PROCESS DIRECTOR

Configuration Guide

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About PROCESS DIRECTOR

PROCESS DIRECTOR is a software solution that runs inside SAP and in a web browser. It can create, receive and process different types of business documents, improving your ability to optimize document or request driven processes in SAP.

PROCESS DIRECTOR includes:

- The generic PROCESS DIRECTOR core services (workflows, user management, process logging, archiving, data versioning and database persistence)
- A number of built-in process types, that is, business document types and all of the process-specific business logic for handling them

By consolidating the handling all of these documents and requests onto a unified platform, PROCESS DIRECTOR provides an easy user experience for what is often a difficult process in SAP standard.

The easy to use web browser interface is tightly integrated with the SAP based application and provides a single point of entry and full transparency for all parties involved in a process.

PROCESS DIRECTOR's single document ledger and flexible workflow capability offer better control and visibility while seamlessly integrating with the familiar SAP interface.

Document-driven process types

Document-driven processes are initiated by the need to process existing documents, usually from external sources. Examples of such documents are delivery notes, sales orders, payment advices, etc.

PROCESS DIRECTOR offers these document-driven process types:

- Accounts Payable
- Customer Orders
- Electronic Bank Statements
- Generic Archiving
- Goods Receipts (can also be implemented as a request-driven process)
- Order Confirmations
- Payment Advices

Request-driven process types

Request-driven processes arise from the need to process requests for action, usually from internal sources. Examples of such requests are purchase requisitions, changes to master data, and corrections to FI postings.

PROCESS DIRECTOR provides the following standard request-driven process types.

- Financial Postings
- Fixed Asset Postings:
- Asset Acquisition
- Asset Retirement
- Asset Transfer

- Goods Receipts. You can also implement Goods Receipts as a document-driven process.
- Invoice Block and Cancelation
- Master Data Maintenance:
- Assets
- Cost centers
- Customers
- G/L accounts
- Profit centers
- Vendors
- Payment Approvals
- Requisitions

Get your system up and running

Create an RFC user for the Web Application

All communication between SAP and the PROCESS DIRECTOR Web Application takes place via an RFC user. You must create this RFC user in SAP and assign to this user authorizations for all activities that the Web Application may need to perform. In particular, the RFC user must have authorization to perform RFC calls for function group *ARFC*.

You only need to perform these steps if you are installing the PROCESS DIRECTOR Web Application.

To create an RFC user for the Web Application, complete the following steps.

1. In transaction `SU01`, create an RFC user (naming suggestion: *PDWA_USER*) with **Logon data > User Type** *System*.

   If you are configuring the RFC user in a development or test system, it is recommended to set **Logon data > User Type** to *Dialog*, otherwise RFC cannot be debugged.
2. Set up the appropriate authorizations for the RFC user. For example, if you are using Requisitions, set up the authorizations required to create an SAP purchase order.
3. Set **Defaults > Spool Control > OutputDevice** to a properly configured output device. Which device to use depends on the customer system and requirements.

Open the IMG

Each process type in PROCESS DIRECTOR has its own IMG. Most process types have a "standard" IMG, which is a simplified version of the IMG that provides access to the most common configuration activities. All process types have an "expert" IMG that provides advanced functionality. In general, only expert users will use the expert IMG.

Note: You perform most of the configuration for Accounts Payable in the `/COCKPIT/CI` transaction. See the *PROCESS DIRECTOR Accounts Payable Configuration Guide* for more information.

To open the IMG for a process type, complete the following steps.

1. Go to transaction `/EBY/PDBOC`.

   Note: When entering PROCESS DIRECTOR transactions, you must add `/N` as a prefix to the transaction, even from the SAP Easy Access menu. For example, enter `/N/EBY/PDBOC`.
2. Select the process type.
3. Optional. Clear the **Expert configuration** check box if you want to use the standard IMG (if available).
4. Click the **Execute** button. A license check is performed.

   Note: If the process type you selected does not have a valid license, a warning message is displayed before the customizing tree is opened.

You can directly access the IMG for the following process types with these transaction codes.

Process type	Standard IMG	Expert IMG
Requisitions	/EBY/PDPOC	/EBY/PDPOCE
Customer Orders	/EBY/PDSOC	/EBY/PDSOCE
Goods Receipts	/EBY/PDDNC	/EBY/PDDNCE
Financial Postings	/EBY/PDFIC	/EBY/PDFICE
Accounts Receivable	/EBY/PDPAC	/EBY/PDPACE
Payment Approvals	/EBY/PDPRC	/EBY/PDPRCE
Order Confirmations	/EBY/PDORC	/EBY/PDORCE

Connect to an archive

Define a content repository

Customer implementations usually require that PROCESS DIRECTOR business objects are archived, so you must define a content repository for the archived objects. You can also use an existing content repository.

To define a content repository, complete the following steps.

1. Go to transaction OAC0.
2. In change mode, click the **Create** button.
3. Define a new content repository as per customer specification.
4. Click **Save**.

Add archiving document types

Add the archiving documents types that you will use with PROCESS DIRECTOR.

To add archiving document types, complete the following steps.

1. Go to transaction OAC2.
2. In change mode, add a new entry.
3. Add your document types.

4. Click **Save**.

Example

Doc. type	Long name	Doc. class
ZEPD_DOC	PROCESS DIRECTOR MS Word document	DOC
ZEPD_HTML	PROCESS DIRECTOR HTML document	HTM
ZEPD_JPG	PROCESS DIRECTOR JPG document	JPG
ZEPD_NOTES	PROCESS DIRECTOR notes & workflow	PDF
ZEPD_PDF	PROCESS DIRECTOR PDF document	PDF
ZEPD_TIF	PROCESS DIRECTOR scanned document	TIF
ZEPD_TXT	PROCESS DIRECTOR TXT document	TXT
ZEPD_XLS	PROCESS DIRECTOR MS Excel document	XLS

Note: The italicized **Doc. type** entries are only naming suggestions. The actual names to use may depend on customer requirements.

Add archiving links

Create links between your archiving document types and the PROCESS DIRECTOR business objects.

To add archiving links, complete the following steps.

1. Go to transaction `OAC3`.
2. In change mode, add a new entry.

3. Add these new entries for each process type you want to use, then save your changes.

ObjectType	Doc. Type	S	Cont. Rep. ID	Relationship	Retent. Period
Process type's SAP object type (for example /EBY/PDPO for PO Requisition)	ZEPD_DOC	X	customer-specific	*TOA01*	customer-specific
Process type's SAP object type (for example /EBY/PDPO for PO Requisition)	ZEPD_HTML	X	customer-specific	*TOA01*	customer-specific
Process type's SAP object type (for example /EBY/PDPO for PO Requisition)	ZEPD_JPG	X	customer-specific	*TOA01*	customer-specific
Process type's SAP object type (for example /EBY/PDPO for PO Requisition)	ZEPD_PDF	X	customer-specific	*TOA01*	customer-specific
Process type's SAP object type (for example /EBY/PDPO for PO Requisition)	ZEPD_XLS	X	customer-specific	*TOA01*	customer-specific

Note: Make sure that the same content repository ID is assigned to the PROCESS DIRECTOR object type and its corresponding SAP business object type. For example, */EBY/PDPO* should have the same content repository ID as *BUS2012* (Purchase order) and *BUS2105* (Purchase requisition). This ensures that the attachments of the PROCESS DIRECTOR document can be viewed in the SAP document.

Note: The italicized **Doc. type** entries are only naming suggestions — the actual names to use may depend on customer requirements.

Note: If using the Web Application, only the Doc. types configured here will be allowed for attachment upload for a given process type. The allowable document types can be further restricted in the Web Application configuration file *mimetypes.properties*.

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

Set up the archive device

PROCESS DIRECTOR uses a Smart Form to create the workflow log. To archive Smart Form output in SAP, you must define an archive device in spool administration (transaction SPAD) and define a device type for this archive device. See the SAP ArchiveLink documentation for detailed information.

In the standard R/3 System, the archive device *ARCH* of type *ARCHIXOS* is the default for storing with SAP ArchiveLink. If you use this standard archive device, you should not need to make any changes.

If the standard archive device is not configured, or if you use an archive device with a different name, you need to ensure that the device and the system profile parameters are correctly set up. As with all installation tasks, this is usually done by the SAP Basis Team, who have the required permissions.

To create the archive device, complete the following steps,

1. Go to transaction `SPAD`.
2. Click the **Output devices Display** button.
3. In change mode, click the **Create** button.
4. Enter the following settings and save your changes.

Field	Description
Output device	Enter a name for the device.
Short name	Enter a short name for the device. If you use the default short name *ARCH*, you do not have to configure the system profile parameters.
Device Attributes tab	
Device Type	Select the appropriate device type for archiving, for example, *ARCHLINK* , *ARCHIXOS* or *ARCHUTF8*.
Spool Server	Select a spool server.
Device class	Select *Archiving program*.
Location	Enter text to identify the device, for example, *Virtual printer for archiving*.
Access Method tab	
Host Spool Access Method	Select *Archiving device*.

To set the system profile parameters, complete the following steps.

1. Go to transaction `RZ10`.

2. In the **Profile** field, select the appropriate system profile.
3. Select **Extended maintenance** and click the **Change** button.
4. Click the **Create parameter** button.
5. In the **Parameter name** field, enter *rspo/default_archiver*.
6. In the **Parameter val.** field, enter the short name of your archive device.
7. Click **Save**.

Manage licenses

About licenses

Licenses are available for production and non-production clients and may have an expiry date (the license is only valid until a specified date) or a volume limit (the license is only valid for a specified number of documents).

