

Operations Guide for SAP S/4HANA for Customer Management



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1 Getting Started

➔ Recommendation

This guide does not replace the daily operations handbook that we recommend customers create for their specific production operations.

1.1 About This Guide

Introduction

SAP S/4HANA for customer management is an add-on for SAP S/4HANA. The solution helps you manage your customer relationships and enables you to set up and run functions and processes for different areas, such as service order processing and customer interaction.

SAP S/4HANA for customer management enhances the function portfolio already available in SAP S/4HANA and is tightly integrated with SAP S/4HANA. For a comprehensive overview of the functions provided by SAP S/4HANA for customer management, refer to the Feature Scope Description on [SAP Help Portal](#).

Target Groups

- Technical consultants
- System administrators
- Solution consultants
- Business process owners
- Support specialists

About This Document

This guide provides a starting point for managing your SAP applications and maintaining and running them efficiently. It contains specific information about various tasks and lists the tools that you can use to implement them.

This guide also provides references to the documentation required for these tasks, especially to the documentation of [SAP S/4HANA for customer management](#) and to the documentation of [SAP S/4HANA](#) on SAP Help Portal. You will sometimes also need other guides for SAP S/4HANA for customer management, for example, the *Getting Started Guide*, the *Installation Guide*, and the *Security Guide*

i Note

You always find the most up-to-date version of this guide on [SAP Help Portal](#).

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For certain features, you may need a separate subscription license. Please contact your SAP Account Executive for further information.

2 Technical System Landscape

For more information about the technical system landscape and the technical components needed for a specific scenario, see the *Getting Started Guide* for [SAP S/4HANA for customer management](#).




2.1 Related Documentation

The following table lists some sources of more information about the technical system landscape:

Content	Location on SAP Help Portal
Technical Configuration	<i>Getting Started Guide</i>
Application Security Guide	<i>Security Guide</i>

Further Useful Links

The following table lists further useful links:

Content	Location on SAP Help Portal
SAP Support Portal	http://support.sap.com 
SAP Notes search	http://support.sap.com/notes 
SAP Software Distribution Center (Software download and ordering of software)	http://support.sap.com/swdc 

3 Monitoring of SAP S/4HANA for Customer Management

SAP provides you with the infrastructure to help your technical support consultants and system administrators effectively monitor your system landscape.

For more information about monitoring topics, search for *Solution Monitoring* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

For more information about industry-specific monitoring tasks and tools, see [Industry-Specific Scenarios \[page 25\]](#).

3.1 Alert Monitoring with CCMS

SAP S/4HANA for customer management is technically based on SAP NetWeaver Application Server, and reuses SAP NetWeaver monitoring tools such as the Computing Center Management System (CCMS).

The following predefined component and scenario monitors are available for SAP S/4HANA for customer management:

Component Monitors

Component monitor: Application Server ABAP

Component monitor: CAT Server

Component monitor: IC Web Client

Component monitor: Intelligence Connector

Scenario Monitoring Templates

The following scenario monitoring templates are available:

- Interaction Center monitor template
- Service monitor template

3.1.1 CCMS Monitoring Installation and Setup

CCMS provides a flexible infrastructure, which permits the central monitoring of an entire landscape and reports problems quickly and reliably. The architecture can be easily extended to include additional SAP and non-SAP components.

3.1.2 Alert Monitoring of Components

You can use CCMS monitoring to monitor the following components:

- Application Server ABAP
- IC Web Client

To enable the auto-alert mechanism of CCMS, see SAP Note [617547](#).

For more information about predefined monitors for the alert monitor, search for *Monitoring in the CCMS* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

3.1.2.1 Application Server ABAP

Use

This component is based on the SAP NetWeaver Application Server.

i Note

CCMS integration is not available for the ABAP MapBox. However, there is an application logging mechanism, which logs all errors and traces during processing in ABAP MapBox.

To activate application logging, maintain in table `ISPCFG`, for parameter `CRM_MAPBOX`, parameter value 2 and enter **x**.

