PROCESS DIRECTOR Accounts Payable

Configuration Guide

Version: 7.2

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Lexmark™

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Introduction

Welcome

Welcome to the *ReadSoft PROCESS DIRECTOR 7.2 Accounts Payable – Configuration Guide*.

PROCESS DIRECTOR Accounts Payable supports the process of document entry into SAP. The aim is to facilitate the automatic posting of error-free data records and to support accounts payable personnel in the process of identifying and amending documents that contain errors. PROCESS DIRECTOR Accounts Payable is like an invoice entry ledger.

This document explains how you can configure PROCESS DIRECTOR 7.2 Accounts Payable to suit the requirements of your organization.

For more information on configuring PROCESS DIRECTOR, please refer to the following ReadSoft guides:

- *Importing PROCESS DIRECTOR into SAP*
- *WORK CYCLE 7.2 – SAP Configuration Guide*

About this guide

This guide describes how to configure PROCESS DIRECTOR Accounts Payable. It assumes you are already familiar with the general concepts and basic use of PROCESS DIRECTOR.

The guide contains the following chapters:

- Getting your system up and running

  Explains all the mandatory tasks you must perform to get PROCESS DIRECTOR Accounts Payable up and running.

- Configuration 101

  PROCESS DIRECTOR Accounts Payable configuration follows some basic rules. These are explained here.

- Main configuration tasks

  Explains all the common configuration tasks in PROCESS DIRECTOR Accounts Payable.

- Other features

  Explains some other features of PROCESS DIRECTOR Accounts Payable that come with their own IMG, programs, and User Exits.

- Programs and functions

  PROCESS DIRECTOR Accounts Payable contains numerous programs and functions that you can use. The main ones are described here.

- Import interface

  Describes the interfaces for importing documents into PROCESS DIRECTOR Accounts Payable.

- Archiving

  PROCESS DIRECTOR Accounts Payable documents can be archived. This chapter explains how.

- Appendix A – IMG

  A complete reference for the PROCESS DIRECTOR Accounts Payable IMG.

- Appendix B – User Exits

  PROCESS DIRECTOR Accounts Payable comes with over 60 User Exits templates that you can use to customize your installation.

- Appendix C – Tables

  Lists and describes all the configuration and data tables in PROCESS DIRECTOR Accounts Payable.

- Appendix D – Transactions

  Lists the most common PROCESS DIRECTOR Accounts Payable transactions.

- Appendix E – Other tasks

  Explains how you can configure your SAP system to view TIFF document images.

Typographical conventions

The following typographical conventions are used:

- Menu names, commands, and dialog names appear in **bold**.
- Names of keys on your keyboard appear in SMALL CAPITAL LETTERS.
- Names of files, folders, and settings appear in `Courier` font.
- SAP transaction codes and program names appear in `ARIAL MONOSPACE`.
- Variables that have to be replaced by an actual value are *italicized* or appear in <>.

Getting your system up and running

Overview

After importing the PROCESS DIRECTOR transport*, you must perform the following tasks to have a functioning system:

- Install the licenses
- Map the fields from INVOICES
- Determine the tax code
- Define any document types
- Define posting attempts after receipt
- Define the posting settings
- Define line-item proposal or determination method
- Setup user authorizations

* The ReadSoft guide *Importing PROCESS DIRECTOR into SAP* explains the import procedure.

Licensing

Overview

You must install a license in order to use any of the applications. A separate license exists for:

- PROCESS DIRECTOR Accounts Payable
- WORK CYCLE
- EDI COCKPIT
- MOBILE APPROVAL
- INFO MAIL
- WEB BOARD
- PERFORMANCE ANALYTICS

Note: The PERFORMANCE ANALYTICS license is not displayed in the license information window.

Types of licenses

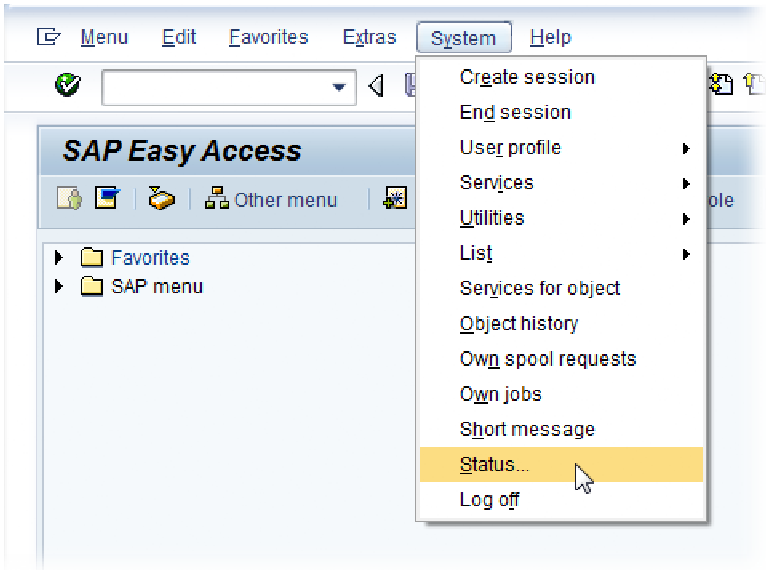
There are three types of licenses:

License type	System type	Expiry date	Volume limit*
1. Demo	Non-production only	None	None
2. Test	Non-production only	Yes	None
3. Normal/Full	Production	Yes (optional)	Yes

* Volume limits are annual limits, which are reset every year on 1 January (only for licenses with no expiry date).

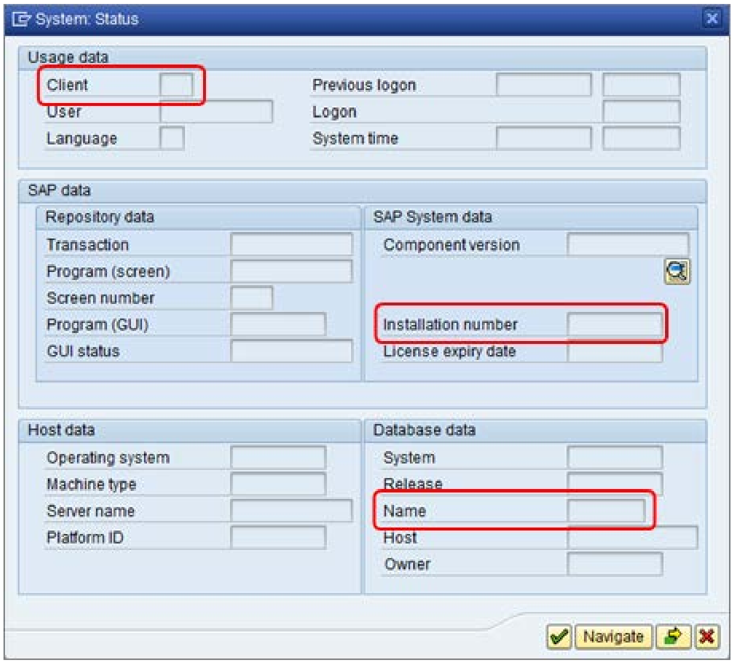
Obtaining a license

To order your license(s), you need your SAP Installation number and your SAP System ID. This information is found by choosing **System** > **Status** from the menu bar.

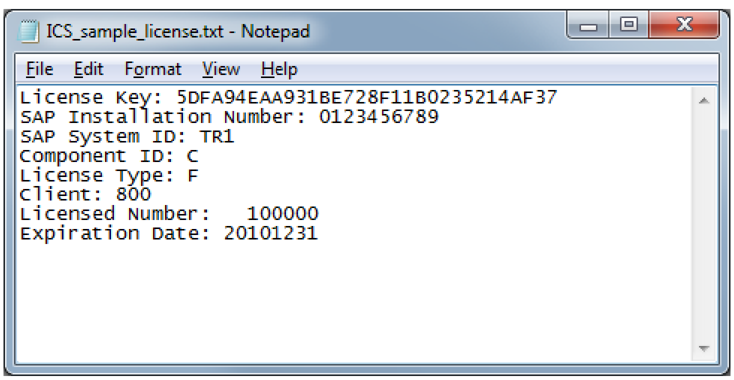


You need:

- **SAP System data** > **Installation number**
- **Database data** > **Name**
- **Usage data** > **Client** (only required if your license is intended to be restricted to this client)



After placing your order, you will receive a license (in a .TXT file) from ReadSoft. Your license file contains information similar to the following illustration.




```
License Key: 5DFA94EAA931BE728F11B0235214AF37
SAP Installation Number: 0123456789
SAP System ID: TR1
Component ID: C
License Type: F
Client: 800
Licensed Number:   100000
Expiration Date: 20101231
```

Field	Description
License key	Encrypted number to validate the license.
SAP Installation Number	The SAP Installation number of your system (that you provided to ReadSoft when you ordered the license).

Field	Description
Client	The client number of your system (that you provided to ReadSoft when you ordered the license). *Optional – only if your license is restricted to a specific client. If the Client is not provided in your license, the license is valid for all clients.*
SAP System ID	The SAP System ID of your system (that you provided to ReadSoft when you ordered the license).
Component ID	The product component the license is valid for: • C – PROCESS DIRECTOR Accounts Payable • E – EDI COCKPIT(1) • D – PROCESS DIRECTOR Accounts Payable & EDI COCKPIT(2) • A – ANALYZER • W – WORK CYCLE • I – INFO MAIL • B – WEB BOARD • M – MOBILE APPROVAL • T – TRAVEL EXPENSES • R – REPORTER
License Type	F – Normal/Full T – Test D – Demo
Licensed Number	The production server volume limit for Normal licenses.
Expiration Date	Date of expiration.

(1) It is possible to run EDI COCKPIT together with PROCESS DIRECTOR Accounts Payable, with only a license for EDI COCKPIT. Requirements: 1. A valid EDI COCKPIT license. 2. The sum of the document

counters for EDI COCKPIT and PROCESS DIRECTOR Accounts Payable must not exceed the license volume for EDI COCKPIT.

(2) The volume is equal to the total documents processed by PROCESS DIRECTOR Accounts Payable and EDI COCKPIT. Adding this license removes any existing PROCESS DIRECTOR Accounts Payable and/or EDI COCKPIT licenses.

Installing a license

You can install licenses in the following ways:

- Import license information into PROCESS DIRECTOR
- Entering license information in PROCESS DIRECTOR
- Transporting an existing license from one system to another

Importing license information into PROCESS DIRECTOR

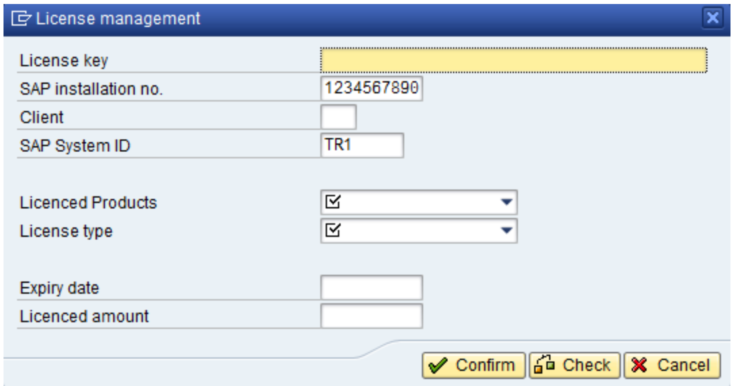
1. Go to `/COCKPIT/C46`.
2. In change mode, click the **Import** button  or select the menu item **License > Import**.
3. Select the license file you received from ReadSoft.

The information from the license file is inserted in the **License Management** screen.

Entering license information in PROCESS DIRECTOR

1. Go to `/COCKPIT/C46`.
2. Create a new license entry.

   Enter your license information from the license file you received from ReadSoft.



Note: Your license file may not include a **Client** number or **Expiry date**. If no **Client** is specified, the license is valid for all clients.

3. Click **Check** your entry to ensure that you have entered all of the relevant information.
4. Click **Confirm** to complete the license installation.

Transporting an existing license from one system to another

It is possible for a product component to have more than one license installed on the same machine. However, only one can be valid at any one time, because only one will match the SAP system (the SAP Installation Number and SAP System ID [Database Data Name]) it is installed on.

When working on an instance of PROCESS DIRECTOR that you wish to migrate, or transport, from one system to another, the licenses are included. This means that you can install a normal/full PROCESS DIRECTOR license in a demo/development system and transport it to the test/QA system and later to the normal/production system. The normal license will only be used/valid when it matches the SAP Installation Number and SAP System ID (Database Data Name) used within the (production) system.

License expiration

The license validity mechanism behaves differently in the case that a production or non-production client is used.

Production client

Allowed license type

Only Normal licenses are allowed. Licenses other than Normal are not active on the production server.

For other clients, the provided production license will be used since only one license can be valid on the system. Production license counters will not be incremented when in a test client.

License expiration

If a Normal license exceeds the production server volume or the passes the expiry date.

If the production license is exceeded, the production client as well as the demo and test clients will be not function.

Note: Volume limits are annual limits, which are reset every year on 1 January (only for licenses with no expiry date).

Non-production clients

Allowed license type

Normal, Demo and Test licenses are allowed on non-production clients

License expiration

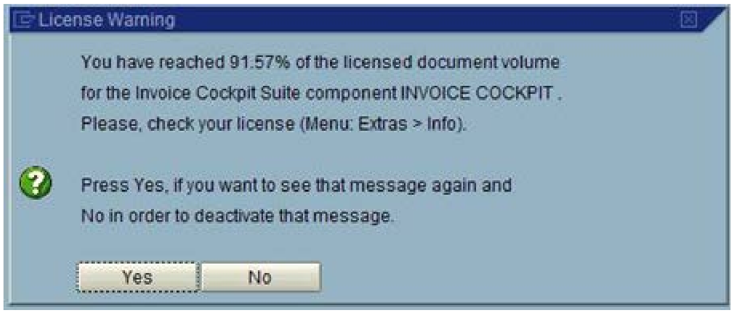
If a Normal license is installed, the volume processed on production client will be taken into an account. If a Test license is installed, the expiration date is used instead. If a Demo license is installed, no validity and expiration date are used.

Note: You can only have one active license installed per component on one system.

Threshold warnings

Volume warnings

PROCESS DIRECTOR Accounts Payable displays a warning message after starting the application when your license counter reaches 90%, 95% and 99% of the issued volume.



If users click **Yes**, the warning will appear again the next time PROCESS DIRECTOR Accounts Payable is opened. If users click **No**, the warning will only appear again when the license counter reaches the next threshold (95% and 99%).

For applications that do not have a direct view in the SAP GUI (EDI COCKPIT, WEB BOARD and INFO MAIL), the warning messages are displayed in PROCESS DIRECTOR Accounts Payable.

Once the license counter reaches 100%, PROCESS DIRECTOR Accounts Payable will stop working (cannot be started) and WORK CYCLE will not allow new workflows to be started. Users of the Web Application are not affected—they can continue to process their current documents.

Expiry date warnings

A warning appears 15 days before the expiry date (if your license has one). Users can choose to have the warning repeated on subsequent starts of PROCESS DIRECTOR Accounts Payable or not.

Document counters

Production server

Document counters only exist on production systems (for Normal licenses). If more than one production client is installed on one system, then only one production license should be provided. This means that only one license counter per product will be incremented for those clients.

Counter incrementation

Counters only increment on productions servers.

The following table describes how counters are incremented in different applications.

Application	Counter	Counters checked	Counter type
PROCESS DIRECTOR Accounts Payable	Yes	PROCESS DIRECTOR Accounts Payable	Every document, except IDocs, transported into PROCESS DIRECTOR Accounts Payable is counted.
EDI COCKPIT	Yes	EDI COCKPIT	Every IDoc transferred from EDI COCKPIT to PROCESS DIRECTOR Accounts Payable. The PROCESS DIRECTOR counter will not increment.
PROCESS DIRECTOR Accounts Payable & EDI COCKPIT	Yes	PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Every document transferred to PROCESS DIRECTOR Accounts Payable, including IDocs.
WORK CYCLE	Yes	WORK CYCLE	The WORK CYCLE counter increments the first time a document is sent from PROCESS DIRECTOR Accounts Payable to a WORK CYCLE workflow. If you send the same document to a second workflow, the counter does not increment. Invoices created in WORK CYCLE are incremented in the PROCESS DIRECTOR Accounts Payable counter.
MOBILE APPROVAL	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.

Application	Counter	Counters checked	Counter type
WEB BOARD	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only. Invoices created in WEB BOARD are counted as PROCESS DIRECTOR Accounts Payable documents.
INFO MAIL	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.
ANALYZER	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.
REPORTER	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.
PERFORMANCE ANALYTICS	No	None. The system only checks if a valid license exists for PROCESS DIRECTOR Accounts Payable.	Activation license only.

Creating the archive

Overview

The following connections to business objects are made:

Document	Business object(s)
PROCESS DIRECTOR Accounts Payable	• /COCKPIT/B • /COCKPIT/I (for attachments, see below)
FI	BKPF
MM	• BUS2081 • BKPF (for the associated FI document)

The connections to the business objects usually occur when the documents are created. Under certain circumstances, a connection may not be established. Broken connections can be viewed and repaired using the `/COCKPIT/ARCHIVELINK_CHECK` program.

/COCKPIT/I

Linking document types to the /COCKPIT/I object type allows users to attach files to PROCESS DIRECTOR Accounts Payable documents and be able to see them when viewing the posted SAP document (via the **Services for object** > **Attachment list** menu). Files attached to unposted PROCESS DIRECTOR Accounts Payable documents are linked automatically to the resulting SAP documents after posting. Files attached to posted PROCESS DIRECTOR Accounts Payable documents are linked using the `/COCKPIT/ARCHIVELINK_CHECK` function.

Note: In order to add and view attachments, users must have the authorization object S_WFAR_OBJ with activities 01 Create and 03 Display.

Creating and connecting archive document types

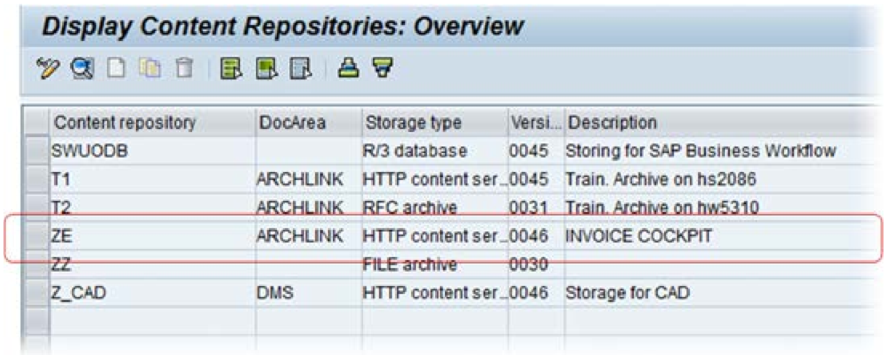
Before you can start importing documents into PROCESS DIRECTOR Accounts Payable, you must create the required document types in the archive that will be used in the system:

1. Creating an archive repository
2. Defining the global archive document types
3. Defining the archive links

Note: These tasks are usually performed by the organization's SAP Basis Team, not by ReadSoft. These instructions are provided as guidelines only. Setting up the archive is based on the organization's requirements for the type of archive needed and the document types that will be supported.

Creating an archive repository

/OAC0



Display Content Repositories: Overview

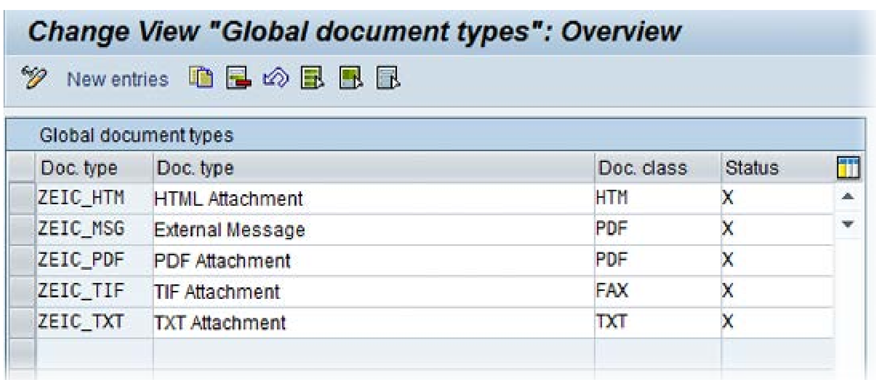
Content repository	DocArea	Storage type	Versi...	Description
SWUODB		R/3 database	0045	Storing for SAP Business Workflow
T1	ARCHLINK	HTTP content ser...	0045	Train. Archive on hs2086
T2	ARCHLINK	RFC archive	0031	Train. Archive on hw5310
ZE	ARCHLINK	HTTP content ser...	0046	INVOICE COCKPIT
ZZ		FILE archive	0030	
Z_CAD	DMS	HTTP content ser...	0046	Storage for CAD

Create an archive repository for storing PROCESS DIRECTOR Accounts Payable documents and their attachments.

PROCESS DIRECTOR Accounts Payable is ArchiveLink compliant. However, you may want to use another file server.

Defining the global archive document types

/OAC2



Change View "Global document types": Overview

New entries

Global document types

Doc. type	Doc. type	Doc. class	Status
ZEIC_HTM	HTML Attachment	HTM	X
ZEIC_MSG	External Message	PDF	X
ZEIC_PDF	PDF Attachment	PDF	X
ZEIC_TIF	TIF Attachment	FAX	X
ZEIC_TXT	TXT Attachment	TXT	X

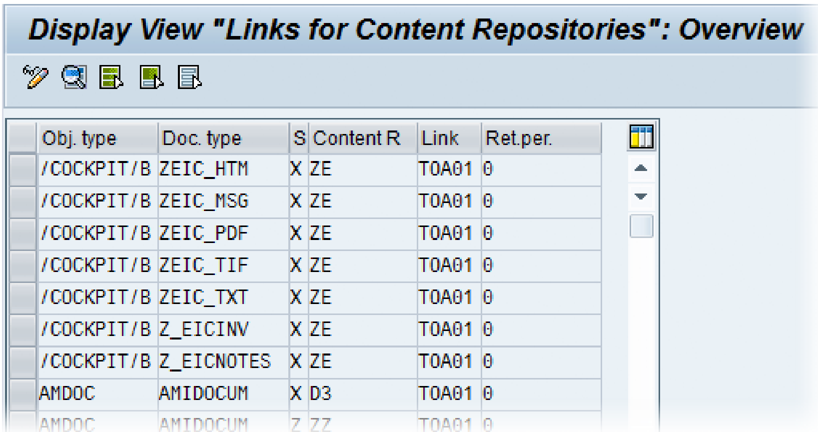
Add the document types that you want to support.

Your installation may support more or less document types than those depicted above.

Some examples and uses:

- TIF – For invoice images.
- TXT – For document notes.
- PDF – For document attachments.

Defining the archive links



Display View "Links for Content Repositories": Overview

Obj. type	Doc. type	S	Content R	Link	Ret.per.
/COCKPIT/B	ZEIC_HTM	X	ZE	TOA01	0
/COCKPIT/B	ZEIC_MSG	X	ZE	TOA01	0
/COCKPIT/B	ZEIC_PDF	X	ZE	TOA01	0
/COCKPIT/B	ZEIC_TIF	X	ZE	TOA01	0
/COCKPIT/B	ZEIC_TXT	X	ZE	TOA01	0
/COCKPIT/B	Z_EICINV	X	ZE	TOA01	0
/COCKPIT/B	Z_EICNOTES	X	ZE	TOA01	0
AMDOC	AMIDOCUM	X	D3	TOA01	0
AMDOC	AMIDOCUM	Z	ZZ	TOA01	0

Define links between the archive respository and document types you specified, together with the business objects.

Business objects to specify

- /COCKPIT/B – Business object for PROCESS DIRECTOR Accounts Payable
- /COCKPIT/I – Business object for PROCESS DIRECTOR Accounts Payable, to support attachments.
- BKPF – Business object for FI documents
- BUS2081 – Business object for MM documents

Entries must be made for all four business objects.

Note: Make sure that the same content repository ID is assigned to the PROCESS DIRECTOR Accounts Payable object types and the corresponding SAP business object types. For example, /COCKPIT/B should have the same content repository ID as BKPF and BUS2081.

Tables to use

- TOA01
- TOA02
- TOA03

Depending on functions and document types required, up to nine links can be entered for each document type (1 doc. type * 3 business objects * 3 table links).

Mapping data

Mapping data

In order to transfer data from an external application, like INVOICES, to PROCESS DIRECTOR Accounts Payable, you must specify how fields are to be mapped between the two. In other words, if you do not map a field in the following tables, it will not be transferred and saved in the PROCESS DIRECTOR Accounts Payable document.

Mapping non-tax data

1. Go to `/COCKPIT/C1`.
2. Enter the name of the invoice **Profile** in INVOICES.
3. Enter the **Structure** and the names of the **External field** a (in INVOICES) and **Internal field** (in PROCESS DIRECTOR Accounts Payable).

Mapping tax data

1. Go to `/COCKPIT/C2`.
2. Enter the name of the invoice **Profile** in INVOICES.
3. Enter the **External tax rate**, **External tax amount** and **External tax code**, as they appear in INVOICES.

Determining the tax code

When a document in created in PROCESS DIRECTOR Accounts Payable, the system determines the SAP tax code and adds it to the document. There are two ways this can be done:

- Simple tax code determination table

  Use the `/COCKPIT/C15` table when there is only one possible tax rate for a tax code for a specific buyer and vendor combination.

- User Exit

  You need to use a User Exit when the determination of the tax code is more complex. For example, when there is more than one possible tax code for a tax rate for a specific buyer and vendor combination. See User Exit 001 - Determination of the tax code.

Simple tax code determination table

1. Go to /COCKPIT/C15.
2. Enter the buyer and vendor countries, and the tax rate that applies to transactions between these two countries.
3. Enter the corresponding tax code for the tax rate you entered.

Posting documents after receipt

When a document is received by PROCESS DIRECTOR Accounts Payable, you can determine if it should be posted automatically (if free of errors), or if some other action needs to be executed.

Depending on your organization's requirements, you may want to attempt to post MM documents only, and have FI documents checked and sent to a workflow before posting.

1. Go to /COCKPIT/C7.
2. Add entries for the combination of Company Code and IC Document Type, for MM and FI documents, as required.

Example

Maintenance of posting logic during data transfer

Company code	IC doctype	Posting FI	Posting MM
		05 Check	05 Check
2000		05 Check	02 Post

Here, only incoming MM documents for Company code 2000 that contain no errors are posted automatically. For all other documents, the PROCESS DIRECTOR Accounts Payable additional checks are executed.

Note: The posting attempts in this table are only executed immediately after the transfer of documents. All subsequent automatic posting attempts are handled by the REPETITOR program, using the settings in /COCKPIT/C8.

Posting and performing methods

You can specify the SAP interface used to post documents, as well as the transaction called when users perform documents.

Defining the transaction to perform documents

1. Go to /COCKPIT/C9.
2. Specify the transaction to use for FI documents (**Post FI**) and MM documents (**Post MM**).

   If you select FB10 for **Post FI**, you can specify a variant to use by clicking the Details button.
3. If you wish to use a transaction that is not listed in the above two settings, enter it in **Transaction code**.

   Warning: Be sure that the transaction code you specify can process the documents correctly.

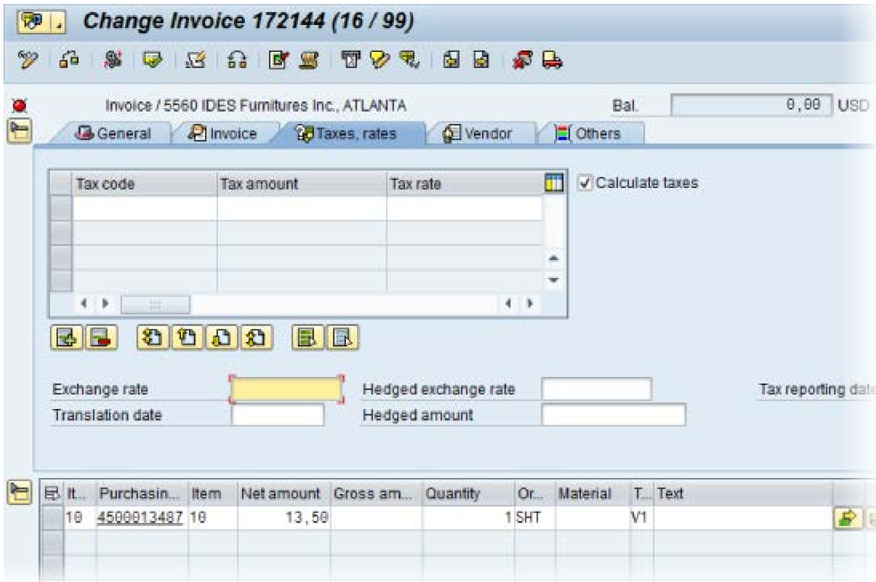
Defining which posting interface to use

The /COCKPIT/C9 configuration table also determines the posting method to use (even though the posting method is not displayed in the table).

Transaction in Post FI/Post MM	Posting method	Perform method
FB01	BAPI_ACC_ INVOICE_RECEIPT_POST	Batch-Input on TA FB01
FB01 + FI Posting ...	FI Posting-Interface	Batch-Input on TA FB01
FB60	BAPI_ACC_ INVOICE_RECEIPT_POST	Batch-Input on TA FB60
FB60 + FI Posting ...	FI Posting-Interface	Batch-Input on TA FB60
MIRO	BAPI_INCOMING INVOICE_CREATE	Batch-Input on TA MIRO

Calculating taxes

PROCESS DIRECTOR Accounts Payable has a **Calculate taxes** setting, which functions exactly the same way as in SAP. It is located on the **Taxes, rates** tab.



The example document above has no balance, even though there is no tax information entered in the header. However, the line item contains the **Net amount** (13,50) and the **Tax code** (V1). As the **Calculate taxes** setting is active, PROCESS DIRECTOR Accounts Payable calculates the total taxes from the line item(s) automatically.

Method for calculating taxes

The method used for calculating taxes depends on the posting method setup in the PROCESS DIRECTOR Accounts Payable configuration. The following rules apply:

Perform method*	Tax calculation method
All transactions beginning with FB (For example, FB01, FB60)	Tax is calculated for each item.
All non-FBxx transactions (For example, MIRO)	Tax is calculated for the invoice net amount.

* The perform method also determines the way in which documents are posted.

Example

In some cases, a small balance may occur when taxes are calculated on the item level, as shown below.

Invoice header:

Net amount	Tax rate	Tax amount
7583	19.6%	1486.27 (rounded from 1486.268)

Invoice items:

Item	Net	Tax rate	Tax amount
10	2020	19.6%	395.92
20	1098	19.6%	215.208
30	809	19.6%	158.564
40	2109	19.6%	413.36
50	1547	19.6%	303.21
Total	7583		1486.26 (rounded from 1486.262)

Here, a balance on 0.01 would exist due to rounding differences if the **Calculate taxes** flag is set and the Perform method is set to an FBxx transaction.

Line item proposal and determination

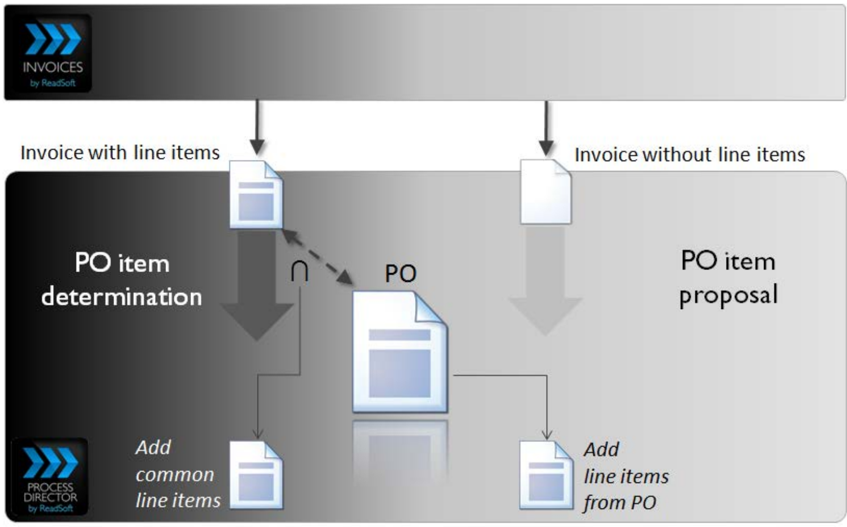
Overview

PO item determination and PO item proposal are two different methods to add line items to invoices inside PROCESS DIRECTOR Accounts Payable. Both actions can occur:

- During the transfer of an invoice into PROCESS DIRECTOR Accounts Payable.
- By the user, manually.

What happens when invoices are transferred?

- If line-item data is transferred, **PO item determination** occurs.
- If line-item data is not transferred, **PO line item proposal** occurs.



PO item determination

PO item determination compares the line-item data from the captured invoice to the purchase order. If the match is considered good enough, the information is entered into the PROCESS DIRECTOR Accounts Payable document.

PO item proposal

Line-item data from the purchase order is added to the PROCESS DIRECTOR Accounts Payable document.

Line item determination

PO item determination is a feature that is primarily used during invoice data transfer to PROCESS DIRECTOR Accounts Payable. The purpose of this feature is to compare the captured line-item data from the invoice (typically scanned in INVOICES) to the line-item data in the related purchase order. If the comparison meets configured criteria, the line item is entered in the PROCESS DIRECTOR Accounts Payable document.

This feature makes it possible for line items to appear in the PROCESS DIRECTOR Accounts Payable document, even though the order of appearance differs between the invoice and purchase order.

Note: Line item determination is not the same as line-item proposal. PO item determination occurs when line items are captured. When no line items are captured, PO line items are proposed using the MM item suggestion configuration.

Line item proposals

Overview

Introduction

PROCESS DIRECTOR can add, or “propose” line-item data from purchase order and/or delivery notes to PROCESS DIRECTOR documents. This feature reduces the amount of manual data entry needed for completing invoices before they can be posted.

Note: This feature is not the same as PO item determination. PO item determination occurs when line items are captured and transferred to PROCESS DIRECTOR. When no line items are transferred, PO line items are proposed using the MM item suggestion setting.

PROCESS DIRECTOR uses the purchase order and/or the delivery note number(s) to retrieve line-item data from the purchase orders and add them to the invoice. If the invoice contains both, the delivery note number takes precedence.

When are items proposed?

There are two times line-item data can be added to PROCESS DIRECTOR documents:

- During transfer—when line items are not transferred and the purchase order number and/or the delivery note number appear in the invoice header. (When a purchase order number and/or a delivery note number is located in both the invoice header and in the line item, PROCESS DIRECTOR combines them for the line-item proposal calculation.)
- Manually in `/COCKPIT/1` by clicking the  (**Propose doc. item from PO**) button in the document detail view. Any existing line-item data is deleted.

Methods for proposing items

What item data is added to the invoice is determined by:

- The presence and location of the purchase order and delivery note numbers.

  Two different methods are available (the **MM item suggestion version** setting in `/COCKPIT/C6`):

  - **PROCESS DIRECTOR 7.1 AP with pop-up** (dialog appears where users can enter PO and delivery note numbers)
  - **ICS 3.2 and earlier** (no pop-up dialog appears)

- Which of the five **MM item suggestion** methods is selected. This setting is based on whether a line item is billable or not. That is, whether a goods receipt exists.

  See **MM item suggestion**.

- Whether a check exists to ensure the vendor on the invoice is the same as on the PO.

Vendor check

You can activate a vendor check to make PROCESS DIRECTOR Accounts Payable use only purchase orders and delivery notes that not only have the corresponding number(s) from the invoice, but are from the same vendor.

See **The vendor is the one listed on the purchase order** validation type in the **Activate additional checks** section. You must activate the following check:

Setting	Value
Validation type (Valtyp)	(0002) The vendor is the one listed on the purchase order.
Time	(2) Check document in PROCESS DIRECTOR Accounts Payable.
Message	(X) Error message, no posting.

Checks can be performed for all documents or for selected vendor and PROCESS DIRECTOR Accounts Payable document type combinations.

If no vendor check is in place, PROCESS DIRECTOR Accounts Payable searches all matching delivery note and purchase order numbers.

User authorizations

Overview

You can restrict which users can access PROCESS DIRECTOR Accounts Payable and what actions they can perform in it.

- Authorization object
- Enabling actions that users can perform

Authorization object

You can restrict which SAP users in your organization can access PROCESS DIRECTOR Accounts Payable. You need to:

1. Create an authorization object in SAP.
2. Assign the authorization object to users.
3. Activate the authorization object in PROCESS DIRECTOR Accounts Payable.

Enabling actions that users can perform

You can enable and disable many actions in PROCESS DIRECTOR Accounts Payable, such as the parking and deletion of documents.

1. Go to `/COCKPIT/C4`.

2. Select the actions that PROCESS DIRECTOR Accounts Payable users can execute.

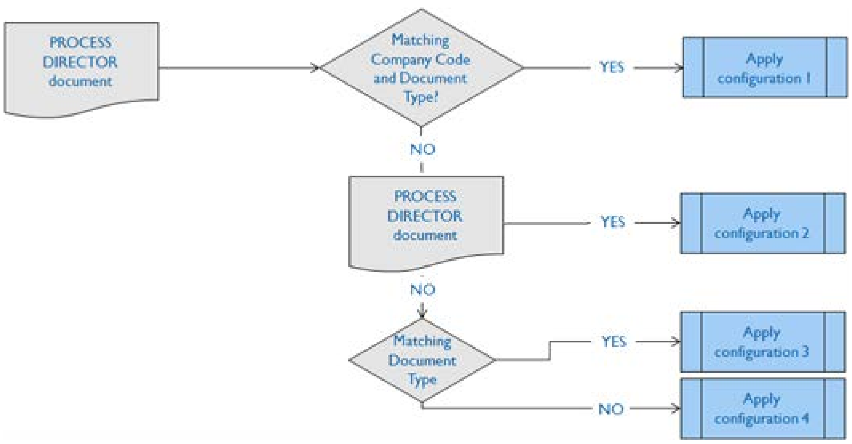
Configuration 101

Overview

Nearly every configuration table in PROCESS DIRECTOR contains the **Company code** and **PROCESS DIRECTOR Document Type** fields. This allows you to fine-tune your configuration and apply different settings to different kinds of documents.

Configuration method

To determine what configuration to apply, PROCESS DIRECTOR uses the following method:



Example

`/COCKPIT/C7`

Company code	PD document type	Posting FI	Posting MM
		Check	Check
1000		Check	Post

Company code	PD document type	Posting FI	Posting MM
	A1	Post	Post
1000	A1	Park	Park

Result

Company code	PD document type	FI/MM	Result
1000	A1	MM	Park
2000	A1	MM	Post
1000	A2	FI	Check
3000	A2	FI	Check

Note: A configuration with an empty value for company code or document type will not only be applied to documents with no company code/document type assigned to it, but for all documents that have no other matching entry. The 3000/A2 document above demonstrates this.

Document types

PROCESS DIRECTOR Accounts Payable documents types are an arbitrary, and optional, way to classify documents. The configuration of PROCESS DIRECTOR Accounts Payable can be fine-tuned based on document types, meaning a specific configuration can be applied to one set of documents, and another configuration applied to another set.

See: Configuration 101: Overview

Creating a document type

1. Go to `/COCKPIT/C11`.
2. Under **PD DocType**, enter any two-character ID.
3. Under **Description**, enter any description you like, as an indicator of how the document type is to be applied.

Assigning document types

Document types can be assigned:

- During document INVOICES scanning.
- As a **Supplier field** in INVOICES in the Optimize module.
- Upon transfer to PROCESS DIRECTOR Accounts Payable, via
  - a User Exit
  - PROCESS DIRECTOR CONNECTOR
  - SERVICE BUS
- Manually, by PROCESS DIRECTOR Accounts Payable users.

Main configuration tasks

Overview

- Automatic postings
- Document reversals
- Determining the vendor
- One-time vendors
- Additional checks
- Highlighting fields with errors
- Field statuses
- Authorizations
- Creating message templates
- Follow-up flags
- Invoice reduction
- Nota fiscal

Automatic postings

Overview

Documents can be posted automatically at two different times. Each is configured separately in PROCESS DIRECTOR.

- Upon receipt

  Use the configuration table in `/COCKPIT/C7` to determine which error-free documents are posted automatically as soon as they are transferred to PROCESS DIRECTOR.

- After receipt

  `REPETITOR` is a PROCESS DIRECTOR program that you run as a background job at regular intervals to post error-free documents. The automatic posting settings are saved in `/COCKPIT/C8`.

Posting documents after receipt

When a document is received by PROCESS DIRECTOR Accounts Payable, you can determine if it should be posted automatically (if free of errors), or if some other action needs to be executed.

Depending on your organization's requirements, you may want to attempt to post MM documents only, and have FI documents checked and sent to a workflow before posting.

1. Go to `/COCKPIT/C7`.

2. Add entries for the combination of Company Code and IC Document Type, for MM and FI documents, as required.

Example

Maintenance of posting logic during data transfer

Company code	IC doctype	Posting FI	Posting MM
		05 Check	05 Check
2000		05 Check	02 Post

Here, only incoming MM documents for Company code 2000 that contain no errors are posted automatically. For all other documents, the PROCESS DIRECTOR Accounts Payable additional checks are executed.

Note: The posting attempts in this table are only executed immediately after the transfer of documents. All subsequent automatic posting attempts are handled by the REPETITOR program, using the settings in /COCKPIT/C8.

Document reversals

Overview

The document reversal action in PROCESS DIRECTOR Accounts Payable allows accounts payable staff to cancel/reverse a posted SAP document directly from PROCESS DIRECTOR Accounts Payable. The configuration allows you to control the following options:

- Whether a pop-up window is displayed allowing users to specify reversal parameters (reason, date, and period)
- If no pop-up is displayed, the default reversal parameters to use
- For MM documents, if vendor items are cleared automatically or manually via `F-44`.

Procedure

1. Go to `/COCKPIT/C56`.
2. Enter a **Company code** and **PD DocType**, as required.
3. To have documents reversed immediately (in the background, without a pop-up):
   a. Enter the reversal **Reason**.

      If you do not enter a reversal reason, a pop-up will appear, irrespective of whether the **Pop-up** parameter has been set or not.

   b. Optional: Enter the **Posting date** and **Period** as well.

      If you do not enter values for these parameters, the default SAP reversal parameters are used for the reversal.
4. To have a pop-up window appear:
   a. Select the **Pop-up** checkbox.
   b. Optional: Enter a reversal **Reason**, **Posting date**, and/or **Period**. These are default values that appear in the pop-up window (and can be changed by the user).
5. For MM documents, to clear vendor items automatically, check the **Clear** checkbox.

Determining the vendor

Overview

There are two methods for determining the vendor on incoming documents:

- In INVOICES
    - The most common method.
    - SAP master data is imported to INVOICES.
    - Vendors are assigned to invoices.
    - Vendor numbers are transferred with invoices.
- In PROCESS DIRECTOR Accounts Payable
    - Vendor is determined based on the PO number, VAT number, and/or other values.

If vendors are determined in INVOICES, no additional configuration is required in PROCESS DIRECTOR Accounts Payable.

If vendors are not determined in INVOICES, you must specify how PROCESS DIRECTOR Accounts Payable will determine the vendors.

Procedure

There are two steps to determine the vendor for incoming documents:

1. General settings
2. Specify the search logic

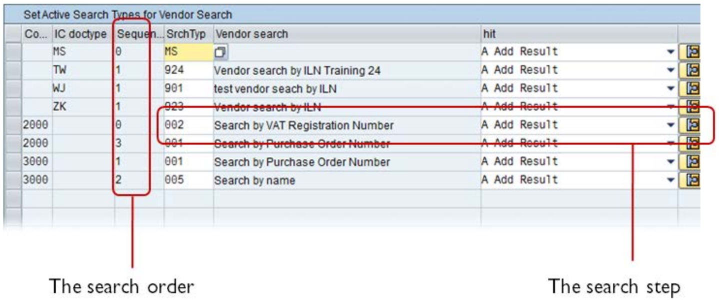
Note: The configuration described in these steps is ignored and is not necessary for vendors that are determined in INVOICES and transferred together with the rest of the document's data.

General settings

1. Go to `/COCKPIT/C41`.
2. Select if you want to exclude blocked and/or deleted vendors from the search.
3. Select **Do not post if vendor identified** if you want to prevent documents whose vendors are identified in PROCESS DIRECTOR Accounts Payable from being posted automatically upon receipt.
4. Select if the documents' message logs will contain the logs of the vendor search.

Specifying the search logic

Here you must create the search that is used to determine the vendor. You can search based on one or more field values. A comparison is made between the captured data and that in the vendor master data record.



For MM documents, a search for the PO number is usually sufficient to determine the vendor. For FI invoices, a more extensive search is required.

1. Go to /COCKPIT/C32.

2. Select the **Type for search** you want to perform.

3. Determine what to do with the search **Hit**.

4. To add further searches, specify the **Sequence**, or search order.

Example

In the illustration above, PROCESS DIRECTOR Accounts Payable determines the vendor for all documents belonging to Company Code 2000 based on the VAT registration number, followed by the purchase order number.

I need a User Exit to determine the vendor

The standard configuration in PROCESS DIRECTOR Accounts Payable is usually enough to determine the vendor. A User Exit can be developed to add additional search types, for example, to search based on International Location Number (ILN).

One-time vendors

Overview

Upon receipt of documents from one-time vendors (or CPD vendors), PROCESS DIRECTOR Accounts Payable assigns the vendors to the designated CPD account automatically, saving users from having to do it manually. Further, vendor information such as address and bank account details can be captured and transferred to the one-time vendor fields in SAP.

Transferring vendor data for one-time vendors

1. Open /COCKPIT/C34.
2. Enter the PROCESS DIRECTOR fields to map them to the SAP one-time vendor fields.

   Map only those fields from the invoice whose values you want to save to the SAP one-time vendor fields.

   Important: You must map the **Name 1**, **Postal Code** and **City** fields.
3. Save your changes.
4. Open /COCKPIT/C33.
5. Map the values of the **Name 1** field (that is, the name of the vendor on the invoice that has been captured for this field) to the SAP one-time vendor account number.

   Do this for each respective **Company Code**.
6. Optionally, select if invoices from this vendor can be posted automatically.

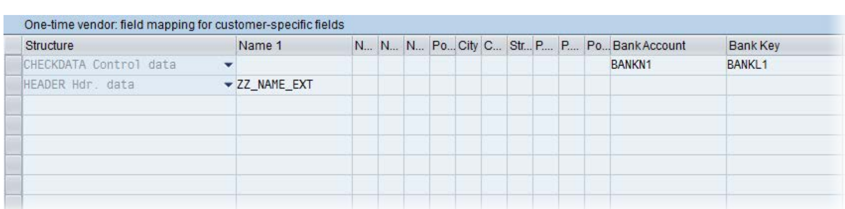
Example

Consider an invoice where the following fields (among others) have been captured for transfer to PROCESS DIRECTOR Accounts Payable:

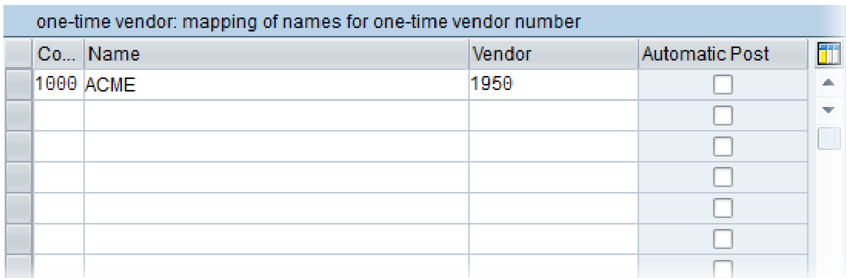
- Name 1: ACME
- Bank Key: 1234
- Bank Account: 5678

To automatically assign this vendor to the CPD L-Z (1950) one-time vendor account, and have the bank account details transferred to the PROCESS DIRECTOR Accounts Payable document, we need the following entries in /COCKPIT/C34 and /COCKPIT/C33:

1. In /COCKPIT/C34, we add two entries, one for the bank account details (which are CHECKDATA fields) and one for the vendor name (a HEADER field). In the example below, a custom PROCESS DIRECTOR Accounts Payable field is used (**ZZ_NAME_EXT**).



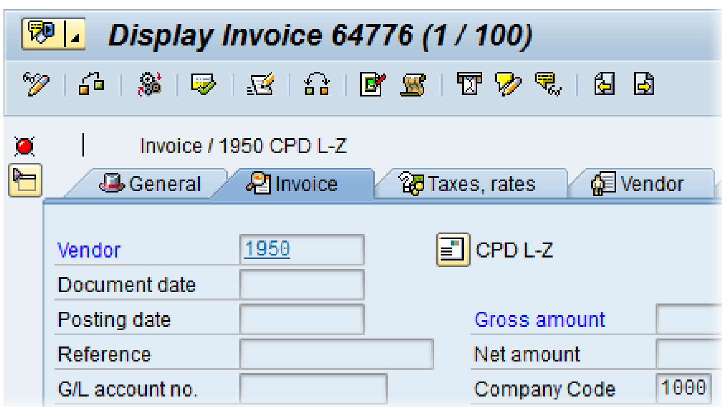
2. In `/COCKPIT/C33`, we add an entry for our vendor, **A***. The configuration below basically says: Assign documents from all suppliers whose names begin with A for Company Code 1000 to vendor account 1950.



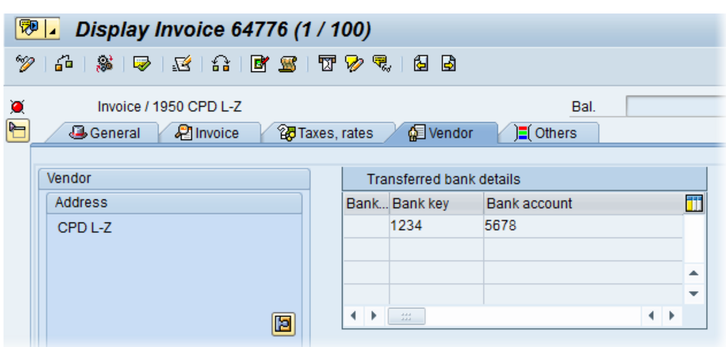
3. For this configuration to be applied, the incoming document contains ACME in the **ZZ_NAME_EXT** field, which we specified above.

Result

The vendor is assigned to account 1950...



...and the bank account details are transferred and saved in the PROCESS DIRECTOR document:

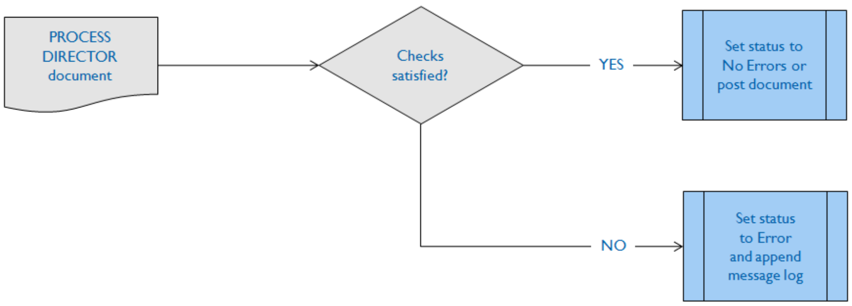


Using additional checks

Overview

PROCESS DIRECTOR Accounts Payable contains various checks that you can apply to documents to verify they are free from errors before posting. These checks are in addition to the existing checks in SAP.

You can use the PROCESS DIRECTOR Accounts Payable checks to block documents from posting, as well as to highlight errors in documents. You can apply checks at various times, for example, upon transfer, posting, on demand, and so on.



When posting documents, PROCESS DIRECTOR Accounts Payable performs the SAP checks plus any additional checks configured in the system.

Specifying additional checks

1. Go to `/COCKPIT/5`.
2. Enter the **Company Code** and **PROCESS DIRECTOR Document Type** (if any) to apply the configuration to.
3. Select the **Validation Type**, or check, you want to activate.
4. Specify the **Time** the check is executed.

   You may leave the **Time** field empty, which will force the check to be performed at every time a check can be executed (for example, upon transfer, when posted, when the **Check** button is pressed, and so on).
5. Select the **Message** type.

   To prevent a document from being posted if a check fails, select **X - Error message, no posting**.
6. Specify any additional **Details** (parameters) for the check.

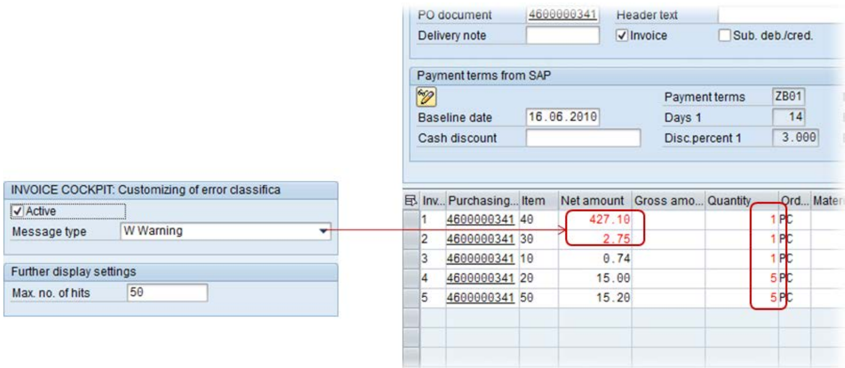
Highlighting fields with errors

You can highlight fields with warning messages, or error messages, or both. This helps users quickly identify those fields that need correction.

1. Go to `/COCKPIT/C28`.
2. Check the **Active** checkbox.
3. Select **Message type** to either **E - Error message** or **W - Warning**.

   Warning: highlights both fields with errors and warnings. **Error** highlight only fields with errors.

The different message classifications are set in the additional checks.



Here, fields with either an error or warning are highlighted in the document.

Field statuses

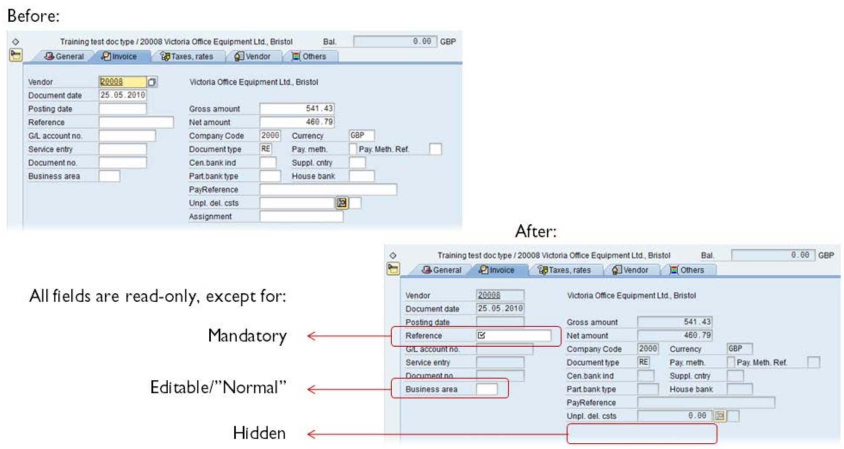
Overview

A field status is a way to:

- Hide fields
- Set fields to read-only
- Set mandatory fields

Field statuses can be applied to PROCESS DIRECTOR Accounts Payable and WORK CYCLE workflows. It is common to apply field statuses to workflows because field statuses allow you to restrict which fields can be displayed, changed, or for which a value must be entered before the workflow step can be completed.

Example



You can see the result of applying a field status to change the display characteristic of particular fields.

Creating field statuses

1. Go to /COCKPIT/C23.
2. Click the **Display/Change** button and click New entries.
3. Enter a name/ID in **Field status**.
4. Under **Field status identification**, specify if header fields, line-item fields, and/or account assignment fields should be made read-only.

   Checking **No account assignment line with MM invoices** hides the account assignment fields section for FI items in MM documents.
5. Double-click Characteristic value of status.
6. Specify the individual fields that will be hidden, read-only, mandatory, or normal.

   Note: Mandatory fields here prevent the document from being saved if the field has no value. It is not the same as the other kind of mandatory field in /COCKPIT/C3, which prevents the document from being posted if the field is empty.
7. Save the new field status.
8. Go to /COCKPIT/C24.
9. Specify the Company code and PROCESS DIRECTOR Document type to apply the Field status to.

Note: The field status is only activated for PROCESS DIRECTOR here, and not for WORK CYCLE. Field statuses are activated in the workflow step configuration.

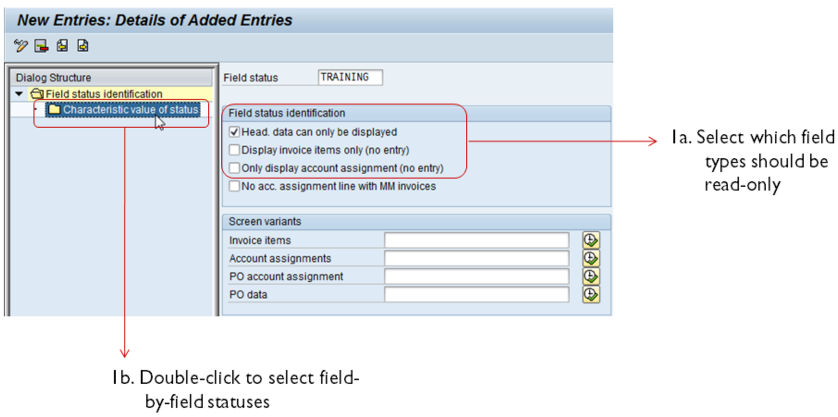
10. Save the change.

Example

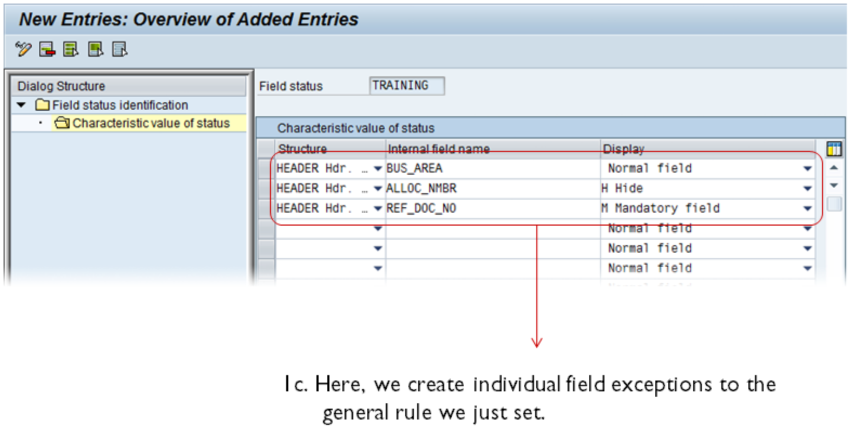
Objective: To make all header fields read-only, except for:

Header field	Display setting
Business area	Normal field (a field whose value can be changed)
Assignment	Hidden
Reference document	Mandatory

Step 1: Make all header fields read-only.



Step 2: Specify the three fields that will not be read-only.