You can activate licenses per system or per client. If you do not specify a client, the license is valid for all clients in the system.

License types

The following types of license are available. Volume limits are annual limits, which are reset every year on 1 January (only for licenses with no expiry date).

License type	Client type	Expiry date	Volume limit
1. Demo	Non-production only	No	No
2. Test	Non-production only	Yes	No
3a. Normal/Full	Production	No	Yes
3b. Normal/Full	Production	Yes	Yes

Process type licenses

You can obtain licenses for the following standard PROCESS DIRECTOR process types. You need a license for each standard PROCESS DIRECTOR process type that you want to use.

Process type	ID	Notes
Accounts Payable	IV	For the Accounts Payable process type, you need a PROCESS DIRECTOR Accounts Payable (formerly INVOICE COCKPIT Suite) license. A separate license exists for

		PROCESS DIRECTOR Accounts Payable and its associated products. WORK CYCLE EDI COCKPIT Email-based Approval (formerly MOBILE APPROVAL) INFO MAIL WEB BOARD Ariba integration for PROCESS DIRECTOR Accounts Payable (Activation license only)
Customer Orders	SO	
Electronic Bank Statements	ES	
Financial Postings	FI	This license includes G/L Account Postings (FI) and FI Customer Postings (FIC).
Fixed Asset Postings	ASSET	This license includes the following types of fixed asset postings. Asset Acquisition (AA) Asset Retirement (AR) Asset Transfer (AT)
Generic archiving	ARCH_BUS	
Goods Receipts	DN	
Invoice Block and Cancelation	IB	
Master Data Maintenance	MD	This license includes the following types of master data. Cost Center Maintenance (MD_COSTCTR) Profit Center Maintenance (MD_PRCTR) Vendor Master Maintenance (MD_VENDOMA) Customer Master Maintenance (MD_CUSTMA)

		G/L Account Maintenance (MD_GLACC) Asset Master Maintenance (MD_ASSET)
Order Confirmations	OR	
Payment Advices	PA	This license works for Electronic Bank Statements too. A separate ES license is not required.
Payment Approvals	PR	
Requisitions	PO	
Umbrella Solution	UM	Activation license only. The Synchronizer program checks this license.
Workflows not assigned to a specific process	WC	See Workflow licenses.
Customer-defined process types	YZ	Customer-defined process types require only a single license for all customer-defined process types handled on a single PROCESS DIRECTOR installation.
ZUGFeRD	ZUGFERD	Activation license only.

Workflow licenses

You can activate workflow licenses per process type or as a separate global license independent of the process types you use. An exception is Accounts Payable. Using workflows with Accounts Payable requires a license for the WORK CYCLE.

- In the case of a workflow license for a specific process type, the volume limit for workflows is usually equal to the document volume limit for the process type. However, you can specify a different volume limit for the workflow than for the process type. For example, for requisitions (PO), you can specify a document volume limit of 10,000, but a workflow volume limit of only 8,000. In this case, you can create 10,000 requisitions, but you can only send 8,000 to a workflow.
- In the case of a global workflow license (WC), the volume limit for the workflow license applies to all process types you use.

- You can combine a global workflow license with process-specific licenses. In this case, the global workflow volume limit applies only to those process types for which you have not activated a process-specific workflow license.

License counters

License counters count the number of documents that are processed in PROCESS DIRECTOR, but they are only incremented on production clients.

PROCESS DIRECTOR

For PROCESS DIRECTOR, counters are incremented in the following cases:

- A new document is created in PROCESS DIRECTOR, either via manual entry in the SAP GUI or the Web Application or via transfer from external sources.
- A document is sent to a workflow for the first time. If the same document is sent to other workflows, or is sent to the same workflow a second time, the counter is not incremented.

PROCESS DIRECTOR Accounts Payable

The following table describes how counters are implemented in the PROCESS DIRECTOR Accounts Payable 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.
PROCESS DIRECTOR Accounts Payable Umbrella System	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.
EDI COCKPIT	Yes	EDI COCKPIT	Every IDoc transferred from EDI COCKPIT to PROCESS DIRECTOR Accounts Payable. The PROCESS DIRECTOR Accounts Payable 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.
Email-based Approval (formerly MOBILE APPROVAL)	No	Total count of PROCESS DIRECTOR Accounts Payable and EDI COCKPIT	Activation license only.
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.

Note: In the case of licenses with no expiry date, the license counters are reset every year on 1st January to the number of purchased documents. You can view the counters for previous years by clicking the **Display counters for all years** button in `/EBY/PD_LICENSES`.

License validity

When a license for a process type has expired or the volume limit is exceeded, users cannot create new documents of this type in the SAP GUI and the Web Application. Transfer of documents from external sources is not interrupted, but a separate counter is incremented for these documents. When you renew the process type license, this separate counter is added to the license counter. For example, after the Customer Orders license has expired, 100 Customer Order documents are transferred to PROCESS DIRECTOR. You then renew the Customer Order license and 50 new Customer Orders are transferred. The total license count for Customer Orders is now 150.

When a workflow license volume limit is exceeded, no new workflows can be started. However, workflow processing is still possible for all documents that have already been sent to a workflow. For example, if a document is recalled from a workflow and then the workflow volume license is exceeded, it is still possible to send this document to a workflow again.

Note: In the case of licenses with no expiry date, the volume limits are annual limits, which are reset every year on 1 January.

You can only have one active license installed per process type on one system. The license validity mechanism behaves differently depending on whether a production or non-production client is used.

- **Production client**

  You can only activate normal licenses on a production client. Demo or test clients running on the same system use the normal license, because only one license can be valid on an SAP system. PROCESS DIRECTOR does not increment license counters in these clients.
  The license expires when it exceeds the production client volume limit or passes the expiry date. If the production client license expires, PROCESS DIRECTOR will not also not function on the demo and test clients.

- **Non-production clients**

  You can activate normal, demo and test licenses on non-production clients.
  If a normal license is installed, the volume processed on the production client is taken into account. If a test license is installed, the expiration date on the production client is taken into account. If a demo license is installed, no validity and expiration date are used.

License threshold warnings

Fifteen days before the license expiration date, or when the license counter reaches 90%, 95% and 99% of the volume limit, threshold warning messages are displayed when PROCESS DIRECTOR is started. Threshold warning messages are not displayed in the Web Application.

To suppress the display of these messages in SAP, click **No** at the bottom of the dialog. The messages will not be displayed again until the next threshold is reached.

Note: The current license counter value is always displayed at logon. For this reason, values not equal to 90%, 95% or 99% may be displayed if further documents have been processed between the threshold being reached and the user logging on.

Threshold warning messages for WORK CYCLE and for applications that do not have a direct view in the SAP GUI (EDI COCKPIT, WEB BOARD and INFO MAIL) are displayed in PROCESS DIRECTOR Accounts Payable. Threshold warnings are not displayed in the Web Application or WORK CYCLE.

Once the license counter reaches 100%, PROCESS DIRECTOR will stop working (cannot be started) and new workflows cannot be started. However, workflow processors can continue to process their current documents.

Define license threshold warning recipients

You can define license threshold warnings only to those users who are responsible for ordering the licenses, rather than to each user who starts PROCESS DIRECTOR in the SAP GUI.

To define threshold warning recipients, complete the following steps.

1. In the IMG, select **Initial settings > Licenses > Manage license keys and activate process types** (`/EBY/PD_LICENSES`).
2. Click the **License threshold warning recipients** button.
3. In change mode, add a new entry.
4. Enter the ID of each processor to whom license threshold warnings should be displayed. The **Complete name** field is filled when you press ENTER or save.
5. Click **Save**.

Obtain and install licenses

Obtain a license

To order a license, you must provide your SAP installation number and SAP System ID. You can find this information by selecting the menu item **System** > **Status** in your SAP system.

You need the following information.

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

When you have placed your order, you will receive a license file in .TXT format. Your license file contains the following information.

Field	Description
License key	The license key provided by Lexmark. This encrypted number validates the license.
SAP Installation Number	The SAP installation number of your system (that you provided to Lexmark when you ordered the license).
SAP System ID	The SAP system ID of your system (that you provided to Lexmark when you ordered the license).

Process type (not Accounts Payable)	The process type for which the license is valid.
Component ID (Accounts Payable only)	The PROCESS DIRECTOR Accounts Payable component for which license is valid: C – PROCESS DIRECTOR Accounts Payable U – PROCESS DIRECTOR Accounts Payable Umbrella System E – EDI COCKPIT D – PROCESS DIRECTOR Accounts Payable & EDI COCKPIT A – ANALYZER W – WORK CYCLE I – INFO MAIL B – WEB BOARD M – Email-based Approval (formerly MOBILE APPROVAL) T – TRAVEL EXPENSES R – REPORTER
License type	The type of license: **Demo**, **Test** or **Normal**.
Client	The client ID, if the license applies only to a specific client.
Expiration date	The date on which the license expires.
Licensed volume/ **Licensed number**	The volume limit, that is, the number of documents for which the license is valid.
Workflow active (not Accounts Payable)	**X** indicates that the license includes the use of workflows. If this line is blank, workflows are not included.
Workflow volume **(**not Accounts Payable)	The volume limit for workflows, that is, the number of documents that can be sent to a workflow.

Notes

- **Component ID E:** 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.

- **Component ID D:** 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.

Install a license

To install a license, PROCESS DIRECTOR must already be installed. There are two ways to install licenses:

- Enter license information in PROCESS DIRECTOR.
- Transport an existing license from one system to another

Enter license information in PROCESS DIRECTOR

To enter license information in PROCESS DIRECTOR, complete the following steps.