The monitor template for this component can be used for local monitoring. To monitor the component centrally, create a monitor-set using the following monitor tree elements that are available for local monitoring:

- H7L\p246204_H7L_00\...\OperatingSystem\...
- H7L\p246204_H7L_00\...\DatabaseClient\...
- H7L\p246204_H7L_00\...\R3Service\...
- H7L\p246204_H7L_00\...\R3BasisSystem\...
- H7L\p246204_H7L_00\...\R3Abap
- H7L\p246204_H7L_00\...\R3Syslog
- H7L\p246204_H7L_00\...\Security
- H7L\p246204_H7L_00\...\InstanceAsTask
- H7L\p246204_H7L_00\...\Server Configuration

- H7L\p246204_H7L_00\...\Web Service ABAP\...
- H7L\p246204_H7L_00\...\Web Dynpro ABAP

i Note

Use the central monitoring system that is recommended for the SAP NetWeaver release on which your SAP S/4HANA for customer management installation runs.

More Information

Search for *Technical Operations for SAP NetWeaver* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

3.1.2.2 Interaction Center

SAPconnect

For more information, search for *Alert Monitor for SAPconnect* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

SAPphone

For more information, search for *Alert Monitor for SAPphone* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

3.1.3 Scenario Alert Monitoring

In addition to the required monitoring of each component, some other monitoring objects are designed to monitor cross-component communications, and other scenario-specific critical situations.

⚠ Caution

A description is provided, only if specific alert monitoring for scenarios is available in addition to the standard scenario monitors.

The following standard scenario monitors are available:

Scenario	Component Monitor
Service	Application Server ABAP
Interaction Center	Application Server ABAP

3.2 Detailed Monitoring and Tools for Problem and Performance Analysis

3.2.1 Log Objects and Subobjects for Application Server ABAP

You can use transaction `SLG1` to analyze object and subobject logs for ABAP based components. To see a complete list of the logs available for SAP S/4HANA for customer management, enter **CRM*** in the *Object* field.

Log Objects and Subobjects

Object	Object Text	Grouping	Subgrouping
CRM_ACE	None	Basic Functions	None
CRM_BSP	Blueprint Applications	Basic Functions	None
CRM_DATAARCHIVING	Data Archiving	Basic Functions	None
CRM_DOCUMENT	One Order Document	Basic Functions	None
CRM_EEWA	None	Basic Functions	None
CRM_LOG	None	Basic Functions	None
CRM_MPK	Measuring Point Kernel	Basic Functions	None
CRM_UI_PFCG_ROLE	UI PFCG Role	Basic Functions	None
CRMWST	None	Basic Functions	None
CRMXIF	External Interfaces	Basic Functions	None
CRM_IUDIT_ERRORLOG	Bal Log object for Utilities DIT	Industries	Utilities
CRM_CLM	Call List Management	Interaction Center	None

Object	Object Text	Grouping	Subgrouping
CRM_IC_EVENT	None	Interaction Center	None
CRM_SMF	Service Management Framework	Interaction Center	None
CRM_BP_ASS	Rule-Based Assignment of Employees Responsible	Master Data	None
CRM_BUPA	Business Partner	Master Data	None
CRM_BUPA_HIERARCHY	Business Partner Hierarchy	Master Data	None
CRM_MDM_LOG	None	Master Data	None
CRM_PRODUCT_MAINTAIN	Maintain Product Master Data	Master Data	None
CRM_PRP	Partner/Product Selections	Master Data	None
CRM_CAT	Multilevel Categorization	Service	None
CRM_DWP	Dispatchers Workplace	Service	None
CRM_MASS_CP	None	Service	None
CRM_CC_PT	None	None	None

3.2.2 Interaction Center Analysis Tools

3.2.2.1 E-Mail Response Management System

For SAPconnect alert monitor and trace, use transaction SCOT.

For workflow log and monitor, use transaction SWI1.

For trace information regarding individual e-mails, use the E-Mail Response Management System workbench. Sign in to SAP S/4HANA for customer management and access the workbench in the `Service Professional` role using either of the following steps:

- Choose [Service Operations](#) to navigate to the [E-Mails Status: Overview](#) page.
- Choose [Service Operations](#) to navigate to the [E-Mail Workbench](#) page.

To view the e-mail response trace, use transaction CRM_ERMS_LOGGING.

