-OPT-INV „SAP Invoice Management by Open Text“ belongs to software component OTEXTVIM which is an Add-On to SAP ERP 6.0.

See:

Note 1721041 - SAP Invoice Management by OpenText support for EhP6

Note 1598141 - SAP Enhancement Package 6 for SAP ERP 6.0:Compatible Add-ons

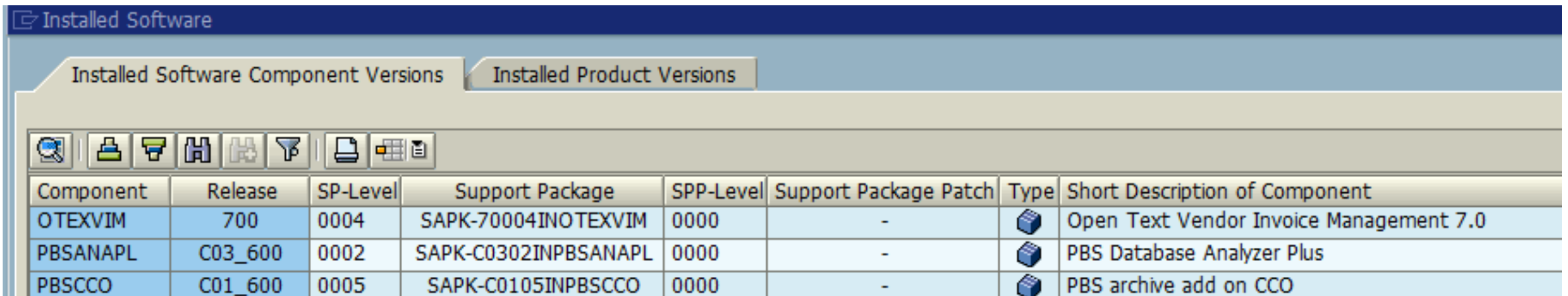
Note 2015232 - Missing authorization check in XX-PART-OPT-INV

How to check if the note is relevant:




- Use transaction SE37 to verify if one of the functions /OPT/VIM_RPT_GET_NPO_WI_DATA or /OPT/VIM_RPT_GET_PO_WI_DATA exist. If yes, apply the note.

or

- Check System → Status if you find an entry for software component OTEXVIM release 700 with a support package below SP 4:



The screenshot shows the 'Installed Software' transaction in SAP. The 'Installed Software Component Versions' tab is active. The table below lists the installed components and their support packages.

Component	Release	SP-Level	Support Package	SPP-Level	Support Package Patch	Type	Short Description of Component
OTEXVIM	700	0004	SAPK-70004INOTEXVIM	0000	-		Open Text Vendor Invoice Management 7.0
PBSANAPL	C03_600	0002	SAPK-C0302INPBSANAPL	0000	-		PBS Database Analyzer Plus
PBSCCO	C01_600	0005	SAPK-C0105INPBSCCO	0000	-		PBS archive add on CCO

Note 1902611 - Potential information disclosure relating to BC-SEC

The Secure Storage (ABAP) is based on a static main key by default. You can set an individual main key by yourself.

Report by ERPScan:

<http://erpscan.com/press-center/blog/sap-passwords-part-1/>

Online Help:

[Secure Storage in the File System \(AS ABAP\)](#)

[Using an Individual Encryption Key](#)

Activities:

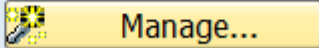
- Check recommended setting of Profile parameter `rsec/securestorage/keyfile`
- Set individual main key using transaction `SECSTORE` (see notes [1902258](#) and [1922423](#))
- Set „Display/maintenance using standard tools like `SE16` not allowed“ and
- assign special table authorization group `SPSE` for tables `RSECTAB` and `RSECACTB`
- **No user should have authorizations for `S_TABU_DIS` for table authorization group `SPSE`**

Note 1902611 - Potential information disclosure relating to BC-SEC

Status of Secure Storage

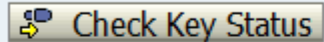
✓ Secure Storage ABAP/DB V6.0

Encryption Key for New and Updated Records

⊗ Default Key 

Use transaction SECSTORE to check the status of the Secure Store and to generate an individual random key.

Secure Storage in the Database Legacy Key File Tool

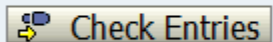
 Check Key Status

This tool enables you to check the current key status and manage encryption keys based on a key file.

See SAP Note 1902258 for general information and help with errors ("RSECWnnn").

First, the system checks the key status of all instances for consistency.



Step 1: Review the Results of the Key Consistency Check

 Check Entries

Instance	Execution Result	Primary Legacy Key	Secondary Legacy Key	Legacy Key File Path
wdfldbmt8216_M84_10	Success	Default Key	Default Key	D:\usr\sap\M84\SYS\global\security\data\SecStoreDBKey.pse
wdfldbmt8217_M84_10	Success	Default Key	Default Key	\\wdfldbmt8216\sapmnt\M84\SYS\global\security\data\SecStoreDBKey.pse
wdfldbmt8218_M84_10	Success	Default Key	Default Key	\\wdfldbmt8216\sapmnt\M84\SYS\global\security\data\SecStoreDBKey.pse

Note 1902611 - Potential information disclosure relating to BC-SEC

Execute OS Command (Logged in SYSLOG and Trace Files)

 Reset list  Change current directory

```
R/3 M84 001      User      D019687      Date  23.02.2015 Time 18:56:54
Host wdfldbmt8217 User      m84adm
Path D:\usr\sap\M84\D10\work
```

```
Execute history command number with next command
Execute last history command with next command ..
$(name) replaced by logical OS commands and profile parameters
```

```
[1]dir \\wdfldbmt8216\sapmnt\M84\SYS\global\security\data\
Volume in drive \\wdfldbmt8216\sapmnt is Application
Volume Serial Number is 60C5-4056

Directory of \\wdfldbmt8216\sapmnt\M84\SYS\global\security\data

23.02.2015  18:01    <DIR>          .
23.02.2015  18:01    <DIR>          ..
03.06.2014  19:31                23 SecStore.key
07.07.2014  12:25             837 SecStore.properties
23.02.2015  18:01             49 SecStoreDBKey.pse
              3 File(s)              909 bytes
              2 Dir(s)  56.146.120.704 bytes free
[2]type \\wdfldbmt8216\sapmnt\M84\SYS\global\security\data\SecStoreDBKey.pse
;B01F9423D3A406EE83D340B0C6406306A311AF20A885B1B0
```

Result: You are using an individual key which is stored in a file.

However, thy ABAP system can show the content of the file e.g. via transactions like AL11 or reports like RSBDCOS0.

Note 2074736 - Directory traversal in GW

Transaction `SMGW` and profile parameter `gw/logging` now restrict allowed pathnames to specific directories.

Solution:

1. Check value of profile parameter `gw/logging`
If logging is off, you will observe, that the default is secure (no action; no path defined in LOGFILE):

```
ACTION= LOGFILE=gw_log-%y-%m-%d SWITCHTF=day MAXSIZEKB=100
```


→ You can shift any activity to the next planned maintenance window.
2. Upgrade Kernel as described in note 2074736 and 2035100 (this note lists higher patch levels)
SAP KERNEL 7.20 patch 712
SAP KERNEL 7.21 patch 332
SAP KERNEL 7.40 patch 76
SAP KERNEL 7.41 patch 113
SAP KERNEL 7.42 patch 34
3. Set profile parameter `gw/logging_secure = 1` as described in the note 2035100



January 2015

Topics January 2015



Repetition: [Why you should really get rid of old password hashes *NOW*](#)

Posted by [joris van de Vis](#) in [SCN Security](#) on May 8, 2014 9:01:30 AM

How many notes are in scope of the monthly patch process?

How to find security related notes about databases (Example: Oracle)?

Note [2094598](#) - Fixing POODLE SSLv3.0 Vulnerability in AS Java 7.00, 7.01, 7.02

Note [1985387](#) - Potential information disclosure relating to SAP Solution Manager

Why you should really get rid of old password hashes *NOW*

Posted by joris van de Vis in SCN Security on May 8, 2014 9:01:30 AM

Whitepaper: Secure Configuration of SAP NetWeaver Application Server ABAP

Notes 991968 / 2076925 - List of values for "login/password_hash_algorithm" (SHA-1, SHA-256, SHA-384, SHA-512)

Note 1023437 - ABAP syst: Downwardly incompatible passwords (since NW2004s)

Note 1237762 - ABAP systems: Protection against password hash attacks

Note 1300104 - CUA|new password hash procedures: Background information

Note 1458262 - ABAP: recommended settings for password hash algorithms

Note 1484692 - Protect read access to password hash value tables

Steps:

- Monitor current configuration e.g. using application Configuration Validation
- Protect tables containing password hashes: restrict S_TABU_DIS / S_TABU_NAM (if you want to give access to a part of a table you can create a new database view)
- Check compatibility i.e. concerning a CUA supporting very old systems with old releases, too
- Set profile parameters to enforce new policy
- Delete old password hashes

Password hashes in SAP NetWeaver ABAP

- Introduction to the vulnerability

What is a password hash?

Some information about password hashes

- Passwords are hashed with password hash functions into password hashes to store passwords in a secure way
- Password hash algorithms are one way, passwords cannot be calculated from password hashes
- Password hash attacks are always possible, just the speed is different

Password:

Thisisastrongpassword



Hash:

9d6ffda73e361025b92fb702aabf5e0

- But password hashes can be generated from potential passwords until password hashes match

Password:

Welcome



Hash:

83218ac34c1834c26781fe4bde918ee4

Thisisastrongpassword

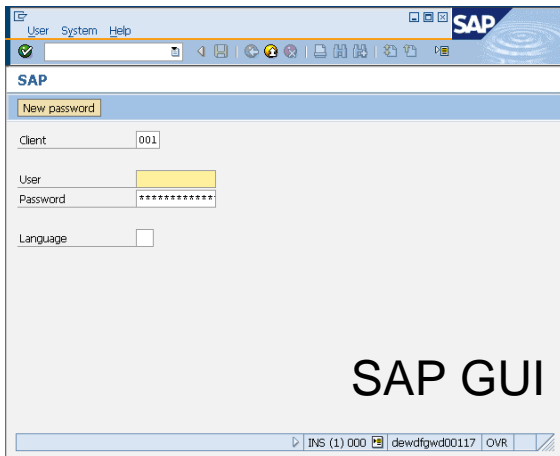


9d6ffda73e361025b92fb702aabf5e0

Which password hash is compared during user login?

User login in AS ABAP 7.02 with `login/password_downwards_compatibility* = 0/1`

- Code Version per user (field `CODVN`) controls which password hash is used for a user authentication
- `login/password_downwards_compatibility >= 2` can activate check of old `BCODE` in addition



Username and Password →



SAP NetWeaver
Application Server ABAP

- 1 Calculate password hash

Password



Password Hash

- 2 Compare calculated password hash with stored password hash

- 3 Successful user login if password hash is matching

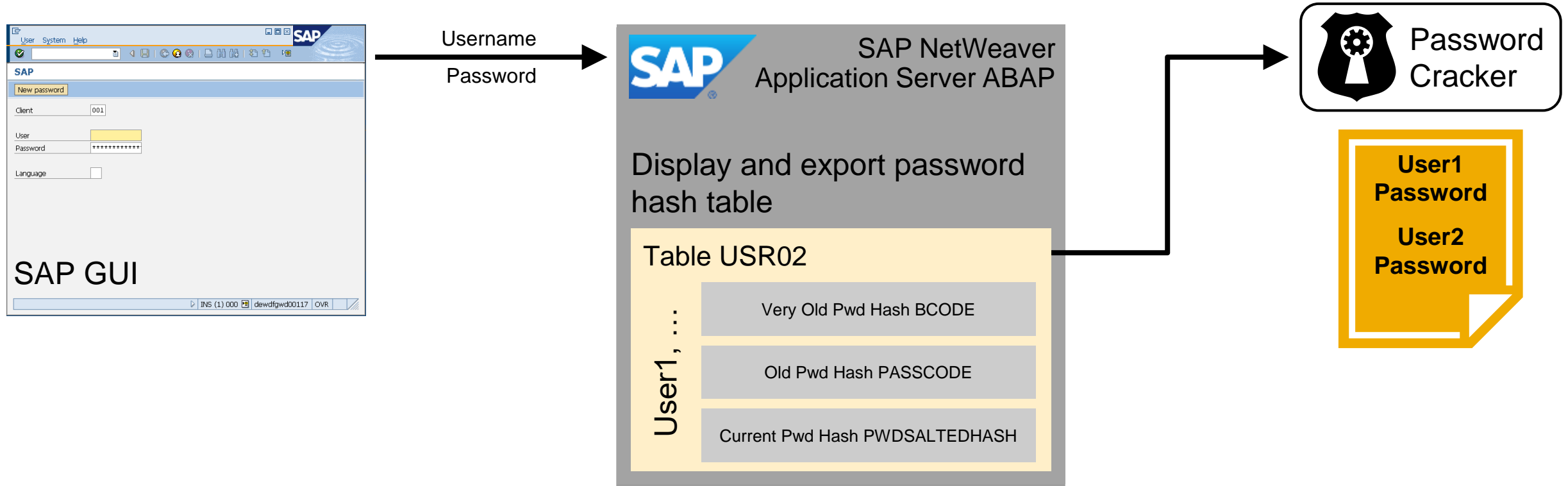
Table `USR02`

User1, ...	Very Old Pwd Hash BCODE
	Old Pwd Hash PASSCODE
	Current Pwd Hash PWDSALTEDHASH

Let's hack an SAP system by weak password hashes!

Attack scenario

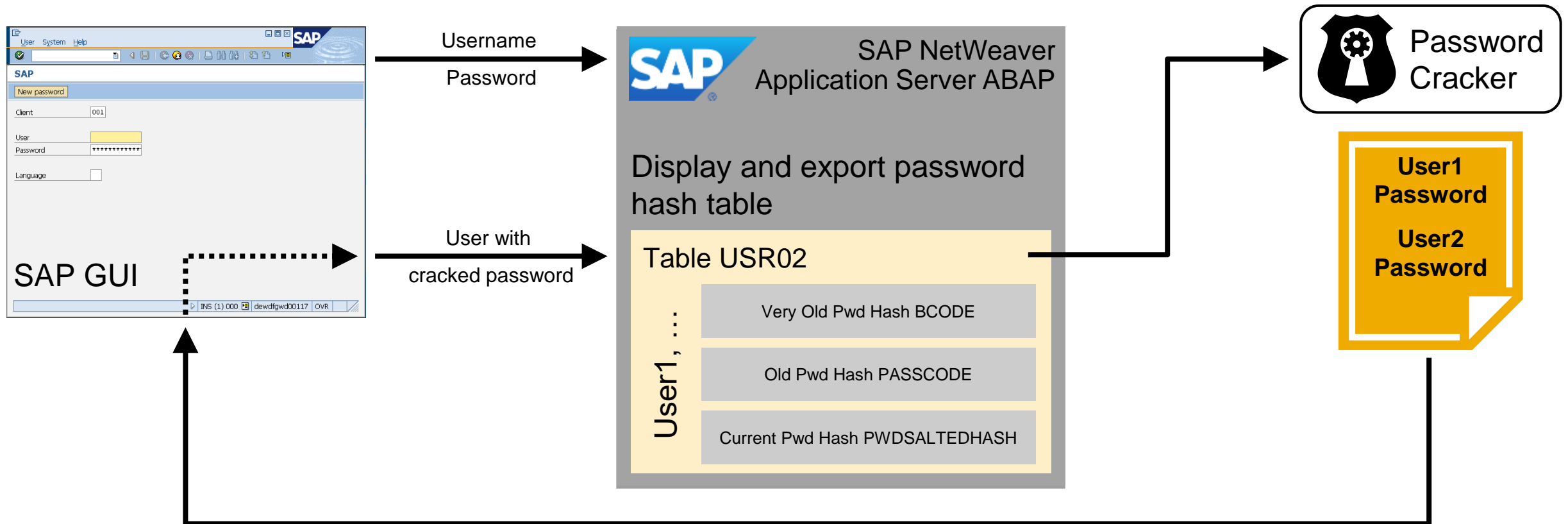
Logon to an SAP system with a user having table display access to USR02



Let's hack an SAP system by weak password hashes!

Attack scenario

Logon to an SAP system with a user having table display access to USR02



What happens during user creation?

User creation in AS ABAP with SU01

- User administrator creates a user and enters a clear text password
- SAP system generates up to **three*** password hashes with different strength for downward compatibility reasons

Maintain Users

User: USER1
Changed By: [] [] 00:00:00 Status: Not saved

Address Logon Data SNC Defaults Parameters Roles Profiles Groups

Alias: []
User Type: Dialog
Security Policy: []

Password

New Password Rules (Case-Sensitive)

New Password: []
Repeat Password: []
Password Status: []

ONE WAY →

ONE WAY →

ONE WAY →

Table USR02

Very Old Pwd Hash BCODE (≤ 6.40)

Old Pwd Hash PASSCODE (7.00-7.01)

Current Pwd Hash PWDSALTEDHASH (≥ 7.02)

* Depends on profile parameter *login/password_downwards_compatibility*

Some important details about available AS ABAP password hashes!

Password hash creation is controlled by a profile parameter (7.00+)

- `login/password_downwards_compatibility` (refer to SAP Note [1458262](#))
 - 0 = Only strongest password hash is calculated
 - 1-5 = All three password hashes are calculated

Password Hash	Release	Hash Algorithm / Code Version	Security Status
BCODE	3.1i	MD5 based (Code Version A-E)	<ul style="list-style-type: none">• Broken, full brute force is possible by an open source password cracker with GPU acceleration within max 20 hours
PASSCODE	7.00-7.01	SHA1 based (Code Version F)	<ul style="list-style-type: none">• Limited, duration of attack depends on password length and password complexity
PWDSALTEDHASH	7.02	Iterated salted SHA-1 (Code Version H)	<ul style="list-style-type: none">• State of the art, higher number of iterations slows down the hash calculation; usage of random salts prevents hash pre-calculation; password length and complexity mitigate dictionary attacks

What are the issues around password hashes in SAP systems?

SAP systems store passwords also with a broken password hash algorithm

- Refer to SAP notes [1237762](#) and [1458262](#)

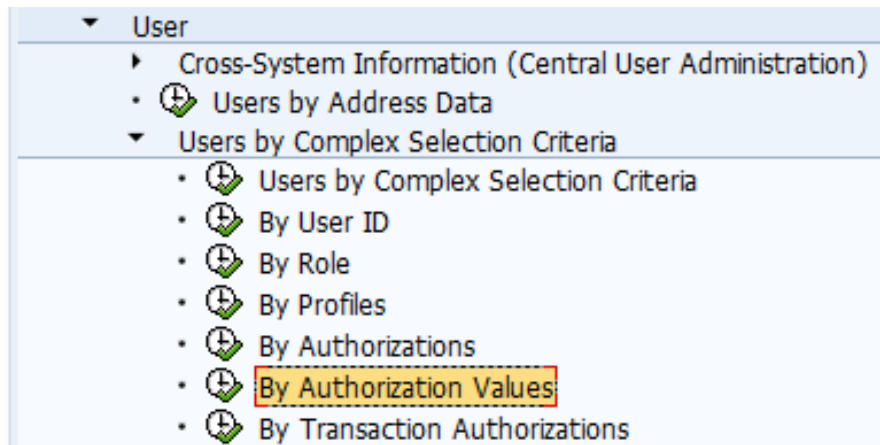
Password hashes are stored in several tables and tables are not assigned to special table authorization groups

- Depending on the SAP release, password hashes are stored in up to 6 tables / views
- By default, password hash tables are assigned to table authorization group SC (which contains many tables)
- Refer to SAP note [1484692](#)
- Refer to SAP note [2024431](#) that provides a report to adjust TDDAT in customer landscapes

What are the issues around password hashes in SAP systems?