1. Go to `/EBY/PD_LICENSES`.

   For Accounts Payable and its associated products, go to `/COCKPIT/C46`.
2. In change mode, add a new entry.
3. Enter the license settings. You can find the required information in the license file supplied to you by ReadSoft.
4. Click **Save**.

Transport 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.

View license information

You can only view license information in the SAP GUI.

To view information about your PROCESS DIRECTOR licenses, complete the following step.

- Go to transaction `/EBY/PD_LIC_INFO`.

  To view information about your PROCESS DIRECTOR Accounts Payable or WORK CYCLE license, as well as other associated products, complete the following step.
- In PROCESS DIRECTOR or WORK CYCLE, on the Extras menu, select **Info**, then click the **Licenses** tab.

Configure the Worklist

What is the Worklist?

The Worklist is a navigation area that allows users to quickly access different categories of PROCESS DIRECTOR business documents in an expandable tree view. Usually, users will use the Worklist as their main entry point for navigating and accessing documents.

By navigating deeper into the Worklist tree, you can drill down to the document subcategories. A subnode always displays a subset of its parent Worklist node's document selection.

Each Worklist node has a ranges configuration (a configurable SQL query) that determines which documents are displayed when the node is selected. The implementation consultant defines a node's ranges configuration in the customizing. Users cannot configure the ranges configuration.

However, the Worklist offers another mechanism—selection screen fields (user-specifiable filter criteria)—which allow the user to additionally restrict the document selection of a node.

Open the Worklist configuration screen

You set up the structure and behavior of the PROCESS DIRECTOR Worklist in the Worklist configuration screen.

In the left pane, you create new nodes and edit and preview the Worklist node tree structure. This pane only displays the node structure, not the actual business documents.

In the right pane, you use the ranges editor to configure which documents will be displayed for each node.

In the selection screen pane, you configure the selection screen, which allows users to filter Worklist nodes to display only documents that meet specific criteria.

To open the Worklist configuration screen, complete this step.

- In the IMG, click **Initial settings > Worklist > Worklist configuration** (`/EBY/PDBO_WLC`).

Configue Worklist nodes

What is a Worklist node?

A node is a level in the Worklist tree structure that you can use to categorize and provide access to business documents.

You can create new Worklist nodes with the following levels and types.

Node level	Node types allowed
top-level node	static (default)
subnode	static, semi-dynamic, dynamic, other

Static nodes

Static nodes are the simplest type of Worklist node available in PROCESS DIRECTOR. Their Ranges configurations are static—that is, fully specified by the implementation consultant at design time.

Static nodes only allow literal values on the right hand side of logical expressions in the Ranges configuration, like in this example:

CREATOR_USER = 'SCHMITZ'

This node would display documents for the user SCHMITZ.

Semi-dynamic nodes

Semi-dynamic nodes are able to construct parts of the node query at runtime. Semi-dynamic nodes are more flexible because they also allow you to use query classes, like this:

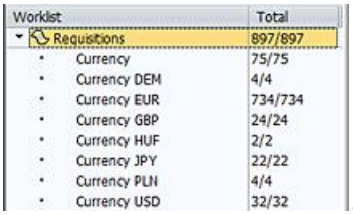
CREATOR_USER = [/EBY/CL_PDBO_WL_QRY_PD_USER]

This node would display documents for the currently logged on user.

Note: If you do not need to use a query class in the Ranges configuration, you should define it as a static node for better performance. If you use the query class */EBY/CL_PDBO_WL_QRY_PD_SUBST* or */EBY/CL_PDBO_WL_QRY_PD_SUB_ACT*, the fields *WC_PROCESSER* and *WC_PROC_TYPE* must be included in the node's view.

Dynamic nodes

Dynamic nodes can create subnodes at runtime based on certain criteria, such as the currency. Simply add the relevant field to the ranges configuration.



Worklist	Total
Requisitions	897/897
Currency	75/75
Currency DEM	4/4
Currency EUR	734/734
Currency GBP	24/24
Currency HUF	2/2
Currency JPY	22/22
Currency PLN	4/4
Currency USD	32/32

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Other

Select this option for nodes that require a special node class handler. This is necessary, for example, to include line item data in the selection screen criteria for a Worklist node.

Add a top level node

Usually, you should add one top-level Worklist node for each process type in PROCESS DIRECTOR. You do not need to configure ranges for top level nodes.

Note: You must have installed a valid license for each process type that you add as a top-level node, otherwise the node will not be displayed in PROCESS DIRECTOR.

To add a Worklist top level node, complete the following steps.

1. In the Worklist configuration screen, in change mode, click the **Add Business Object node** button.
2. In the **Change basic data** dialog box, select the process type and enter a description for the node.
3. Specify any optional settings for the node.

4. Click the **Continue** button.
5. Click **Save**.
6. Add subnodes, as required.
7. Click **Generate**.

Add a subnode

To add a Worklist subnode, complete the following steps.

1. In the Worklist configuration screen select the node to which you want to add a subnode.
2. In change mode, perform one of the following actions.
   - To add the node as a subnode of the selected node, click the **Insert node as a subnode** button
   - To add the node at the same level as the selected node, click the **Insert node at same level** button
3. In the **Change basic data** dialog box, enter a description for the node.
4. Select the node type. This will usually be static or semi-dynamic. For non-static nodes, you must also enter a view name.

   Note: Semi-dynamic nodes cannot have static subnodes.

5. Specify any optional settings for the node and save your changes.
6. Configure the range of the subnode.
7. Click **Save**.
8. Click **Generate**.

Redefine a static Worklist node as semi-dynamic

You should only do this if you need to use a query class in the node's Ranges configuration.

To redefine a static Worklist node as semi-dynamic, complete the following steps.

1. In the Worklist configuration screen, in change mode, select the Worklist node, then click the toolbar button .

   The **Change Basic Data** popup opens.
2. Set the node type to *SD Semi-dynamic*.
3. If the node does not yet have a view name, add one.
4. Confirm and then save your changes.

Note: If the node is top-level, has static subnodes, you cannot redefine it as semi-dynamic. If there are other static nodes on the same level—that is, having the same parent node—you must also redefine *all* of these other nodes as semi-dynamic.

Add Worklist nodes for Accounts Payable

Worklist nodes for Accounts Payable documents need special settings for the Web Application.

Note: You can create other nodes as needed for the SAP GUI, but the Web Application currently only supports the nodes listed below.

To add nodes for Accounts Payable, complete the following steps.

1. In the Worklist configuration screen, create the following nodes.
2. Save your changes and generate the Worklist.

Node	Node settings			Description
	Control	Not visible in SAP GUI	No counter display	
Top-level node for process type *IV Accounts Payable*	ICS_DOCS			
Subnode for workflow inbox	WC_INBOX	Checked		Displays all Accounts Payable documents that have been sent to the current user in a workflow and have not yet been processed.
Subnode for workflow history	WC_HISTORY	Checked	Checked	Displays all Accounts Payable documents that have been sent to the current user in a workflow and on which the user has performed one of these actions: Approve Partially approve Notate If the **Display approvals only** option is deactivated in the workflow history selection screen, documents are also displayed on which these actions have been performed: Reject Forward Reply to query Recall

				Documents processed by substitutes or another member of a group are not displayed. See the *WORK CYCLE SAP Configuration Guide* for more information on the workflow history selection screen (`/COCKPIT/WI24`).
(Optional) Subnode for workflow recall	WC_RECALL	Checked		Displays documents that can be recalled from the workflow. In `/COCKPIT/WI3A` the option **Recall documents** must be checked for the workflow step. In the *pdweb-app.properties*. file, the *undo* parameter must be set to 1 or 2. See the *PROCESS DIRECTOR Web Application Configuration Guide* for more information.

Translate Worklist node names

To translate Worklist node names, complete the following steps.

1. Log on to SAP in the language into which you want to translate.
2. In the Worklist configuration screen, on the **Goto** menu, click **Translation**.
3. In change mode, edit the node names.
4. Click **Save**.

Configure ranges

What are Worklist ranges?

The Worklist ranges configuration is a configurable SQL query that determines which documents display when a Worklist node is selected.

To view a Worklist node's ranges configuration, in the Worklist configuration screen you can:

- Select the Worklist node, then click the toolbar button .
- Double-click the Worklist node

In change mode, you can also edit the configuration.

Note: Technically, the ranges inherited from parent nodes (if any) are also a part of the node's Ranges configuration, although they are not explicitly displayed in the node's editor view. Therefore, when viewing or editing the Ranges configuration of a non top-level node, you need to be aware that part of its Ranges configuration is implicit.

The Worklist configuration ranges editor is available in two modes—a tree editor and a text editor mode.

General functionality

This functionality is always available in the ranges editor, no matter which editor mode you are in:

- You can toggle the editor mode using the **Ranges editor mode** button at any time, depending on which mode is most convenient.
- In change mode, you can drag and drop elements from the **Operators and Fields** pane to the **Ranges configuration** pane.
- You can manually check the Ranges query syntax by clicking the **Check ranges** button.

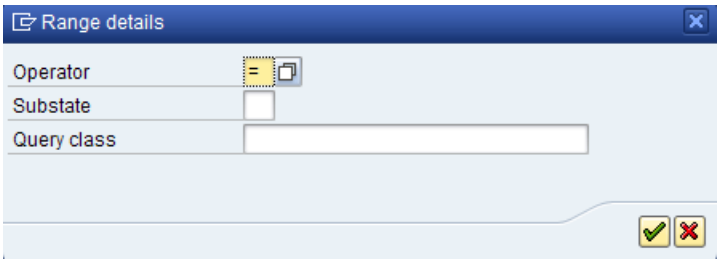
After editing a node's Ranges configuration, always:

- Save your changes.
- Regenerate the Worklist by clicking the **Generate** button.