3.2.2.2 Business Communication Broker and Integrated Communication Interface (BCB/ICI)

Trace View

To view the BCB trace, use transaction CRM_ICI_TRACE.

Trace Level Adjustment

The default is OFF. You can increase the trace level on an individual user basis. To increase the trace level:

1. Choose *System* → *User Profile* → *Own Data*.
2. On the *Parameters* tab page, enter CRM_ICI_TRACELEVEL as the parameter ID and XXX as the parameter value.
3. Save.

3.2.2.3 Call List Log

You can access the call list log using transaction SLG1 and object CRM_CLM.

3.2.2.4 Business Workplace

The e-mail inbox uses business workplace functions. For more information, search for *Business Workplace (BC-SRV-GBT)* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

3.2.2.5 SAPphone

For more information about SAPphone, search for *SAPphone (BC-SRV-COM-TEL)* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

3.2.2.6 SAP Business Workflow

To view the SAP Business Workflow log, use transaction SWDP.

3.2.2.7 Data Archiving Monitor

For more information, search for *Data Archiving Monitor* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

4 Management of SAP S/4HANA for Customer Management

SAP provides you with infrastructure to help your technical support consultants and system administrators effectively manage all SAP components and complete all tasks related to technical administration and operation.

For more information about the underlying technology, search for *Technical Operations for SAP NetWeaver* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

For more information about industry-specific technical administration tasks and tools, see [Industry-Specific Solutions \[page 25\]](#).

4.1 Administration Tools of Software Components

For more information about the underlying technology, search for *Technical Operations for SAP NetWeaver* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

4.1.1 Interaction Center

Transaction/Tool	Description	Requirements
E-Mail Response Management System (ERMS) administration	<p>Maintain mail forms:</p> <ul style="list-style-type: none"> • Sign in to SAP S/4HANA for customer management using business role <code>Service Professional</code>. • Choose <i>Service Operations</i> to navigate to the <i>Mail Forms</i> page. <p>Maintain rule policies:</p> <ul style="list-style-type: none"> • Sign in to SAP S/4HANA for customer management using business role <code>Service Professional</code>. • Choose <i>Service Operations</i> to navigate to the <i>Rule Policies</i> page. <p>Maintain categorization schemas:</p> <ul style="list-style-type: none"> • Sign in to SAP S/4HANA for customer management using business role <code>Service Professional</code>. • Choose <i>Home</i> to navigate to the <i>Categorization Schemas</i> page. 	RFC loopback node is set up using SAPconnect, and inbound distribution is specified under SAP Business Workflow
SAPconnect (transaction SCOT)	SAPconnect administration required for ERMS	None
SAP Business Workflow (transaction SO28)	Inbound distribution specified for ERMS	None

4.2 Starting and Stopping

For more information, search for *Starting and Stopping SAP Systems* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

4.3 Backup/Restore and Recovery

You must back up your system landscape regularly to ensure that you can restore and recover it should a malfunction occur.

The backup and restore concept for your system landscape should not only consider SAP systems. It should be embedded in the overall business requirements and take into account the whole process flow in your company.

In addition, the backup and restore strategy must cover disaster recovery processes, such as the loss of a data center through fire. It is most important in this context that you ensure that backup devices are not lost together with normal data storage (separation of storage locations).

The following table lists further documentation on the topic of backup and recovery:

Topic	Details / Link
SAP NetWeaver technical operations information	Search for the following in the relevant version of SAP S/4HANA on SAP Help Portal: <ul style="list-style-type: none">• <i>Technical Operations for SAP NetWeaver</i>• <i>Backup and Recovery</i>
SAP HANA database backup and recovery	Refer to the SAP HANA Administration Guide in the relevant version of SAP HANA on SAP Help Portal

4.3.1 Interaction Center - Communication Channels

Recovery of Interaction Center (IC) communications channels is necessary if the application terminates due to hardware failure, software failure or power outage. Recovery is also required if an IC agent closes the application but there are still active phone calls or chats.

Recovery path:

1. Identify active connections using ICI
2. Determine connection IDs as well as their status and type.
3. Find associated business partner (manual identification)

The screen can be determined and accessed using either the index or navigation bar entry.