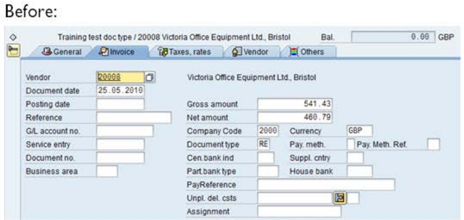
Step 3: Activate the field status.

Assigment of field status to company code a

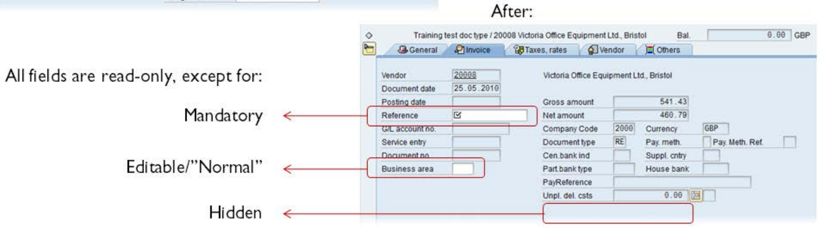
Co...	IC doctype	Field status
2000	FF	TRAINING

Result:

Before:



After:



Authorizations

Overview

You can use activate an authorization object for PROCESS DIRECTOR Accounts Payable. Doing so restricts access to those users who have the authorization object assigned to their user master record. If no authorization object is activated, all SAP users have access to all PROCESS DIRECTOR Accounts Payable transactions.

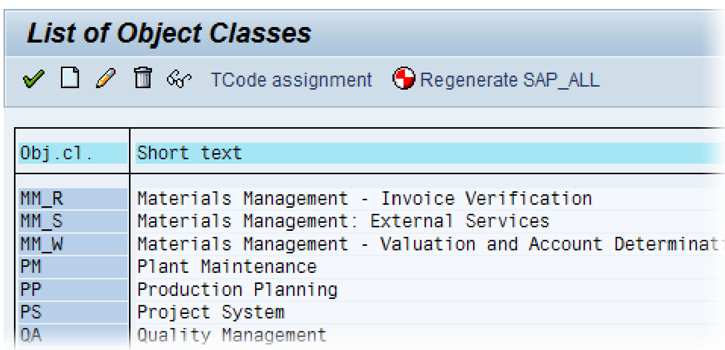
See: Creating an authorization object

If you want to restrict specific PROCESS DIRECTOR Accounts Payable actions within an authorization role, or to allow other functionality not covered in the activity list of the authorization object, you can use the User Exit 041 – Suppress buttons.

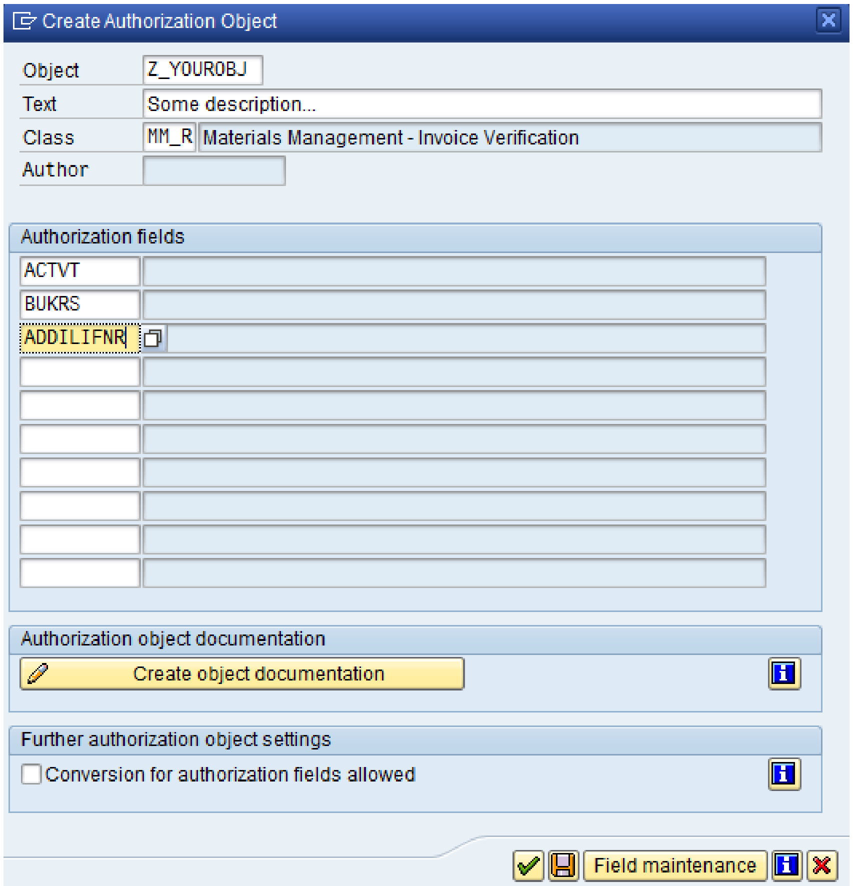
Creating and activating an authorization object

The authorization object is created in the client namespace (for example, Z_YOUROBJ) as shown in the following illustrations. It is your responsibility to choose an object name that will not conflict with any other established objects.

1. Go to `/SU21`.
2. Double-click the **MM_R** object class.

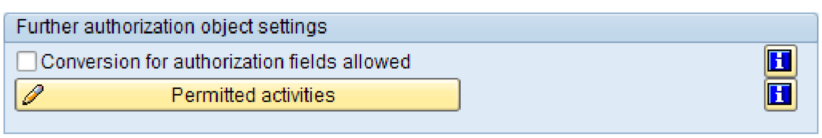


3. Create the **Create** button to create a new authorization object.
4. Enter an **Object** name and description **Text** for your authorization object.
5. Add ACTVT, BUKRS, and ADDILIFNR to the list of Authorization fields.

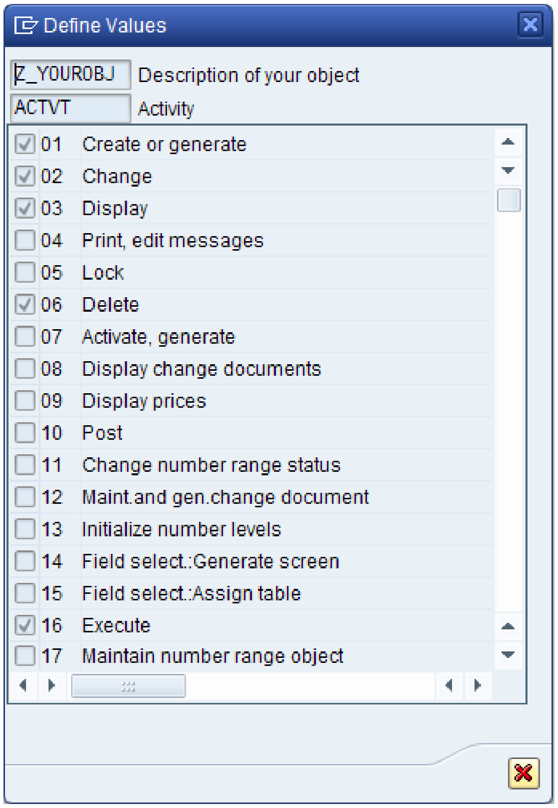


6. Save the object in the appropriate transport.

7. After saving, the **Permitted activities** button appears. Click it to edit the permitted activities.



8. Check the following activities: **01**, **02**, **03**, **06**, **16**, **24**, and **A3**.



9. Activate the authorization object in PROCESS DIRECTOR.

10. Now that you have created the authorization object you need register its use in PROCESS DIRECTOR. Go to `/COCKPIT/C14` and enter the object name.

Note: To finish the process you will need to assign authorization objects to the users of PROCESS DIRECTOR as appropriate.

Creating message templates

You can create templates that are used when sending messages to vendors, or others. Messages are usually emails, but you can also configure faxes and letters as well.

Creating templates

Create the templates that PROCESS DIRECTOR users can use when composing messages.

1. Go to `/COCKPIT/C35`.

2. Click the **Display/Change** button and click New entries.

3. Enter a **Message** ID.

4. Enter a Description.

5. Enter an ID for the text template. Click  to jump to `SE61` to create or edit the text.

   Note: The Document class in `SE61` must be set to General text.

6. Check **Default for reject** if the **Reject document** option in the message popup should be activated by default. Messages for which this option is activated are not available for documents that cannot be rejected (such as posted documents). In the **Field disp.** column you can set a field status for the **Reject document** option.

Note: Placeholder fields are supported. These are variables such as `&HEADER-PO_NUMBER` that are replaced with the values from the PROCESS DIRECTOR document when the e-mail is sent. If the message is sent for several documents, only placeholders that are the same for all documents are replaced. Placeholders with different values per document (for example, the Reference Number) are replaced with a space value. If a value is not available, the placeholder is replaced with a space value.

Languages for templates

If you translate templates into different languages, you should be aware that PROCESS DIRECTOR searches for message templates in the following order:

1. Vendor language from FK03
2. Logon language of the user
3. English (fall-back language 1)
4. German (fall-back language 2)

If templates are not available in the above languages, no message template will be displayed.

We recommend creating a translation in at least one of the fall-back languages for all templates.

Activating and archiving messages

Activate the message template for the chosen company code(s) and PROCESS DIRECTOR document type(s).

1. Go to `/COCKPIT/C42`.
2. Enter the **Company code** and PROCESS DIRECTOR **document type**, as required.
3. Enter the **Message** ID of the template you wish to make available for use and the **Archive type**.
4. Assign the archive **Document type** (optional) and file format (**Doc type**).

   You do not have to archive messages (that is, specifying a value for **Document type**). If you do not, messages are still sent or printed, just not archived. You can always archive these messages later using the `ARCHIV_CONNECT` program.

5. Optional: Specify a Smart Form ID for layout.

Follow-up flags

Overview

Follow-up flags help PROCESS DIRECTOR Accounts Payable users identify:

- Important documents and those that need attention
- Invoices that can be paid early in order to receive a discount
- Overdue invoices
- Price and quantity deviations

There are a number of built-in follow-up flags. In addition, you can create your own unique ones, using an icon and description of your choosing.

Creating follow-up flags

1. Go to `/COCKPIT/C50`.
2. Click the **Display/Change** button and click New entries.
3. Specify the Follow-up ID, Icon and Description.
4. Enter a **Sequence** number.

   If a document has more than one follow-up flag assigned to it, this number determines which flag is displayed in the document list.
5. Select if the flag is cleared (removed) automatically.

   Flags can be removed automatically after being posted, paid, or a workflow is completed. You must run the `PAYMENT_CONTROL` program to clear these flags if **Clear posted**, **Clear paid** or **Clear WC** are activated. That is, activating these settings alone does not remove the flag after the respective condition has been met.
6. Save the follow-up flag.

After creating a follow-up flag, you must activate it.

Activating follow-up flags

After creating custom follow-up flags, you must activate them. You must also activate the built-in follow-up flags. Activating follow-up flags makes them available for use.

Enabling follow-up flags feature

You first enable the follow-up flags feature:

1. Go to `/COCKPIT/C49`.
2. Check Activate flags.

Important: If this setting is not checked, follow-up flags cannot be used in PROCESS DIRECTOR!

Activating follow-up flags

You must create an entry for each follow-up flag, in order to use it. This includes the built-in follow-up flags.

1. Go to `/COCKPIT/C48`.
2. Enter the **Follow-up flag** ID.
3. Enter a **Company code** and/or PROCESS DIRECTOR **Document type**, if you wish to restrict the use of the flag.

   Otherwise, leave these two fields blank.

Important: If a flag is set to a specific company code and PROCESS DIRECTOR document type, then documents with this combination can only have the follow-up flags that match this company code/document type—no other follow up flags are available (including the generic ones, for which no company code and document type has been set).

Note: The price and quantity deviation flags are available only if the **Activate checks** option is checked in `/COCKPIT/C49`.

Built-in follow-up flags

PROCESS DIRECTOR Accounts Payable comes with the following built-in follow-up flags:

ID	Icon	Description
AT		A new attachment has been created in PROCESS DIRECTOR Accounts Payable.
BA		A new attachment has been created by a vendor in WEB BOARD.
BN		A new note has been created in WEB BOARD.

ID	Icon	Description
CA		A new attachment has been created in WORK CYCLE. **Note:** This flag is only set when attachments are added using the Web Application. It is not set when using `/COCKPIT/WC`.
CN		A new note has been created in WORK CYCLE. **Note:** This flag is set irrespective of whether the note is created in the Web Application or `/COCKPIT/WC`.
D1		Indicates there are less than *x* days to the first due date (Due Days 1).
D2		Indicates there are less than *x* days to the second due date (Due Days 2).
DD		Indicates there are less than *x* days to the net due date.
DO		Payment is overdue.
IA*		A price/quantity/goods receipt check has failed.
IG*		A goods receipt is missing.
IP*		There is a price difference.
IQ*		There is a quantity difference.
MS		A message was sent.
PT		Fast payment trigger. The vendor has changed the payment terms for the invoice in WEB BOARD.

ID	Icon	Description
SA		A new attachment has been created in ReadSoft Supplier Portal.
SN		A new note has been created in ReadSoft Supplier Portal.

* These follow-up flags are displayed only if the **Activate checks** option has been selected.

The configuration for these flags is done in `/COCKPIT/C43`.

Using the payment follow-up flags

There are three follow-up flags that you can use to automatically flag documents whose due dates for payment are approaching:

ID	Icon	Description
D1		Indicates there are less than *x* days to the first due date (Due Days 1).
D2		Indicates there are less than *x* days to the second due date (Due Days 2).
DD		Indicates there are less than *x* days to the net due date.

The *x* days is the **Quick payment flag (days)** parameter in the `/COCKPIT/PAYMENT_CONTROL` program. The parameter determines when the flag is displayed: *x* days before the respective due date.

Example

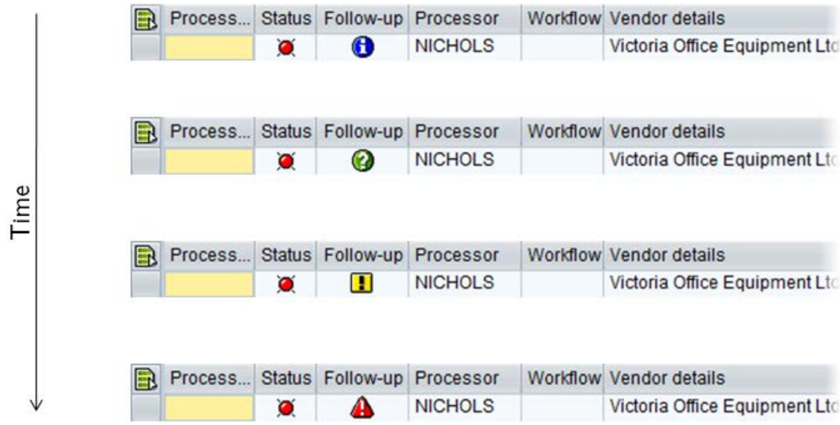
Baseline date: 2010-06-01

Quick payment flag: 7 days

Flag	Due date	Flag appears*
	Due date 1: 2010-06-14	2010-06-07
	Due date 2: 2010-06-30	2010-06-23
	Net due date: 2010-07-15	2010-07-08

Flag	Due date	Flag appears*
	Overdue: 2010-07-16	2010-07-17

* The flag remains until the next payment flag is activated.



So long as the invoice remains unpaid, the payment follow-up flag changes accordingly, until the payment overdue flag is displayed.

Invoice reduction

Overview

Process overview

Invoice reduction in PROCESS DIRECTOR Accounts Payable assists with the handling of price and quantity deviations for MM invoices (posted or unposted documents) and comes with the following features:

- Follow-up flags at header and line item level to easily identify price and quantity deviations, as well as missing goods receipts.
- During a workflow, it is possible to enter the amounts/quantities by which the invoice should be reduced due to the deviations. Processors must specify a reason for the reduction.
- Automatic creation of a PROCESS DIRECTOR debit advice document, based on the adjusted invoice information.
- Creation of a PDF attachment with debit advice data when the debit advice document is posted. The PDF can be archived, sent to the supplier by email or printed.

See the *WORK CYCLE 7.2 User Guide* for detailed information on this process.

Configuration overview

Configuring invoice reduction requires the following steps:

1. Activating invoice reduction
2. Activating checks and follow-up flags for price and quantity deviations
3. Defining document settings for the creation of the debit advice document and the PDF attachment
4. Defining reasons for invoice reduction
5. Activating available workflow steps for invoice reduction

Note: Follow-up flags for price and quantity deviations can be used independently of invoice reduction. If you want to display price and deviation follow-up flags, but not allow invoice reduction, you only need to carry out step 2.

Activating invoice reduction

Invoice reduction is only available if it is activated.

1. Go to `/COCKPIT/C60`.
2. In change mode, check the **InvRed. active** checkbox. If you are activating this option for the first time, you need to click **New Entries** first.
3. Save.

Activating checks and follow-up flags

Price and quantity deviations are only recognized if the appropriate additional checks have been activated in `/COCKPIT/C5`, as well as the **Activate checks** option in `/COCKPIT/C49`. You must also activate the option **Customizing of error classification** in `/COCKPIT/C28`.

- 0001 - Deviation between invoice and order price
- 0003 - Invoice quantity is more than the delivered but not yet invoiced amount
- 0011 - Amount calculated is more than the amount ordered
- 0019 - Goods receipt missing (only for icon and debit advice)

Note: These checks only take into account price and quantity deviations that are in excess of the expected amount, not deviations that are less than the expected amount.

Follow-up flags are set based on the results of these checks. Display of follow-up flags is optional, and can be activated and deactivated in `/COCKPIT/C49`. The standard follow-up flag icons can be customized in `/COCKPIT/C59`.

1. Go to `/COCKPIT/C49`.
2. In change mode, check the **Activate flags** (optional) and the **Activate checks** (mandatory) checkboxes.
3. Save.

Defining document settings

When a workflow step that has been activated for invoice reduction is approved, and the processor has reduced the amount or quantity, a corresponding new debit advice document is created in PROCESS DIRECTOR. When this debit advice document is posted, a PDF attachment is created and attached to the debit advice document. You must configure the settings for these documents.

1. Go to `/COCKPIT/C61`.
2. Click the **Display/Change** button and click New entries.
3. Enter the settings.
4. Save.

Defining reduction reasons

You must create reduction reasons that workflow processors can select when they reduce the amount or quantity of an invoice.

1. Go to `/COCKPIT/C62`.
2. Click the **Display/Change** button and click New entries.
3. Enter a text and a number in the **Order** column to specify where in the selection list the reason will appear (lower numbers at the top of the list).
4. Save.

Activating workflow steps

Workflow steps are defined in the usual way in `/COCKPIT/WI3`, but must be activated for invoice reduction. Price and quantity deviations can be handled in separate workflow steps or together in the same step. There are prerequisites for workflow steps for invoice reduction.

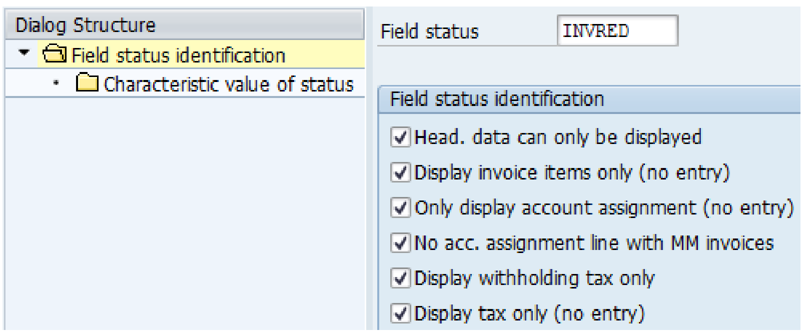
1. Go to `/COCKPIT/C63`.
2. Click the **Display/Change** button and click New entries.
3. Select a workflow.
4. Select the type of reduction: price or quantity, or blank to enable a reduction of both price and quantity.

5. Save.

Workflow steps prerequisites

These workflow step settings are required in order for invoice reduction to work correctly.

- The workflow type must be set to **2 Correction**.
- A field status must be applied to the workflow step. The field status must set all fields to read-only.



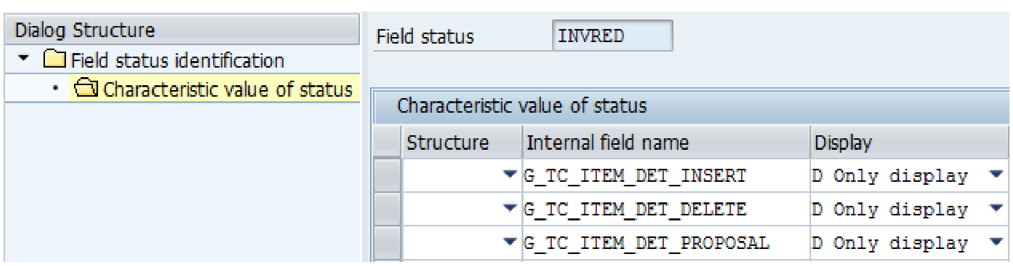
- The field status must deactivate these buttons on the line items toolbar.

 Insert row

 Delete row

 Propose PO item

To deactivate these buttons, in the field status configuration screen, click **Characteristic value of status** and set these fields to **D Only display** or **H Hide**. Leave the **Structure** field empty.



Note: These fields are not available in the search help, they must be entered manually.

Nota fiscal

Nota fiscal (NF-e) is particular kind of document that exists in Brazil. It is the legal invoice that is approved by the Brazilian government and is sent directly to the buyer. The nota fiscal includes all tax-related information that is required for financial reporting to the tax authorities. A physical representation of the nota fiscal with embedded bar codes must accompany the shipment. This PDF is called a DANF-e; it can be scanned by government officials to ensure that the shipment matches the approved NF-e.

Notas fiscais can be processed in PROCESS DIRECTOR Accounts Payable like other invoices. When posting, a nota fiscal document is created inside SAP. Nota fiscal works for only those documents that have a Brazilian company code.

PROCESS DIRECTOR 7.2 provides only very limited support for the Nota fiscal process, so ReadSoft strongly recommends using PROCESS DIRECTOR 7.3 instead to process Notas fiscais. Please see the *PROCESS DIRECTOR 7.3 Accounts Payable Configuration Guide* and *PROCESS DIRECTOR 7.3 Accounts Payable User Guide* for more information. Documentation for the limited Nota fiscal solution in PROCESS DIRECTOR 7.2 is only available on request.

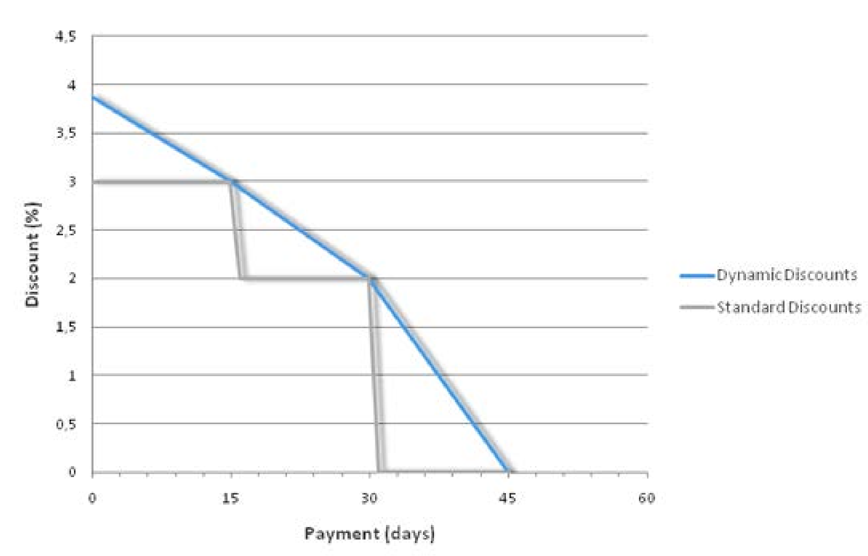
- System requirements
- Enabling
- User Exits
- Creating custom functions
- Using field statuses

Other features

Dynamic discounting

Overview

Dynamic discounting gives you the ability to maximize the amount of discounts from your suppliers. Rather than discounts being fixed at pre-determined points of time, a sliding scale is applied whereby discounts are available right up until the net due date.



For example, if you paid an invoice with the above standard payment terms after 20 days, you would receive a discount of 2%. But with dynamic discounting, you would receive 2.625%.

Configuration

There are four steps to enable and configure dynamic discounting.

1. Defining budgets

   You must define a budget for the total amount of dynamic discounts to be allocated.

2. Activating budgets

   Your budget(s) is activated and can be applied to specific vendors and company codes.

3. Specifying the dynamic discount method

   In addition to the continuous gradient displayed above, there are slight variations that you can select that determine the maximum discount available.

4. Setting the payment method

   Specifying the payment method, which is written into the FI document, allows any payment conditions to be ignored and guarantees payment on the selected date.

Note: You must activate three User Exits to enable dynamic discounting.

In addition, the following options and reporting functions are available:

- Viewing current budget allocations
- Adding text to the FI document

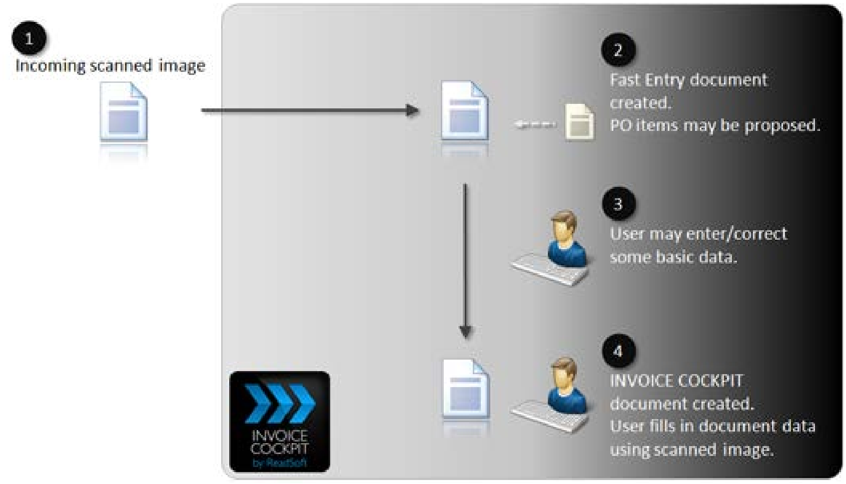
- Activating and viewing reporting statistics.

Fast entry

Overview

Fast entry is a feature that allows document images to be transferred to PROCESS DIRECTOR without (or with very little) document data. As with every other document that is imported, PROCESS DIRECTOR documents are created. However, for Fast Entry documents, where only the image is transferred, the document data is keyed in by the user in PROCESS DIRECTOR, using the document's scanned image.

Note: You can also directly create a new Fast Entry document.



Configuring Fast Entry

Overview

In order to use Fast Entry, you must configure the following:

- Basic settings
- Here you activate Fast Entry. For documents with a PO number in the header, you also specify whether line items are proposed and if other information is added to the document from the purchase order.
- Defining fields for data entry

  In addition to some default fields that appear in imported documents, you can specify others.
- Activating an authorization object

  You can specify an authorization object to restrict which users can open and edit Fast Entry documents.

Defining fields for data entry

When a document is transferred to PROCESS DIRECTOR (that is, before the PROCESS DIRECTOR document is created), it appears with the following fields by default:

Internal name	Description
VENDOR_NO	The vendor number.
DOC_DATE	The date printed on the document.
REF_DOC_NO	The reference number of the document.
CURRENCY	The currency of the total amount.
GROSS_AMOUNT	The total gross amount.
NET_AMOUNT	The total net amount.
PO_NUMBER	The purchase order number. **Note**: Purchase order numbers are only supported in the document header, not in line items.

Important: These are the default display fields, not the fields that are supported for import.

You can specify additional display fields. This means that values for these fields can be entered manually by PROCESS DIRECTOR users after transfer, but before the document's conversion to a PROCESS DIRECTOR document (when all fields can be edited).

To define extra fields for data entry:

1. Create a pool of fields that can be used.

   Go to `/COCKPIT/C53`. Add the field and specify its location when the document is displayed.

   Note: Do not add the default fields (above). These fields are supported automatically.

2. Specify the company code(s) to apply fields to different documents (optional).

Go to `/COCKPIT/C55`. Add the fields listed in `/COCKPIT/C53` and specify the Company Code(s) they are restricted to.

Note: If the table is left blank, all fields listed in `/COCKPIT/C53` are displayed for all documents.

Note: All default fields are displayed are automatically displayed for all documents.

Creating a test document

You use the RFC_DATA_SUBMIT PROCESS DIRECTOR Accounts Payable function to create test documents. The `ORIGIN` field in the PROCESS DIRECTOR Accounts Payable document must be **8** to indicate that it is a Fast Entry document. INVOICE_IND must be **X** to indicate an invoice in order to use line item proposals.

Note: After a Fast Entry document has been transferred Accounts Payable, the `ORIGIN` value changes to **F** (to enable reporting on Fast Entry documents with PERFORMANCE ANALYTICS).

Licensing

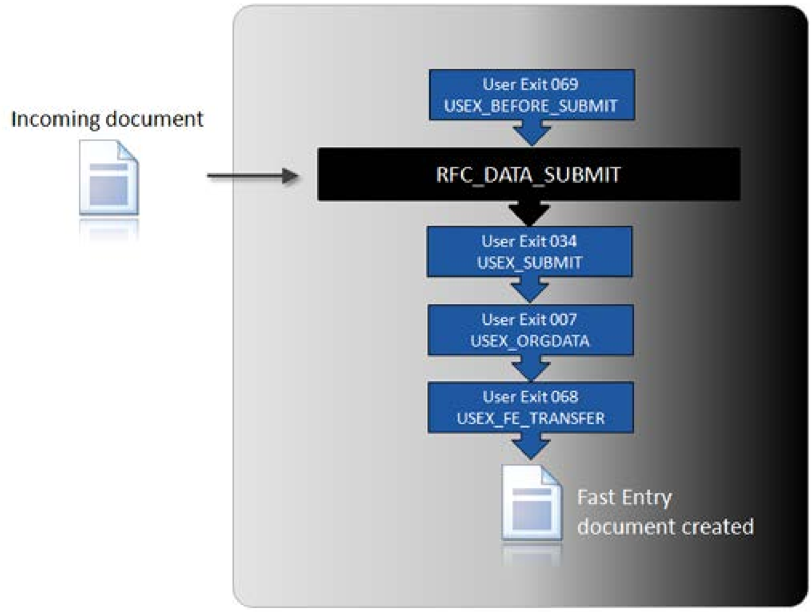
No additional license is required to import Fast Entry documents. When a Fast Entry document is converted to a PROCESS DIRECTOR Accounts Payable document, the regular PROCESS DIRECTOR Accounts Payable license counter is incremented.

Importing documents

Overview

- Import procedure
- Supported import fields

Import procedure

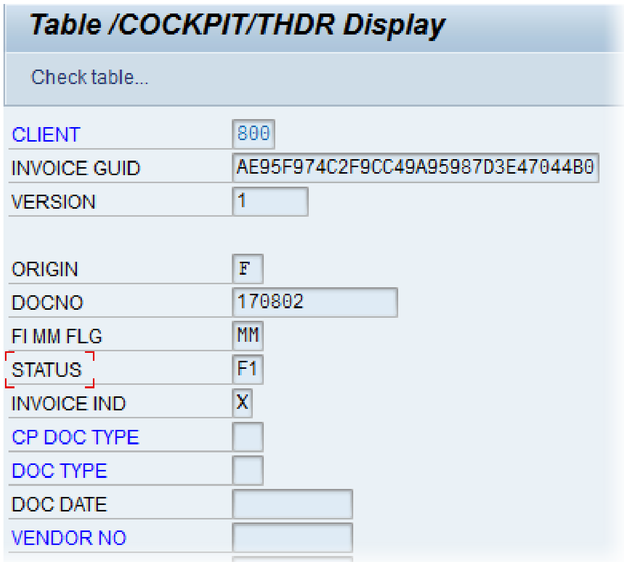


1. Data can be manipulated before the import using User Exit 069 - Adjustment of Fast Entry data before transfer.
2. Document is imported using the standard RFC_DATA_SUBMIT.
3. User Exit 034 - Directly after the transfer of the data is called.
4. User Exit 007 - Adjustment of the original data when transferring is called.
5. User Exit 068 - Adjustment of checked data during transfer of Fast Entry docs is called.

Note: No other User Exits, which are called after RFC_DATA_SUBMIT for normal documents, are called for Fast Entry documents.

Tables

After a document has been imported, the header data is saved in the normal `/COCKPIT/THDR` table. The document has the **F1** status.



Supported import fields

Supported fields

You can transfer a limited amount of document data with the image. Only the following HEADER and CHECKDATA fields are supported:

Internal name	Type	Description
ORIGIN	HEADER	The origin of the document. An **8** indicates it is a fast Entry document.
INVOICE_IND	HEADER	The indicator to mark whether the document is an invoice (X) or credit note (blank).
CP_DOC_TYPE	HEADER	The PROCESS DIRECTOR document type.
COMP_CODE	HEADER	The Company Code.
VENDOR_NO	HEADER	The vendor number.
USERNAME	HEADER	The SAP username.

Internal name	Type	Description
EXT_DOC_NO	HEADER	An external document number.
YY*	HEADER	HEADER Include using CI_COCKPIT_HDR.
ZZ*	HEADER	HEADER Include using CI_COCKPIT_HDR.
SRCGUID	CHECKDATA	External ID of the PROCESS DIRECTOR document.
YY*	CHECKDATA	CHECKDATA Include using CI_COCKPIT_CHECK.
ZZ*	CHECKDATA	CHECKDATA Include using CI_COCKPIT_CHECK.

* All custom fields must start with YY or ZZ, as specified by SAP's naming convention.

Important: Line item, accounting data and tax data cannot be transferred.

Programs and functions

Overview

PROCESS DIRECTOR Accounts Payable comes with a series of programs and functions that you can use. The most important are:

Important programs and functions

Name*	Description
PAYMENT_CONTROL	Updates payments blocks, due dates (including flags), and cash discounts.
DUE_DATE_CHECK	Sends emails for overdue workflows.

Name*	Description
REPETITOR	Automatic posting of PROCESS DIRECTOR Accounts Payable documents

* All programs and functions are contained within the `/COCKPIT/` namespace.

Other programs and functions

Name	Description
2REPORTER54	Data export for ReadSoft REPORTER.
ACCASS_POSNO_REPAIR	Corrects missing item numbers in multi-account assignment lines.
ARCHIV_CONNECT	Create archive connections asynchronously.
ARCHIV_NOTE_LATE	Late archiving of notes.
ARCHIV_NOTE_REPAIR	The program only sets the archiving indicator without archiving in case of posted documents.
ARCHIVELINK_CHECK	Connect attachments not yet connected to ArchiveLink.
ARCHIV_WCLOG_REPAIR	Archives workflow notes that have not yet been archived.
CUSTOMIZING_REPORT	Exports values from selected configuration tables.
DUMP_CREATE	Creates dumps of documents.
IMPORT	Imports P-Card files.
MD_EXPORT	Exports master data for import into ReadSoft INVOICES

Name	Description
NUMMERIC_USER_REPAIR	Repair program for numeric agent identification.
RESCAN	Used by INVOICE COCKPIT CONNECTOR to attach scanned documents to an existing PROCESS DIRECTOR Accounts Payable document.
RFC_DATA_SUBMIT	Used by INVOICE COCKPIT CONNECTOR to transfer documents to PROCESS DIRECTOR Accounts Payable. Can be run to create test documents.

Descriptions

2REPORTER54

2REPORTER54 exports 10 CSV files for use with ReadSoft REPORTER.

The data Includes:

- Most header and line item data, including payment date and discount data
- Workflow data

For full information about how to use this program, see the ReadSoft guide *Exporting Data for REPORTER*.

ACCASS_POSNO_REPAIR

Corrects missing item number in multiple allocations to account and recreates the field POS_NO of the table /COCKPIT/TACCAS, if it contains a zero.

ARCHIV_CONNECT

Create archive connections asynchronously.

This report serves for the archiving of document via PROCESS DIRECTOR Accounts Payable and the barcode connection.

Usually, documents and their attachments are archived as soon as they are created/uploaded. If this is not the case, this program can be used to subsequently archive these items.

ARCHIV_NOTE_LATE

Archives notes that have not been archived normally.

The program archives, internal notes and all other notes that have not yet been archived with workflow. All notes relevant to the workflow are already automatically archived when terminating the workflow. Notes that have been entered after the termination of the workflow and internal notes (are not displayed in the workflow) can be archived with this program.

ARCHIV_NOTE_REPAIR

The program only sets the archiving indicator, without archiving in the case of posted documents.

ARCHIV_REPAIR

Note: This program is no longer maintained. It's functionality is included in the `ARCHIVELINK_CHECK` program, which you should use.

Supplement of missing ArchiveLink connections.

The program supplements existing archive connections to posted PROCESS DIRECTOR Accounts Payable documents into the belonging SAP Business Object.

A PROCESS DIRECTOR Accounts Payable document has been posted. At the same time, a Business Object BUS2081 (SAP MM document) and BKPF (SAP FI document) were created in SAP. If there were subsequent attachments only to the PROCESS DIRECTOR Accounts Payable document, they would be lacking in the SAP Business Object; that is, in the SAP documents. This is repaired by the program.

ARCHIVELINK_CHECK

This program checks the ArchiveLink connections between PROCESS DIRECTOR documents and all its associated files and attachments (for example, the invoice image, notes, and supporting attachments).

Attachments added to unposted PROCESS DIRECTOR documents are automatically linked to the corresponding SAP document during posting. However, attachments added to posted documents are not. To establish this connection, run `ARCHIVELINK_CHECK`. You can also run this program to display connections that are broken, without actually undertaking a repair.

Setting	Description
Carry out correction process	Connects attachments to SAP documents that are not yet connected. If unselected, the program performs a check only and displays the results, without performing any correction.
Correct archive documents on	The archive document type(s) to connect missing attachments to. You can restrict the repair to a specific document type, for example, ZEIC_PDF.
Write PD messages	For each new, deleted, and faulty archive connection, a message is added to the document's message logs, which can be viewed by users.

Setting	Description
Commit work to	Repairs of connections are made in batches. Here you specify the number of documents in each batch. For example, enter 100 to have changes made to the database after every 100th document has been checked, for documents 1-100, 101-200, etc.
Create connections from EC* fields	Checks and repairs connections to the /COCKPIT/B business object.
Track existing connections	Checks and repairs connections to all other business objects. This is applicable for posted documents, when documents, which are already connected to /COCKPIT/B prior to posting, are connected to BKPF and BUS2081 (as appropriate), and other associated documents (like WORK CYCLE documents) are also archived. **Note**: A connection to /COCKPIT/B must already exist. If the connection to /COCKPIT/B is missing, you must run ARCHIVELINK_CHECK twice: the first to connect documents to /COCKPIT/B, the second run to connect documents to the other business objects.
Track SAP receipts	Determines the follow-on business objects from the SAP document and associated documents. This option must be activated for PROCESS DIRECTOR documents with no archive connections.
Delete faulty connections	Repairs incorrect archive connections. **Note:** Only applicable for versions of INVOICE COCKPIT prior to 2.04.0075!
Correct faulty connections	Sometimes `ARCHIV_REPAIR` can create incorrect connections if an SAP document (with the same Document ID in archive) is connected to several PROCESS DIRECTOR documents. If this setting is enabled, the program deleted all attachments on SAP follow-up documents (BKPF, BUS2081), which have same archive object as in THDR-EC_ARC_OBJ, but which are not the main attachment (DOC_ID <> THDR-EC_DBC_ID).

Setting	Description
Selection criteria	Various fields to restrict the documents the programs checks.
Edition	The following parameters determine what information to display in the log that is shown after the program has finished.
Show selection screen	All selection criteria used to run the program.
Show detailed information	The company code, and the archive information for the object. If unselected, only the PROCESS DIRECTOR document number and its GUID are displayed.
Show statistics per document	The number of existing connections and if these connections are complete or faulty.
Show total statistics	The total number of existing and missing connections, the number of connections that are complete and faulty, as well as the number of documents processed by the report.
Show warning	Warnings for archive connections.
Show existing connection	Existing items currently archived for the document.
Show missing connection	Items not currently archived for the document.
Show inserted connection	Items for which a link was created by the `ARCHIVELINK_CHECK` program.
Show faulty connection	Items with incorrect archive connections.
Show deleted connection	Items for which the link to was deleted by the `ARCHIVELINK_CHECK` program.

Setting	Description
Show errors in reconnection process	Information about reconnection errors.
Show complete documents	Documents where all attachments are linked to the archive.
Show uncheckable documents	Documents that could, for some reason, not be checked for incomplete connections
Show faulty documents	Documents with an attachment(s) not connected to the archive.

ARCHIV_WCLOG_REPAIR

Archives workflow notes that have not yet been archived. Sometimes, the archiving of WORK CYCLE notes can fail. You can use this program to archive all WORK CYCLE notes that have not yet been archived.

CUSTOMIZING_REPORT

CUSTOMIZING_REPORT exports values from selected configuration tables. This can be helpful when submitting a support case.

Setting	Description
Client number	The client for which configuration data is exported.
Display technical information	Includes field names in the export.
Zebra	Displays lines in different colors, for better readability.
Copy icons	Icons used in the application(s) are saved.
Table selection	The application for which configuration data is exported. • PROCESS DIRECTOR

Setting	Description
	• WORK CYCLE • WEB BOARD • EDI COCKPIT • ANALYZER • INFO MAIL • MOBILE APPROVAL

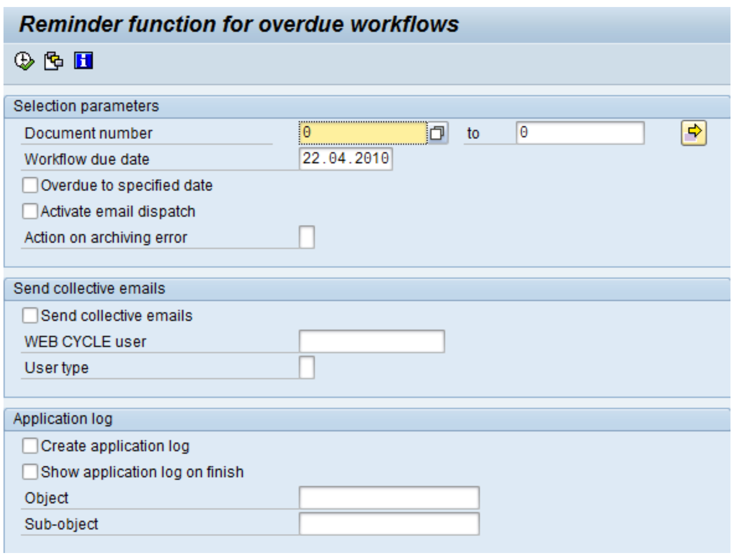
DOC_IMPORT

This program contains the same functionality as **Document** > **Import SAP document** menu item in PROCESS DIRECTOR Accounts Payable. That is, an SAP document can be imported to create a new, posted PROCESS DIRECTOR Accounts Payable document. In addition, this program can also be used to update an existing PROCESS DIRECTOR Accounts Payable document from an SAP document (which is not possible by using the menu).

Note: The program can only import/update one document at a time (no bulk imports or updates).

DUE_DATE_CHECK

You can use the `DUE_DATE_CHECK` program to send reminder emails for overdue workflows. Use the standard `/SE38` SAP transaction to run the program once, or `/SM36` to schedule it as a background job.



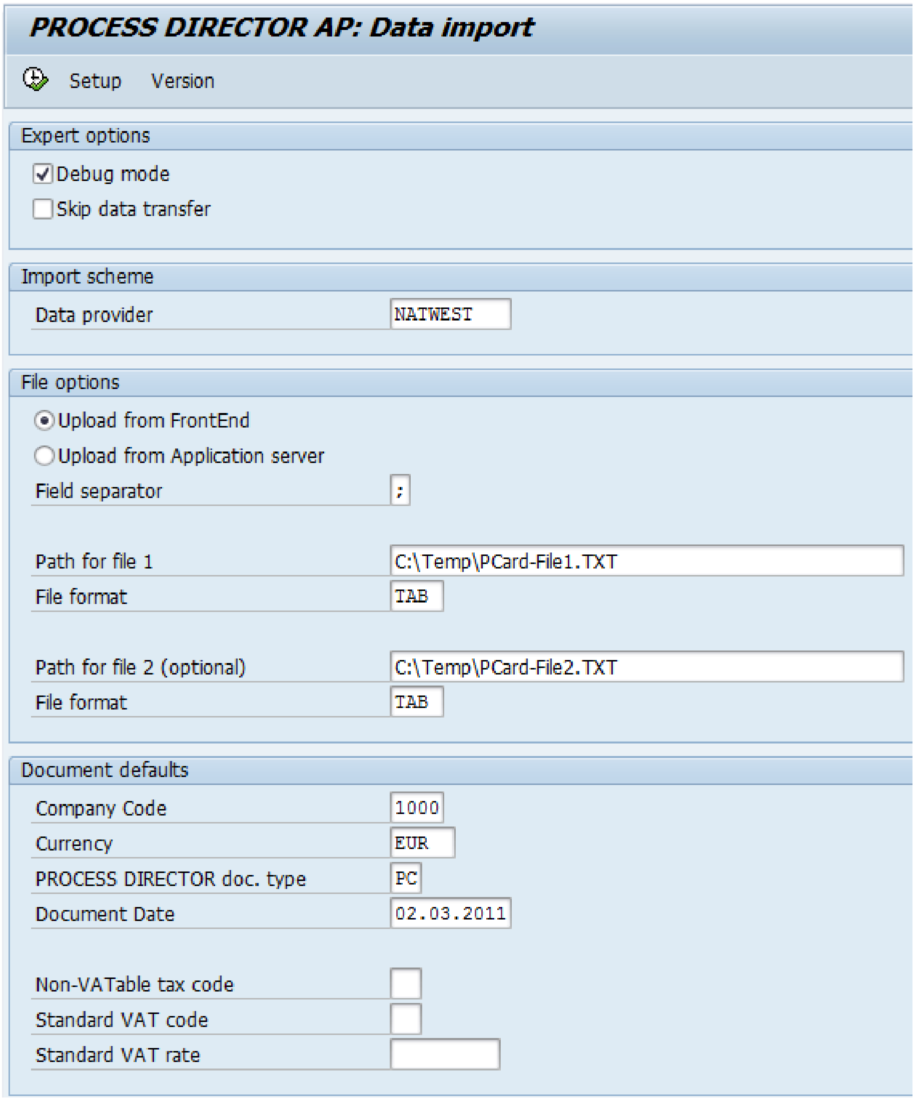
Setting	Description
Document number	The range of PROCESS DIRECTOR Accounts Payable documents to be processed.
Workflow due date	Specify if the program should only run for workflows whose due date is past this date.
Overdue to specified date	Select if you have specified a due date above.
Activate email dispatch	Select to send reminder emails.
Send collective emails	You can set collective versus individual email sending in the customizing of the workflow step. The program, when executed, will check for processors who have received a workflow step and are now due new collective email.
WORK CYCLE user	The user specified here is used as the sender of collective emails.
User type	I – WORK CYCLE user S – SAP user G – User group
Create application log	Creates messages in the SAP application log. **Note:** In order to create an application log (which is based on standard SAP functionality), you must specify an Object and Sub-object (see below). The Object and Sub-object classify the log, so it is best to use custom (Z*) ones.
Show application log on finish	Displays the SAP application log after the program has been executed.
Object & Sub-object	The object and sub-object included in the messages in the SAP application log, used for classification purposes.

DUMP_CREATE

Creates dumps of documents.

IMPORT

`/COCKPIT/IMPORT`



Configuration settings in the /COCKPIT/IMPORT program, with Expert options activated.

Use this program to import your P-Card files. You can also specify pre-defined values for selected fields.

Setting	Description
Debug mode	Creates a detailed log when the program is executed.
Skip data transfer	The program is executed but no PROCESS DIRECTOR documents are created. You can use this setting to test the import of files.
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`.
Upload from FrontEnd	Uploads the data from the SAP GUI FrontEnd.
Upload from Application server	Supports the upload of data from the Application server, in the background. **Note**: Only logical file names from the `FILE` transaction are supported. The XLS and XLSX formats are not supported.
Field separator	The character that separates fields in the import file(s). No entry here indicates a tab separation.
Path for File 1	The path on the local machine to the first import file.
File format	The file extension of the first import file: • ASC • CSV • TAB • TXT • XLS • XML
Path for File 2	*Optional—only if a second file has been sent by the data provider.* The path on the local machine to the second import file.

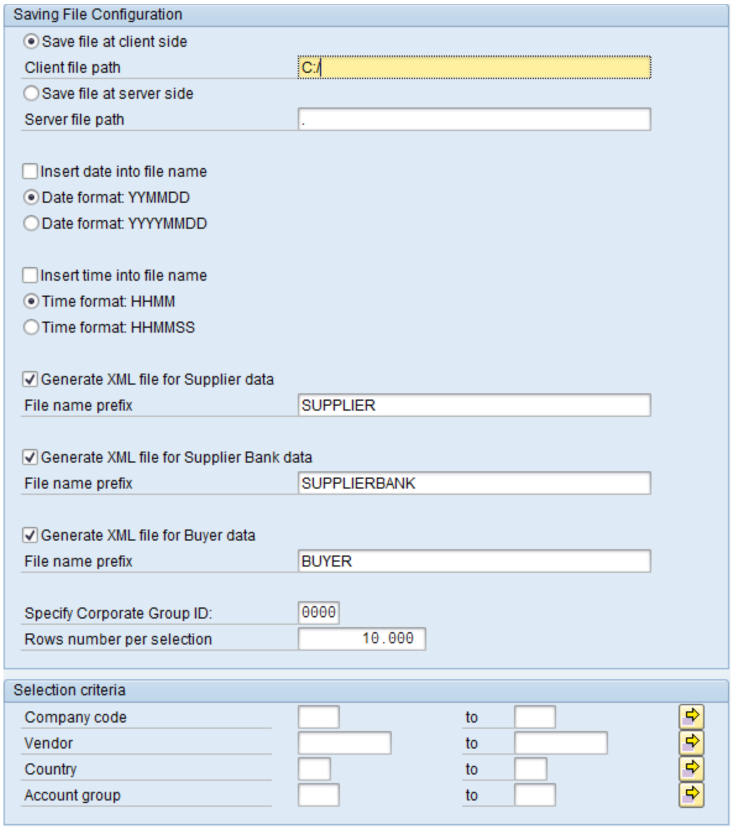
Setting	Description
File format	*Optional—only if a second file has been sent by the data provider.* The file extension of the second import file: • ASC • CSV • TAB • TXT • XLS • XML
Document defaults	Values for the following fields can be added to the resulting PROCESS DIRECTOR documents: • Currency • PROCESS DIRECTOR document type • Document date • Non-VAT table tax code • Standard VAT code • Standard VAT rate **Note:** Any values here override those in `/COCKPIT/IMPORT_C2` and in the P-Card files.

MD_EXPORT

The MD_EXPORT program exports master data from your SAP system, as XML files. The output is intended for subsequent import into ReadSoft INVOICES. Three files are created:

- `Buyer.xml`
- `Supplier.xml`
- `SupplierBank.xml`

The files conform to the INVOICES XSDs. You can import the data in these files to INVOICES without modifications. To import master data in INVOICES, create a maintenance plan. For instructions, see the *Importing master data* topic in *INVOICES Help*.



You can specify the following options for the XML export files:

Setting	Description
Save file at client/server side	Select where to save the files and in which directory.
Insert date/time into file name	Includes the date and time respectively in the filenames. Example filename without the date and time: `Buyer.xml` Example filename with the data and time: Buyer<Date><Time>.xml
Generate XML file for Supplier/Supplier Bank/Buyer data	Select which files to create. **Note:** Master data in INVOICES is comprised of these three data types.

Setting	Description
File name prefix	You can change the filenames from the defaults provided. The filename has no effect on your ability to import them into INVOICES.
Specify Corporate Group ID	The Corporate Group ID is a field for suppliers and vendors in INVOICES, and not in SAP. It is the internal identification number of a group of buyers (for example subsidiaries). This key field in the INVOICES supplier registry connects suppliers to the buyers that they deliver to. A number entered here is included in all buyer and supplier entries in all three files.
Rows number per selection	Specifies the number of vendor records (rows in the database table) are taken into memory and exported at each processing run. For example, if you have 1000 entries, and set **Rows number per selection** to 100, 100 records will be exported at a time. The resulting exported file will be the same. **Rows number per selection** is designed to avoid errors/short dumps when exporting large amounts of data. The higher the number set here, the faster the export will take.
Selection criteria	You can restrict the output to specific: • Company codes • Vendors • Countries • Account groups

Character encoding

The character encoding used in the XML output files is based on the code page (another name for character encoding) of the SAP system. You cannot change the SAP code page using the MD_EXPORT program.

INVOICES requires that XML master data import files be in ANSI (Windows code pages) format. You must perform any necessary character encoding conversion yourself. You can use the ReadSoft XMLConverter program for exactly this purpose. ReadSoft staff can access this program at: http://rsdn/rcc/xmlconverter/default.aspx.

NUMMERIC_USER_REPAIR

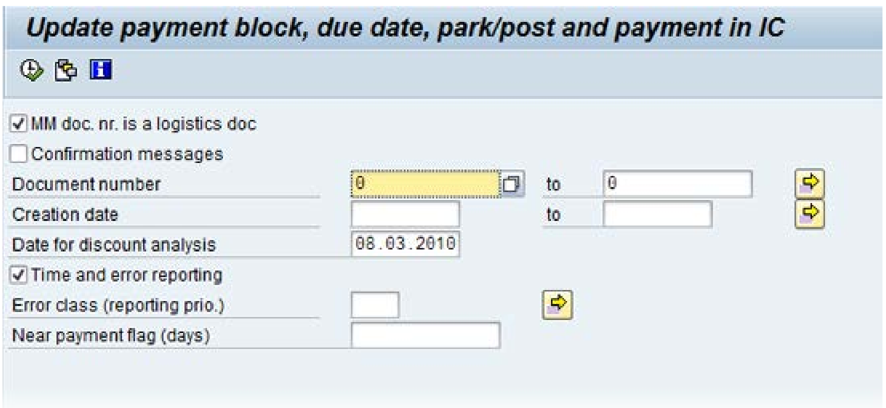
Repair program for numeric agent identification.

For the compatibility of the PROCESS DIRECTOR Accounts Payable agent with WORK CYCLE, the PROCESS DIRECTOR Accounts Payable agent has been extended to 16 digits, which can lead to problems in case of numeric agents with leading zeros. The program fills the additional leading zeros.

PAYMENT_CONTROL

The `/COCKPIT/PAYMENT_CONTROL` report:

- Updates payment blocks in the PROCESS DIRECTOR Accounts Payable document
- Updates the payment terms and discount amounts
- Updates the clearing fields (document number and dates) in the PROCESS DIRECTOR Accounts Payable document after a payment run
- Updates follow-up flags
- Changes the statuses of parked documents to posted after they have been posted in SAP
- Performs the specified checks
- Updates the processing times



Setting	Description
MM doc. nr. is a logistics doc	This option must be deactivated whenever an FI document number appears in the (SAP) **Document number** field (`SAP_DOC_NO`). The corresponding MM document will then be ascertained from the FI document.

Setting	Description
Confirmation messages	Displays the log messages for the program run, for each document. These messages are displayed as soon as the program has finished.
Document number	The PROCESS DIRECTOR Accounts Payable documents that `PAYMENT_CONTROL` will update, according to their PROCESS DIRECTOR Accounts Payable document number.
Creation date	The PROCESS DIRECTOR Accounts Payable documents that `PAYMENT_CONTROL` will update, according to the date on which they were created in PROCESS DIRECTOR Accounts Payable.
Date for discount analysis	The cash discount information ‘Cash discount 1’, ‘Cash discount 2’, ‘Cash discount days 1’, ‘Cash discount day 2’, ‘Net days’ and a possible cash discount amount is calculated anew and then adjusted. For this purpose, the date at which the cash discount calculation is to be carried out is stated in the parameter, 'Date for cash discount evaluation'. It can always be the actual date or a date in the future. For example, it is useful to always use the actual date + 1 day. (a day in the future), when the report /COCKPIT/PAYMENT_CONTROL runs before midnight and the evaluation on the following day is to be based on the actual day (for example, tomorrow).
Time and error reporting	Adds the total processing time (receive to post) and the total workflow processing time (if applicable) to the TTIME and TEWCTIME fields in the PROCESS DIRECTOR Accounts Payable document. (These fields can be added to the **Others** tab by using `/COCKPIT/C20`.)
Error class	The error categories are allocated to the additional checks (corresponds to the number of the additional check). This error category is entered in the PROCESS DIRECTOR Accounts Payable document and is available for evaluations. In the parameter, 'error categories (priority)', with multiple selections, you enter the error categories/additional checks that are to be taken into account at the time of the evaluation. The chronological order results in the priority when several different errors have occurred with one document.

Setting	Description
Quick payment flag (days)	This parameter is used by the D1, D2, and DD follow-up flags to calculate when these flags are displayed. For example, if this parameter is set to 7 days, the D1 flag is displayed 7 days from the first due date for payment, until 7 days before the second due date for payment, when the D2 flag is shown instead. The D2 flag is displayed 7 days from the second due date for payment, until 7 days before the net due date for payment, when the DD flag is shown instead.

Note: Documents must be unlocked (unopened) in order for `PAYMENT_CONTROL` to update the document.

Clearing follow-up flags

In addition to the above configured settings, `PAYMENT_CONTROL` also clears follow-up flags that have been configured to be removed automatically in `/COCKPIT/C43`. That is, if a flag has been configured to be cleared automatically after the document has been posted or paid, or after a workflow has ended, *the flag will only be cleared after the next run of `PAYMENT_CONTROL`*.