Large number of users have display access to the password hash tables

- Depending on the authorization concept, usually several hundred to several thousand users have access to password hash tables
- Analysis can be done with SUIM
 - Authorization Object S_TABU_DIS
 - Activity 03 (Display)
 - Table Auth Group SC, SPWD
 - Table Auth Group # *



A screenshot of the 'Selection by Values' dialog box. It contains the following fields and options:

- Always Convert Values
- Entry values button
- Authorization object 1
 - Authorization Object: S_TABU_DIS
 - DICBERCLS - Table Authorization Group
 - Value: #* |
 - OR
 - AND
 - ACTVT - Activity
 - Value: 03
 - OR
 - AND

SAP Runs SAP:

Approach for password hash protection

Restrict display access to password hash tables

- All password hash tables have been assigned to the dedicated table authorization group `SPWD`
- Authorization concept was adjusted to minimize number of users having display access to password hash tables

Activate that only new password hashes for users are created

- Check that the CUA system generates all three password hashes
- Change profile parameter on all systems - `login/password_downwards_compatibility = 0`
- Exclude the CUA system if this system is connected to systems not supporting `PWDSALTEDHASH`

Enforcement of single sign on for personal users

- Users defined which have an exception for single sign on in `SU01 – Tab SNC` Permit Password Logon for SAP GUI (User-Specific)
- Enforce single-sign on for SAP GUI communication with `(snc/accept_insecure_gui = U)`

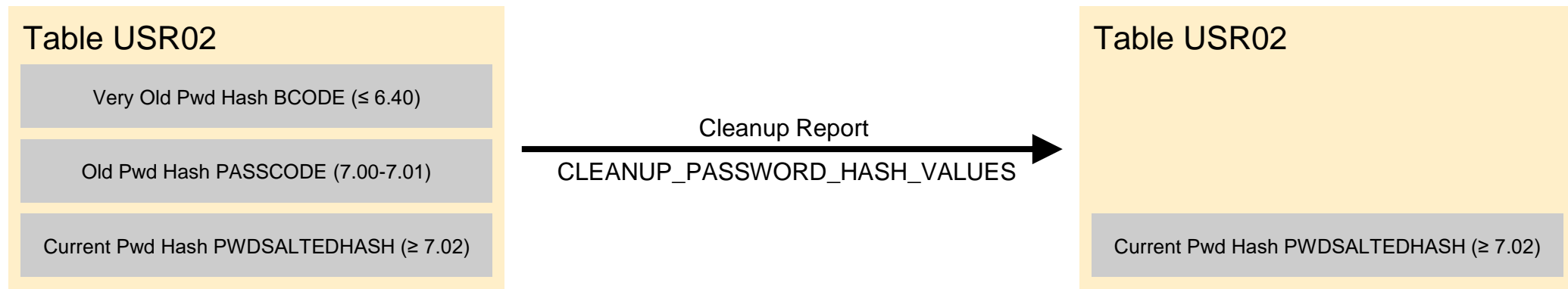
SAP Runs SAP: Approach for password hash protection

Re-enforce / adjust password policies

- Passwords for all single-sign on users have been removed
- Change all technical users to user type SYSTEM to exclude from password policy
- Password policy was adjusted by updating profile parameters (e.g. `login/min_password_lng`)
- Password policy was enforced by setting profile parameters (`login/password_compliance_to_current_policy`)

Clean-up of old password hashes

- Execution of report `CLEANUP_PASSWORD_HASH_VALUES` which deletes redundant password hashes (cross-client)



SAP Runs SAP:

Internal implementation of password hash protection

Issues faced during implementation – lessons learned

- Even with single sign on, password hashes might be stored for users
- Password policy settings (based on profile parameters) affect all clients
- Clean-up of redundant password hashes did not cause any problems
- Hardly possible to remove all `BCODE` password hashes in systems existing for some years (e.g. technical user accounts with only `BCODE` password hashes)
- Setting `login/password_downwards_compatibility = 0` after system installation saves lots of efforts and discussions with operations
- Get reasons if `login/password_downwards_compatibility` has values ≥ 2 before changing to 0

SAP Runs SAP: Monitoring of ABAP password hash generation

Part 1: ABAP password hash generation depends on several independent settings

- Profile parameters (e.g. `login/password_downwards_compatibility`, `login/min_password_lng`, `login/password_compliance_to_current_policy`)
- Table authorization groups for password hash tables

Usage of SAP Solution Manager – Configuration Validation at SAP

Configuration Items										
ConfigStore Name	Config. Item	Compliance	System	Compliant (1=Yes, -1=No, * =Not valuated)						
				Overall Result	ABC 0123456789	DEF 0123456789	GHI 0123456789	JKL 0123456789	MNO 0123456789	PQR 012345678
ABAP_INSTANCE_PAHI	login/min_password_lng	No		-2	-1	-1				
		Yes		4			1	1	1	1
	login/min_password_lowercase	No		-2	-1	-1				
		Yes		4			1	1	1	1
	login/min_password_specials	Yes		6	1	1	1	1	1	1
	login/password_compliance_to_current_policy	No		-2	-1	-1				
		Yes		4			1	1	1	1
	login/password_downwards_compatibility	No		-2	-1	-1				
Yes			4			1	1	1	1	
TDDAT	USH02	No		-2	-1	-1				
		Yes		4			1	1	1	1
	USH02_ARC_TMP	Yes		6	1	1	1	1	1	1
	USR02	No		-2	-1	-1				
		Yes		4			1	1	1	1
USRPWDHISTORY	Yes		6	1	1	1	1	1	1	

SAP Runs SAP: Monitoring of ABAP password hash access

Part 2: ABAP password hash access depends on several independent settings

- Percentage of users with weak password hashes (under evaluation how to monitor)
 - Idea: Percentage of users with weak BCODE password hashes shall be 5% or less per user type
- Authorization roles allowing display access to password hash tables (under evaluation how to monitor)

Usage of SAP Solution Manager – Configuration Validation under evaluation

Configuration Items				Compliant (1=Yes, -1=No, *'=Not valuated)				
ConfigStore Name	Client	Config. Item	Compliance System	Overall Result	ABC 0123456789	DEF 012345678	GHI 0123456789	JKL 0123456789
USER_PASSWD_HASH_USAGE	000	COMMUNICATION/USED/UNUSED/UNUSED/	No	-1		-1		
		DIALOG/USED/UNUSED/UNUSED/	No	-1		-1		
		SERVICE/USED/UNUSED/UNUSED/	Yes	1		1		
	001	COMMUNICATION/USED/UNUSED/UNUSED/	No	-1	-1			
			Yes	2		1		1
		DIALOG/USED/UNUSED/UNUSED/	No	-2		-1		-1
			Yes	1	1			
		SERVICE/USED/UNUSED/UNUSED/	No	-1	-1			
		SYSTEM/USED/UNUSED/UNUSED/	No	-1	-1			
	200	COMMUNICATION/USED/UNUSED/UNUSED/	No	-1			-1	
			Yes	3	1	1		1

How many notes are in scope of the monthly patch process?

January 2015

10 Security Notes
on Patch Day

1 Support Package
Note on Patch Day

4 Support Package
Notes on other days

2 Security HotNews
out-of-bands

Note	Application Component	Short text	Priority	Release date	Type
1985387	SV-SMG-INS-AGT	Potential information disclosure relating to SAP Solution Manager	high	13.01.2015	SecNote
2000401	IS-A-DP	Missing authorization check in IS-A-DP	high	13.01.2015	SecNote
2016638	BC-TWB-TST-ECA	Untrusted XML input parsing possible in BC-TWB-TST-ECA	high	13.01.2015	SecNote
2065073	BC-CST-LL	Missing authorization check in System Trace	high	13.01.2015	SecNote
2090692	BC-SEC	Security vulnerability in ICM content filter [sapcsa]	medium	13.01.2015	SecNote
2094598	BC-JAS-SEC-CPG	Fixing POODLE SSLv3.0 Vulnerability in AS Java	HotNews	13.01.2015	SecNote
2098906	HAN-AS-XS	Code injection vulnerability in SAP HANA XS	high	13.01.2015	SecNote
2109565	HAN-DB	Potential information disclosure relating to IMPORT FROM statement	high	13.01.2015	SecNote
2111169	XX-PART-CLK	Security Vulnerabilities in ClickSoftware Applications	high	13.01.2015	SecNote
2113333	BC-SYB-ASE	Multiple SQL injection vulnerabilities in SAP ASE	high	13.01.2015	SecNote
1951171	LO-SPM	Potentiell kontrollierbarer RFC-Funktionsbaustein bei EWM	medium	13.01.2015	SPIN
1937544	OPU-GW-CORE	Unauthorized modification of displayed content in User Self Service	medium	10.01.2015	SPIN
1605531	MDM-GDS	Credentials are stored in memory by SAP MDM GDS 2.1	medium	07.01.2015	SPIN
2069588	FIN-FSCM-BD-AR	Switchable authorization checks for RFC in Biller Direct	medium	23.12.2014	SPIN
1783807	CA-CL-SEL	Missing authorization checks in CA-CL	medium	18.12.2014	SPIN
2092489	BC-SEC	update to note 2067859	HotNews	12.12.2014	SecNote
2107562	MOB-MCO-MM	Fixing POODLE SSLv3.0 Vulnerability in Money Mobiliser Platform	HotNews	12.12.2014	SecNote

Conclusion: All notes published after the previous Patch Day are in scope!

How to find security related notes about databases?

Most security related notes about databases (except for HANA and SYBASE) are not “Security Notes”

- The notes are not listed on <https://support.sap.com/securitynotes>
- The notes are not listed by application System Recommendations

Example for Oracle:

- Note [1868094](#) - Overview: Oracle Security SAP Notes (updated on 03.12.2013)
This note lists ~60 security related notes
- Note [850306](#) - Oracle Critical Patch Update Program (updated on 25.11.2014)
This note lists ~30 critical patch notes

Other sources about secure configuration of Oracle databases:

- White Paper: [Database Security for Oracle](#) (PDF) from 2012
- SAP NetWeaver Security Guide - [Oracle on Windows](#)
- SAP NetWeaver Security Guide - [Oracle on UNIX](#)

Note [2094598](#) - Fixing POODLE SSLv3.0 Vulnerability in AS Java 7.00, 7.01, 7.02

The solution is available as a patch even for quite old support packages.

The manual activity of the note is not required (as the old protocol SSL 3.0 is switched off automatically by applying the fix).

Note [2092630](#) describes how to disable SSLv3 on AS ABAP, on AS JAVA as of 7.1, and on HANA.

There does not exist a solution for AS JAVA release 6.40.

Note 1985387 - Potential information disclosure relating to SAP Solution Manager

Open questions:

- How to check if a Solution Manager system is affected?
 - Don't care about deep analysis, just do it.
- How to change the password of the users?
 - Not using transaction SU01 but in SolMan "System Preparation" / "Maintain Users"
- Is it necessary to tell Diagnostics Agents about the new password?
 - Only in case of "Basic Authentication" but in this case you should go for "Certificate Based Authentication" anyway
- If yes, how to tell the Diagnostics Agents about the new password?
 - That's somewhere in the Agent Admin user interface
- Which folder contains the temporary files?
 - `C:\Program Files\sapinst_instdir` on windows respective `/tmp/sapinst_instdir` on Unix/Linux but log files can also be written to other directories, if non-standard installation procedures had been executed.
- These questions triggered the creation of new note 2119627 **Change the Password for the Diagnostics Agent Connection User in SAP Solution Manager**



December 2014

Topics December 2014



Recent notes for application System Recommendations

Note [1987344](#) - Code injection vulnerability in the OCS functionality (SPAM)

Note [2039348](#) - Missing whitelist check in GRC-ACP

Note [2046493](#) - Privilege escalation vulnerability in saposcol

Note [2091973](#) - Missing authorization check in FS-CD

Note [1686632](#) - Positive lists for RFC callback (extended)

Note [1800603](#) / [2074889](#) - Potential remote code execution in Message Server

Recent notes for application System Recommendations

2099728 SysRec: Object list for ABAP notes does not show Usage Procedure Logging data (UPL)

from 02.12.2014 for SolMan 7.1 SP 9 - 12

2025144 SysRec: enhancement for RFC to managed system and switch framework component

from 14.10.2014 for SolMan 7.1 SP 6 – 12

Use application System Recommendations to find such notes:

➤ Select notes by Application Component SV-SMG-SR

➤ Show Correction Notes

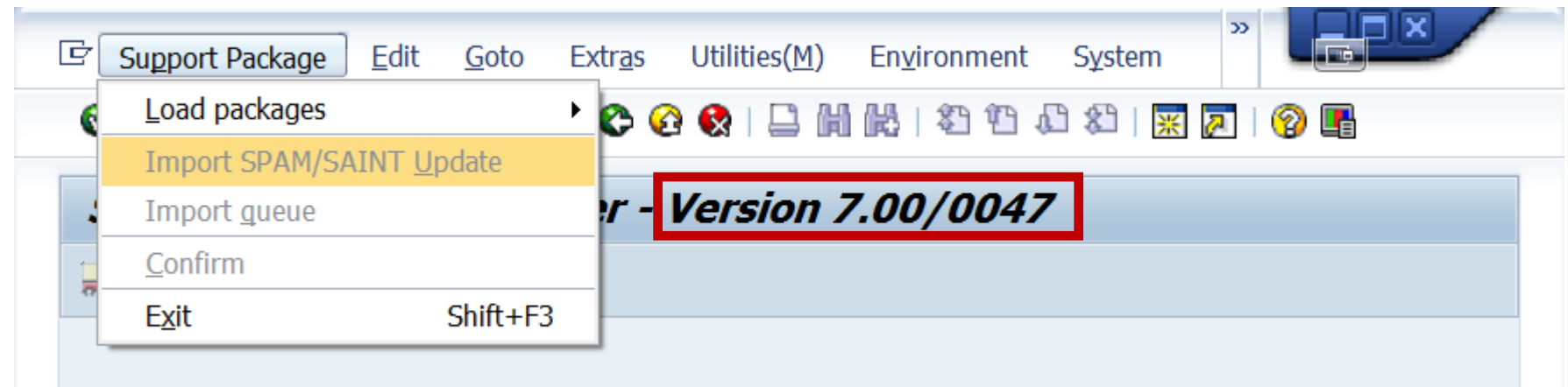
The screenshot shows the SAP SysRec interface. The 'Application Component' dropdown is set to 'SV-SMG-SR (System Recommendations for Managed Systems)'. Below it, a list of application components is shown, with 'SV-SMG-SR' highlighted. The 'Correction Notes (2)' tab is selected. The table below shows two notes:

Note Num...	Version	Short Text	Priority	Auto...	Manual I...	Kernel ...	Supp...	Categ...	Date
0002025144	0004	SysRec: enhancement for RFC to managed system and switc...	2	X				D - Ad...	14.10.2014
0002030394	0001	SysRec: System Recommendations Report with lots of systems	3	X				A - Pr...	13.06.2014

Note 1987344 - Code injection vulnerability in the OCS functionality

No Support Package assignment is possible for this type of correction.

- System Recommendations will show the note for all ABAP systems
- Call transaction SPAM to verify if the correction is required
- Solution:
 - R/3 Release 4.0B and 4.5B: SPAM/SAINT Update - Version 0052
 - R/3 Release 4.6: SPAM/SAINT Update - Version 0056
 - Basis Release 6.20 - 7.40: SPAM/SAINT Update - Version 0050



Note 2039348 - Missing whitelist check in GRC-ACP

Questions from users

➤ Which applications use this whitelist framework?

- This whitelist framework was published using note 1560878. Therefore we can expect that all applications which use this framework have notes showing a relationship to this note respective to some key words of the framework. Using the search for notes with term `SRT_WHITE_LIST` you find 10 notes which (except the framework notes itself) all belong to GRC.

➤ Do I need to maintain a whitelist for GRC-ACP?

- You only need to maintain a whitelist if you are using special functions (non-GRC Plugins, NON-GRCPI) for GRC in the customer name range which are registered somewhere in GRC customizing. Otherwise it's sufficient just to apply the note using transaction SNOTE. In any case we can state that the attack vector is rather narrow as an attacker only is able to call very specific functions using the vulnerability.

➤ Can I use authorizations for `S RFC` or security control using `U CON` instead?

- GRC applications come with several RFC enables functions. This is true for a central GRC box as well as for the GRC plugins for managed systems. Therefore you should have a strong authorization concept for authorization object `S RFC` and/or remote security based on `U CON`.
- `S RFC` respective `U CON` secure who is able to execute which RFC enabled functions. This includes RFC functions from GRC. The whitelist as described in note 2039348 secures which other functions can be indirectly called via the RFC interface of GRC.

Note 2046493 - Privilege escalation vulnerability in saposcol

System Recommendations cannot exactly check if the system is vulnerable, therefore it shows the note for all systems. However, only Unix systems are affected (even if `saposcol` exists for other platform as well).

Verify that the s-bit is not set. You can use report RSBDCOS0 for to execute following command:

```
ls -l /usr/sap/hostctrl/exe/saposcol
```

The program is vulnerable if output shows `-rws-r-x----` instead of `-rwx-r-x----`

```
[1]ls -l /usr/sap/hostctrl/exe/saposcol
-rwxr-x--- 1 root sapsys 2944585 2012-07-24 15:47 /usr/sap/hostctrl/exe/saposcol
```

Start `saposcol` either as a root (not recommended according to note 726094), or use SAPHOSTAGENT package which contains the new `saposcol` and handles its starting/stopping automatically in a safe way (see Note 1031096 - Installing Package SAPHOSTAGENT)

Other references:

- Note 19227 - Open newest `saposcol`
- Installation and Configuration of `saposcol`
http://help.sap.com/saphelp_nw70ehp2/helpdata/en/aa/b8c93a8aaa2b28e10000000a114084/content.htm

Note 2091973 - Missing authorization check in FS-CD

Deactivation of obsolete report in software component INSURANCE.

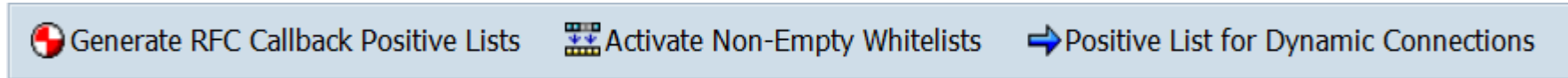
➤ As usual with this type of corrections: Just do it!

Note 1686632 - Positive lists for RFC callback (extended)

Questions from users

- Is it possible to use wildcards in whitelists?
 - By using '*' in the whitelist table `RFCCBWHITELIST` for field `CALLED_FM` or `CALLED_BACK_FM`, you can allow all called/callback function modules for the specified system. (see [documentation](#) of release 7.40)

- Does SAP plans to deliver a standard whitelist for SAP standard functions / remote scenarios?
 - Not really as we do not know your destination names and your active scenarios
 - Transaction SM59 gets an options to generate the whitelist using the Security Audit Log



**Preparation:
Implement note
2128095 - SAL
Missing parameters
in DUI, DUJ, and
DUK messages**

- Would it be possible to define a blocklist instead of a allowlist?
 - No, you only have allow entries and profile parameter `rfc/callback_security_method`:
 - 0: All entries are ignored, even the active ones.
 - 1: Only active entries are valid
 - 2: Only active entries are valid. However, also (invalid) inactive entries generate an entry in the security audit log if a callback is received from this destination that would have been rejected by the entry is active.
 - 3: All entries are valid, even the inactive ones.