4.4 System Copy

4.4.1 Interaction Center

The following configuration needs to be revisited after the system copy:

- Computer Telephony Integration (CTI)
Adjust the RFC configuration for CTI (ICI or SAPphone) according to the new system landscape:
 - ICI
After setting up the connection to the communication software in transaction `SM59`, assign the newly configured RFC destination to your communication management software system ID in transaction `CRMM_BCB_ADM`.

- SAPphone
After setting up the connection to the communication software in transaction SM59, create a telephony server with the newly created RFC destination in transaction SPHB.
For more information about configuring communication management software, see SAP Solution Manager.
- Transaction Launcher
 - Adjust the logical systems and URLs for the transaction launcher in the new system and configure transaction launcher in Customizing for customer management, under [Interaction Center WebClient > Basic Functions > Transaction Launcher > Configure Transaction Launcher \(Wizard\)](#).

4.5 Periodic Tasks

You should run all jobs, unless otherwise specified, at times of very low system activity, so as not to affect performance or otherwise disrupt your daily operations. All jobs, unless otherwise specified, can be restarted.

4.5.1 Scheduled Periodic Tasks

4.5.1.1 Interaction Center

Program / Task	Recommended Frequency	Description
Upload interaction statistics (transaction CRM_CIC_CTI_LOAD)	Daily	Report used to upload statistics data from the communication system (for example, CTI server).
Compile knowledge bases (BSP application CRM_EI_CMP_ADMN)	Not less than 5 min	<p>You set the frequency in the Indexes application. You can set the frequency individually for different knowledge bases.</p> <p>This is an administrative background job. It does not influence system availability, but does influence data availability.</p> <p>If, for some reason, the job does not execute, run a full compilation.</p>

4.5.2 Required Manual Periodic Tasks

4.5.2.1 Interaction Center

Task or Transaction	Description	Recommended Frequency
Delete Reporting Data (CRMD_ERMS_DEL_RDATA)	Removes e-mails from the system. To ensure that non processed items remain in the system, be sure to select <i>Extracted Data Only</i> .	Daily
Compilation	None	If regular delta compilation is scheduled in the <i>Indexes</i> application, no manual task is required. This task does not influence system availability, but does influence data availability.

4.6 Logon and Load Balancing

For more information, search for *Load Balancing* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

4.7 User Management

SAP S/4HANA for customer management uses the standard functionality of SAP NetWeaver for user management. For more information, search for *User Management* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

Further User Management Tools

Tool	Detailed Description
Transaction PPOCW	Create organization and staffing
Transaction PPOMW	Change organization and staffing
User maintenance (transaction SU01)	SAP NetWeaver AS user management

Tool	Detailed Description
Profile generator (transaction PFCG)	Create roles and assign authorizations to users in ABAP-based systems

User

User	Detailed Description	Single Sign-On
SU01 user	You require a user with the privileges to administrate users.	No

5 Business Continuity and High Availability

For more information, search for *Technical Operations for SAP NetWeaver* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

5.1 Interaction Center

The connection to third-party CTI vendors uses XML/SOAP. High availability and failover concepts for this component have to be discussed with the corresponding CTI vendor. Depending on the capabilities of the third-party product, the CTI component might be a single point of failure (SPOF).

When a heartbeat profile is used, the system checks for continued communication between the application server session, the communication management software (CMS), and the web browser. If this communication is disrupted beyond a given timeframe, the system will log the user off the CMS.

You can configure the heartbeat profile in Customizing for customer management under [Interaction Center WebClient](#) > [Basic Functions](#) > [Communication Channels](#) > [Define Heartbeat Profile](#).

6 Software Change Management

Software Change Management standardizes and automates software distribution, maintenance, and testing procedures for complex software landscapes and multiple software development platforms. These functions support your project teams, development teams, and application support teams.

The goal of software change management is to establish consistent, solution-wide change management that allows for specific maintenance procedures, global rollouts (including localizations), and open integration with third-party products.

6.1 Transport and Change Management

For transport and change management issues, the procedures of SAP NetWeaver apply. SAP NetWeaver includes the Change and Transport System (CTS) which is a tool that helps you organize development projects in the ABAP Workbench and in Customizing, and then transport the changes between the SAP systems in your system landscape.