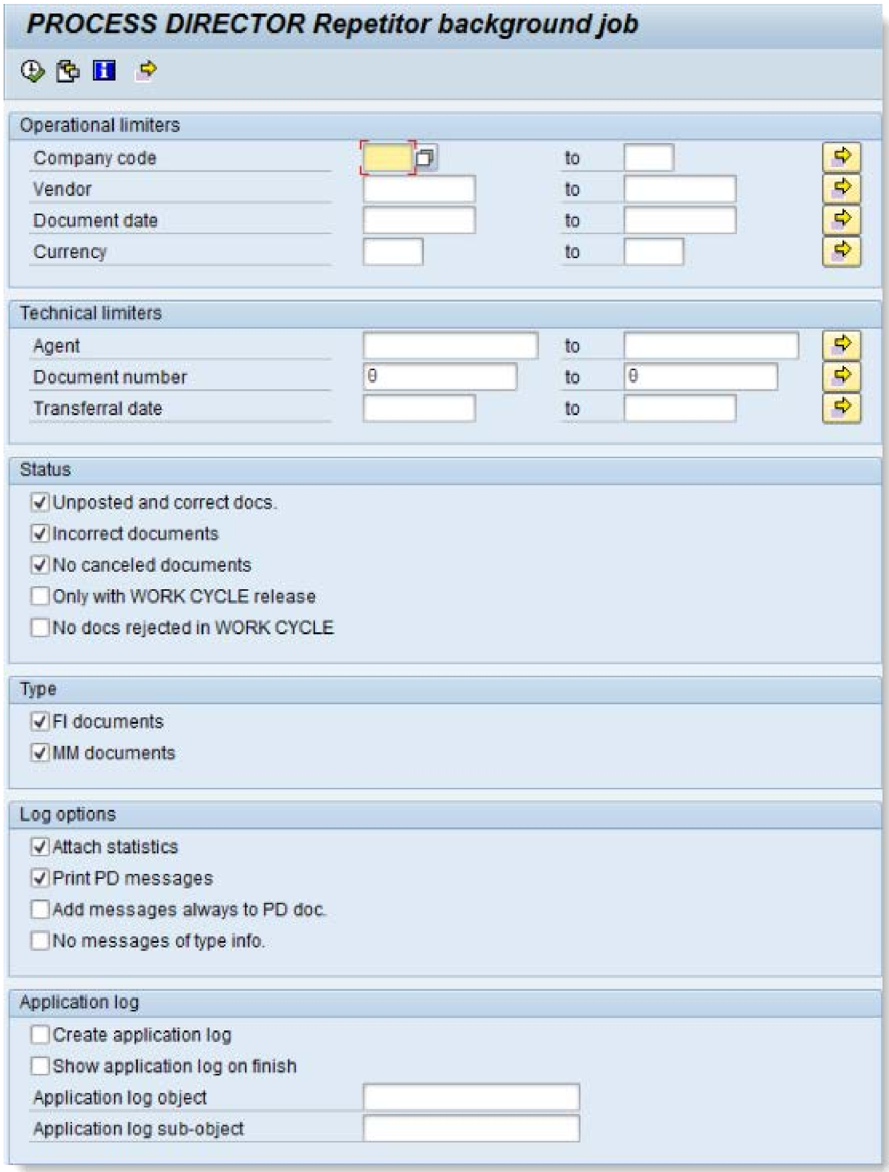
REPETITOR

Overview

REPETITOR:

- Posts documents automatically
- Changes document statuses
- Connects PROCESS DIRECTOR Accounts Payable documents to SAP posting documents

Note: REPETITOR is used to post documents automatically, but not after documents have just been *transferred*. Automatic posting attempts after transferral are controlled by the settings in `/COCKPIT/C7`. REPETITOR is used for all *subsequent* automatic posting attempts.



Settings

Setting	Description
Company code	The buying organizational unit.
Vendor	The supplier.

Setting	Description
Document date	The date, as it appears on the document.
Currency	The currency of the document.
Agent	The PROCESS DIRECTOR Accounts Payable user assigned to the document.
Document number	The PROCESS DIRECTOR Accounts Payable document number.
Transferral date	The date the document was transferred into PROCESS DIRECTOR Accounts Payable.
Unposted and correct docs	Documents with the **Unposted/error-free** status.
Incorrect documents	Documents with the **Errors** status. **Note**: Documents with the **Errors** status may in fact contain no errors. For example, when errors in a document have been resolved in a workflow, and before a **Check** has been performed (which would change the status from **Errors** to **Error-free**). Therefore, it is possible for REPETITOR to post such documents.
No canceled documents	Ignore documents that have been reversed.
Only with WORK CYCLE release	Documents that have been approved/released in a workflow.
No docs rejected in WORK CYCLE	Ignore documents that have been rejected in a workflow.
FI documents	FI/general expense invoices.

Setting	Description
MM documents	MM/PO-based invoices.
Attach statistics	Includes a summary of the processing results, such as the number of documents selected, successfully checked, posted, skipped, etc.
Print PD messages	Includes the message log issued by PROCESS DIRECTOR when actions are performed on a document.
Add messages always to PD doc	Adds the resulting messages from the REPETITOR check and posting actions to the document's message log.
No messages of type info	Does not add **Information** messages to the document's message log. **Note**: The **Add messages always to PD doc** setting (above) must be active.
Create application log	Creates messages in the SAP application log. **Note**: In order to create an application log (which is based on the standard SAP functionality), you must specify an Object and Sub-object (see below). The Object and Sub-object classify the log, so it is best to use custom (Z*) ones.
Show application log on finish	Displays the SAP application log after the program has been executed.
Application log object	The object included in the messages in the SAP application log, used for classification purposes.
Application log sub-object	The sub-object included in the messages in the SAP application log, used for classification purposes.

Configuring REPETITOR

1. Go to `/COCKPIT/C8`.
2. Specify the posting settings for FI and MM documents.
3. Go to `/SE38`.
4. Enter `/COCKPIT/REPETITOR` in the Program field.
5. Click the **Variants** button.
6. Schedule the variant.

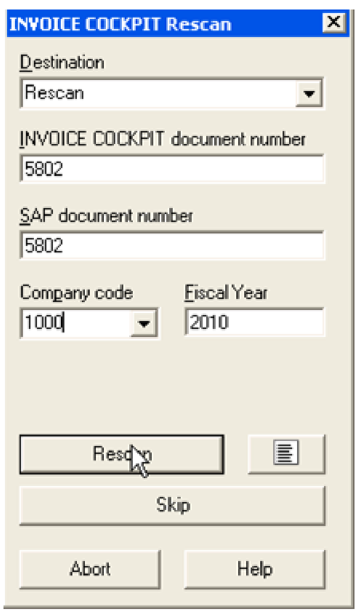
   Like most SAP background jobs, REPETITOR is configured and scheduled with the `/SM36` transaction. You can access this transaction from the PROCESS DIRECTOR Accounts Payable configuration IMG: **Schedule background processing** > **Schedule REPETITOR**.

Overview

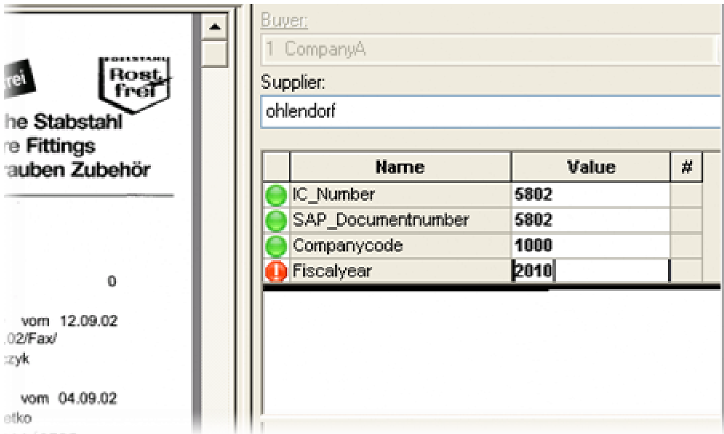
The Rescan function is used to attach scanned paper documents to an existing PROCESS DIRECTOR Accounts Payable document.

You need a dedicated Rescan profile in the ReadSoft capture software (for example, in the INVOICES Scan or Transfer module). When the document is scanned:

- In the Scan module, a ***popup*** is displayed in which the operator enters the number of the PROCESS DIRECTOR document, and optionally other values.



- For the Transfer module, the document details are ***entered in Verify***.



The scanned document is transferred to PROCESS DIRECTOR and is automatically attached to the PD document. If the document was already posted, the attachment is also available in the related SAP document(s).

You can use User Exits 038, 055 and 056 to adjust the Rescan data.

See the *INVOICE COCKPIT Connector Configuration Guide* for information on configuring Rescan.

Local interface

```
FUNCTION /cockpit/rfc_rescan.
*"----------------------------------------------------------------------
*"*"Local interface:
*"  IMPORTING
*"     VALUE(IC_DOCNO) LIKE  /COCKPIT/THDR-DOCNO OPTIONAL
*"     VALUE(IC_SAPDOCNO) LIKE  /COCKPIT/THDR-SAP_DOC_NO OPTIONAL
*"     VALUE(IC_COMPCODE) LIKE  /COCKPIT/THDR-COMP_CODE OPTIONAL
*"     VALUE(IC_FISCALYEAR) LIKE  /COCKPIT/THDR-FISCAL_YEAR OPTIONAL
*"     VALUE(IC_DOC_ID) LIKE  /COCKPIT/THDR-EC_DBC_ID OPTIONAL
*"     VALUE(IC_ARC_ID) LIKE  /COCKPIT/THDR-EC_ARC_ID OPTIONAL
*"     VALUE(IC_ARC_OBJ) LIKE  /COCKPIT/THDR-EC_ARC_OBJ OPTIONAL
*"     VALUE(IC_MATCHCODE) LIKE  /COCKPIT/THDR-EC_DBC_ID OPTIONAL
*"     VALUE(IC_COVERSHEET1) LIKE  SAPB-SEARCHKEY OPTIONAL
*"     VALUE(IC_COVERSHEET2) LIKE  SAPB-SEARCHKEY OPTIONAL
*"     VALUE(IC_COVERSHEET3) LIKE  SAPB-SEARCHKEY OPTIONAL
```

Local interface
*" VALUE(I_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL
*" VALUE(I_LIC_COUNTER) LIKE BOOLE-BOOLE DEFAULT ' '
*" EXPORTING
*" VALUE(EC_DOCNO) LIKE /COCKPIT/THDR-DOCNO
*" VALUE(EC_DOC_ID) LIKE /COCKPIT/THDR-EC_DBC_ID
*" TABLES
*" I_TAB_CONTENT STRUCTURE TBL1024 OPTIONAL
*" E_TAB_MESSAGES STRUCTURE BAPIRET2
*"--

Overview

This function is used to transfer documents from INVOICES or any other application. It is called once per document. When a document has been successfully created in PROCESS DIRECTOR Accounts Payable, the function module returns the E_GUID, which uniquely identifies the document in PROCESS DIRECTOR Accounts Payable.

You can also use `RFC_DATA_SUBMIT` to create single test documents.

Local interface
FUNCTION /cockpit/rfc_data_submit.
*"--
""Local interface:
*" IMPORTING
*" VALUE(I_STR_HEADER) LIKE /COCKPIT/SHDR_EXT STRUCTURE
*" /COCKPIT/SHDR_EXT
*" VALUE(I_STR_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE
*" /COCKPIT/SCHECKDATA
*" VALUE(I_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL
*" VALUE(I_EXTERNAL_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID OPTIONAL
*" VALUE(I_LIC_COUNTER) LIKE BOOLE-BOOLE DEFAULT 'X'
*" EXPORTING

Local interface
*" VALUE(E_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID
*" VALUE(E_DOCNO) LIKE /COCKPIT/THDR-DOCNO
*" TABLES
*" I_TAB_ITEM STRUCTURE /COCKPIT/SITEM_EXT
*" I_TAB_TAX STRUCTURE /COCKPIT/STAX_EXT
*" I_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_EXT
*" I_TAB_CONTENT STRUCTURE TBL1024 OPTIONAL
*" E_TAB_MESSAGES STRUCTURE BAPIRET2
*" IT_FILES STRUCTURE /COCKPIT/SEDI_FILE OPTIONAL
*" IT_BINARY STRUCTURE TBL1024 OPTIONAL
*" IT_TEXT STRUCTURE DOCS OPTIONAL
*" IT_PROCESSLOG STRUCTURE BAPIRET2 OPTIONAL
*" EXCEPTIONS
*" ERROR_OCCURED
*"--

Import interfaces

Overview

There following interfaces are available for creating PROCESS DIRECTOR Accounts Payable documents:

Importing data

You can import invoice data saved in structured files, such as XML and purchasing cards.

- Data import: Overview

RFC interface

An RFC interface exists for importing documents and their scanned images. Transmission of the data is done per document, meaning an RFC function module is called for each document.

All RFC function modules for the PROCESS DIRECTOR Accounts Payable import interface are stored in the `/COCKPIT/INTERFACE` function group. The mains ones are:

- RFC_DATA_SUBMIT
- RFC_PICTURE_SUBMIT
- RFC_MAPPING_GET

Creating documents from existing SAP ones

The `/COCKPIT/DOC_IMPORT` function module is used to create PROCESS DIRECTOR Accounts Payable documents from existing SAP ones.

Rescan

The `/COCKPIT/RESCAN` function is used to attach scanned documents to an existing PROCESS DIRECTOR document.

Data import

Overview

There are two ways to import invoice data into PROCESS DIRECTOR Accounts Payable:

- Import structured files to create new invoices
- Import files containing line item data to existing existing FI invoices

Creating new invoices

You can import invoices that are saved in structured files. Supported file types include:

- XML files (for example, e-invoices)
- Purchasing cards (P-cards)
- CSV
- XLS
- TXT

Before importing files, you need to map fields between the file(s) and PROCESS DIRECTOR Accounts Payable, and perform some other tasks.

Adding line items to existing FI invoices

Some FI invoices may not contain any line items, but may be sent with some supplementary information in a separate document (for example, credit card transactions, phone contracts, rental car hire details). This information can be uploaded to existing invoices using either PROCESS DIRECTOR Accounts Payable or WORK CYCLE in SAP, or using the WORK CYCLE Web Application.

It is also possible to upload other files; for example, a file that an AP clerk has maintained that contains account coding information.

Preparing to import

Overview

You must perform the following steps in order to import files (including P-Card files) into PROCESS DIRECTOR Accounts Payable:

1. Define a data provider.
2. Define default data to add to documents.
3. Map fields between the file(s) and PROCESS DIRECTOR Accounts Payable.
4. Define the structure of the file(s) (for P-card files only).
5. Select how the vendor is determined.
6. *Optional:* Map G/L account number to vendors based on the Merchant Category Code (MCC) (for P-card files only).

Adding a data provider

You must specify some basic properties about the data provider, or the file source. Other configuration options you perform later are based on the data provider.

For example, you could have one data provider for statements from your credit card provider, and another data provider for some Microsoft Excel spreadsheets that an AP staff member maintains with line-item data.

1. Go to `/COCKPIT/IMPORT_C1`.
2. Enter a **Data provider** name.

   Example: *Visa*, *MyExcelFile*.
3. Enter a **Description** for the data provider.
4. Select the Import scheme.

   To import P-card files, select **File**. To import any other kind of file, select **Table**.
5. Enter a **Vendor**.

   There are different ways the vendor can be determined. If all the resulting PROCESS DIRECTOR documents from this data provider should have the same vendor, then enter the vendor number here. Otherwise, leave blank.

6. Enter the character that is the **Field separator**. A blank entry indicates tab separation of the fields.

7. Enter the **Workflow ID**.

   This is the workflow you want to start automatically after the file has been imported and the PROCESS DIRECTOR documents created. To enable this feature, you must activate File import User Exit 020 - Start workflow after data import.

8. If you want to modify the data in the file(s) before the data is mapped, or before the data is submitted and the PROCESS DIRECTOR are created, enter the respective User Exits in **User Exit before mapping** and **User Exit before submitting**.

Adding data to documents

In addition to the data contained in the actual files, you can add other, default data to the resulting PROCESS DIRECTOR documents during the import process.

There are two ways to add data:

- For every file import
- For selected file imports

Adding data for every import

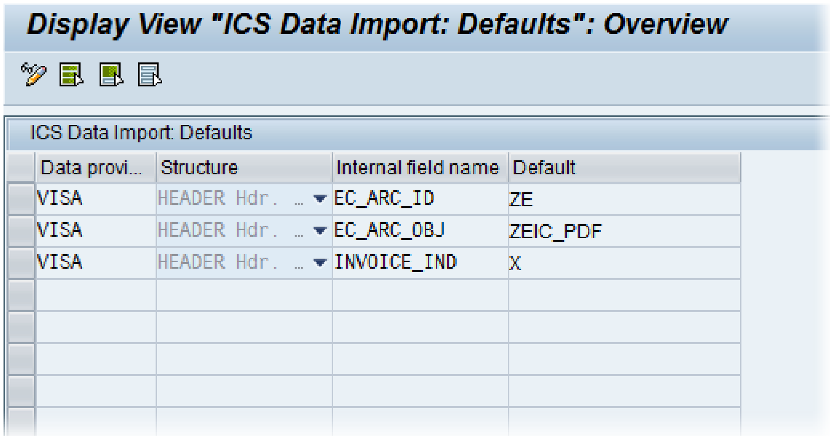
1. Go to `/COCKPIT/IMPORT_C2`.

2. Enter the **Data provider**, field **Structure**, **Internal field name** and the **Default** value to be added.

In order to link documents to the archive and to define them as invoices, it's a good idea to do this using this table, by specifying values to the following fields:

- EC_ARC_ID and EC_ARC_OBJ
- INVOICE_IND

Note: Data is this table is only added to a document if no value is specified in the import files.



Data provi...	Structure	Internal field name	Default
VISA	HEADER Hdr. ...	EC_ARC_ID	ZE
VISA	HEADER Hdr. ...	EC_ARC_OBJ	ZEIC_PDF
VISA	HEADER Hdr. ...	INVOICE_IND	X

Adding data for selected imports

1. Go to /COCKPIT/IMPORT.

2. In the **Document defaults** section of the program, enter the values for the fields to apply for this particular file import.

Note: Any values here override those in /COCKPIT/IMPORT_C2 and in the files themselves.

Mapping fields

You must specify which fields from the file(s) you want to import and to which internal PROCESS DIRECTOR fields they are mapped to. Not all data from the files must be imported. Usually the descriptions and amounts of the items purchased are sufficient Other data, not contained in the file, can be added during the import or subsequently in PROCESS DIRECTOR.

1. Go to /COCKPIT/IMPORT_C3.

2. Enter the ID of the **Data provider**.

3. Select whether the field to be mapped is located in **File 1** or **File 2**.

4. Select the type of field **Structure**.

5. Specify the PROCESS DIRECTOR **Internal field name**.

6. Specify the position/cell ID of the **External field** in the P-Card file.

7. Optional: Specify the **Mapping function** and **Parameter**s to modify the value of the field before it is saved in the PROCESS DIRECTOR document.

   You can develop your own function and use it here to modify field values. For example, to change date or amount formats. The value in **Parameter** is passed to your function.

Defining P-Cards to import

When importing P-cards, you must specify some basic properties of the P-card file(s), for each data provider.

1. Go to `/COCKPIT/IMPORT_C4`.

2. Specify the number of **Header lines** in File 1 (and in File 2 if you receive two files).

   Header lines are not imported. Therefore, if you specify 2 as the number of header lines, the import will start from line 3.

3. Specify the **Key field** in File 1 and File 2.

   Leave blank if importing only one file.

   The key field links the data from File 1 and File 2 together, so that the respective data from both files ends up in the same document.

4. Specify the field that acts as the **Document separator**.

5. Specify the field containing the **P-Card number**.

6. *Optional*. Specify the **MCC** (Merchant Category Code) for File 1 and File 2.

7. *Optional*. Specify the field name in the **`LFA1`** table (vendor master data) that contains the P-Card number.

   If entered, the vendor is determined by looking up the P-Card number in the vendor master data.

Determining the vendor

The vendor in the PROCESS DIRECTOR documents produced from importing files can be determined automatically, using one of methods below:

- By data provider

  If all the purchase items in the file should be assigned to the same vendor, you can assign a vendor directly to the data provider.

- P-Card number in the vendor master data (P-card files only)

  If the P-Card has been issued by a vendor, and the P-Card number is recorded in the vendor master data (usually in the Name 2 or Name 3 field), you can specify the field which contains the P-Card number in the import file. This number is then used to look up the vendor in the master data.

- P-card number assigned to vendor in configuration (P-card files only)

Here, instead of looking up the vendor in the master data, as above, you provide an explicit mapping between the P-Card number and the vendor.

- Standard PROCESS DIRECTOR vendor determination

  If none of the above methods are used to determine the vendor, PROCESS DIRECTOR will use the search criteria in `/COCKPIT/C32`. For example, vendor can be determined based on the vendor name in the imported file.

Assigning P-Cards to vendors

If a P-Card has been issued by a vendor (similar to a customer card), the vendor can be added to the PROCESS DIRECTOR Accounts Payable document by assigning the P-Card to the vendor. There are two ways to do this:

Method 1: Master data lookup

Here, you specify the location of the P-Card number in the import file, which is used to lookup the corresponding vendor in the master data.

1. Go to `/COCKPIT/IMPORT_C4`.
2. Specify the field name in the **`LFA1`** table (vendor master data) that contains the P-Card number.

Method 2: Mapping P-Card numbers to vendors

Here, instead of looking up the vendor in the master data, as above, you provide an explicit mapping between the P-Card number and the vendor.

1. Go to `/COCKPIT/IMPORT_C6`.
2. Enter the Procurement card number.
3. Enter the **Vendor** number.

After entering the above details, a **Procurement card hash** is generated and the **Procurement card number** is encrypted. Only the last four numbers are displayed.

Assigning G/L account numbers

You can assign General Ledger account numbers to P-card items by using the Merchant Category Code (MCC). When a purchasing item is found in the P-card file that contains an MCC, the corresponding G/L account is assigned to the item in the PROCESS DIRECTOR Accounts Payable document.

1. Go to `/COCKPIT/IMPORT_C5`.
2. Enter the Data provider.
3. Map the MCC and G/L account number.

Importing files

Overview

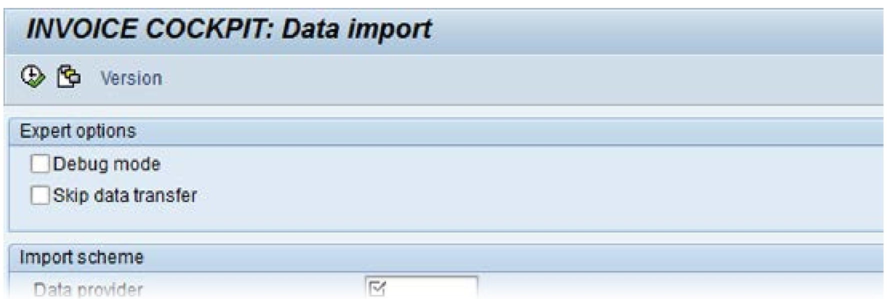
Use the /COCKPIT/IMPORT program to import files. You can run it from /SE38 or use the /COCKPIT/IMPORT transaction code.

The import program also allows you to add default data to the PROCESS DIRECTOR documents (that is, data not contained in the import files).

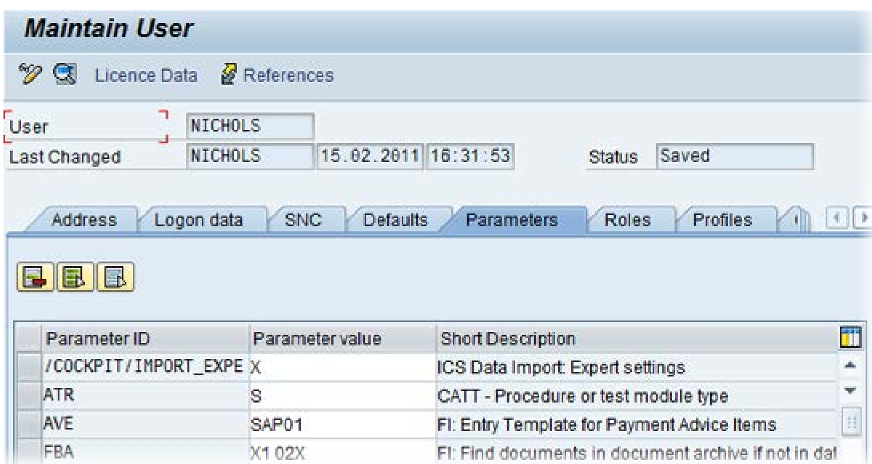
Debug mode and testing

The program contains two (initially hidden) options:

- **Debug mode** – displays debug messages after the program has completed.
- **Skip data transfer** – runs a test import, with no import of data to PROCESS DIRECTOR Accounts Payable.

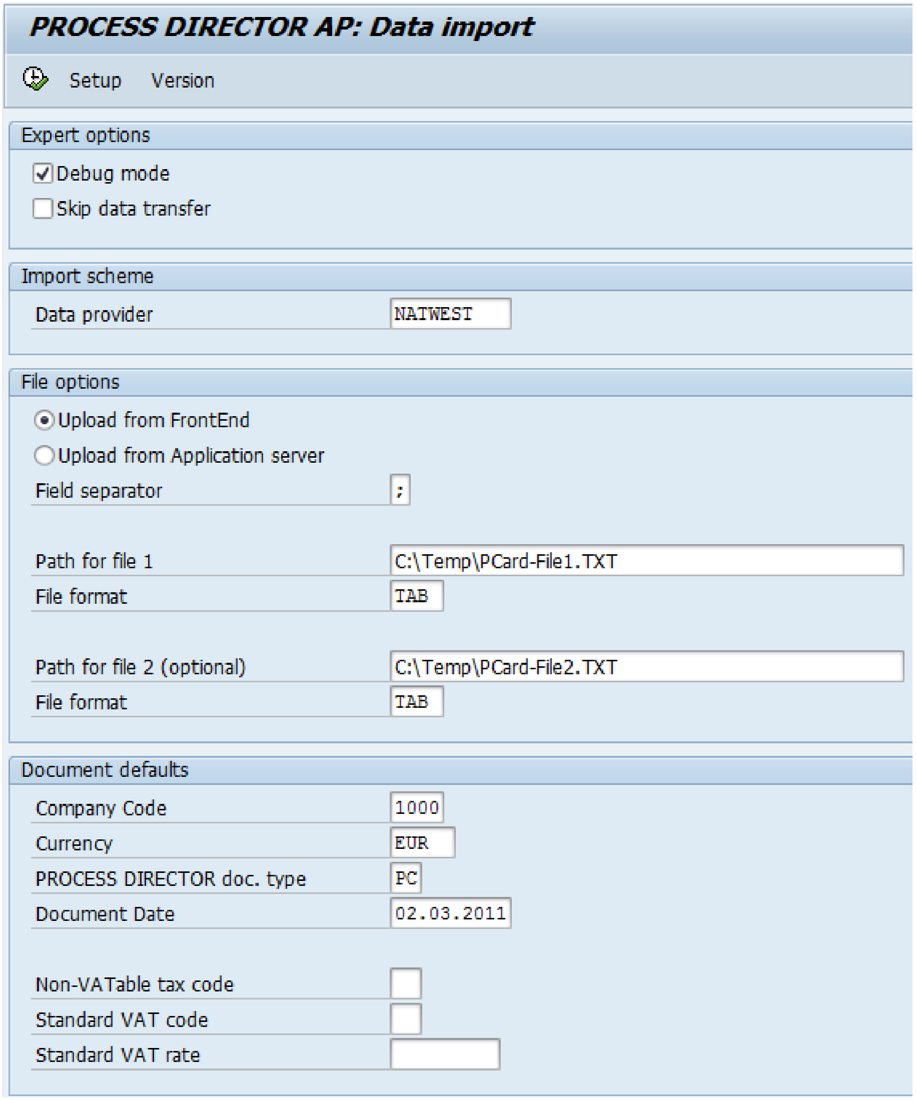


To display these options, you must add the **/COCKPIT/IMPORT_EXPE** as a **Parameter ID** to the settings of the desired user in SU01, and activate it with an **X** as the **Parameter value**, as shown below:

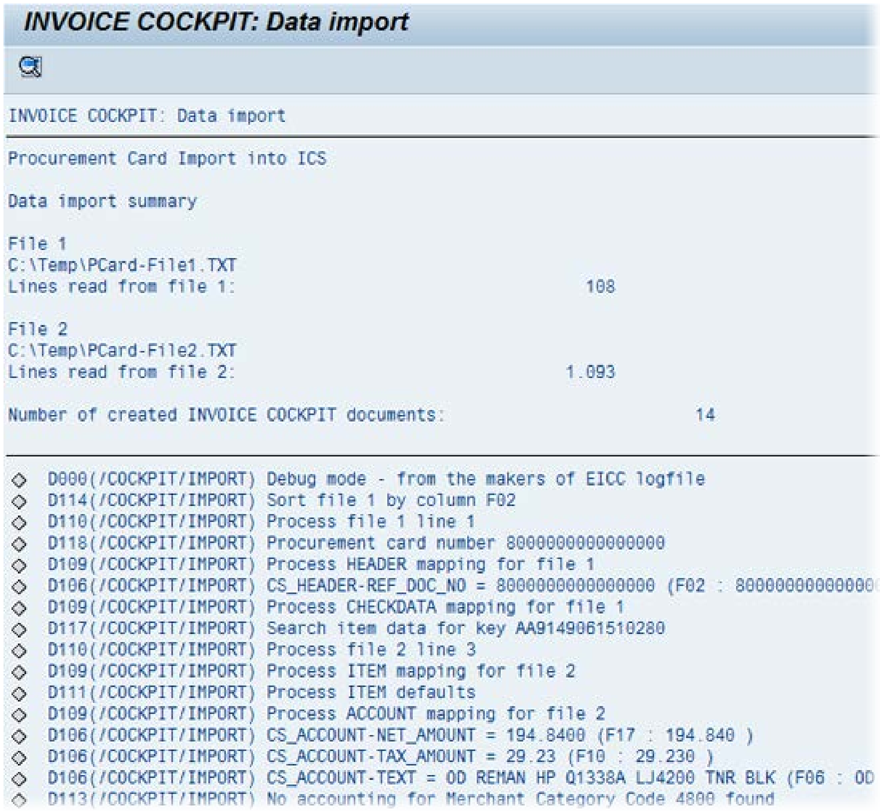


Example

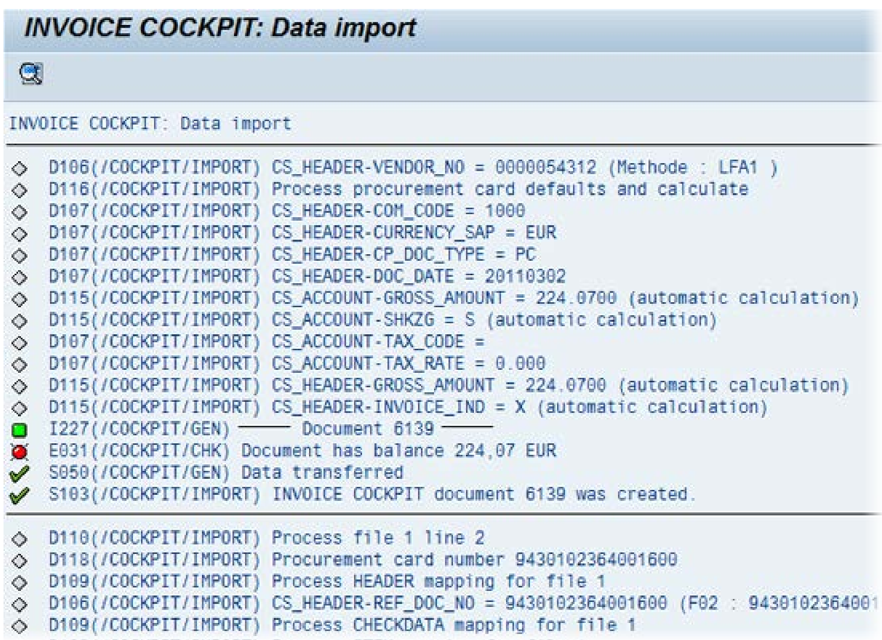
Import parameters



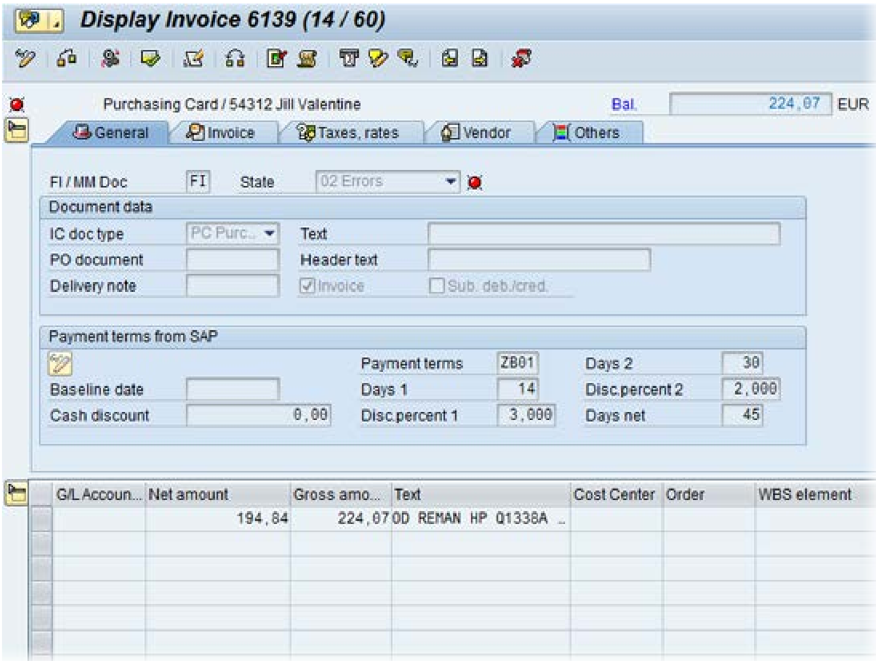
Resulting messages



The last four messages below for document 6139 are the transfer messages.



Resulting document (example)



RFC

RFC_DATA_SUBMIT

Overview

This function is used to transfer documents from INVOICES or any other application. It is called once per document. When a document has been successfully created in PROCESS DIRECTOR Accounts Payable, the function module returns the E_GUID, which uniquely identifies the document in PROCESS DIRECTOR Accounts Payable.

You can also use `RFC_DATA_SUBMIT` to create single test documents.

Local interface
FUNCTION /cockpit/rfc_data_submit. *"-- *"*"Local interface: *" IMPORTING *"   VALUE(I_STR_HEADER) LIKE /COCKPIT/SHDR_EXT STRUCTURE *"   /COCKPIT/SHDR_EXT

```
Local interface

*"     VALUE(I_STR_CHECK) LIKE  /COCKPIT/SCHECKDATA STRUCTURE
*"       /COCKPIT/SCHECKDATA
*"     VALUE(I_CONTENT_LENGTH) LIKE  SAPB-LENGTH OPTIONAL
*"     VALUE(I_EXTERNAL_GUID) LIKE  /COCKPIT/SIF-INVOICE_GUID OPTIONAL
*"     VALUE(I_LIC_COUNTER) LIKE  BOOLE-BOOLE DEFAULT 'X'
*"  EXPORTING
*"     VALUE(E_GUID) LIKE  /COCKPIT/SIF-INVOICE_GUID
*"     VALUE(E_DOCNO) LIKE  /COCKPIT/THDR-DOCNO
*"  TABLES
*"      I_TAB_ITEM STRUCTURE  /COCKPIT/SITEM_EXT
*"      I_TAB_TAX STRUCTURE  /COCKPIT/STAX_EXT
*"      I_TAB_ACCOUNT STRUCTURE  /COCKPIT/SACCT_EXT
*"      I_TAB_CONTENT STRUCTURE  TBL1024 OPTIONAL
*"      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*"      IT_FILES STRUCTURE  /COCKPIT/SEDI_FILE OPTIONAL
*"      IT_BINARY STRUCTURE  TBL1024 OPTIONAL
*"      IT_TEXT STRUCTURE  DOCS OPTIONAL
*"      IT_PROCESSLOG STRUCTURE  BAPIRET2 OPTIONAL
*"  EXCEPTIONS
*"      ERROR_OCCURED
*"----------------------------------------------------------------------
```

I_STR_HEADER

Import structure

In the `I_STR_HEADER` import structure, the header data of a document is transferred. The structure can be extended to include customer fields with the CI_COCKPIT_HDR Include.

For the “Early archiving” scenario the EC_ARC_ID, EC_DBC_ID and EC_ARC_OBJ fields provide the information with which the transferred document is stored in the connected R3 ArchiveLink storage system.

Field	Field type	Data type	Length	Decimals	Description
INVOICE_IND	COCKPIT/DINV_IND	CHAR	1	0	Flag to identify document as invoice
CP_DOC_TYPE	COCKPIT/DDOC_TYPE	CHAR	2	0	PROCESS DIRECTOR Accounts Payable document type
ORIGIN	/COCKPIT/DORIGIN	CHAR	2	0	Source of the PROCESS DIRECTOR Accounts Payable document
DOC_TYPE	BLART	CHAR	2	0	Document type
DOC_DATE	BLDAT	DATS	8	0	Document date in document
VENDOR_NO	LIFNR	CHAR	10	0	Account number of vendor or creditor
DIFF_INV	LIFRE	CHAR	10	0	Different invoicing party
PO_NUMBER	EBELN	CHAR	10	0	Purchasing document number
PSTNG_DATE	BUDAT	DATS	8	0	Posting date in the document

Field	Field type	Data type	Length	Decimals	Description
REF_DOC_NO	XBLNR	CHAR	16	0	Reference document number
COMP_CODE	BUKRS	CHAR	4	0	Company code
GL_ACCOUNT	HKONT	CHAR	10	0	G/L account
CURRENCY_ISO	ISOCD	CHAR	3	0	ISO currency code
CURRENCY_SAP	WAERS	CUKY	5	0	Currency key
GROSS_AMOUNT	BAPIWRBTR	DEC	23	4	Gross amount in document currency
NET_AMOUNT	BAPIWRBTR	DEC	23	4	Net amount in document currency
PMNTTRMS	/COCKPIT/DDZTERM	CHAR	4	0	Terms of payment key
BLINE_DATE	COCKPIT/DDZFBDT/	DATS	8	0	Baseline date for due date calculation
DSCT_DAYS1	/COCKPIT/DDZBD1T	DEC	3	0	Cash discount days 1

Field	Field type	Data type	Length	Decimals	Description
DSCT_DAYS2	/COCKPIT/DDZBD2T	DEC	3	0	Cash discount days 2
NETTERMS	/COCKPIT/DDZBD3T	DEC	3	0	Net payment terms period
DSCT_PCT1	/COCKPIT/DDZBD1P	DEC	5	3	Cash discount percentage 1
DSCT_PCT2	/COCKPIT/DDZBD1P	DEC	5	3	Cash discount percentage 2
PYMT_METH	SCHZW_BSEG	CHAR	1	0	Payment method
HEADER_TXT	BKTXT	CHAR	25	0	Document header text
DEL_COSTS	/COCKPIT/DBAPI_BEZNK	DEC	23	4	Unplanned delivery costs
DEL_COSTS_TAXC	MWSKZ_BNK	CHAR	2	0	Tax code for delivery costs
EXT_DOC_NO	/COCKPIT/DEXT_DOC_NO	CHAR	10	0	External document number
SAP_DOC_NO	RE_BELNR	CHAR	10	0	Document number of an invoice document
USERNAME	USNAM	CHAR	12	0	User name

Field	Field type	Data type	Length	Decimals	Description
VENDOR_NAME_EXT	COCKPIT/DVEND_EXT/	CHAR	100	0	External vendor name
POSTAGE_AMOUNT	BAPIWRBTR	DEC	23	4	Unplanned delivery costs
INSURANCE_AMOUNT	BAPIWRBTR	DEC	23	4	Unplanned delivery costs
FREIGHT_AMOUNT	BAPIWRBTR	DEC	23	4	Unplanned delivery costs
PACKAGE_AMOUNT	BAPIWRBTR	DEC	23	4	Unplanned delivery costs
SGTXT	SGTXT	CHAR	50	0	Item text
BVTYP	BVTYP	CHAR	4	0	Partner bank type
HBKID	HBKID	CHAR	5	0	Short key for a house bank
SCBANK_IND	LZBKZ	CHAR	3	0	State central bank indicator
SUPCOUNTRY	LANDL	CHAR	3	0	Supplying country
SUPCOUNTRY_ISO=	LANDL_ISO	CHAR	2	0	Supplier country ISO code

Field	Field type	Data type	Length	Decimals	Description
BLLSRV_IND	DIEKZ	CHAR	1	0	Service indicator (foreign payment)
KURSF	KURSF	DEC	9	5	Exchange rate
KURSR	KURSR	DEC	9	5	Hedged exchange rate
GBETR	BAPIWRBTR	DEC	23	4	Amount in document currency
TBTKZ	TBTKZ	CHAR	1	0	Indicator: subsequent debit/credit
SHEET_NO	LBLNI	CHAR	10	0	Entry sheet number
ALLOC_NMBR	COCKPIT/DZUONR/	CHAR	18	0	Assignment number
LFSNR	LFSNR	CHAR	16	0	Number of external delivery note
DSCT_AMOUNT	BAPISKNTO	DEC	23	4	Cash Discount Amount in Local Currency
BUS_AREA	GSBER	CHAR	4	0	Business Area

Field	Field type	Data type	Length	Decimals	Description
PMNT_BLOCK	/COCKPIT/DZLSPR	CHAR	1	0	Payment Block Key
VATDATE	/COCKPIT/DVATDATE	DATS	8	0	VAT date
EC_ARC_ID	SAEARCHIVI	CHAR	2	0	Content repository identification
EC_DBC_ID	SAEARDOID	CHAR	40	0	SAP ArchiveLink: document ID
EC_ARC_OBJ	SAEOBJART	CHAR	10	0	Document type
.INCLUDE	CI_COCKPIT_HDR	N/A	0	0	Header Include for PROCESS DIRECTOR Accounts Payable

I_STR_CHECK

Import structure

In the import structure `I_STR_CHECK`, the check fields of a document is transferred (bank details, tax number and tax identification number). PROCESS DIRECTOR Accounts Payable compares the imported data with that in the vendor master record. The structure can be extended to include customer fields with the CI_COCKPIT_CHECK Include.

Component	Component type	Data type	Length	Decimals	Description
BANKN1	BANKN	CHAR	18	0	Bank account number
BANKL1	BANKK	CHAR	15	0	Bank key

Component	Component type	Data type	Length	Decimals	Description
SWIFT1	SWIFT	CHAR	11	0	SWIFT code for international payments
IBAN1	IBAN	CHAR	34	0	IBAN (International Bank Account Number)
BANKN2	BANKN	CHAR	18	0	Bank account number
BANKL2	BANKK	CHAR	15	0	Bank code
SWIFT2	SWIFT	CHAR	11	0	SWIFT code for international payments
IBAN2	IBAN	CHAR	34	0	IBAN (International Bank Account Number)
BANKN3	BANKN	CHAR	18	0	Bank account number
BANKL3	BANKK	CHAR	15	0	Bank code
SWIFT3	SWIFT	CHAR	11	0	SWIFT code for international payments
IBAN3	IBAN	CHAR	34	0	IBAN (International Bank Account Number)
BANKN4	BANKN	CHAR	18	0	Bank account number
BANKL4	BANKK	CHAR	15	0	Bank code

Component	Component type	Data type	Length	Decimals	Description
SWIFT4	SWIFT	CHAR	11	0	SWIFT code for international payments
IBAN4	IBAN	CHAR	34	0	IBAN (International Bank Account Number)
STENR	/COCKPIT/DSTENR	CHAR	18	0	Tax code at the tax office
STCEG	STCEG	CHAR	20	0	Sales tax identification number
SRCGUID	/COCKPIT/DSRCGUID	CHAR	32	0	External ID of the PROCESS DIRECTOR Accounts Payable document
.INCLUDE	CI_COCKPIT_CHECK	N/A	N/A	N/A	Customer fields

I_CONTENT_LENGTH

Import parameter

If the document image is transferred to the archive, the length of the image file must be specified here.

Component	Component type	Data type	Length	Decimals	Description
I_CONTENT_LENGTH	SAPB-LENGTH	NUM12	12	0	Numeric field 12

I_EXTERNAL_GUID

Import parameter

If an external number that uniquely identifies the document is to be used instead of the unique identification number generated by PROCESS DIRECTOR Accounts Payable, this external number must be specified here.

Component	Component type	Data type	Length	Decimals	Description
I_EXTERNAL_GUID	/COCKPIT/SIF-INVOICE_GUIDE	CHAR	32	0	Unique document identification

I_LIC_COUNTER

Import parameter

This import parameter is for ReadSoft internal use only.

Component	Component type	Data type	Length	Decimals	Description
I_LIC_COUNTER	BOOLE-BOOLE	CHAR	1	0	Turn on license counter

E_GUID

Export parameter

When a document has been successfully created in PROCESS DIRECTOR Accounts Payable, a unique identification number for the document is returned, which can be used for further data transfers.

Note: This is the GUID of the document, it is not the document number displayed in PROCESS DIRECTOR Accounts Payable.

Component	Component type	Data type	Length	Decimals	Description
E_GUID	/COCKPIT/DINV_GUID	CHAR	32	0	Unique identification for the document in PROCESS DIRECTOR Accounts Payable

E_DOCNO

Export parameter

When a document has been successfully created in PROCESS DIRECTOR Accounts Payable, a PROCESS DIRECTOR Accounts Payable number is assigned, which is returned here.

Note: This is the document number displayed in PROCESS DIRECTOR Accounts Payable. It is not the GUID of the document.

Component	Component type	Data type	Length	Decimals	Description
E_GUID	/COCKPIT/DINV_GUID	CHAR	32	0	Unique identification for the document in PROCESS DIRECTOR Accounts Payable

I_TAB_ITEM

Import table

This table includes the transferred document line item data. The table structure can be extended using the CI_COCKPIT_INCLUDE Include.

Component	Component type	Data type	Length	Decimals	Description
INVOICE_ITEM	RBLGP	NUMC	6	0	Document item in invoice document
PO_NUMBER	BSTNR	CHAR	10	0	Purchase order number
PO_ITEM	EBELP	NUMC	5	0	Item number of purchasing department
REF_DOC	LFBNR	CHAR	10	0	Document number of a reference document
REF_DOC_YEAR	LFGJA	NUMC	4	0	Fiscal year of current period

Component	Component type	Data type	Length	Decimals	Description
REF_DOC_IT	LFPOS	NUMC	4	0	Item of a reference document
TBTKZ	TBTKZ	CHAR	1	0	Indicator: subsequent debit/credit
TAX_CODE	MWSKZ_MRM	CHAR	2	0	Tax code
TAX_RATE	MSATZ_F05L	DEC	7	3	Tax rate
TAX_AMOUNT	BAPIWMWST	DEC	23	4	Tax amount in document currency
TAXJURCODE	TXJCD	CHAR	15	0	Tax jurisdiction code
ITEM_AMOUNT	BAPIWRBTR	DEC	23	4	Item amount in document currency
GROSS_AMOUNT	BAPIWRBTR	DEC	23	4	Gross amount in document currency
QUANTITY	MENGE_D	QUAN	13	3	Quantity
PO_UNIT_ISO	/COCKPIT/DISOCD_BSTME	CHAR	3	0	ISO code purchase order unit of measure

Component	Component type	Data type	Length	Decimals	Description
PO_UNIT_SAP	BSTME	UNIT	3	0	Order unit
MATERIAL	MATNR	CHAR	18	0	Material number
ITEM_TEXT	SGTXT	CHAR	50	0	Item text
SHEET_NO	LBLNI	CHAR	10	0	Entry sheet number
LFSNR	LFSNR	CHAR	16	0	Number of external delivery note
COND_TYPE	KSCHL	CHAR	4	0	Condition type
.INCLUDE	CI_COCKPIT_ITEM	N/A	N/A	N/A	Customer fields

I_TAB_TAX

Import table

This table includes the transferred document tax data. The table structure can be extended using the CI_COCKPIT_TAX Include.

Component	Component type	Data type	Length	Decimals	Description
TAX_CODE	MWSKZ	CHAR	2	0	Tax on sales/purchases code
TAX_RATE	MSATZ_F05L	DEC	7	3	Tax rate

Component	Component type	Data type	Length	Decimals	Description
TAX_AMOUNT	BAPIWMWST	DEC	23	4	Tax amount in document currency
TAXJURCODE	TXJCD	CHAR	15	0	Jurisdiction for tax calculation - tax jurisdiction code
.INCLUDE	CI_COCKPIT_TAX	N/A	N/A	N/A	Customer fields

I_TAB_ACCOUNT

Import table

This table includes the transferred document accounting data. The table structure can be extended using the CI_COCKPIT_ACCT Include.

Component	Component type	Data type	Length	Decimals	Description
GL_ACCOUNT	SAKNR	CHAR	10	0	G/L account number
NET_AMOUNT	BAPIWRBTR	DEC	23	4	Net amount in document currency
GROSS_AMOUNT	BAPIWRBTR	DEC	23	4	Gross amount in document currency
TEXT	SGTXT	CHAR	50	0	Item text
HEADER_DATA	XFELD	CHAR	1	0	Checkbox
ALLOC_NMBR	/COCKPIT/DZUONR	CHAR	18	0	Assignment number
SHKZG	SHKZG	CHAR	1	0	Debit/credit indicator

Component	Component type	Data type	Length	Decimals	Description
BSCHL	BSCHL	CHAR	2	0	Posting key
COSTCENTER	KOSTL	CHAR	10	0	Cost center
ORDERID	AUFNR	CHAR	12	0	Order number
WBS_ELEMENT	PS_POSID	CHAR	24	0	Work breakdown structure element (WBS element)
SALES_ORD	KDAUF	CHAR	10	0	Sales order number
S_ORD_ITEM	KDPOS	NUMC	6	0	Item number in sales order
COST_OBJ	KSTRG	CHAR	12	0	Cost object
CO_BUSPROC	EPRZNR	CHAR	12	0	Receiver business process
NETWORK	NPLNR	CHAR	12	0	Network number for account assignment
NETWORK_OP	NPVRG	CHAR	4	0	Network activity
CO_MATERIAL	CO_EMATNR	CHAR	18	0	Receiving material
PLANT	CO_EWERKS	CHAR	4	0	Plant for receiver material

Component	Component type	Data type	Length	Decimals	Description
PROFIT_CTR	PRCTR	CHAR	10	0	Profit center
BUS_AREA	GSBER	CHAR	4	0	Business area
TAX_CODE	MWSKZ	CHAR	2	0	Tax on sales/purchases code
TAX_RATE	MSATZ_F05L	DEC	7	3	Tax rate
TAX_AMOUNT	WMWST	CURR	13	2	Tax amount in document currency
TAXJURCODE	TXJCD	CHAR	15	0	Jurisdiction for tax calculation - tax jurisdiction code
REC_STATUS	XFELD	CHAR	1	0	Checkbox
IDOC_NUMBER	EDI_DOCNUM	NUMC	16	0	IDoc number
IDOC_GUID	/COCKPIT/DINV_GUID	CHAR	32	0	Unique document identification
ORIGIN	/COCKPIT/DORIGIN	CHAR	2	0	Source of PROCESS DIRECTOR Accounts Payable document

Component	Component type	Data type	Length	Decimals	Description
DOCNO	/COCKPIT/DDOCNO	NUMC	14	0	PROCESS DIRECTOR Accounts Payable document number
FI_MM_FLG	/COCKPIT/DFI_MM_FLG	CHAR	2	0	FI or MM document?
INVOICE_IND	/COCKPIT/DINV_IND	CHAR	1	0	Flag to identify document as invoice
CP_DOC_TYPE	/COCKPIT/DDOC_TYPE	CHAR	2	0	PROCESS DIRECTOR Accounts Payable document type
DOC_DATE	BLDAT	DATS	8	0	Document date in document
VENDOR_NO	LIFNR	CHAR	10	0	Account number of vendor or creditor
PO_NUMBER	EBELN	CHAR	10	0	Purchasing Document Number
REF_DOC_NO	XBLNR	CHAR	16	0	Reference document number
COMP_CODE	BUKRS	CHAR	4	0	Company code
CURRENCY	WAERS	CUKY	5	0	Currency Key

Component	Component type	Data type	Length	Decimals	Description
HEADER_TXT	BKTXT	CHAR	25	0	Document header text
.INCLUDE	CI_COCKPIT_ACCT	N/A	N/A	N/A	Customer fields

I_TAB_CONTENT

Import table

This table includes the transferred document image data. It is a table of type TBL1024, which is delivered by SAP.

E_TAB_MESSAGES

Export table

This table contains the success and failure messages when creating documents in PROCESS DIRECTOR Accounts Payable.

Component	Component type	Data type	Length	Decimals	Description
TYPE	BAPI_MTYPE	CHAR	1	0	Message type: S Success, E Error, W Warning, I Info, A Abort
ID	SYMSGID	CHAR	20	0	Messages, message class
NUMBER	SYMSGNO	NUMC	3	0	Messages, message number
MESSAGE	BAPI_MSG	CHAR	220	0	Message text
LOG_NO	BALOGNR	CHAR	20	0	Application log: log number
LOG_MSG_NO	BALMNR	NUMC	6	0	Message log: internal message serial number

Component	Component type	Data type	Length	Decimals	Description
MESSAGE_V1	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V2	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V3	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V4	SYMSGV	CHAR	50	0	Messages, message variables
PARAMETER	BAPI_PARAM	CHAR	32	0	Parameter name
ROW	BAPI_LINE	INT4	10	0	Lines in parameter
FIELD	BAPI_FLD	CHAR	30	0	Field in parameter
SYSTEM	BAPILOGSYS	CHAR	10	0	Logical system from which message originates

Return values

Component	Value
TYPE	S
ID	/COCKPIT/GEN
NUMBER	50

IT_FILES, IT_BINARY and IT_TEXT

Export tables

These tables enable archiving of multiple files. The IT_FILES export table delivers the metadata required for archiving, and the IT_BINARY and IT_TEXT tables are referenced by the component ARCTABLE (see below). If ARCTABLE is set to B the system searches for the data in the IT_BINARY table, if it is set to T the system searches the IT_TEXT table. The components FIRSTLINE and LASTLINE specify which lines should be searched in these tables.

Component	Component type	Data type	Length	Decimals	Description
ORDNO	NUMC3	NUMC	3	0	Numc3, internal use
SAP_OBJECT	SAEANWDID	CHAR	10	0	SAP ArchiveLink: Object type of business object
ARCHIV_ID	SAEARCHIVI	CHAR	2	0	Content Repository identification
ARC_DOC_ID	SAEARDOID	CHAR	40	0	SAP ArchiveLink: Document ID
AR_OBJECT	SAEOBJART	CHAR	10	0	Document type
URL	SAEURI	CHAR	4096	0	SAP ArchiveLink: Data element for absolute URI
MIMETYPE	W3CONTTYPE	CHAR	128	0	HTML content type
ARCTABLE	/COCKPIT/DARCTABLE	CHAR	1	0	Archive table
FIRSTLINE	NUM06	NUMC	6	0	Numeric field: Length 6
LASTLINE	NUM06	NUMC	6	0	Numeric field: Length 6

Component	Component type	Data type	Length	Decimals	Description
LENGTH	NUM12	NUMC	6	0	Numeric field 12
FILENAME	CHAR255	CHAR	255	0	Char255

IT_PROCESSLOG

Export table

This table contains information about the processes that were executed during the document transfer.

Component	Component type	Data type	Length	Decimals	Description
ORDNO	NUMC3	NUMC	3	0	Numc3, internal use
SAP_OBJECT	SAEANWDID	CHAR	10	0	SAP ArchiveLink: Object type of business object
ARCHIV_ID	SAEARCHIVI	CHAR	2	0	Content Repository identification
ARC_DOC_ID	SAEARDOID	CHAR	40	0	SAP ArchiveLink: Document ID
AR_OBJECT	SAEOBJART	CHAR	10	0	Document type
URL	SAEURI	CHAR	4096	0	SAP ArchiveLink: Data element for absolute URI
MIMETYPE	W3CONTTYPE	CHAR	128	0	HTML content type
ARCTABLE	/COCKPIT/DARCTABLE	CHAR	1	0	Archive table

Component	Component type	Data type	Length	Decimals	Description
FIRSTLINE	NUM06	NUMC	6	0	Numeric field: Length 6
LASTLINE	NUM06	NUMC	6	0	Numeric field: Length 6
LENGTH	NUM12	NUMC	6	0	Numeric field 12
FILENAME	CHAR255	CHAR	255	0	Char255

RFC_PICTURE_SUBMIT

Overview

PROCESS DIRECTOR Accounts Payable offers the possibility to archive the transferred documents via ArchiveLink by means of the R/3 system. The document must be made available on a web server for archiving. With the `RFC_PICTURE_SUBMIT` RFC function module, the URL with which the image can be called up on the web server is passed to PROCESS DIRECTOR Accounts Payable.

Local interface
FUNCTION /cockpit/rfc_picture_submit. *"-- *"*"Local interface: *" IMPORTING *"   VALUE(I_INVOICE_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID *" TABLES *"   I_TAB_PICTURE_DETAILS STRUCTURE /COCKPIT/SPICT *"   E_TAB_MESSAGES STRUCTURE BAPIRET2 *"--

I_INVOICE_GUID

Import parameter

This parameter specifies the unique identification number of the document in PROCESS DIRECTOR Accounts Payable. `RFC_PICTURE_SUBMIT` can only be used for documents that have already been created in PROCESS DIRECTOR Accounts Payable.

Component	Component type	Data type	Length	Decimals	Description
I_INVOICE_GUID	/COCKPIT/DINV_GUID	CHAR	32	0	Unique identification for the document in PROCESS DIRECTOR Accounts Payable

I_TAB_PICTURE_DETAILS

Import table

This table is used to pass the URL of the document on the web server to PROCESS DIRECTOR Accounts Payable.

Component	Component type	Data type	Length	Decimals	Description
URL	/COCKPIT/DURL	CHAR	255	0	URL
PAGE_TYPE	/COCKPIT/DPAGE_TYPE	CHAR	2	0	Page type (see below for possible values)
MIME_TYPE	W3CONTTYPE	CHAR	128	0	HTML content type

Transfer values for PAGE_TYPE

Value	Description
01	Invoice page

Value	Description
02	Attachment

E_TAB_MESSAGES

Export table

This table contains the success and failure messages when creating documents in PROCESS DIRECTOR Accounts Payable.

Component	Component type	Data type	Length	Decimals	Description
TYPE	BAPI_MTYPE	CHAR	1	0	Message type: S Success, E Error, W Warning, I Info, A Abort
ID	SYMSGID	CHAR	20	0	Messages, message class
NUMBER	SYMSGNO	NUMC	3	0	Messages, message number
MESSAGE	BAPI_MSG	CHAR	220	0	Message text
LOG_NO	BALOGNR	CHAR	20	0	Application log: log number
LOG_MSG_NO	BALMNR	NUMC	6	0	Message log: internal message serial number
MESSAGE_V1	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V2	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V3	SYMSGV	CHAR	50	0	Messages, message variables
MESSAGE_V4	SYMSGV	CHAR	50	0	Messages, message variables

Component	Component type	Data type	Length	Decimals	Description
PARAMETER	BAPI_PARAM	CHAR	32	0	Parameter name
ROW	BAPI_LINE	INT4	10	0	Lines in parameter
FIELD	BAPI_FLD	CHAR	30	0	Field in parameter
SYSTEM	BAPILOGSYS	CHAR	10	0	Logical system from which message originates

Return values

Component	Value
TYPE	S
ID	/COCKPIT/GEN
NUMBER	50

RFC_MAPPING_GET

I_PROFILE

Import parameter

This parameter contains the name of the requested field mapping profile.

Component	Component type	Data type	Length	Decimals	Description
I_PROFILE	/COCKPIT/DPROFILE_INV	CHAR	40	0	Profile ID in transaction `/COCKPIT/C1`.