Note 1686632 - Positive lists for RFC callback (extended) Example

RFC Destination CALLTP_Linux

Connection Test Unicode Test

RFC Destination

Connection Type Description

Description

Description 1	Transport Tools: tp Interface	*generated*
Description 2		
Description 3		

Administration Technical Settings **Logon & Security** Unicode Special Options

Security Options

Status of Secure Protocol

SNC Inactive Active

Authorization for Destination

Callback-Positivliste

Positivliste aktiv

	Gerufener Funktionsbaustein	Callback-Funktionsbaustein
<input type="checkbox"/>	*	TRINT_PROGRESS_INDICATOR
<input type="checkbox"/>	*	TRINT_TP_UPDATE_TPSTAT

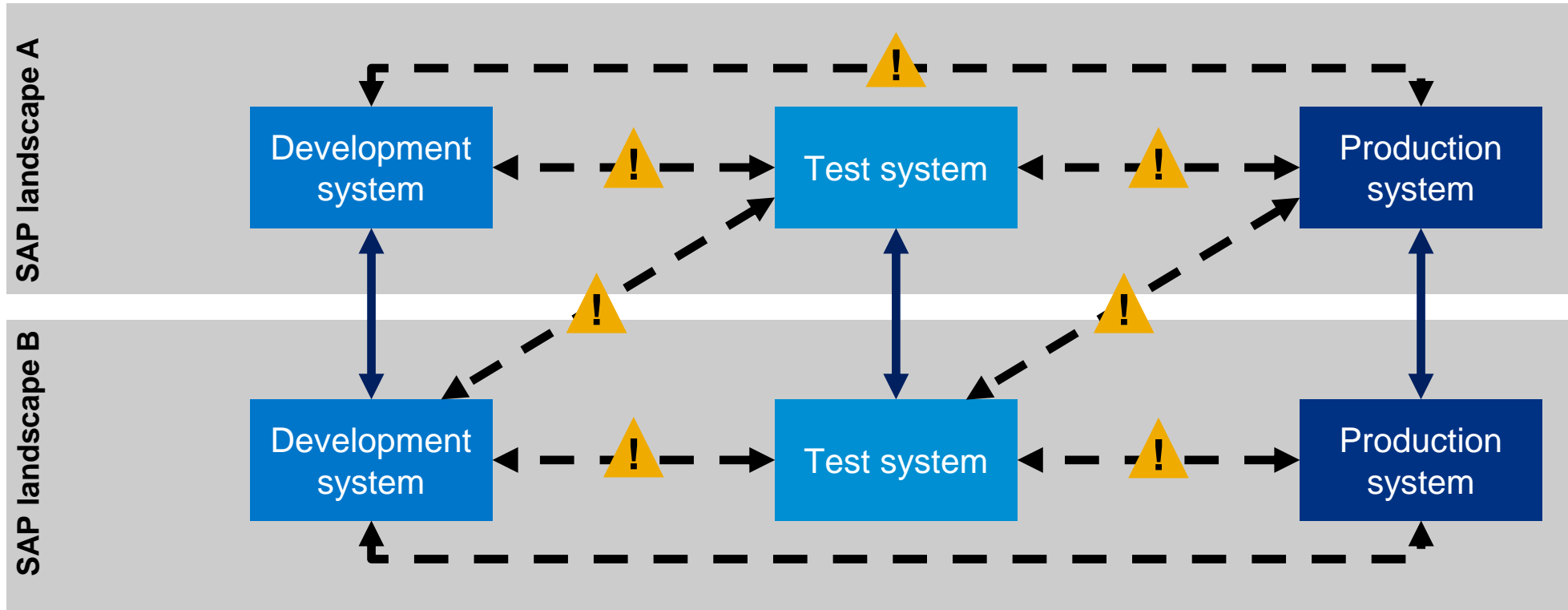
“Standard” scenario

tp is allowed to send status information back to ABAP.

No restriction, which of the functions within tp is allowed to callback to ABAP.

Note 1686632 - Positive lists for RFC callback (extended)

System landscape



- ← **OK:** RFC destinations between systems of same security classification
- ← **! CHECK:** RFC destinations from low security level to high security level (trust relationship, stored credentials)
RFC destinations from high security level to low security level (callback)

Note 1800603 / 2074889 - Potential remote code execution in Message Server

Solution:

SAP KERNEL 7.20 patch 402 620

SAP KERNEL 7.21 patch 42 318

Validate the version using
transaction **SMMS** → Goto → Release Notes

Keep in mind that both system types, ABAP and Java, contain a message server and are therefore affected.

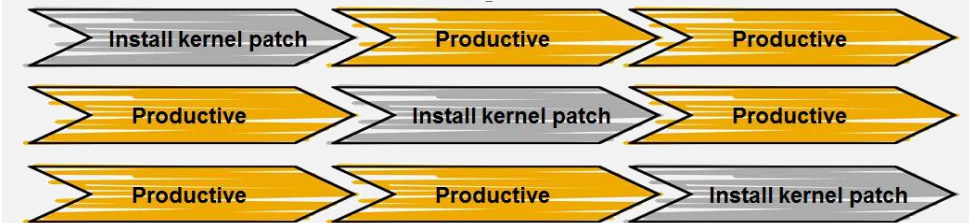
It is sufficient to update the message server. You can use the message server from 7.20 for a system with a kernel running on 7.00, 7.01, 7.10, or 7.11, however, although this will work from a technical point of view it is not officially supported by SAP. SAP strongly recommend to upgrade the kernel to release 7.20 at least. Note 1636252 describes how to install the downward-compatible kernel.

see blog:

[Best-practice about Security Advisory concerning Kernel related notes 1785761 and 1800603](#)

The Rolling Kernel Switch Procedure

<http://scn.sap.com/docs/DOC-46485>





November 2014

Topics November 2014



Note [1738988](#) - Code-Injection-Vulnerability in ABAP Dictionary Utility

Note [2078596](#) - SACF: Workbench for switchable authorization (RFC) scenarios
Further improvements for RFC security

Note [2008727](#) - Whitepaper: Securing Remote Function Calls (RFC)

Note [2086818](#) - Fixing POODLE SSLv3.0 (CVE-2014-3566) Vulnerability

Note [1686632](#) - Positive lists for RFC callback (updated)

Note 1738988 - Code-Injection-Vulnerability in ABAP DDIC Utility

Classical ABAP Code Injection:

1. Report which can be submitted via SA38 or using many other report starters
2. No AUTHORITY-CHECK
3. Import parameter containing ABAP coding
4. GENERATE SUBROUTINE
5. PERFORM form IN PROGRAM
6. **Gotcha!**

See also:

Note 1872638 - Code injection vulnerability in CRM-MKT-MPL-TPM-PPG (October 2014)

Note 1835691 - Code injection vulnerability in CRM-MKT-MPL-TPM-PPG (September 2014)

Note 2078596 - SACF: Switchable Authorization (RFC) Scenarios

Issue: RFC enabled function modules which do not perform any or sufficient business related authorization checks.

<i>Note</i>	<i>Component</i>	<i>Description</i>
<u>2078596</u>	BC-MID-RFC	Further improvements for RFC security
<u>2008727</u>	BC-MID-RFC	Whitepaper: Securing Remote Function Calls
<many>	<many>	Switchable authorization checks for RFC in <...>

SAP_BASIS

700 SP 32
701 SP 17
702 SP 17
710 SP 19
711 SP 14
720 SP 8
730 SP 13
731 SP 14
740 SP 9

Prerequisite notes are referenced in SAP Note 2054522.

Additional information on switchable authorization checks (SACF) is available in note 1922808

Kernel

7.20 patch 618
7.21 patch 227
7.38 patch 51
7.40 patch 44
7.41 patch 10

Online Help - Switchable Authorization Check Framework

http://help.sap.com/saphelp_nw74/helpdata/en/ff/599a937a9a43f8927040b63ce08cc4/content.htm

Note 2078596 - SACF: Switchable Authorization (RFC) Scenarios

Goal: Switch on all RFC scenarios ...

... for used scenarios including verification and adjustment of the authorization concept

... for not used scenarios (no need to update authorizations)

Process:

- 1. Fulfil prerequisites for SAP_BASIS and Kernel**
- 2. Enable RFC scenarios for logging using transaction SACF**
- 3. After some time: Adjust authorizations and then activate RFC scenarios**

Regular repetition!

Mitigation: Implement a strong authorization concept about **S_RFC** or use **UCON** mainly to block all unused RFC scenarios.

How to get RFC call traces to build authorizations for S_RFC for free!

<http://scn.sap.com/community/security/blog/2010/12/05/how-to-get-rfc-call-traces-to-build-authorizations-for-srfc-for-free>

Unified Connectivity (UCON)

<http://scn.sap.com/docs/DOC-53844>

Note 2078596 - Further improvements for RFC security

Caution: Other notes about “Missing authorization check in ...“ might not be related to Switchable Authorization Scenarios!

Note 2078596 currently lists 32 notes which are related to an SACF project and 28 notes describing other solutions like

- Introduction of an authorizations check which does not require to update authorizations
- Deactivation of obsolete but critical functions
- Disable the feature that the function can be called remotely

Note 2008727 - Whitepaper: Securing Remote Function Calls (RFC)

The White Paper shows best-practice to solve typical questions:

- How to secure RFC/http destinations between different system types (DEV, TEST, PRD)?
- How to secure RFC/http destinations having stored credentials (userid / password)?
- How to secure RFC/http destinations using trust relationships (Trusted RFC, SAP Authentication Token)?
- How to encrypt RFC/http communication channels?
- How to secure RFC server programs?
- How to secure the RFC client system?
- How to setup an authorization concept for RFC?
- How to analyze RFC usage?

<https://support.sap.com/securitywp>

Contents:

Securing RFC Destination Configuration

- Trusted System Security
- Secure Network Communication

Securing RFC Communication on the Server

- Limiting Access to RFC Function Modules
- Authorization Maintenance for RFC Communication
- Activating Switchable Authorization Checks

Securing RFC Communication on the Client

Securing RFC Callback

Securing the RFC Gateway

- Access Control for External RFC Servers
- Access Control for RFC Proxy Requests
- Blocking RFC Communication

RFC Security Monitoring

Note 2086818 - Fixing POODLE SSLv3.0 (CVE-2014-3566)



A fundamental flaw has been determined in the older cryptography protocol Secure Sockets Layer 3.0 (SSL 3.0), used to encrypt HTTPS communication. An exploit, called *Padding Oracle On Downgraded Legacy Encryption* (POODLE), has been published September 2014, that takes advantage of this vulnerability (CVE-2014-3566).

Although the SSL 3.0 protocol has been superseded with the newer Transport Layer Security (TLS) cryptography protocol, most web browsers also implement support for a "downgrade" protocol that allow SSL to be used if a connection using TLS cannot be established with a web application server.

This issue is not specific to SAP products, but affects all web applications that use HTTPS/SSL encrypted communication channels.

Solution:

Ensure that **all** web browsers and **all** web application servers disable use of the SSL 3.0.

Clients: Refer to vendor specific documentation for your web browser

Servers: Refer to vendor specific documentation for your Web Application Server

Note 2086818 - Fixing POODLE SSLv3.0 (CVE-2014-3566)

<i>Note</i>	<i>Component</i>	<i>Description</i>
<u>2086818</u>	BC-SEC-SSL	Fixing POODLE SSLv3.0 (CVE-2014-3566) Vulnerability (Central note)
<u>2092630</u>	BC-SEC-SSL	Turning off SSLv3 on AS ABAP, on AS JAVA as of 7.1, and on HANA
<u>2094598</u>	BC-JAS-SEC-CPG	Fixing POODLE SSLv3.0 Vulnerability in AS Java 7.00, 7.01, 7.02 (January 2015)
<u>2088755</u>	BC-JAS-SEC-CPG	Disabling SSLv3.0 in Netweaver AS Java 6.40 not possible
<u>510007</u>	BC-SEC-SSL	Setting up SSL on Web Application Server ABAP
<u>2089135</u>	SBO-BC	Upgrade OpenSSL to resolve the POODLE issue with the SSL 3.0
<u>2083444</u>	BI-BIP-DEP	Impact of the POODLE vulnerability on SAP BusinessObjects software
<u>2096275</u>	BC-SYB-SQA	Fixing Poodle SSLv3.0 Vulnerability in multiple SAP Sybase products
<u>2094995</u>	MOB-AFA	Afaria Server Poodle Mitigation
<u>2105793</u>	MOB-SYC-SAP	Fixing Poodle SSLv3 vulnerability for Agency
<u>2107562</u>	MOB-MCO-MM	Fixing Poodle SSLv3 vulnerability in Money Mobiliser Platform
<u>2085867</u>	XX-SER-SAPSMP-ACC	No more support for old SSL Protocols in Service Marketplace

Note 1686632 - Positive lists for RFC callback (updated)

The solution provided by note 1686632 is incomplete and got updated:

2002096 - Wrong originally called function in RFC callback check

This note offers a Kernel patch for 721 only!

- Upgrade Kernel to 721 patch 321 or higher as part of your next maintenance activity.
- Then, schedule the project to secure RFC callback.

The implementation differs depending on the release of SAP_BASIS:

- Note 2058946 - Maintenance of callback positive lists before Release 7.31
- Online Help – RFC Logon and Security as of release 7.31
http://help.sap.com/saphelp_nw74/helpdata/en/48/8c727789603987e10000000a421937/frameset.htm

See note 2102941 - Update 1 to Security Note 1686632

Credits for this tip:
SAP Security Consulting



October 2014

Topics October 2014



Note [2067859](#) - Potential Exposure to Digital Signature Spoofing

Note [1686632](#) - Positive lists for RFC callback

Note [1872638](#) - Code injection vulnerability in CRM-MKT-MPL-TPM-PPG

Integration of System Recommendations and Usage Procedure Logging as of SolMan 7.1 SP 11

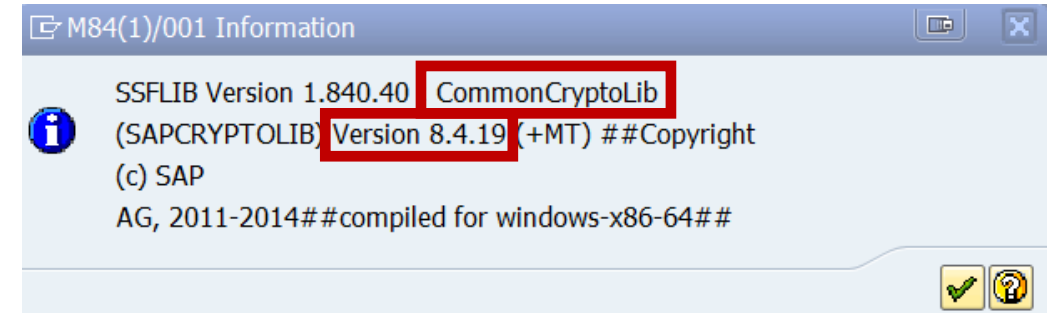
Note 2067859 - Potential Exposure to Digital Signature Spoofing

There is a critical vulnerability in versions of SAPCRYPTOLIB, SAPSECULIB and CommonCryptoLib components of SAP NetWeaver AS for ABAP and SAP HANA applications. The vulnerability may enable an attacker to spoof system digital signatures based on the DSA algorithm.

Determine the type and release of the SAP Cryptographic Library on your system using transaction STRUST → Environment → Display SSF Version. If your version is lower than those versions listed below, then replace your SAP Cryptographic Library.

Replace the affected libraries.

- SAPCRYPTOLIB, upgrade to version 5.5.5.38 or later.
- SAPSECULIB, upgrade to SAPCRYPTOLIB
- CommonCryptoLib, upgrade to version 8.4.30 or later.



It is sufficient to replace these libraries – you do not need to update the complete Kernel.

The main preventive measure is to replace the libraries. Do this first. You may consider to renew DSA keys, too. See note 2068693.

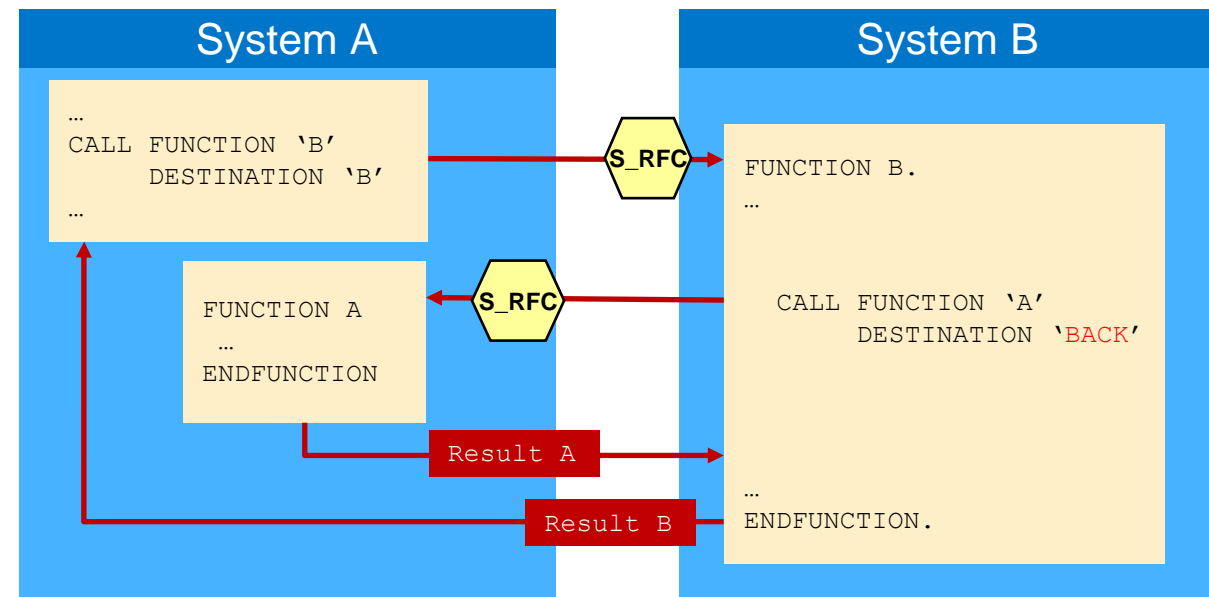
Note 1686632 - Positive lists for RFC callback

RFC callback can pose risks to business critical systems when initiating RFC communication to other systems using highly privileged users. In many cases batch jobs are executed by highly privileged system users. These batch jobs could perform RFC communication to remote systems.

Malicious remote systems could misuse the high privileges of the batch user using RFC callback. The following access control should therefore be implemented for all business critical systems.

RFC callback always performs S_RFC authorization checks and potentially additional functional authorization checks on the user that initiated the RFC communication.

The authorization management for users initiating RFC communication should therefore follow the same guidelines as for users receiving RFC calls.



Note 1872638 - Code injection vulnerability in CRM-MKT-MPL-TPM-PPG

Classical ABAP Code Injection via RFC:

1. RFC enabled function module
2. No AUTHORITY-CHECK except implicit check for S_RFC
3. Import parameter containing ABAP coding
4. GENERATE SUBROUTINE
5. PERFORM form IN PROGRAM
6. Gotcha!

SAP Usage and Procedure Logging (UPL)

Introduction

UPL is a new functionality available in any ABAP based system based on the core functionality of SAP Coverage Analyzer.

It will be used to log all called and executed ABAP units like programs, function modules down to classes, methods and subroutines.