For more information, search for *Change and Transport System* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

6.2 Support Packages and SAP Notes Implementation

For an overview of which Support Packages are available and which releases and support packages of the used components should be installed, see [SAP Support Package Stacks](#) on SAP Support Portal. The SP stacks give you an overview of the versions of the different components that are required for each Support Package.

6.3 Release and Upgrade Management

Corrections for SAP S/4HANA for customer management are available in support packages.

7 Troubleshooting

7.1 Interaction Center

7.1.1 E-Mail

Technically, e-mail can be handled in SAP S/4HANA for customer management in the following ways:

- Agent inbox
To use the agent inbox, complete the following steps:
 - In Customizing for customer management, choose ► [Interaction Center WebClient](#) ► [Basic Functions](#) ► [Communication Channels](#) ► [Define E-Mail Profiles](#) ►. Enter the profile ID and choose *INBOX* as the e-mail provider.
 - Configure the agent inbox in Customizing for customer management under ► [Interaction Center WebClient](#) ► [Agent Inbox](#) ►.
 - Make sure that SAPconnect and SAPoffice are set up correctly.
- Integrated Communication Interface (ICI) / Business Communication Broker (BCB)

To use ICI/BCB, go to Customizing for customer management and choose ► [Interaction Center WebClient](#) ► [Basic Functions](#) ► [Communication Channels](#) ► [Define E-Mail Profiles](#) ►.

Enter the profile ID and choose *ICI* as the e-mail provider. To troubleshoot the ICI, see [Monitoring of SAP S/4HANA for Customer Management \[page 7\]](#).

For more information, search for *Integrated Communication Interface* in the relevant version of [SAP S/4HANA for customer management](#) on SAP Help Portal.

7.1.2 Simplified ABAP Messaging (SAM)

For more information about troubleshooting, see SAP Note [828884](#) .

7.1.3 SAPphone

For more information, search for *SAPphone (BC-SRV-COM-TEL)* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

7.1.4 Mandatory SICF Services

For more information about the SICF services that are required for IC WebClient, see SAP Note [1295006](#).

8 Support Desk

Support Desk Management enables you to set up an efficient internal support desk for your support organization that seamlessly integrates your end users, internal support employees, partners, and SAP support specialists with an efficient problem resolution procedure.

For support desk management, you need the methodology, management procedures, and tools infrastructure to run your internal support organization efficiently. SAP S/4HANA for customer management uses the standard SAP NetWeaver read-only access support roles.

For more information about remote support setup, see the Getting Started guide for [SAP S/4HANA for customer management](#) on the product page.

For more information about the standard SAP NetWeaver read-only access support roles, search for *Setting Up Service Connections for SAP Remote Support* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

9 Industry-Specific Scenarios

This section describes scenario-specific details for industry scenarios.

9.1 Troubleshooting

9.1.1 Scenario: Service Processes for Utilities

In SAP for Utilities (SAP IS-U), you can search for business partners using a combination of name and premise address if one of the following Customizing parameters is switched on:

- Parameter *Adjust standard address of move-in customer* (In Customizing for SAP for Utilities, under [▶ Customer Service ▶ Process Execution ▶ Move-In/Out ▶ Move-In ▶ Define Move-In Control Parameters at Document Level ▶](#)).
If this parameter is switched on, the search is possible using the business partner address fields.
- Parameter *Search index: Search for business partner by premise address* (In Customizing for SAP for Utilities, under [▶ SAP Utilities ▶ Basic Settings/Enterprise Structure ▶ Define System Parameters for IS-U ▶](#)).
If this parameter is switched on, the search is possible using the premise/connection object address fields.

If only the first parameter is switched on and the search performance is not satisfactory, the second parameter should be switched on, too.

A Appendix

A.1 Related Information

For more information about SAP S/4HANA for customer management, see the relevant documentation on the [product page](#).



For more information about system administration and maintenance of SAP NetWeaver, search for *Technical Operations for SAP NetWeaver* in the relevant version of [SAP S/4HANA](#) on SAP Help Portal.

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