ET_MAPPING

Export table

The ET_MAPPING export table contains information for the assignment of the external fields to the fields of the I_STR_HEADER, I_STR_CHECK, I_TAB_ITEM and I_TAB_ACCOUNT import structures.

Component	Component type	Data type	Length	Decimals	Description
PROFILE	/COCKPIT/DPROFILE_INV	CHAR	40	0	Profile ID in transaction /COCKPIT/C1
STRUCTURE	/COCKPIT/DSTRUCTURE	CHAR	20	0	Structure for field selection
FIELD_INV	/COCKPIT/DFIELD_INV	CHAR	20	0	External field name
FIELD_SAP	/COCKPIT/DFIELD_SAP	CHAR	30	0	Internal field name in PROCESS DIRECTOR Accounts Payable

ET_MAPPING_TAX

Export table

The ET_MAPPING export table contains information for the assignment of the external fields to the fields of the I_TAB_TAX import structure.

Component	Component type	Data type	Length	Decimals	Description
PROFILE	/COCKPIT/DPROFILE_INV	CHAR	40	0	Profile ID in transaction /COCKPIT/C2.
TAX_RATE	/COCKPIT/DSTRUCTURE	CHAR	20	0	Field for external tax rate

Component	Component type	Data type	Length	Decimals	Description
TAX_AMOUNT	/COCKPIT/DFIELD_INV	CHAR	20	0	Field for external tax amount
TAX_CODE	/COCKPIT/DFIELD_SAP	CHAR	30	0	Field for external tax code

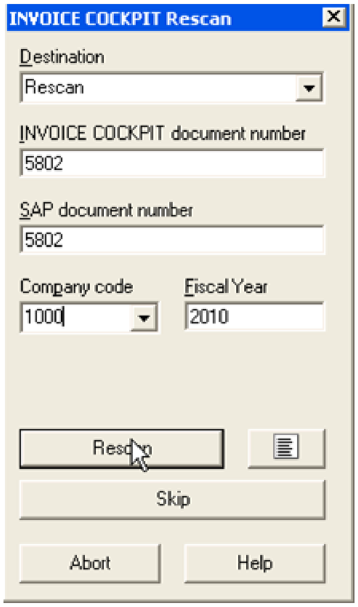
Rescan

Overview

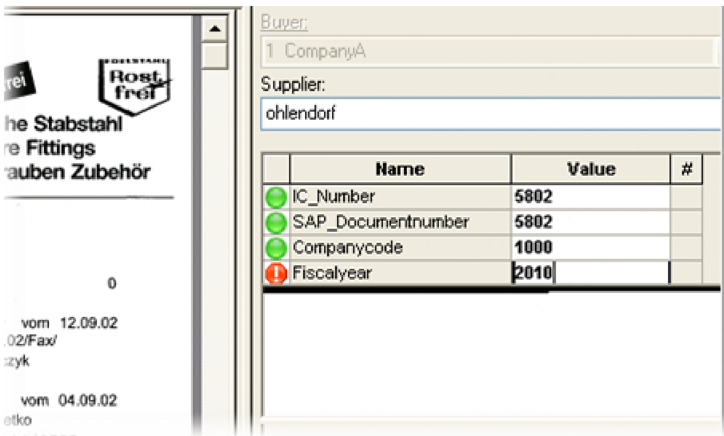
The Rescan function is used to attach scanned paper documents to an existing PROCESS DIRECTOR Accounts Payable document.

You need a dedicated Rescan profile in the ReadSoft capture software (for example, in the INVOICES Scan or Transfer module). When the document is scanned:

- In the Scan module, a ***popup*** is displayed in which the operator enters the number of the PROCESS DIRECTOR document, and optionally other values.



- For the Transfer module, the document details are ***entered in Verify***.



The scanned document is transferred to PROCESS DIRECTOR and is automatically attached to the PD document. If the document was already posted, the attachment is also available in the related SAP document(s).

You can use User Exits 038, 055 and 056 to adjust the Rescan data.

See the *INVOICE COCKPIT Connector Configuration Guide* for information on configuring Rescan.

Local interface

```
FUNCTION /cockpit/rfc_rescan.
*"----------------------------------------------------------------------
*"*"Local interface:
*"  IMPORTING
*"     VALUE(IC_DOCNO) LIKE  /COCKPIT/THDR-DOCNO OPTIONAL
*"     VALUE(IC_SAPDOCNO) LIKE  /COCKPIT/THDR-SAP_DOC_NO OPTIONAL
*"     VALUE(IC_COMPCODE) LIKE  /COCKPIT/THDR-COMP_CODE OPTIONAL
*"     VALUE(IC_FISCALYEAR) LIKE  /COCKPIT/THDR-FISCAL_YEAR OPTIONAL
*"     VALUE(IC_DOC_ID) LIKE  /COCKPIT/THDR-EC_DBC_ID OPTIONAL
*"     VALUE(IC_ARC_ID) LIKE  /COCKPIT/THDR-EC_ARC_ID OPTIONAL
*"     VALUE(IC_ARC_OBJ) LIKE  /COCKPIT/THDR-EC_ARC_OBJ OPTIONAL
*"     VALUE(IC_MATCHCODE) LIKE  /COCKPIT/THDR-EC_DBC_ID OPTIONAL
*"     VALUE(IC_COVERSHEET1) LIKE  SAPB-SEARCHKEY OPTIONAL
*"     VALUE(IC_COVERSHEET2) LIKE  SAPB-SEARCHKEY OPTIONAL
*"     VALUE(IC_COVERSHEET3) LIKE  SAPB-SEARCHKEY OPTIONAL
```

Local interface
*" VALUE(I_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL *" VALUE(I_LIC_COUNTER) LIKE BOOLE-BOOLE DEFAULT ' ' *" EXPORTING *" VALUE(EC_DOCNO) LIKE /COCKPIT/THDR-DOCNO *" VALUE(EC_DOC_ID) LIKE /COCKPIT/THDR-EC_DBC_ID *" TABLES *" I_TAB_CONTENT STRUCTURE TBL1024 OPTIONAL *" E_TAB_MESSAGES STRUCTURE BAPIRET2 *"--

Rescan parameters

Import parameters

To attach the scanned document to a PDAP document, the field `IC_DOCNO` must be populated.

To attach to a PDAP MM document and the corresponding SAP MM document (`RBKP`), the fields `IC_SAPDOCNO` and `IC_FISCALYEAR` must be populated.

To attach to an PDAP FI document and the corresponding SAP FI document (`BKPF`), the fields `IC_SAPDOCNO`, `IC_COMPCODE` and `IC_FISCALYEAR` must be populated.

The fields `IC_MATCHCODE`, `IC_COVERSHEET1`, `IC_COVERSHEET2` and `IC_COVERSHEET3` can be used in user exit 038.

Field	Field type	Data type	Length	Description
IC_DOCNO	/COCKPIT/THDR-DOCNO	NUMC	14	PROCESS DIRECTOR document number
IC_SAPDOCNO	/COCKPIT/THDR-SAP_DOC_NO	CHAR	10	Document number of an SAP invoice document
IC_COMPCODE	/COCKPIT/THDR-COMP_CODE	CHAR	4	Company code

Field	Field type	Data type	Length	Description
IC_FISCALYEAR	/COCKPIT/THDR-FISCAL_YEAR	NUMC	4	Fiscal year
IC_DOC_ID	/COCKPIT/THDR-EC_DBC_ID	CHAR	40	SAP ArchiveLink: Document ID
IC_ARC_ID	/COCKPIT/THDR-EC_ARC_ID	CHAR	2	Content Repository Identification
IC_ARC_OBJ	/COCKPIT/THDR-EC_ARC_OBJ	CHAR	10	Document type
IC_MATCHCODE	/COCKPIT/THDR-EC_DBC_ID	CHAR	40	Matchcode field for user exit 038
IC_COVERSHEET1	SAPB-SEARCHKEY	CHAR	255	Coversheet field 1 for user exit 038
IC_COVERSHEET2	SAPB-SEARCHKEY	CHAR	255	Coversheet field 2 for user exit 038
IC_COVERSHEET3	SAPB-SEARCHKEY	CHAR	255	Coversheet field 3 for user exit 038
I_CONTENT_LENGTH	SAPB-LENGTH	NUMC	12	Binary length of file to archive
I_LIC_COUNTER	BOOLE-BOOLE	CHAR	1	Flag for license counter, default: SPACE

Export parameters

Field	Field type	Data type	Length	Description
EC_DOCNO	/COCKPIT/THDR-DOCNO	NUMC	14	Document number of found PDAP document
EC_DOC_ID	/COCKPIT/THDR-EC_DBC_ID	CHAR	40	Document ID of archived file

Tables

Field	Field type	Data type	Length	Description
I_TAB_CONTENT	TBL1024	RAW	1024	File to archive
E_TAB_MESSAGES	BAPIRET2			Return table with messages

Archiving

Overview

Archiving is carried out via the SAP Archive Development Kit. Support by the archive information system is not planned at the moment.

After a document has been posted via PROCESS DIRECTOR Accounts Payable, the document data from the data tables of PROCESS DIRECTOR Accounts Payable can be archived. The archiving should be carried out periodically based on the volume of documents and your organization's requirements.

The data archiving is carried out via the `/SARA` transaction. PROCESS DIRECTOR Accounts Payable provides a program for writing and deleting in order to archive the transaction data of the PROCESS DIRECTOR Accounts Payable tables.

Preparing to archive

1. Create the `/COCKPIT/S` archiving object.
2. Enter the required settings for the `/COCKPIT/S` archiving object in `/SARA`.

Performing an archive

- Archiving documents
- Deleting documents
- Analyzing documents
- Administration

Preparing to archive

Creating the archiving object

You must create the /COCKPIT/S archiving object.

1. Go to /AOBJ.
2. Click the **Display/Change** button and click New entries.
3. Enter the general **Archiving object** values.
4. Enter the **Structure definition** values.
5. Enter the Tables from which you only delete entries values.
6. Enter the **Customizing settings** values.
7. Enter the **Read program** values.
8. Save the /COCKPIT/S archiving object.

Archiving object settings: General

The /COCKPIT/S archiving object must contain these values:

Setting	Value to enter
Object Name	/COCKPIT/S
Text	ReadSoft PROCESS DIRECTOR Accounts Payable
Write Program	/COCKPIT/SARA_WRITE

Setting	Value to enter
Delete Program	/COCKPIT/SARA_DELETE
Index Build Program	/COCKPIT/SARA_INDEX

Extra settings are required for reloading documents. See Reloading documents: Overview.

Archiving object settings: Structure definition

The `/COCKPIT/S` archiving object must contain these values:

Record no.	Parent segment	Segment	Structure	Do not delete
10		/COCKPIT/THDR	[blank]	[unchecked]
20	/COCKPIT/THDR	/COCKPIT/THDRO	[blank]	[unchecked]
30	/COCKPIT/THDR	/COCKPIT/THDRV	[blank]	[unchecked]
40	/COCKPIT/THDR	/COCKPIT/TITEM	[blank]	[unchecked]
50	/COCKPIT/THDR	/COCKPIT/TITEMO	[blank]	[unchecked]
60	/COCKPIT/THDR	/COCKPIT/TITEMV	[blank]	[unchecked]
70	/COCKPIT/THDR	/COCKPIT/TACCT	[blank]	[unchecked]
80	/COCKPIT/THDR	/COCKPIT/TACCTO	[blank]	[unchecked]
90	/COCKPIT/THDR	/COCKPIT/TACCTV	[blank]	[unchecked]
100	/COCKPIT/THDR	/COCKPIT/TTAX	[blank]	[unchecked]

Record no.	Parent segment	Segment	Structure	Do not delete
110	/COCKPIT/THDR	/COCKPIT/TTAXO	[blank]	[unchecked]
120	/COCKPIT/THDR	/COCKPIT/TTAXV	[blank]	[unchecked]
130	/COCKPIT/THDR	/COCKPIT/TCHECKO	[blank]	[unchecked]
140	/COCKPIT/THDR	/COCKPIT/THIST	[blank]	[unchecked]
150	/COCKPIT/THDR	/COCKPIT/TMIME	[blank]	[unchecked]
160	/COCKPIT/THDR	/COCKPIT/TMSG	[blank]	[unchecked]
170	/COCKPIT/THDR	/COCKPIT/TSTAT	[blank]	[unchecked]
180	/COCKPIT/THDR	/COCKPIT/TACCAS	[blank]	[unchecked]
190	/COCKPIT/THDR	/COCKPIT/TACCASV	[blank]	[unchecked]
200	/COCKPIT/THDR	/COCKPIT/TTXTHDR	[blank]	[unchecked]
210	/COCKPIT/TTXTHDR	/COCKPIT/TTXTBOD	[blank]	[unchecked]
220	/COCKPIT/THDR	/COCKPIT/TWC	[blank]	[unchecked]
230	/COCKPIT/THDR	/COCKPIT/TWCV	[blank]	[unchecked]
240	/COCKPIT/THDR	/COCKPIT/TWCS	[blank]	[unchecked]

Record no.	Parent segment	Segment	Structure	Do not delete
250	/COCKPIT/THDR	/COCKPIT/TWCSV	[blank]	[unchecked]
260	/COCKPIT/THDR	/COCKPIT/TWCSF	[blank]	[unchecked]
270	/COCKPIT/THDR	/COCKPIT/TWCF	[blank]	[unchecked]
280	/COCKPIT/THDR	/COCKPIT/TWCFN	[blank]	[unchecked]
290	/COCKPIT/THDR	/COCKPIT/TVEND	[blank]	[unchecked]
300	/COCKPIT/THDR	/COCKPIT/TCPDKIG	[blank]	[unchecked]
310	/COCKPIT/THDR	/COCKPIT/TERRORS	[blank]	[unchecked]
320	/COCKPIT/THDR	/COCKPIT/TERRORV	[blank]	[unchecked]
330	/COCKPIT/THDR	/COCKPIT/TEDI	[blank]	[unchecked]
340	/COCKPIT/THDR	/COCKPIT/TFLAG	[blank]	[unchecked]
350	/COCKPIT/THDR	/COCKPIT/TWCLASS	[blank]	[unchecked]
360	/COCKPIT/THDR	/COCKPIT/TWCLASV	[blank]	[unchecked]
370	/COCKPIT/THDR	/COCKPIT/TWCSE	[blank]	[unchecked]

Archiving object settings: Customizing settings

The `/COCKPIT/S` archiving object must contain these values:

Setting	Value to enter
Logical file name	/COCKPIT/S_FILE
Maximum size in MB	[blank]
Maximum number of data objects	200
Commit counter	100
Test mode variant	TESTLAUF
Production mode variant	PRODUKTION
Build index	[checked]

Archiving object settings: Read program

The `/COCKPIT/S` archiving object must contain these values:

Read program	Archive selection active
/COCKPIT/SARA_READ	[checked]
/COCKPIT/SARA_READ_DIRECT	[checked]

Preparing SARA

You must configure the SARA program for the `/COCKPIT/S` archiving object.

1. Go to `/SARA`.
2. Enter `/COCKPIT/S` in the **Object name** field and click **Customizing**.
3. In the Data archiving customizing popup window, go to **Cross-Archiving Object Customizing** > **Technical Settings**.

4. Enter the required settings (see below).

5. Save the changes.

SARA setting

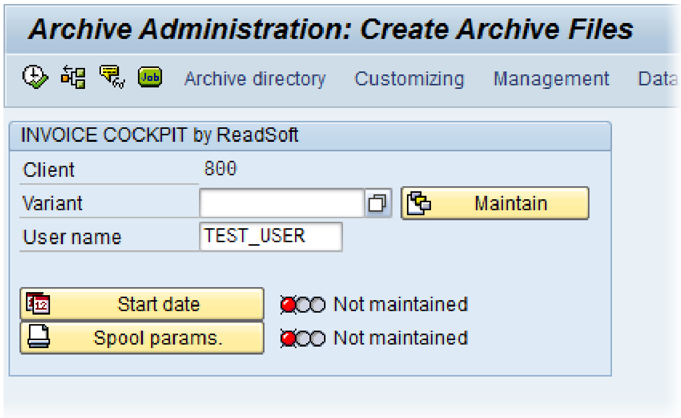
The `/SARA` program must contain these values for the `/COCKPIT/S` archiving object under **Cross-Archiving Object Customizing** > **Technical Settings**:

Setting	Value to enter
Data archiving monitor **– Active**	[checked]
Check access for archive selection **– For files in file system**	[checked]
Verification of archive files **– Create verifiable files**	[checked]
Time of verification **– Delete** **– Read** **– Reload**	 [checked] [checked] [checked]

Performing an archive

Archiving documents

The `/SARA` transaction can be used to archive PROCESS DIRECTOR Accounts Payable data tables using the `/COCKPIT/S` archiving object.



Here, you can include the background job for `/COCKPIT/SARA_WRITE`., the program for writing.

Enter a predefined variant, or create a new one. Additionally, you have to set up the starting date of the background job and possibly the spool parameters.

The program for deletions is not automatically started after the termination of the program for writing. However, this can be set afterwards.

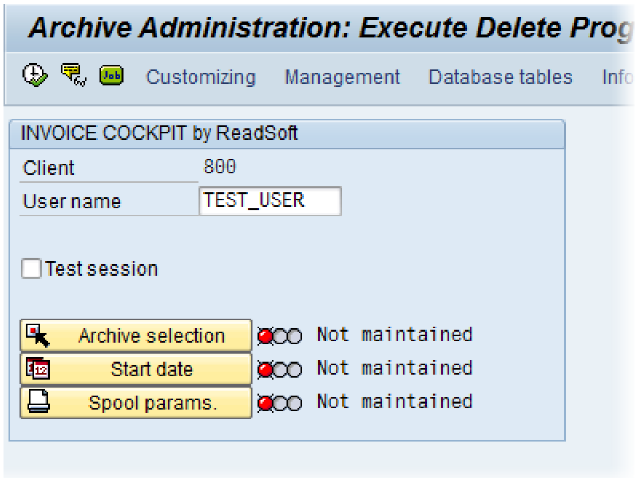
If archiving for the archiving object has been carried out and there are still archive data existent from this archiving run which has not yet been processed by the appropriate program for deletion, you now see a window open with a corresponding text. The same applies for discontinued archiving runs.

Make sure in such a case that the job that is to be included again will not select the same data that is still contained in the archive files that have yet to be processed.

Warning: If you archive a large amount of PROCESS DIRECTOR Accounts Payable documents (>25% of all documents), indexes for the `/COCKPIT/THDR` table will become fragmented and can slow down your system. Contact you database administrator to optimize/rebuild the indexes for `/COCKPIT/THDR` after successfully deleting documents in SARA archiving. The quality of primary indexes on other `/COCKPIT/T*` tables might also be affected.

Archiving: Deleting documents

The `/SARA` transaction can be used to delete PROCESS DIRECTOR Accounts Payable documents by using the `/COCKPIT/S` archiving object.

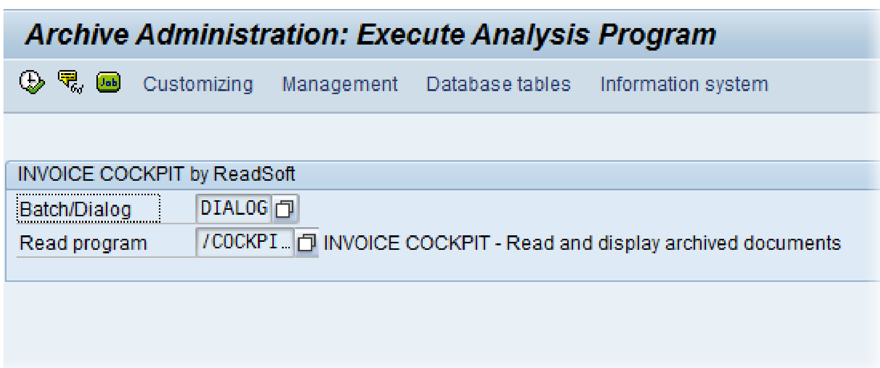


If you activate **Test session**, the program does not carry out any database alterations. If **Test session** is deactive the selected data are deleted from the tables. Using **Archive selection** you can select the archive files from which the data is to be deleted. You must also set the starting date of the background job and possibly the spool parameters.

During the deleting process the search index for the selected data gets created.

Archiving: Analyzing documents

The `/SARA` transaction can be used to analyze PROCESS DIRECTOR Accounts Payable documents by using the `/COCKPIT/S` archiving object.



You can carry out the evaluation of the archive files with the configured program for reading (`/COCKPIT/SARA_READ` or `/COCKPIT/SARA_READ_DIRECT`) either in dialog mode or via a background job. The operation type and the program for reading can be selected with the F4 key.

If you include a background job for the evaluation, only the header lines of the evaluation are written in the spool order. It is recommended to use the dialog mode for the evaluation.

/COCKPIT/SARA_READ

With this program, reading the stored data sequentially from the stored archive is possible. A direct access to the stored data is not possible, that is, a delimitation of the data of an archive file is not possible.

/COCKPIT/SARA_READ_DIRECT

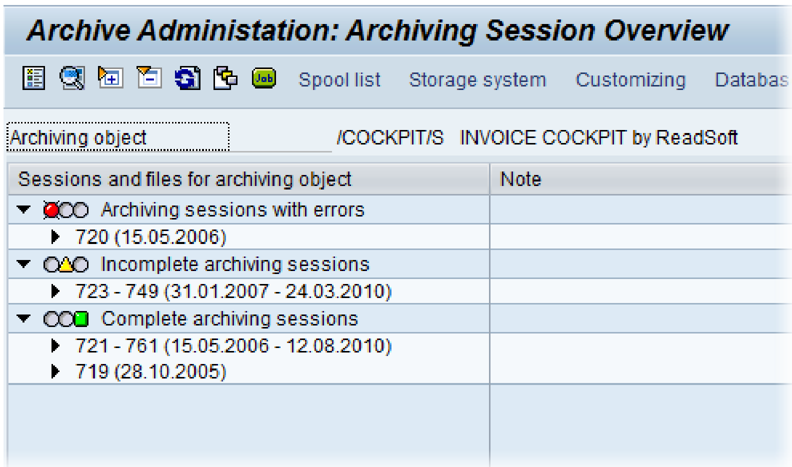
With this program, reading a direct access to the stored data is possible. There is access to the already laid out search indexes, meaning an archive selection is not existent in this case, the selection is made via all archive files for which search indexes are existent. On the following selection screen you can search for specific documents.

Note: These other search fields are determined/configured in the `CI_COCKPIT_SARA` include in the `/COCKPIT/TSARAID` table. If you change `CI_COCKPIT_SARA`, you must rebuild the index in order for these fields to appear in the above screen.

To rebuild the index, you must first execute `/COCKPIT/SARA_INIT_INDEX` once using `/SE38` which deletes the index flags of all archives from archive administration. Second, build the index again using `/SARA`.

Archiving: Administration

The `/SARA` transaction can be used to manage and view the archive of PROCESS DIRECTOR Accounts Payable documents.



Here, you find an overview of all archiving runs for an archiving object in which the administration information can be displayed and evaluated.

Additional information for the data archiving and archiving administration can be found in the standard SAP documentation.

Reloading documents

Overview

It is possible to reload documents that have been archived back into PROCESS DIRECTOR Accounts Payable. This is helpful if you need to retrieve documents again for some reason.

Warning: Please read the following message from SAP about reloading:

"Reloading archived data to the database can cause problems, therefore you should only do this in an emergency. For example, if you establish immediately after archiving that you have archived the wrong data or too much data. You should, wherever possible reload this data immediately after archiving."

You reload all archive files from a complete archiving session—you cannot reload individual documents. When reloading, the archive file(s) remains in the archiving session and is not altered nor deleted.

Requirements

The `/COCKPIT/SARA_RELOAD` program is used for reloading. In order to use it, you need to change two parameters in the `/COCKPIT/S` archiving object:

1. Go to the SAP archiving object menu: `/AOBJ`.

2. Open the `/COCKPIT/S` object.

3. In the **Reload prog.** field, enter `/COCKPIT/SARA_RELOAD`.

4. Check the **No reload** (4.0B - 4.6C) or **Prohibit New Session During Reload** (4.70) box.

Procedure

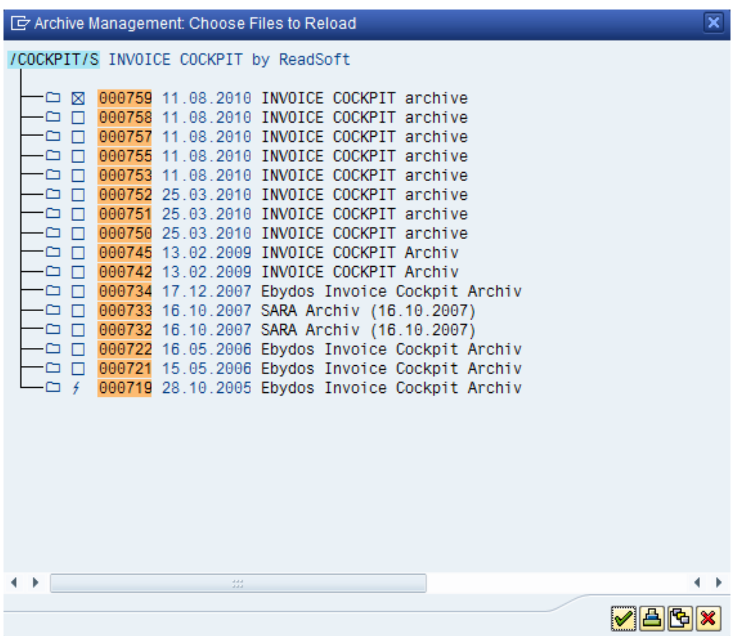
1. Go to `/SARA`.

2. Enter the `/COCKPIT/S` object name and press ENTER.

3. In the SAP menu, go to **Goto** > **Reload**.

   Here you can use or create a variant, if desired.

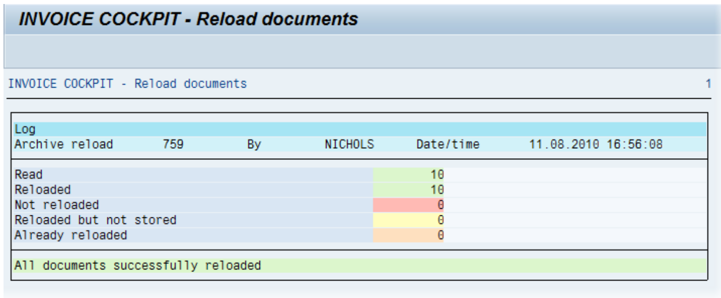
4. Press **Archive selection** and select the archive file(s) to reload.



5. Select the Start date and Spool parameters.

6. Click the **Execute** button.

   The result:

   The archive file is reloaded and the documents are now available in PROCESS DIRECTOR Accounts Payable.

Reload documents result dialog

Parameter	Description
Read	The number of documents in the archive file that the program has attempted to reload into PROCESS DIRECTOR Accounts Payable.
Reloaded	The number of documents reloaded into PROCESS DIRECTOR Accounts Payable.
Not reloaded	The number of documents that were not reloaded into PROCESS DIRECTOR Accounts Payable.
Reloaded but not stored	The number of documents that were reloaded into PROCESS DIRECTOR Accounts Payable, but for which no corresponding entry could be created in the `/COCKPIT/TSARA` table.
Already reloaded	The number of documents that were not reloaded into PROCESS DIRECTOR Accounts Payable because they were already reloaded previously. These documents are skipped by the program.

Notes:

After reloading, the index(es) of the archived file(s) is deleted and must be rebuilt.

An entry is made in the `/COCKPIT/TSARA` table for every document reloaded. This table contains the Client ID and document GUID only. The table is used for reference purposes, to ensure that no document is ever reloaded twice.

Reloaded documents cannot be archived because the archive file from which the documents were retrieved is not deleted during the reloading.

Appendix A – IMG

Mandatory settings

Managing license key and activating product

`/COCKPIT/C46`

Setting	Description
License key	The encrypted number that validates the license.
SAP installation no.	The SAP Installation number of your system.
Client	*Optional—only if your license is restricted to a specific client. If the Client is not provided in your license, the license is valid for all clients.* The client number of your system.
SAP System ID	The SAP System ID of your system.
License products	The PROCESS DIRECTOR Accounts Payable component the license is valid for: C - PROCESS DIRECTOR Accounts Payable E - EDI COCKPIT (1) D - PROCESS DIRECTOR Accounts Payable & EDI COCKPIT (2) A - ANALYZER W - WORK CYCLE I - INFO MAIL B - WEB BOARD M - MOBILE APPROVAL

Setting	Description
	T - TRAVEL EXPENSES R - REPORTER
License type	F - Normal/Full T - Test D - Demo
Expiry date	The date the license expires, at which point you can no longer use the software without installing a new license.
Licensed amount	The production server volume limit for Normal licenses.

(1) It is possible to run EDI COCKPIT together with PROCESS DIRECTOR Accounts Payable with only a license for EDI COCKPIT. Requirements: 1. A valid EDI COCKPIT license. 2. The sum of the document counters for EDI COCKPIT and PROCESS DIRECTOR Accounts Payable must not exceed the license volume for EDI COCKPIT.

(2) The volume is equal to the total documents processed by PROCESS DIRECTOR Accounts Payable and EDI COCKPIT. Adding this license removes any existing PROCESS DIRECTOR Accounts Payable and/or EDI COCKPIT licenses.

Data transfer

Set field mapping

`/COCKPIT/C1`

Setting	Description
Profile	The name of the invoice profile in INVOICES.
Structure	The type of field: • CHECKDATA (used to identify the vendor) • HEADER • ITEM

Setting	Description
	• TAX • ACCOUNT • ACCASS • SORDER
External field	The name of the field as it appears in INVOICES.
Internal field	The name of the field in PROCESS DIRECTOR Accounts Payable.

Defining tax field mapping

`/COCKPIT/C2`

Setting	Description
Profile	The name of the invoice profile in INVOICES.
External tax rate	The name of the field in INVOICES for the tax rate.
External tax amount	The name of the field in INVOICES for the tax amount.
External tax code	The name of the field in INVOICES for the tax code.

Setting tax code determination

`/COCKPIT/C15`

Setting	Description
Country	The country of the buying organization.

Setting	Description
Country	The country of the vendor.
Tax rate	The name of the field in INVOICES for the tax rate.
Tax code	The SAP tax code corresponding to the specified tax rate.

Post

Set automatic posting procedure

`/COCKPIT/C7`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Posting FI	The posting setting for FI documents after transfer (see below).
Posting MM	The posting setting for MM documents after transfer (see below).

Posting settings

Setting	Description
01 Park	Park error-free documents.
02 Post	Post error-free documents.
03 Attempt to post, then park	Attempt to post documents. If the document cannot be posted, attempt to park it.

Setting	Description
04 No attempt	No action is performed on the document upon its transfer.
05 Check	The additional checks configured for the document are executed.

Define posting

`/COCKPIT/C6`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR document type.
Document type – Invoice (FI)	The document type used for posting FI invoices.
Document type – Credit memo (FI)	The document type used for posting FI credit notes.
Document type – Invoice (MM)	The document type used for posting MM invoices. If this entry is blank, the document type for FI invoices is used.
Document type – Credit memo (MM)	The document type used for posting MM credit notes. If this entry is blank, the document type for FI credit notes is used.
Posting key – Vendor debit	The posting code used for posting debits to a vendor account.
Posting key – Vendor credit	The posting code used for posting credits to a vendor account.

Setting	Description
Posting key – G/L account debit	The posting code used for posting debits to a general ledger account.
Posting key – G/L account credit	The posting code used for posting credits to a general ledger account.
Calculate tax	Calculates the tax automatically.
Use FI posting-interface instead of FI BAPI to post	Uses the FI posting interface for FI postings. This is the same as posting via transaction FB01, and includes any customized settings for this transaction included in the SAP system. **Warning!** If this setting is deactivated, you must perform some other configuration to prevent errors.
FI posting-interface: Deactivate authorisation check	Deactivates the authorization check when posting documents.
Support mult. account assignm.	Activates support for multiple account allocations.
Planned del. costs	Activates support for planned additional expenses.
Generate final version from SAP document	Creates a final version of the PROCESS DIRECTOR document from the posted SAP document. **Warning!** Do not activate this for documents containing items assigned to different company codes. If you do, only line items corresponding to the company code in the header will be transferred. All others will be lost!

Setting	Description
MM item suggestion	The method used to add line-item data from the invoice's purchase order.
MM item suggestion version	PROCESS DIRECTOR 7.1 AP with pop-up: Displays a pop-up dialog to users to enter PO and delivery note numbers. The line item proposal is then executed based on these entries. **Note**: If the company code in the PROCESS DIRECTOR document header is different from the company code in the purchase order, the PROCESS DIRECTOR document company code is changed to be the same as the purchase order. **PD AP 7.1 without company code replace**: This behaves in the same way as **PROCESS DIRECTOR AP 7.1 with popup**, except that it does not overwrite the company code in the PROCESS DIRECTOR document. ICS 3.2 and earlier: Does not display a pop-up dialog. Proposes line items based on PO numbers transferred and any delivery notes in SAP.
PD tax code	When this box is checked, PROCESS DIRECTOR behaves as follows. Behavior 1: A PROCESS DIRECTOR document contains one (and only one) entry in the header tax table. The related purchase order line items have no tax code entered. Upon purchase order item proposal, PROCESS DIRECTOR will enter the tax code from the header data into each line item's tax code field. Behavior 2: A PROCESS DIRECTOR document contains no tax code information in the header. A related purchase order has one or more line items with an entered tax code. Upon purchase order item proposal, PROCESS DIRECTOR will place a tax code value in the header data tax table for each line item with a distinct value. No other information will be entered in the header data tax table.
CO-PA segment during FI entry	Activate this setting for company codes where the result-object data will be entered. You must also copy the setting of the entry mask of the RFBU procedure for the RFBV procedure.
Company code dependent value validation	Normally PROCESS DIRECTOR will ensure that the cost center is valid in the cost center master data.

Setting	Description
	When this parameter is checked PROCESS DIRECTOR will also validate that the cost center is valid in the company code entered in the PROCESS DIRECTOR header field. This may need to be unchecked if there are multiple line items with different company codes per line item. In this case, each line item cost center would be validated against a single company code (in the PROCESS DIRECTOR header) and a validation error may occur.
Activate Nota Fiscal support	Allows PROCESS DIRECTOR to generate Nota Fiscal documents when posting. Can only be used with Brazilian company codes. See Nota fiscal for more information. **Important**: Only activate this option if you have imported the nota fiscal transport from ReadSoft.

MM item suggestion

`/COCKPIT/C6`

Setting	Resulting line-item data
(-) Only billable (default)	Adds line-item data for only items that have been received. The line-item data includes quantities and price amounts (if available). If some but not all of the goods in a line-item have been received, only items received are added to the invoice. This proposal method is the same used in MIRO.
(1) Non billable (without price/quantity)	Adds line-item data for all items that have been received, in the same way as the **Only billable** option. If there are no billable items on the invoice, PROCESS DIRECTOR Accounts Payable adds the non-billable items, but does not include the price and quantity. If an invoice contains billable and non-billable items, only the billable items are added to the invoice.

Setting	Resulting line-item data
(2) Non billable (with PO price/quantity)	This option is the same as **Non billable (without price/quantity)**, but with the addition of prices and quantities.
(3) All (non billable without price/quantity)	Adds all billable and all non-billable line items to the invoice. Prices and quantities are not included for non-billable items.
(4) All (non billable with PO price/quantity)	This option is the same as **All (non billable without price/quantity)**, but with the addition of prices and quantities for non-billable items.

Note: If the **GR-based IV** (GR-based invoice verification) setting in the purchase order is active for a line-item, this item will only be proposed when the goods have been received, regardless of which of the above settings is used. (If a partial delivery has been made, only these quantities are added to the invoice.) For items that are proposed, the goods receipt number is also added to the line-item data.

MM item suggestion version

7.1 AP with pop-up

`/COCKPIT/C6`

This is one of the two methods you can use for proposing line items to invoices (the other is ICS 3.2 and earlier).

- During transfer of invoices into PROCESS DIRECTOR
- Manual execution in `/COCKPIT/1`

Note: The following descriptions assume that **Only billable** is set for the **MM item suggestion** setting.

During transfer

1. If only a delivery note number(s) is available:

   PROCESS DIRECTOR proposes line items using the delivery note(s), based on the supplier in the PROCESS DIRECTOR document.

2. If only a purchase order number(s) is available:

   PROCESS DIRECTOR proposes line items using the purchase order(s).

3. If delivery note number(s) and purchase order number(s) are available:

   - A line item proposal is made using the delivery note(s). The proposal is based on the vendor.

- All items not corresponding to the purchase order(s) are removed.
- An additional proposal of line items is performed using items remaining on the PO(s) but not on the delivery note(s).
- The results of the second item proposal are added to the results of the first. These items are the ones that appear in the PROCESS DIRECTOR document.

The delivery note(s) and purchase order(s) used for the line item proposal are saved in the PROCESS DIRECTOR document.

If no line item proposal can be executed during the transfer of invoices into PROCESS DIRECTOR, the delivery note and purchase order number(s) are not saved in the PROCESS DIRECTOR document.

Line-item proposals executed during transfer use an SAP batch user, which has all the required permissions for the operation. Therefore, it is possible that items can be proposed during transfer that a regular SAP user may not be able to see or post, and which may not appear if this regular SAP user proposes items him/herself. In these cases, users receives an error message informing them that they do not have the required permissions.

Optional behaviour (via User Exit 046)

Line line-item proposals can be restricted to specific plants. All plants of the company code are determined and an authority check is performed for the user. Items are only proposed for those plants that the user has sufficient rights for.

Manual execution

A pop-up dialog is displayed in which users can enter the PO and delivery note numbers to base the item proposal on.

1. The delivery notes in the system are determined.

   If no delivery note exists, an error is displayed.

2. For each delivery note, the supplier is determined.

   - If at least one supplier on the delivery note is the same as the vendor, the delivery note number is used for line-item proposals
   - If no suppliers on the delivery note are the same as the vendor, an error message is displayed
   - If no vendor is tranferred or determined in PROCESS DIRECTOR, and only one supplier exists in the delivery note(s), this supplier is saved as the vendor in the PROCESS DIRECTOR document.
   - If no vendor is transferred or determined in PROCESS DIRECTOR, and more than one supplier exists in the delivery note(s), a pop-up window appears, which displays the list of suppliers found. The user can then select one and this is saved as the vendor in the PROCESS DIRECTOR document.

3. For each purchase order, the supplier is determined.

    - If the supplier in the PO is the same as the vendor in the PROCESS DIRECTOR document, the PO is used for line-item proposals. In order to perform this check, the PROCESS DIRECTOR additonal check 0002 - The vendor is the one listed on the purchase order must be activated.
    - If the supplier in the PO is not the same as the vendor in the PROCESS DIRECTOR document, an error message is displayed.
    - If no vendor is transferred or determined in PROCESS DIRECTOR, the supplier from the PO is saved as the vendor in the PROCESS DIRECTOR document.

ICS 3.2 and earlier

`/COCKPIT/C6`

This is one of the two methods you can use for proposing line items to invoices. The other is PROCESS DIRECTOR 7.1 AP with pop-up.

The following tables describe how line items are added to invoices, depending on:

- Whether purchase order and/or delivery note numbers are included in the invoice, and if so,
- Their location on the invoice (in the header on in the line item).

If a delivery note number and purchase order number are both located in the invoice header, the items proposed are based on the delivery note. You can change this behavior by creating a user exit to remove the delivery note number during the transfer of the invoice to PROCESS DIRECTOR Accounts Payable.

The following scenarios assume the **Only billable** setting for **MM item suggestion** is used.

During the transfer of an invoice to PROCESS DIRECTOR

Scenario	Result
PO number in invoice header	Line-item data is added for all items that have been received. For GR-based IV items, the goods receipt number is determined and added to the invoice together with the delivery note number (if this is on the goods receipt).
Delivery note number in invoice header	Line-item data is added for all delivery note items that have a goods receipt. The delivery note is added to each of the line items.

Scenario	Result
	If the delivery note references only one purchase order, the PO number is added to the invoice header. If more than one purchase order is referenced, the purchase order numbers are added to the respective line items. If The vendor is the one listed on the purchase order check is not activated, it may be possible that unrelated PO numbers from other vendors are added.
Delivery note number in invoice header **Related PO number in invoice header**	Line-item data is added for all received PO items with a corresponding delivery note. Received PO items with a differing or no delivery note are not added.
Delivery note number in invoice header **Unrelated PO number in invoice header**	The PO number is deleted from the invoice header and line items are added based on the delivery note.

Using the Propose doc. item from PO button

Scenario	Result
PO number in invoice header **No existing items in COCKPIT document**	Line-item data is added for all PO items that have been received.
Delivery note number in invoice header **No existing items in COCKPIT document**	Line-item data is added for all delivery note items that have been received. The delivery note number is added to each of the line items. If more than one purchase order is referenced, the purchase order numbers are added to the respective line items.
Delivery note number in invoice header **Related PO number in invoice header**	As above.

Scenario	Result
No existing items in COCKPIT document	
PO number in invoice header **Delivery note number in line item**	Line-item data is added for all goods received with a corresponding PO and delivery note number(s). If more than one PO number is referenced, the PO number in the header field is cleared.
PO number in line item **Delivery note number in line item**	Line-item data is added for all goods received with the corresponding delivery note number(s).

Checks performed

Before proposing line items, PROCESS DIRECTOR must determine which delivery notes and purchase orders to use to propose data from. The method of used depends on the value for **MM item suggestion version** in `/COCKPIT/C6`.

- PROCESS DIRECTOR 7.1 and later
- INVOICE COCKPIT SUITE 3.2 and earlier

PROCESS DIRECTOR 7.1 and later

1. PROCESS DIRECTOR checks every delivery note number on the invoice to determine those that are currently in SAP (entered in the goods receipts). Delivery notes which are not already in the system are ignored and not used for proposing line items.

2. For the first item on each delivery note, PROCESS DIRECTOR determines the supplier and:

   a. If at least one vendor is specified on the delivery note or can be otherwise determined and:

   - if at least one supplier on the delivery note is the same as the vendor, the delivery note number is used for line-item proposals

   - if no suppliers on the delivery note is the same as the vendor, the delivery note number is not used for line-item proposals

   b. If no vendor is specified on the delivery note, or cannot otherwise be determined and:

   - Exactly one supplier for all delivery notes is found, this supplier is added as the vendor in the PROCESS DIRECTOR document. The delivery note numbers are used for line-item proposals

- If more than one supplier for all delivery notes is found, delivery notes not belonging to the current financial year are filtered out for the following calculations:
- If exactly one supplier is found for all delivery notes (in the current financial year), this supplier is added as the vendor in the PROCESS DIRECTOR document. The delivery note numbers are used for line-item proposals.
- If more than one supplier is found for all delivery notes (in the current finanical year), these delivery notes are not used for line-item proposals.

3. The supplier is determined for each order. If no order can be found in the system, it is ignored and not used for line-item proposals.
   - The vendor can be determined via the supplier when the purchase order number is transferred. Determining the supplier occurs before line items are proposed.
   - If the supplier in the order is the same as the vendor, the purchase order is used for the line item proposal. In order to perform this check, the PROCESS DIRECTOR Additonal check 0002 - The vendor is the one listed on the purchase order must be activated.
   - If the supplier of the order is not the same as the one in PROCESS DIRECTOR, the order is not used when proposing line items.

After these checks have been performed, PROCESS DIRECTOR now has a list of valid delivery notes and purchase orders to use when proposing line items.

When proposing line items, PROCESS DIRECTOR uses the value of the **MM item suggestion** setting in `/COCKPIT/C6`.

Functions

Set available transactions

`/COCKPIT/C9`

- Transaction called when Performing
- Posting method

Transaction called when Performing

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Post FI	The transaction called when users Perform an FI document: • FB60 • MIRO • FB10 • FB01
Detail – Variant	The posting setting for MM documents after transfer (see below).
Transaction code	The transaction code to call (overrides that in **Post FI**).
Post MM	The transaction called when users Perform an MM document: • MIRO • MRHR • MR01
Transaction code	The transaction code to call (overrides that in **Post MM**).

Posting method

The `/COCKPIT/C9` configuration table also determines the posting method to use (even though the posting method is not displayed in the table).

Transaction in Post FI/Post MM	Posting method	Perform method
FB01	BAPI_ACC_ INVOICE_RECEIPT_POST	Batch-Input on TA FB01
FB01 + FI Posting ...	FI Posting-Interface	Batch-Input on TA FB01
FB60	BAPI_ACC_ INVOICE_RECEIPT_POST	Batch-Input on TA FB60
FB60 + FI Posting ...	FI Posting-Interface	Batch-Input on TA FB60
MIRO	BAPI_INCOMING INVOICE_CREATE	Batch-Input on TA MIRO

Set active functions

`/COCKPIT/C4`

Here you can enable/disable various PROCESS DIRECTOR Accounts Payable functions, such as parking and deleting documents. This table applies to all PROCESS DIRECTOR Accounts Payable users. To restrict access to certain functions for specific users, use User Exit 041 - Suppress buttons.

Other

Defining archive link

`/COCKPIT/C16`

Setting	Description
Object	(Business object type) The archive connection can be operated on the basis of the business object type.
User	The archive connection can be operated by the user.
Connection	The archive connection determines whether and how an archive connection is to be carried out by PROCESS DIRECTOR Accounts Payable. PROCESS DIRECTOR Accounts Payable supports all archive scenarios of SAP, and for this purpose, exclusively sets up the basis of the SAP archive interface, ArchiveLink. PROCESS DIRECTOR Accounts Payable supports the following connections: • Barcode - without document transfer. The SAP archiving scenario with barcode checks for the received document has a barcode and that this barcode is handed over to PROCESS DIRECTOR Accounts Payable from the external application via the entry interface. At the time of posting, the barcode is indicated automatically in order for the SAP system to create the archive connection via the barcode. The manual entry of the barcode into the SAP posting transaction is omitted. The document storage in the archive is carried out independently of the SAP system. • Archive document ID. without document transfer. The SAP archiving scenario without barcode checks the received document has been archived at the time of the scanning. The archive document ID is handed over to PROCESS DIRECTOR Accounts Payable from the external application via the entry interface. When posting a document, PROCESS DIRECTOR Accounts Payable automatically creates an archive connection in the SAP system via ArchiveLink. The document storage in the archive is carried out independently of the SAP system. • Archive document I.D - with document transfer (HTTP). Same as archive document ID – without document transfer, however, the document is stored in the archive before the connection via HTTP and ArchiveLink.

Setting	Description
	The prerequisite here is the access to the scanned image via HTTP and the handover of an URL in the entry interface.
Doc. type	The PROCESS DIRECTOR Accounts Payable document type. The document is archived under the document type. The archive is entered in the R/3 Customizing according to the document type. Table for the determination of the archive document type – For the allocation of a document type, the PROCESS DIRECTOR Accounts Payable table, /COCKPIT/CARCOBJ, or the tables, T003B or T003S, included in the SAP standard, can be used. This value only has significance for the business object /COCKPIT/B used by PROCESS DIRECTOR Accounts Payable and is only of significance if the following settings were made at the time of the archive connection: 2, archive document ID without document transfer or 3, archive document ID with document transfer – HTTP.

Additional system-wide (and cross-client) settings

`/COCKPIT/C22`

Here you specify whether SAP Note 561175 is used. You need to activate this setting (as well as the note) if you:

- Deactivate the **Use FI posting-interface instead of FI BAPI to post** setting in `/COCKPIT/C6`. (That is, the FI BAPI is used.)
- If reversing documents is performed using PROCESS DIRECTOR Accounts Payable (which uses the FI BAPI).

This note is required to plug a limitation with the FI BAPI, which does not recognize the ZEBY object type.

Optional settings

Vendor selection

General settings for vendor determination

/COCKPIT/C41

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Filter blocked vendors	The vendor search does not use vendors marked as blocked in SAP.
Filter deleted vendors	The vendor search does not use vendors marked for deletion in SAP.
Do not post if vendor identified	Prevents the document from being posted automatically upon receipt.
Show detailed messages	Include details of the vendor search in the document's message log.

Set active search types for vendor search

Set active search types for vendor search

/COCKPIT/C32

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR document type.

Setting	Description
Sequence	The order in which the search is performed, if more than one search is configured. 0 is the first search executed.
Type for search	The method used to search for the vendor. You can search according to: • 001 - Purchase order number • 002 - VAT registration number • 003 - Tax reference number (tax code) • 004 - IBAN • 005 - Vendor name • 006 - Bank data • 007 - Address • 008 - Email address • 009 - Telephone and fax number • 010 - History table (previous search results) • 012 - Fuzzy search by Telephone/Fax Number • 013 - Search by Tax Reference Number 1, 2, 3 or 4
Vendor search	The name of the search type selected above (cannot be changed).
Hit	The action to perform when the vendor is found: • A – Add result – The result set is added to the list of all found vendors. • B – Compare result with found vendors – The result set is compared with the list of all found vendors. Warning: If the result set is empty, the list of all found vendors will be deleted accordingly. • C – Add result only in the case of one found vendor – The result set is added to the list with all found vendors, but only if the result set consists of one entry.

Setting	Description
	• D – Compare result only in the case of one found vendor. The result set is compared to the list with all found vendors, but only if the result set consists of one entry. • E – Add result; end when only one hit. The result set is added to the list with all found vendors. When the resulting list of all found vendors only consists of one entry, the search is cancelled and all further search areas are skipped. • F – Compare result; end when exactly one hit. The result set is compared to the list with all found vendors. When the resulting list, of all found vendors, only consists of one entry, the search is cancelled and all further search areas are skipped. • G – Add result only when one hit; end when exactly one hit. The result set is added to the list with all found vendors, but only when the result set consists of one entry. When the resulting list, with all found vendors, also only consists of one entry, the search is cancelled and all further search areas are skipped.
	• H – Compare result only when one hit; end when exactly one hit. The result set is compared to the list with all found vendors, but only when the result set consists of one entry. When the resulting list, with all found vendors, also only consists of one entry the search is cancelled and all further search areas are skipped. • I – Add result; end when several hits. The result set is added to the list with all found vendors. When the resulting list with all found vendors consists of several entries, the search is cancelled and all further search areas are skipped. • J – Compare result; end when several hits. The result set is compared to the list with all found vendors. When the resulting list with all found vendors consists of more than one entry, the search is cancelled and all further search areas are skipped. • K – Add result only in the case of one found vendor; end when several hits. The result set is added to the list with all found vendors, but only when the result set consists of one entry. When the resulting list with all found vendors consists of several entries, the search is cancelled and all further search areas are skipped. • L – Compare result only in the case of one found vendor; end when several hits. The result set is compared to the list with all found vendors,

Setting	Description
	but only when the result set consists of one entry. When the resulting list with all found vendors consists of several entries, the search is cancelled and all further search areas are skipped.
Parameter/details	Most **Types of search** have extra settings to configure.

Vendor search 002 – VAT registration number: Parameters

/COCKPIT/C32

Parameter	Description
Allowed special characters	Letters and special characters in the VAT number that are included in the search (in addition to numbers).

Vendor search 003 – Tax reference number: Parameters

/COCKPIT/C32

Parameter	Description
Search by tax number 1 **Search by tax number 2** **Search by tax number 3** **Search by tax number 4**	Each one of the four tax numbers (tax codes) for the vendor can be searched.
Allowed special characters	Letters and special characters in the VAT number that are included in the search (in addition to numbers).

Vendor search 005 – Vendor name: Parameters

/COCKPIT/C32

Parameter	Description
Filter special characters	Characters that are excluded from the vendor search. Punctuation is a typical example: , : - .
Separator of key terms	A character that separates the words in the name.
Filter key terms	Words that are excluded from the vendor search. For example, **Inc.**, **AG**, **AB**.

Vendor search 006 – Bank data: Parameters

/COCKPIT/C32

Parameter	Description
Remove special characters from bank data	Special characters in the bank data are not included in the search.
Ignore leading zeros in account number	Do not include leading zeros in the search. This is helpful when there are leading zeros in the account number in the master data, but not on the invoice. Note that if a vendor is found with leading zeros in the bank account number, the search is stopped. **Example** Vendor 1: 88123456 Vendor 2: 12345600 Vendor 3: 00123456 Ignore leading zeros in account number: Active Bank data search with wildcard at beginning and end: Active *Result:* Only Vendor 3 is returned. If **Ignore leading zeros in account number** was inactive, all three vendors would be returned.

Parameter	Description
Bank data search with wildcard at end	Allow other characters at the end of the bank data. This is helpful when entries in the bank data on the invoice are incomplete or have not been transferred completely.
Bank data search with wildcard at beginning and end	Allow other characters at the start and end of the bank data. This is helpful when entries in the bank data on the invoice are incomplete or have not been transferred completely.
Identification using bank account and SWIFT	Search according to both the account number and SWIFT code.
Assign bank account to every bank key/SWIFT code	Search according to every combination of account number, bank code or SWIFT code, transferred from the invoice. That is, every account number is not searched individually, but in combination with its associated bank code or SWIFT code.
Identification using bank account and key	Search according to the combination of account number and bank code.
Search accuracy	Determines the maximum number of search results returned (based on the general search criteria). Use this to limit the number of results when searches generate too many matches.

Vendor search 007 – Address data: Parameters

`/COCKPIT/C32`

Parameter	Description
Structure	HEADERDATA or CHECKDATA The selected structure must match the address field types, below. That is, if the address fields are transferred as CHECKDATA fields, then CHECKDATA must be selected here.

Parameter	Description
Street	The street field name that is searched.
P.O. Box	The P.O. Box number field name that is searched.
P.O. Box postal code	The P.O. Box post code (ZIP code) field name that is searched.
Postal code	The post code (ZIP code) field name that is searched.
City	The city field name that is searched.

Note: You must enter the internal field names here, and not the transferred values.

Vendor search 008 – Email address: Parameters

`/COCKPIT/C32`

Parameter	Description
Structure	HEADERDATA or CHECKDATA The selected structure must match the email address field type, below. That is, if the email address field is transferred as a CHECKDATA field, then CHECKDATA must be selected here.
Email address	The email address field name that is searched. **Note:** You must enter the internal field name, and not the transferred values.

Vendor search 009 – Telephone and fax number: Parameters

`/COCKPIT/C32`

Parameter	Description
Structure	HEADERDATA or CHECKDATA

Parameter	Description
	The selected structure must match the address field types given below. That is, if the address fields are transferred as CHECKDATA fields, then CHECKDATA must be selected here.
Telephone 1	The telephone field name that is searched.
Fax number	The fax number field name that is searched.

Note: You must enter the internal field names here, and not the transferred values.

Vendor search 010 – History table: Parameters

`/COCKPIT/C32`

The search works by comparing the search fields entered in the parameters from the database table /COCKPIT/TVDHIST with the transferred values of the invoice. The structure CI_COCKPIT_VENDHIST is incorporated in the table. All fields for the use of the search by means of the HistoryTable are to be incorporated in this structure. When an invoice is posted successfully via PROCESS DIRECTOR Accounts Payable, the respective table fields for the respective vendor are filled. If a new invoice is transferred to PROCESS DIRECTOR Accounts Payable and the fields used for the search exist on the invoice, with the values of the preceding posting procedures, the respective vendor is filled in.

Parameter	Description
Delete old history data	Deletes previous selections from
Search field	The primary field to be used for the search.
Search field is key field	If this is checked, only one value is saved in the history.
Search field	You can enter up to four further search fields, which must be available in the `/COCKPIT/TVDHIST` table. If the search produces multiple results, you can determine how the results should be handled in the **Hit** settings.

Creating document types

/COCKPIT/C11

Parameter	Description
PD document type	A two-character ID for the PROCESS DIRECTOR Accounts Payable document type.
Description	Any description.

Setting PO item determination

/COCKPIT/C25

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR document type.
Check: **Purchase order unit** **Material number** **Unit price** **Value to be invoiced** **Quantity to be invoiced** **Effective value**	Set each of these line-item fields to: • _ - Check and allow automatic posting Compares the value for the field between the invoice and purchase order. If all checks pass, the line item is added to the invoice in PROCESS DIRECTOR. Further, these invoices can be posted automatically (upon receipt). • C - Checks and cancel automatic posting Same as above, but these invoices are blocked for automatic posting upon receipt. • X - No check No check comparison is made between the invoice and purchase order.

Setting	Description
No check of final delivery code	Enables the checks to be performed even though the **Delivery completed** indicator is set in the purchase order.
Carry out check despite final invoice code	Enables the checks to be performed even though the **FInal invoice** indicator is set in the purchase order.
No check when print price set	No price checks are performed when the **...** indicator is set in the purchase order.
No check when price estimated	No price checks are performed when the **Estimated price** indicator is set in the purchase order.
No quantity check or authorized, unlimited excess orders	No quantity check is performed when the **Unlimited (overdelivery allowed)** indicator is set in the purchase order.
No sequential organization of purchase order items	When the indicator is set, the purchase order items are not assigned to the invoice items in chronological order (i.e. in their chronological order in the purchase order), if no purchase order items are found by means of the set checks. As standard, the purchase order items are assigned to the invoice items in chronological order, if no purchase order items are found by means of the set checks.
Read missing goods receipt docs	• When the indicator is set, the adequate performance entry is read, if the assigned purchase document contains performance items for which performance entries are available, but in the invoice there is no statement of performance entry sheet numbers. • The search of the goods receipt documents can be set with the following options: • Search GR documents only with a reference. The goods receipt is only searched via the reference (the goods receipt document) • Search GR documents also by means of amount/quantity, no posting. additional search options to the reference without posting

Setting	Description
	• Search GR documents also by means of amount/quantity, posting. additional search options to the reference with posting
Accept ERS items	A check comparison is also made of Evaluated Receipt Settlement (ERS) line items.

Set the handling of units of measure from the PO

`/COCKPIT/C44`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Units from the purchase order	The method for adding the units (for quantities) to the PROCESS DIRECTOR Accounts Payable document: • _ - Get unit from the purchase order Units are always gotten from the purchase order. • X - Do not get unit from purchase order item Units are always gotten from the transferred invoice. • N - Transfer unit from purchase order item (if not entered) Units are only gotten from the purchase order if they are not transferred on the invoice.

Activate additional checks

Activate additional checks

`/COCKPIT/C5`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR document type.
Validation type	The PROCESS DIRECTOR check: • 0001 - Deviation between invoice and order price • 0002 - The vendor is the one listed on the purchase order • 0003 - Invoice quantity is more than the delivered but not yet invoiced amount • 0004 - Bank details on the invoice are identical to those in the master data • 0005 - Document already exists (duplicate) • 0006 - The company code is the same one listed on the purchase order • 0007 - The invoice amount exceeds the limit • 0009 - Check house bank ID and/or partner bank type • 0010 - Check selected rate and amount • 0011 - Amount calculated is more than the amount ordered • 0012 - Correct purchase order item • 0013 - Invoicing party is blocked • 0014 - Unplanned delivery costs in FI document • 0015 - Correct tax data • 0016 - Limit exceeded • 0017 - Employee tolerances • 0018 - Withholding tax base amount was not entered or is 0 • 0019 - Goods receipt missing (only for icon and debit advice) **Note:** There is no validation type 0008.
Time	The time(s) at which the check is performed:

<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td></td><td>1 - Document transfer and park (via BAPI)
2 - Document transfer and post (via BAPI)
3 - Park document in INVOICE COCKPIT (via BAPI)
4 - Post document in INVOICE COCKPIT (via BAPI)
5 - Park/post document in INVOICE COCKPIT (via SAP transaction)
6 - Check document in INVOICE COCKPIT
7 - Create/update document from SAP document
Note: You may leave the Time field empty, which will force the check to be performed at all of the above times (for example, upon transfer, when posted, when the Check button is pressed, and so on).</td></tr>
<tr><td>Description</td><td>The name of the check (cannot be changed). See Validation type, above.</td></tr>
<tr><td>Message</td><td>The type of message that is generated when the check fails:
I - Information
W - Warning
E - Error message
X - Error message, no posting
The first three message type are different kinds of information messages. Only the icon used in the message log is different. However, you can also classify which messages are highlighted as errors.