Benefits:

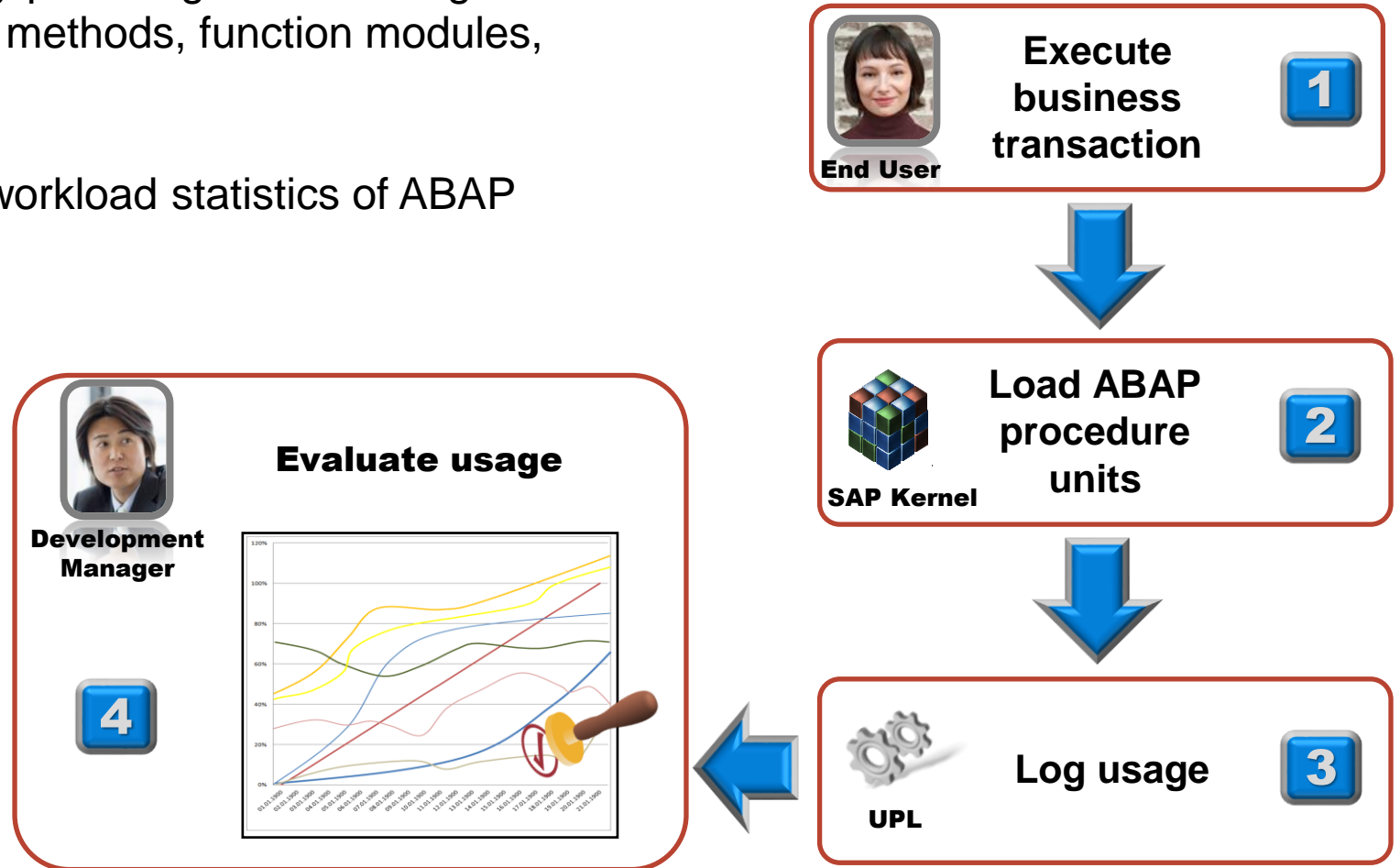
- ✓ No performance impact
- ✓ 100% coverage of usage
- ✓ Detection of dynamically called ABAP elements
- ✓ Secured access to UPL data to protect information
- ✓ The full reporting capabilities with enriched information in BW of the Solution Manager will give you the flexibility to analyze ABAP usage on your demands.

UPL, a prerequisite for several new SAP Solution Manager applications like BPCA and EHP Scope & Effort Analyzer

Usage and Procedure Logging (UPL)

The new way getting the real system usage

- UPL is a kernel based logging technology providing runtime usage information of ABAP procedure units like methods, function modules, subroutines and much more...
- UPL complements the standard ST03N workload statistics of ABAP executables
- UPL provides 100 % reliable usage analysis without measurable performance impact
- UPL is available as of SAP Netweaver 7.01 SP10 with Kernel 720 Patch 94
- EHP Scope and Effort Analyzer uses UPL to identify used ABAP procedure units and to create an inventory of these usage information.



SAP Usage and Procedure Logging (UPL)

FAQ about UPL

How to find out if UPL collection is collecting data?

Start transaction **SCOV** in the managed system. If UPL is activated, you will see a status information "SCOV lite is activated!" Furthermore the traffic light under "Data collection" should be green. In this case everything is fine.

Will UPL have any impact on the system performance?

No, there is no measurable impact, because we count the usage as soon as the ABAP compiler is loading the code. This is confirmed by the SAP benchmark team.

Are there any risks to activate UPL?

No, there is no known risk to activate UPL.

How much data will be consumed in the managed system?

We collect usage data on a daily basis. As soon as one ABAP program was executed, we increase only the execution counter. From our experience the needed DB space is between 2-10 MB for 14 days of data. But this depends on the real usage of different programs.

There is an error message "Data collection was not performed" in monitor of SCOV.

Ensure settings and server are correct. If not please use report /SDF/UPL_CONTROL to stop UPL mode. Start transaction SCOV and correct the server settings. Then reactivate the UPL again.

In case of technical issues open a customer message on component SV-SMG-CCM-CDM

SAP Usage and Procedure Logging (UPL)

Usage Analysis (local in managed system)

How to read the UPL data in the managed system?

Use the report **/SDF/SHOW_UPL** to show the UPL data on the managed system. This includes viewing of existing time slices and also the current UPL collection in progress. In most cases the usage information is instantly available.

Output format (selection of most important ones)

Date	All entries with the same UPL date were executed at this date (no time available).
Object Type	Describes the transport type of objects. PROG for programs, FUGR for function groups, etc.
Object Name in Object Directory	Name of the ABAP repository object (TADIR).
Tcode/Program	Name of the ABAP include containing the ABAP procedure.
Type	Type of ABAP processing block. You are able to distinct between executions of function modules (FUNC), class methods (METH), selection screens, report events, user exits, etc.
Processing Block	Name of the ABAP processing block
Accumulated Executions	Number of executions

SAP Usage and Procedure Logging (UPL) Usage Analysis (local in managed system)

Display Usage & Procedure Logging Data



UPL data

UPL Date	Obj. Type	Runtime Obj. Name	Frame Program	Proc. Bloc	Proc. Block	Package	Accum. E...
06.09.2014	PROG	RSN3CRAWLR	RSN3CRAWLR	FORM	SEARCH_SCR_FOR_SAPSTARTSRV	SAPWL_NONE_R3_STATREC	48
06.09.2014	PROG	RSN3CRAWLR	RSN3CRAWLR	FORM	UPDATE_SCR_WITH_DSR_COMPONENTS	SAPWL_NONE_R3_STATREC	144
06.09.2014	PROG	RSN3CRAWLR	RSN3CRAWLR	PROG		SAPWL_NONE_R3_STATREC	48
06.09.2014	PROG	RSN3CRAWLR	RSN3CRAWLR	SSEL	START-OF-SELECTION:00	SAPWL_NONE_R3_STATREC	48
06.09.2014	PROG	RSN3CRAWLR	RSN3CRAWLR	SSEL	START-OF-SELECTION:01	SAPWL_NONE_R3_STATREC	48
06.09.2014	PROG	RSN3_AGGR_REORG	RSN3_AGGR_REORG	ESEL	END-OF-SELECTION:00	SAPWL_NONE_R3_STATREC	1
06.09.2014	PROG	RSN3_AGGR_REORG	RSN3_AGGR_REORG	PROG		SAPWL_NONE_R3_STATREC	1
06.09.2014	PROG	RSN3_AGGR_REORG	RSN3_AGGR_REORG	SSEL	START-OF-SELECTION:00	SAPWL_NONE_R3_STATREC	1
06.09.2014	PROG	RSN3_STAT_COLLECTOR	RSN3_STAT_COLLE...	ESEL	END-OF-SELECTION:00	SAPWL_NONE_R3_STATREC	24
06.09.2014	PROG	RSN3_STAT_COLLECTOR	RSN3_STAT_COLLE...	PROG		SAPWL_NONE_R3_STATREC	24
06.09.2014	PROG	RSN3_STAT_COLLECTOR	RSN3_STAT_COLLE...	SSEL	START-OF-SELECTION:00	SAPWL_NONE_R3_STATREC	24
06.09.2014	PROG	RSN3_STAT_COLLECTOR	RSN3_STAT_COLLE...	SSEL	START-OF-SELECTION:01	SAPWL_NONE_R3_STATREC	24
06.09.2014	PROG	RSOL_SOFTWARECOMPO...	RSOL_SOFTWAREEC...	ESEL	END-OF-SELECTION:00	DSWP_EWASDCCN_DE	1
06.09.2014	PROG	RSOL_SOFTWARECOMPO...	RSOL_SOFTWAREEC...	PROG		DSWP_EWASDCCN_DE	1
06.09.2014	PROG	RSOL_SOFTWARECOMPO...	RSOL_SOFTWAREEC...	SSEL	START-OF-SELECTION:00	DSWP_EWASDCCN_DE	1
06.09.2014	PROG	RSORA110	RSORA110	FORM	CONFIG_DEF_ANALYSIS	SAPWL_TOOLS	9
06.09.2014	PROG	RSORA110	RSORA110	FORM	CREATE_DATASUPPLIER_LOG_NODE	SAPWL_TOOLS	21

Extended Functions in System Recommendations

Show object list for selected ABAP notes

Available as of SolMan 7.1 SP 5

Filter System Recommendations by:

Solution: SAP Solution Application Component: All

Product System: SD7

Technical System: SD7 [ABAP]

Released From: To:

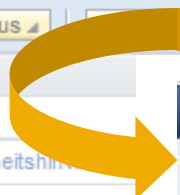
Apply Filter Save Filter

Technical System SD7 System Type ABAP Released From Released To Change Requests(13) BPC System Recommendations Report Last Refresh: 23.01.2012 21:00:54 CET Refresh

Security Notes (121) HotNews (22) Performance Notes (137) Legal Change Notes (21) Configuration Notes (4633)

View: List Set Status Show Object List Start BPCA Analysis Export Delete Filter Settings

Show object list for selected ABAP notes



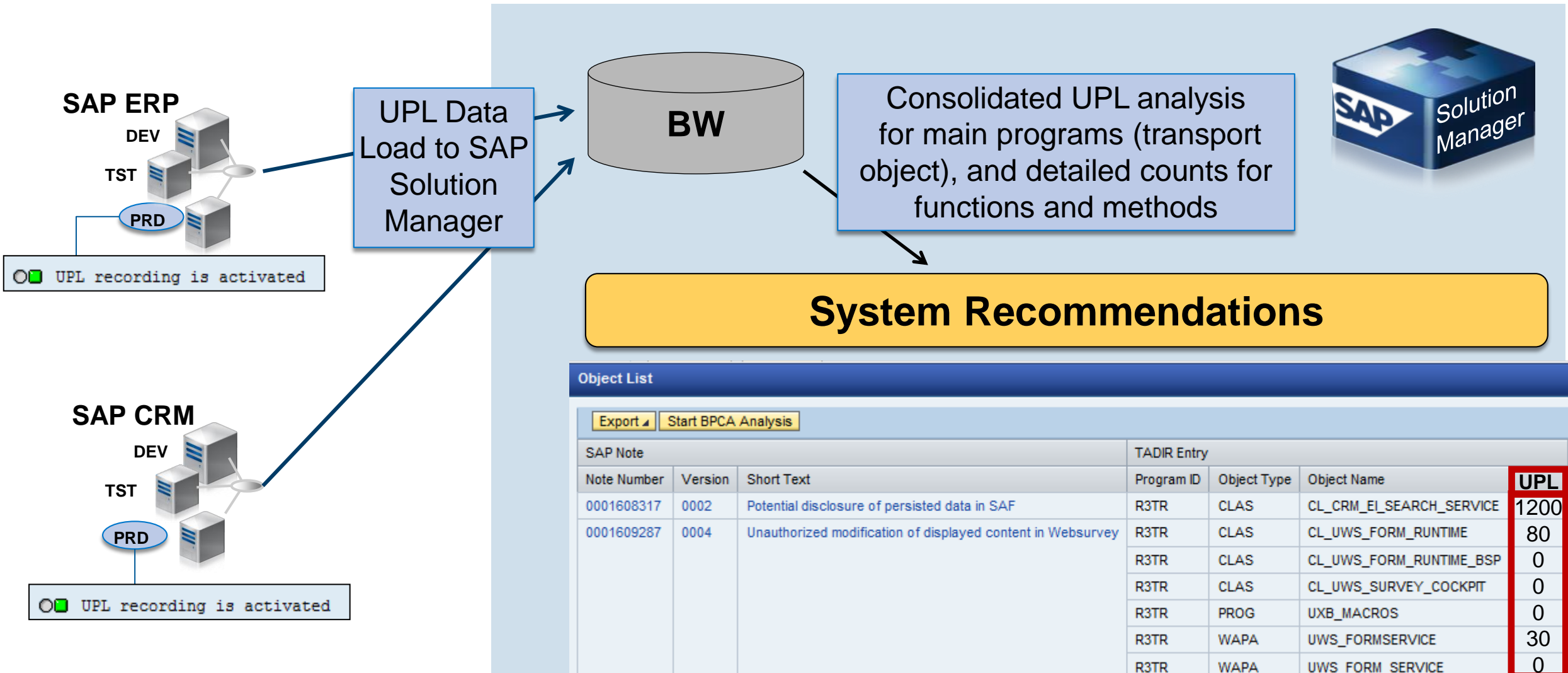
Object List

Export Start BPCA Analysis

SAP Note			TADIR Entry		
Note Number	Version	Short Text	Program ID	Object Type	Object Name
0001608317	0002	Potential disclosure of persisted data in SAF	R3TR	CLAS	CL_CRM_EI_SEARCH_SERVICE
0001609287	0004	Unauthorized modification of displayed content in Websurvey	R3TR	CLAS	CL_UWS_FORM_RUNTIME
			R3TR	CLAS	CL_UWS_FORM_RUNTIME_BSP
			R3TR	CLAS	CL_UWS_SURVEY_COCKPIT
			R3TR	PROG	UXB_MACROS
			R3TR	WAPA	UWS_FORMSERVICE
			R3TR	WAPA	UWS_FORM_SERVICE

Analysis of Object Usage in System Recommendations Data Collection of Usage Procedure Logging (UPL)

Available as of
SolMan 7.1 SP 10(12)



Analysis of Object Usage in System Recommendations

Show object list for selected ABAP notes with usage data

Available as of SolMan 7.1 SP 10(12)

SAP Solution Manager: Work Centers

My Home | Business Process Operations | Business Process Operations (New) | Custom Code Management | **Change Management** | SAP Solution Manager: Configuration | Root Cause Analysis | Data Volume Management

Filter System Recommendations by:

Solution: SAP Solution | Application Component: All
 Product System: 1124 | AC* (AC and subnodes)

Object List

Export | Start BPCA Analysis

SAP Note			Object Description			TADIR Entry			Last Month Usages
Note Number	Version	Short Text	Program ID	Object Type	Object Name	Program ID	Object Type	Object Name	Last Month Usages
0001932505	0001	Unauthorized modification of displayed content in NWBC	LIMU	METH	CL_NWBC_TEST_HANDLE_TESTCANVAS	R3TR	CLAS	CL_NWBC_TEST	0
0001949046	0001	Broken authorization check	LIMU	REPS	BDLCOTOP	R3TR	PROG	BDLCOTOP	0
0001955908	0001	Fehlende Berechtigungsprüfung in BC-BMT-WFM	LIMU	REPS	RSWNWIEX	R3TR	PROG	RSWNWIEX	0
			LIMU	REPS	RSWY_WI_EXECUTE	R3TR	PROG	RSWY_WI_EXECUTE	0
0001965610	0001	Code injection vulnerability in external commands	LIMU	FUNC	SXPG_CALL_SYSTEM	R3TR	FUGR	SXPT	0
			LIMU	FUNC	SXPG_COMMAND_CHECK	R3TR	FUGR	SSXP	34
			LIMU	FUNC	SXPG_COMMAND_EXECUTE	R3TR	FUGR	SXPT	34
			LIMU	FUNC	SXPG_COMMAND_EXECUTE_LONG	R3TR	FUGR	SXPT	34
			LIMU	FUNC	SXPG_STEP_COMMAND_START	R3TR	FUGR	SSXP	34
			LIMU	FUNC	SXPG_STEP_XPG_START	R3TR	FUGR	SSXP	35
			LIMU	REPS	LSSXPTOP	R3TR	FUGR	SSXP	833
0001966056	0001	Code injection vulnerability in BW	LIMU	REPS	LRSCONDENSEF01	R3TR	FUGR	RSCONDENSE	9452
			LIMU	REPS	LRSDQF05	R3TR	FUGR	RSDQ	5298
			LIMU	REPS	RS_CURRENCY_CONVERTER	R3TR	PROG	RS_CURRENCY_CONVERTER	0

OK

Cross-System check for System Recommendations

Report ZSYSREC_NOTELIST with object list and usage data

Available as of SolMan 7.1 SP 10(12)

ZSYSREC_NOTELIST

Systems: M84 ABAP 21.07.2014 04:02:00
M84 JAVA 21.07.2014 04:02:46

Maintain status: Use functions NEW (new), IMP (to be implemented), NOR (irrelevant), PSP (postponed) and SAVE to maintain status

Object list: Use function OBJ to show the object list of selected notes including usage data

SID	Sys-Type	Note	version	Application area	Priority	Note short text	Rel.date	Note U...	SysRecSt...
M84	ABAP	2017050	1	BC-CUS-TOL-H...	2	Update 1 to Security Note 1971238	08.07.2014		New
M84	ABAP	2000476	1	CRM-MKT-MPI	2	Missing authorization check in CRM-MKT-MPI	13.05.2014		New
M84	ABAP	1998770							
M84	ABAP	1997788							
M84	ABAP	1988956							
M84	ABAP	1985100							
M84	ABAP	1984057							
M84	ABAP	1983739							
M84	ABAP	1977547							
M84	ABAP	1974016							
M84	ABAP	1971238							
M84	ABAP	1966896							
M84	ABAP	1966056							
M84	ABAP	1965610							
M84	ABAP	1965610							

Object list of notes with usage data

SI...	Note	Type	Name	Obj.	Transport object name	Count
M84	1955908	REPS	RSWNWIEX	PROG	RSWNWIEX	0
		REPS	RSWY_WI_EXECUTE	PROG	RSWY_WI_EXECUTE	0
	1965610	REPS	LSSXPTOP	FUGR	SSXP	908
		FUNC	SXPG_STEP_XPG_START	FUGR	SSXP	38
		FUNC	SXPG_COMMAND_CHECK	FUGR	SSXP	37
		FUNC	SXPG_COMMAND_EXECUTE	FUGR	SXPT	37
		FUNC	SXPG_COMMAND_EXECUTE_LONG	FUGR	SXPT	37
		FUNC	SXPG_STEP_COMMAND_START	FUGR	SSXP	37
		FUNC	SXPG_CALL_SYSTEM	FUGR	SXPT	0

SAP Usage and Procedure Logging (UPL)

Prerequisites for the monitored system

- SAP NetWeaver SAP_BASIS 7.01 SP10 **or** 7.02 SP9 (= SAP ERP 6.0 EHP4 **or** SAP ERP 6.0 EHP5)
- ST-PI 2008_1_700 SP4 **or** SP5 & Note [1683134](#) **or** ST-PI 2008_1_700 SP6 *or higher*
- Kernel 720 Patch 94 *or higher according to ...*
- SAP Note [1785251](#) - SCOV/UPL: Error messages in monitor (*Kernel 720 Patch 410 / 721 Patch 112*)
- SAP Note [1822227](#) (*to allow changing the data retention time using report /SDF/UPL_CONTROL*)
- SAP Note [1906451](#) - Technical Preparation for Custom Code Management
- Based on our experience the space requirements are 2-10 MB for 14 days of data. So even data collection of one year won't massively affect space requirements. Nevertheless verify your individual storage settings / database free space for a higher retention time value.
- Report /SDF/UPL_CONTROL shows the status:
 - Tipp: use System Recommendations to search for latest **correction notes** of application component **SV-SMG-CCM-CDM** for the managed system and for the SAP Solution Manager

Usage & Procedure Logging Control

Show results Job status

UPL Control Framework

Status Usage & Procedure UPL recording is activated STOP

UPL data available for 14 days

SAP Usage and Procedure Logging (UPL)

Activation via SAP Solution Manager

The UPL activation procedure was subject of continuous enhancements in the SAP Solution Manager infrastructure. Starting with many manual steps in SAP Solution Manager 7.1 SP5 it has finally reached a fully guided and system supported version in SAP Solution Manager 7.1 SP 11.