Tree editor mode

Tree editor mode example (this shows the same Ranges configuration as the text editor example)

If you are editing a semi-dynamic node, the **Ranges detail** popup appears when you:



- Drag and drop a view field from the **Fields and Operators** pane into the **Ranges configuration** pane
- Double-click an existing field

To insert a query class, you can either:

- Type in the query class name directly and enclose it in square brackets.
- Use the search help for the field **Get query class**.

Advantages of the tree mode:

- Logical operators such as AND and OR will be decorated with icons (example: OR). These icons have no particular function other than to indicate the logical structure of the query.
- You can use search help to pick a standard PROCESS DIRECTOR query class.

This feature is especially useful when using the query class */EBY/CL_PDBO_WL_QRY_PD_SUBST*, which needs to be assigned to the *ANY_FIELD* placeholder instead of to a field:

1. Drag and drop the *ANY_FIELD* placeholder into the **Ranges configuration** pane. The **Ranges detail** popup appears, allowing you to specify a query class assigned to the placeholder.
2. Use search help to pick */EBY/CL_PDBO_WL_QRY_PD_SUBST*.

The *ANY_FIELD* placeholder then will be resolved at runtime to the query class result (the users for which the current user is a substitute).

Important note: After changing a node's configuration, be sure to always manually check the query syntax using , as this does *not* occur automatically when using tree editor mode.

Text editor mode

```
1   SELECT *
2   FROM ZPZ_PDWC_VWRKL21
3   WHERE
4
5   WC_PROC_TYPE = '[/EBY/CL_PDBO_WL_QRY_PD_USER_TY]'
6   AND
7   WC_PROCESSOR = '[/EBY/CL_PDBO_WL_QRY_PD_USER]'
8   OR
9   (
10    ANY_FIELD = '[/EBY/CL_PDBO_WL_QRY_PD_SUBST]'
11  )
```

Text editor mode example (this shows the same Ranges configuration as the tree editor example)

Advantages of the text editor mode:

- It provides an automatic query syntax check.
- Useful for copying and pasting complex Ranges queries.
- You can enter any ABAP code that is legal to use inside the *WHERE* clause of an ABAP Open SQL *SELECT* statement.

If you are editing a semi-dynamic node, you can insert a query class by typing in the query class name enclosed in square brackets and single quotes. The query class is evaluated at runtime and the result is inserted into the query.

Note: If your SAP GUI does not have the new AB4 ABAP editor control (recommended), the text editor mode will not be available.

Check the Worklist ranges configuration

You can have PROCESS DIRECTOR check the syntax of your Ranges configuration for a Worklist node to ensure that it is correct.

To checks the ranges configuration, complete the following steps.

1. Double-click the node.
2. Click **Check ranges**.

Check the Worklist configuration

Before generating the Worklist, you can have PROCESS DIRECTOR check your Worklist configuration to ensure that it is correct.

To check the Worklist, complete the following steps.

- In the Worklist configuration screen click the **Check worklist** button.

PROCESS DIRECTOR checks if:

- The ranges configuration is correct
- The select table/view is defined if the node is not a static node
- The select table/view or document object interface structure contains all the fields used in ranges
- The select table/view contains the mandatory fields **GUID**, **LFT**, **RGT** and **CREATE_TSTAMP**.
- The select table/view for non-static nodes contains all the fields used in ranges defined for parent non-static nodes
- All nodes have tables/views if the selection screen is configured
- All node tables/views contain the fields configured for the selection screen

Configure selection screens

What is a selection screen?

Users can use a selection screen to filter Worklist nodes to display only documents that meet specific criteria.

You can configure a selection screen for each process type. The configured selection screen fields will apply to **all** nodes of the given process type, not just the currently selected node.

You can also configure a start-up selection screen, which is displayed instead of the Worklist when users start PROCESS DIRECTOR. Users must first enter search criteria and execute the search. The Worklist then displays only documents that correspond to the entered search criteria.

The start-up selection screen has a **General** section, the search fields of which apply for more than one process type. In addition, you can add sections for specific process types. The fields in these sections apply only for that process type.

Note: The **Process type** selection list and the **Max. number** field are always present in the **General** section and do not need to be configured.

Define selection screen fields

When defining a selection screen, you select a table containing the fields that will be available in the screen. Usually this is the same as the view defined in the node's basic data settings, but you can use any table, view, or structure that delivers the correct fields and properties. If you do not use the same view for all nodes of the process type, select a table or view containing only the fields that are common to all Worklist nodes' views for the process type.

You do not have to add the **Maximum number of hits** field, as this field is automatically available in the selection screen. You can specify a default value for this field in the node's basic data settings.

To define selection screen fields, complete the following steps.

Note: You define selection screen fields for the Accounts Payable Workflow History node in `/COCKPIT/WI24`. See the *WORK CYCLE SAP Configuration Guide* for more information.

1. In the Worklist configuration screen, double-click any of the available nodes for the process type.
2. Click the **Selection screen** button.
3. In change mode, in the **Selection screen fields** pane, click the **Insert row** button.
4. For each selection screen field, select the **Table Name** and the **Field Name**.
5. Click **Save**.
6. Click **Generate**.

Define line item selection screen fields

To allow users to search in line item data, complete the following steps.

1. In `SE19`, in the **New BAdI Enhancement Implementation** field, type */EBY/PDVI_BADI* and click **Display**.
2. Select the */EBY/PDVI_LINE_SEL* BAdI implementation and click the **Activate** button.
3. To configure the Worklist nodes, complete the following substeps.
   1. In the Worklist configuration screen, in change mode, select the node and click the **Basic data** button.
   2. In the **Node type** selection list, select *O Other*.
   3. In the **Node class** field, select the appropriate node handler and click the **Continue** button.
   - For static nodes: /EBY/CL_PDBO_WRKL_NODE_ITEM_ST
   - For semi-dynamic nodes: /EBY/CL_PDBO_WRKL_NODE_ITEM_SD
   - For dynamic nodes: /EBY/CL_PDBO_WRKL_NODE_ITEM_D
4. In the selection screen pane, click the **Insert Row** button.
5. Type the **Table name** and **Field name** and select the *ITEMS* **Logical level**.
6. Click **Save**.
7. Click **Generate**.

Define the start-up selection screen

To define the start-up selection screen, complete the following steps.

1. Create a view containing the fields that you want to include in the **General** section of the start-up selection screen.
2. In the Worklist configuration screen, define the selection screen fields for each process type you want to include in the start-up selection screen.
3. Click the **Start-up selection screen** button.

4. For the individual process types, add the fields that should be displayed in the start-up selection screen.

   Note: These fields must have been added to the selection screen configuration for that process type.

5. Optionally, in the **Order** field, specify a number to determine the position of the field on the screen, and select the **Input type**.
6. To add fields to the **General** section, for each process type, add the field and enter the view name and field name in the fields **Common structure** and **Common field name**.
7. Click the **Check** button to ensure that the configuration is correct.
8. Click **Save**.

Generate the Worklist

After you have made changes to the Worklist, you must generate it to make those changes available to users. When you transport your PROCESS DIRECTOR configuration from one system to another (for example, from test to production), you must regenerate the Worklist in the target system.

Worklist generation creates the Worklist nodes and maps documents to static nodes according to the nodes' ranges configuration. For example, if a node's ranges configuration specifies *STATE = 'OK'* (document status = posted), all documents with this status will be mapped to and therefore displayed in the node. Mapping of documents to semi-dynamic nodes takes place at runtime, when PROCESS DIRECTOR is started.

To generate the Worklist, complete the following step.

- In the Worklist configuration screen, click **the Generate** button.

A message dialog box may display asking if you want to regenerate static nodes. Regenerating static nodes can be time-consuming, and is usually only necessary if there are inconsistencies in the Worklist, such as wrong assignments or counters and missing documents. If you click the **Yes** button in this message dialog box, another message dialog box opens in which you can choose whether you want to perform this task in the background.

You can also use the `/EBY/PDBO_CONFIG_GEN_WORKLIST` program to generate the Worklist.

If the Worklist generation program messages indicate that documents were not mapped, you can run the following programs.

- For skipped documents, run `/EBY/PDBO_GEN_FAILED_NSTDSETS`
- For failed documents, run `/EBY/PDBO_CHECK_NESTEDSET_NEW`

Optimize the start-up time

The number of documents that need to be loaded and the database software influence the start-up time for PROCESS DIRECTOR, in both the SAP GUI and the Web Application. For a faster start-up time, you need to change the view used in the Worklist configuration by completing the following steps.

1. Copy the standard views to the project’s namespace.
2. Add the following selection condition: `/EBY/PDBO_TNE`Stable, **PROJECT EQ ''** field name.

See the *PROCESS DIRECTOR Troubleshooting Guide* for more information on troubleshooting the Worklist.

Configure the Web Application Quick start menu

The quick start menu displays when a user logs on to PROCESS DIRECTOR in the Web Application. This menu provides rapid access to frequently used actions or Worklist nodes. The quick start menu displays in addition to the Worklist. It is not available in the SAP GUI.

To add a new menu item to the Quick start menu, complete the following steps.

1. In the IMG, click **Initial settings > Worklist > Quick start menu** (`/EBY/PDVI_VWLAC`).
2. In change mode, add a new entry.
3. Select the component type *WA_LIST WA List Header*.
4. Use search help to select a Worklist node ID.
5. Select the action that will be performed when the user clicks the Quick start menu item:
   - *SWITCHWLNODE&CREATE* to switch to the Worklist node specified in the **Node ID** field and create a new business document of that node's document type
   - *SWWLN0* to switch to the Worklist node specified in **Node ID**.
6. In the **File name** field, enter a file mapping or an image file in the Web Application to be used as the display icon for the action.