X - Error message, no posting is the only type of message that prevents documents from being posted if they fail the check.</td></tr>
<tr><td>Detail view</td><td>Some checks have additional options that can be configured. See the descriptions for each check for details.</td></tr>
</table>

Additional check 0001 - Deviation between invoice and order price

This is a price check to ensure that the price on the invoice is the same (or within specified tolerances) as that on the purchase order.

Setting	Description
Currency	The currency of the **Gross amount** to use for the check.
Gross amount	The gross amount limit that activates the check. For example: Gross amount = 10000.00 Currency = EUR The check is performed on all invoices above 10000EUR, or its equivalent in other currencies.
Check tolerance limits	Checks the price variance tolerance limits set in `/OMR6` (tolerance key **PP**). **Note:** This setting overrides all other options for this check. That is, **Currency**, **Gross amount** and **Exact price** are ignored.
Exact price	The amounts on the invoice must be exactly the same as those on the purchase order.

Additional check 0002 - The vendor is the one listed on the purchase order

This check ensures that the vendor on the invoice is the same as the one on the purchase order.

Setting	Description
Take account of head office	Headquarters to branch relationships in the master data are also checked.
Take account of alternative payee	Any alternative payee is also checked.
Take account of ref. alternative payee	The alternative payee(s) in the vendor master data is also checked.

Take account of partner roles	Partner roles in the purchase order are also checked.
Partner role	When **Take account of partner roles** is active, enter up to four partner roles to be checked.
Message for missing vendor data	Add an entry to the message log if vendor data is missing.

Additional check 0003 - Invoice quantity is more than the delivered but not yet invoiced amount

This is a quantity check to ensure that the quantity of goods on the invoice is not greater than that received (the quantity on the goods receipt).

Setting	Description
Goods receipt blocked stock	Goods receipt blocked stock is not included in the check.
Cancel automatic posting if no goods receipt expected	Blocks automatic posting if no goods receipt is expected.
No message if no GR expected	No entry is added to the message log if no good receipt is expected.

Additional check 0004 - Bank details on the invoice are identical to those in the master data

This check is used to ensure that the bank data on the invoice is the same as that in the vendor master data.

Setting	Description
Message if no bank data	Add an entry to the message log if no bank data for the vendor has been transferred from INVOICES.

Setting	Description
1 bank in master segment enough	If this option is checked, not all the bank data that has been transferred will be checked as long as one of the transferred banks can be found in the vendor master data.
Ignore missing bank master data	The check passes even if there is no bank data in the vendor master data.
Take account of head office	Checks the bank data of the vendor's head office in addition to those of the vendor.
Take account of alternative payee	Checks the bank data of any alternative payee in addition to those of the vendor.
Take account of ref. alternative payee	Checks the bank data of the alternative payee(s) in the vendor master data in addition to those of the vendor.
Check SWIFT code	Checks that the SWIFT code on the invoice for the specific bank data record matches the SWIFT code for the same bank data record in the vendor master data. **Example** *Vendor master data* `Bank key    Bank account    SWIFT` `10          1000            ABC` `10          2000` *Invoice 1* `Bank key    Bank account    SWIFT` `10          1000            ABC` **Result:** Match *Invoice 2* `Bank key    Bank account    SWIFT` `10          2000            ABC`

<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td></td><td>Result: No match - The SWIFT code differs for this bank data record. (Even though the SWIFT code for bank 10 is ABC, this is not recorded for this specific bank record.)</td></tr>
<tr><td>Check IBAN</td><td>Checks that the IBAN on the invoice for the specific bank data record matches the IBAN for the same bank data record in the vendor master data.
Example
Vendor master data
<pre>Bank key   Bank account   IBAN
10   1000   101000
10   2000</pre>Invoice 1
<pre>Bank key   Bank account   IBAN
10   1000   101000</pre>Result: Match
Invoice 2
<pre>Bank key   Bank account   IBAN
10   2000   102000</pre>Result: No match - The IBAN differs for this bank data record. (Even though the IBAN on the invoice may be correct, there is no IBAN recorded in the master data for this specific bank record.)</td></tr>
<tr><td>Find and check SWIFT code</td><td>Checks that the SWIFT code on the invoice matches the SWIFT code in the vendor master data. In comparison with the Check SWIFT code setting, the SWIFT code here does not have to be in the same bank data record for a match to occur.
In the example above for the Check SWIFT code setting, the check for Invoice 2 would result in a match.</td></tr>
</table>

Setting	Description
Find and check IBAN	Checks that the IBAN on the invoice matches the IBAN in the vendor master data. In comparison with the **Check IBAN** setting, the IBAN here does not have to be in the same bank data record for a match to occur. In the example above for the **Check IBAN** setting, the check for Invoice 2 would result in a match.

Additional check 0005 - Document already exists (duplicate)

This check ensures that an invoice has not already been received. It compares values for the selected fields below with those in other documents.

The following checks are performed together to form an AND relationship. That is, each check activated here must be TRUE for the entire document duplicate check to fail.

Setting	Description
Check on company code	Check if the company code exists on another invoice.
Check vendor's account number	Check if the vendor's account number exists on another invoice.
Check date of document	Check if the date is the same on another invoice.
Check reference document number	Check if the reference document number exists on another invoice.
Check gross amount	Check if the gross amount is the same on another invoice.
Check on currency key	Check if the currency key is the same on another invoice.
Check purchase document number	Check if the purchase order number is the same on another invoice.
Check archive document ID or barcode	Check if the archive document ID or barcode are the same on another invoice.

Setting	Description
Check on another freely-selectable field	Another field, the value for which PROCESS DIRECTOR Accounts Payable also checks exists on another invoice.
Deactivate SAP check on duplicate invoices	SAP's own check for duplicate invoices is deactivated.

Additional check 0006 - The company code is the same one listed on the purchase order

This checks ensures that the company code on the invoice is the same as the one on the purchase order.

Additional check 0007 - The invoice amount exceeds the limit

This check fails if the total gross amount of the invoice is greater than that specified below.

Setting	Description
Currency	The currency used when checking the **Gross amount**.
Gross amount	The total gross amount of the invoice.

Additional check 0009 - Check house bank ID and/or partner bank type

This checks sees if a value exists for any of the two fields below. The check should be activated if you are using SAP 4.6b, because these fields are not supported by BAPI. It should also be activated if these fields are hidden in BAPI.

Setting	Description
Check the house bank ID	Check if a value for this field exists in the PROCESS DIRECTOR Accounts Payable document.
Check for partner bank type	Check if a value for this field exists in the PROCESS DIRECTOR Accounts Payable document.

Additional check 0010 - Check selected rate and amount

The check is carried out when the data in PROCESS DIRECTOR Accounts Payable is completed. This error message was introduced because SAP systems, 4.6b and 4.6c with < PL33, did not support the check. Thus, it is important that incomplete data is transferred for posting.

Additional check 0011 - Amount calculated is more than the amount ordered

This check compares the quantity/quantities on the invoice with those on the purchase order.

Note: This check does not check monetary *amounts* (prices), as suggested by the title of this check. See Additional check 0001 - Deviation between invoice and order price for a price check.

Additional check 0012 - Correct purchase order item

This additional check views the correct assignment of the purchase order item to the invoice item.

Additional check 0013 - Invoicing party is blocked

This check verifies that the vendor on the invoice is not blocked.

Additional check 0014 - Unplanned delivery costs in FI document

This check sees if there if there are any unplanned delivery costs in the invoice.

Additional check 0015 - Correct tax data

This check ensures that the tax information in the invoice header is consistent with the tax information in the line items and accounting lines.

Setting	Description
Overwrite PROCESS DIRECTOR Accounts Payable message	This parameter indicates whether the message type stored in PROCESS DIRECTOR Accounts Payable is used if the entered tax amount is different to the calculated amount, or whether the code entered in SAP customizing for tax codes is used. Inactive - PROCESS DIRECTOR Accounts Payable configuration is used. Active - SAP tax code customizing is used. If the **Check code** checkbox is highlighted, the system issues an error message and posting is canceled; otherwise, the system issues a warning message.

Additional check 0016 - Limit exceeded

This check applies to limit purchase orders. Limit POs are a type of purchase order that envisages more than one invoice being issued in the future for the ordered items. When creating the PO, you set an overall limit on the total value and/or quantity of all future associated invoices. Using the **Limit exceeded** check, you can check that the total amount/quantity of the invoices does not exceed the associated limit PO.

Additional check 0017 - Employee tolerances

This check verifies the employee limit (as determined in SAP FI configuration) is not exceeded.

Additional check 0018 - Withholding tax base amount was not entered or is 0

This check ensures that there is an amount entered for the withholding tax if the vendor is liable to pay withholding taxes.

Setting	Description
Check FI documents	Apply this check to FI documents.
Check MM documents	Apply this check to MM documents.
Withholding tax base amount entered manually	This parameter prohibits the **Withholding tax base** amount to be 0. That is, a non-zero value must be entered.

Additional check 0019 - Goods receipt missing (only for icon and debit advice)

This check is used with the Invoice reduction feature and verifies if a goods receipt is missing.

Define tolerance limits

`/OMR6`

This item in the PROCESS DIRECTOR Accounts Payable IMG is a shortcut to `/OMR6`. Here you can define the price variance (using the **PP** tolerance key) tolerance limits that are used when **Check tolerance limits** is activated in Additional check 0001 - Deviation between invoice and order price.

Controlling error display in detail screen and selection criteria

`/COCKPIT/C28`

Setting	Description
Active	Highlights fields with warnings and/or error messages.
Message type	• E - Error message Highlight only fields with errors.

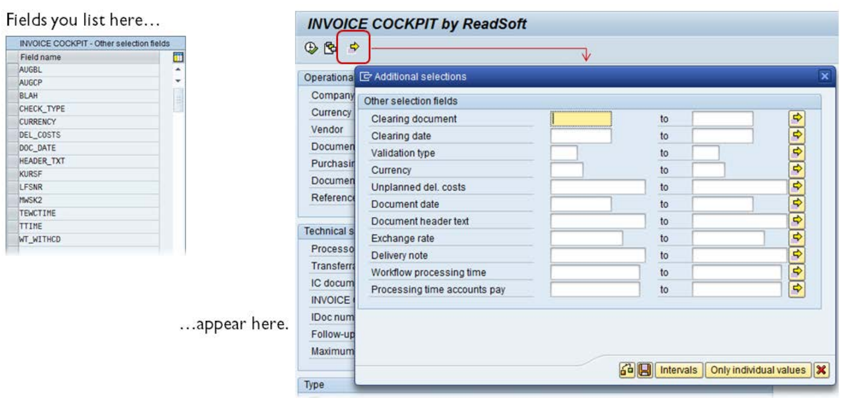
Setting	Description
	• W - Warning Highlights both fields with errors and warnings.
Maximum number of hits	The default value for this field in the `/COCKPIT/1` selection screen.

Define other fields and field characteristics

Defining other selection fields

`/COCKPIT/C19`

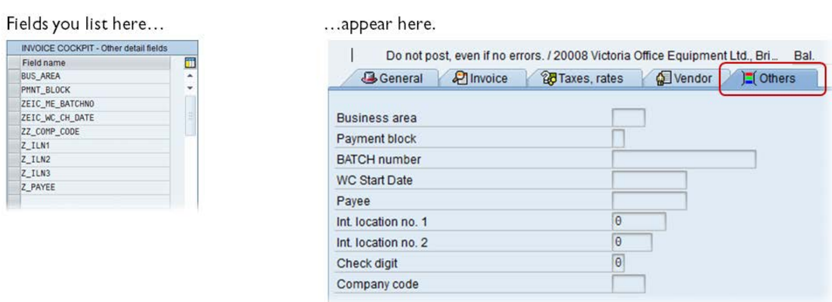
You maintain a list here of fields that are displayed in the **Other selection fields** dialog in `/COCKPIT/1`.



Defining other detail fields

`/COCKPIT/C20`

You maintain a list here of fields that are displayed in the **Others** tab when viewing documents.



Note: A maximum of 132 characters can be displayed in these fields. For details about this restriction, see http://help.sap.com/abapdocu_702/en/abenabap_dynpros_fields.htm.

Set mandatory fields

`/COCKPIT/C3`

Setting	Description
Company code	The buying organizational unit.
Structure	The type of field: • CHECKDATA (used to identify the vendor) • HEADER (header data) • ITEM (line item data) • TAX (tax data) • ACCOUNT (account assignment data) • ACCASS (multi-account assignment data) • SORDER (purchase order data) • CPD (one-time vendor)
SAP field	The name of the field in PROCESS DIRECTOR Accounts Payable that is mandatory. That is, the field must have a value before the document can be posted or performed.

Creating field status and assigning field characteristics

`/COCKPIT/C23`

Field status identification

Setting	Description
Field status	The name/ID of the field status.
Header data can only be displayed	Display all header fields as read-only.
Display invoice items only	Display all line-item fields as read-only.

Setting	Description
Only display account assignment	Display all account assignment fields as read-only.
No account assignment line with MM invoices	The account assignment fields for FI items in MM documents are hidden.
Display withholding tax only	Display withholding tax fields as read-only.
Display tax only (no entry)	Display tax fields as read-only.

Screen variants

Here you can assign screen variants for the **Invoice items**, **Account Assignments**, **PO Account Assignments** and **PO Data** grids. See the SAP documentation for information on creating screen variants.

Characteristic value of status

Setting	Description
Structure	The type of field: • CHECKDATA (used to identify the vendor) • HEADER (header data) • ITEM (line item data) • TAX (tax data) • ACCOUNT (account assignment data) • ACCASS (multi-account assignment data) • SORDER (purchase order data)
Internal field name	The name of the field in PROCESS DIRECTOR Accounts Payable.
Display	• D - Only display

Setting	Description
	Display the field as read-only. • H - Hide Do not display the field. • M - Mandatory field Force a value to be entered for the field before the document can be saved. • Normal field A field whose value can be changed.

Using field status

`/COCKPIT/C24`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Field status	The name/ID of the field status (see `/COCKPIT/C23`).

Activating special authorizations

/COCKPIT/C14

Setting	Description
Authorization object	The name of the SAP authorization object employed to permit access PROCESS DIRECTOR Accounts Payable. If no authorization object is specified, all SAP users can access PROCESS DIRECTOR Accounts Payable.

Setting message display and log procedure

/COCKPIT/C27

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Show message display window	The time(s) when the **Message log** window is displayed: • _ - with all messages Messages window is displayed for kinds of messages. • W - with warnings and errors Messages window is displayed for warnings or error messages. • E - with errors Messages window is displayed for error messages only.
No notification at processor change	A message popup does not appear when the processor of a document is changed.

Setting	Description
Reject document	A note must be created before a document can be rejected.

Set display of the archived document screens

/COCKPIT/C21

Setting	Description
Browser not amodal	When the indicator is set, the archived document images are displayed in the standard web browser. The standard web browser has to support the display of the used document type. As the standard, the Performance Assistant available as of R/3 4.6c, is used for the display of the document images
Auto. screen display when jumping to transactions	When the indicator is set, the screen is opened automatically in a separate window before a transaction from the PROCESS DIRECTOR Accounts Payable detailed image is performed, in order to make the screen available for the user of the standard transaction (MIRO, FB60, etc).
Automatically close ext. application for screen display	When the indicator is set, the application is closed if PROCESS DIRECTOR Accounts Payable document is closed.
Image transfer	Determines whether the image is always loaded from the web server. The image stored in the archive is not touched in doing so. This setting is only applicable when using archive scenarios 1 or 3. • _ - Archive first (if possible URL), the web server (URL) • X - Web server first (URL), then archive (if possible URL) **Note:** If the image is deleted from the web server, it can no longer be viewed in the Web Application. It can only be viewed using PROCESS DIRECTOR Accounts Payable and WORK CYCLE in SAP using the **Services for Object** > **Attachment list** menu. • Y - Archive first (image data), the web server (URL)

Setting	Description
HTML control	This is used for the display of the document images in the docked condition. The HTML control is based on an internet explorer installation; that means that the IE has to support the used document type for the display. As standard the EAI control contained in the SAP standard as of R/3 4.6 is used for the display in the docked condition. The use of the EAI control is released in the SAP Customizing. If the internet explorer is equipped with the respective plug-ins, the display can also take place without the EAI control.
Dock control	The display of document images can be carried out in a separate window or in the work area. The following options are available: • 0 - No docking • 1 - Dock left • 8 - Dock right **Note**: Image docking is not supported on ITS/WEBGUI.

Setting selection of archive document type

`/COCKPIT/C18`

This table overwrites the default settings for the archive document type configured by company code and document type (`BLART`).

It is recommended that this table be left empty if the company code (`COMP_CODE`) and document type (`BLART`) are not filled in and default values are used.

Setting	Description
Company code	The buying organizational unit.
Type	The assignment of the archive document type can be set differently depending on document types. PROCESS DIRECTOR Accounts Payable initially tries to read specific entries for the document type. When there are no specific entries for the document type, an entry, with an empty document type, is read. This entry applies for all document types for which no entry has been entered.
Use notes	The type of note to be archived:

Setting	Description
	_ - Document screen The invoice image transferred to PROCESS DIRECTOR Accounts Payable. - W - WORK CYCLE notes Notes created in WORK CYCLE and belonging to a workflow. - I - Internal notes Notes created in PROCESS DIRECTOR Accounts Payable that can only be viewed in PROCESS DIRECTOR Accounts Payable. 1 - External emails Emails sent from PROCESS DIRECTOR Accounts Payable to an email address. 2 - External letters/faxes Letters or faxes generated by PROCESS DIRECTOR Accounts Payable. - U - WORK CYCLE upload Document attachments and invoice images uploaded in WORK CYCLE. - E - Visualization of an e-invoice (for example, IDoc) Images created by PROCESS DIRECTOR Accounts Payable to visually represent electronic invoices. **Note:** These images are not archived! They are only for display purposes. - R - Rescan Document images created using the INVOICES Rescan function and sent to PROCESS DIRECTOR Accounts Payable.
Doc. type	The document type used for archiving.

Set reversal document

`/COCKPIT/C56`

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Reason	The reversal reason. If you want documents to be reversed without displaying a pop-up window to the user, you must specify a value here.
Posting date	The date for the document reversal. If no value is specified here, and: • The **Pop-up** is activated: Users can specify their own value. • The **Pop-up** is not activated: The default SAP reversal parameters are used.
Period	The posting period for the document reversal. If no value is specified here, and: • The **Pop-up** is activated: Users can specify their own value. • The **Pop-up** is not activated: the default SAP reversal parameters are used.
Clear	*For MM documents only* The corresponding vendor items are automatically cleared. If **Clear** is not selected, the vendor items must be manually cleared by the user using `F-44`. Note: The clearing of vendor items occurs automatically for FI documents. There is no option to perform this manually.
Pop-up	Displays a pop-up window after the user has selected **Document** > **Reverse**. In this window, the user can specify the **Reversal reason**, **Posting date** and the **Period**.

Settings for one-time vendors

Define one-time vendor account automatically

`/COCKPIT/C33`

Setting	Description
Company code	The buying organizational unit.
Name	The name of the CPD (one-time) vendor. Wildcards are allowed. Example: **A*** includes all vendors whose names start with "A".
Vendor	The CPD account.
Automatic post	Permits documents from these vendors to be posted automatically, upon receipt.

Fill one-time vendor fields during data transfer

`/COCKPIT/C34`

Setting	Description
Structure	The type of field that the CPD fields are. • CHECKDATA (used to identify the vendor) • HEADER (header data)
[SAP CPD fields] = [PROCESS DIRECTOR Accounts Payable fields]	The field mapping between the CPD fields and the PROCESS DIRECTOR Accounts Payable fields. **Important: Name 1** must be filled in!

Set external message dispatch

Message design

`/COCKPIT/C35`

Setting	Description
Message	The ID of the message.
Description of the email	The description of the message. When PROCESS DIRECTOR Accounts Payable users send messages, this description appears in both the drop-down list of available messages, and is the default subject.
Text ID for email	The ID of the text message. Click to jump to `SE61` to edit the text. The **Document class** in `SE61` must be set to **General text**.
Field display	Select an option for display of the **Reject document** field in the **Send message** popup: **Normal field** - the field is displayed and can be edited **D Only display -** the field is displayed but cannot be edited **H Hide** - the field is not displayed **M Mandatory** field - the field is displayed and must be filled
Default for reject	Makes the message the default for the documents that have been rejected in PROCESS DIRECTOR Accounts Payable.

Message use

`/COCKPIT/C42`

Setting	Description
Company code	The buying organizational unit.

Setting	Description
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Message	The ID of the message.
Archive type	The message type: • External emails • External letters/faxes
Document type	Optional. The archive document type used for archiving. The available document types are ones that are specified in `OAC2`. If you do not specify an archive document, the message is still sent or printed, just not archived.
Doc type	The file format used for the message: • H - HTML • P - PDF
Smart Form ID for layout	Optional. An SAP Smart Form to use for the message.

Follow-up flags

Basic settings

`/COCKPIT/C49`

Setting	Description
Activate flags	Specifies whether follow-up flags are available and can be used (both built-in and custom flags). If they are not active, the **Documents** > **Follow up** menu item in PROCESS DIRECTOR Accounts Payable does not appear.

Setting	Description
Activate checks	Activates checks for price and quantity deviations. If this option is not activated, the follow-up flag icons for price and quantity deviations will not be displayed.

Define customer follow-up flags

`/COCKPIT/C50`

Setting	Description
Follow-up	Any two-character ID that uniquely identifies the follow-up flag.
Icons	Use Search Help (F4) to select an icon from the image library.
Sequence	If more than one follow-up flag is set for a document, the sequence number is used to determine which icon is displayed in the PROCESS DIRECTOR document list view. The flag with the lowest sequence number has the highest priority and is displayed. **Note:** The **Sequence** setting does not affect which icon is displayed in the document detail view—it is always the follow-up flag which was set *last*.
Clear posted*	Specifies whether the flag should be automatically cleared when the document is posted.
Clear paid*	Specifies whether the flag should be automatically cleared when the document is paid.
Clear WC*	Specifies whether the flag should be automatically cleared when a workflow for a document is started.
Remove	Disables the flag. Specifically: • Removes the flag from the search help, therefore preventing it from being selected by users.

Setting	Description
	• Disables the ability of the the flag to be set automatically. • If a (built-in) system flag overrides the customer flag, the system flagged is also not displayed.
Description	A short explanation of the flag, which appears when viewing and selecting follow-up flags.

* You must run the `PAYMENT_CONTROL` program to clear these flags if **Clear posted**, **Clear paid** or **Clear WC** are activated. That is, activating these settings alone does not remove the flag after the respective condition has been met.

Define customer-specific follow-up flag for additional check

`/COCKPIT/C59`

Setting	Description
Valtyp	The type of additional check.
Description	An explanation of the follow-up flag.
Reduction	The price or quantity reduction.
Follow-up	Any two-character ID that uniquely identifies the follow-up flag.
Icon	The icon for the follow-up flag..
Description	A short description of the flag.

Availability

/COCKPIT/C48

Setting	Description
Follow-up	The two-character ID for the follow up flag.
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.

Attachment added flag exclude

/COCKPIT/C51

Setting	Description
Object type & Document type	The business object and document type combination for which the **AT** attachment flag will not be set if a file of this type is attached to a PROCESS DIRECTOR Accounts Payable document.

Invoice reduction

Basic settings

/COCKPIT/C60

Setting	Description
InvRed. active	Activates the invoice reduction function.

Note: When you are setting this option for the first time, you need to click **New Entries** in the edit mode.

Document settings

`/COCKPIT/C61`

These are the parameters for the debit advice document, as well as for the PDF attachment that is created when the PROCESS DIRECTOR debit advice document is posted.

Setting	Description
Company Code	The company code that the Invoice reduction function is activated for. Leaving it blank specifies that it is active for all company codes.
PD doc. type	The PROCESS DIRECTOR document type that the Invoice reduction function is activated for. Leaving it blank specifies that it is active for all the document types.
Reference	The text that is displayed in the **Reference** field of the debit advice document (header data). If you enter an ampersand sign (&), the value of the **Reference** field in the original invoice is appended to this text.
Doc. Header Text	The text that is displayed in the **Header text** field of the debit advice document (header data).
Text	The text that is displayed in the **Text** field of the debit advice document (header data).
PD doc. type	The document type that is assigned to the created PROCESS DIRECTOR debit advice documents. Any document type defined in `/COCKPIT/C11` can be selected.
SmartForm MM for PDF	The Smart Form that is used to create the PDF document that is attached to the debit advice and can be sent to the supplier. The `/COCKPIT/DEBITADVICE` Smart Form is available as a template that can be copied and adapted as required.
Document type	The archiving document type for the PDF.
Reason	Enter the name of a line item field. The reason entered by the workflow processor during invoice reduction is then entered in this field.

Setting	Description
Spool	Select this check box to send the created outgoing debit advice document to the spool of the current user. The user can then define how the document should be printed (printing does not occur automatically).
Name	The name of the spool request.
User	The name of the user who produced the spool request.
Email	Select this check box to send the created outgoing debit advice document to the vendor by email. The email is sent to the email address in the vendor master record. If no email address is maintained, an error message is displayed.
Description	The subject of the email.
Email text ID	The text of the email (defined in `SE61`). Placeholders and HTML email are not supported.
Sender	The email address of the sender of the email.
BCC	The email address to which a blind copy of the email will be sent.

Reasons

`/COCKPIT/C62`

Setting	Description
Order	The order in which the reduction reasons appear in the selection list.
Text	The reasons that users can select when creating invoice reductions.

WORK CYCLE

/COCKPIT/C63

Setting	Description
Workflow step ID	The IDs of the workflow steps that are available for invoice reduction.
Reduction	The type of invoice reduction (price, quantity or blank for both).

Amendments

Customer-specific customizing

/COCKPIT/C45

Setting	Description
Transaction code	The transaction code to activate.
Transaction text	The transaction text.
	Executes the transaction code.

Activate and set REPETITOR

/COCKPIT/C8

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Posting FI	The posting setting for FI documents after transfer (see below).

Setting	Description
Posting MM	The posting setting for MM documents after transfer (see below).

Posting settings

Setting	Description
01 Park	Park error-free documents.
02 Post	Post error-free documents.
03 Attempt to post, then park	Attempt to post documents. If the document cannot be posted, attempt to park it.
04 No attempt	No action is performed on the document upon its transfer.
05 Check	The additional checks configured for the document are executed.

Activating User Exits

`/COCKPIT/C13`

Setting	Description
User Exits	The ID of the PROCESS DIRECTOR Accounts Payable template the User Exit is based on. It is necessary for the correct connection of the User Exit to the processes to be adjusted.
Function module	The name of the User Exit.
No standard	Indicates the User Exit replaces standard functionality in PROCESS DIRECTOR Accounts Payable.

Setting	Description
	For example, you would check **No standard** for User Exit 001 – Determination of the tax code, which replaces the standard configuration table in /COCKPIT/C15.
	Shortcut to view and edit the User Exit.

Setting other functions

/COCKPIT/C26

Displays menu items to execute custom functions. Use User Exit 12 to link the menu item to the function.

Setting	Description
Company code	The buying organizational unit.
PD document type	The PROCESS DIRECTOR Accounts Payable document type.
Activate customer functions	Enable the custom menu in /COCKPIT/1.
Menu description	The name of the menu.

Customer specific function 1-6

Setting	Description
Description	The name of the menu item.
Icon	An icon to use for the menu item. (Optional)
Op. mode	Specifies whether the function should lock the document (no other changes permitted while locked) or not. • _ - Lock and update document

Setting	Description
	• 1 - Lock but do not update document • 2 - No lock and no update of document
Process several documents	Specifies whether the function can be executed on more than one document simultaneously.

Schedule background processing

Schedule payment status synchronization

`/SM36`

A shortcut to `/SM36` to define a background job for the `PAYMENT_CONTROL` program.

This program updates the payment and cash discount terms. There is also a readout of payment blocks for posted documents and they are pasted into the PROCESS DIRECTOR Accounts Payable document.

Schedule reminder function for overdue workflows

`/SM36`

A shortcut to `/SM36` to define a background job for the `DUE_DATE_CHECK` program.

Schedule REPETITOR

`/SM36`

A shortcut to `/SM36` to define a background job for the `REPETITOR` program.

Schedule asynchronous archiving

`/SM36`

A shortcut to `/SM36` to define a background job for the `ARCHIV_CONNECT` program.

Obsolete settings

Archiving sent external messages

`/COCKPIT/C37`

The functionality to archive sent external messages has been replaced by `/COCKPIT/C42`.

Setting	Description
Archive type	The message type: • External emails • External letters/faxes
Document type	The archive document type used for archiving. The available document types are ones that are specified in `/OAC2`.
Doc type	The file format used for the message: • H - HTML • P - PDF
Smart Form ID for layout	Optional. An SAP Smart Form to use for the message.

System settings

Defining process types

`/COCKPIT/C10`

PROCESS DIRECTOR Accounts Payable is delivered with a filled process type table. This table must not be altered. The process types describe the cycles in PROCESS DIRECTOR Accounts Payable, with numbers.

Defining additional checks

`/COCKPIT/C12`

PROCESS DIRECTOR Accounts Payable is delivered with a filled additional check table. This table must not be altered.

Defining message handling

`/COCKPIT/C17`

PROCESS DIRECTOR Accounts Payable is delivered with a filled message handling table. This table must not be altered.

Define follow-up flags

`/COCKPIT/C43`

This list contains the (built-in) system follow-up flags. To create your own flags, use `/COCKPIT/50`.

Setting	Description
Follow-up	Any two-character ID that uniquely identifies the follow-up flag.
Icon	Use Search Help (F4) to select an icon from the image library.
Sequence	If more than one follow-up flag is set for a document, the sequence number is used to determine which icon is displayed in the PROCESS DIRECTOR document list view. The flag with the lowest sequence number has the highest priority and is displayed. **Note:** The **Sequence** setting does not affect which icon is displayed in the document detail view—it is always the follow-up flag which was set *last*.
Clear posted*	Specifies whether the flag should be automatically cleared when the document is posted.
Clear paid*	Specifies whether the flag should be automatically cleared when the document is paid.
Clear WC	Specifies whether the flag should be automatically cleared when a workflow for a document is started.
Description	A short explanation of the flag, which appears when viewing and selecting follow-up flags.

* You must run the `PAYMENT_CONTROL` program to clear these flags if **Clear posted** or **Clear paid** are activated. That is, activating these settings alone does not remove the flag after the respective condition has been met.

Define follow-up flag for additional check

`/COCKPIT/C58`

Note: These are the standard system settings. If you want make any changes, you should go to `/COCKPIT/C59`.

Setting	Description
Valtyp	The type of additional check.
Description	An explanation of the follow-up flag..
Reduction	The price or quantity reduction.
Follow-up	Any two-character ID that uniquely identifies the follow-up flag.
Icon	The icon for the follow-up flag..
Description	A short description of the flag.

Set version comparison

`/COCKPIT/C30`

The fields entered here are not taken into account in case of a comparison of versions of a PROCESS DIRECTOR Accounts Payable document.

Create SAP object type ZEBY for accounting

`/COCKPIT/SAP1`

When the hint mentioned under ‘Additional system-wide (cross client) settings’ is not brought in, a matching object type is created. This point jumps into the respective SAP maintenance transaction.

FI posting interface deactivated?

If the **Use FI posting-interface instead of FI BAPI to post** setting is deactivated in `/COCKPIT/C6`, you must:

1. Create the following entries in this table:

Ref. proc	Object type name	Structure	Function module
WBRK	Vendor bill document	(blank)	WLF_AC_DOCUMENT_SENDER_WBRK
ZEBY	Document from IDoc	(blank)	/COCKPIT/SHOW_COCKPIT_FROM_FI

2. Activate the **SAP note 561175 applied** setting in `/COCKPIT/C22`.

Creating SAP authorization group for this customizing

`/COCKPIT/SAP4`

The authorization group allows extended authorization protection for particular objects. The authorization groups are freely definable. The authorization groups usually occur together with an activity.

Set Functions for Vendor Search

`/COCKPIT/C31`

The functions for the vendor search determine which function template is to be used for which search type, when searching the vendor. In this case, there are normally no manual alterations.

Define Callable Transactions

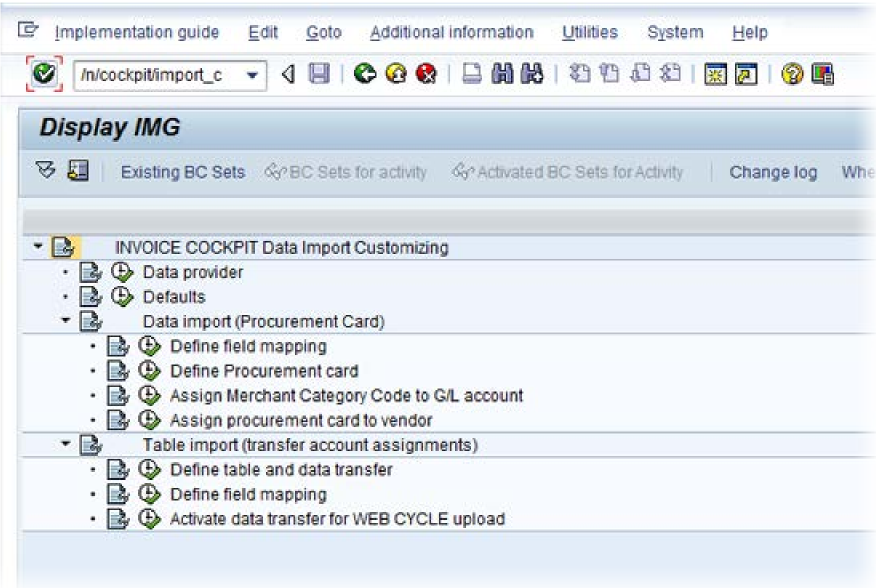
`/COCKPIT/C36`

These transactions define which transactions can be used from PROCESS DIRECTOR Accounts Payable for the posting of invoices.

Data import

Overview

The Data import IMG is accessed via the `/COCKPIT/IMPORT_C` transaction code.



Data providers

`/COCKPIT/IMPORT_C1`

Setting	Description
Data provider	The ID of the card provider.
Description	A general description about the provider.
Import scheme	The format of the data to be imported. • File – P-card files only. • Table – All other files. For example, XML, XLS, and other supported file formats.
Vendor	The vendor account in SAP to assign to this data provider.

Setting	Description
	If the import file contains cards that should be assigned to the same vendor, enter the vendor account number here. Leave this blank if you wish to determine the vendor in another way.
Field separator	The character that separates fields in the import file. No entry here indicates a tab separation.
FI SmartForm	(Optional) The SmartForm to use to present data in FI invoices in a readable document.
MM SmartForm	(Optional) The SmartForm to use to present data in MM invoices in a readable document.
Workflow ID	The workflow that is started after the PROCESS DIRECTOR Accounts Payable document is created. You must activate Data import User Exit 020 to enable the automatic start of workflows.
User Exit before mapping	The User Exit called after the file is loaded into the system, but before field mapping is performed and the PROCESS DIRECTOR Accounts Payable document is created. A User Exit can be used to modify the data. A template is provided. See Data import User Exit 800 - Change data before mapping.
User Exit before submitting	The User Exit called after the file is loaded into the system and after field mapping, but before the PROCESS DIRECTOR Accounts Payable document is created. A User Exit can be used to modify the data. A template is provided. See Data import User Exit 801 - Change data before submitting.

Defaults

`/COCKPIT/IMPORT_C2`

Here, you can specify data to add to a document, if no value is specified in the import files.

Setting	Description
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`. **Note:** If this field is empty, the entry is applied to all data providers and overwrites any default field values specific to a data provider.
Structure	The type of field: • CHECKDATA (used to identify the vendor) • HEADER • ITEM • TAX • ACCOUNT • ACCASS • SORDER • CPD
Internal field name	The internal ID of the field in PROCESS DIRECTOR Accounts Payable.
Default	The value assigned to the field before the PROCESS DIRECTOR Accounts Payable document is created.

Data import

Field mapping

`/COCKPIT/IMPORT_C3`

Setting	Description
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`.
File	The file in which the field is located. • File 1 • File 2 If a field in each of the two import files is mapped to the same PROCESS DIRECTOR Accounts Payable field, PROCESS DIRECTOR Accounts Payable uses the field from File 2.
Structure	The type of field: • CHECKDATA (used to identify the vendor) • HEADER • ITEM • TAX • ACCOUNT • ACCASS • SORDER • CPD
Internal field name	The internal ID of the field in PROCESS DIRECTOR Accounts Payable.
External field	The position/column of the field in the data file to be imported. • F01 – 1st field (A) • F52 – 52nd field (AZ)

Setting	Description
Mapping function	*Optional* The function module called before the data from the file is mapped to the PROCESS DIRECTOR Accounts Payable field. A function module can be used to convert the format to one that is compatible with SAP. Examples: • MM/DD/YYYY to YYYYMMDD • 1,234.56 to 1234.56 A function module could also perform more complex operations, such as setting the invoice indicator (INVOICE_IND) to blank (credit note) if the text contains "Credit" or if the amount is negative.
Parameter	*Optional* Parameters here are passed to the mapping function, above. For example, a mapping function may be used to strip specific characters from the value. The characters to be stripped can be specified here.

Procurement cards

`/COCKPIT/IMPORT_C4`

Setting	Description
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`.
Header lines, file 1	The number of header rows in File 1.
Key field, file 1	The field in File 1 that links it with File 2.
Header lines, file 2	The number of header rows in File 2.
Key field, file 2	The field in File 2 that links it with File 1.

Setting	Description
Document separator	The field/column in File 1 used to group entries into one PROCESS DIRECTOR Accounts Payable document. PROCESS DIRECTOR Accounts Payable creates separate documents from one set of import files (File 1 and File 2), based on the field you specify here. Usually it is the P-card number, which results in one document created for each P-Card number in the import files.
P-Card number	The field/column in File 1 containing the P-Card number.
MCC, file 1	*Optional* The field/column in File 1 containing the Merchant Category Code (MCC).
MCC, file 2	*Optional* The field/column in File 2 containing the Merchant Category Code (MCC).
P-Card in LFA1	*Optional* The name of the field in the `LFA1` table (vendor master data) that contains the P-Card number. If specified, the P-Card number is used to determine the vendor.

Merchant Category Code (MCC) assignment

`/COCKPIT/IMPORT_C5`

Setting	Description
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`.
MCC	The Merchant Category Code.
G/L account no.	The General Ledger account number.

Procurement card assignment

`/COCKPIT/IMPORT_C6`

Setting	Description
Data provider	The ID of the card provider, as specified in `/COCKPIT/IMPORT_C1`.
Procurement card hash	This is generated automatically after the entire entry is complete. It is used to encrypt the **Procurement card number**.
Procurement card number	The number of the P-Card. After you enter the entire entry, this number is encrypted and only the last four numbers are displayed.
Vendor	The vendor number in SAP.

Dynamic discounting

Budget

Define budget

/COCKPIT/DD_C1

Here, you specify budgets, or limits, to use with dynamic discounting.

Setting	Description
Budget	The name of the budget.
Currency	The currency used for the amount of the **Planned budget** (below).
Planned budget	The amount of the dynamic discounting budget. That is, the total monetary amount allowed for discounts via dynamic discounting.

Plan budget

/COCKPIT/DD_C2

Here, you activate budgets for specific company codes, vendors, and time periods.

Setting	Description
Company code	The buying organizational unit.
Vendor	The vendor ID.
1st day	The date the budget starts. If no entry is provided, 19700101 is used.
Last day	The date the budget ends. If no entry is provided, 20991231 is used.

Setting	Description
Active	Indicates whether the budget is active or not. If the budget is not active, a warning will be displayed to PROCESS DIRECTOR Accounts Payable users stating that no budget for dynamic discounting is available.
Budget	The name of the budget to activate. If no budget is specified, but the Active flag is set, dynamic discounting is not available.

Determination of budget when multiple entries exist

If you define more than one budget, PROCESS DIRECTOR Accounts Payable attempts to find a match based on company code and vendor, then vendor, and then company code. More specifically, the following determination order is used:

1. <Company Code> <Vendor> <First day: SPACE> <Last day: SPACE> Inactive
2. <Company Code> <Vendor> <First day: SPACE> <Last day: SPACE> Active
3. <Company Code: SPACE> <Vendor> <First day: SPACE> <Last day: SPACE> Inactive
4. <Company Code: SPACE> <Vendor> <First day: SPACE> <Last day: SPACE> Active
5. <Company Code> <Vendor: SPACE> <First day: SPACE> <Last day: SPACE> Inactive
6. <Company Code> <Vendor: SPACE> <First day: SPACE> <Last day: SPACE> Active
7. <Company Code: SPACE> <Vendor: SPACE> <First day: SPACE> <Last day: SPACE> Inactive
8. <Company Code: SPACE> <Vendor: SPACE> <First day: SPACE> <Last day: SPACE> Active

If two entries are the same except for the dates, the entry with the shortest period is used.

View current budget

/COCKPIT/DD_C3

(Read-only table.) Displays the amounts for the dynamic discount budgets you have defined, together with the actual amount of discounts awarded using dynamic discounting.

Setting	Description
Budget	The name of the budget. **Note:** Budgets that have not yet been used (that is, no discounts for it have been used) do not appear in this table.
Currency	The currency used for the amount of the **Planned budget** (below).
Planned budget	The amount of the dynamic discounting budget. That is, the total monetary amount allowed for discounts via dynamic discounting.
Current budget	The current amount of discounts awarded using this budget.

Payment

Set discount proposal

/COCKPIT/DD_C4

In this table, you specify the method of calculating the discount as well as the dates that invoices using dynamic discounting are paid.

Note: Changes to this table are applied immediately. PROCESS DIRECTOR Accounts Payable must not be restarted to apply them.

Setting	Description
Payday	The value you select here depends on whether the payment run is scheduled every day or weekly. • Today + x workdays - Select when using daily payment runs

Setting	Description
	• Next weekday - Select when using weekly payment runs Use these values in combination with **Payday value** (below) to determine the payment date.
Payday value	An integer used in combination with the **Payday** value to determine the payment date. When using: • *Today + x workdays* ...x is the Payday value **Example:** Today's date: 2011-07-01 Payday: Today + x workdays Payday value: 2 Payment date: 2011-07-03 You can also enter 0 or blank, and the payment date will be the current date. Note that the payment date changes the discount calculated. • *Next weekday* 1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday 7 = Sunday
Extra discount	The method used to calculate the value of the (dynamic) discount. • <SPACE> - Continuous gradient The discount is calculated as a sliding scale between the defined (fixed) payment terms. **Examples:**

Setting	Description
	Baseline date: 2011-07-01 *Payment terms: 3% (within 14 days), 2% (within 30 days), Due net within 45 days* Scenario 1: Payment date: 2011-07-01 Discount received: 3.875% Scenario 2: Payment date: 2011-07-05 Discount received: 3.563% Scenario 3: Payment date: 2011-07-14 Discount received: 3% Scenario 4: Payment date: 2011-07-20 Discount received: 2.625% Scenario 5: Payment date: 2011-08-09 (40 days) Discount received: 0.8% Scenario 5: Payment date: 2011-08-09 (45 days) Discount received: 0% **Note:** The gradient is calculated using the defined payment term dates, including the baseline date and the net due date. *The maximum discount is calculated by extending the gradient back to the baseline date.* The maximum discount cannot exceed the maximum discount specified in the MAXSK field in the T043T table.

Setting	Description
Extra discount (con't)	The remaining values for **Extra discount** increase the maximum available discount (when payment is made on the baseline date) and also the starting point for the gradient. • EP1 - 1% extra The first/maximum discount is increased by one percentage point. • EP2 - 2% extra The first/maximum discount is increased by two percentage points. • EP3 - 3% extra The first/maximum discount is increased by three percentage points. • E025 - 25% extra The first/maximum discount is increased by 25 percent. • E050 - 50% extra The first/maximum discount is increased by 50 percent. • E075 - 75% extra The first/maximum discount is increased by 75 percent. • E100 - 100% extra The first/maximum discount is increased by 100 percent. • MAX - Maximum possible discount T043T The maximum discount is that specified in the MAXSK field in the T043T table. **Examples:** *Baseline date: 2011-07-01* *Defined discount: 3% (0-14 days)* Scenario 1: Extra discount: Continuous gradient Payment date: 2011-07-01 Discount received: 3.875%
Extra discount (con't)	Scenario 2: Extra discount: EP1 - 1% extra Payment date: 2011-07-01 Discount received: 4%

Setting	Description
	Scenario 3: Extra discount: Continuous gradient Payment date: 2011-07-05 Discount received: 3.563% Scenario 4: Extra discount: EP1 - 1% extra Payment date: 2011-07-05 Discount received: 3.643% **Note:** The maximum discount in the T043T table is *always* enforced. That is, it is never possible to assign a dynamic discount higher than this rate, regardless of what value is used for **Extra discount**.

Set payment method

`/COCKPIT/DD_C5`

This table defines the payment method for vendors who have accepted dynamic discounting. It allows the payment program to ignore payment conditions, therefore guaranteeing payment on the selected date (provided no payment block exists). This must be set for each country.

Setting	Description
Country key	The two-character ISO country code.
Payment method	The method used to pay the vendor. The payment method is country-dependent, so you must specify a **Country key** first.

Set item text

`/COCKPIT/DD_C6`

This table allows you to add texts to the FI document when dynamic discounting is accepted for an invoice.

Setting	Description
Country key	The two-character ISO country code.
Language	The language of the text.
Text	The text to add to the FI document when dynamic discounting is accepted for the invoice.

Analysis

Activate analysis functions

`/COCKPIT/DD_C7`

Here, you can activate the recording on dynamic discounts accepted by vendors. The reporting is generated by the `/COCKPIT/DD_ANALYSIS` program, which is also accessible via `/COCKPIT/DD_C8`.

Dynamic discounting: Start analysis

`/COCKPIT/DD_C8`

The `/COCKPIT/DD_ANALYSIS` program reports the dynamic discounts accepted by vendors. The report is broken down by budget, vendor, and company code. Some filters can be applied below.

Filter	Description
Company code	The buying organizational unit.
Document number	The accounting document number (*not* the PROCESS DIRECTOR Accounts Payable document number).

Filter	Description
Fiscal year	The fiscal year in which the discount was awarded.
Budget	The name of the budget.

Fast entry

Basic settings

/COCKPIT/C52

Setting	Description
Active	Determines whether the Fast Entry feature in PROCESS DIRECTOR Accounts Payable is available or not.
Automatic line-item proposal	If a purchase order number is entered (in the document header), the line items are proposed from the purchase order.
Adopt details from PO	If a purchase order number is entered (in the document header), the company code, vendor and currency are added to the PROCESS DIRECTOR Accounts Payable document from the purchase order.

Maximum number of fields

/COCKPIT/C53

Setting	Description
Structure	The type of field: • CHECKDATA • HEADER
Field name	The name of the field in PROCESS DIRECTOR Accounts Payable.

Setting	Description
Position	• [Blank]: Field appears in the left column. • RIGHT - Right aligned: Field appears in the right column.
Sequence	The list order of the fields in the column. 0 is highest. Numbers must not be sequential.

Visible fields

`/COCKPIT/C55`

Setting	Description
Company code	The buying organizational unit.
Structure	The type of field: • CHECKDATA • HEADER
Field name	The name of the field in PROCESS DIRECTOR Accounts Payable.

Authorization object

`/COCKPIT/C54`

Setting	Description
Authorization object	The name of the SAP authorization object employed to permit access to Fast Entry documents. If no authorization object is specified, all PROCESS DIRECTOR Accounts Payable users can access Fast Entry documents.

Appendix B – User Exits

Overview

PROCESS DIRECTOR Accounts Payable comes with over 100 User Exit interfaces (for all components) that you can use to customize the application to suit business requirements.

Function modules called from the the User Exit interfaces can be found in the following function groups.

Function group	Description
/COCKPIT/EXIT_SAMPLE	Interfaces for PROCESS DIRECTOR Accounts Payable that are compatible with SAP versions from Release 4.0.
/COCKPIT/EXIT_SAMPLE46	Interfaces for PROCESS DIRECTOR Accounts Payable that are compatible with SAP versions from Release 4.6.
/COCKPIT/EXIT_SAMPLE46C	Interfaces for PROCESS DIRECTOR Accounts Payable that are compatible with SAP versions from Release 4.6C.
/COCKPIT/WC_EXIT_SAMPLE	Interfaces for WORK CYCLE.
/COCKPIT/EDI_EXIT_SAMPLE	Interfaces for EDI COCKPIT.
/COCKPIT/WB_EXIT_SAMPLE	Interfaces for WEB BOARD that are compatible with SAP versions from Release 4.0.
/COCKPIT/WB_EXIT_SAMPLE46	Interfaces for WEB BOARD that are compatible with SAP versions from Release 4.6.
/COCKPIT/IM_EXIT_SAMPLE	Interfaces for INFO MAIL.
/COCKPIT/RP_EXIT_SAMPLE	Interfaces for ReadSoft REPORTER.

Function group	Description
`/COCKPIT/BSP_EXITS`	Interfaces for the Business Solution Package (BSP). These come with a separate transport (the Process Automation Package) and are not included in the standard PROCESS DIRECTOR Accounts Payable transport.

Function modules in these groups should be copied and then modified in order to guarantee a stable interface and to conform with the ReadSoft standard.

Interface structure

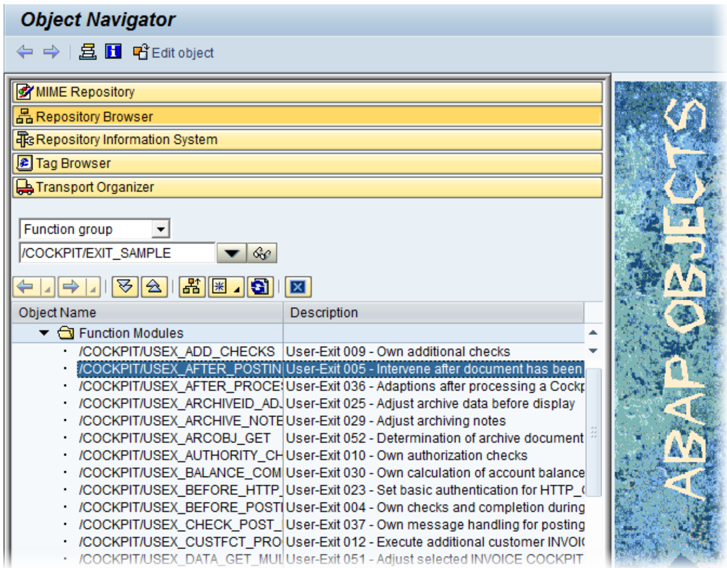
The interface structures and the tables in the local interface of the User Exit function templates start with I, E, and C.

Prefix	Description
E	Data is exported only. Changes are possible.
I	Data is imported only. Changes are not incorporated.
C	Data can be changed. Changes are possible.

Developing User Exits

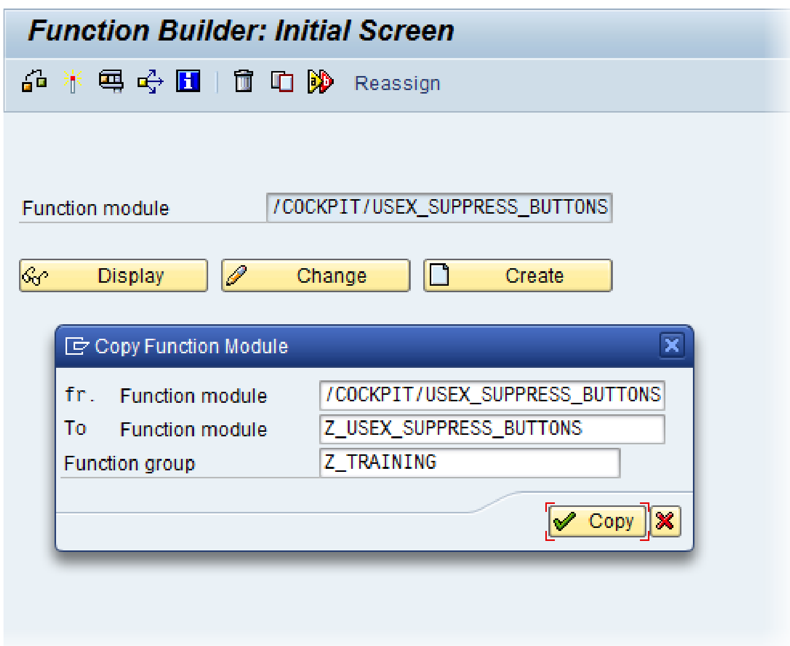
1. Select a User Exit template to use.

   The User Exit templates are saved in various `/COCKPIT/*SAMPLE*` function groups.



2. Copy the template to your own function module.

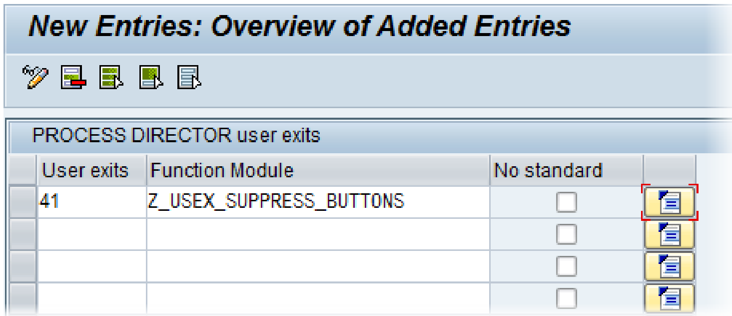
   Use `/SE37` to copy and create a new function module.



   Note: Be sure to copy the function module to your own custom function group.

3. Develop your User Exit code.

4. Activate the User Exit in `/COCKPIT/C13`.



Creating a custom function group

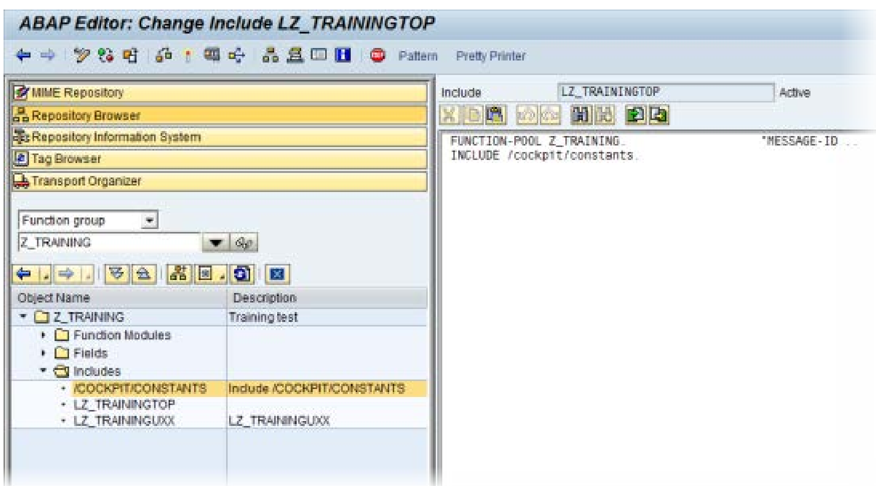
When you develop your own User Exits/function modules, you must save them in your own custom function group. Do not save them in an existing PROCESS DIRECTOR one. Your function group must include the PROCESS DIRECTOR standard `/COCKPIT/CONSTANTS` interface.

1. Go to `SE80`.

2. Create a new function group.

3. Include the `/COCKPIT/CONSTANTS` interface.

   Add it to the `*TOP` include (the one created by default), as shown below.



4. Save your changes.

List of User Exits

List of User Exits

Note: This list only includes User Exit templates available in the standard PROCESS DIRECTOR transport. Other transports, such as the Business Solution Package and Nota Fiscal, contain their own fully-developed User Exits. For details on these, refer to the respective documentation.

User Exit	Name
001	Determination of the tax code
002	Determination of accounting and sub-accounting
003	Assignment of invoice items to purchase order items
004	Own checks and completion before posting
005	Intervening after posting a document
006	Adjustment of the Batch Input data before carrying out a TA
007	Adjustment of the original data when transferring
008	Determination of the document type
009	Own additional checks
010	Own authorization checks
011	Adjustment of the checked data during the transfer
012	Customer-specific functions

User Exit	Name
013	Adjustment of the image data when transferring
014	Adjustment of the data before performing the MM-BAPI
015	Own operation of the display of the SAP document
016	Own checks and adjustment in the PAI of the detailed image
017	Adjustment of the data before performing the MM-BAPI
018	Adjustment of the data before performing the FI-BAPI
019	Adjustment of the data before performing the FI Posting-Interface
020	After the transfer and the posting attempt
021	Before the image display
022	Determining the field status in the detail screen
023	Setting of the Basic-Authentication with http_get
024	Determination of the vendor
025	Adjustment of the archiving data before the image display
026	Adjustment of the data before the completion
027	Own checks and adjustment in the PAI of the overview list

User Exit	Name
028	Determine the file name for the Control Display
029	Adjustment of the notes to be archived
030	Own calculation of the balance of a document
031	Adjustment of the headers of the overview list
032	Adjustment after FI > MM transfer
033	Adjustment after MM > FI Transfer
034	Directly after the transfer of the data
035	Own logic in the PBO of the detail screen as of 4.6
036	Own logic after performing an invoice
037	Own message handling when posting a document
038	Adjustment before the Rescan
039	Adjustment of the messages before the display
040	Adjustment of the messages before the storage
041	Suppress buttons
042	Adjustment of the field catalogs of the overview lists

User Exit	Name
043	After assignment of invoice items to PO items
044	Check and adjustment of the agent assignment
045	Adjustments of the e-mails with HTML contents
046	Adjustment of the purchase order item proposal
047	Check of posting data and posting period
048	Filtering of MM invoice items in the user interface
049	Filtering of FI accounting lines in the user interface
050	F4 search help for replacement of reference documents
051	Adjustment of selected documents
052	Determination of archive object type
053	Adjustment of data during MM document import
054	Adjustment of data during FI document import
055	Adjustment of data in Rescan before a linking
056	Adjustment of the data in Rescan after linking
057	Initialize Button for vendor selection

User Exit	Name
058	Change text of SAP Business Workflow Workitem
059	Adopt display of planned multi-account assignments
060	Adjust data before a MM posting
061	Call of customer function popup on level
063	REPORTER Export, changes in result tables after export
066	Determination of the document type on editing
070	Adjust messages before output in Web
072	After rejection of a PROCESS DIRECTOR document
074	After reversal of a PROCESS DIRECTOR document
300	Adjust Smart Form options
400	REPORTER extract result change
500	Selection of REPETITOR documents
501	Processing of a document after REPETITOR selection
701	Adjust INFO MAIL subject keywords

User Exit 001 – Determination of the tax code

The User Exit determination of the tax code is displayed upon the receipt of a document via the entry interface and upon transfer of a document from FI to MM and vice versa.