The **SOLMAN_SETUP** scenario for Custom Code Management contains all necessary steps and UIs to handle UPL configuration end to end including job scheduling of related UPL jobs.

See

Note [1955847](#) - UPL: Activation Procedure and Authorization Handling in SAP Solution Manager

Additional authorizations:

- S_COV_ADM with change activity
- S_RFC for function group /SDF/SCOV_LITE

SAP Usage and Procedure Logging (UPL)

Guided Procedure as of SAP Solution Manager 7.1 SP 11

SAP Solution Manager Configuration: Custom Code Management

Technical System M84~ABAP~001 User Name D019687 Create Support

1 Managing System Prepar... 2 Housekeeping Settings 3 Create Template Users 4 Scope Selection 5 Client Selection 6 Configure Infrastructure 7 Configure Library

System specific part

Edit | Previous Next | Save Reset

Help

Automatic Activities

Show All Logs | Execute All | Execute Selected | Refresh

	Status	Updates Needed	Activity	Type	Comment	Navigation	Execution Status
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BW Content Activation (Custom Objects)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BW Content Activation (CCLM)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BW Content Activation (SAP References)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BW Content Activation (ATC)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BW Content Activation (SQLM)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Check BW content activation (UPL)	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Schedule CCM Infrastructure Jobs	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Schedule BW House-Keeping Job	Mandatory			Execute
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Check MDX Parser	Mandatory			Execute

SAP Usage and Procedure Logging (UPL)

Central Analysis using BW in SAP Solution Manager

BEx Ad Hoc Analysis

Data Analysis Graphical display Info Information Broadcasting

BW Query OSM_CCL_UPL_MONTH

UPL monthly Report

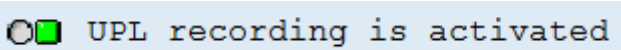
Last Data Update: 20.09.2014 06:57:08

Save View Bookmark Variable Screen Exceptions and Conditions Comments Export to Microsoft Excel Export to CSV

Rows	System ID	Calendar Year/Month	Program Name	Object Type	Object Name	Processing Name	Processing Type	Object Executions
Calendar Year/Month	M11	JUL 2014	%H_USR10	PROG	%H_USR10	GET_FIELD	FORM	8
Object Name						GET_STRUCTAB	FORM	2
Object Type						RANGE_SELECT_HV_H_USR10	FORM	2
Processing Name			/1BCDWB/DB/SDF/UPL_LOG	PROG	/1BCDWB/DB/SDF/UPL_LOG	FIRST_TIME_SORT	FORM	1
Processing Type						INITIALIZATION:00	INIT	2
Program Name						LIST_OUTPUT	FORM	1
System ID						SORT_MAIN_TAB	FORM	1
						START-OF-SELECTION:01	SSEL	1
						TOP-OF-PAGE:00	TOPA	1
			/1BCDWBEN/SAPL/IWFND/EN0000	FUGR	/1BCDWBEN//IWFND/EN0000	DEQUEUE_/IWFND/E_MET_AGR	FUNC	21
						ENQUEUE_/IWFND/E_MET_AGR	FUNC	21
			/1BCDWBEN/SAPL/SSF/EN0000	FUGR	/1BCDWBEN//SSF/EN0000	DEQUEUE_/SSF/E_PTAB	FUNC	983
						ENQUEUE_/SSF/E_PTAB	FUNC	984
			/1BCDWBEN/SAPLBEN0000	FUGR	/1BCDWBEN/BEN0000	DEQUEUE_EBANK_JC_SYNC	FUNC	9
						DEQUEUE_EBANK_PP_PARUNHD	FUNC	18
						DEQUEUE_EBANK_PROCESS	FUNC	66
						DEQUEUE_EBANK_WORKL_PACK	FUNC	4.404
						ENQUEUE_EBANK_JC_ACTIVE	FUNC	9
						ENQUEUE_EBANK_JC_SYNC	FUNC	12
						ENQUEUE_EBANK_PP_PARUNHD	FUNC	18
						ENQUEUE_EBANK_PP_RUNKEY	FUNC	3
						ENQUEUE_EBANK_PROCESS	FUNC	66
						ENQUEUE_EBANK_WORKL_PACK	FUNC	4.404
			/1BCDWBEN/SAPLBEN0001	FUGR	/1BCDWBEN/BEN0001	DEQUEUE_E_MASD	FUNC	990
						ENQUEUE_E_MASD	FUNC	991

Analysis of Object Usage in System Recommendations Troubleshooting

If you do not see the additional column in System Recommendations or if you get zero results only:

- **Check if UPL is active in managed system**
 - Report /SDF/UPL_CONTROL should show 
 - Report /SDF/SHOW_UPL should show some data (run it for a previous day to get results faster)
- **Check if SolMan gets usage data**
 - BW-Query OSM_UPL_DATE_RANGE_BPCA respective OSM_CCL_UPL_MONTH should show some data
Keep in mind that it takes some time (up to 2 days) to replicate usage data into this query
 - Note [2077995](#) describes new report AGS_CC_INFRASTRUC_CHECK for SolMan 7.1 SP 12 which checks the UPL setup
- **Check notes of application component SV-SMG-SR**
 - Note [2099728](#) - SysRec: Object list for ABAP notes does not show Usage Procedure Logging data (UPL) from 02.12.2014 for SolMan 7.1 SP 9 - 12
- If UPL is not working ask for advice via application component **SV-SMG-CCM**
- If SysRec does not show existing usage data, create a ticket on application component **SV-SMG-SR**
- If report ZSYSREC_NOTELIST does not show existing usage data, send me a mail or comment on <http://scn.sap.com/community/security/blog/2011/07/18/report-zsysreconotelist--show-results-of-system-recommendation>



September 2014

Topics September 2014



Note [1909442](#) - Incorrect authorization check in IAC post processing

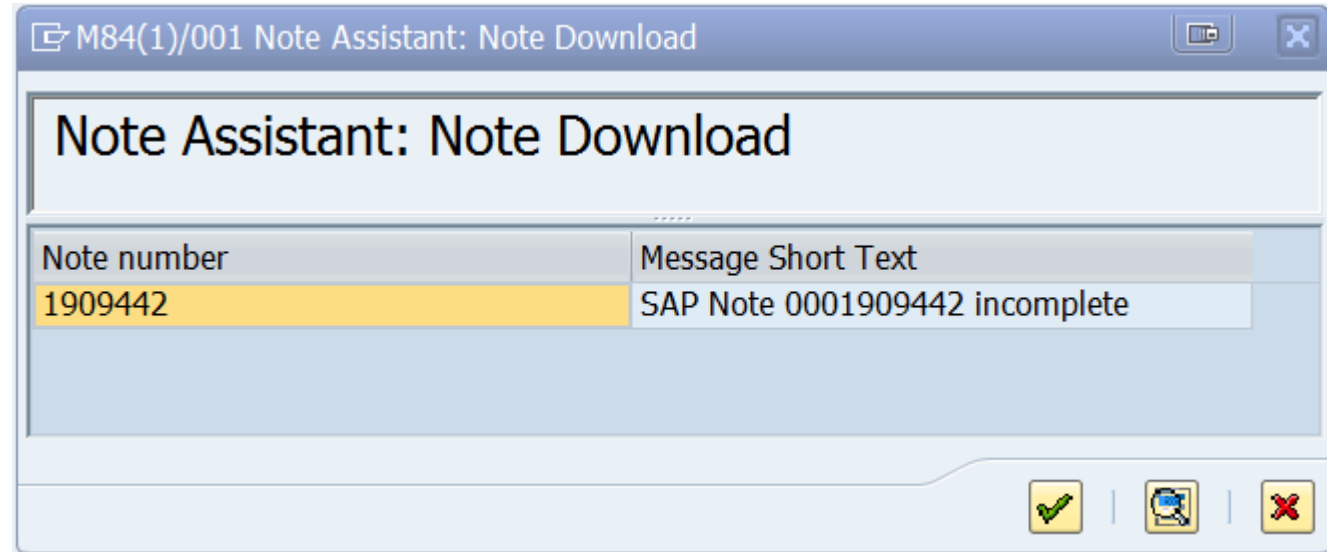
Note [1971397](#) - Missing authorization check in BW-BEX-OT

Note 1909442 - Incorrect authorization check in IAC post processing

Issue: You cannot download note 1909442 into SNOTE

SNOTE cannot download ,incomplete' notes directly.

I'm not sure if the note owner can solve the issue.



Workaround: Use the "download basket" of the SMP do download notes to your PC. Then unzip the downloaded archive and upload the files to SNOTE.

Works fine!

Note 1971397 - Missing authorization check in BW-BEX-OT



Use of new 'Repository Whitelists' (transaction SLDW) for a specific application.

Make sure note 1919573 and 2061628 are implemented in your system and execute the manual activities.

→ Huge correction if you have to get these notes first, go for it only if you want to run the complete project about 'Repository Whitelists'

Note 1919573 - SLDW: Environment for maintaining switchable whitelists

Note 1922712 - SLDW: FAQ: Supplementary notes for whitelist maintenance

Note 2061628 - SLDW: Transport connection for new whitelists



August 2014

Topics August 2014



Note [2020395](#) - Sapinst used static salt for password encryption on UNIX / Linux

Note [1917381](#) - Missing authorization check in Profile Maintenance

Note [1769064](#) - Additional values for auth/rfc_authority_check

Tips & Tricks: Notes showing several SP for same release

Tips & Tricks: Notes referring to other notes at Causes - Side Effects

Tips & Tricks: Old notes

Note 2020395 - Sapinst used static salt for password encryption on UNIX / Linux

Only relevant for **UNIX / Linux** servers (but not for Windows...) on which you have installed ABAP, Java, etc. in the past using SAPinst patch before 2013.12.

Check file **/etc/shadow** for users showing the substring **R3** surrounded by ,'\$' which is the field separator within this file. These users have the weak salt as described in the note.

The note proposes to re-set the existing value of the password to get a new random salt for the hash.

Caution: Be very careful to re-set the existing value – you should be sure that you know the existing password. If you change the password to a different value than you have to update it wherever it is used, too.

Note 1917381 - Missing authorization check in Profile Maintenance

Several customers had been waiting for the publication of this note. Now the note is available again.

Remark for customers that have installed Support Package 5 of SAP_BASIS 740 (SAPKB74005):

Version 2 of this note cannot be implemented if version 1 is already implemented. Do not try to de-implement version 1 in this case.

Note 1769064 - Additional values for auth/rfc_authority_check

Calling RFC function modules requires a valid authentication of the user and authorizations for authorization object S_RFC for all function except the RFC enabled function of function group SRFC.

Some of the RFC functions of this function group unveil system information which might help potential attackers. Using the new Kernel as described in note 1769064 you can force authentication and authorization checks for these RFC functions as well.

Be careful to use these options, as this might have a strong impact to existing interfaces!

New options:

3 = Logon required for all function modules except RFC_PING and RFC_SYSTEM_INFO (no authorization check)

4 = Authorization check required for all function modules except RFC_PING and RFC_SYSTEM_INFO

5 = Logon required for all function modules except RFC_PING (no authorization check)

6 = Authorization check required for all function modules except RFC_PING

8 = Logon required for all function modules no authorization check)

It's much more important to get rid of any '*' in authorizations for S_RFC!

Run a project to improve authorizations for S_RFC, e.g. using this blog on SCN:

How to get RFC call traces to build authorizations for S_RFC for free!

<http://scn.sap.com/community/security/blog/2010/12/05/how-to-get-rfc-call-traces-to-build-authorizations-for-srfc-for-free>

Tips & Tricks:

Notes showing several SP for same release

Example: Note [1674132](#) - Code injection vulnerability in BC-SRV-COM-FTP

There are multiple entries for different support package per release. In addition there are multiple correction instructions per release.

Which SP per release is required to get the complete solution?

➤ You need the latest SP.

Is the system safe if you are in between?

➤ If you just have the lower SP, the system is not safe. Individual analysis would be required to judge if you don't get anything at or partly solution.

Do I need to take care while implementing a note using the note assistant, transaction SNOTE?

➤ Usually you see several correction instructions. One is valid up to lower SP – 1, the other is (should be) valid up to higher SP – 1. SNOTE takes care automatically implementing all relevant correction instructions in the correct order.

Support Packages		
Software Component	Release	Support Package
SAP_BASIS	46B	SAPKB46B62
	46C	SAPKB46C66
	46C	SAPKB46C64
	620	SAPKB62074
	620	SAPKB62072
	640	SAPKB64032
	640	SAPKB64030
	700	SAPKB70027
	700	SAPKB70029
	701	SAPKB70112
	701	SAPKB70114
	702	SAPKB70214
	702	SAPKB70213
	702	SAPKB70212
	710	SAPKB71017
	710	SAPKB71015
	711	SAPKB71110
	711	SAPKB71112
	720	SAPKB72008
	730	SAPKB73009
730	SAPKB73008	
730	SAPKB73007	
731	SAPKB73103	
731	SAPKB73107	

Tips & Tricks:

Notes referring to other notes at Causes - Side Effects

Example: Note [1674132](#) contains a reference to an update note [1826162](#) in the section 'The following SAP Notes correct this Note / Patch'

This is a similar case as described on previous slide which shows that the correction provided by the first note either is incomplete or even is the source of errors.

If the update note contains correction instructions that it's usually sufficient just to implement the update note. The note assistant, transaction SNOTE, will read the first note and will implement these correction instructions first. However, there is no harm if you start implementing the first note. Take care to get the update note, too.

System Recommendations shows both notes if the notes are relevant.

Causes - Side Effects

Notes / Patches corrected with this note					
Note Reason	From Version	To Version	Note Solution	Version	Support Package
The table does not contain any entries					

The following SAP Notes correct this Note / Patch					
Note Reason	From Version	To Version	Note Solution	Version	Support Package
1674132	0	0	1826162	1	

Support Packages & Patches

Support Packages		
Software Component	Release	Support Package
SAP_BASIS	620	SAPKB62074
	640	SAPKB64032
	700	SAPKB70029
	701	SAPKB70114
	702	SAPKB70214
	710	SAPKB71017
	711	SAPKB71112
	720	SAPKB72008
	730	SAPKB73010
	731	SAPKB73108
	740	SAPKB74003

Tips & Tricks: old notes

Examples for notes showing up in SysRec for many systems

Note Number	Short Text	Auto	Manual	Date	Application Component	Software Component	Comment
0001497599	Missing authorization check in method GET_CONVERTED_TABLE	X		14.12.2010	AP-MD-PRO	SAP_ABA	An automatic correction instruction is valid for All Support Package Levels
0001517478	Missing Authorization Check in Menu Painter	X		14.12.2010	BC-DWB-UTL-BRR	SAP_BASIS	An automatic correction instruction is valid for All Support Package Levels
0001541716	Potential Denial of Service in translation tools funct.	X		08.03.2011	BC-DOC-TTL	SAP_BASIS	An automatic correction instruction is not restricted by to-SP
0001571325	Potential disclosure of persisted data in test code	X		10.05.2011	CO-PC	SAP_APPL	An automatic correction instruction is valid for All Support Package Levels
0001599094	HCM: Directory traversal in PT-TL		X	01.07.2011	PT-TL	SAP_HRRXX	An automatic correction instruction is valid for All Support Package Levels
0001608317	Potential disclosure of persisted data in SAF	X		08.11.2011	CA-GTF-IC-SAF	WEBCUIF	The note and the correction instructions are valid for several software components (SAP_ABA, CRMUIF, WEBCUIF). An automatic correction instruction for WEBCUIF is not restricted by to-SP
0001648395	Unauthorized modification of displayed content in CA-AUD		X	10.04.2012	CA-AUD	SAP_ABA	An automatic correction instruction for SAP_ABA is not restricted by to-SP
0001760776	Directory traversal in PY-NL-RP, PA-PA-NL and PA-PF-NL		X	12.03.2013	PY-NL	SAP_HRCNL	A manual post-implementation instruction for SAP_HRCNL is not restricted by to-SP . This is correct as it describes mandatory customizing activities which you can do after implementing the note or installing the SP.

Tips & Tricks: old notes

Overall rule

- SysRec shows relevant notes if the meta data of the note (validity of correction instructions, assignments of support packages / patches) show exact ranges.
After implementing these notes via SNOTE / support package / patch, these notes will vanish from SysRec.
- SysRec shows candidates for relevant notes if the meta data of the note is unspecific (release independent, support package independent, valid for all support packages, no valid-to limitation)
You have to decide if such notes are relevant for a given system. It might be the case that SNOTE accepts such notes and can implement them without errors. But it might happen that SNOTE runs into trouble as well. In this case it's most likely that the note is not relevant for this system. These notes will stay on SysRec (except if you implement them via SNOTE).

Tips & Tricks: old notes

Some specific rules

- If you just implement the coding part of a note but miss to execute any additional manual activities (from manual instructions or simply from the text of the note) than the note will vanish from SysRec even if the implementation is not complete. This could happen for ABAP, Kernel, and all others.
- If a note has manual instructions describing customizing, profile parameter changes, etc. then it would be correct if the validity of the instruction is not limited / valid FOR ALL SP but such notes will not vanish from SysRec (if you do not implement a coding part via SNOTE).
- SysRec takes the status from SNOTE (which will be transported from DEV systems to PROD systems, too)
→ in case of ABAP notes only having manual instructions SysRec does not know if the note is implemented or not and the note remains visible in SysRec.
- Automatic correction instructions which are valid FOR ALL SP or have no valid-to date are (most likely) wrong as SAP always delivers software corrections with support packages respective patches. You will observe that this had happened with older notes more often than with newer notes. SNOTE will claim that the note can be applied but will not find that the corrections are already there if you run a newer support package. If the code was changed in the meantime by another note or another change in a support package than it could even happen that SNOTE will show errors.
- Manual correction instructions which are valid FOR ALL SP or have no valid-to date are (most likely) correct as such notes usually describe configuration changes which can be applied after you got the new software. You should add such notes to a special worklist if you plan to postpone the action to the next maintenance activity about upgrading the SP.



July 2014

Topics July 2014



Small patch days in June (19+3) and July (8+3) mostly for non-ABAP / non-Java

Note [1988956](#) - Unauthorized modification of displayed content in BSP

Note [1881073](#) - Unauthorized modification of displayed content in BSP

Note [1971238](#) - Missing authorization check in BC-CUS-TOL-HMT

Note [2017050](#) - Update 1 to Security Note 1971238

Note [1808003](#) is not visible anymore

Note [1967780](#) - Missing authorization check in BW-WHM-DST

Note [2006974](#) - Code injection vulnerability in PP-PI-CFB

Note [2026132](#) - Update 1 to security note 1483548

Small patch days in June (19+3) and July (8+3) mostly for non-ABAP / non-Java

System Recommendations shows only notes about Software Components which belong to “Technical Systems” which are registered in the SLD/SMDL/SolMan.