   Note: You can only use files that are available in the Tomcat *webapps\pdweb-app\themes\procdir\images\pd\icons\big* folder here. You cannot upload or maintain images in the Web Application from within this configuration activity.

7. Enter labels that will appear on the menu item and in the tooltip.
8. Save your changes.

Note: If you regenerate the Worklist, you may have to change the node ID of the Quick start menu definition, as the defined node may have been assigned a different node number during regeneration.

Manage users and authorizations

Authorizations

PROCESS DIRECTOR offers the following authorization types.

- Worklist authorization controls which Worklist nodes a user can view and expand.
- Document authorization controls which actions a user can perform on business documents.

Most customer implementations of PROCESS DIRECTOR use Worklist authorization. Many also use document authorization. Document authorizations take precedence over Worklist authorizations.

To implement authorizations, you need to:

1. Create authorization objects and assign them to user roles.
2. Assign the authorization objects to Worklist nodes for Worklist authorization or document types for document authorization.

If you have PROCESS DIRECTOR Accounts Payable, WORK CYCLE users can use the PROCESS DIRECTOR Web Application instead of WORK CYCLE to process documents, provided you assign the appropriate authorization roles.

Note: If installing the Web Application, you may also need to configure the proper RFC authorizations for interaction with SAP.

Create an authorization object

You use authorization objects to control Worklist and document authorization.

To create an authorization object, complete the following steps.

1. Go to transaction `SU21`.
2. If necessary, create a new object class for PROCESS DIRECTOR authorization objects.
3. Double-click the object class.
4. Create a new authorization object.
5. Type an object name and description for your authorization object.
6. Add the authorization field *ACTVT*. For Worklist authorization, this is the only field required. For document authorization, you can also add other fields to restrict document access based on the values of these fields. For example, add the field *BUKRS* to restrict document access to documents for a specific company.
7. Save the object in the appropriate transport.
8. After saving, the **Permitted activities** button appears. Click this button to edit the permitted activities.
9. Select the required activities. For Worklist authorization, you only need to select the activity *03 Display*.
10. Click **Save**.

Next:

1. In transaction `PFCG`, assign the authorization object to an appropriate role, and assign this role to the appropriate users. See the SAP documentation for more information on creating roles and assigning them to users. Make sure that users also have authorization to access the `/EBY/PD` transaction.
2. Assign the authorization object to a Worklist node or a document type.

Set up Worklist authorizations

Worklist authorizations control which Worklist nodes a user can view and expand.

Note: Worklist authorization controls only the visibility of Worklist nodes. To control which actions a user can perform on the documents in the node, use document authorizations.

To set up authorization for a Worklist node, complete the following steps.

1. Create the appropriate authorization object.
2. In the IMG, click **Initial settings > Worklist > Worklist configuration** (`/EBY/PDBO_WLC`).
3. In change mode, select the Worklist node and click the **Basic data** button.
4. In the **Auth. object** field, enter the appropriate authorization object.
5. Click the **Continue** button.
6. Click **Save**.
7. Click **Generate**.

Set up document authorizations

Document authorizations control which actions users can perform on a document.

To set up document authorizations for a process type, complete the following steps.

1. Create the appropriate authorization objects and then assign them to a document type:
2. In the expert IMG, click **Change system settings > Model > Object type**. (`/EBY/PDBO_VOBJC`).
3. In change mode, add a new entry.
4. Select the process type.
5. In the **Auth. object** field, select an authorization object.
6. Click **Save**.
7. For each field except the *ACTVT* field, enter the name of the corresponding PROCESS DIRECTOR field, such as *COMP_CODE* for *BUKRS*.

   Note: If the document fields you enter here do not exist in the default view */EBY/PDBO_VWRKL0*, you must add a view that contains these fields to the Worklist node basic data settings of the process type's node.

8. Click **Save**.

   You can specify the values for the fields in role maintenance, for example, to which company codes the authorization applies.

Assign authorization roles for WORK CYCLE users

If PROCESS DIRECTOR Accounts Payable is installed, WORK CYCLE Web Application users can log on to PROCESS DIRECTOR instead of WORK CYCLE to process documents. You can assign roles to these users to control their Worklist and document authorizations.

1. Go to `/EBY/ICWC_UM3`.
2. In change mode, add a new entry.
3. Enter the WORK CYCLE user and the role.
4. Click the button to view or make changes to the role.
5. Click **Save**.

To simultaneously assign a role to multiple users, click **Bulk addition** button, then select the role and the users.

User types

PROCESS DIRECTOR differentiates the following types of user.

User type	Description
Internet users	Internet users can only log on to the Web Application.

SAP users	SAP users can log on to the SAP GUI and can also log on to the Web Application using their SAP user name and password.
LDAP users	LDAP users do not need a PROCESS DIRECTOR logon account. They can log on to the Web Application using their LDAP user name and password. LDAP users cannot log on to the SAP GUI.
User groups	You define user groups in `/COCKPIT/WUM1`. In the SAP GUI, PROCESS DIRECTOR resolves user groups to the individual users when a user assigns the group to a workflow step. In the Web Application, PROCESS DIRECTOR resolves the group when a user performs a workflow action, such as workflow start. PROCESS DIRECTOR removes group members with a user type not assigned to the workflow step.

Define user type priorities

Assigning priorities to user types determines:

- How PROCESS DIRECTOR authenticates users when they log on to the Web Application

For example, PROCESS DIRECTOR searches first for SAP users with the given logon credentials, then Web Application users, then LDAP users.

- Which user type is entered as the default value in the **Workflow start** dialog.

The user type that is assigned the highest priority is entered as the default value.

To define user type priorities, complete the following steps.

1. In the expert IMG, click **Change system settings > Other > User types handling** (`/EBY/PDBO_VUSTC`).
2. In change mode, add a new entry.
3. Select a user type, then use search help to select the appropriate user type factory.

User type	User type factory
Internet user	*/EBY/CL_ICWC_USER_FACTORY_INT*
LDAP user	*/EBY/CL_PDBO_USER_FACTORY_LDAP*
SAP user	*/EBY/CL_PDBO_USER_FACTORY_SAP*
User group	*/EBY/CL_ICWC_USER_FACTORY_GRP*

4. To assign a priority, enter a number in the **Position** field, 1 being the highest priority.
5. Click **Save**.

Note: When users who have authorization for only /EBY/PD transactions attempt to drill down to another SAP transaction (for example: the transaction for posting documents), an error message about the missing authorization is displayed.

Configure LDAP users

You can configure PROCESS DIRECTOR for LDAP users. LDAP users do not need a PROCESS DIRECTOR logon account; they can log on to the Web Application using their LDAP user name and password. LDAP users cannot log on to the SAP GUI. After you have configured LDAP users, you can assign them as an allowed user type in workflow steps.

To configure LDAP users, complete the following steps.

1. Configure the LDAP server in SAP using transaction LDAP.
2. Make the LDAP server available in PROCESS DIRECTOR.
3. Specify general settings for the LDAP server.
4. Define the LDAP user type.

Configure the LDAP server in SAP

Use transaction LDAP to configure the LDAP server. See the SAP documentation on Directory Services for information on performing this task.

Make the LDAP server available in PROCESS DIRECTOR

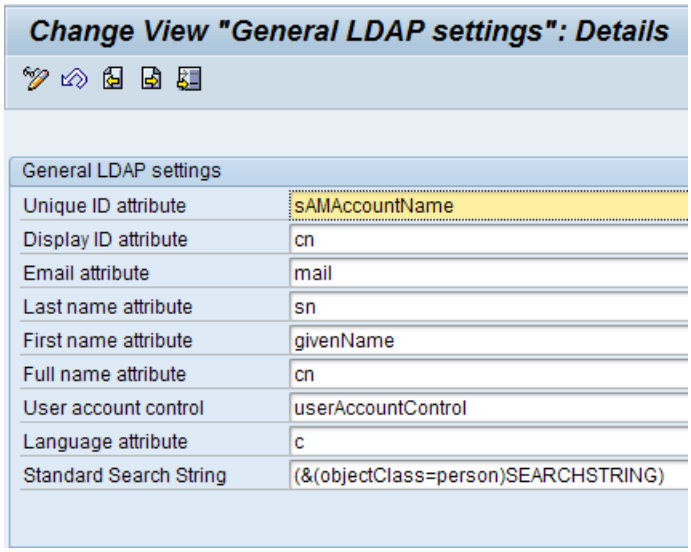
To make the LDAP server available, complete the following steps.

1. Go to /EBY/PDBO_VLDPC (expert IMG > **Additional settings > Other > LDAP servers > Servers available to PROCESS DIRECTOR**).
2. In change mode, add a new entry.
3. Configure the settings, then save your changes.

Specify general LDAP settings

To map the LDAP attributes to PROCESS DIRECTOR fields, complete the following steps. To do this, you will need some understanding of how the LDAP directory stores information.

1. Go to /EBY/PDBO_VLDG (expert IMG > **Default system settings > Other > General LDAP settings**).
2. Configure the settings. The image below shows example settings.