This User Exit is normally used when the `/COCKPIT/C15` table is insufficient to determination the tax code. For example, when there is more than one possible tax code for a tax rate for a specific buyer and vendor combination. Or, when other fields like Business Place or Section Code must be used to determine the tax code.

Template

```
FUNCTION /COCKPIT/USEX_DETERMINE_TAXCOD.
*'----------------------------------------------------------------------
*'*'Local interface:
*'  IMPORTING
*'     REFERENCE(I_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE /COCKPIT/THDR
*'  TABLES
*'      C_TAB_ITEM STRUCTURE  /COCKPIT/TITEM
*'      C_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*'      C_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*'      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*'  EXCEPTIONS
*'      ERROR_OCCURED
*'----------------------------------------------------------------------
ENDFUNCTION.
```

User Exit 002 – Determination of accounting and sub-accounting

The User Exit Determination of accounting and sub-accounting is displayed upon the receipt of a document via the entry interface and upon transfer of a document from FI to MM and vice versa.

Template

```
FUNCTION /COCKPIT/USEX_DETERMINE_GLACCT.
*'----------------------------------------------------------------------
*'*'Local interface:
```

Template
*' IMPORTING *' REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE /COCKPIT/THDR *' TABLES *' I_TAB_ITEM STRUCTURE /COCKPIT/TITEM *' I_TAB_TAX STRUCTURE /COCKPIT/TTAX *' C_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *' E_TAB_MESSAGES STRUCTURE BAPIRET2 *' EXCEPTIONS *' NOT_FOUND *'-- ENDFUNCTION.

User Exit 003 – Assignment of invoice items to purchase order items

The User Exit assignment of invoice items to purchase order items is displayed upon the receipt of a document via the entry interface and it can be displayed manually by the agent.

Template
FUNCTION /COCKPIT/USEX_PO_ITEMS. *'-- *'*'Local interface: *' IMPORTING *' REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE /COCKPIT/THDR *' EXPORTING *' REFERENCE(E_NO_STANDARD) LIKE BOOLE-BOOLE *' TABLES *' C_TAB_ITEM STRUCTURE /COCKPIT/TITEM *' C_TAB_MESSAGES STRUCTURE BAPIRET2 *" EXCEPTIONS *" ERROR_OCCURED

Template
*'-- ENDFUNCTION.

User Exit 004 – Own checks and completion before posting

Before posting, there is a check on completion via BAPI, and before the filling of the transaction, via Batch Input.

Template

```
FUNCTION /cockpit/usex_before_posting.
*"--------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     REFERENCE(I_CALLING_PROG) TYPE  C
*"  EXPORTING
*"     REFERENCE(E_DOC_NO) LIKE  /COCKPIT/SIF-SAP_DOC_NO
*"     REFERENCE(E_FISCAL_YEAR) LIKE  /COCKPIT/SIF-FISCAL_YEAR
*"     REFERENCE(E_POSTING_DATE) LIKE  /COCKPIT/SIF-PSTNG_DATE
*"     REFERENCE(E_DONT_CONTINUE) LIKE  BOOLE-BOOLE
*"  TABLES
*"      C_TAB_ITEM STRUCTURE  /COCKPIT/TITEM
*"      C_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*"      C_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*"      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*"      C_TAB_ACCT_ASSIGN STRUCTURE  /COCKPIT/TACCAS OPTIONAL
*"  CHANGING
*"     REFERENCE(C_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*"       /COCKPIT/THDR
*"     REFERENCE(C_PROCESS) LIKE  /COCKPIT/SIF-PROCESS
```

Template
*"   REFERENCE(C_CPD_DATA) LIKE BSEC STRUCTURE BSEC OPTIONAL *"   REFERENCE(C_CPD_UID) LIKE BSEG-STCEG OPTIONAL *" EXCEPTIONS *"   ERROR_OCCURED *"--
*@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_before_post IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 005 – Intervening after posting a document

The User Exit intervening after posting a document is displayed after the posting procedure via BAPI (also parking) and after the posting of a document via online transaction.

Template
FUNCTION /COCKPIT/USEX_AFTER_POSTING. *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE /COCKPIT/THDR *" EXPORTING *"   REFERENCE(E_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE *"   /COCKPIT/THDR *' TABLES

Template
*'   I_TAB_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL
*'   I_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*'   I_TAB_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*'   E_TAB_MESSAGES STRUCTURE BAPIRET2 OPTIONAL
*' EXCEPTIONS
*'   ERROR_OCCURED
*'--
ENDFUNCTION.

User Exit 006 – Adjustment of the Batch Input data before carrying out a TA

This User Exit modifies the Batch Input data before carrying out a transaction (MIRO, FB60, MRHR) via Batch Input.

Template
FUNCTION /COCKPIT/USEX_PREPARE_ONLINE.
*'--
''Local interface:
*' IMPORTING
*'   REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE /COCKPIT/THDR
*'   REFERENCE(I_TRANSACTION) LIKE TSTC-TCODE
*' TABLES
*'   I_TAB_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL
*''   I_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*''   I_TAB_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*''   I_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL
*''   C_TAB_BDC_DATA STRUCTURE BDCDATA
*''   E_TAB_MESSAGES STRUCTURE BAPIRET2
*' CHANGING

Template
*' REFERENCE(C_CTU_MODE) LIKE BDC_STRUC-BDCMODE
*' REFERENCE(C_CTU_UPDATE) LIKE IBIPPARMS-UPDATEMODE
*'--
ENDFUNCTION.

User Exit 007 – Adjustment of the original data when transferring

The User Exit adjustment of the original data when transferring them to PROCESS DIRECTOR Accounts Payable is displayed upon the receipt of a document via the entry interface, and before PROCESS DIRECTOR Accounts Payable completes the transferred data.

Template
FUNCTION /COCKPIT/USEX_ORGDATA.
*"--
""Lokale Schnittstelle:
*" IMPORTING
*" REFERENCE(I_STR_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE
*" /COCKPIT/SCHECKDATA
*" REFERENCE(I_INVOICE_GUID) LIKE /COCKPIT/THDR-INVOICE_GUID
*" EXPORTING
*" REFERENCE(E_FI_MM_FLG) LIKE /COCKPIT/THDR-FI_MM_FLG
*" TABLES
*" C_TAB_ITEM STRUCTURE /COCKPIT/SITEM_EXT
*" C_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_EXT
*" C_TAB_TAX STRUCTURE /COCKPIT/STAX_EXT
*" C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL
*" C_TAB_MESSAGES STRUCTURE BAPIRET2
*" CHANGING
*" REFERENCE(C_STR_HEADER) LIKE /COCKPIT/SHDR_EXT STRUCTURE

Template
*" /COCKPIT/SHDR_EXT *" EXCEPTIONS *" ERROR_OCCURED *"--

User Exit 008 – Determination of the document type

This User Exit can be used to change the SAP document type on receipt of a document via the entry interface.

To change the SAP document type during editing, use User Exit 066 - Determination of the document type on editing.

Template
FUNCTION /COCKPIT/USEX_DOCTYPE. *'-- *'*'Local interface: *' IMPORTING *' REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE /COCKPIT/THDR *' CHANGING *' REFERENCE(C_DOCTYPE) LIKE BKPF-BLART *'-- ENDFUNCTION.

User Exit 009 – Own additional checks

The User Exit own additional checks is displayed after the additional checks defined in PROCESS DIRECTOR Accounts Payable.

Template
FUNCTION /cockpit/usex_add_checks. *"-- *"*"Lokale Schnittstelle:

Template
*" IMPORTING *" REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE *" /COCKPIT/THDR *" REFERENCE(I_STR_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE *" /COCKPIT/SCHECKDATA *" REFERENCE(I_CHECK_WHERE) LIKE /COCKPIT/SDUMMY-CHKWO OPTIONAL *" REFERENCE(IC_PROCESS) LIKE /COCKPIT/SIF-PROCESS OPTIONAL *" TABLES *" C_TAB_ITEM STRUCTURE /COCKPIT/TITEM *" C_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *" C_TAB_TAX STRUCTURE /COCKPIT/TTAX *" IT_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL *" E_TAB_MESSAGES STRUCTURE BAPIRET2 *" EXCEPTIONS *" ERROR_OCCURED *"--

User Exit 010 – Own authorization checks

The User Exit own authorization checks is displayed after the PROCESS DIRECTOR Accounts Payable-specific authorization check. The User Exit is only active when an authorization object is maintained.

Template
FUNCTION /cockpit/usex_authority_checks. *"-- *"*"Lokale Schnittstelle: *" IMPORTING *" REFERENCE(I_INVOICE_GUID) LIKE /COCKPIT/THDR-INVOICE_GUID *" OPTIONAL *" REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE

Template
`*"       /COCKPIT/THDR OPTIONAL` `*"     REFERENCE(I_STR_HEADER_DISP) LIKE  /COCKPIT/SHDR_DISP STRUCTURE` `*"       /COCKPIT/SHDR_DISP OPTIONAL` `*"     REFERENCE(I_ACTVT) LIKE  TACT-ACTVT OPTIONAL` `*"     REFERENCE(IB_WEBCYCLE) LIKE  BOOLE-BOOLE DEFAULT CON_FALSE` `*"     REFERENCE(I_USER) LIKE  USR02-BNAME OPTIONAL` `*"     REFERENCE(I_BUKRS) LIKE  /COCKPIT/SIF-COMP_CODE OPTIONAL` `*"     REFERENCE(I_LIFNR) LIKE  /COCKPIT/SIF-VENDOR_NO OPTIONAL` `*"  EXPORTING` `*"     REFERENCE(EB_NO_STANDARD) LIKE  BOOLE-BOOLE` `*"  EXCEPTIONS` `*"      NOT_AUTHORIZED` `*"      ERROR_OCCURED` `*"----------------------------------------------------------------------`

User Exit 011 – Adjustment of the checked data during the transfer

The User Exit adjustment of the checked data during the transfer is displayed upon receipt of a document via the entry interface, after PROCESS DIRECTOR Accounts Payable has completed the transferred data.

Template
`FUNCTION /COCKPIT/USEX_TRANSFER.` `*'----------------------------------------------------------------------` `*'*'Local interface:` `*'  IMPORTING` `*'     REFERENCE(I_STR_CHECK) LIKE  /COCKPIT/SCHECKDATA STRUCTURE` `/COCKPIT/SCHECKDATA` `*'  TABLES` `*'      C_TAB_ITEM STRUCTURE  /COCKPIT/TITEM`

Template
*'   C_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *'   C_TAB_TAX STRUCTURE /COCKPIT/TTAX *'   E_TAB_MESSAGES STRUCTURE BAPIRET2 *' C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL *' CHANGING *'   REFERENCE(C_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE *'   /COCKPIT/THDR *' EXCEPTIONS *'   ERROR_OCCURED *'--- ENDFUNCTION.

User Exit 012 – Customer-specific functions

This User Exit is executed when a customer function from the menu is selected.

Template
FUNCTION /COCKPIT/USEX_CUSTFCT_PROCESS. *'--- *'*'Local interface: *' IMPORTING *'   REFERENCE(I_FUNCTION) LIKE SY-UCOMM *' TABLES *'   C_TAB_ITEM STRUCTURE /COCKPIT/SITEM_IF *'   C_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_IF *'   C_TAB_TAX STRUCTURE /COCKPIT/STAX_IF *"   C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL *'   E_TAB_MESSAGES STRUCTURE BAPIRET2 *' CHANGING

Template
*’   REFERENCE(C_STR_HEADER) LIKE /COCKPIT/SHDR_IF STRUCTURE /COCKPIT/SHDR_IF
*’ EXCEPTIONS
*’   WRONG_STATUS
*’   ERROR_OCCURED
*’--
ENDFUNCTION.

User Exit 013 – Adjustment of the image data when transferring

The User Exit adjustment of the image data when transferring them to PROCESS DIRECTOR Accounts Payable is displayed upon receipt of a URL for a document via the entry interface. When the automatic posting is activated, there is no image information yet available at the time of posting.

Template
FUNCTION /COCKPIT/USEX_PICTURE_SUBMIT.
*’--
’’Local interface:
*’ IMPORTING
*’   REFERENCE(IC_ INVOICE_GUID) LIKE /COCKPIT/SIF- INVOICE_GUID
*’ TABLES
*’   C_TAB_PICTUREDETAILS STRUCTURE /COCKPIT/SPICT
*’   E_TAB_MESSAGES STRUCTURE BAPIRET2
*’ EXCEPTIONS
*’   ERROR_OCCURED
*’--
ENDFUNCTION.

User Exit 014 – Adjustment of the data before performing the MM-BAPI

(SAP R/3 4.6C or later)

The User Exit adjustment of the data before performing the MM-BAPI.

Template
FUNCTION /COCKPIT/USEX_PREP_MMBAPI46C. *"-- *"*"Local interface: *" IMPORTING *"   REFERENCE(I_STR_HEADER) TYPE /COCKPIT/THDR *" TABLES *"   I_TAB_ITEM STRUCTURE /COCKPIT/TITEM *"   I_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *"   I_TAB_TAX STRUCTURE /COCKPIT/TTAX *"   I_TAB_ACCAS STRUCTURE /COCKPIT/TACCAS *"   C_TAB_BAPIITEM STRUCTURE BAPI_INCINV_CREATE_ITEM *"   C_TAB_BAPIACCOUNTING STRUCTURE BAPI_INCINV_CREATE_GL_ACCOUNT *"   C_TAB_BAPITAX STRUCTURE BAPI_INCINV_CREATE_TAX *"   C_TAB_BAPIACCAS STRUCTURE BAPI_INCINV_CREATE_ACCOUNT *"   C_TAB_BAPIWITHTAX STRUCTURE BAPI_INCINV_CREATE_WITHTAX *"   OPTIONAL *"   C_TAB_BAPIVENDSPLIT STRUCTURE BAPI_INCINV_CREATE_VENDORSPLIT *"   OPTIONAL *"   C_TAB_BAPIMATERIAL STRUCTURE BAPI_INCINV_CREATE_MATERIAL *"   OPTIONAL *"   E_TAB_MESSAGES STRUCTURE BAPIRET2 *"   C_TAB_EXTENSIONIN STRUCTURE BAPIPAREX OPTIONAL *"   C_TAB_AFS_ITEMDATA OPTIONAL
*" CHANGING

Template
*"   REFERENCE(C_STR_BAPIHEADER) LIKE BAPI_INCINV_CREATE_HEADER *"   STRUCTURE BAPI_INCINV_CREATE_HEADER *"   REFERENCE(C_STR_BAPIADDRESS) LIKE *"   BAPI_INCINV_CREATE_ADDRESSDATA STRUCTURE *"   BAPI_INCINV_CREATE_ADDRESSDATA OPTIONAL *"   REFERENCE(C_IDOC_POSTING) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *"   ERROR_OCCURED *"-- *@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_prep_mmbapi46c IS INITIAL. ENDIF. * ICS1479 BAPI calls doesn't support EXTENSIONIN structure *>>> START OF IMPLEMENTATION >>>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 015 – Own operation of the display of the SAP document

The User Exit that can display the SAP document.

Template
FUNCTION /COCKPIT/USEX_DISPLAY_DOCUMENT. *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(US_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE

Template
*' /COCKPIT/SHDR_DISP *' EXPORTING *' REFERENCE(EC_DONT_CONTINUE) LIKE BOOLE-BOOLE *'-- ENDFUNCTION.

User Exit 016 – Own checks and adjustment in the PAI of the detailed image

(SAP R/3 4.6 or later)

PAI = Process After Input; an action (e.g. entry validation; but there is also the possibility of carrying out buttons) is carried out after an entry in the detailed image.

Template
FUNCTION /COCKPIT/USEX_PAI_DETAILSCREEN. *'-- *'*'Local interface: *' TABLES *' CT_ITEM STRUCTURE /COCKPIT/SITEM_DISP *' CT_ACCOUNT STRUCTURE /COCKPIT/SACCT_DISP *' CT_TAX STRUCTURE /COCKPIT/STAX_DISP *' CHANGING *' REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *' /COCKPIT/SHDR_DISP *' REFERENCE(CC_OK_CODE) LIKE SY-UCOMM *'-- ENDFUNCTION.

User Exit 017 – Adjustment of the data before performing the MM-BAPI

(SAP R/3 4.6 to 4.6B)

MM-BAPI: Here adjustments in the BAPI-processing can be brought about; especially the addition of customer-specific fields that PROCESS DIRECTOR Accounts Payable does not contain in the standard BAPI (e.g. accounting fields in MM).

Template
FUNCTION /COCKPIT/USEX_PREP_MMBAPI. *'-- *'*'Local interface *'   REFERENCE(I_STR_HEADER) TYPE /COCKPIT/THDR *' TABLES *'   I_TAB_ITEM STRUCTURE /COCKPIT/TITEM *'   I_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *'   I_TAB_TAX STRUCTURE /COCKPIT/TTAX *'   I_TAB_ACCAS STRUCTURE /COCKPIT/TACCAS *'   C_TAB_BAPIITEM STRUCTURE BAPI_INCINV_CREATE_ITEM *'   C_TAB_BAPITAX STRUCTURE BAPI_INCINV_CREATE_TAX *'   C_TAB_BAPIACCAS STRUCTURE BAPI_INCINV_CREATE_ACCOUNT *'   E_TAB_MESSAGES STRUCTURE BAPIRET2 *' CHANGING *'   REFERENCE(C_STR_BAPIHEADER) LIKE BAPI_INCINV_CREATE_HEADER *'   STRUCTURE BAPI_INCINV_CREATE_HEADER *' EXCEPTIONS *'   ERROR_OCCURED *'-- ENDFUNCTION.

User Exit 018 – Adjustment of the data before performing the FI-BAPI

(SAP R/3 4.6 to 4.6B)

FI-BAPI: Here adjustments in the BAPI-processing can be brought about; especially the addition of customer-specific fields that PROCESS DIRECTOR Accounts Payable does not contain in the standard BAPI.

Template

```
FUNCTION /COCKPIT/USEX_PREP_FIBAPI.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     REFERENCE(I_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*"        /COCKPIT/THDR
*"  TABLES
*"      I_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*"      I_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*"      C_TAB_ACCOUNTPAYABLE STRUCTURE  BAPIACAP03
*"      C_TAB_ACCOUNTGL STRUCTURE  BAPIACGL03
*"      C_TAB_ACCOUNTTAX STRUCTURE  BAPIACTX01
*"      C_TAB_CURRENCYAMT STRUCTURE  BAPIACCR01
*"      C_TAB_CRITERIA STRUCTURE  BAPIACKECR OPTIONAL
*"      C_TAB_VALUEFIELD STRUCTURE  BAPIACKEVA OPTIONAL
*"      C_TAB_EXTENSION1 STRUCTURE  BAPIEXTC OPTIONAL
*"      E_TAB_MESSAGES STRUCTURE  BAPIRET2
```

```
*"  CHANGING
*"     REFERENCE(C_STR_DOCUMENTHEADER) LIKE  BAPIACHE03 STRUCTURE
*"        BAPIACHE03
*"     REFERENCE(C_STR_CUSTOMERCPD) LIKE  BAPIACPA00 STRUCTURE
*"        BAPIACPA00 OPTIONAL
*"  EXCEPTIONS
```

Template
*"   ERROR_OCCURED *"--

User Exit 019 – Adjustment of the data before performing the FI Posting-Interface

Same as User Exit 017; however, with the FI-Posting-Interface (Alternative to FI-BAPI, that does not carry out all checks etc. or does not provide functionalities); Posting-Interface supplies FB01 functionality.

Template

```
FUNCTION /COCKPIT/USEX_PREP_FICALL.
*'----------------------------------------------------------------------
*'*'Local interface:
*'  IMPORTING
*'     REFERENCE(I_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*'        /COCKPIT/THDR
*'  TABLES
*'      I_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*'      I_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*'      C_TAB_FTPOST STRUCTURE  FTPOST
*'      C_TAB_FTTAX STRUCTURE  FTTAX
*'      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*'  CHANGING
*'     REFERENCE(C_TRANSACTION) LIKE  SY-TCODE
*'     REFERENCE(C_CTU_MODE) LIKE  BDC_STRUC-BDCMODE
*'     REFERENCE(C_CTU_UPDATE) LIKE  IBIPPARMS-UPDATEMODE
*'  EXCEPTIONS
*'      ERROR_OCCURED
*'----------------------------------------------------------------------
ENDFUNCTION.
```

User Exit 020 – After the transfer and the posting attempt

As opposed to the User Exit 011, which adjusts the checked data during transfer, here the posting attempt waits for automatic posting after the transfer.

Template

```
FUNCTION /COCKPIT/USEX_FINAL_TRANSFER.
*'----------------------------------------------------------------------
*'*'Local interface:
*'  IMPORTING
*'     REFERENCE(I_STR_CHECK) LIKE  /COCKPIT/SCHECKDATA STRUCTURE
*'        /COCKPIT/SCHECKDATA
*'     REFERENCE(I_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*'        /COCKPIT/THDR
*'     REFERENCE(I_FLG_ERROR) LIKE  BOOLE-BOOLE
*'  TABLES
*'      I_TAB_ITEM STRUCTURE  /COCKPIT/TITEM
*'      I_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*'      I_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*'      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*'  EXCEPTIONS
*'      ERROR_OCCURED
*'----------------------------------------------------------------------
ENDFUNCTION.
```

User Exit 021 – Before the image display

This can be used as an example when there is a need for adjustment to either a file name or the filing list, before the display. (e.g. '.tif' instead of '.tp1').

Template

```
FUNCTION /COCKPIT/USEX_SHOW_PICTURE.
*'----------------------------------------------------------------------
```

Template
''Local interface: *' IMPORTING *'   REFERENCE(I_STR_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *'   /COCKPIT/SHDR_DISP *' EXPORTING *'   REFERENCE(ES_MESSAGE) LIKE BAPIRET2 STRUCTURE BAPIRET2 *' EXCEPTIONS *'   ERROR_OCCURED *'--- ENDFUNCTION.

User Exit 022 – Determining the field status in the detail screen

You can use this user exit to change the field status in the PROCESS DIRECTOR Accounts Payable detail screen.

Template
FUNCTION /COCKPIT/USEX_FIELDSTATE_GET. *'--- *'*'Local interface: *' IMPORTING *'   REFERENCE(IS_HEADER_DISP) LIKE /COCKPIT/SHDR_DISP STRUCTURE *'   /COCKPIT/SHDR_DISP *'   REFERENCE(IB_IN_WEB CYCLE) LIKE BOOLE-BOOLE *'   REFERENCE(IB_ONLY_WC) LIKE BOOLE-BOOLE *' CHANGING *'   REFERENCE(CC_FIELD_STATE_ID) LIKE *'   /COCKPIT/CSCREEN-FIELD_STATE_ID *'--- ENDFUNCTION.

Consider the following example:

```
DATA:
    ls_header          LIKE /cockpit/shdr_if.
* IF con_exit_get_fieldstate IS INITIAL. ENDIF.
  IF is_header_disp-wc_user EQ 'SMITH'
    AND is_header_disp-wc_usertype EQ 'S'.
    CALL FUNCTION '/COCKPIT/API_DATA_GET'
         EXPORTING
              i_guid       = is_header_disp-invoice_guid
         IMPORTING
              e_str_header = ls_header.
    IF ls_header-header_txt EQ 'Please check'.
      cc_field_state_id = 'FSTATUS_1'.
    ENDIF.
  ENDIF.
```

This user exit example applies the `FSTATUS_1` field status to documents opened by the SAP user SMITH in WORK CYCLE, whenever the value for the **Header text** field is equal to *Please check*.

User Exit 023 – Setting of the Basic-Authentication with http_get

When the access to the external web server for the image display requires an authentication with user name/password, the respective user name/password can be entered in this User Exit. The data is necessary when images of the web server are archived via the `ARCHIV_CONNECT` report or if an email that contains an image of the web server as attachment is generated via the **Send messages** or **Send workflow** functions.

Template
FUNCTION /COCKPIT/USEX_BEFORE_HTTP_GET. *'-------------------------------- *' *'Local interface: *' IMPORTING *'   REFERENCE(IC_ INVOICE_GUID) LIKE /COCKPIT/THDR- INVOICE_GUID *' EXPORTING *'   REFERENCE(E_USER) TYPE C *'   REFERENCE(E_PASSWORD) TYPE C *' CHANGING *'   REFERENCE(C_URL) LIKE /COCKPIT/TMIME-URL *'-- ENDFUNCTION.

User Exit 024 – Determination of the vendor

Note: This User Exit is obsolete. It is used with the old configuration to determine vendors in `/COCKPIT/C29`.

Template
FUNCTION /COCKPIT/USEX_FIND_VENDOR. *'-- *' *'Local interface: *' IMPORTING *'   REFERENCE(IC_GUID) LIKE /COCKPIT/SIF- INVOICE_GUID *' TABLES *'   IT_ITEM STRUCTURE /COCKPIT/SITEM_EXT *'   ET_BANKACCT STRUCTURE /COCKPIT/SBANK_ACCT *'   ET_ASSIGNED_VENDORS STRUCTURE /COCKPIT/SVENDOR_FIND *'   ET_MESSAGES STRUCTURE BAPIRET2 *' CHANGING *'   REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *'   /COCKPIT/THDR *'   REFERENCE(CS_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE *'   /COCKPIT/SCHECKDATA *' EXCEPTIONS *'   ERROR_OCCURED *'-- ENDFUNCTION.

User Exit 025 – Adjustment of the archiving data before the image display

Here the vendor determination can be adjusted and evaluated. It serves as enhancement/modification of the standard vendor determination configuration.

Template
FUNCTION /COCKPIT/USEX_ARCHIVEID_ADJUST. *'--

Template
''Local interface: *' IMPORTING *'   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *'   /COCKPIT/SHDR_DISP *' EXPORTING *'   REFERENCE(EC_DOC_TYPE) LIKE TOADV-DOC_TYPE *' CHANGING *'   REFERENCE(CS_ARCHIVE) LIKE /COCKPIT/SARCHIVE STRUCTURE *'   /COCKPIT/SARCHIVE *'-- ENDFUNCTION.

User Exit 026 – Adjustment of the data before the completion

Serves for the adjustment of the data in a PROCESS DIRECTOR Accounts Payable document before being finalized.

Template
FUNCTION /COCKPIT/USEX_DOC_FINISH. *'-- *'*'Local interface: *' TABLES *'   ET_MESSAGES STRUCTURE BAPIRET2 *' CHANGING *'   REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *'   /COCKPIT/SHDR_DISP *'   REFERENCE(CC_SAP_OBJ) LIKE /COCKPIT/CARCHIV-SAP_OBJECT *'   REFERENCE(CC_CANCEL_FINALIZE) LIKE BOOLE-BOOLE *'   REFERENCE(CC_SAP_DOC_NO) LIKE BKPF-BELNR *'   REFERENCE(CC_FISCAL_YEAR) LIKE BKPF-GJAHR

Template
*'   REFERENCE(CC_POSTING_DATE) LIKE BKPF-BUDAT
*'   REFERENCE(CC_NO_ARCHIVING) LIKE BOOLE-BOOLE
*'--
ENDFUNCTION.

User Exit 027 – Own checks and adjustment in the PAI of the overview list

(SAP R/3 4.6 or later)

The same as User Exit 016 - Own checks and adjustment in the PAI of the detailed image, but in the overview list.

Template
FUNCTION /COCKPIT/USEX_PAI_OVERVIEW.
*'--
''Local interface:
*' IMPORTING
*'   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE
*'   /COCKPIT/SHDR_DISP
*' TABLES
*'   IT_ITEM STRUCTURE /COCKPIT/SITEM_IF
*'   IT_ACCOUNT STRUCTURE /COCKPIT/SACCT_IF
*'   IT_TAX STRUCTURE /COCKPIT/STAX_IF
*"   IT_ACCOUNT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL
*' CHANGING
*'   REFERENCE(CC_OK_CODE) LIKE SY-UCOMM
*'--
ENDFUNCTION.

User Exit 028 – Determine the file name for the Control Display

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_EAI_FILENAME. *'--- *'*'Local interface: *' IMPORTING *'   VALUE(IS_ARCHIVE) LIKE /COCKPIT/SARCHIVE STRUCTURE *'   /COCKPIT/SARCHIVE *'   VALUE(IC_FILE_EXTENSION) TYPE C *'   VALUE(IS_SHDR_DISP) LIKE /COCKPIT/SHDR_DISP STRUCTURE *'   /COCKPIT/SHDR_DISP *' CHANGING *'   VALUE(C_FILENAME) TYPE C *'   VALUE(C_DOC_TYPE) LIKE TOADV-DOC_TYPE *'--- ENDFUNCTION.

User Exit 029 – Adjustment of the notes to be archived

Notes are archived at the time of posting or at the time of the release in WORK CYCLE. This User Exit can be used, in case there are adjustments; for example, add-ons of additional information necessary.

Template
FUNCTION /COCKPIT/USEX_ARCHIVE_NOTES. *'--- *'*'Local interface: *' IMPORTING *'   REFERENCE(IS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *'   /COCKPIT/THDR *'   REFERENCE(IB_UPDATETASK) LIKE BOOLE-BOOLE *'   REFERENCE(IB_CONNECT_FURTHER) LIKE BOOLE-BOOLE

Template
*’   REFERENCE(IS_NOTES_CUST) LIKE /COCKPIT/CNOTES STRUCTURE
*’   /COCKPIT/CNOTES
*’ EXPORTING
*’   REFERENCE(EC_ARC_DOC_TYPE) LIKE TOADD-DOC_TYPE
*’   REFERENCE(EN_LENGTH) LIKE SAPB-LENGTH
*’   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
*’ TABLES
*’   CT_TEXT STRUCTURE /COCKPIT/SWC_NOTE
*’   ET_DOCS STRUCTURE DOCS
*’   ET_MESSAGES STRUCTURE BAPIRET2
*’ EXCEPTIONS
*’   ERROR_OCCURED
*’--
ENDFUNCTION.

User Exit 030 – Own calculation of the balance of a document

Template
FUNCTION /COCKPIT/USEX_BALANCE_COMPUTE.
*’--
’’Local interface:
* *" IMPORTING
*"   REFERENCE(IS_HEADER) LIKE /COCKPIT/THDR STRUCTURE
*"   /COCKPIT/THDR OPTIONAL
*"   REFERENCE(IS_HEADER_DISP) LIKE /COCKPIT/SHDR_DISP STRUCTURE
*"   /COCKPIT/SHDR_DISP OPTIONAL
*"   REFERENCE(IB_COMPUTE_DISCOUNT) LIKE BOOLE-BOOLE DEFAULT
*"   CON_FALSE

Template
*" EXPORTING
*"   REFERENCE(EP_BALANCE) LIKE RM08M-DIFFERENZ
*"   REFERENCE(ES_MESSAGE) LIKE BAPIRET2 STRUCTURE BAPIRET2
*"   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
*" TABLES
*"   IT_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL
*"   IT_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*"   IT_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*"   IT_ITEM_DET STRUCTURE /COCKPIT/SITEM_DET OPTIONAL
*"   IT_ACCOUNT_DET STRUCTURE /COCKPIT/SACCT_DET OPTIONAL
*"   IT_TAX_DET STRUCTURE /COCKPIT/STAX_DET OPTIONAL
*'--
ENDFUNCTION.

User Exit 031 – Adjustment of the headers of the overview list

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_HEADER_DISP_SET.
*'--
''Local interface:
*' CHANGING
*'   REFERENCE(ES_HEADER_DISP) LIKE /COCKPIT/SHDR_DISP STRUCTURE
*'   /COCKPIT/SHDR_DISP
*'--
ENDFUNCTION.

User Exit 032 – Adjustment after FI > MM transfer

User-Exit after clicking on the FI-MM transfer button. For example, in order to determine customer-specific document types that emerge of a User-Exit (determination of the document type).

Template
FUNCTION /COCKPIT/USEX_TRANSFER_FI_MM. *'--- *'*'Local interface: *' TABLES *'   C_TAB_ITEM STRUCTURE /COCKPIT/TITEM *'   C_TAB_ACCOUNT STRUCTURE /COCKPIT/TACCT *'   C_TAB_TAX STRUCTURE /COCKPIT/TTAX *'   C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL *'   E_TAB_MESSAGES STRUCTURE BAPIRET2 *' CHANGING *'   REFERENCE(C_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE *'   /COCKPIT/THDR *' EXCEPTIONS *'   ERROR_OCCURED *'--- ENDFUNCTION.

User Exit 033 – Adjustment after MM > FI Transfer

User-Exit after clicking on the FI-MM transfer button. For example in order to determine customer-specific document types that emerge of a User-Exit (determination of the document type).

Template
FUNCTION /COCKPIT/USEX_TRANSFER_MM_FI. *'--- *'*'Local interface: *' TABLES

Template

```
*'      C_TAB_ITEM STRUCTURE  /COCKPIT/TITEM
*'      C_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*'      C_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*'      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*'  CHANGING
*'     REFERENCE(C_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*'        /COCKPIT/THDR
*'  EXCEPTIONS
*'      ERROR_OCCURED
*'---------------------------------------------------------------------
ENDFUNCTION.
```

User Exit 034 – Directly after the transfer of the data

User Exit is called directly after data transfer to PROCESS DIRECTOR Accounts Payable. Can be used to write data in other tables not in the PROCESS DIRECTOR Accounts Payable standard tables.

Template

```
FUNCTION /COCKPIT/USEX_SUBMIT.
*'---------------------------------------------------------------------
*'*'Local interface:
*'  EXPORTING
*'     REFERENCE(EC_GUID) LIKE  /COCKPIT/SIF- INVOICE_GUID
*'     REFERENCE(EC_DOCNO) LIKE  /COCKPIT/THDR-DOCNO
*'     REFERENCE(EB_NO_STANDARD) LIKE  BOOLE-BOOLE
*'  TABLES
*'      CT_ITEM STRUCTURE  /COCKPIT/SITEM_EXT
*'      CT_TAX STRUCTURE  /COCKPIT/STAX_EXT
*'      CT_ACCOUNT STRUCTURE  /COCKPIT/SACCT_EXT
```

Template
*' CT_CONTENT STRUCTURE TBL1024 OPTIONAL
*' ET_MESSAGES STRUCTURE BAPIRET2
*' CHANGING
*' REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_EXT STRUCTURE
*' /COCKPIT/SHDR_EXT
*' REFERENCE(CS_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE
*' /COCKPIT/SCHECKDATA
*' REFERENCE(CN_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL
*" REFERENCE(CC_EXTERNAL_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID
*" OPTIONAL
*' EXCEPTIONS
*' ERROR_OCCURED
*'--
ENDFUNCTION.

User Exit 035 – Own logic in the PBO of the detail screen as of 4.6

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_PBO_DETAILSCREEN.
*'--
''Lokale Schnittstelle:
*' TABLES
*' CT_ITEM STRUCTURE /COCKPIT/SITEM_DET OPTIONAL
*' CT_ACCOUNT STRUCTURE /COCKPIT/SACCT_DET OPTIONAL
*' CT_TAX STRUCTURE /COCKPIT/STAX_DET OPTIONAL
*' CHANGING
*' REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE

Template
*'   /COCKPIT/SHDR_DISP
*'---
ENDFUNCTION.

User Exit 036 – Own logic after performing an invoice

Template
FUNCTION /COCKPIT/USEX_AFTER_PROCESSING.
*'---
''Local interface:
*' IMPORTING
*'   REFERENCE(IS_HEADER) LIKE /COCKPIT/THDR STRUCTURE
*'   /COCKPIT/THDR OPTIONAL
*'   REFERENCE(IC_PROCESS) LIKE /COCKPIT/SIF-PROCESS OPTIONAL
*'   REFERENCE(IC_USER) LIKE /COCKPIT/SHDR_IF-CR_USER OPTIONAL
*'   REFERENCE(IC_CHANGE_USER_IS_ONLINE) LIKE COMMS-COMMIT_SW
*'   OPTIONAL
*'   REFERENCE(IC_DOC_NO) LIKE /COCKPIT/SIF-SAP_DOC_NO OPTIONAL
*'   REFERENCE(IC_FISCAL_YEAR) LIKE /COCKPIT/SIF-FISCAL_YEAR
*'   OPTIONAL
*'   REFERENCE(IC_POSTING_DATE) LIKE /COCKPIT/SIF-PSTNG_DATE
*'   OPTIONAL
*'   REFERENCE(IC_USER_CANCEL) LIKE BOOLE-BOOLE OPTIONAL
*' TABLES
*'   IT_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL
*'   IT_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*'   IT_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*'   IT_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL

Template
*'   ET_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *'-- ENDFUNCTION.

User Exit 037 – Own message handling when posting a document

In some systems, messages are received that PROCESS DIRECTOR Accounts Payable cannot process and thus regards the document as not posted. Here, it is possible to modify them.

Template
FUNCTION /COCKPIT/USEX_CHECK_POST_MSG. *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(IB_NO_MSG_DEL) LIKE BOOLE-BOOLE DEFAULT SPACE *'   REFERENCE(IC_COMP_CODE) LIKE /COCKPIT/THDR-COMP_CODE OPTIONAL *'   REFERENCE(IC_CP_DOC_TYPE) LIKE /COCKPIT/THDR-CP_DOC_TYPE *'   OPTIONAL *' EXPORTING *'   REFERENCE(EC_DOC_NO) LIKE BKPF-BELNR *'   REFERENCE(EC_PROCESS) LIKE /COCKPIT/THIST-PROCESS *'   REFERENCE(EC_BUKRS) LIKE BKPF-BUKRS *'   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE *' TABLES *''   IT_DOCNO STRUCTURE BLNTAB OPTIONAL *'   CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *'-- ENDFUNCTION.

User Exit 038 – Adjustment before the Rescan

With the help of this User Exit, adjustments before and during the processing in the Rescan can be carried out.

Template
FUNCTION /cockpit/usex_rescan. *"-- *"*"Lokale Schnittstelle: *" TABLES *"   I_TAB_CONTENT STRUCTURE TBL1024 OPTIONAL *"   E_TAB_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *" CHANGING *"   REFERENCE(C_DOCNO) LIKE /COCKPIT/THDR-DOCNO OPTIONAL *"   REFERENCE(C_SAPDOCNO) LIKE /COCKPIT/THDR-SAP_DOC_NO OPTIONAL *"   REFERENCE(C_COMPCODE) LIKE /COCKPIT/THDR-COMP_CODE OPTIONAL *"   REFERENCE(C_FISCALYEAR) LIKE /COCKPIT/THDR-FISCAL_YEAR OPTIONAL *"   REFERENCE(C_DOC_ID) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *"   REFERENCE(C_ARC_ID) LIKE /COCKPIT/THDR-EC_ARC_ID OPTIONAL *"   REFERENCE(C_ARC_OBJ) LIKE /COCKPIT/THDR-EC_ARC_OBJ OPTIONAL *"   REFERENCE(C_MATCHCODE) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *"   REFERENCE(C_COVERSHEET1) LIKE SAPB-SEARCHKEY OPTIONAL *"   REFERENCE(C_COVERSHEET2) LIKE SAPB-SEARCHKEY OPTIONAL *"   REFERENCE(C_COVERSHEET3) LIKE SAPB-SEARCHKEY OPTIONAL *"   REFERENCE(C_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL *"   REFERENCE(CB_NO_STANDARD) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *"   ERROR_OCCURED *"--

User Exit 039 – Adjustment of the messages before the display

Checks messages before displaying them and is able to adjust them.

Template
FUNCTION /COCKPIT/USEX_MSG_DISPLAY. *'-- *'*' Local interface: *' IMPORTING *'   REFERENCE(IC_COMP_CODE) LIKE /COCKPIT/THDR-COMP_CODE OPTIONAL *'   REFERENCE(IC_CP_DOC_TYPE) LIKE /COCKPIT/THDR-CP_DOC_TYPE *'   OPTIONAL *' EXPORTING *'   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE *' TABLES *'   ET_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *' CHANGING *'   REFERENCE(EC_TITLE) LIKE SY-TITLE OPTIONAL *'   REFERENCE(EC_MSG_V1) LIKE SY-MSGV1 OPTIONAL *'   REFERENCE(EB_ADD_CHECK) LIKE BOOLE-BOOLE OPTIONAL *'   REFERENCE(EB_CONTINUE) LIKE BOOLE-BOOLE OPTIONAL *'-- ENDFUNCTION.

User Exit 040 – Adjustment of the messages before the storage

Adjust messages before they are written to the database.

Template
FUNCTION /COCKPIT/USEX_MSG_HISTORY. *'-- *'*'Local interface:

Template

```
*'      IMPORTING
*'          REFERENCE(IC_GUID) LIKE  /COCKPIT/SIF- INVOICE_GUID
*'        OPTIONAL
*'          REFERENCE(IC_VERSION) LIKE  /COCKPIT/SIF-VERSION
*'        OPTIONAL
*'      EXPORTING
*'          REFERENCE(EB_NO_STANDARD) LIKE  BOOLE-BOOLE
*'      TABLES
*'           ET_MESSAGES STRUCTURE  BAPIRET2 OPTIONAL
*'      CHANGING
*'          REFERENCE(EC_PROCESS) LIKE  /COCKPIT/SIF-PROCESS
*'        OPTIONAL
*'          REFERENCE(EC_USERNAME) LIKE  SY-UNAME OPTIONAL
*'      EXCEPTIONS
*'           ERROR_OCCURED
*'----------------------------------------------------------------------
ENDFUNCTION.
```

User Exit 041 – Suppress buttons

Access to PROCESS DIRECTOR can be restricted by using an SAP authorization object, which is activated in PROCESS DIRECTOR based on a typical role concept, for example, AP key user, Invoice coder, Approver and PO requisitioner/creator, and so on. You can use this User Exit to differentiate access within these groups or to cover functionality that is not covered in the activity list of the authorization object.

Template

```
FUNCTION /COCKPIT/USEX_SUPPRESS_BUTTONS .
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  TABLES
```

Template
*" CT_FCODE STRUCTURE RSEXFCODE *"-- *@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_excl_button IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* * example : user ABC123 is not allowed to .... * if sy-uname = 'ABC123'. ** customized with 'Active functions' * append 'SHOW' TO ct_fcode. * append 'TAX' TO ct_fcode. * append 'CHCK' TO ct_fcode. * append 'PARK' TO ct_fcode. * append 'POST' TO ct_fcode. * append 'PROC' TO ct_fcode. * append 'FIMM' TO ct_fcode. * append 'HIST' TO ct_fcode.
* append 'POFIND' TO ct_fcode. * append 'VEND' TO ct_fcode. * append 'ORDE' TO ct_fcode. * append 'DELE' TO ct_fcode. * append 'REFRESH' TO ct_fcode. * append 'LEGE' TO ct_fcode. * append 'REFUSE' TO ct_fcode. * append 'VERS' TO ct_fcode.

Template

```
*    append 'FINAL' TO  ct_fcode.
*
** Web Cycle
*    append 'WC_SEND' TO  ct_fcode.
*    append 'WC_RECALL' TO  ct_fcode.
*    append 'WC_LEGEND' TO  ct_fcode.
*    append 'NOTE_DIS' TO  ct_fcode.
*    append 'NOTE_NEW' TO  ct_fcode.
*
** customer functions:
*    append 'CF1' TO  ct_fcode.
*    append 'CF2' TO  ct_fcode.
*    append 'CF3' TO  ct_fcode.
*    append 'CF4' TO  ct_fcode.
*    append 'CF5' TO  ct_fcode.
*    append 'CF6' TO  ct_fcode.
```

```
* others
*    append 'TOGGLE' TO  ct_fcode. "toggle /display/change
*    append 'DETA'   TO  ct_fcode. "show detail view
*    append 'CLERK'  TO  ct_fcode. "assign user
*    append 'DETA'   TO  ct_fcode. "show detail view
*    append 'BELN'  TO  ct_fcode. "show SAP document
*    append 'USRDEF'  TO  ct_fcode. "change user settings
*    append 'WC_STATUS'  TO  ct_fcode. "display wc status
* endif.
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

The PROCESS DIRECTOR actions in the above example correspond to the list in `/COCKPIT/C4`.

Example

The following example disables the Post action for the TRAINING10 user:

Example

```
FUNCTION Z_USEX_SUPPRESS_BUTTONS .
*"----------------------------------------------------------------------
*"*"Local interface:
*"       TABLES
*"              CT_FCODE STRUCTURE  RSEXFCODE
*"----------------------------------------------------------------------
*@US@aa        => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_excl_button IS INITIAL. ENDIF.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
 if sy-uname = 'TRAINING10'.
    append 'POST' TO  ct_fcode.
endif.
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

User Exit 042 – Adjustment of the field catalogs of the overview lists

(SAP R/3 4.6 or later)

Template

```
FUNCTION /COCKPIT/USEX_FIELDCAT_ADAPT.
*'----------------------------------------------------------------------
```

Template
''Local interface: *' IMPORTING *'   REFERENCE(IC_GRIDNAME) LIKE TFDIR-FUNCNAME *' CHANGING *'   REFERENCE(CT_FIELDCAT) TYPE LVC_T_FCAT *'-- ENDFUNCTION.

User Exit 043 – After assignment of invoice items to PO items

A User Exit that permits adjustments for the items after the line-item determination.

Template
FUNCTION /COCKPIT/USEX_PO_ITEMS_FINAL. *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(I_STR_HEADER) LIKE /COCKPIT/THDR STRUCTURE *'   /COCKPIT/THDR *' TABLES *'   C_TAB_ITEM STRUCTURE /COCKPIT/TITEM *'   C_TAB_MESSAGES STRUCTURE BAPIRET2 *' EXCEPTIONS *'   ERROR_OCCURED *'-- ENDFUNCTION.

User Exit 044 – Check and adjustment of the agent assignment

(SAP R/3 4.6 or later)

Template
/COCKPIT/USEX_CLERK_ASSIGN . *'-- *'*'Local interface: *' TABLES *'   IT_HDR_DISP STRUCTURE /COCKPIT/SHDR_DISP *' CHANGING *'   REFERENCE(CB_SAVE_CLERK) LIKE BOOLE-BOOLE *'   REFERENCE(CC_USER) LIKE /COCKPIT/THDR-CR_USER *' EXCEPTIONS *'   ERROR *'-- ENDFUNCTION.

User Exit 045 – Adjustments of the e-mails with HTML contents

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_EMAIL_HTML_MODIF . *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(IB_NO_STANDARD) LIKE BOOLE-BOOLE *'   REFERENCE(ID_DATE) TYPE D *'   REFERENCE(IC_SUBJECT_TEXT) TYPE /COCKPIT/EMAIL_SUBJECT *' TABLES *'   IT_EMAIL_TEXT STRUCTURE /COCKPIT/SWC_NOTE

Template
*'   IT_SENDER_TEXT STRUCTURE /COCKPIT/SWC_NOTE
*'   IT_RECIPIENT_TEXT STRUCTURE /COCKPIT/SWC_NOTE
*'   CT_HTML STRUCTURE DOCS
*'   ET_MESSAGES STRUCTURE BAPIRET2
*'--
ENDFUNCTION.

User Exit 046 – Adjustment of the purchase order item proposal

(SAP R/3 4.6 and later)

With the help of this User Exit, adjustment for the function of the purchase order line-item proposal can be carried out.

Template
FUNCTION /COCKPIT/USEX_POITEM_PROPOSAL .
*'--
''Local interface:
*" IMPORTING
*"   REFERENCE(IB_ALL_ITEMS) LIKE /COCKPIT/CPOSTNG-ITEM_PROP DEFAULT
*"   CON_FALSE
*" EXPORTING
*"   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
*" TABLES
*"   ET_ITEM STRUCTURE /COCKPIT/TITEM
*"   ET_MESSAGES STRUCTURE BAPIRET2
*"   ET_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*"   ET_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*"   ET_ACCTASG STRUCTURE /COCKPIT/TACCAS OPTIONAL
*" CHANGING
*"   REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE

Template
*"   /COCKPIT/THDR
*" EXCEPTIONS
*"   NOT_AUTHORIZED
*"   ERROR_OCCURED
*"--
*@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...   => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
IF con_exit_poitem_proposal IS INITIAL. ENDIF.
>>> START OF IMPLEMENTATION >>
<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
ENDFUNCTION.

User Exit 047 – Check of posting data and posting period

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_POSTDATE_PERIOD .
*'--
''Local interface:
*' EXPORTING
*'   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
*' CHANGING
*'   REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE
*'   /COCKPIT/SHDR_DISP
*'--
ENDFUNCTION.

User Exit 048 – Filtering of MM invoice items in the user interface

Template
FUNCTION /COCKPIT/USEX_FILTER_MM_ITEMS . *'-- *'*'Local interface: *' TABLES *'   CT_ITEM STRUCTURE /COCKPIT/TITEM *'-- ENDFUNCTION.

User Exit 049 – Filtering of FI accounting lines in the user interface

Template
FUNCTION /COCKPIT/USEX_FILTER_FI_ITEMS . *'-- *'*'Local interface: *' TABLES *'   CT_ACCOUNT STRUCTURE /COCKPIT/TACCT *'-- ENDFUNCTION.

User Exit 050 – F4 search help for replacement of reference documents

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_F4_REF_DOC . *'-- *'*'Local interface: *' IMPORTING

Template
*'   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE
*'   /COCKPIT/SHDR_DISP
*'   REFERENCE(IS_ITEM) LIKE /COCKPIT/SITEM_DISP STRUCTURE
*'   /COCKPIT/SITEM_DISP
*' EXPORTING
*'   REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
*' CHANGING
*'   REFERENCE(CC_REF_DOC) LIKE /COCKPIT/TITEM-REF_DOC OPTIONAL
*'   REFERENCE(CN_REF_DOC_YEAR) LIKE /COCKPIT/TITEM-REF_DOC_YEAR
*'   OPTIONAL
*'   REFERENCE(CN_REF_DOC_IT) LIKE /COCKPIT/TITEM-REF_DOC_IT
*'   OPTIONAL
*'   REFERENCE(LC_LFSNR) LIKE /COCKPIT/TITEM-LFSNR OPTIONAL
*'--
ENDFUNCTION.

User Exit 051 – Adjustment of selected documents

Template
FUNCTION /COCKPIT/USEX_DATA_GET_MULTI .
''Local interface:
*' IMPORTING
*'   REFERENCE(IB_SELECT_STATE_CREATED) LIKE COMMS-COMMIT_SW DEFAULT
*'   'X'
*'   REFERENCE(IB_SELECT_STATE_ERROR) LIKE COMMS-COMMIT_SW DEFAULT
*'   'X'
*'   REFERENCE(IB_SELECT_STATE_PROCESSED) LIKE COMMS-COMMIT_SW

Template
*' DEFAULT 'X' *' REFERENCE(IB_SELECT_STATE_WC) LIKE BOOLE-BOOLE DEFAULT 'X' *' REFERENCE(IB_SELECT_REFUSE) LIKE COMMS-COMMIT_SW DEFAULT SPACE *' REFERENCE(IB_SELECT_FI) LIKE COMMS-COMMIT_SW DEFAULT 'X' *' REFERENCE(IB_SELECT_MM) LIKE COMMS-COMMIT_SW DEFAULT 'X' *' REFERENCE(IC_GUID) LIKE /COCKPIT/SIF- INVOICE_GUID OPTIONAL *' REFERENCE(IC_SPECIAL_SELECT) TYPE C OPTIONAL *' REFERENCE(II_MAXSEL) LIKE RSEUMOD-TBMAXSEL OPTIONAL *' REFERENCE(IC_WC_USER) LIKE /COCKPIT/SWC_IF-WC_USER OPTIONAL *' REFERENCE(IC_WC_USERTYPE) LIKE /COCKPIT/SWC_IF-WC_USERTYPE *' DEFAULT CON_SAP_USER *' REFERENCE(IB_SELECT_STATE_COLL_INV_CL) LIKE BOOLE-BOOLE DEFAULT *' 'X' *' REFERENCE(IB_SELECT_STATE_COLL_INV_OP) LIKE BOOLE-BOOLE DEFAULT *' 'X' *' REFERENCE(II_SUBRC) LIKE SY-SUBRC OPTIONAL
*' TABLES *' IT_SELOPT_COMP_CODE STRUCTURE BUKRS_RAN OPTIONAL *' IT_SELOPT_VENDOR STRUCTURE /COCKPIT/RVENDOR OPTIONAL *' IT_SELOPT_DOC_POST_DATE STRUCTURE RNG_DATE OPTIONAL *' IT_SELOPT_CURRENCY STRUCTURE /COCKPIT/RCURR OPTIONAL *' IT_SELOPT_USERNAME STRUCTURE /COCKPIT/RUSER OPTIONAL *' IT_SELOPT_BEARBEITER STRUCTURE /COCKPIT/RUSER OPTIONAL *' IT_SELOPT_DOC_SCAN_DATE STRUCTURE RNG_DATE OPTIONAL *' IT_SELOPT_PO_NUMBER STRUCTURE RANGE_EBELN OPTIONAL *' IT_SELOPT_SAP_DOC_NO STRUCTURE RNG_BELNR OPTIONAL *' IT_SELOPT_REF_DOC_NO STRUCTURE /COCKPIT/RXBLNR OPTIONAL

Template
*'   IT_SELOPT_DOCNO STRUCTURE /COCKPIT/RDOCNO OPTIONAL
*'   IT_SELOPT_CP_DOC_TYPE STRUCTURE /COCKPIT/RCPDOCTYPE OPTIONAL
*'   IT_SELOPT_GUID STRUCTURE /COCKPIT/RGUID OPTIONAL
*'   IT_SELOPT_FREE STRUCTURE /COCKPIT/SELOPT_FREE OPTIONAL
*'   IT_FREE_SELECTIONS STRUCTURE RSDSWHERE OPTIONAL
*'   CT_HEADER_DISP STRUCTURE /COCKPIT/SHDR_IF
*'   CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL
*' EXCEPTIONS
*'   NO_DATA_FOUND
*'   ERROR_OCCURED
*'--
ENDFUNCTION.