Use the Service Marketplace

<https://support.sap.com/securitynotes>

to find Security Notes about other products like Sybase, BI, Mobile/Afaria.

BC-BMT	Business Management
BC-BSP	Business Server Pages
BC-CUS	Customizing
BC-JAS	Java Application Server - Please use sub-components
BC-MID	Middleware
BC-SEC	Security
BC-SRV	Basis Services/Communication Interfaces
BC-SYB	Sybase Products
BC-WD	Web Dynpro
BI-BIP	Business intelligence platform
BI-RA	Reporting, analysis, and dashboards
BW-WHM	Data Warehouse Management
EP-KM	Knowledge Management and Collaboration
EPM-BPC	Business Planning and Consolidation
FIN-FSCM	Financial Supply Chain Management
HAN-LM	SAP HANA Lifecycle Management
HAN-WDE	SAP HANA Web IDE
MFG-ME	SAP Manufacturing Execution
MOB-AFA	Afaria
MOB-SUP	Sybase Unwired Platform
PP-PI	Production Planning for Process Industries
PY-PH	Philippines

Small patch days in June (19+3) and July (8+3) mostly for non-ABAP / non-Java

Transaction LMDB
this data is automatically
delivered by SLD data
suppliers

System
Recommendations

The screenshot shows the SAP SLD interface for a technical system. The 'Software Component Versions' tab is active, displaying a table of installed components. Below it, the 'Security Notes' section is expanded, showing a list of vulnerabilities with their support package names highlighted.

Display Name	Supplier	Installation Type	System Or Insta...	SP Level	Patch L...
SAP HANA DAT...	automatic	Installed on Instance	HDB10 on Id7328	053	53
SAP HOST AGE...	automatic	Used by System	SDH on Id7328	170	170

Note Number	Short Text	Priority	Support Package Name	Date	Application Comp...	Software Component	SP Relevance
0001341333	Potential info. disclosure and code execution in sap...	2		08.05.2012	BC-DB-SDB	SAPHOSTAGENT 7.20	Support Package Independent
0001870605	Privilege escalation in SAP HANA	2	SP057	09.07.2013	HAN-DB	HDB 1.00	Support Package Independent
0001914778	Potential information disclosure relating to HANA ho...	3	SP060	08.10.2013	HAN-AS-XS	HDB 1.00	Support Package Independent
0001963932	Missing encryption for form based authentication	3	SP070	11.03.2014	HAN-AS-XS	HDB 1.00	Support Package Independent
0001964428	XS bypasses authentication for former public applic...	2	SP070	11.03.2014	HAN-AS-XS	HDB 1.00	Support Package Independent
0001993349	Unauthorized modification of displayed content in S...	2	SP072	08.04.2014	HAN-AS-XS-ADM	HDB 1.00	Support Package Independent
0002009696	Unauthorized modification of displayed content in S...	3	SP073	13.05.2014	HAN-AS-XS	HDB 1.00	Support Package Independent
0002011169	Unauthorized use of application functions in SAP H...	2	SP062	08.07.2014	HAN-LM-APP	HDB 1.00	Support Package Independent
0002014881	Potential disclosure of persisted data in SAP HANA ...	2	SP069	10.06.2014	HAN-WDE	HDB 1.00	Support Package Independent
0002015446	Unauthorized use of application functions in SAP H...	2	SP074	10.06.2014	HAN-WDE	HDB 1.00	Support Package Independent

Note 1988956 - Unauthorized modification of displayed content in BSP

Note 1881073 - Unauthorized modification of displayed content in BSP

“Be sure the note 1881073 is already applied in the system.”

This security note from June 2014 is defined as prerequisite note, that means the Note Assistant, transaction SNOTE will get it automatically.

However, without updating the kernel you wouldn't get the solution as this prerequisite note states:
”Please apply correction for both SAP Kernel and ABAP.”

Note 1971238 - Missing authorization check in BC-CUS-TOL-HMT

Note 2017050 - Update 1 to Security Note 1971238

Note 1971238 from March requires extended authorizations for authorization object S_RFC for function groups SHI1 and SHI5 in transactions SPRO and SUIM and others.

→do not implement this note without update note 2017050

Note 2017050 from July calls the authorization check only in case of an RFC call.

By the way: do you have a strong authorization concept about authorization object S_RFC?

- No role should contain full authorizations for authorization object S_RFC
- List used functions (FUNC) or at least function groups (FUGR) avoiding *
- Run a project to improve authorizations for S_RFC, e.g. using this blog on SCN:
How to get RFC call traces to build authorizations for S_RFC for free!
<http://scn.sap.com/community/security/blog/2010/12/05/how-to-get-rfc-call-traces-to-build-authorizations-for-srfc-for-free>

Note 1808003 is not visible anymore

Document is not released

Note 1808003 version 1 was published in May.

In June the note has been updated leading to version 2. Unfortunately it was necessary to deactivate the note afterwards because implementing version 2 (which deimplements version 1 first) would harm a system on releases below SAP_BASIS 7.40

→ Ignore this note if you don't have implemented it

→ Do not de-implement the note if you have implemented version 1

Update note 2032840 - Potential information disclosure relating to BC-CST explains that the solution is only available via SP and it emphasizes that you should not try to de-implement note 1808003 if you have implement it.

Note 1967780 - Missing authorization check in BW-WHM-DST

Inspecting the ABAP correction instruction we see that's a development support program which only will be used in emergency cases:

```
==== Check authorization to execute this program
AUTHORITY-CHECK OBJECT 'S_DEVELOP' " for user sy-uname
      ID 'DEVCLASS'   DUMMY
      ID 'OBJTYPE'   FIELD 'DEBUG'
      ID 'OBJNAME'   DUMMY
      ID 'P_GROUP'   DUMMY
      ID 'ACTVT'     FIELD '03'.
```

→ Implement the note similar to other notes which deactivate obsolete code: no test required for production systems.

Note 2006974 - Code injection vulnerability in PP-PI-CFB

What happens if you ignore the manual instruction to create a message via modification?

... not much, the user still get's the error message code E454(CFB) but without (misleading) text.

What happens if you ignore the manual instruction to implement a BAdI?

... nothing if you do not use Consumer Products Food and Beverage component (PP-PI-CFB)

Note 2026132 - Update 1 to security note 1483548

The note is shown by System Recommendations if your system runs with SAP_BASIS 701 but independently from any Support Package.

You do not implement this note via Note Assistant, transaction SNOTE, therefore you do not get rid of it.

→ Happily ignore this note as you will implement referenced note 1483548 anyway if shown by System Recommendations



June 2014

Topics June 2014



1808003 - Potential information disclosure relating to BC-CST

Minimal authorizations to run System Recommendations

How to run BW reporting on System Recommendations

How to send emails with results of System Recommendations

1889999 - Missing authorization check in LCAPPS DP

1966995 - Potential information disclosure relating to WebDynpro Application

1946911 - SAP NWBC ABAP Runtime Patch 35

1896642 - Potential information disclosure relating to Integration Technology ALE

1997455 - Potential information disclosure in BC-SEC-USR-ADM

1808003 - Potential information disclosure relating to BC-CST

Currently we have some issues with note 1808003 version 2

CVSS Base Score: 4.0

CVSS Base Vector: AV:N/AC:L/AU:S/C:P/I:N/A:N

Priority medium

→ Do not touch the note (do not implement version 2, do not de-implement version 1)

Minimal authorizations to run System Recommendations

see [Security Patch Process FAQ #30](#)

First of all you need access to Work Center "**Change Management**" (if you don't use the corresponding WebDynpro application `WDC_NOTE_CENTER` directly).

To control access to System Recommendations, the authorization object **SM_FUNCS** in SAP Solution Manager 7.1 (or **SM_TABS** in SAP Solution Manager 7.0) can be used to grant or deny access to the different tabs of System Recommendations.

Use the fields `ACTVT=03`, `SM_APPL=SYSTEM_REC`, `SM_FUNC=tab` (i.e. SECURITY).

You can restrict access to the systems of specific solutions using the authorization object **D_SOL_VSBL** with `SOLUTION=solution id` and `ACTVT=03`.

Depending on the version of the Solution Manager, authorization object **AI_LMDB_PS** with `ACTVT=03` and `LMDB_NAMES=ACTIVE` and `PS_NAME=system id` controls access to individual systems as well. These authorization objects are the minimal set which you need to execute the WebDynpro application directly.

See chapter 16.6 "System Recommendations" and 13.14.2 "User Roles for Solutions, Projects, Solution Directory" in the [documentation](#) → Operations → [Security Guide SAP Solution Manager 7.1 SP10](#).

How to run BW reporting on System Recommendations

1. via System Recommendations

Execute BW reporting via System Recommendations

- Shows System Recommendations for a system and navigate to the “System Recommendations Report”
- All systems of the solution will be selected
- Data from all areas (Security, HotNews, Legal Change, Performance) will be selected
- You can change the selection afterwards within the BW report via “Right click → Enhanced menu → Variables Entry”

- Keep Filter Value
- Fix Filter Value to Axis
- Select Filter Value
- Filter and drilldown according to ▶
- Drilldown ▶
- Swap Note Number with ▶
- Remove Drilldown
- Swap Axes
- Sort Note Number ▶
- Export as ... ▶
- Bookmark
- Distribute ▶
- Properties
- Query Properties
- Variables Entry**
- Basic Menu

Filter System Recommendations by:

No maintenance project assigned to this solution

Solution: M53_Sol

Product System: M53

Technical System: M53 [ABAP]

Released From: [] To: []

Apply Filter Save Filter

Technical System M53 | System Type ABAP | Released Fro

System Recommendations Report

Security Notes (159) HotNews (118) Perform

View: List | Set Status | Create

Note Num...	Version	Short Text	Priority
0000186119	0007	Restricting ...	4
0000400241	0054	Problems ...	4
0000412309	0019	Authorizatio...	6
0000512595	0005	Report on ...	1
0000526633	0005	Buffer overf...	1
0000538405	0090	Composite...	6
0000595383	0005	Security, Ag...	2
0000598074	0004	No fullpath ...	3

How to run BW reporting on System Recommendations

2. via Configuration Validation

Execute BW reporting via Configuration Validation

- Start Configuration Validation via same Work Center “Change Management”
- Choose tab 'Report Execution → Reporting Templates'
- Choose tab 'Configuration reporting'
- Optional: Select a system list for comparison (if you have defined one).
- Select configuration report 0TPL_0SMD_VCA2_SYS_RECOM_NOTES 'System recommendation reporting (missing SAP Notes calculated from system recommendations)'
- Finally enter selections about systems, area (Security, HotNews, Legal Change, Performance), notes (as of SolMan 7.1 SP 9) or date ranges

Overview
Projects
Requests for Change
Change Documents
System Recommendations
Maintenance Optimizer
License Management
Queries
Reports
▼ Common Tasks
New Request for Change
New Defect Correction
New Maintenance Transaction
IT Service Management
▼ Related Links
Change Management
Schedule Manager
Default SAP GUI Setting
Configuration Validation
SAP Links
Change Management
SAP Links

Operator validation Consistency validation **Configuration reporting** Weighted validation

Choose a configuration report

Configuration report	Description
0TPL_0SMD_VCA2_VAR_REP_HIER	Reporting using a hierarchical display (no validation)
0TPL_0SMD_VCA2_VAR_REP_FLAT	Reporting using a flat list (no validation)
0TPL_0SMD_VCA2_VAR_REP_CELL	Matrix Reporting (configuration item values in cells, configuration item names on x-axis - no validation)
0TPL_0SMD_VCA2_SYS_RECOM_NOTES	System recommendation reporting (missing SAP Notes calculated from system recommendations)

Suppress query variables pop-up Number of rows displayed Allow to paste notes

[Start configuration reporting](#)

How to send e-mails with results of System Recommendations via BW Broadcasting (1)

Prerequisites

To send reports by e-mail, you use the standard functions for BW Web Templates, which require only that your BW system (= Solution Manager) is connected to your e-mail communication. More information:

- SAPconnect (BC-SRV-COM)
http://help.sap.com/saphelp_nw70ehp2/helpdata/en/2b/d925bf4b8a11d1894c0000e8323c4f/frameset.htm
- External Sending in the SAP System
http://help.sap.com/saphelp_nw70ehp2/helpdata/en/55/a8b538891b11d2a25a00a0c943858e/frameset.htm

General information about sending BW object as e-mails:

- Broadcast by E-Mail
http://help.sap.com/saphelp_nw70ehp2/helpdata/en/cf/700b405bacdd5fe10000000a155106/frameset.htm

You need note 1880710 “3.X Broadcaster sends empty document” (pilot release) of component BW-BEX-ET-BC if your SolMan runs with SAP_BW 702 SP 10-14 to be able to enter lower case selections e.g. for area = „Security“

How to send e-mails with results of System Recommendations via BW Broadcasting (2)

Configuration

Call the BW report that you want to send by e-mail, and choose the desired settings for the time interval and the systems to be displayed. Create a Bookmark URL which you later can add to the e-mail text.

Ensure that you call the reports with the user under whose name the e-mails are to be sent. Ensure that this user has a working e-mail address in his or her user data (transaction SU01).

Right-click any active area of the BW report to display the context menu, switch to the **Extended Menu** and choose **Distribute → By E-Mail**.

A new screen now appears, on which you can make settings for the sending of the e-mail. If you have not yet created appropriate settings, choose **Create New Setting**. Either create the settings manually or using the wizard.

You can define the title and text of the e-mail here, and to whom it is to be sent:

- In the *Description* input field, enter a meaningful description of the settings.
- If you want to send the report directly as part of the e-mail, and it is to be displayed directly in the e-mail, choose the Output Format 'MHTML'.
- You can select recipients using their user names in the system or their e-mail addresses. You can also define the recipient list using roles. Separate multiple recipients with semicolons.
- On the *Texts* tab page, you define the title and text of the e-mail. Note that the e-mails only contain the BW Report itself, that is, they do not contain the selection elements (report name, time interval, and system ID). Create an e-mail text so that the report can be understood without this information.
- If, in addition to viewing the sent BW report, the recipient should be able to directly access the BW report interactively, insert the relevant Bookmark-URL in the contents of the e-mail.
- Leave the data on the *General Precalculation* and *Filter Navigation* tab pages unchanged.

Choose **Save**, and specify a technical name for the settings.

How to send e-mails with results of System Recommendations via BW Broadcasting (3)

Options for Sending

If you only want to send this report once immediately, choose *Execute*; however, it is more likely that you will want to send the report automatically at regular intervals. In this case, choose the *Schedule* button.

You define the scheduling on a new screen. To create a new periodic schedule, activate the two indicators *Create New Scheduling* and *Periodic...*. Now select the desired period and the next start time.

Choose the *Transfer* button, and save your changes. You have now completed the scheduling. The desired recipients will now regularly receive the desired reports.

How to send e-mails with results of System Recommendations via BW Broadcasting

Configuration Items

System	Note Number	Version	Short Text	
M53	00		Keep Filter Value	
	00		Fix Filter Value to Axis	
	00		Select Filter Value	
	00		Filter and drilldown according to	
	00		Drilldown	
	00		Swap Note Number with	
	00		Remove Drilldown	
	00		Swap Axes	
	00		Sort Note Number	
	00		Export as ...	
	00		Bookmark	
	00		Distribute	
	00		Properties	
	00		Query Properties	
	00		Variables Entry	
	00		Basic Menu	
	00	0000554444	0010	Status managem.: more than 1000 change dc
	00	0000558171	0009	Check log page numbers or I/O sequence num

Broadcaster

Settings Web Template | Settings Query | Overview of Scheduled Settings

Description	Technical Name	Owner	Last Changed	Scheduled
No Settings Available for Web Template Name Notes - System Recommendations (0TPL_0SMD_VCA2_SYS_RECOM_NOTES)				

Create New Setting Create New Setting with the Wizard

How to send e-mails with results of System Recommendations via BW Broadcasting

Setting Security Notes for SQ7 (Frank Buchholz)

Description: Security Notes for SQ7 Technical Name: SECNOTESSQ7

Distribution Type: Broadcast E-mail Output Format: MHTML As ZIP File

Recipient(s) Texts General Precalculation Filter Navigation

User: BUCHHOLZF

User in Role:

E-Mail Addresses: frank.buchholz@sap.com

Authorization User: BUCHHOLZF

Language: English

Save **Save as...** **Check** **Schedule** **Execute** **Close**

Settings

Define description, output format (MHTML), recipients, and text of the e-mail (which should contain the Bookmark URL, too, to allow interactive access).

Choose either *Schedule* or *Execute* to send the e-mail

Scheduling Security Notes for SQ7 (Frank Buchholz)

Direct Scheduling in the Background Processing

Weekly - to be started next on 07.06.2014 at 15:50:14 Delete

Create New Scheduling

Periodic All 1 Week(s)

Next Start at 07.06.2014 At 05:00:00

Transfer **Cancel**

Recipient(s) **Texts** General Precalculation Filter Navigation

Subject: Required Security Notes for SQ7 Importance: Medium

Contents

Interactive Access:
https://sq7.wdf.sap.corp:44390/sap/bw/BEx?SAP-LANGUAGE=EN&BOOKMARK_ID=0002TJ4UKKKQZGZB6RFZVYRKC

How to send e-mails with results of System Recommendations via BW Broadcasting

Von: Frank Buchholz <BUCHHOLZF@200.sq7.r3.wdf.sap.corp> Gesendet: Fr 06.06.2014 16:24
An: Buchholz, Frank
Cc:
Betreff: Required Security Notes for SQ7

Interactive Access:
https://sq7.wdf.sap.corp:44390/sap/bw/BEx?SAP-LANGUAGE=EN&BOOKMARK_ID=0002TJ4UKKKQZGZB6RFZVYRKC

System Recommendations - SAP Notes System Recommendations - SAP Notes

Selection: Reference system; Comparison Systems; Config Store; ...
SQ7; Empty Demarcation; Security; Empty Demarcation; Empty Demarcation

Number of Notes		Notes - Systems according System Recommendation			
System	Counter				
SQ7	2				

Details

Query View Selection
Save View:
Navigation Block:

Configuration Items					
System	Note Number	Short Text	Priority	Automatic I.	
SQ7	0001815228	Certificate Mapping: constraint "min. date" without function	4 - Correction with low priority	#	
	0001986895	Potential disclosure of information in SAProuter	4 - Correction with low priority	#	

BUCHHOLZF; 06.06.2014 16:23:43

A broadcast administrator or the person sending this e-mail can change the recipient list using the following link: https://sq7.wdf.sap.corp:44390/sap/bw/BEx?CMD=START_BROADCASTER&SETTING_ID=SECNOTESSQ7

Result

E-mail with Result of the BW report including a Bookmark URL to the interactive BW report

1889999 - Missing authorization check in LCAPPS DP

No impact to existing authorization concept, as

- critical code gets deactivated
- a predefined whitelist gets introduced

1966995 - Potential information disclosure relating to WebDynpro Application 1946911 - SAP NWBC ABAP Runtime Patch 35

Security note 1966995 simply refers to functional note 1946911.

You cannot implement note 1966995 using SNOTE but you can implement note 1946911.

This note contains cumulative corrections for the complete NW BC Framework:
Transaction SNOTE would verify and implement 37+12 additional notes.