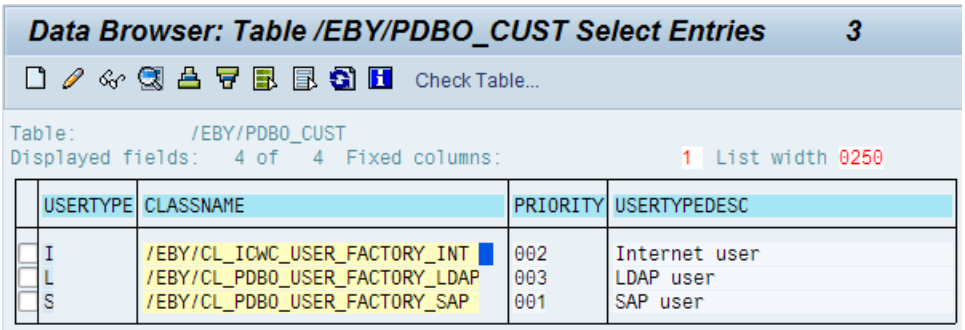
3. Click **Save**.

Note: **Standard Search String** defines how a user is found in LDAP directories. It is important that this field contains *SEARCHSTRING* because this literal is used internally by PROCESS DIRECTOR for searching.

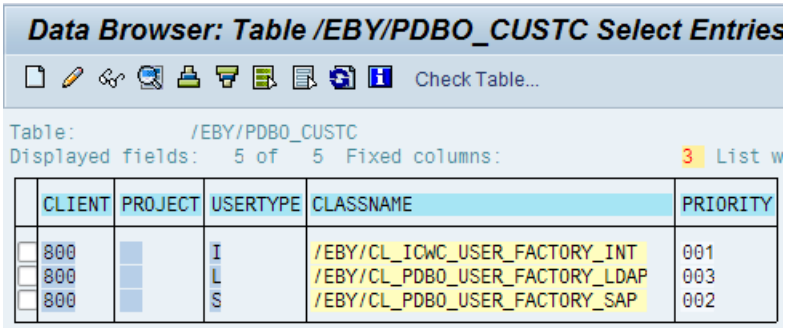
Define the LDAP user type

Defining the LDAP user type is not available as an IMG activity. To define LDAP as a user type, make the appropriate entries in the following tables:

/EBY/PDBO_CUST

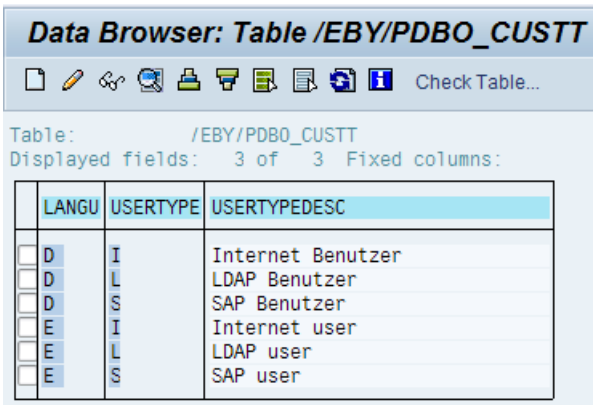


/EBY/PDBO_CUSTC



CLIENT	PROJECT	USERTYPE	CLASSNAME	PRIORITY
800		I	/EBY/CL_ICWC_USER_FACTORY_INT	001
800		L	/EBY/CL_PDBO_USER_FACTORY_LDAP	003
800		S	/EBY/CL_PDBO_USER_FACTORY_SAP	002

/EBY/PDBO_CUSTT



LANGU	USERTYPE	USERTYPEDESC
D	I	Internet Benutzer
D	L	LDAP Benutzer
D	S	SAP Benutzer
E	I	Internet user
E	L	LDAP user
E	S	SAP user

Manage substitutes

You can assign and edit substitutes for SAP and WORK CYCLE users. Users can also assign and edit their own substitutes in PROCESS DIRECTOR.

1. Go to transaction `/EBY/WC_SUBS_MGR`.
2. Select the **User type** and **User ID**.
3. Click the **Execute** button.
4. In the **Substitute Maintenance for Workflows** table, manage the substitutes for the selected user by adding new ones and modifying or deleting the existing ones.
5. Check the **Active** check box to assign an active substitute. Active substitutes see the documents of the user they are substituting for in their own Worklist and receive an email notification when a document is assigned to that user.
6. Click **Save**.

Define a substitute profile

Similar to the SAP Business Workplace (SBWP), you can assign substitute profiles to PROCESS DIRECTOR process types to control which substitutes can process documents of that type. For example, a user may have different substitutes for approval of requisitions and approval of financial postings. In this case, you need to create two substitute profiles: one for requisitions, assigned to the process type *PO*

Requisitions, and one for financial postings, assigned to the process type *FI Financial postings*. When the user assigns substitutes for his periods of absence, he can select the appropriate profile for each substitute.

When a document is sent to a user in a workflow, PROCESS DIRECTOR checks whether a substitute profile has been assigned to the document's process type and whether the user's substitutes have that profile assigned.

If no substitute profile has been assigned to the process type, the document will be sent to all substitutes.

If a substitute profile has been assigned to the process type:

- The document will only be sent to substitutes who have the profile assigned
- Substitutes with a different profile or no profile assigned are ignored
- If none of the substitutes has the profile assigned, the document will be sent to all substitutes to whom no profile at all is assigned

Define a substitute profile

To define a substitute profile, complete the following steps.

1. In SAP transaction SPR0, click the SAP Reference IMG button to bring up the IMG. Then select the activity **SAP Web Application Server** > **Business Management** > **SAP Business Workflow** > **Basic Settings** > **Substitute Profile** > **Define Substitute Profile**.
2. Choose the second activity, **Substitute Profile**.
3. In change mode, add a new entry.
4. Enter a profile ID and description.
5. Save your changes.

Assign a substitute profile to a process type

To assign a substitute profile to a process type, complete the following steps.

1. Go to `/EBY/PDB0_VSPRFL` (expert IMG > **Additional settings > Other > Define substitute profiles**).
2. In change mode, add a new entry.
3. Use search help to select a substitute profile.
4. Save your changes.

Assign a substitute profile to a substitute

See the *PROCESS DIRECTOR SAP User Guide* for information on assigning profiles to substitutes.

Example

The substitute profile RQAPP has been assigned to the *PO Requisitions* process type. User1 and User2 have assigned the following substitutes. A requisition document is sent to these users in a workflow.

User1		**User2**	
Substitute	**Assigned profile**	**Substitute**	**Assigned profile**
SubA	RQAPP Requisition approval	SubX	FIAPP Financial posting approval
SubB	FIAPP Financial posting approval	SubY	FIAPP Financial posting approval
SubC	None	SubZ	None

For User1, only SubA can process the document (RQAPP profile is assigned).

For User2, only SubZ can process the document (RQAPP is not assigned, SubZ is the only substitute to whom no profile is assigned).

Configure rules

Presets

Add a preset

A preset populates a document field with a default value at a predefined point in its life cycle—for example, when the document is created, updated or successfully posted. Presets can also be applied for specific workflow actions (on document approval, rejection or recall) and before checks and determinations run. The preset ID determines when the preset is applied.

The preset value can be a fixed value or system variable, or it can be computed dynamically by a preset class.

To add a preset, complete the following steps.

1. In the IMG, click **Initial settings > Rules > Presets** (`/EBY/PDBO_VPSVC`).
2. In change mode, add a new entry.
3. Select a preset ID to determine when the preset will be applied.
4. Select the logical level to which the preset will be applied.
5. Select the type of value to preset: a fixed value, an SAP SY system variable, or a dynamic value.
6. Specify the value that will be preset:
   - **Fixed value**: enter a **Field Name** and the **Field Value** that will be preset in that field.

- **SAP value**: enter a **Field Name** and the name of an SAP system variable in the **Field Value** field, for example, *SY-DATUM* for the current date.
- **Dynamic value**: leave the **Field Name** and **Field Value** fields blank and enter a preset class in the **Preset class** field. You can use standard PROCESS DIRECTOR preset classes or create your own. See the *PROCESS DIRECTOR Reference Guide* for information on the available standard preset classes and the *PROCESS DIRECTOR SAP Advanced Configuration Guide* for information on creating your own preset classes.

7. Click **Save**.

Tip: You can define configuration criteria to determine whether a preset is applied or not, based on specific values.

Checks

What is a check?

A check verifies the completeness, accuracy and consistency of data in a business document. PROCESS DIRECTOR provides a number of pre-defined checks that you can activate to verify that documents are free from errors before posting. You can also create your own checks. See the *PROCESS DIRECTOR Reference Guide* for information on the available pre-defined checks.

Here are some important points to keep in mind about checks:

Inputs and outputs

A check operates on a single input document or on multiple documents, one document at a time. That is, batch checks are possible, but not cross-document consistency checks.

Checks can indicate their results by generating messages of the types *Error*, *Warning* and *Success* as outputs.

Also, they can modify the document status.

Possible effects on posting

A check event cannot directly prevent a document from being posted to SAP, though it can do so indirectly.

If the action running a given check also contains the event 'Evaluate checks', any messages generated by checks run during the previous course of the action can have an influence on if (and how) the action completes. It is the 'Evaluate checks' event that actually prevents document posting, not the check event that generated the error message.

For example, the action might be aborted or rolled back if error messages have occurred during checks, a popup might be displayed if there were warnings, or action processing might be allowed to complete normally in case of success messages only.

Possible effects on other checks

All checks configured for an action will run in the specified suborder, no matter which messages the other checks may have generated. However, although every check will be fired, it is not guaranteed to actually run to completion. For example, a check might inspect the messages left by previous checks and abort if it finds errors.

Custom checks

PROCESS DIRECTOR provides a check class template to assist you in developing your own checks. You can also use the user exit / BAdI **Check** to implement a custom check. See the *PROCESS DIRECTOR SAP Advanced Configuration Guide* for more information.

Tip: You can schedule the `/EBY/PDBO_REPETITOR` program to automatically run configured checks at regular intervals. See the *PROCESS DIRECTOR Reference Guide* for more information on this program.