User Exit 052 – Determination of archive object type

Template
FUNCTION /cockpit/usex_arcobj_get.
*"--
""Lokale Schnittstelle:
*" IMPORTING
*"   REFERENCE(IC_SAP_OBJ) LIKE /COCKPIT/CARCHIV-SAP_OBJECT
*"   REFERENCE(IC_ARC_OBTYP) LIKE /COCKPIT/CARCOBJ-OBTYP
*"   REFERENCE(IC_ARC_OBJ) LIKE /COCKPIT/CARCHIV-AR_OBJECT
*"   REFERENCE(IS_HEADER) LIKE /COCKPIT/THDR STRUCTURE
*"   /COCKPIT/THDR
*" CHANGING
*"   REFERENCE(CC_ARC_OBJ) LIKE /COCKPIT/CARCHIV-AR_OBJECT
*"--

Template
*@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_arcobj_get IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 053 – Adjustment of data during MM document import

(SAP R/3 4.6C or later)

Template
FUNCTION /COCKPIT/USEX_DOCIMPORT_MM. *"-- *"*"Lokale Schnittstelle: *" TABLES *"   CT_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL *"   CT_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL *"   CT_GLACCOUNT STRUCTURE /COCKPIT/TACCAS OPTIONAL *"   CT_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL *"   IT_BSEG STRUCTURE BSEG OPTIONAL *"   IT_BKPF STRUCTURE BKPF OPTIONAL *"   IT_ITEMDATA STRUCTURE BAPI_INCINV_DETAIL_ITEM OPTIONAL *"   IT_ACCTDATA STRUCTURE BAPI_INCINV_DETAIL_ACCOUNT OPTIONAL *"   IT_GLACCTDATA STRUCTURE BAPI_INCINV_DETAIL_GL_ACCOUNT OPTIONAL *"   IT_TAXDATA STRUCTURE BAPI_INCINV_DETAIL_TAX OPTIONAL *"   CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL

Template
*" CHANGING *" REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *" /COCKPIT/THDR *" REFERENCE(CC_SHORT_BELNR) LIKE BKPF-BELNR OPTIONAL *" REFERENCE(CI_POSNO) TYPE I OPTIONAL *" REFERENCE(CB_CHECK_ARCHIV) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *" ERROR_OCCURED *"--
*@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_docimp_mm IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 054 – Adjustment of data during FI document import

(SAP R/3 4.6C or later)

Template
FUNCTION /COCKPIT/USEX_DOCIMPORT_FI. *"-- *"*"Lokale Schnittstelle: *" TABLES *" CT_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL

Template
*"   CT_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL *"   IT_BSEG STRUCTURE BSEG OPTIONAL *"   IT_ABKPF STRUCTURE ABKPF OPTIONAL *"   CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *" CHANGING *"   REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *"   /COCKPIT/THDR *"   REFERENCE(CI_POSNO) TYPE I OPTIONAL *"   REFERENCE(CB_CHECK_ARCHIV) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *"   ERROR_OCCURED
*"-- *@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_docimp_fi IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 055 – Adjustment of data in Rescan before a linking

Template
FUNCTION /cockpit/usex_rescan_befor_lnk. *"-- *"*"Lokale Schnittstelle:

Template
*" TABLES *" CT_CONTENT STRUCTURE TBL1024 OPTIONAL *" CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *" CHANGING *" REFERENCE(CC_DOCNO) LIKE /COCKPIT/THDR-DOCNO OPTIONAL *" REFERENCE(CC_SAPDOCNO) LIKE /COCKPIT/THDR-SAP_DOC_NO OPTIONAL *" REFERENCE(CC_COMPCODE) LIKE /COCKPIT/THDR-COMP_CODE OPTIONAL *" REFERENCE(CC_FISCALYEAR) LIKE /COCKPIT/THDR-FISCAL_YEAR *" OPTIONAL *" REFERENCE(CC_DOC_ID) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *" REFERENCE(CC_ARC_ID) LIKE /COCKPIT/THDR-EC_ARC_ID OPTIONAL *" REFERENCE(CC_ARC_OBJ) LIKE /COCKPIT/THDR-EC_ARC_OBJ OPTIONAL *" REFERENCE(CC_MATCHCODE) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *" REFERENCE(CC_COVERSHEET1) LIKE SAPB-SEARCHKEY OPTIONAL *" REFERENCE(CC_COVERSHEET2) LIKE SAPB-SEARCHKEY OPTIONAL *" REFERENCE(CC_COVERSHEET3) LIKE SAPB-SEARCHKEY OPTIONAL *" REFERENCE(CC_CONTENT_LENGTH) LIKE SAPB-LENGTH OPTIONAL *" REFERENCE(CC_SEARCH_RESULT) LIKE SAPB-PRIORITY OPTIONAL *" REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *" /COCKPIT/THDR OPTIONAL *" REFERENCE(CB_LOCK_DOCUMENT) LIKE BOOLE-BOOLE OPTIONAL *" REFERENCE(CB_NO_STANDARD) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *" ERROR_OCCURED
*"-- *@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name

Template
*@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_rescan_before_link IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>>* * === Reference implementation of Coversheet rescan === * This implentations start automatically a WEB CYCLE * after a Coversheet is rescanned. * If you want to start a WEB CYCLE in user exit * 055 con_exit_rescan_After_link, you must activate * locking in this user exit, because you will modify * INVOICE COCKPIT document with WEB CYCLE start.   DATA: lb_auto_approve LIKE boole-boole VALUE con_true,   ls_webcycle   LIKE /cockpit/swc_if,   ls_wc_step   LIKE /cockpit/swc_step,   lc_user   LIKE /cockpit/swc_if-wc_user.   IF lb_auto_approve = con_true.   lc_user = sy-uname.   CALL FUNCTION '/COCKPIT/WC_API_DATA_GET'   EXPORTING   ic_guid   = cs_header-invoice_guid   ic_user_type = con_sap_user   ic_user   = lc_user   IMPORTING   es_webcycle = ls_webcycle   es_wc_step   = ls_wc_step
EXCEPTIONS

Template
``   not_found   = 1   OTHERS   = 2.   IF (ls_webcycle-wc_id = 'TG_TRAVEL1' OR   ls_webcycle-wc_id = 'TG_TRAVEL2') AND   ls_wc_step-wc_step_id = 'TG_TRAVELB'.   cb_lock_document = con_true.   ELSE.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_number   = '078'   i_id   = '/COCKPIT/WC'   TABLES   c_tab_messages = ct_messages.   IF 1 EQ 2. MESSAGE e078(/cockpit/wc). ENDIF.   RAISE error_occured.   ENDIF. ELSE.   CHECK: NOT cc_coversheet1 IS INITIAL OR   NOT cc_coversheet2 IS INITIAL OR   NOT cc_coversheet3 IS INITIAL. ```
``   IF cs_header-status EQ con_status_webcycle.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_number   = '078'   i_id   = '/COCKPIT/WC'   TABLES ```

Template
c_tab_messages = ct_messages. IF 1 EQ 2. MESSAGE e078(/cockpit/wc). ENDIF. RAISE error_occured. ENDIF. cb_lock_document = con_true. ENDIF. *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 056 – Adjustment of the data in Rescan after linking

Template
FUNCTION /cockpit/usex_rescan_after_lnk. *"-- *"*"Lokale Schnittstelle: *" IMPORTING *"   REFERENCE(IC_DOCNO) LIKE /COCKPIT/THDR-DOCNO OPTIONAL *"   REFERENCE(IC_SAPDOCNO) LIKE /COCKPIT/THDR-SAP_DOC_NO OPTIONAL *"   REFERENCE(IC_COMPCODE) LIKE /COCKPIT/THDR-COMP_CODE OPTIONAL *"   REFERENCE(IC_FISCALYEAR) LIKE /COCKPIT/THDR-FISCAL_YEAR *"   OPTIONAL *"   REFERENCE(IC_DOC_ID) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *"   REFERENCE(IC_ARC_ID) LIKE /COCKPIT/THDR-EC_ARC_ID OPTIONAL *"   REFERENCE(IC_ARC_OBJ) LIKE /COCKPIT/THDR-EC_ARC_OBJ OPTIONAL *"   REFERENCE(IC_MATCHCODE) LIKE /COCKPIT/THDR-EC_DBC_ID OPTIONAL *"   REFERENCE(IC_COVERSHEET1) LIKE SAPB-SEARCHKEY OPTIONAL *"   REFERENCE(IC_COVERSHEET2) LIKE SAPB-SEARCHKEY OPTIONAL *"   REFERENCE(IC_COVERSHEET3) LIKE SAPB-SEARCHKEY OPTIONAL

Template

```
*"     REFERENCE(IC_CONTENT_LENGTH) LIKE  SAPB-LENGTH OPTIONAL
*"     REFERENCE(IC_SEARCH_RESULT) LIKE  SAPB-PRIORITY OPTIONAL
*"     REFERENCE(IB_LOCK_DOCUMENT) LIKE  BOOLE-BOOLE OPTIONAL
*"     REFERENCE(IS_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*"       /COCKPIT/THDR OPTIONAL
*"  TABLES
*"      IT_CONTENT STRUCTURE  TBL1024 OPTIONAL
*"      CT_MESSAGES STRUCTURE  BAPIRET2 OPTIONAL
*"  CHANGING
*"     REFERENCE(CB_NO_STANDARD) LIKE  BOOLE-BOOLE OPTIONAL

*"  EXCEPTIONS
*"      ERROR_OCCURED
*"----------------------------------------------------------------------
*@US@aa          => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...      => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_rescan_after_link IS INITIAL. ENDIF.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
* === Reference implementation of Coversheet rescan ===
* This implentations start automatically a WEB CYCLE
* after a Coversheet is rescanned.
*
* If you want to start a WEB CYCLE in this user exit
* you must activate locking in user exit
* 038 con_exit_rescan, because you will modify
* INVOICE COCKPIT document with WEB CYCLE start.
```

Template

```
  CHECK: ic_search_result EQ 'CPT',
         NOT is_header-invoice_guid IS INITIAL,
         ib_lock_document EQ con_true.
  DATA:
    ls_header_if      LIKE  /cockpit/shdr_if,
    lt_item_if        LIKE TABLE OF /cockpit/sitem_if,
    lt_tax_if         LIKE TABLE OF /cockpit/stax_if,
    lt_account_if     LIKE TABLE OF /cockpit/sacct_if,
    lc_webcycle_id    LIKE /cockpit/swc_webcycle-wc_id,
    lc_proc_wc        LIKE /cockpit/thist-process,
    lb_auto_approve   LIKE boole-boole VALUE con_true,
    ls_wc_step        LIKE /cockpit/swc_if,
    lc_user           LIKE /cockpit/swc_if-wc_user.
* get INVOICE COCKPIT document data from database
  CALL FUNCTION '/COCKPIT/API_DATA_GET'
    EXPORTING
      i_guid        = is_header-invoice_guid
    IMPORTING
      e_str_header  = ls_header_if
    TABLES
      e_tab_item    = lt_item_if
      e_tab_tax     = lt_tax_if
      e_tab_account = lt_account_if
    EXCEPTIONS
      no_data_found = 1
      error_occured = 2
      OTHERS        = 3.
```

Template
IF sy-subrc NE 0.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_type   = 'E'   i_id   = '/COCKPIT/WC'   i_number   = '022'   i_message_v1 = is_header-invoice_guid   TABLES   c_tab_messages = ct_messages.
IF 1 EQ 2. MESSAGE e022(/cockpit/wc) WITH space. ENDIF.   RAISE error_occured. ENDIF. IF lb_auto_approve = con_true. *   auto approve WEB CYCLE, user must pre-assigned   lc_user = sy-uname.   CALL FUNCTION '/COCKPIT/WC_API_DATA_GET'   EXPORTING   ic_guid   = is_header-invoice_guid   ic_user_type = con_sap_user   ic_user   = lc_user   IMPORTING   es_webcycle = ls_wc_step   EXCEPTIONS   not_found   = 1   OTHERS   = 2.   CALL FUNCTION '/COCKPIT/WC_SET_APPROVED'   EXPORTING

Template
| ```
        is_wc_step    = ls_wc_step
        ib_online     = con_false
      TABLES
        et_messages   = ct_messages
      EXCEPTIONS
        canceled      = 1
        error_occured = 2
        OTHERS        = 3.
  ELSE.
``` |

```
*   start WEB CYCLE, user must pre-assigned or
*   must be automatically assigned with user exit.
    IF ls_header_if-status EQ con_status_webcycle.
      CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'
        EXPORTING
          i_number      = '078'
          i_id          = '/COCKPIT/WC'
        TABLES
          c_tab_messages = ct_messages.
      IF 1 EQ 2. MESSAGE e078(/cockpit/wc). ENDIF.
      RAISE error_occured.
    ENDIF.
    lc_webcycle_id = 'TG_TRAVEL1'.
    CALL FUNCTION '/COCKPIT/WC_START'
      EXPORTING
        ib_online      = con_false
        ic_webcycle_id = lc_webcycle_id
      IMPORTING
```
```

Template
| ```
        ec_proc_wc     = lc_proc_wc
      TABLES
        it_item        = lt_item_if
        it_account     = lt_account_if
        it_tax         = lt_tax_if
        et_message     = ct_messages
      CHANGING
        es_header      = ls_header_if
``` |
| ```
     EXCEPTIONS
        canceled       = 1
        error_occured  = 2
        OTHERS         = 3.
  IF sy-subrc EQ 0.
   CALL FUNCTION '/COCKPIT/API_DATA_UPDATE'
       EXPORTING
          i_invoice_guid          = is_header-invoice_guid
          i_no_commit             = con_true
          i_process               = con_proc_wc_started
          ic_change_user_is_online = con_false
       TABLES
          e_tab_messages          = ct_messages
       CHANGING
          c_str_header_disp       = ls_header_if
       EXCEPTIONS
          OTHERS                  = 1.
  ELSE.
   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'
``` |

Template
``   EXPORTING   i_number   = '077'   i_id   = '/COCKPIT/WC'   TABLES   c_tab_messages = ct_messages.   IF 1 EQ 2. MESSAGE e077(/cockpit/wc). ENDIF.   CALL FUNCTION '/COCKPIT/OBJ_HISTORY_POST' ```
``   EXPORTING   i_guid   = is_header-invoice_guid   i_process   = lc_proc_wc   TABLES   i_tab_bapiret2 = ct_messages   EXCEPTIONS   OTHERS   = 1.   ENDIF.   ENDIF. * COMMIT WORK must be executed to be sure, * that API_DATA_UPDATE or OBJ_HISTORY_POST is written to database. * There is no explicit COMMIT WORK in RFC_RESCAN *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION. ```

User Exit 057 – Initialize Button for vendor selection

(SAP R/3 4.6 or later)

Template
FUNCTION /COCKPIT/USEX_VND_PUSH_BTTN.

Template
`` *"-- *"*"Lokale Schnittstelle: *" IMPORTING *"   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *"   /COCKPIT/SHDR_DISP *" CHANGING *"   REFERENCE(C_GUID) LIKE /COCKPIT/SHDR_DISP-INVOICE_GUID *"-- *@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_vnd_push_bttn IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>>* * To know the global variables of function group DISPLAY46 call function * CALL FUNCTION '/COCKPIT/DISPLAY46_GET_GLOBALS' *   IMPORTING *   ec_data_changed = *   ec_change_detail = *   ec_in_webcycle   = . ```
`` *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* * User exit maybe necessary if hitlist of possible vendors changed * during user entry in detail mode (entered different PO's etc) in this * case the changing parameter c_guid must be inizialized ENDFUNCTION. ```

User Exit 058 – Change text of SAP Business Workflow Workitem

(SAP R/3 4.6 or later)

Template

```
FUNCTION /COCKPIT/USEX_WORKITEMTEXT.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     VALUE(I_GUID) LIKE  /COCKPIT/THDR-INVOICE_GUID
*"     VALUE(I_USER) LIKE  WFSYST-AGENT
*"     VALUE(I_STEP) LIKE  /COCKPIT/TWCS-WC_STEP_ID
*"  CHANGING
*"     REFERENCE(C_WORKITEMTEXT) LIKE
*"        /COCKPIT/BO_W_ATTRIBUTES-WORTKITEMTEXT
*"----------------------------------------------------------------------
*@US@aa        => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
* Caution: id current receiver of step is SAP User 'DUNKEL', the value
* if field i_user is 'USDUNKEL'
* be careful to use methods like /cockpit/obj_data_get. The sy-uname is
* WF-BATCH when this module is called, there may be authority issues
  IF con_exit_workitemtext IS INITIAL. ENDIF.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

User Exit 059 – Adopt display of planned multi-account assignments

Template

```
FUNCTION /cockpit/usex_accas_display.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  TABLES
*"      IT_ITEM_DET STRUCTURE  /COCKPIT/SITEM_DET
*"      CT_ACCTASG STRUCTURE  /COCKPIT/TACCAS
*"  CHANGING
*"     REFERENCE(CI_SCREEN_INPUT) TYPE  I
*"----------------------------------------------------------------------
*@US@aa         => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_accas_display IS INITIAL. ENDIF.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

User Exit 060 – Adjust data before a MM posting

Template

```
FUNCTION /COCKPIT/USEX_FINAL_MM_CALL.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     REFERENCE(IC_RUN_MODE) TYPE  C
```

Template

```
*"    REFERENCE(IS_THDR_DATA) LIKE  /COCKPIT/THDR STRUCTURE
*"       /COCKPIT/THDR OPTIONAL
*"  TABLES
*"     CT_BDCDATA STRUCTURE  BDCDATA OPTIONAL
*"     CT_BBKPF STRUCTURE  BBKPF OPTIONAL
*"     CT_MESG STRUCTURE  MESG OPTIONAL
*"     CT_RBSEC STRUCTURE  RBSEC OPTIONAL
*"     CT_RBSEG STRUCTURE  RBSEG OPTIONAL
*"     CT_RBSET STRUCTURE  RBSET OPTIONAL
*"     FT_FRSEG TYPE  MMCR_TFRSEG OPTIONAL
*"     ET_MESSAGES STRUCTURE  BAPIRET2 OPTIONAL
*"  CHANGING
*"    REFERENCE(CS_RBKPV) TYPE  MRM_RBKPV OPTIONAL
*"    REFERENCE(CC_STGRD) LIKE  BKPF-STGRD OPTIONAL
*"  EXCEPTIONS
*"     ERROR_OCCURED
*"--------------------------------------------------------------------
```

```
*@US@aa        => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_final_mm_call IS INITIAL. ENDIF.
* ic_run_mode:  'O' - online, 'C' - mm conv, 'L' - mm liv.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
```

User Exit 061 – Call of customer function popup on level

Template
FUNCTION /cockpit/usex_item_cust_func. *"-- *"*"Lokale Schnittstelle: *" IMPORTING *"   REFERENCE(IB_IN_WEBCYCLE) LIKE BOOLE-BOOLE *"   REFERENCE(IB_EDITABLE) LIKE BOOLE-BOOLE *"   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP STRUCTURE *"   /COCKPIT/SHDR_DISP *" EXPORTING *"   REFERENCE(IB_ITEM_UPDATE) LIKE BOOLE-BOOLE *" TABLES *"   CT_ITEM STRUCTURE /COCKPIT/SITEM_IF *"   ET_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *" EXCEPTIONS *"   ERROR_OCCURED *"-- *@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_cust_fct_item IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 063 – REPORTER Export, changes in result tables after export

This user exit can be used to export fields that are not included in the default export files. The user exit can also change the data that is exported. For example, you could change user IDs to the users' actual names.

Template

```
FUNCTION /cockpit/usex_rp_res_change.
*"----------------------------------------------------------------------
*"*"Local interface:
*"  TABLES
*"      CT_REP_HDR STRUCTURE  /COCKPIT/SREP_HDR OPTIONAL
*"      CT_AUDIT_TRAIL STRUCTURE  /COCKPIT/SAUDIT_TRAIL OPTIONAL
*"      CT_REP_ITEM STRUCTURE  /COCKPIT/SREP_ITEM OPTIONAL
*"      CT_REP_ACCT STRUCTURE  /COCKPIT/SREP_ACCT OPTIONAL
*"      CT_REP_CCHKT STRUCTURE  /COCKPIT/SREP_CCHKT OPTIONAL
*"      CT_REP_ERROR STRUCTURE  /COCKPIT/SREP_ERROR OPTIONAL
*"  CHANGING
*"     REFERENCE(CB_ERROR) TYPE  BOOLE-BOOLE OPTIONAL
*"----------------------------------------------------------------------
*@US@aa        => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_cust_fct_item IS INITIAL. ENDIF.
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

User Exit 066 – Determination of the document type on editing

This User Exit performs the same function as User Exit 008, but 066 can be used to change the SAP document type when editing a document, whereas 006 can only be used to change the SAP document type upon document transfer/import.

This User Exit is very helpful, for example, when changing the **Subsequent Debit/Credit** (TBTKZ) flag for a document, which requires a change to the SAP document type used for posting.

Template

```
FUNCTION /COCKPIT/USEX_DOCTYPE2.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     REFERENCE(IC_COMP_CODE) LIKE  /COCKPIT/SIF-COMP_CODE
*"     REFERENCE(IC_CP_DOC_TYPE) LIKE  /COCKPIT/SIF-CP_DOC_TYPE
*"     REFERENCE(IC_FI_MM_FLG) LIKE  /COCKPIT/SIF-FI_MM_FLG
*"     REFERENCE(IB_INVOICE_IND) LIKE  /COCKPIT/SIF-INVOICE_IND
*"     REFERENCE(IB_TBTKZ) LIKE  /COCKPIT/SIF-TBTKZ
*"  CHANGING
*"     REFERENCE(CC_DOC_TYPE) LIKE  /COCKPIT/SIF-DOC_TYPE
*"     REFERENCE(CB_CALC_TAX_IND) LIKE  /COCKPIT/SIF-CALC_TAX_IND
*"       OPTIONAL
*"  EXCEPTIONS
*"      NOT_FOUND
*"----------------------------------------------------------------------
*@US@aa         => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_doctype2 IS INITIAL. ENDIF.
```

Template
`*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*` `*  DATA:` `*   ls_posting TYPE ?????.` `*` `*  IF ib_tbtkz CO ' /'.` `*    EXIT.` `*  ENDIF.` `*` `*  CALL FUNCTION '?????'` `*    EXPORTING` `*      i_comp_code   = ic_comp_code` `*      i_cp_doc_type = ic_cp_doc_type` `*    IMPORTING` `*      e_str_posting = ls_posting` `*    EXCEPTIONS` `*      not_found     = 1` `*      OTHERS        = 2.` `*  IF sy-subrc <> 0.` `*    RAISE not_found.` `*  ENDIF.` `*`
`** Set document type by invoice indicator and FI_MM flag` `*  IF NOT ib_invoice_ind IS INITIAL.` `*    IF ic_fi_mm_flg EQ con_type_fi OR` `*       ls_posting-doc_type_inv_mm IS INITIAL.` `*      cc_doc_type = ls_posting-doc_type_inv.` `*    ELSE.`

Template
* cc_doc_type = ls_posting-doc_type_inv_mm.
* ENDIF.
* ELSE.
* IF ic_fi_mm_flg EQ con_type_fi OR
* ls_posting-doc_type_crm_mm IS INITIAL.
* cc_doc_type = ls_posting-doc_type_crm.
* ELSE.
* cc_doc_type = ls_posting-doc_type_crm_mm.
* ENDIF.
* ENDIF.
<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
ENDFUNCTION.

User Exit 070 – Adjust messages before output in Web

This User Exit is called after the /COCKPIT/RFC_MSG_HISTORY_GET function module. The latter is used to display the audit trail/history messages of a document in the Web Application (from 7.1 only). User Exit 070 can be used to modify these messages before being displayed.

Template
FUNCTION /COCKPIT/USEX_MSG_HISTORY_GET .
*"--
""Local interface:
*" IMPORTING
*" REFERENCE(IC_INVOICE_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID
*" REFERENCE(IN_VERSION) LIKE /COCKPIT/SIF-VERSION OPTIONAL
*" REFERENCE(ID_TIMESTAMP) LIKE /COCKPIT/SIF-CR_TIMESTAMP OPTIONAL
*" REFERENCE(IC_PROCESS) LIKE /COCKPIT/SIF-PROCESS OPTIONAL
*" REFERENCE(IC_PROC_HIGH) LIKE /COCKPIT/SIF-PROCESS OPTIONAL

Template
*" TABLES *" ET_HISTORY STRUCTURE /COCKPIT/SHIST_DISP *" ET_MSG_HISTORY STRUCTURE /COCKPIT/SMSG_DISP *" ET_MESSAGES STRUCTURE BAPIRET2 *"-- *@US@aa => Signature of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_msg_history_get IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 071 – Skip PROCESS DIRECTOR Accounts Payable documents

This User Exit is used to skip documents when users click the **Previous/Next document** buttons. The User Exit accesses document header data, on a boolean basis. For example, all documents without a follow-up flag could be skipped, so that only flagged documents are displayed.

Template
*"-- *"*"Local interface: *" IMPORTING *" REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP *" STRUCTURE /COCKPIT/SHDR_DISP *" EXPORTING *" REFERENCE(EB_SKIP_DOCUMENT) LIKE BOOLE-BOOLE *"--

Template
*@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_skip_document IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

Example

```
* Show only documents with follow-up flag(s)
  IF is_header-follow_up_icon IS INITIAL.
*   Skip next/previous PD document
    eb_skip_document = con_true.
  ELSE.
*   Stop skipping
    eb_skip_document = con_false.
  ENDIF.
```

User Exit 072 – After rejection of a PROCESS DIRECTOR Accounts Payable document

This User Exit is called immediately after rejecting a document, including when a document is rejected via the **Document** > **Send message** dialog.

Template
FUNCTION /COCKPIT/USEX_REJECT_FINAL. *"-- *"*"Local interface: *" IMPORTING

Template
*"   REFERENCE(IS_HEADER) LIKE /COCKPIT/SHDR_DISP
*" STRUCTURE /COCKPIT/SHDR_DISP
*"   TABLES
*"   ET_MESSAGES STRUCTURE BAPIRET2
*"--
*@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...   => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
IF con_exit_document_reject IS INITIAL. ENDIF.
>>> START OF IMPLEMENTATION >>
<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
ENDFUNCTION.

User Exit 074 – After reversal of a PROCESS DIRECTOR document

(SAP R/3 4.6C or later)

This User Exit is called after a PROCESS DIRECTOR document has been reversed using the **Document** > **Reverse** menu item. You can use it to change values in any field in the document.

Template
FUNCTION /COCKPIT/USEX_AFTER_REVERSAL.
*"--
""Local interface:
*" TABLES
*"   CT_ITEM STRUCTURE /COCKPIT/TITEM OPTIONAL
*"   CT_ACCOUNT STRUCTURE /COCKPIT/TACCT OPTIONAL
*"   CT_TAX STRUCTURE /COCKPIT/TTAX OPTIONAL
*"   CT_ACCOUNT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL
*"   ET_MESSAGES STRUCTURE BAPIRET2

Template
*" CHANGING *" REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *" /COCKPIT/THDR *"-- *@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_reversal IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 300 – Adjust Smart Form options

This User Exit enables the modification of Smart Form options such as language and printer.

Template
FUNCTION /COCKPIT/USEX_SMARTFORM_CNTRL. *"-- *"*"Lokale interface: *" IMPORTING *" REFERENCE(IS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *" /COCKPIT/THDR *" CHANGING *" REFERENCE(CS_OUTPUT_OPTIONS) TYPE SSFCOMPOP *" REFERENCE(CS_CONTROL_PARAMETERS) TYPE SSFCTRLOP *"-- *@US@aa => Signiture of Creator, e.g. HH for Harry Hirsch

Template
*@CU@aaa... => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check IF con_exit_smartform_control IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 400 - REPORTER extract result change

Function group: `/COCKPIT/RP_EXIT_SAMPLE`

This interface allows you to change the data in all files exported by the `/COCKPIT/2REPORTER54` program.

Note: Function 5 in the Business Solution Package, which is based on this interface, allows you to substitute users' names with the name of their department.

Template
FUNCTION /cockpit/usex_rp_res_change. *"-- *"*"Local interface: *" TABLES *" CT_REP_HDR STRUCTURE /COCKPIT/SREP_HDR OPTIONAL *" CT_AUDIT_TRAIL STRUCTURE /COCKPIT/SAUDIT_TRAIL OPTIONAL *" CT_REP_ITEM STRUCTURE /COCKPIT/SREP_ITEM OPTIONAL *" CT_REP_ACCT STRUCTURE /COCKPIT/SREP_ACCT OPTIONAL *" CT_REP_CCHKT STRUCTURE /COCKPIT/SREP_CCHKT OPTIONAL *" CT_REP_ERROR STRUCTURE /COCKPIT/SREP_ERROR OPTIONAL *" CT_REP_CWC_FLW STRUCTURE /COCKPIT/SREP_CWC_FLW OPTIONAL *" CT_REP_CWC_IDT STRUCTURE /COCKPIT/SREP_CWC_IDT OPTIONAL *" CT_REP_CWC_STT STRUCTURE /COCKPIT/SREP_CWC_STT OPTIONAL

Template
*"   CT_REP_WC_OWNER STRUCTURE /COCKPIT/SREP_WC_OWNER OPTIONAL
*" CHANGING
*"   REFERENCE(CB_ERROR) TYPE BOOLE-BOOLE OPTIONAL
*"--
*@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...   => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
IF con_exit_reporter_res_change IS INITIAL. ENDIF.
* User exit 400
* WARNING!
* EIC invoice guid is encoded to REPORTER style see
* FORM convert_invoice_guid in /COCKPIT/LREPORTERF01.
* Additional fields can be added with customer includes to
* structures given in UE interface and can be prepared here.
* If additional field has the same name as in corresponding EIC table
* this UE is not necessary.
>>> START OF IMPLEMENTATION >>>
<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
ENDFUNCTION.

User Exit 500 – Selection of REPETITOR documents

Template
FUNCTION /COCKPIT/USEX_RPTTR_SLCTN.
*’--
’’Local interface:
*" IMPORTING

Template
*"   REFERENCE(I_SELECT_STATE_CREATED) LIKE COMMS-COMMIT_SW DEFAULT *"   'X' *"   REFERENCE(I_SELECT_STATE_ERROR) LIKE COMMS-COMMIT_SW DEFAULT *"   'X' *"   REFERENCE(I_SELECT_STATE_WCONLY) LIKE COMMS-COMMIT_SW DEFAULT *"   'X' *"   REFERENCE(I_SELECT_STATE_WCNORJ) LIKE COMMS-COMMIT_SW DEFAULT *"   'X' *"   REFERENCE(I_SELECT_FI) LIKE COMMS-COMMIT_SW DEFAULT 'X' *"   REFERENCE(I_SELECT_MM) LIKE COMMS-COMMIT_SW DEFAULT 'X' *" TABLES *"   I_SELOPT_COMP_CODE STRUCTURE BUKRS_RAN *"   I_SELOPT_VENDOR STRUCTURE /COCKPIT/RVENDOR *"   I_SELOPT_DOC_POST_DATE STRUCTURE RNG_DATE *"   I_SELOPT_USERNAME STRUCTURE /COCKPIT/RUSER *"   I_SELOPT_BEARBEITER STRUCTURE /COCKPIT/RUSER *"   I_SELOPT_DOC_SCAN_DATE STRUCTURE RNG_DATE *"   I_SELOPT_DOCNO STRUCTURE /COCKPIT/RDOCNO OPTIONAL *"   I_SELOPT_CURRENCY STRUCTURE /COCKPIT/RCURR *"   I_FREE_SELECTIONS STRUCTURE RSDSWHERE OPTIONAL *"   C_TAB_HEADER_DISP STRUCTURE /COCKPIT/SHDR_IF OPTIONAL
*" EXCEPTIONS *"   NO_DATA_FOUND *"   ERROR_OCCURED*’--- ENDFUNCTION.

User Exit 501 – Processing of a document after REPETITOR selection

Template
FUNCTION /COCKPIT/USEX_REPETITOR_FINAL . *'--- *'*'Local interface: *' IMPORTING *'   REFERENCE(IC_PROCESS) LIKE /COCKPIT/SIF-PROCESS *' TABLES *'   C_TAB_ITEM STRUCTURE /COCKPIT/SITEM_IF *'   C_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_IF *'   C_TAB_TAX STRUCTURE /COCKPIT/STAX_IF *'   C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS *'   E_TAB_MESSAGES STRUCTURE BAPIRET2 *' CHANGING *'   REFERENCE(C_STR_HEADER) LIKE /COCKPIT/SHDR_IF STRUCTURE *'   /COCKPIT/SHDR_IF *'--- ENDFUNCTION.

User Exit 701 – Adjust INFO MAIL subject keywords

In order to analyze incoming email subjects, INFO MAIL supports five fields by default (LIFNR, EIKTO, DOC_DATE, PO_NUMBER and REF_DOC_NO). You can use this user exit to add support for additional fields. When an email is received with values for these additional fields, the values are added to the standard query.

This user exit can be used to expand the funtionality of INFO MAIL. For example, you could use INFO MAIL to register new WORK CYCLE users, where these users could send an email to the INFO MAIL service containing the user's name and contact details, and a separate user exit could be written to take these details to create a new WORK CYCLE user. Similarly, new vendors could register for the INFO MAIL service by sending an email containing their vendor number and contact details, and a user exit could be executed to take these details to register the vendor for INFO MAIL.

Template
FUNCTION /COCKPIT/USEX_IM_KEYWORDS . *'-- *"*"Local interface: *" TABLES *" ET_FIELD_VALUES STRUCTURE /COCKPIT/SIM_IMPORT_DATA *" OPTIONAL *" CT_MESSAGES STRUCTURE BAPIRET2 OPTIONAL *'-- ENDFUNCTION.

Example:

```
FUNCTION Z_USEX_IM_KEYWORDS.
*"----------------------------------------------------------------------
*"*"Local interface:
*"       TABLES
*"              ET_FIELD_VALUES STRUCTURE  /COCKPIT/SIM_IMPORT_DATA
*"         OPTIONAL
*"              CT_MESSAGES STRUCTURE  BAPIRET2 OPTIONAL
*"----------------------------------------------------------------------
*@US@RZ         => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
*@K1@ ... *@K9@ => Keywords for Implemented Functionality
* Dummy entry for user exit cross reference check
  IF con_exit_infomail_keywords IS INITIAL. ENDIF.
* User exit 701
*>>> START OF IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>*
  et_field_values-field = 'ACTION'.
  APPEND et_field_values.
  et_field_values-field = 'NAME'.
  APPEND et_field_values.
  et_field_values-field = 'PHONE'.
  APPEND et_field_values.
```

```
*<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<*
ENDFUNCTION.
```

In this example, the ACTION, NAME and PHONE fields are added to the list of supported INFO MAIL fields.

You then call this user exit in the the `/COCKPIT/RFC_IM_CUSTOMIZ_GET` function to add the fields to the `ET_FIELD_VALUES` table. For example:

```
*>>> INSERT
* User exit 702 - enable user definable keywords
  CALL FUNCTION '/COCKPIT/Z_USEX_IM_KEYWORDS'
       EXPORTING
            i_exittype    = con_exit_infomail_keywords
       IMPORTING
            e_fname       = lc_function
       EXCEPTIONS
            OTHERS        = 1.
  IF sy-subrc EQ 0.
    CALL FUNCTION lc_function
         TABLES
              it_field_values     = et_field_values.
  ENDIF.
*<<< INSERT
```

Data import

Overview

When importing files, not all functionality is built into the standard PROCESS DIRECTOR Accounts Payable code. In order to use these features, you must activate the following User Exits.

User Exit	Name
012	Menu button to import data.
020	Start workflow after data import
800	Change data before mapping*

User Exit	Name
801	Change data before submitting*
918	Account assignment upload.

* Template only. You must develop your own User Exit based on the template.

All file import User Exits are located in the `/COCKPIT/IMPORT` function group.

List of User Exits

File import User Exit 012 – Menu button to import data

This User Exit creates a menu button in PROCESS DIRECTOR Accounts Payable to import files.

Template
FUNCTION /cockpit/import_usex_custfct. *"-- *"*"Local interface: *" IMPORTING *"   REFERENCE(I_FUNCTION) LIKE SY-UCOMM *"   REFERENCE(I_DETAIL_VIEW) LIKE BOOLE-BOOLE OPTIONAL *" TABLES *"   C_TAB_ITEM STRUCTURE /COCKPIT/SITEM_IF *"   C_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_IF *"   C_TAB_TAX STRUCTURE /COCKPIT/STAX_IF *"   C_TAB_ACCT_ASSIGN STRUCTURE /COCKPIT/TACCAS OPTIONAL *"   E_TAB_MESSAGES STRUCTURE BAPIRET2 *"   I_TAB_SEL_HEADERS STRUCTURE /COCKPIT/SHDR_IF OPTIONAL *" CHANGING *"   REFERENCE(C_STR_HEADER) LIKE /COCKPIT/SHDR_IF STRUCTURE *"   /COCKPIT/SHDR_IF *"--

Template
DATA: ls_data_provider TYPE /cockpit/simport_dataprovider,   ls_sheet   TYPE /cockpit/cim_sh,   lt_data1   TYPE TABLE OF /cockpit/simport_fieldlist,   ls_checkdata   TYPE /cockpit/tchecko,   ls_header_new   TYPE /cockpit/shdr_ext,   ls_checkdata_new TYPE /cockpit/scheckdata,   lt_tax_new   TYPE TABLE OF /cockpit/stax_ext,
lt_item_new   TYPE TABLE OF /cockpit/sitem_ext WITH HEADER LINE, lt_account_new   TYPE TABLE OF /cockpit/sacct_ext WITH HEADER LINE, lt_item_single   TYPE TABLE OF /cockpit/sitem_ext, lt_account_single TYPE TABLE OF /cockpit/sacct_ext, li_doc_count   TYPE i. CALL SCREEN 100 STARTING AT 3 3. CHECK NOT gs_popup_0100 IS INITIAL. CALL FUNCTION '/COCKPIT/API_CUST_IMPORT_GET' EXPORTING ic_data_provider = gs_popup_0100-data_provider IMPORTING es_data_provider = ls_data_provider es_sheet   = ls_sheet EXCEPTIONS not_found   = 1 OTHERS   = 2. IF sy-subrc NE 0. CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'

Template
EXPORTING i_type = 'D' i_id = '/COCKPIT/IMPORT' i_number = '100' i_message_v1 = gs_popup_0100-data_provider i_duplicates = con_true TABLES c_tab_messages = e_tab_messages EXCEPTIONS OTHERS = 0.
IF 1 = 2. MESSAGE i100(/cockpit/import) WITH space. ENDIF. RAISE error_occured. ENDIF. CALL FUNCTION '/COCKPIT/IMPORT_UPLOAD_CONVERT' EXPORTING ic_filename1 = gs_popup_0100-filename ic_fileformat1 = gs_popup_0100-fileformat TABLES et_data1 = lt_data1 ct_messages = e_tab_messages EXCEPTIONS error_occured = 1 OTHERS = 2. IF sy-subrc NE 0. EXIT. ENDIF. CALL FUNCTION '/COCKPIT/IMPORT_SHEET'

Template

```
    EXPORTING
      ic_data_provider = gs_popup_0100-data_provider
      ib_debug_mode    = gs_popup_0100-debug_mode
    IMPORTING
      es_header        = ls_header_new
      es_checkdata     = ls_checkdata_new
    TABLES
      it_data1         = lt_data1
      et_item          = lt_item_new
      et_account       = lt_account_new
      et_tax           = lt_tax_new
      et_acct_assign   = c_tab_acct_assign
      et_messages      = e_tab_messages.
CASE ls_sheet-import_sheet.
  WHEN con_import_sheet_create.
    PERFORM submit_document
                    TABLES lt_item_new
                           lt_account_new
                           lt_tax_new
                           e_tab_messages
                     USING ls_data_provider
                           gs_popup_0100-skip_datatrans
                  CHANGING ls_header_new
                           ls_checkdata_new
                           li_doc_count.
  WHEN con_import_sheet_single.
    LOOP AT lt_item_new.
```

Template
``   REFRESH: lt_item_single,   lt_account_single.   APPEND lt_item_new TO lt_item_single.   PERFORM submit_document   TABLES lt_item_single   lt_account_single   lt_tax_new   e_tab_messages   USING ls_data_provider ```
``   gs_popup_0100-skip_datatrans   CHANGING ls_header_new   ls_checkdata_new   li_doc_count.   ENDLOOP.   LOOP AT lt_account_new.   REFRESH: lt_item_single,   lt_account_single.   APPEND lt_account_new TO lt_account_single.   PERFORM submit_document   TABLES lt_item_single   lt_account_single   lt_tax_new   e_tab_messages   USING ls_data_provider   gs_popup_0100-skip_datatrans ```

Template

```
                CHANGING ls_header_new
                         ls_checkdata_new
                         li_doc_count.
  ENDLOOP.
WHEN con_import_sheet_update.
  CALL FUNCTION '/COCKPIT/API_DATA_ORG_GET'
    EXPORTING
      i_guid          = c_str_header-invoice_guid
    IMPORTING
      e_str_check_data = ls_checkdata
    EXCEPTIONS
      error_occured    = 1
      OTHERS           = 2.
  IF sy-subrc EQ 0.
    PERFORM update_doc_from_sheet TABLES c_tab_item
                                         lt_item_new
                                         c_tab_account
                                         lt_account_new
                                         c_tab_tax
                                         lt_tax_new
                                         e_tab_messages
                                  USING ls_sheet
                                         ls_header_new
                                         ls_checkdata_new
                               CHANGING c_str_header
                                         ls_checkdata.
    IF NOT ls_sheet-import_checkdata IS INITIAL.
```

Template

```
      MODIFY /cockpit/tchecko FROM ls_checkdata.
     ENDIF.
    ENDIF.
   WHEN OTHERS.
  ENDCASE.
ENDFUNCTION.
```

File import User Exit 020 – Start workflow after data import

This User Exit starts the workflow specified in `/COCKPIT/IMPORT_C1` after the file(s) has been imported.

Template

```
FUNCTION /cockpit/import_usex_final_trn.
*"----------------------------------------------------------------------
*"*"Local interface:
*"  IMPORTING
*"     REFERENCE(I_STR_CHECK) LIKE  /COCKPIT/SCHECKDATA STRUCTURE
*"        /COCKPIT/SCHECKDATA
*"     REFERENCE(I_STR_HEADER) LIKE  /COCKPIT/THDR STRUCTURE
*"        /COCKPIT/THDR
*"     REFERENCE(I_FLG_ERROR) LIKE  BOOLE-BOOLE
*"  TABLES
*"      I_TAB_ITEM STRUCTURE  /COCKPIT/TITEM
*"      I_TAB_ACCOUNT STRUCTURE  /COCKPIT/TACCT
*"      I_TAB_TAX STRUCTURE  /COCKPIT/TTAX
*"      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*"  EXCEPTIONS
*"      ERROR_OCCURED
*"----------------------------------------------------------------------
```

Template
DATA: ls_usex_data TYPE /cockpit/simport_usex_data, ls_header_if LIKE /cockpit/shdr_if, lt_item_if LIKE TABLE OF /cockpit/sitem_if WITH HEADER LINE, lt_account_if LIKE TABLE OF /cockpit/sacct_if WITH HEADER LINE, lt_tax_if LIKE TABLE OF /cockpit/stax_if WITH HEADER LINE, lc_proc_wc LIKE /cockpit/thist-process. * Dummy entry for user exit cross reference check IF con_exit_final_transfer IS INITIAL. ENDIF.
>>> START OF REFERENCE IMPLEMENTATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> IMPORT ls_usex_data FROM MEMORY ID con_import_id. CHECK NOT ls_usex_data-workflow IS INITIAL. CALL FUNCTION '/COCKPIT/MAP_INTERN_TO_EXTERN' EXPORTING i_str_header = i_str_header IMPORTING e_str_header_if = ls_header_if TABLES i_tab_item = i_tab_item i_tab_account = i_tab_account i_tab_tax = i_tab_tax e_tab_item_if = lt_item_if e_tab_account_if = lt_account_if e_tab_tax_if = lt_tax_if. CALL FUNCTION '/COCKPIT/WC_START' EXPORTING ib_online = con_false

Template

```
        ic_webcycle_id = ls_usex_data-workflow
    IMPORTING
        ec_proc_wc     = lc_proc_wc
    TABLES
        it_item        = lt_item_if
        it_account     = lt_account_if
        it_tax         = lt_tax_if
        et_message     = e_tab_messages
```

```
    CHANGING
        es_header      = ls_header_if
    EXCEPTIONS
        canceled       = 1
        error_occured  = 2
        OTHERS         = 3.
IF sy-subrc EQ 0.
  CALL FUNCTION '/COCKPIT/API_DATA_UPDATE'
    EXPORTING
        i_invoice_guid          = i_str_header-invoice_guid
        i_no_commit             = con_true
        i_process               = con_proc_wc_started
        ic_change_user_is_online = con_false
    TABLES
        e_tab_messages          = e_tab_messages
    CHANGING
        c_str_header_disp       = ls_header_if
    EXCEPTIONS
        OTHERS                  = 0.
```

Template
<code>ELSE. CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND' EXPORTING i_number = '077' i_id = '/COCKPIT/WC' TABLES c_tab_messages = e_tab_messages.</code>
<code>IF 1 EQ 2. MESSAGE e077(/cockpit/wc). ENDIF. CALL FUNCTION '/COCKPIT/OBJ_HISTORY_POST' EXPORTING i_guid = i_str_header-invoice_guid i_process = lc_proc_wc TABLES i_tab_bapiret2 = e_tab_messages EXCEPTIONS OTHERS = 0. ENDIF. *<<< END OF REFERENCE IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.</code>

File import User Exit 800 – Change data before mapping

You can use this User Exit to change data in the imported file(s) before the fields are mapped to the PROCESS DIRECTOR Accounts Payable fields.

Template
<code>FUNCTION /cockpit/import_usex_bfr_map. *"--</code>

Template
""Local interface: *" IMPORTING *"   REFERENCE(IS_DATA_PROVIDER) LIKE /COCKPIT/SIMPORT_DATAPROVIDER *"   STRUCTURE /COCKPIT/SIMPORT_DATAPROVIDER *"   REFERENCE(IS_DOC_DEFAULTS) LIKE /COCKPIT/SIMPORT_DOCDEFAULTS *"   STRUCTURE /COCKPIT/SIMPORT_DOCDEFAULTS *" EXPORTING *"   REFERENCE(EI_DOC_COUNT) TYPE I *" TABLES *"   CT_DATA1 STRUCTURE /COCKPIT/SIMPORT_FIELDLIST *"   CT_DATA2 STRUCTURE /COCKPIT/SIMPORT_FIELDLIST *"   CT_MESSAGES STRUCTURE BAPIRET2 *" CHANGING *"   REFERENCE(CB_NO_STANDARD) LIKE BOOLE-BOOLE *"-- * Enumerate lines   LOOP AT ct_data1.   ct_data1-f50 = sy-tabix.   CONDENSE ct_data1-f50.   MODIFY ct_data1.   ENDLOOP.
* Enumerate lines   LOOP AT ct_data2.   ct_data2-f50 = sy-tabix.   CONDENSE ct_data2-f50.   MODIFY ct_data2.   ENDLOOP.

Template
ENDFUNCTION.

File import User Exit 801 – Change data before submitting

You can use this User Exit to change data from the P-Card import file(s) before the data is submitted to PROCESS DIRECTOR Accounts Payable via RFC_DATA_SUBMIT.

Template

```
FUNCTION /cockpit/import_usex_bfr_sbmt.
*"----------------------------------------------------------------------
*"*"Local interface:
*"  EXPORTING
*"     REFERENCE(EC_EXTERNAL_GUID) LIKE  /COCKPIT/SIF-INVOICE_GUID
*"     REFERENCE(EC_GUID) LIKE  /COCKPIT/SIF-INVOICE_GUID
*"     REFERENCE(EC_DOCNO) LIKE  /COCKPIT/THDR-DOCNO
*"     REFERENCE(EB_NO_STANDARD) LIKE  BOOLE-BOOLE
*"  TABLES
*"      CT_ITEM STRUCTURE  /COCKPIT/SITEM_EXT
*"      CT_TAX STRUCTURE  /COCKPIT/STAX_EXT
*"      CT_ACCOUNT STRUCTURE  /COCKPIT/SACCT_EXT
*"      CT_CONTENT STRUCTURE  TBL1024
*"      CT_MESSAGES STRUCTURE  BAPIRET2
*"      CT_FILES STRUCTURE  /COCKPIT/SEDI_FILE
*"      CT_BINARY STRUCTURE  TBL1024
*"      CT_TEXT STRUCTURE  DOCS
*"      CT_PROCESSLOG STRUCTURE  BAPIRET2
*"  CHANGING
*"     REFERENCE(CS_HEADER) LIKE  /COCKPIT/SHDR_EXT STRUCTURE
*"        /COCKPIT/SHDR_EXT
```

Template
*" REFERENCE(CS_CHECKDATA) LIKE /COCKPIT/SCHECKDATA STRUCTURE *" /COCKPIT/SCHECKDATA *" REFERENCE(CN_CONTENT_LENGTH) LIKE SAPB-LENGTH *"-- cs_header-sgtxt = 'Import'. ENDFUNCTION.

File import User Exit 918 - Account assignment upload

This User Exit enables users to upload account assignments from an external file.

Template
FUNCTION /cockpit/import. *"-- *"*"Local interface: *" IMPORTING *" REFERENCE(IC_DATA_PROVIDER) LIKE /COCKPIT/CIM_DP-DATA_PROVIDER *" REFERENCE(IS_DOC_DEFAULTS) LIKE /COCKPIT/SIMPORT_DOCDEFAULTS *" STRUCTURE /COCKPIT/SIMPORT_DOCDEFAULTS OPTIONAL *" REFERENCE(IC_INVOICE_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID *" OPTIONAL *" REFERENCE(IB_DEBUG_MODE) TYPE XFELD OPTIONAL *" REFERENCE(IB_SKIP_DATATRANSFER) TYPE XFELD OPTIONAL *" EXPORTING *" REFERENCE(EI_DOC_COUNT) TYPE I *" TABLES *" IT_DATA1 STRUCTURE /COCKPIT/SIMPORT_FIELDLIST *" IT_DATA2 STRUCTURE /COCKPIT/SIMPORT_FIELDLIST OPTIONAL

Template
*"   ET_MESSAGES STRUCTURE BAPIRET2 *"--   DATA: ls_data_provider TYPE /cockpit/simport_dataprovider,   lb_error   TYPE boole-boole,   lb_no_standard   TYPE boole-boole.   IF ib_debug_mode = con_true.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_type   = 'D'   i_id   = '/COCKPIT/IMPORT'   i_number   = '000'   i_message_v1   = 'Debug mode - '   i_message_v2   = 'from the makers of'   i_message_v3   = 'EICC logfile'   i_duplicates   = con_true   TABLES   c_tab_messages = et_messages   EXCEPTIONS   OTHERS   = 0.   "#EC NOTEXT   IF 1 = 2. MESSAGE i000(/cockpit/import) WITH space. ENDIF.   ENDIF.   CALL FUNCTION '/COCKPIT/API_CUST_IMPORT_GET'   EXPORTING   ic_data_provider = ic_data_provider   IMPORTING   es_data_provider = ls_data_provider   EXCEPTIONS

Template
``   not_found   = 1   OTHERS   = 2. IF sy-subrc NE 0.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_id   = '/COCKPIT/IMPORT'   i_number   = '100'   i_message_v1   = ic_data_provider   TABLES   c_tab_messages = et_messages   EXCEPTIONS   OTHERS   = 0.   IF 1 = 2. MESSAGE i100(/cockpit/import) WITH space. ENDIF.   EXIT. ENDIF. PERFORM user_exit_before_mapping TABLES it_data1   it_data2   et_messages   USING ls_data_provider   is_doc_defaults   CHANGING ei_doc_count   lb_no_standard. CHECK lb_no_standard IS INITIAL. CASE ls_data_provider-import_scheme.   WHEN con_import_scheme_file.   PERFORM file_mapping TABLES it_data1   it_data2   et_messages ```

Template
<pre>   USING ic_data_provider   is_doc_defaults   ib_debug_mode   ib_skip_datatransfer   CHANGING ei_doc_count   lb_error.   WHEN con_import_scheme_sheet. *   PERFORM sheet_mapping TABLES it_data1 *   it_data2 *   et_messages *   USING ic_data_provider *   is_doc_defaults *   ic_invoice_guid *   ib_debug_mode *   ib_skip_datatransfer *   CHANGING ei_doc_count *   lb_error.   WHEN OTHERS.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_id   = '/COCKPIT/IMPORT'   i_number   = '121'   i_message_v1 = ls_data_provider-import_scheme   TABLES   c_tab_messages = et_messages   EXCEPTIONS   OTHERS   = 0.   IF 1 = 2. MESSAGE i121(/cockpit/import) WITH space. ENDIF.</pre>

Template
ENDCASE. ENDFUNCTION.

Dynamic discounting

Overview

The following three User Exits must be activated in order to enable dynamic discounting.

User Exit in PROCESS DIRECTOR

Activate in `/COCKPIT/C13`.

User Exit	Function module	Description	No standard
12	/COCKPIT/DD_USEX_CUSTFCT_PROC	Enables the dynamic discounting button.	-

User Exits in WEB BOARD

Activate in `/COCKPIT/WBI13`.

User Exit	Function module	Description	No standard
921	/COCKPIT/DD_USEX_WC_DATA_GET	Displays the dynamic discounting data for a document.	-
957	/COCKPIT/DD_USEX_WB_GET_MULTI	Allows the display of documents that have dynamic discounting activated.	X

All dynamic discounting User Exits are located in the `/COCKPIT/DD_USEX` function group.

List of User Exits

Dynamic discounting User Exit 012 – Enable the dynamic discounting button

This User Exit enables the dynamic discounting button in PROCESS DIRECTOR, as well as the custom menu item, which displays the dynamic discounting information and gives users the ability to reject dynamic discounting proposals from vendors.

Warning! If you have other custom menu items and buttons, you must integrate the following User Exit into your already existing User Exit 12 (using WHEN 'CF1', WHEN 'CF2', etc.)

User Exit

```
FUNCTION /cockpit/dd_usex_custfct_proc.
*"----------------------------------------------------------------------
*"*"Lokale Schnittstelle:
*"  IMPORTING
*"     REFERENCE(I_FUNCTION) LIKE  SY-UCOMM
*"     REFERENCE(I_DETAIL_VIEW) LIKE  BOOLE-BOOLE OPTIONAL
*"  TABLES
*"      C_TAB_ITEM STRUCTURE  /COCKPIT/SITEM_IF
*"      C_TAB_ACCOUNT STRUCTURE  /COCKPIT/SACCT_IF
*"      C_TAB_TAX STRUCTURE  /COCKPIT/STAX_IF
*"      C_TAB_ACCT_ASSIGN STRUCTURE  /COCKPIT/TACCAS OPTIONAL
*"      E_TAB_MESSAGES STRUCTURE  BAPIRET2
*"      I_TAB_SEL_HEADERS STRUCTURE  /COCKPIT/SHDR_IF OPTIONAL
*"  CHANGING
*"     REFERENCE(C_STR_HEADER) LIKE  /COCKPIT/SHDR_IF STRUCTURE
*"        /COCKPIT/SHDR_IF
*"  EXCEPTIONS
*"      WRONG_STATUS
*"      ERROR_OCCURED
*"----------------------------------------------------------------------
* Dummy entry for user exit cross reference check
```

User Exit

```
  IF con_exit_custfunct IS INITIAL. ENDIF.
  DATA:
    ls_status   TYPE /cockpit/tstat.
  CHECK c_str_header-status = con_status_processed.
  CALL FUNCTION '/COCKPIT/API_POSTING_STATUS_GE'
      EXPORTING
          i_invoice_guid = c_str_header-invoice_guid
      IMPORTING
          e_str_status   = ls_status
      EXCEPTIONS
          not_found      = 1
          error_occured  = 2
          OTHERS         = 3.
  CHECK sy-subrc EQ 0.
* Logic from FuMo /COCKPIT/DISPLAY_STATUS_ICON
  IF ( ls_status-process   EQ con_proc_park         OR
      ls_status-process   EQ con_proc_online_park ) OR
    ( ( ls_status-process EQ con_proc_sap_create    OR
       ls_status-process EQ con_proc_sap_update )  AND
       ls_status-status  EQ con_status_parked ).
    CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'
       EXPORTING
           i_type        = 'E'
           i_id          = '/COCKPIT/DYNDSCNT'
           i_number      = '009'
       TABLES
           c_tab_messages = e_tab_messages
       EXCEPTIONS
```

User Exit
<pre>   OTHERS   = 0.   IF 1 = 2. MESSAGE e009(/cockpit/dyndscnt). ENDIF.   EXIT. ENDIF. CASE c_str_header-fi_mm_flg.   WHEN con_type_mm.   CALL FUNCTION '/COCKPIT/DD_QUERY_DYNDSCNT'   EXPORTING   ic_mm_belnr   = c_str_header-sap_doc_no   ic_mm_gjahr   = c_str_header-fiscal_year   TABLES   et_messages   = e_tab_messages   EXCEPTIONS   not_found   = 1   wrong_status   = 2   not_implemented = 3   payment_block   = 4   error_occured   = 5   OTHERS   = 6.   IF sy-subrc NE 0.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_type   = 'E'   i_id   = '/COCKPIT/DYNDSCNT'   i_number   = '010'   TABLES   c_tab_messages = e_tab_messages.   IF 1 = 2. MESSAGE e010(/cockpit/dyndscnt). ENDIF.</pre>

User Exit
<pre>   ENDIF. WHEN con_type_fi.   CALL FUNCTION '/COCKPIT/DD_QUERY_DYNDSCNT'   EXPORTING   ic_fi_bukrs   = c_str_header-comp_code   ic_fi_belnr   = c_str_header-sap_doc_no   ic_fi_gjahr   = c_str_header-fiscal_year   TABLES   et_messages   = e_tab_messages   EXCEPTIONS   not_found   = 1   wrong_status   = 2   not_implemented = 3   payment_block   = 4   error_occured   = 5   OTHERS   = 6.   IF sy-subrc NE 0.   CALL FUNCTION '/COCKPIT/OBJ_MESSAGE_APPEND'   EXPORTING   i_type   = 'E'   i_id   = '/COCKPIT/DYNDSCNT'   i_number   = '010'   TABLES   c_tab_messages = e_tab_messages.   IF 1 = 2. MESSAGE e010(/cockpit/dyndscnt). ENDIF.   ENDIF.   ENDCASE. ENDFUNCTION.</pre>

Dynamic discounting User Exit 921 – Display the dynamic discounting data for a document

This User Exit displays the dynamic discounting data for a document (discount rate and amount if dynamic discounting is activated, compared to the standard discount rate and amount).

User Exit
FUNCTION /cockpit/dd_usex_wc_data_get . *"-- *"*"Lokale Schnittstelle: *" IMPORTING *"   REFERENCE(IC_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID OPTIONAL *"   REFERENCE(IC_WC_ID) LIKE /COCKPIT/SWC_IF-WC_ID OPTIONAL *"   REFERENCE(IC_WC_STEP_ID) LIKE /COCKPIT/SWC_IF-WC_STEP_ID *"   OPTIONAL *"   REFERENCE(IN_WC_SUBPOS) LIKE /COCKPIT/SWC_IF-WC_SUBPOS DEFAULT *"   999 *"   REFERENCE(IC_USER_TYPE) LIKE /COCKPIT/TWCS-WC_USERTYPE OPTIONAL *"   REFERENCE(IC_USER) LIKE /COCKPIT/SWC_IF-WC_USER OPTIONAL *"   REFERENCE(IC_GET_CONTENT) LIKE COMMS-COMMIT_SW DEFAULT *"   CON_FALSE *"   REFERENCE(IC_ENQUEUE) LIKE COMMS-COMMIT_SW DEFAULT CON_FALSE *"   REFERENCE(IB_ALL_NOTES) LIKE BOOLE-BOOLE DEFAULT CON_FALSE *"   REFERENCE(IB_HISTORY) LIKE BOOLE-BOOLE DEFAULT CON_FALSE *"   REFERENCE(IC_LANGUAGE) LIKE SY-LANGU DEFAULT SY-LANGU *"   REFERENCE(IB_CONVERT) LIKE BOOLE-BOOLE DEFAULT CON_FALSE *"   REFERENCE(IC_WC_APPL) LIKE /COCKPIT/CWC_ID-WC_APPL DEFAULT *"   SPACE *" TABLES *"   ET_ITEM STRUCTURE /COCKPIT/SITEM_IF OPTIONAL *"   ET_TAX STRUCTURE /COCKPIT/STAX_IF OPTIONAL

User Exit
*" ET_ACCOUNT STRUCTURE /COCKPIT/SACCT_IF OPTIONAL
*" ET_NOTICE STRUCTURE /COCKPIT/SWEBCYCLE_NOTE OPTIONAL
*" ET_CONTENT STRUCTURE TBL1024 OPTIONAL
*" ET_MESSAGES STRUCTURE BAPIRET2 OPTIONAL
*" ET_EMAIL STRUCTURE /COCKPIT/SWC_NOTE OPTIONAL
*" ET_FORMS STRUCTURE /COCKPIT/CWC_STF OPTIONAL
*" ET_ARC_DOCS STRUCTURE /COCKPIT/SWC_ARC_DOCS OPTIONAL
*" ET_ACCAS STRUCTURE /COCKPIT/TACCAS OPTIONAL
*" ET_NOTE_HDA STRUCTURE /COCKPIT/SWC_NOTE_HDA OPTIONAL
*" ET_NOTE_BOD STRUCTURE /COCKPIT/SWC_NOTE_BOD OPTIONAL
*" ET_ACCAS_PO STRUCTURE /COCKPIT/TACCAS OPTIONAL
*" ET_COPADATA STRUCTURE /COCKPIT/SWC_COPA_VALUES OPTIONAL
*" ET_WB_PMTRMS STRUCTURE /COCKPIT/CWB_PT OPTIONAL
*" ET_FLAG STRUCTURE /COCKPIT/TFLAG OPTIONAL
*" CHANGING
*" REFERENCE(CS_HEADER) LIKE /COCKPIT/SHDR_IF STRUCTURE
*" /COCKPIT/SHDR_IF OPTIONAL
*" REFERENCE(CS_WEBCYCLE) LIKE /COCKPIT/SWC_IF STRUCTURE
*" /COCKPIT/SWC_IF OPTIONAL
*" REFERENCE(CI_CONTENT_LENGTH) LIKE SY-TABIX OPTIONAL
*" REFERENCE(CB_USER_ASSIGN) LIKE BOOLE-BOOLE OPTIONAL
*" REFERENCE(CC_URL) LIKE SAPB-URI OPTIONAL
*" REFERENCE(CC_MIME) LIKE /COCKPIT/TMIME-MIME_TYPE OPTIONAL
*" REFERENCE(CB_WB_CHANGE) LIKE BOOLE-BOOLE OPTIONAL
*" REFERENCE(CB_USE_COPA) LIKE BOOLE-BOOLE OPTIONAL
*" REFERENCE(CB_XCPDK) LIKE BOOLE-BOOLE OPTIONAL
*" REFERENCE(CS_DYNDSCNT) LIKE /COCKPIT/SDD_PAYMENT_TERMS
*" STRUCTURE /COCKPIT/SDD_PAYMENT_TERMS OPTIONAL

User Exit