In the meantime you could find note 2015939 - SAP NWBC ABAP Runtime Patch 39

→ If you are using the SAP NetWeaver Business Client than go for periodic maintenance activities concerning SAP NWBC ABAP Runtime

1896642 - Potential information disclosure relating to Integration Technology ALE

This note requires manual modifications. Table EDIPOWHITELIST needs to be created using transaction SE11. Then new messages need to be created using SE91.

After that you can implement the correction using transaction SNOTE.

Let's assume, you are planning a Support Pack Stack update, which will include this note.

- Do you need to implement the note before the SPS update, following instructions for pre-implementation work?
- Do you need to perform the pre-implementation steps before applying the SPS?
- If you simply apply the SPS, will table "EDIPOWHITELIST" be delivered empty?
- Should we expect a service disruption if you simply apply the SPS and do not maintain table "EDIPOWHITELIST"?

1997455 - Potential information disclosure in BC-SEC-USR-ADM

Only customers running a CUA are affected by this vulnerability. Only the CUA main system is affected.

The solution describes how to improve the authorization concept concerning authorization object S_RFC for a particular application (Central User Administration, CUA), however, in addition to patch this application using the note I recommend to have a broader view on RFC authorizations in general:

- No role should contain full authorizations for authorization object S_RFC
- Run a project to improve authorizations for S_RFC, e.g. using this blog on SCN:
How to get RFC call traces to build authorizations for S_RFC for free!
<http://scn.sap.com/community/security/blog/2010/12/05/how-to-get-rfc-call-traces-to-build-authorizations-for-srfc-for-free>

1881073 - Unauthorized modification of displayed content in BSP application

Correction for both SAP Kernel and ABAP

ABAP correction instruction for SAP_BASIS

740 To SAPKB74004

730 SAPKB73001 - SAPKB73010

720 SAPKB72002 - SAPKB72007

711 SAPKB71101 - SAPKB71112

710 To SAPKB71018

702 SAPKB70201 - SAPKB70214

701 To SAPKB70114

700 SAPKB70009 - SAPKB70030

Kernel

SAP KERNEL 7.20 patch 612

SAP KERNEL 7.21 patch 227

SAP KERNEL 7.38 patch 36

SAP KERNEL 7.40 patch 29

→ You get the solution if you apply both.

2006974 - Code injection vulnerability in PP-PI-CFB

Implement the attached correction instruction, check the BAdI documentation and implement the BAdI to allow the usage of your own reports for the overview form printing.

→ only relevant if you use PP-PI-CFB. In this case testing is strongly recommended.

2028012 - Vulnerability in Afaria mobile device app

Update SAP Afaria on mobile clients to versions 6.60.6417.1 on iOS and 6.60.6417 on Android before enrollment of new devices.

SAP HANA

2014881 - Potential disclosure of persisted data in SAP HANA Web-based Development Workbench

CVSS Base Score: 3.5 CVSS Base Vector: AV:N/AC:M/AU:S/C:P/I:N/A:N

SAP HANA DATABASE 1.00 SP069 05

2015446 - Unauthorized use of application functions in SAP HANA Web-based Development Workbench via code injection

CVSS Base Score: 6.0 CVSS Base Vector: AV:N/AC:M/AU:S/C:P/I:P/A:P

SPS06 is not affected by this issue.

SAP HANA DATABASE 1.00 SP074 00

BO

1998990 - Potential information disclosure relating to BI-BIP-ADM

→ BI 4.0 Patch 9.1, BI 4.0 SP 10, BI 4.1 SP 4

2001106 - Potential denial of service in BI-BIPCVSS

→ BI 4.0 Patch 9.1, BI 4.0 SP 10, BI 4.1 SP 4

1941562 - Unauthorized modification of stored content in BI-BIP-INV

→ BI EDGE 4.1

1971270 - Unauthorized modification of displayed content in BI-BIP-INV, BI-BIP-QB, BI-BIP-BIW

→ BI 4.0 SP 6 patch 12, BI 4.0 SP 7 patch 10, BI 4.0 SP 8 patch 6, BI 4.0 Patch 9.1, BI 4.0 SP 10, BI 4.1 SP 4

1908531 - Untrusted XML input parsing possible in SBOP Explorer

→ BI 4.0 SP9 Patch 2, BI 4.0 SP 10, BI 4.1 SP 3 patch 2, BI 4.1 SP 4

1981048 - HTTP Cookies Without HttpOnly Flag Set may lead to Cross Site Scripting Issues

→ BI 4.1 oder Edge 4.1



April 2014

Topics April 2014



Info: OpenSSL Heartbleed Bug

Note [1974046](#) - Potential information disclosure relating to Business Data

Note [1971516](#) - Code injection vulnerability in SV-SMG-SDD

Q: How much staff do companies have to allocate to this process?

OpenSSL Heartbleed Bug

General



The Heartbleed Bug

<http://heartbleed.com/>

CVE-2014-0160

<http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2014-0160>

<https://www.cert.fi/en/reports/2014/vulnerability788210.html>

How to test servers:

<http://www.heise.de/newsticker/meldung/SSL-Gau-So-testen-Sie-Programme-und-Online-Dienste-2165995.html>

[3] <http://filippo.io/Heartbleed/>

[4] <http://possible.lv/tools/hb/>

[5] <https://github.com/FiloSottile/Heartbleed>

[6] <https://github.com/noxxi/p5-scripts/blob/master/check-ssl-heartbleed.pl>

https://www.openssl.org/news/secadv_20140407.txt

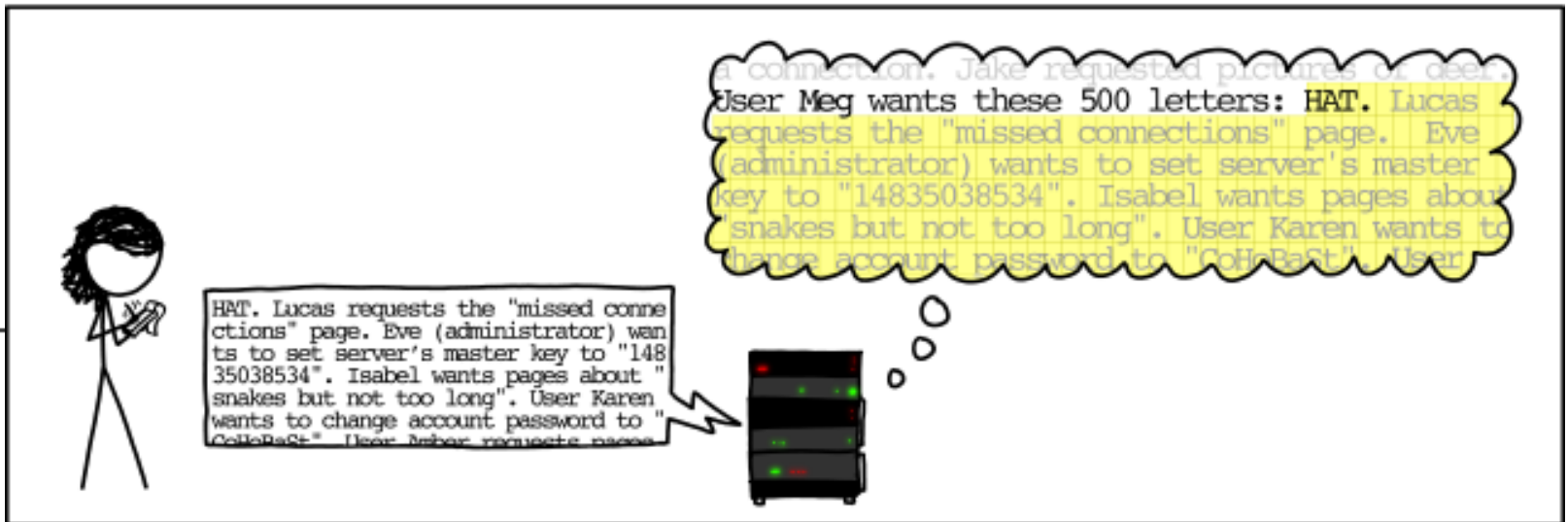
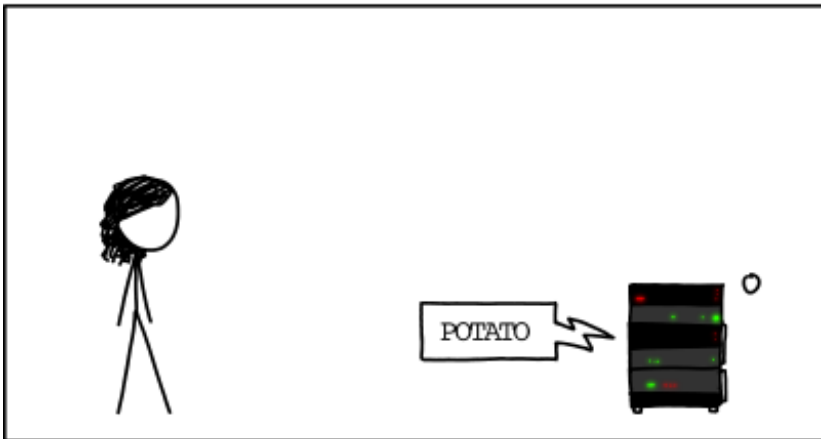
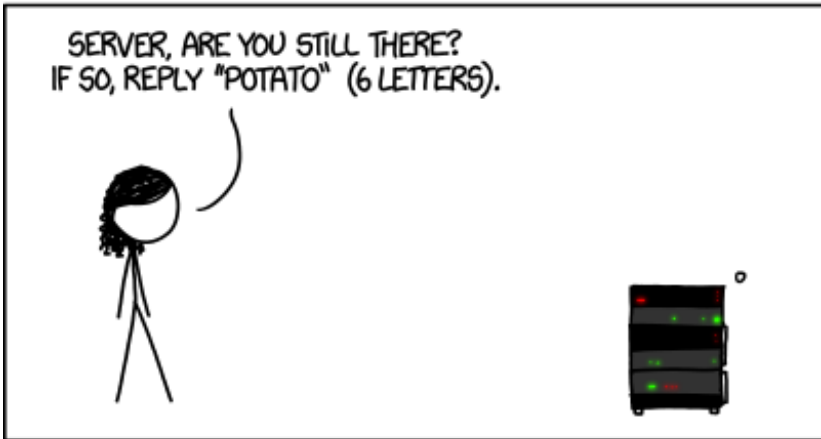
"Users unable to immediately upgrade can alternatively recompile OpenSSL with `-DOPENSSL_NO_HEARTBEATS`."

Bruce Schneier: "Heartbleed is a catastrophic bug in OpenSSL"

<https://www.schneier.com/blog/archives/2014/04/heartbleed.html>

OpenSSL Heartbleed Bug

How the heartbleed bug works: <http://xkcd.com/1354/>



OpenSSL Heartbleed Bug

SAP NetWeaver ABAP / Java



Application areas: BC-SEC-SSL, BC-JAS-SEC

Products: NetWeaver Application Server ABAP, NetWeaver Application Server Java

The crypto libraries used for applications in the

NetWeaver Application Server ABAP ("SAPCRYPTOLIB"/"CommonCryptoLib" aka Secure Login Library)
and in the

NetWeaver Application Server Java ("SAP Java Cryptographic Toolkit" aka "IAIK")
do not use OpenSSL.

We have no indications that these crypto libraries are vulnerable to the Heartbleed bug as in the OpenSSL 1.0.1 versions.

Customers with questions may be asked to contact SAP support via a customer message.

In the event they are unsure about the component to use, they can assign their request to the Security Backoffice component **XX-SER-BO-SEC**

OpenSSL Heartbleed Bug

KBA/Notes



2004805 - Heartbleed (CVE-2014-0160) OpenSSL Vulnerability – Product related status and recommendations

2004903 - FAQ: OpenSSL Heartbleed vulnerability as it relates to SAP Afaria

2004565 - OpenSSL HeartBleed vulnerability. - Afaria 7

2003582 - How does The Heartbleed Bug affects SAP BusinessObjects Xi3.1 and Business Intelligence products 4/4.1

2004815 - How does The Heartbleed Bug affect SAP Data Services and Business Intelligence products 4/4.1

2004769 - SQL Anywhere, MobiLink, and the Relay Server Outbound Enabler are affected by the OpenSSL 'Heartbleed'

2004367 - SAP BW Accelerator and OpenSSL Heartbleed bug

<to be continued>

Blog@saphana.com - No Heartbleed with SAP HANA

Blog@SCN - HANA Cloud Platform is NOT Vulnerable to Heartbleed

Note 1974046 - Potential information disclosure relating to Business Data

This note seems to be an usual ABAP note as it's related to software component SAP_BASIS. However, you do not see any Support Package assignment or any (automatic) Correction Instructions.

Is this note incomplete?

→ The note is correct as it deals with release SAP_BASIS release 804 only. This release has a special patch collection delivery method called 'hotfix'.

Do you need to implement the note?

→ SAP_BASIS release 804 is used in systems of hosting scenarios only but not in on-premise installations.

Note 1971516 - Code injection vulnerability in SV-SMG-SDD

Specific rule: This note deactivates obsolete coding → No special test procedures required.

General rule about notes of

- Software Component: ST-PI
- Application Component: SV-SMG-SDD

There exist several valid releases:

2008_1_46C

2008_1_620

2008_1_700

etc.

If not all releases are assigned in the note, than System Recommendations might miss to show the note, therefore, identify such notes on <https://support.sap.com/securitynotes> and use them as a trigger to update software components ST-PI and ST-A/PI.

Q&A

How much staff do companies have to allocate to this process? It takes so much work just to determine if the notes are relevant or not. Can the notes be better segregated (e.g. if it requires a Kernel upgrade or not, if SAP suggests testing or not, etc.)?



March 2014

Topics March 2014



Patch Day Notes vs. Support Package Implementation Notes (reloaded)

Note [1900200](#) - Directory traversal in BC-SRV-ARL

Note [1966056](#) - Code injection vulnerability in BW

Patch Day Notes vs. Support Package Implementation Notes (reloaded)

Announcement Jul 8, 2013:

Implementing SAP security fixes

Important information and call for action

SAP is continuously investing in increasing the quality and security of its products. **To improve the consumability of its security fixes and to further adjust its deployment processes to industry standards, SAP has changed the way how security patches are provided.**

SAP delivers important security fixes on its monthly Security Patch Day. SAP strongly recommends its customers to implement security fixes, flagged with priority 1 and priority 2, primarily fixing externally reported issues. The fixes are released on the second Tuesday of every month, and can be used to fix a particular vulnerability without needing to update a system to service packs.

In order to further reduce the implementation efforts for our customers, other **security fixes like priority 3 and 4 will generally be delivered with support packages.** SAP strongly recommends its customers to apply Support Packages on their systems as soon as a support pack is available. The [Support Packages can be found on SAP Service Marketplace](#) in the corresponding product area. **Information about these improvements will also be published in security notes with priority 3 and 4 some months after Support Packages have been released.**

Find security notes that were previously released on SAP Service Marketplace at [/securitynotes](#).

Patch Day Notes vs. Support Package Implementation Notes (reloaded)

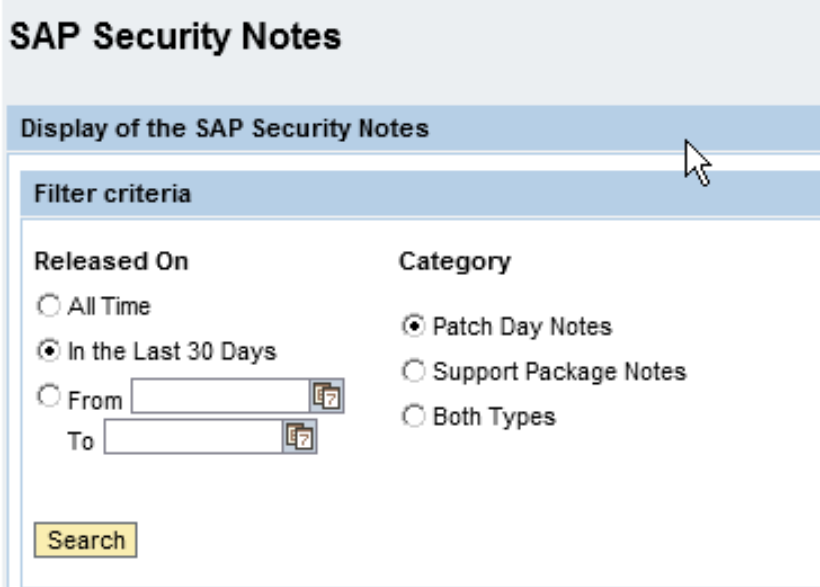
PD Notes

- SAP Security Notes published on and for Security Patch Day
- Contain important security corrections
- Very often address security issues reported from external sources
- Have CVSS scoring in most cases

Re-classification in March 2016 covering “minor, medium or high”

SPIN

- Typically address security issues of minor impact found SAP internally
- Should not be published in the first place but just be contained in future SPs
- Had to be published outside SP and outside the PD schedule because some customer production issue depended on it to be implemented first



The screenshot shows the 'SAP Security Notes' interface. The title is 'SAP Security Notes'. Below it is a sub-header 'Display of the SAP Security Notes'. Underneath is a 'Filter criteria' section. It has two columns: 'Released On' and 'Category'. Under 'Released On', there are three radio button options: 'All Time', 'In the Last 30 Days' (which is selected), and 'From' followed by a date input field and a calendar icon. Below the 'From' field is a 'To' field with another date input field and calendar icon. Under 'Category', there are three radio button options: 'Patch Day Notes' (which is selected), 'Support Package Notes', and 'Both Types'. At the bottom left of the filter section is a 'Search' button.

SPIN might be published on PD dates as well!