Open the check configuration screen

You activate checks in the check configuration screen.

To open the check configuration screen, complete the following step.

- In the IMG, click **Initial settings > Rules > Checks** (`/EBY/PDBO_CHC`).

Use the following buttons to configure checks.

Button	Description
	Switch to change mode.
	Add a new check.
	Copy a check.
	If several checks are configured for the same action, the number in the **Suborder** column defines the order in which they are executed. Use these buttons to change the suborder.
	Remove a check.
	View documentation for a check.

Tip: With the user parameter */EBY/PDBO_CHK_SPLITV* you can split the checks configuration screen vertically so that the check details and message parameters are displayed on the right instead of at the bottom of the screen. See the *PROCESS DIRECTOR Reference Guide* for more information.

Add a check

To add a check, complete the following steps.

1. In the check configuration screen, in change mode, click the **Insert** button.
2. In the **Insert check** dialog box, select the environment in which the check should run. If you leave the **Environment** field blank, the check will run in every environment.
3. Use search help to pick an action into which the check should be inserted.

For example, if you want the check to run when a user clicks the **Check** button, select the *CHECK Check document* action.

4. Use search help to select the check.
5. Optional. To configure check parameters, click the **Initialization parameters** button. Initialization parameters are not available for all checks.
6. Click **Save**.

Tip: You can define configuration criteria to determine whether a check is executed or not, based on specific values.

Check initialization parameters

Some checks have initialization parameters, which specify conditions or data to use with the check. If different types of initialization parameters are available for a check, a selection list appears in the **Check-specific parameters** dialog box. Select the parameter type you want to configure, then set the parameters.

See the check descriptions in the *PROCESS DIRECTOR Reference Guide* for information on the available initialization parameters.

Data preparation for checks

If you add a check for an action where the check requires some data preparation, you may need to add the appropriate event for the preparation of the data to `/EBY/PDBO_VPROC_ACT` (**Change system settings > Processes > Customize processes – all, in list**), otherwise you may get an error message when the check runs. Some actions already include this data preparation event, others do not.

For example, the simulation check, which is available for some process types and simulates creation or posting of the document in SAP, requires that the data structures for creating the SAP document are filled before the check is performed.

Example:

The check */EBY/CL_PDSO_EVT_CHK_CREATE Check whether an SAP sales order can be created* requires the event class */EBY/CL_PDSO_EVT_CREATE_STRU Fill data structures for creating a sales order*.

You can check whether the required event is already available in the action in `/EBY/PDBO_VPRA` (**Default system settings > Processes > Processes - per action**) under **Order of events**.

The *UPDATE* action is not listed in `/EBY/PDBO_VPRA`. Therefore, if you add the check */EBY/CL_PDSO_EVT_CHK_CREATE Check whether an SAP sales order can be created* for the *UPDATE* action, you must add the following entry in `/EBY/PDBO_VPROC_ACT`:

Field	Description
Environment	Leave blank.
Action	*UPDATE Update in database*
Event	*CHK_0BEGIN Begin checks*
Event type	*5 Execute instead of*
Suborder	Enter any number here.
Event class	*/EBY/CL_PDSO_EVT_CREATE_STRU Fill data structures for creating a sales order*

Copy a check

To copy a check, complete the following steps.

1. In the check configuration screen, in change mode, double-click the check.
2. Click the **Copy** button.
3. In the **Copy check** dialog box, change the settings as required.
4. Click the **Continue** button.
5. Click **Save**.

Change a check's message type

Checks generate their output as messages belonging to the message group *CHK*. The possible message types are *Error*, *Warning* and *Success*, with *Error* being the maximum possible type (in order of severity).

However, you can reduce the maximum possible message type of a check to:

Maximum message type	When to use
Use default	Recommended setting
Error	

Warning	If you want to reduce messages that would normally be of type *Error* to type *Warning* for example, because you don't want a check to prevent document posting by generating errors. Warning or success messages will not be affected by this.
Success	If you want to temporarily deactivate the check for test or debugging purposes

Note: Check message type settings will be applied first, then message filters.

Warning: Be careful when reducing the maximum message type to warning or success, as this might allow saving or posting of inconsistent documents.

Example: Assume that you have activated checks for the workflow start action. Any check with an error message would prevent the workflow from starting. Therefore it would make sense to set the maximum possible message type for all workflow start checks to *Warning*, so the user can see the warning messages, but confirm that he wants to start a workflow nevertheless. If all checks are set to *Success*, the user will still be able to see the messages, but will be taken immediately to the workflow start dialog without being shown a confirmation popup.

Remove a check

To remove a check, complete the following steps.

1. In the check configuration screen, click the **Delete** button in the check's table row.
2. Click the **Yes** button to confirm the deletion.
3. Click **Save**.

Configure duplicate checks

What is a duplicate check?

The duplicate value check */EBY/CL_PDBO_EVT_DFC_CHK* enables you to check whether a specific field value or combination of field values entered by the PROCESS DIRECTOR user is already available in the database. This prevents duplicate records being added to the database.

To configure a duplicate value check:

- Create remove or replace IDs if you want to remove/replace characters

  You can remove or replace characters entered by the user in the PROCESS DIRECTOR field before it is checked against the SAP field in order to increase the accuracy of the duplicate value check. For example, you can:

  - Remove leading zeroes
  - Remove special characters, such as removing ( ) - / from telephone numbers
  - Replace separator characters in date fields to match the format of your master data (such as 01/01/2012 vs. 01.01.2012).

- Create a check ID.

  You can add one or more fields to a check ID. If you add several fields, the duplicate value check does not check the existence of the individual fields, but of the *combination* of these fields.

For example, when a user creates a new vendor master data request, the duplicate check can check whether the combination of bank country, bank key and bank account number that the user enters is already stored in the master data record of a vendor, and returns an error message if this is the case.

- Add the duplicate value check to the checks configuration.

Create a duplicate check ID

To create a duplicate check ID, complete the following steps.

1. Go to /EBY/PDBO_VDFCC (expert IMG > **Initial settings > Rules > Duplicates**).
2. In change mode, add a new entry.
3. Enter a check ID.
4. Select the new check ID and double-click the **Duplicate field check** dialog structure menu.
5. Enter the logical level and PROCESS DIRECTOR field name that should be checked.
6. Enter the SAP table and SAP field name that should be checked.
7. To remove or replace characters in the checked field, add the appropriate **Remove ID** or **Replace ID**.
8. Repeat steps 5 and 6 if you want to check a combination of fields.
9. Click **Save**.

When you have specified the fields, add the duplicate value check to the checks configuration.

Create a remove or replace ID

To create a remove or replace ID, complete the following steps.

1. Go to /EBY/PDBO_VDFCC (expert IMG > **Initial settings > Rules > Duplicates**).
2. Double-click the **Remove IDs** or **Replace IDs** dialog structure menu, depending on which you want to define.
3. In change mode, add a new entry.
4. Enter an ID.
5. Select the new remove or replace ID and double-click the **Removals** or **Replacements** dialog structure menu.
6. For removals, add an entry for each character that should be removed from the field. For replacements, add an entry for each character that should be replaced and specify the replacement character.
7. Click **Save**.

Determinations

What is a determination?

A determination attempts to infer the correct value for a given document field from the other fields in the document, or from other sources such as mapping tables. A determination runs one or more searches to look for possible field values and perform computations on the search result sets to select the most likely candidate.

Here are some important points to keep in mind about determinations:

Inputs and outputs

Depending on the type of determination, it can set one or more field values on a document.

In addition to setting document fields, it can also generate messages of the types *Error*, *Warning* and *Success* as outputs.

Execution

All determinations configured for an action execute in the specified suborder, no matter which messages the other determinations generated.

Searches

Configure every determination with one or more searches. If no search is configured, the determination will not be executed and will not generate any messages.

Generally, a determination runs its configured searches in the specified order. However, it is not guaranteed that every search is actually fired. For example, a search may be configured to end the determination immediately if it finds exactly one result—that is, not allow the determination to execute any further searches.

A determination's result set is composed by specifying set operations on the result sets of its configured searches.

Custom determination

PROCESS DIRECTOR provides a determination template to assist you in developing your own determinations. You can also use the user exit / BAdI **Determination results** to implement a custom determination. See the *PROCESS DIRECTOR SAP Advanced Configuration Guide* for more information.

Open the determination configuration screen

You activate determinations in the determination configuration screen.

To open the determination configuration screen, complete the following step.

- In the IMG, click **Initial settings > Rules > Determinations** (`/EBY/PDBO_DEC`).

Use the following buttons to configure determinations.

Button	Description
	Switch to change mode.
	Add a determination.
	Copy a determination.

	If you configure several determinations for the same action, the number in the **Suborder** column defines the order in which they run. Use these buttons to change the suborder.
	Remove a determination.
	View documentation for a determination.

Tip: With the user profile parameter **/EBY/PDBO_CHK_SPLITV** you can split the determinations configuration screen vertically so that the determination details, message parameters and searches are displayed on the right instead of at the bottom of the screen. See the *PROCESS DIRECTOR Reference Guide* for more information.

Add a determination

Tip: You can define configuration criteria to determine whether a determination is executed or not based on specific values.

To add a determination, complete the following steps.

1. In the determination configuration screen, in change mode, click the **Insert** button.
2. In the **Insert determination** dialog box, select the environment in which the determination will run. If you leave the **Environment** field blank, the determination will run in every environment.
3. Select an action for the determination.