```
*"----------------------------------------------------------------------
* Dummy entry for user exit cross reference check
  IF con_wc_usex_rfc_data_get IS INITIAL. ENDIF.
  DATA:
    lt_messages TYPE TABLE OF bapiret2,
    ls_status   TYPE /cockpit/tstat.
  CALL FUNCTION '/COCKPIT/WC_WEB_DEBUGGING'
      EXPORTING
          ic_function  = '/COCKPIT/DD_USEX_WC_DATA_GET'
          ic_user_type = ic_user_type
          ic_user      = ic_user.
  CHECK:
    ic_wc_appl       EQ 'B',
    cs_header-status EQ con_status_processed.
  CALL FUNCTION '/COCKPIT/API_POSTING_STATUS_GE'
      EXPORTING
          i_invoice_guid = cs_header-invoice_guid
      IMPORTING
          e_str_status   = ls_status
      EXCEPTIONS
          not_found      = 1
          error_occured  = 2
          OTHERS         = 3.
  CHECK sy-subrc EQ 0.
* Logic from FuMo /COCKPIT/DISPLAY_STATUS_ICON
  IF ( ls_status-process   EQ con_proc_park          OR
      ls_status-process   EQ con_proc_online_park ) OR
     ( ( ls_status-process EQ con_proc_sap_create    OR
```

User Exit
| ```
        ls_status-process EQ con_proc_sap_update )  AND
        ls_status-status  EQ con_status_parked ).
    EXIT.
  ENDIF.
  CASE cs_header-fi_mm_flg.
    WHEN con_type_mm.
      CALL FUNCTION '/COCKPIT/RFC_DD_DATA_GET'
        EXPORTING
          ic_mm_belnr = cs_header-sap_doc_no
          ic_mm_gjahr = cs_header-fiscal_year
          ib_webapp   = con_true
        IMPORTING
          es_dyndscnt = cs_dyndscnt
        TABLES
          et_messages = lt_messages
        EXCEPTIONS
          OTHERS      = 0.
    WHEN con_type_fi.
      CALL FUNCTION '/COCKPIT/RFC_DD_DATA_GET'
        EXPORTING
          ic_fi_bukrs = cs_header-comp_code
          ic_fi_belnr = cs_header-sap_doc_no
          ic_fi_gjahr = cs_header-fiscal_year
          ib_webapp   = con_true
        IMPORTING
          es_dyndscnt = cs_dyndscnt
        TABLES
          et_messages = lt_messages
``` |
```

User Exit
EXCEPTIONS OTHERS = 0. ENDCASE. * Do not return any message, because WEB BOARD user get * the Dynamic Discounting or not. That is enough. * APPEND LINES OF lt_messages TO ct_messages. ENDFUNCTION.

Dynamic discounting User Exit 957 – Display of documents with dynamic discounting activated

This User Exit allows the display of the documents that have dynamic discounting activated. It is called when searching for invoices in the **New invoice selection** tab.

Warning! This User Exit must be activated with the **No standard** flag.

User Exit
FUNCTION /COCKPIT/DD_USEX_WB_GET_MULTI . *"-- *"*"Lokale Schnittstelle: *" IMPORTING *" REFERENCE(IC_USER_TYPE) LIKE /COCKPIT/TWCS-WC_USERTYPE OPTIONAL *" REFERENCE(IC_USER) LIKE /COCKPIT/TWB_UMP-WB_USER OPTIONAL *" REFERENCE(IC_WC_APPL2) LIKE /COCKPIT/CSTMAP-WC_APPL OPTIONAL *" REFERENCE(I_MAXSEL) LIKE RSEUMOD-TBMAXSEL OPTIONAL *" TABLES *" IT_INPUT_SEL STRUCTURE /COCKPIT/SWB_SELTAB OPTIONAL *" ET_HEADER STRUCTURE /COCKPIT/SHDR_IF OPTIONAL *" ET_WC_DOCS STRUCTURE /COCKPIT/SINV_GUID OPTIONAL *" ET_MESSAGES STRUCTURE BAPIRET2 OPTIONAL

User Exit
*" ET_FLAG STRUCTURE /COCKPIT/TFLAG OPTIONAL *" CHANGING *" REFERENCE(CB_NO_STANDARD) LIKE BOOLE-BOOLE OPTIONAL *" EXCEPTIONS *" ERROR_OCCURED *"-- * == * = = * = All changes in this function module must be implemented = * = in FuMo /COCKPIT/RFC_WB_DATA_GET_MULTI = * = = * == * Dummy entry for user exit cross reference check IF con_wb_usex_get_multi IS INITIAL. ENDIF. STATICS: st_status_map LIKE TABLE OF /cockpit/cstmap WITH HEADER LINE, sb_status LIKE boole-boole. DATA: lt_sel_vendor_no LIKE TABLE OF /cockpit/rvendor WITH HEADER LINE, lt_sel_comp_code LIKE TABLE OF bukrs_ran WITH HEADER LINE, lt_sel_doc_date LIKE TABLE OF rng_date WITH HEADER LINE, lt_sel_currency LIKE TABLE OF /cockpit/rcurr WITH HEADER LINE, lt_sel_po_number LIKE TABLE OF range_ebeln WITH HEADER LINE, lt_sel_docno LIKE TABLE OF /cockpit/rdocno WITH HEADER LINE, lt_sel_ref_doc_no LIKE TABLE OF /cockpit/rxblnr WITH HEADER LINE, lt_sel_cr_date LIKE TABLE OF rng_date WITH HEADER LINE, lt_sel_cr_user LIKE TABLE OF /cockpit/ruser WITH HEADER LINE, lt_sel_sap_doc_no LIKE TABLE OF rng_belnr WITH HEADER LINE,

User Exit
<pre> lt_sel_follow_up LIKE TABLE OF   /cockpit/rfollow_up WITH HEADER LINE,   lt_sel_free   LIKE TABLE OF rsdswhere WITH HEADER LINE,   lb_sel_fi   LIKE boole-boole,   lb_sel_mm   LIKE boole-boole,   lc_vendor_no   LIKE /cockpit/thdr-vendor_no,   lb_sel_all   LIKE boole-boole,   lb_sel_created   LIKE boole-boole,   lb_sel_error   LIKE boole-boole,   lb_sel_posted   LIKE boole-boole,   lb_sel_parked   LIKE boole-boole,   lb_sel_refuse   LIKE boole-boole,   lb_sel_wc_unpost LIKE boole-boole,   lb_sel_wc_post   LIKE boole-boole,   lb_sel_colinv_cl LIKE boole-boole,   lb_sel_colinv_op LIKE boole-boole, BEGIN OF ls_status,   status_int   LIKE /cockpit/cstmap-status_int,   END OF ls_status,   lt_status   LIKE TABLE OF ls_status,   lb_sel_int_status LIKE boole-boole,   lt_filter_func   LIKE TABLE OF /cockpit/sfilter_fbs   WITH HEADER LINE,   lb_sel_approved   LIKE boole-boole,   lb_sel_rejected   LIKE boole-boole,   lc_guid   LIKE /cockpit/sinv_guid,   li_tabix   TYPE i,   lc_function   LIKE tfdir-funcname,</pre>

User Exit
lb_no_standard LIKE boole-boole, lc_value LIKE /cockpit/swc_dummy-bdc_fval, lc_conv_function LIKE tfdir-funcname, lb_get_dyndscnt LIKE boole-boole, lc_wc_appl LIKE /cockpit/cstmap-wc_appl, lt_stat LIKE TABLE OF /cockpit/tstat, ls_stat LIKE /cockpit/tstat, lt_messages LIKE TABLE OF bapiret2, ls_dyndscnt LIKE /cockpit/sdd_payment_terms. * Debugging *** CALL FUNCTION '/COCKPIT/WC_WEB_DEBUGGING' EXPORTING ic_function = '/COCKPIT/DD_USEX_WB_GET_MULTI' ic_user_type = ic_user_type ic_user = ic_user. * Pre-set vendor *** IF ic_wc_appl2 IS INITIAL. lc_wc_appl = 'B'. ENDIF. READ TABLE it_input_sel TRANSPORTING NO FIELDS WITH KEY field = 'VENDOR_NO'. IF sy-subrc NE 0 AND lc_wc_appl EQ 'B'. PERFORM get_vendor(/cockpit/saplwb_rfc) TABLES et_messages USING ic_user ic_user_type CHANGING lc_vendor_no.

User Exit

```
    CHECK NOT lc_vendor_no IS INITIAL.
    lt_sel_vendor_no-sign = 'I'.
    lt_sel_vendor_no-opt  = 'EQ'.
    lt_sel_vendor_no-low  = lc_vendor_no.
    APPEND lt_sel_vendor_no.
  ENDIF.
* Fill direct selection criteria ****************************************
  LOOP AT it_input_sel.
*== Check if there is a selection ======================================
    CHECK NOT it_input_sel-low IS INITIAL.
*   Change values against conversion exits
    IF sy-saprl GE '460'.
      lc_conv_function = '/COCKPIT/WC_CONVEXIT_FROM_NAME'.
      IF NOT it_input_sel-low IS INITIAL.
        lc_value = it_input_sel-low.
        CALL FUNCTION lc_conv_function
             EXPORTING
                  ic_fieldname = it_input_sel-field
                  ic_tabname   = it_input_sel-table
                  ic_value     = lc_value
                  ib_dir_in    = 'X'
             IMPORTING
                  ec_value     = lc_value.
        it_input_sel-low = lc_value.
        MODIFY it_input_sel.
      ENDIF.
      IF NOT it_input_sel-high IS INITIAL.
        lc_value = it_input_sel-high.
```

User Exit

```
        CALL FUNCTION lc_conv_function
          EXPORTING
            ic_fieldname = it_input_sel-field
            ic_tabname   = it_input_sel-table
            ic_value     = lc_value
            ib_dir_in    = 'X'
          IMPORTING
            ec_value     = lc_value.
        it_input_sel-high = lc_value.
        MODIFY it_input_sel.
      ENDIF.
    ENDIF.
*   Preset sign and option
    IF it_input_sel-sign IS INITIAL.
      it_input_sel-sign = 'I'.
    ENDIF.
    IF it_input_sel-option IS INITIAL.
      IF NOT it_input_sel-high IS INITIAL.
        it_input_sel-option = 'BT'.
      ELSE.
        it_input_sel-option = 'EQ'.
      ENDIF.
    ENDIF.
    IF it_input_sel-high IS INITIAL
       AND it_input_sel-low CA '*'.
      PERFORM add_selopt_where_clause(/cockpit/saplwb_rfc)
            TABLES lt_sel_free
            USING  it_input_sel.
```

User Exit

```
  ELSE.
*== Handle direct selection criteria ===================================
    CASE it_input_sel-field.
*     FI / MM
      WHEN 'FI_FLG'.
        CHECK it_input_sel-low EQ con_true.
        lb_sel_fi = con_true.
      WHEN 'MM_FLG'.
        CHECK it_input_sel-low EQ con_true.
        lb_sel_mm = con_true.
*     Vendor number
      WHEN 'VENDOR_NO'.
        MOVE-CORRESPONDING it_input_sel TO lt_sel_vendor_no.
        lt_sel_vendor_no-opt = it_input_sel-option.
        CALL FUNCTION 'CONVERSION_EXIT_ALPHA_INPUT'
          EXPORTING
            input  = it_input_sel-low
          IMPORTING
            output = lt_sel_vendor_no-low.
        CALL FUNCTION 'CONVERSION_EXIT_ALPHA_INPUT'
          EXPORTING
            input  = it_input_sel-high
          IMPORTING
            output = lt_sel_vendor_no-high.
        APPEND lt_sel_vendor_no.
*     Company code
      WHEN 'COMP_CODE'.
        MOVE-CORRESPONDING it_input_sel TO lt_sel_comp_code.
```

User Exit
APPEND lt_sel_comp_code. * Document date WHEN 'DOC_DATE'. MOVE-CORRESPONDING it_input_sel TO lt_sel_doc_date. APPEND lt_sel_doc_date. * Currency WHEN 'CURRENCY'. TRANSLATE it_input_sel TO UPPER CASE. "#EC SYNTCHAR MOVE-CORRESPONDING it_input_sel TO lt_sel_currency. lt_sel_currency-opt = it_input_sel-option. APPEND lt_sel_currency. * Purchaser order number WHEN 'PO_NUMBER'. MOVE-CORRESPONDING it_input_sel TO lt_sel_po_number. CALL FUNCTION 'CONVERSION_EXIT_ALPHA_INPUT' EXPORTING input = it_input_sel-low IMPORTING output = lt_sel_po_number-low. CALL FUNCTION 'CONVERSION_EXIT_ALPHA_INPUT' EXPORTING input = it_input_sel-high IMPORTING output = lt_sel_po_number-high. APPEND lt_sel_po_number. lb_sel_mm = con_true. * COCKPIT document number WHEN 'DOCNO'.

User Exit
| ```
      MOVE-CORRESPONDING it_input_sel TO lt_sel_docno.
      APPEND lt_sel_docno.
*     Document reference number (e. g. invoice number)
     WHEN 'REF_DOC_NO'.
      TRANSLATE it_input_sel TO UPPER CASE.          "#EC SYNTCHAR
      MOVE-CORRESPONDING it_input_sel TO lt_sel_ref_doc_no.
      APPEND lt_sel_ref_doc_no.
*     Creation date
     WHEN 'CR_DATE'.
      MOVE-CORRESPONDING it_input_sel TO lt_sel_cr_date.
      APPEND lt_sel_cr_date.
*     COCKPIT processor (AP officer / clerk)
     WHEN 'CR_USER'.
      TRANSLATE it_input_sel TO UPPER CASE.          "#EC SYNTCHAR
      MOVE-CORRESPONDING it_input_sel TO lt_sel_cr_user.
      APPEND lt_sel_cr_user.
*     SAP document number
     WHEN 'SAP_DOC_NO'.
      MOVE-CORRESPONDING it_input_sel TO lt_sel_sap_doc_no.
      APPEND lt_sel_sap_doc_no.
*     Cockpit document status
     WHEN 'STATUS'.
      IF sb_status EQ con_false.
       CALL FUNCTION '/COCKPIT/WB_CUST_STATUS_GET'
         EXPORTING
           ic_wc_appl    = lc_wc_appl
         TABLES
           et_status_map = st_status_map.
``` |
```

User Exit

```
        sb_status = con_true.
      ENDIF.
      LOOP AT st_status_map WHERE status_ext EQ it_input_sel-low.
        ls_status-status_int = st_status_map-status_int.
        APPEND ls_status TO lt_status.
      ENDLOOP.
*       Follow-up flag *****************************************
     WHEN 'FOLLOW_UP'.
      MOVE-CORRESPONDING it_input_sel TO lt_sel_follow_up.
      lt_sel_follow_up-opt = it_input_sel-option.
      APPEND lt_sel_follow_up.
*       Dynamic selections
     WHEN OTHERS.
      PERFORM add_selopt_where_clause(/cockpit/saplwb_rfc)
          TABLES lt_sel_free
          USING  it_input_sel.
    ENDCASE.
   ENDIF.
  ENDLOOP.
* Not FI or MM selected
  IF lb_sel_fi EQ con_false AND
     lb_sel_mm EQ con_false.
   lb_sel_fi = con_true.
   lb_sel_mm = con_true.
  ENDIF.
* Set direct status selections based on mapping ************************
  LOOP AT lt_status INTO ls_status.
   CASE ls_status-status_int.
```

User Exit
*   preset WHEN 'E1'.   " Received and in work lb_sel_created = con_true. lb_sel_error   = con_true. lb_sel_parked = con_true. WHEN 'E2'.   " Posted lb_sel_posted = con_true. WHEN 'E3'.   " Payed lb_sel_posted = con_true. WHEN 'E4'.   " Rejected lb_sel_refuse = con_true. *   available status from table /COCKPIT/CSTINT WHEN '01'.   " received and unprocessed lb_sel_created = con_true. WHEN '02'.   " received and erronous lb_sel_error = con_true. WHEN '03'.   " posted lb_sel_posted = con_true. *   WHEN '04'.   " deleted *   not supported *   WHEN '05'.   " partial posted *   not supported WHEN '06'.   " Web Cycle unprocessed document lb_sel_wc_unpost = con_true. WHEN '08'.   " Web Cycle processed document lb_sel_wc_post   = con_true. lb_sel_int_status = con_true. WHEN '09'.   " paid

User Exit
lb_sel_posted = con_true.
lb_sel_int_status = con_true.
WHEN '10'. " collective inv. compl. assigned
lb_sel_colinv_cl = con_true.
WHEN '11'. " collective inv. not compl. assigned
lb_sel_colinv_op = con_true.
WHEN '13'. " rejected
lb_sel_refuse = con_true.
WHEN '23'. " parked
lb_sel_parked = con_true.
lb_sel_int_status = con_true.
WHEN '24'. " payment block
lb_sel_posted = con_true.
lb_sel_int_status = con_true.
WHEN '25'. " dynamic discounting
lb_sel_posted = con_true.
lb_sel_int_status = con_true.
lb_get_dyndscnt = con_true.
* WHEN 'W1'. " unprocessed, Web Cycle released
* lb_sel_created = con_true.
* lb_sel_error = con_true.
* lb_sel_approved = con_true.
* WHEN 'W2'. " unprocessed, Web Cycle rejected
* lb_sel_created = con_true.
* lb_sel_error = con_true.
* lb_sel_rejected = con_true.
* WHEN 'W3'. " processed, Web Cycle released
* lb_sel_wc = con_true.

User Exit

```
*     WHEN 'W4'.   " processed, Web Cycle rejected
*       lb_sel_wc = con_true.
*     WHEN 'X1'.   " posted, payment block
*       lb_paym_block = con_true.
*     WHEN OTHERS.
*       not supported
    ENDCASE.
  ENDLOOP.
* No status
  IF sy-subrc NE 0.
    lb_sel_created    = con_true.
    lb_sel_error      = con_true.
    lb_sel_posted     = con_true.
    lb_sel_parked     = con_true.
    lb_sel_refuse     = con_true.
    lb_sel_wc_unpost  = con_true.
    lb_sel_wc_post    = con_true.
    lb_sel_colinv_op  = con_true.
    lb_sel_colinv_cl  = con_true.
    lb_sel_int_status = con_true.
    lb_sel_all        = con_true.
  ELSE.
    lb_sel_all = con_false.
  ENDIF.
* Get documents ********************************************************
  CALL FUNCTION '/COCKPIT/API_DATA_GET_MULTI_EX'
      EXPORTING
          ii_maxsel            = i_maxsel
```

User Exit

```
    i_sel_type_fi          = lb_sel_fi
    i_sel_type_mm          = lb_sel_mm
    i_sel_stat_new         = lb_sel_created
    i_sel_stat_error       = lb_sel_error
    i_sel_stat_posted      = lb_sel_posted
    i_sel_stat_parked      = lb_sel_parked
    i_sel_stat_rejected    = lb_sel_refuse
    i_sel_stat_wc          = lb_sel_wc_unpost
    i_sel_stat_wc_posted   = lb_sel_wc_post
    i_sel_stat_coll        = lb_sel_colinv_op
    i_sel_stat_coll_posted = lb_sel_colinv_cl
    i_sel_stat_wb_new      = con_true
    i_sel_int_status       = lb_sel_int_status
  TABLES
    i_selopt_comp_code     = lt_sel_comp_code
    i_selopt_currency      = lt_sel_currency
    i_selopt_vendor_no     = lt_sel_vendor_no
    i_selopt_doc_date      = lt_sel_doc_date
    i_selopt_po_number     = lt_sel_po_number
    i_selopt_sap_doc_no    = lt_sel_sap_doc_no
    i_selopt_ref_doc_no    = lt_sel_ref_doc_no
    i_selopt_cr_user       = lt_sel_cr_user
    i_selopt_cr_date       = lt_sel_cr_date
    i_selopt_docno         = lt_sel_docno
    i_selopt_follow_up     = lt_sel_follow_up
    i_selopt_free_selections = lt_sel_free
    et_header_disp         = et_header
    et_flag                = et_flag
```

User Exit

```
          et_messages            = et_messages
      EXCEPTIONS
          OTHERS                 = 0.
  IF NOT et_header[] IS INITIAL.
    SELECT * FROM /cockpit/tstat
           INTO TABLE lt_stat
            FOR ALL ENTRIES IN et_header
          WHERE invoice_guid = et_header-invoice_guid.
  ENDIF.
* Set output ************************************************************
  LOOP AT et_header.
    li_tabix = sy-tabix.
*   Set external status (but not in Web Cycle history)
    IF lc_wc_appl NE ' '.
      IF lb_get_dyndscnt = con_true AND
         et_header-status = con_status_processed.
        CLEAR:
          ls_dyndscnt,
          ls_stat.
        READ TABLE lt_stat
             INTO ls_stat
             WITH KEY invoice_guid = et_header-invoice_guid.
*       Logic from FuMo /COCKPIT/DISPLAY_STATUS_ICON
        IF ( ls_stat-process   EQ con_proc_park          OR
             ls_stat-process   EQ con_proc_online_park ) OR
           ( ( ls_stat-process EQ con_proc_sap_create    OR
               ls_stat-process EQ con_proc_sap_update )  AND
               ls_stat-status  EQ con_status_parked ).
```

User Exit
`*        Parked document -> no DD` `    ELSE.` `      CASE et_header-fi_mm_flg.` `        WHEN con_type_mm.` `          CALL FUNCTION '/COCKPIT/RFC_DD_DATA_GET'` `            EXPORTING` `              ic_mm_belnr = et_header-sap_doc_no` `              ic_mm_gjahr = et_header-fiscal_year` `              ib_webapp   = con_true` `            IMPORTING` `              es_dyndscnt = ls_dyndscnt` `            TABLES` `              et_messages = lt_messages` `            EXCEPTIONS` `              OTHERS      = 0.` `        WHEN con_type_fi.` `          CALL FUNCTION '/COCKPIT/RFC_DD_DATA_GET'` `            EXPORTING` `              ic_fi_bukrs = et_header-comp_code` `              ic_fi_belnr = et_header-sap_doc_no` `              ic_fi_gjahr = et_header-fiscal_year` `              ib_webapp   = con_true` `            IMPORTING` `              es_dyndscnt = ls_dyndscnt` `            TABLES` `              et_messages = lt_messages` `            EXCEPTIONS` `              OTHERS      = 0.`

User Exit
<pre>   ENDCASE.   IF ls_dyndscnt-dd_wskto > 0.   et_header-status = con_status_dyndscnt.   ENDIF.   ENDIF.   ENDIF.   IF sb_status EQ con_false.   CALL FUNCTION '/COCKPIT/WB_CUST_STATUS_GET'   EXPORTING   ic_wc_appl   = lc_wc_appl   TABLES   et_status_map = st_status_map.   sb_status = con_true.   ENDIF.   READ TABLE st_status_map   WITH KEY status_int = et_header-status.   IF sy-subrc EQ 0.   et_header-status = st_status_map-status_ext.   ENDIF. *   filter unselected documents *   (same int status like paid, payment_block select *   also posted documents)   IF lb_sel_all EQ con_false.   READ TABLE it_input_sel WITH KEY field = 'STATUS'   low = et_header-status.   IF sy-subrc NE 0.   DELETE et_header INDEX li_tabix.   CONTINUE.</pre>

User Exit
<pre>   ENDIF.   ENDIF.   ENDIF. *   Check all fields whether they require a conversion routine   CALL FUNCTION '/COCKPIT/CONVERSION_EXIT'   EXPORTING   ix_inoutput = 'O'   ic_tabname   = '/COCKPIT/SHDR_IF'   CHANGING   cs_structure = et_header. "only header line   MODIFY et_header INDEX li_tabix. *   look if this document has been / is in WEB CYCLE   SELECT SINGLE invoice_guid FROM /cockpit/twc   INTO lc_guid-invoice_guid   WHERE invoice_guid = et_header-invoice_guid.   IF sy-subrc = 0.   et_wc_docs-invoice_guid = lc_guid.   APPEND et_wc_docs.   ENDIF. ENDLOOP. ENDFUNCTION.</pre>

Fast entry

Overview

There are two User Exits specific to the importing of Fast Entry documents:

- User Exit 068 - Adjustment of checked data during transfer of Fast Entry docs
- User Exit 069 - Adjustment of Fast Entry data before transfer

List of User Exits

User Exit 068 – Adjustment of the checked data during import of Fast Entry documents

The User Exit is similar to User Exit 011. It adjusts the checked data of Fast Entry documents upon receipt of a document via the PROCESS DIRECTOR entry interface.

Template
FUNCTION /COCKPIT/USEX_FE_TRANSFER. *'-- *'*'Local interface: *' IMPORTING *'   REFERENCE(I_STR_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE /COCKPIT/SCHECKDATA *" TABLES *"   CT_ITEM STRUCTURE /COCKPIT/TITEM *"   CT_ACCOUNT STRUCTURE /COCKPIT/TACCT *"   CT_TAX STRUCTURE /COCKPIT/TTAX *"   CT_MESSAGES STRUCTURE BAPIRET2 *" CHANGING *"   REFERENCE(CS_HEADER) LIKE /COCKPIT/THDR STRUCTURE *"   /COCKPIT/THDR *"   REFERENCE(CS_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE *"   /COCKPIT/SCHECKDATA *" EXCEPTIONS *"   ERROR_OCCURED
*"-- *@US@aa   => Signiture of Creator, e.g. HH for Harry Hirsch *@CU@aaa...   => Customer Name *@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check

Template
IF con_exit_fe_transfer IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

User Exit 069 – Adjustment Fast Entry data before import

The User Exit is similar to User Exit 068. It adjusts the data of Fast Entry documents *before* receipt of a document via the PROCESS DIRECTOR entry interface. It allows you to add additional data to the incoming document, for example, the PROCESS DIRECTOR document type.

Template

```
FUNCTION /COCKPIT/USEX_FE_BEFORE_SUBMIT.
*'----------------------------------------------------------------------
*'*'Local interface:
*'  TABLES
*"      CT_ITEM STRUCTURE  /COCKPIT/SITEM_EXT
*"      CT_ACCOUNT STRUCTURE  /COCKPIT/SACCT_EXT
*"      CT_TAX STRUCTURE  /COCKPIT/STAX_EXT
*"      CT_MESSAGES STRUCTURE  BAPIRET2
*"  CHANGING
*"     REFERENCE(CS_HEADER) LIKE  /COCKPIT/SHDR_EXT STRUCTURE
*"        /COCKPIT/SHDR_EXT
*"     REFERENCE(CS_CHECK) LIKE  /COCKPIT/SCHECKDATA STRUCTURE
*"        /COCKPIT/SCHECKDATA
*"  EXCEPTIONS
*"      ERROR_OCCURED
*"----------------------------------------------------------------------
*@US@aa         => Signiture of Creator, e.g. HH for Harry Hirsch
*@CU@aaa...     => Customer Name
```

Template
*@K1@ ... *@K9@ => Keywords for Implemented Functionality * Dummy entry for user exit cross reference check   IF con_exit_fe_before_submit IS INITIAL. ENDIF. *>>> START OF IMPLEMENTATION >>* *<<< END OF IMPLEMENTATION <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<* ENDFUNCTION.

Appendix C – Tables

Overview

Data in PROCESS DIRECTOR is saved in tables in the /COCKPIT/ namespace. There are two kinds of tables:

- Data tables

  Store the data in PROCESS DIRECTOR documents.

- Configuration tables

  Store the PROCESS DIRECTOR configuration data.

Data tables

Data tables contain PROCESS DIRECTOR document data (both current and previous versions).

Depending on the underlying database of the R/3, appropriate database optimizations must be performed.

Descriptions

Table	Description
/COCKPIT/TACCAS	Data of the allocation to an account for a purchase order item
/COCKPIT/TACCASV	Data of the allocation to an account for a purchase order item versions

Table	Description
/COCKPIT/TACCT	Data of the allocation to an account
/COCKPIT/TACCTO	Original data of the allocation to an account
/COCKPIT/TACCTV	Data of the allocation to an account old versions
/COCKPIT/TCHECKO	Check data for the invoice
/COCKPIT/TCHGTC	Last alteration of a Customer-Includes
/COCKPIT/TCPDK	CPD data
/COCKPIT/TCPDKIG	CPD data for the INVOICE_GUID
/COCKPIT/TERRORS	Occurred errors in the PROCESS DIRECTOR, for the classification
/COCKPIT/TERRORV	Occurred errors in the PROCESS DIRECTOR, for the classification
/COCKPIT/THDR	Header data
/COCKPIT/THDRO	Original header data
/COCKPIT/THDRV	Header data old versions
/COCKPIT/THIST	Data history
/COCKPIT/TITEM	Item data
/COCKPIT/TITEMO	Original item data

Table	Description
/COCKPIT/TITEMV	Item data old versions
/COCKPIT/TLIC	Product licenses
/COCKPIT/TLOGOS	Logos for the display
/COCKPIT/TMIME	Image data
/COCKPIT/TMSG	Messages
/COCKPIT/TNOTES	Notes of the PROCESS DIRECTOR
/COCKPIT/TSTAT	Posting Status data
/COCKPIT/TSARAID	Index Table for archiving
/COCKPIT/TTAX	Tax data
/COCKPIT/TTAXO	Original tax data
/COCKPIT/TTAXV	Tax data old versions
/COCKPIT/TTXTBOD	Rows of the texts of a PROCESS DIRECTOR document
/COCKPIT/TTXTHDR	Header information of the texts of a PROCESS DIRECTOR document
/COCKPIT/TUSRDEF	Creation of an agent for PROCESS DIRECTOR
/COCKPIT/TVDHIST	History for the vendor search

Table	Description
/COCKPIT/TVEND	Found vendors from search
/COCKPIT/TVERS	Data for the copyright
/COCKPIT/TWT_TAX	Table for broadened withholding tax

Properties

Each PROCESS DIRECTOR document has a data volume of 20-50kb (not compressed), on average 35kb. Depending on the underlying database, the actual volume saved is smaller, because the major part of the fields (81% of the length) is stored as VARCHAR und all the field sizes are never fully utilized.

Table	Width	Indexes	Generic	VARCHAR	Entries per doc.	Size (B)
/COCKPIT/TACCAS	202	1	5	197	3	606
/COCKPIT/TACCASV	200	1	5	195	15	3000
/COCKPIT/TACCT	279	1	33	246	3	837
/COCKPIT/TACCTO	284	1	34	250	1	284
/COCKPIT/TACCTV	279	1	34	245	15	4185
/COCKPIT/TCHECKO	205	1	0	205	1	205
/COCKPIT/TCHGTC	56	1	0	56	0	0
/COCKPIT/TCPDK	530	1	21	509	Variable	0
/COCKPIT/TCPDKIG	70	1	0	70	Variable	0

Table	Width	Indexes	Generic	VARCHAR	Entries per doc.	Size (B)
/COCKPIT/TERRORS	95	1	0	95	5	475
/COCKPIT/THDR	656	1	183	473	1	656
/COCKPIT/THDRO	655	1	236	419	1	655
/COCKPIT/THDRV	656	1	183	473	5	3280
/COCKPIT/THIST	98	1	21	77	5	490
/COCKPIT/TITEM	234	1	72	162	5	1170
/COCKPIT/TITEMO	233	1	66	167	1	233
/COCKPIT/TITEMV	234	1	72	162	25	5850
/COCKPIT/TMIME	424	1	0	424	1	424
/COCKPIT/TMSG	432	1	31	401	25	10800
/COCKPIT/TSTAT	64	1	21	43	1	64
/COCKPIT/TTAX	75	1	20	55	1	75
/COCKPIT/TTAXO	59	1	30	29	1	59
/COCKPIT/TTAXV	75	1	20	55	5	375

Table	Width	Indexes	Generic	VARCHAR	Entries per doc.	Size (B)
/COCKPIT/TTXTBOD	118	1	0	118	5	590
/COCKPIT/TTXTHDR	132	1	21	111	1	132
/COCKPIT/TUSRDEF	22	1	3	19	0	0
/COCKPIT/TVDHIST	13	1	0	13	Variable	0
/COCKPIT/TVEND	48	1	0	48	Variable	0
/COCKPIT/TVERS	15	1	0	15	0	0
/COCKPIT/TWT_TAX	75	1	15	60	Variable	0

Configuration tables

Configuration tables store the PROCESS DIRECTOR configuration data. No document data is saved in them.

Data logging is activated for all tables, which record all changes.

Table	Description
/COCKPIT/CADDCHK	Semantic checks of PROCESS DIRECTOR
/COCKPIT/CARCH	Archive Management
/COCKPIT/CARCHIV	Archive connection
/COCKPIT/CARCOBJ	Archive document type
/COCKPIT/CAUTH	Authorization object

Table	Description
/COCKPIT/CBUTN	Create active functions
/COCKPIT/CCHK	Semantic checks of PROCESS DIRECTOR
/COCKPIT/CCHKT	Checks of PROCESS DIRECTOR
/COCKPIT/CCOMSPCS	Comparison of PROCESS DIRECTOR SAP data
/COCKPIT/CCPDDAT	CPD vendors: Field mapping for customer-specific fields
/COCKPIT/CCPDVNO	CPD vendors: Mapping of names for the CPD vendor number
/COCKPIT/CCSTFCT	Customer functions
/COCKPIT/CCSTFTT	Customer functions, texts
/COCKPIT/CCTAC	Create posting transactions
/COCKPIT/CCTIME	Resting time of the documents in PROCESS DIRECTOR
/COCKPIT/CCVFIND	Customizing: vendor search in PROCESS DIRECTOR
/COCKPIT/CCVFINT	Search types in PROCESS DIRECTOR
/COCKPIT/CDICDYN	DIC2DYN transformation of display into DB structure
/COCKPIT/CERRVIS	Customizing of the field classification
/COCKPIT/CEXITS	User exits PROCESS DIRECTOR

Table	Description
/COCKPIT/CEXITS2	User exits PROCESS DIRECTOR
/COCKPIT/CFRDETA	Further detailed fields
/COCKPIT/CFRSELE	Further selection fields
/COCKPIT/CFSTATE	Field status variants of PROCESS DIRECTOR
/COCKPIT/CGENERL	General settings PROCESS DIRECTOR
/COCKPIT/CLOGMSG	Customizing for the logging (history)
/COCKPIT/CLOGOS	Logos for the display
/COCKPIT/CMAP	Mapping of the invoice fields on the SAP fields
/COCKPIT/CMAPT	Mapping SAP fields FI/MM – PROCESS DIRECTOR fields
/COCKPIT/CMAPTAX	Allocation of the PROCESS DIRECTOR tax fields
/COCKPIT/CMSG	Message handling at the time of posting
/COCKPIT/CNCOMP	Fields are not taken into account when comparing versions
/COCKPIT/CNOTES	Settings for the notes
/COCKPIT/CPICDIS	Display of the images, control settings etc.
/COCKPIT/CPOFIND	Create purchase order item search

Table	Description
/COCKPIT/CPOSTNG	Customizing for the INVOICE COCKPIT postings
/COCKPIT/CPROC	Fixed values of the processes of PROCESS DIRECTOR
/COCKPIT/CPROCT	Texts for the processes of PROCESS DIRECTOR
/COCKPIT/CPTYP	PROCESS DIRECTOR document type
/COCKPIT/CPTYPT	PROCESS DIRECTOR document type
/COCKPIT/CREP	Posting logics for the REPETITOR
/COCKPIT/CREQFLD	Mandatory fields of PROCESS DIRECTOR
/COCKPIT/CSABC	Mandatory fields of PROCESS DIRECTOR
/COCKPIT/CSCRDIS	Allocate status variants
/COCKPIT/CSCREEN	Deposit status variants, possibility of alteration of fields
/COCKPIT/CSEXITS	PROCESS DIRECTOR user exits
/COCKPIT/CSTEXT	External document status
/COCKPIT/CSTEXTT	Transformation of the document status, external status description
/COCKPIT/CSTINT	Internal document status
/COCKPIT/CSTINTT	Transformation of the document status, internal status description

Table	Description
/COCKPIT/CSTMAP	Transformation of the document status from PROCESS DIRECTOR to external
/COCKPIT/CSUB	Posting logics at the time of the data transfer in SAP R/3
/COCKPIT/CTAC	Transactions
/COCKPIT/CTAXCOD	How is tax rate illustrated on indicators
/COCKPIT/CTXTYP	Types of texts in PROCESS DIRECTOR
/COCKPIT/CTXTYPT	Texts for the types of texts in PROCESS DIRECTOR
/COCKPIT/CUOMGET	Suppress automatic determination of the unit from the purchase order
/COCKPIT/CTXTYPT	Texts for note types
/COCKPIT/CUOMGET	Suppress automatic determination of the unit from the purchase order
/COCKPIT/CVFIND	Customizing: Vendor search in PROCESS DIRECTOR
/COCKPIT/CVNFIND	Automatic determination of the vendor

Appendix D – Transactions

Overview

Below is a list of the main PROCESS DIRECTOR transactions.

For a list of all configuration transactions, see the Index.

Component	Transaction	Description
PROCESS DIRECTOR	/COCKPIT/1	Displays PROCESS DIRECTOR with document selection screen.
PROCESS DIRECTOR	/COCKPIT/WL1	Displays PROCESS DIRECTOR with today's documents and documents with errors.
PROCESS DIRECTOR	/COCKPIT/WL2	Displays PROCESS DIRECTOR with today's documents and documents with errors assigned to the current user.
PROCESS DIRECTOR	/COCKPIT/WL3	Displays PROCESS DIRECTOR with all documents assigned to the current user.
PROCESS DIRECTOR	/COCKPIT/CI	Displays PROCESS DIRECTOR configuration menu (IMG).
PROCESS DIRECTOR	/COCKPIT/C	Displays PROCESS DIRECTOR configuration menu.
PROCESS DIRECTOR	/COCKPIT/VER	Displays PROCESS DIRECTOR version.
WORK CYCLE	/COCKPIT/WC	Displays WORK CYCLE document list.
WORK CYCLE	/COCKPIT/WI	Displays WORK CYCLE configuration menu (IMG).
WORK CYCLE	/COCKPIT/WUM	Displays user management of WORK CYCLE.

EDI COCKPIT	/COCKPIT/EI	Displays EDI COCKPIT configuration menu (IMG).

Appendix E – Other

Viewing document images

Overview

TIFF is the default format for invoice documents. By default, the SAP GUI uses an embedded browser, based on Internet Explorer, to view document images. However, this browser does not support TIFF files by default. There are two ways you can enable users to view TIFF document images:

- Install a TIFF viewer

  You can install a TIFF viewer on each user workstation. It must be a plugin for Internet Explorer.

- Change the default image viewer

  You can specify another program to view document images.

Changing the default image viewer

You can specify another program to view document images, instead of the SAP GUI.

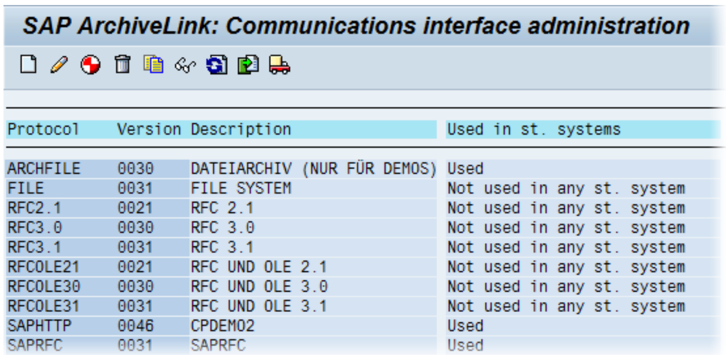
- SAP GUI for Windows
- SAP GUI for Java

SAP GUI for Windows

In SAP you have the option to specify a different program to open TIFF files (as well as other file types):

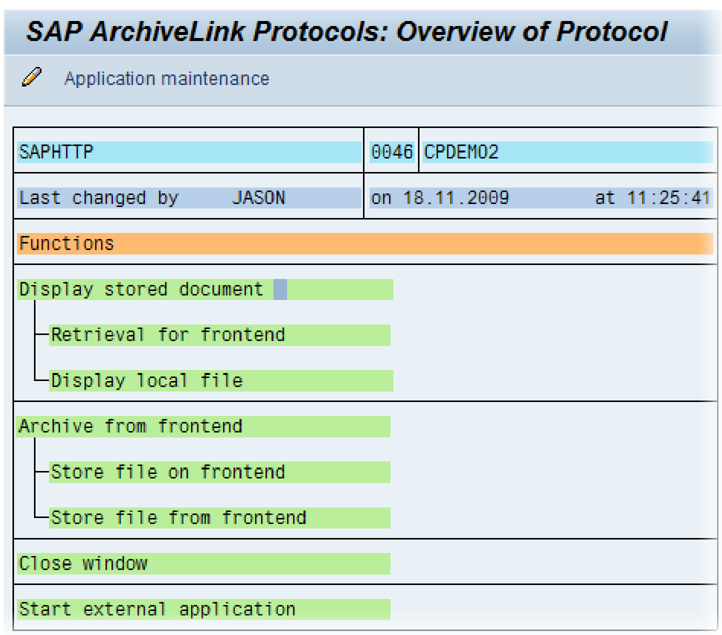
1. Go to `/OAA3`.

   A number of protocols are defined for archiving.



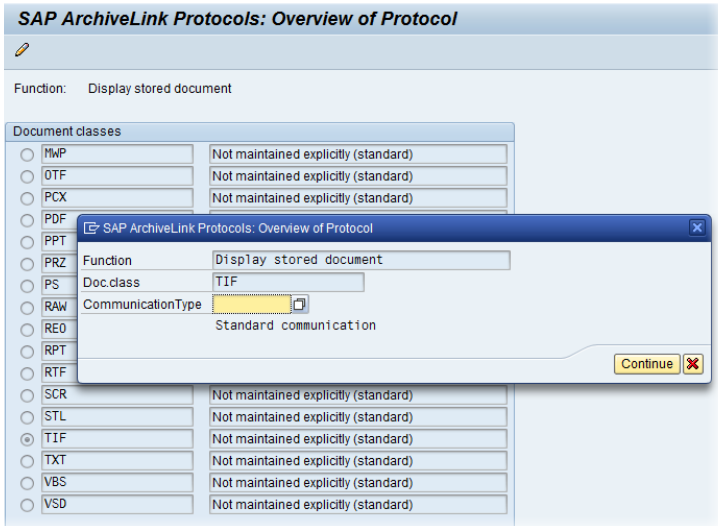
2. Double-click the protocol used to retrieve invoice images.

   The **Overview of Protocol** screen is displayed.



3. Double click Display stored content.

4. Select the file type and then double click it.



5. Select ARCHIVELNK for Communication Type.

   ARCHIVELNK means that the image is transferred from the archive to the application server as a file, imported from the application server and downloaded to the frontend PC.

6. Click **Continue** to save.

7. Double click **Retrieval** for frontend.

8. Select the file type and then double click it.

9. Select ARCHIVELNK for Communication Type.

10. Click **Continue** to save.

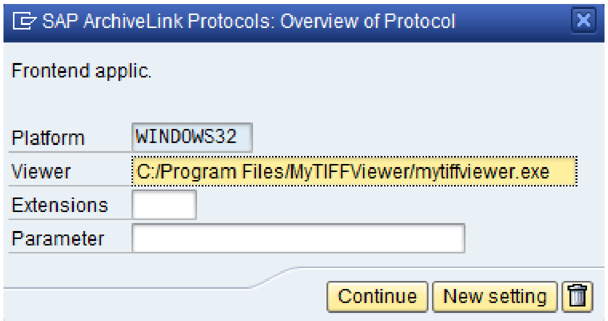
11. Double click Display local file.

12. Select the file type and then double click it.

13. Select ARCHIVELNK for Communication Type.

14. Click Program call.

15. Enter the path to the program you wish to use.



16. Click **Continue**. Click **Continue** once more.

17. Click **Save** to save your changes.

18. Start PROCESS DIRECTOR (restart it if it was open to apply the above changes).

    The application you specified should now start everytime you open the file type you associated it with.

SAP GUI for Java

If you are using SAP GUI for Java, changing the file associations using `/OAA3` has no effect. Instead, you must add entries to the `TOAEX` table. Changing file associations using this table is only supported from SAP R/3 4.70.

To use Internet Explorer to view files instead of the SAP GUI's ECL document viewer:

1. Go to `/SE11`.

2. Enter `TOAEX` as the **Database table** and click **Display**.

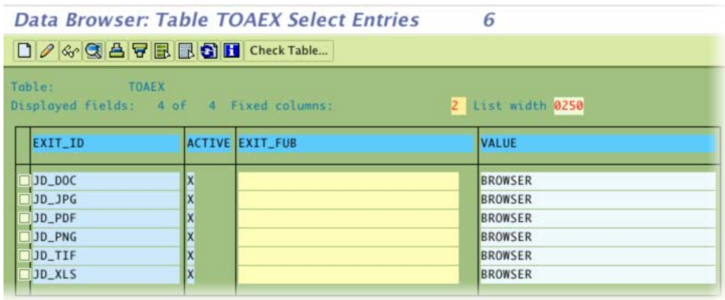
3. Go to Utilities > Table contents > Create entries.

4. Enter the following values for each file type you wish to change the association for:

Setting	Value to enter
EXIT_ID	JD_<File Type> Examples: JD_PDF JD_TIF
ACTIVE	[checked]

Setting	Value to enter
VALUE	BROWSER

5. The result looks something like this:



6. Save and exit.

Line item proposal examples

Examples

The following 12 examples show different cases of:

- whether the supplier, delivery note(s) and/or purchase order(s) are transferred into PROCESS DIRECTOR, and
- what POs and vendors are found in SAP using the transferred data, and
- what items are proposed as a result.

...using the **PD 7.1 AP with pop-up** line item proposal algorithm.

For details of what data in each of the items is proposed, see Line item proposal examples: Goods received.

The table below provides a summary. Details for each examples are found below it.

Example	Transferred data			Match in SAP		Items proposed?
	Supplier	# DNs	# POs	# POs	# Vendors	
Example 1	Yes	1	(-)	2	1	Yes
Example 2	Yes	1	(-)	2	2	Yes
Example 3	No	1	(-)	2	1	Yes
Example 4	No	1	(-)	2	2	No
Example 5	Yes	(-)	2	2	1	Yes
Example 6	Yes	(-)	2	2	2	Yes
Example 7	No	(-)	2	2	1	Yes
Example 8	No	(-)	2	2	2	No
Example 9	Yes	1	2	3	1	Yes
Example 10	Yes	1	1	3	2	Yes
Example 11	(-)	1	2	3	1	Yes
Example 12	(-)	1	1	3	2	Yes

Example 1

Transferred data			
Supplier	2500		
Delivery note	MRM-NEU-SCHEIN1		
Purchase order	(blank)		
Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN1	10	450000000	2500
	20	450000000	2500
	20	450000001	2500
Result – items proposed			
Item	**Purchase order**		
10	450000000		
20	450000000		
20	450000001		

Example 2

Transferred data			
Supplier	2500		
Delivery note	MRM-NEU-SCHEIN2		
Purchase order	(blank)		
Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN2	10	450000002	2500
	20	450000002	2500
MRM-NEU-SCHEIN2	20	450000003	2700
Result – items proposed			
Item	**Purchase order**		
10	450000002		
20	450000002		

Example 3

Transferred data	
Supplier	(blank)

Transferred data			
Delivery note	MRM-NEU-SCHEIN1		
Purchase order	(blank)		
Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN1	10	450000000	2500
	20	450000000	2500
	20	450000001	2500
Result of vendor determination			
Vendor	2500		
Result – items proposed			
Item	**Purchase order**		
10	450000000		
20	450000000		
20	450000001		

Example 4

<table>
<tr><th colspan="4">Transferred data</th></tr>
<tr><td>Supplier</td><td colspan="3">(blank)</td></tr>
<tr><td>Delivery note</td><td colspan="3">MRM-NEU-SCHEIN2</td></tr>
<tr><td>Purchase order</td><td colspan="3">(blank)</td></tr>
<tr><th colspan="4">Matched data in SAP</th></tr>
<tr><td>Delivery note</td><td>Item</td><td>Purchase order</td><td>Vendor</td></tr>
<tr><td rowspan="2">MRM-NEU-SCHEIN2</td><td>10</td><td>450000002</td><td>2500</td></tr>
<tr><td>20</td><td>450000002</td><td>2500</td></tr>
<tr><td>MRM-NEU-SCHEIN2</td><td>20</td><td>450000003</td><td>2700</td></tr>
<tr><th colspan="4">Result of vendor determination</th></tr>
<tr><td>Vendor</td><td colspan="3">2500, 2700</td></tr>
<tr><th colspan="4">Result – items proposed</th></tr>
<tr><td colspan="4">No items are proposed, as more than one vendor was determined using the delivery note.</td></tr>
</table>

Example 5

Transferred data	
Supplier	2500
Delivery note	(blank)

<table>
<tr><th colspan="2">Transferred data</th></tr>
<tr><td>Purchase orders</td><td>450000000, 450000001</td></tr>
</table>

<table>
<tr><th colspan="2">Matched data in SAP</th></tr>
<tr><td>Purchase order</td><td>Vendor</td></tr>
<tr><td>450000000</td><td>2500</td></tr>
<tr><td>450000001</td><td>2500</td></tr>
</table>

<table>
<tr><th colspan="2">Result – items proposed</th></tr>
<tr><td>Item</td><td>Purchase order</td></tr>
<tr><td>10</td><td>450000000</td></tr>
<tr><td>20</td><td>450000000</td></tr>
<tr><td>30</td><td>450000000</td></tr>
<tr><td>10</td><td>450000001</td></tr>
<tr><td>20</td><td>450000001</td></tr>
</table>

Example 6

<table>
<tr><th colspan="2">Transferred data</th></tr>
<tr><td>Supplier</td><td>2500</td></tr>
<tr><td>Delivery note</td><td>(blank)</td></tr>
</table>

Transferred data		
Purchase orders	450000002, 450000003	
Matched data in SAP		
Purchase order		**Vendor**
450000002		2500
450000003		2700
Result – items proposed		
Item	**Purchase order**	
10	450000002	
20	450000002	

Example 7

Transferred data		
Supplier	(blank)	
Delivery note	(blank)	
Purchase orders	450000000, 450000001	
Matched data in SAP		
Purchase order		**Vendor**

Matched data in SAP	
450000000	2500
450000001	2500

Result of vendor determination	
Vendor	2500

Result – items proposed	
Item	**Purchase order**
10	450000000
20	450000000
30	450000000
10	450000001
20	450000001

Example 8

Transferred data	
Supplier	(blank)
Delivery note	(blank)
Purchase orders	450000002, 450000003

Matched data in SAP	
Purchase order	**Vendor**
450000002	2500
450000003	2700
Result of vendor determination	
Vendor	2500, 2700
Result – items proposed	
No items are proposed, as more than one vendor was determined using the purchase orders.	

Example 9

Transferred data	
Supplier	2500
Delivery note	MRM-NEU-SCHEIN3
Purchase order	450000004, 450000006

Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN3	10	450000004	2500
	20	450000004	2500

Matched data in SAP			
	30	450000005	2500
	40	450000005	2500
	50	450000006	2500
	60	450000006	2500

Result – items proposed	
Item	**Purchase order**
10	450000004
20	450000004
50	450000006
60	450000006

Items from PO 450000005 are not proposed because this PO number was not transferred/imported.

Example 10

Transferred data	
Supplier	2500
Delivery note	MRM-NEU-SCHEIN4
Purchase order	450000007

Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN4	10	450000007	2500
	20	450000007	2500
	30	450000008	2500
	40	450000008	2500
MRM-NEU-SCHEIN4	50	450000009	2700
	60	450000009	2700

Result – items proposed	
Item	**Purchase order**
10	450000007
20	450000007

Items from PO 450000008 and 450000009 are not proposed because these PO numbers were not transferred/imported.

Example 11

Transferred data	
Supplier	(blank)
Delivery note	MRM-NEU-SCHEIN3
Purchase order	450000004, 450000006

Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN3	10	450000004	2500
	20	450000004	2500
	30	450000005	2500
	40	450000005	2500
	50	450000006	2500
	60	450000006	2500

Result of vendor determination	
Vendor	2500

Result – items proposed	
Item	**Purchase order**

Result – items proposed	
10	450000004
20	450000004
50	450000006
60	450000006

Items from PO 450000005 are not proposed because this PO number was not transferred/imported.

Example 12

Transferred data	
Supplier	(blank)
Delivery note	MRM-NEU-SCHEIN4
Purchase order	450000007

Matched data in SAP			
Delivery note	**Item**	**Purchase order**	**Vendor**
MRM-NEU-SCHEIN4	10	450000007	2500
	20	450000007	2500
	30	450000008	2500
	40	450000008	2500
MRM-NEU-SCHEIN4	50	450000009	2700
	60	450000009	2700

Result of vendor determination	
Vendor	2500

Result – items proposed	
Item	**Purchase order**
10	450000007
20	450000007

Items from PO 450000008 and 450000009 are not proposed because these PO numbers were not transferred/imported.

Goods received examples

The following table shows the results of proposals for two invoices using each of the **MM item suggestion** options. Some goods have been received for the first invoice. No goods have been received for the second. In addition to the **MM item suggestion** settings, the results are determined by:

- If goods have been received or not.
- If the **GR-based IV** setting is used.

		Invoice 1								Invoice 2			
		Item 1		Item 2		Item 3		Item 4		Item 1		Item 2	
		#	$	#	$	#	$	#	$	#	$	#	$
PO and goods received	Ordered	100	100	100	100	100	100	100	100	100	100	100	100
	Received	30	30	-	-	60	60	-	-	-	-	-	-
	GR-based IV	No		No		Yes		Yes		No		Yes	
MM item suggestion	(-) Only billable	30	30	-	-	60	60	-	-	-	-	-	-
	(1) Non-billable without price/quantity	30	30	-	-	60	60	-	-	-(1)	-(1)	-	-
	(2) Non-billable with price/quantity	30	30	-	-	60	60	-	-	100	100	-	-
	(3) All (non-billable without price/quantity)	30	30	-(1)	-(1)	60	60	-	-	-(1)	-(1)	-	-
	(4) All (non-billable with price/quantity)	30	30	100	100	60	60	-	-	100	100	-	-

(1) Line item added but without price and quantity.

Adding custom fields

PROCESS DIRECTOR provides Customer Includes (CI) that you can use to add customer fields to PROCESS DIRECTOR Accounts Payable. For example, you can add fields to the header data of an invoice using the `CI_COCKPIT_HDR` customer include; to the line item data using the `CI_COCKPIT_ITEM` customer include.

To do so:

1. Create a custom structure.
2. Create a custom field and add this field to the structure.
3. Add the custom structure to the relevant PROCESS DIRECTOR customer include.

Important: You should never add customer-specific fields directly to the customer include. Instead, use your own customer-specific structure instead. That is, first create a customer-specific structure corresponding to the CI, include that structure in the CI and put all customer-specific fields in the customer-specific structure. **Do not use an APPEND structure**. Set the enhancement category of the customer-specific structure to **Can Be Enhanced, Character-Type or Numeric-Type** (menu **Extras**). Never use the enhancement category **Can Be Enhanced (Deep)**. See the SAP documentation for more information.

Note: A maximum of 132 characters can be displayed in screen fields. For details about this restriction, see http://help.sap.com/abapdocu_702/en/abenabap_dynpros_fields.htm.

Glossary

/

/COCKPIT/1: SAP transaction code that starts INVOICE COCKPIT.

/COCKPIT/C23: SAP transaction for specifying and configuring field statuses.

/COCKPIT/CI: SAP transaction code that opens the PROCESS DIRECTOR main configuration screen.

/COCKPIT/EI: SAP transaction code that opens the EDI COCKPIT main configuration screen.

/COCKPIT/INFO_C: Displays PROCESS DIRECTOR info screen with installed versions and license information.

/COCKPIT/WI: SAP transaction code that opens the WORK CYCLE main configuration screen.

/COCKPIT/WL1: SAP transaction code that starts PROCESS DIRECTOR but skips the selection screen and automatically selects documents with errors and documents entered in the current day.

/COCKPIT/WL2: SAP transaction code that starts PROCESS DIRECTOR but skips the selection screen and automatically selects documents for the current user that have errors.

/COCKPIT/WL3: SAP transaction code that starts PROCESS DIRECTOR but but skips the selection screen and automatically selects all documents belonging to the current user.

/SMARTFORMS: Create and edit SAP Smart Forms.

B

BAdI: Business Add-Ins (BAdIs) are an object-oriented enhancement technology for ABAP programs that superseded function module exits in Release 4.6.

C

Connector, EICC, ICC: Abbreviations for INVOICE COCKPIT Connector

F

Field status: Properties for a set of PROCESS DIRECTOR fields. You can specify properties for one or more fields, including whether fields are displayed or hidden, or mandatory (values must be filled in for them). Fields statuses can be applied to PROCESS DIRECTOR as well as to WORK CYCLE workflow steps.

G

GUI: Graphical User Interface

I

IDoc: An SAP document standard, used to define different document types, mainly invoices and purchase orders. IDocs are used for Electronic Data Interchange (EDI) between different applications (both SAP and external ones).

L

Limit PO: A type of purchase order that envisages more than one invoice being issued in the future for the ordered items. When creating the PO, you set an overall limit on the total value and/or quantity of all future associated invoices. You can activate a check in PROCESS DIRECTOR for this (/COCKPIT/C5), using the "Limit exceeded" check.

O

One-time vendor: A term for a collective vendor master record used for processing transactions with vendors with whom you do not regularly do business.

P

P-card: A payment card (typically a credit card) issued by an organization to employees, allowing them to make purchases without having to go through the normal procedure, such as creating purchase requisitions and purchase orders. Although the individual and total purchase amounts made with these cards are small, they are large in number and therefore have a large processing cost. P-card transactions can be handled in PROCESS DIRECTOR, with monthly statements imported, creating a standard PD document for each one.

PROCESS DIRECTOR document type: An arbitrary, and optional, way to classify documents. Document types are used to process documents differently.

R

Remote Function Call: (RFC) Call of a function module that runs in a different system (destination) from the calling program. Connections are possible between different AS ABAP and between an AS ABAP and a non-SAP system. In non-SAP systems, instead of function modules, special programmed functions are called, whose interface simulates a function module. There are synchronous, asynchronous, and transactional function calls. The called system is accessed via the RFC interface.

RESCAN: A process to add an additional image to the archive and associate it with the appropriate PROCESS DIRECTOR document.

S

SAP document type: A key that distinguishes the business transactions to be posted. The document type determines where the document is stored as well as the account types to be posted.

Smart Form: A type of form in SAP that can be used to create messages, order confirmations, invoices, and other kinds of forms. They are "smart" because they can contain both static and dynamic data. Smart Forms can be used by PROCESS DIRECTOR and WORK CYCLE, for example, for messages. Smart Forms are maintained using the /SMARTFORMS transaction.

T

TEKKI: A command in PROCESS DIRECTOR that displays document information in a variety of ways. Useful for creating documents to send to support or to communicate information about errors.

V

Variant (program variant): A variation of an SAP program that is saved with its own parameters. Program variants are usually run as background jobs. For example, /COCKPIT/REPETITOR program is usually saved as one or more variants, and run in the background at regular intervals to attempt to post specific documents.

W

Workflow: A procedure for approving a document for a specific purpose (for example, for payment). A workflow comprises at least one workflow step, and one or more users.

Workflow step: A action that is to be performed, comprising part of a workflow.

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