Patch Day Notes vs. Support Package Implementation Notes (reloaded)

SUPPORT PORTAL

Welcome, Frank Buchholz

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▶ Search for SAP Notes and SAP Knowledge Base Articles

- SAP xSearch - The SAP Support Knowledge Base Search
- ▶ SAP HotNews - Priority 1 SAP Notes
- ▶ **SAP Security Notes**
- News
- Search SAP Security Notes
- Display my SAP Security Notes
- Manage SAP Security Notes (Redirect to CSS)
- FAQs
- ▶ SAP Security Patch Day
- White Papers
- SAP Legal Change Notes
- ▶ SAP TopNotes
- SAP Analytics Notifications
- Side-Effects of SAP Notes
- Media Library

SAP Security Notes

[Feedback](#) | [Doc. Info](#)

Filter criteria

Released On

All Time

In the Last 30 Days

From To

Category

Patch Day Notes

Support Package Notes

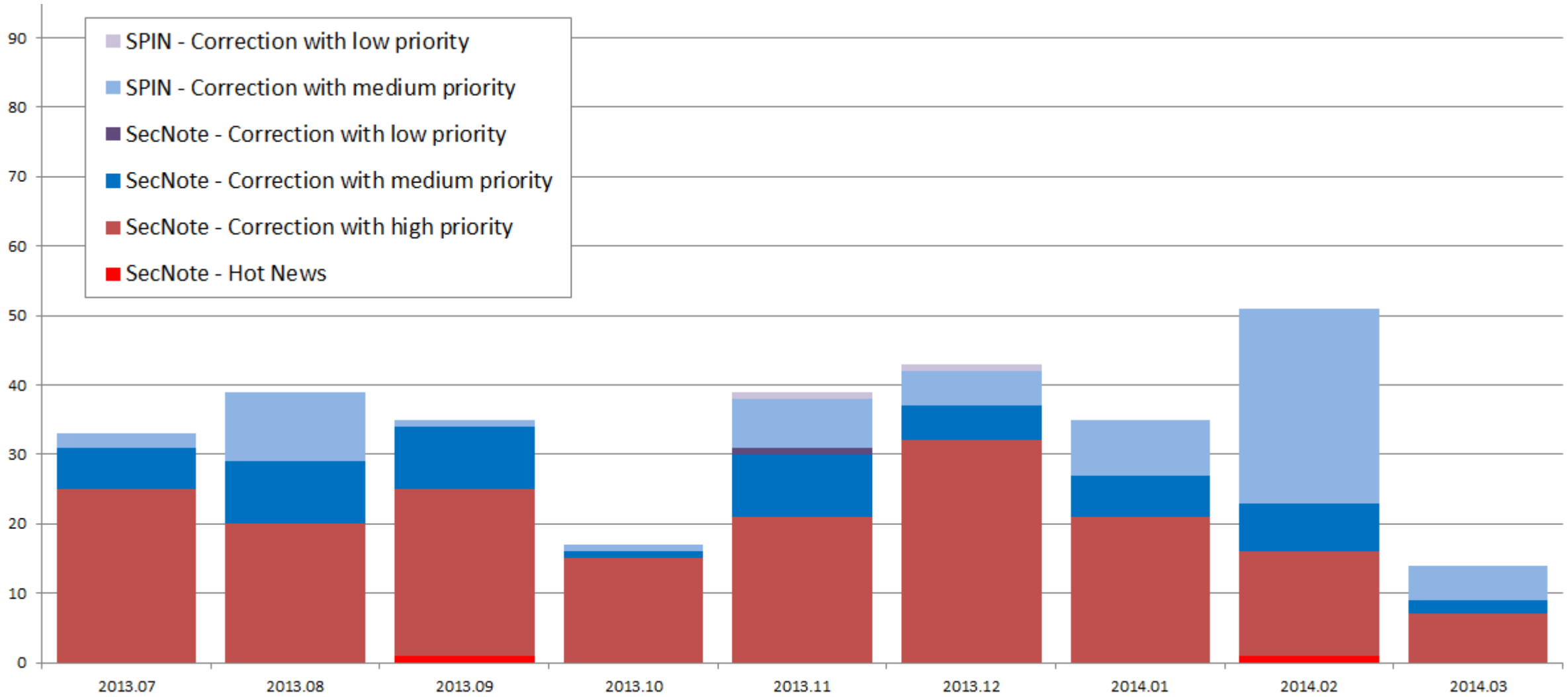
Both Types

Released SAP Security Notes list based on the date range selected

552 SAP Security Note(s) found.

Number	Application Area	Short text	Priority	Released On
			*	*
1772839	BC-SRV-ADR	Potential disclosure of persisted data in BC-SRV-ADR	Correction with medium priority	17.03.2014
1867167	CRM-IC-EMS-CAT	Potential modif./disclosure of persisted data.CRM-IC-EMS-CAT	Correction with medium priority	11.03.2014
1786150	CRM-MD-BP	Potential disclosure of persisted data in [crm-md-bp]	Correction with medium priority	11.03.2014

Patch Day Notes vs. Support Package Implementation Notes (reloaded)



ut

Note 1900200 - Directory traversal in BC-SRV-ARL

This note belongs to the large group of “Directory Traversal” notes (>550 notes).

- You only need to implement this note and all other “Directory Traversal” notes if you are going to maintain logical paths and logical file names using transaction **FILE** and report **RSFILENA**
- You recognize such notes because of a reference to note **1497003 / FILE_VALIDATE_NAME**
- Defining logical path and file names enables you to use authorization object **S_PATH**

Even if you apply recent Support Packages you have to maintain the logical path and file names !

It might be the case that SNOTE refuses to download note 1900200.

In this case use the download basket of the Service Marketplace to get the note:

- Add note to download basket in SMP
- Download the download basket to your PC
- Upload the file into SNOTE using “Goto → Upload note”

Note 1966056 - Code injection vulnerability in BW

Important note as it is possible to inject arbitrary ABAP code without proper authorization check.

The solution turn the following critical code into display-only mode:

```
IF i_show_report EQ rs_c_true.  
    EDITOR-CALL FOR l_t_code.  
ENDIF.
```

* *Programm generieren*

```
INSERT REPORT i_sx_meta-repid FROM l_t_code.
```



Previous Webinars

Topics



Q&A from February

Links

The Future of the EWA Security Notes Subchapter (RSECNOTE)

How to find HANA Security Notes, e.g. [1964428](#) - XS bypasses authentication for former public applications

Note [1903756](#) - DB6: Authorization to execute operating system commands

Note [1963100](#) - Disabling execution of operating system commands using a CTC URL

Various notes about hard coded user names

Q&A from February

In SysRec, is the "Automatic" column what used to be the identification of RSECNOTE notes ?

Well, most notes which we had selected for RSECNOTE contained automatic correction instructions, but on the other hand, RSECNOTE only checks for a small subset of critical notes. Therefore we cannot compare the "Automatic" column with the selection used by RSECNOTE.

Is it possible to keep track of the notes installation status in SysRec ?

In the System Recommendations tool, when you implement a security note in a managed system, will Solution Manager detect this and update the note appropriately in System Recommendations, or do the admins need to go into each note and mark it as implemented ?

Yes, SysRec retrieves the implementation status of notes from the managed system. Therefore, with the next run of the background job of SysRec all implemented notes will vanish. The implementation status of a note will be transported to the production system as well.

Because of this you can configure SysRec to calculate the worklist for development systems as well as to calculate the implementation status in production systems.

Q&A from February

For the notes for which SysRec cannot determine the applicability, I guess they will always appear in the list, even if they are actually implemented ?

Yes, that's true. You either can set a status in SysRec (however, there does not exist a status value 'done') or in case of ABAP you can still use transaction SNOTE: Even if you cannot implement a note with SNOTE you can download the note and set the status to "completed" manually which is then used by SysRec to hide the note (but as far as I know you cannot transport this status to the production system).

Is there documentation on the security authorizations required in Solution Manager for the Security Service or a template role from SAP with the required authority?

In addition to standard authorizations for authorization objects **D_SOL_VSBL** (to get access to the systems of a solution) and **AI_LMDB_PS** and **AI_LMDB_OB** (to read data from the LMDB) you need specific authorizations for **SM_FUNCS** (respective **SM_TABS** in SolMan 7.0) to see the different tabs of the SysRec.

http://wiki.scn.sap.com/wiki/display/SMAUTH/SM_FUNCS

<http://scn.sap.com/blogs/ben.schneider/2011/04>

Links

Security Optimization Service

<https://support.sap.com/sos>

Security Patch Process FAQ

<https://scn.sap.com/community/security/blog/2012/03/27/security-patch-process-faq>

Security Notes

<https://support.sap.com/securitynotes>

System Recommendations for Security Notes

<https://support.sap.com/sysrec>

Configuration Validation

http://wiki.sdn.sap.com/wiki/display/TechOps/ConfVal_Home

The Future of the EWA Security Notes Subchapter

Current situation

- The EWA subchapter “**SAP Security Notes: ABAP and Kernel Software Corrections**” is currently based on RSECNOTE.
- **RSECNOTE** is technically working. However, in the meantime the content, which Security Notes are recommended by RSECNOTE, is only maintained sporadically for SAP-internal reasons.
- The tool “**System Recommendations**” and the quality of SAP Security Notes have improved.

Recommendation

- Use the Solution Manager based Tool “System Recommendations” for your monthly security maintenance process (which is recommended anyhow since even in the past RSECNOTE and thus the EWA only checked for a selected subset of Security Notes)

Intended direction

- We are currently evaluating to base the above mentioned EWA subchapter directly onto System Recommendations. So if you are using System Recommendations you are in our strategic direction. However, no timeline is available yet for this change nor any technical details.
- As soon as the EWA subchapter no longer requires RSECNOTE technically, the tool RSECNOTE is planned to be discontinued.

How to find HANA Security Notes, e.g. 1964428 - XS bypasses authentication for former public applications

System Recommendations is not yet able to show HANA Security Notes.

(Reason: the 'technical system' which is defined based on data in the SLD / LMDB does not contained required information.)

Tipp: Use search on <https://support.sap.com/securitynotes> to find notes of application component

BC-DB-HDB* (including the *).

Number	Application Area	Short text	Priority	Solution	Released On
1964428	BC-DB-HDB-XS	XS bypasses authentication for former public applications	high	SP 70 / SP 69 patch 2	11.02.2014
1914778	BC-DB-HDB-XS	Potential information disclosure relating to HANA host names	medium	SP 60	08.10.2013
1870605	BC-DB-HDB	Privilege escalation in SAP HANA	high	SP 57	09.07.2013
1756978	BC-DB-HDB	SAML 2.0: possible XML signature wrapping attack	high	SP 36	11.09.2012
1726160	BC-DB-HDB	Security issues fixed in SAP HANA Revision 28 and later	high	SP 28	10.07.2012
1645982	BC-DB-HDB	Security issues fixed in SAP HANA Revision 18	high	SP 18	13.12.2011
1628110	BC-DB-HDB	Security issues fixed in SAP HANA Revision 15	high	SP 15	13.09.2011

Note 1903756 - DB6: Authorization to execute operating system commands

Important note, Published in November 2013

Issue: Note cannot be implemented in most systems as function DB6_DIAG_GET_PROGRAM_VERSION exists only in DB2/DB6-Systems

Following SAP Notes are implemented in this step:

Note Action	Note	Version
Implement SAP Note	1903756	10

C...	Status	Obj. Ty...	Object	Message Text
<input type="checkbox"/>		FUNC	DB6 DIAG GET PROGRAM VERSION	Object FUNC DB6 DIAG GET PROGRAM VERSION does not exist; create it
<input checked="" type="checkbox"/>		FUNC	DB6 PM OSCMDSYSOUT2	Changes can be copied
<input checked="" type="checkbox"/>		METH	CL DB6 RDI GET OS COMMAND OUTPUT	Changes can be copied
<input checked="" type="checkbox"/>		FUNC	DB6 DIAG LIST DIRECTORY	Changes can be copied
<input checked="" type="checkbox"/>		FUNC	DB6 DIAG READ FILE	Changes can be copied
<input checked="" type="checkbox"/>		FUNC	DB6 XPLN DOWNLOAD	Changes can be copied
<input checked="" type="checkbox"/>		METH	CL DB6 ACTION MONITOR SETTINGSIF DB6 ACTION CONTROL...	Changes can be copied
<input checked="" type="checkbox"/>		METH	CL DB6 DBCON MIGRATE PARAMETERS FROM RFC	Changes can be copied

➔ Create Support Ticket if you run into trouble while implementing security notes!

➔ Solved since end of January.

Note 1963100 - Disabling execution of operating system commands using a CTC URL

HotNews

CVSS Base Score 9.0

CVSS Base Vector AV:N/AC:L/AU:S/C:C/I:C/A:C

Java, LIFECYCLE MGMT TOOLS as of 6.40

The CTC application contains vulnerability where any operating system command can be executed on an AS Java host using NWA credentials through a URL invocation. Typically, this requires authentication using NWA credentials. If you have not already implemented SAP security note 1445998, then this can be done without authentication using NWA credentials.

Note 1445998 - Disabling invoker servlet (Released in December 2010)

The Invoker Servlet has been disabled by default as of 7.20

Various notes about hard coded user names

Note 1738965	BW-WHM-DBA-OHS	Hard-coded credentials in Open Hub	(BRANDTTH)
Note 1768049	XX-CSC-BR	Hard-coded credentials in XX-CSC-BR	(TESTER)
Note 1789569	PP-CRP-LVL	Hard-coded credentials in capacity leveling	(C1155522)
Note 1791081	PS-ST	Hard-coded credentials in PS-ST and PS-MAT-PRO	(RSHANBHAG)
Note 1795463	IS-B-DP	Hard-coded credentials in IS-B-DP	(XXXX)
Note 1911174	BC-CCM-MON	Hard-coded credentials in CCMS	(CSMREG)
Note 1914777	CA-WUI-WST	Hard-coded credentials in CA-WUI-WST	(OHLIGER)
Note 1920323	IS-OIL-DS-TSW	Hard-coded credentials in IS-OIL-DS-TSW	(various)

Few of these notes is really important from a security point of view – but of course it's better to get rid of these hard coded user names from a functional point of view.

Caution: Notes of this type could show a critical security vulnerability

Various notes about hard coded user names

Note [1915873](#) - Usage of `sy-uname` in Method

Note contains attachment with an ABAP transport which deletes some objects.
As it's about the upgrade tools, there is no other option to publish the correction.

Import into all systems or import into DEV and re-export for other systems.

No test required.

Topics



Note [1773912](#) - Missing authorization check in message server

Note [1906927](#) - Missing authorization check in Accounting BAPIs

Note [1931016](#) - Missing authorization check in ABAP Runtime Analysis

Note [1942424](#) - Missing authorization check in SV_SMG-ASU

Patch Day Notes vs. Support Package Implementation Notes

Note [1853616](#) - Missing authorization check in XX-IDES

Note [1864518](#) - Security Improvements for MOB-APP-EMR-AND

Security Notes of software component ST-PI

Note [1854408](#) - Potential information disclosure relating to user password in GRC AC 10

Note [1823566](#) - Potential information disclosure relating to SAP Solution Manager

Note [1820666](#) - Potential remote code execution in SAProuter

Note 1773912 - Missing authorization check in message server

It would be sufficient to update the `msg_server`. You do not need to update the whole kernel `disp+work`.

Note 1906927 - Missing authorization check in Accounting BAPIs

Requires note 1882417 and 1908870 and 1923728 including extensive manual activities.

Note 1931016 - Missing authorization check in ABAP Runtime Analysis

No influence to productive business processes

Note 1942424 - Missing authorization check in SV-SMG-ASU

The notes solves a vulnerability to execute reports (like in SA38).

Deactivation of obsolete but critical program. No test required.

Patch Day Notes vs. Support Package Implementation Notes

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Patch Day Notes vs. Support Package Implementation Notes

Patch Day Notes

- All Notes (irrespective of priority) fixing externally found vulnerabilities + notes fixing internally found vulnerabilities having High and Very High priority
- Released on Security Patch day with very few exceptions

Support Package Implementation Notes (SPIN)

- Notes fixing internally found vulnerabilities having Low and Medium priority.
- Typically not released as individual notes, however, SAP can release them any time (even on a patch day date) if there is any functional dependency which require the correction.

Currently the above categorization is not available in Service Market place.

Anyway: From a customer point of view all of these notes are simply “Security Notes”

Patch Day Notes vs. Support Package Implementation Notes

Support Package Implementation Notes from November / December 2013

<u>1677912</u>	SD-BIL-IV-PC	Credit cards in order
<u>1735308</u>	BC-CUS-TOL-ALO	Security issues for report TAB_INT0_AUTH_GRP Refers to note <u>1909124</u>
<u>1786150</u>	CRM-MD-BP	Potential disclosure of persisted data in [crm-md-bp]
<u>1787032</u>	FI-AP-AP-B1	FI: Potential Directory Traversal
<u>1788562</u>	LO-LIS-REP	Potential modif./disclosure of persisted data in LO-LIS-REP
<u>1794273</u>	LO-MAP	Persisted data in MAP may be changed/disclosed
<u>1813155</u>	EHS-BD	Possible change/disclosure of persisted data in EH&S
<u>1922205</u>	BC-XI-IS-WKB	Authorization default value in component BC-XI-IS-WKB
<u>1775843</u>	IS-H-PM	Directory traversal in IS-H in utilities (reports)
<u>1785662</u>	SD-BIL-IV-IF	Directory-Traversal in externer Fakturaschnittstelle
<u>1794951</u>	XX-CSC-BR	Directory traversal in XX-CSC-BR
<u>1916257</u>	PA-PA-US	Directory traversal in PA-PA-US

➔ Treat these notes like all other security notes

Note 1853616 - Missing authorization check in XX-IDES

First note ever which deals with vulnerabilities in IDES demo system

Release independent note = no assignment to any product, software component, release, support package

- potential relevant for all customer systems as far as System Recommendations can analyze it
- all customers 'see' the note

Solution via ABAP transport. Normally we forbid transports in notes, however, in this special case there is no other efficient way and I assume that it works fine.

The transport contains delete/deactivation actions for RFC enabled functions in the customer name range.

- ➔ If you go for this note you should consider to apply all other security notes to IDES as well.

Note 1864518 - Security Improvements for MOB-APP-EMR-AND

The note is relevant for the Mobile Platform for Android

Application System Recommendations of the SAP Solution Manager cannot check for this note

Security Notes of software component ST-PI

Some notes about software component **ST-PI** describe the complete validity range in the text only - which cannot be interpreted by System Recommendations.

Example: "Apply Support Package ST-PI 2008_1_* SP08."

Tipp: Use search on <https://support.sap.com/securitynotes> to find notes of application component **SV-SMG-SDD** (which is related to software component ST-PI).

The good news: Security Notes of software component **ST-PI** and **ST-A/PI** are only relevant for the connectivity to the SAP Solution Manager. Therefore you can apply them without any influence to productive business processes within the backend system.

Number	Application Area	Short text	Priority	Released On	Validity/Corr/SP
1896785	SV-SMG-SDD	Missing authorization check in ST-PI	High	10.09.2013	4/4/2
1861791	SV-SMG-SDD	OS CMD injection vulnerability in ST-PI	High	13.08.2013	3/3/1
1688229	SV-SMG-SDD	Information disclosure due to missing auth. in EWA functions	High	13.08.2013	5/5/2
1774432	SV-SMG-SDD	Missing authorization check in ST-PI	Medium	11.06.2013	4/0/0
1788614	SV-SMG-SDD	Missing authorization check in ST-PI	High	12.02.2013	4/4/1
1727914	SV-SMG-SDD	Missing authorization checks in ST-PI	Very high	14.08.2012	4/4/1
1720994	SV-SMG-SDD	Missing authorization check in ST-PI	High	10.07.2012	4/4/1
1727119	SV-SMG-SDD	Update 1 to security note 1642810	Medium	08.06.2012	(update note)
1642810	SV-SMG-SDD	Code injection vulnerability in SV-SMG-SDD	Medium	08.05.2012	SAP_BASIS

Note 1854408 - Potential information disclosure relating to user password in GRC AC 10

An attacker can discover information relating to passwords stored in table **GRACREQUSRPASS** ('Request user password').

This note contains design changes related to user password provisioning, so it is suggested to implement it very cautiously and conduct intensive regression testing before moving this to production.

Note 1823566 - Potential information disclosure relating to SAP Solution Manager

Note published in May 2013 but still relevant!

An attacker can discover information relating to passwords stored in table `DBCON`.

All ABAP systems might be affected - not only the Solution Manager which in fact has the highest probability for the issue as it is used to manages databases including SAP HANA.

Prerequisite:

- KERNEL 7.20 patch 417

- KERNEL 7.21 patch 110

- KERNEL 7.38 patch 14

The ABAP correction plus the Kernel **just enables** to move the passwords to the secure area.

After the implementation of the code corrections, **execute the report** `RS_DBC_CLEANUP` in all systems to perform the migration (client independent).

You can manually check using `SE16` for table `DBCON` with field `PASSWORD` not equal space (if `SE16` still allows viewing the table in your release).

Note 1820666 - Potential remote code execution in SAProuter

Note published in May 2013

SAP Spotlight News:

Important security fixes for SAProuter; new malware variant

Best practice:

<http://scn.sap.com/community/security/blog/2013/11/13/security-of-the-saprouter>

Recommended activities:

- **SAP recommends to upgrade any (active) SAProuter installation as soon as possible**
- Use an access control list (saproustab) to limit connectivity
- Activate SNC to encrypt the communication channel to SAP support and to block any other connections from the internet
- Integrate the SAProuter into a firewall
- Use an SAProuter password for SAP Support (and define process how to change it)
- Change the default port



Thank you!

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Security Patch Process FAQ

<https://scn.sap.com/community/security/blog/2012/03/27/security-patch-process-faq>



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