   For example, if the determination should run when data is transferred to PROCESS DIRECTOR from an external system, select the *RECEI2 Initial processing* action.
4. Select the **Determination ID**.
5. Click the **Continue** button.
6. Configure at least one search for the determination. If you do not configure a search, the determination will not run.
7. Click **Save**.

Copy a determination

To copy a determination, complete the following steps.

1. In the determination configuration screen, in change mode, double-click the determination you want to copy.
2. Click the **Copy** button.
3. In the **Copy determination** dialog box, change the settings as required.
4. Click the **Continue** button.
5. Click **Save**.

Configure determination searches

Add a determination search

To add a determination search, complete the following steps.

1. In the determination configuration screen, in change mode, double-click the determination.
2. In the **Configure searches** pane, click the **Add search** button.
3. In the **Insert search** dialog box, use search help to select a search.
4. Optional. Specify a weight for the search and select a finish option.
5. Configure the search settings.
6. Optional If necessary, adjust the search order using the **Move up** and **Move down** buttons.
7. If more than one search is configured, you may need to define result set operations.
8. Click **Save**.

Define search result set operations for determination searches

A determination's result set is composed by specifying set operations on the result sets of its associated searches. If you have configured several searches, you can specify how their result sets will be handled.

Double-click a search to see how its determination result set is configured.

By default, the determination result set is equal to the search result set of the current search. However, result set operations also let you take the search result sets of previous searches into account when computing the determination result set.

You can define search result set unions and/or intersections by **single-clicking** a search, **then** dragging and dropping it into the **Result handling** pane to the right of the **Configure searches** pane.

- When you click a determination, in the **Result handling** pane, you can see the result handling for all the searches configured for that determination.
- If you click a search in the **Configure searches** pane, you can see the result handling for only that search.
- When you save the data, a warning popup message is displayed if:
- The search is configured with the **When to end** parameter set to **3**, but not used in the next searches for the same determination.
- The search is configured with the **When to end** parameter set to **1** or **2**, but the results were swapped (by using the **Move up** or **Move down** buttons).
- The last search has the **When to end** parameter set to **3**.

Unions are created by default, but you can also create intersections by dragging one search onto another.

Note: Since arbitrary nesting of result set operations is currently not possible, you may need to transform your result set operation into a union-of-intersections form.

Operation	Effect on result set
Intersection	A result is only counted towards the determination's result set if it is generated by every search in the intersection
Union	A result is counted towards the determination's result set if it is generated by any search in the union

To delete a union or intersection, right-click it, then select the context menu item **Delete**.

Edit and delete determination searches

To modify a search, click the button in a search table row. The **Update search** popup appears. Here, you can change the search settings.

To delete a search, click the button in a search table row and confirm to delete the search.

Change a determination's result messages

Determinations generate messages belonging to the message group *DET*. In this section of the dialog, you can configure which message type to display depending on the size of the determination's result set.

The recommended setting is *Use default*. The message types will default to these values:

Number of results	Default message type
1 result	*S Success*
0 results	*E Error*
Many results	*W Warning*

Remove a determination

To remove a determination, complete the following steps.

1. In the determination configuration screen, click the **Delete** button in the determination's table row.
2. Click the **Yes** button to confirm the deletion.
3. Click **Save**.

PROCESS DIRECTOR provides an easy way for you to control the behavior of the system for the different processes.

No knowledge of PROCESS DIRECTOR actions and events (which control these processes) is required; all you have to do is set the appropriate parameters for the process.

For example, you can easily configure PROCESS DIRECTOR to:

- Automatically start a workflow on a document when checks, posting or transfer of the document fails or succeeds. For more information, see Configure automatic workflow start.
- Automatically post the document when a specific workflow is approved. For more information, see Configure automatic posting on workflow approval.
- Create a log of all activities that took place on a document during a workflow and add this as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document. For more information, see Configure workflow log creation.
- Create other attachments such as cover sheets or visualizations of EDI documents. For more information, see Configure a cover sheet and Configure IDoc image attachments.

To configure process parameters, complete the following steps.

1. Go to **Initial settings > Process parameters** and select the appropriate process area. Alternatively, enter the appropriate transaction code:

Process	Transaction code
Archiving	/EBY/PDBO_EPC_ARCHIV
Checks	/EBY/PDBO_EPC_CHECKS
Posting	/EBY/PDBO_EPC_POST
Workflow	/EBY/PDBO_EPC_WORKFL
Other	/EBY/PDBO_EPC_OTHER

2. Click the **Parameters** button for the action and process that you want to configure.
3. Enter the parameters and save.

Configure workflows

What is a workflow?

Users can use workflows to send documents electronically to obtain or provide additional information, clarification and approval.

To build a workflow, complete the following procedures.

1. Create workflow steps
2. Create the workflow process
3. Assign workflow processors

4. Activate the workflow

Create a workflow step

Workflow steps are the basic units of work that you can use to compose workflow processes. In PROCESS DIRECTOR, workflow steps always involve a human task such as a data entry or approval. Defining steps independently of a workflow means that they can be used in different workflows.

To create a workflow step, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps** (`/EBY/PDWC_VSTPC`).
2. In change mode, add a new entry.
3. Enter an ID and a description for the step.
4. Specify appropriate settings for the step.

   With the following settings, you can influence the way in which users can assign processors in the Start workflow dialog box.

- If you use the **Recipients restriction check** setting, only the processors that you specify will be available for selection. In this case, it is mandatory that you assign workflow processors.
- If you set the **Processor assignment** option to **3 In background (automatic, without manual interaction)**, the processors that you specify are not displayed to the user and cannot be changed.

  In this case, the **Recipients restriction check** setting is ignored and it is again mandatory that you assign workflow processors.
- If you use the **Recipient num. limit** setting to specify the maximum number of recipients, an error message is displayed if the user assigns more processors than the number specified in this setting.

5. Double-click the **Allowed user types** dialog structure menu and add a new entry for each type of user that the step can be sent to.
6. Click **Save**.

Note: The handling of workflow steps can also be determined by the Workflow steps handling BAdI.

Create a workflow process

You assemble a workflow process by adding workflow steps to the process.

To create a workflow process, complete the following steps.

Prerequisite: You have created the steps that you want to include in the workflow.

1. In the IMG, select **Initial settings > Workflow > Define processes** (`/EBY/PDWC_VC_FLW`).
2. In change mode, add a new entry.
3. Enter an ID and description for the workflow.
4. Double-click the **Process** dialog structure menu.
5. In change mode, add a new entry.
6. In the **Workflow step** field, select the first workflow step. Leave the **Previous step** field blank.
7. On the next line, in the **Previous step** field, select the first workflow step. In the **Workflow step** field, select the second workflow step.

8. Continue adding steps until your workflow process is complete, making sure to add a previous step for all steps except the first.

   Note: Parallel steps are also possible. To configure steps that run in parallel, select the same previous step.

9. Save your changes.

Tip: You can also assemble a workflow process using the graphical editor.

Activate a workflow

To make a workflow available for use with a specific process type, you must activate the workflow for that process type.

To activate a workflow, complete the following steps.

1. In the IMG, select **Initial settings > Workflow > Activate workflows** (`/EBY/PDWC_CFLAC`).
2. In change mode, add a new entry.
3. Select the process type and the workflow that you want to activate.
4. Click **Save**.

A processor is the person who approves or rejects the workflow step. You can specify which processors a workflow step can be assigned to.

When users start the workflow, the workflow step configuration determines if they can select the processors from the list that you configure here, or if they can assign their own processors. You can also set the processors automatically, in the background. For more information, see Create a workflow step.

Note: If a workflow processor does not have authorization to display a document, then the document also cannot be sent to him in a workflow.

To assign workflow processors to a workflow step, complete the following steps:

1. In the IMG, click **Initial settings > Workflow > Assign processors** (`/EBY/PDWC_UM`).
2. Select the step and click the **Assigned processors** dialog structure menu.
3. In change mode, add a new entry.
4. Assign one or more processors.
5. Click **Save**.

Configure email notifications

What are workflow email notifications?

PROCESS DIRECTOR can send emails to workflow processors, for example, to inform them that a workflow step has been assigned to them or is overdue. PROCESS DIRECTOR can also send emails to workflow initiators, for example, to inform them when workflow steps have been approved or rejected.

The `/EBY/PDWC_DUE_DATE_CHECK` program controls email dispatch. You should schedule this program to run at regular intervals. You can send individual emails for each workflow step, or you can send a collective email that contains all workflow step notifications for that processor since the last program run.

By default, the program sends collective emails for all process types, but you can configure these settings individually for each process type. Emails are sent in plain text format, but you can also configure emails in HTML format.

Note: For more information about the `/EBY/PDWC_DUE_DATE_CHECK` program, see the *PROCESS DIRECTOR Reference Guide*.

Set up workflow email notifications

To set up email notifications, complete the following steps.

1. Go to transaction `SE38`.
2. Enter */EBY/PDWC_DUE_DATE_CHECK* and click .
3. Select the object type for which you want to set up email notifications. To use the same settings for all process types, select the blank entry.
4. Enter the required settings.
5. Click to save the settings as a variant if you are defining parameters for a specific process type.
6. Click to run the job once, or schedule it as a background job in `SM36`.

Customize workflow email texts

PROCESS DIRECTOR provides standard email texts for workflows in plain text and HTML format. You can customize these texts or replace them with your own. See the *PROCESS DIRECTOR Reference Guide* for more information on the available standard email texts.

Use SAP transaction `SE61` to edit or create documentation objects for the email texts and then assign these documentation objects to the workflow or the workflow step.

General workflow email texts

General workflow email texts and subjects are used for all workflows and steps, unless a step-specific configuration is available.

To configure general workflow email texts, complete the following steps.

1. In the expert IMG, click **Change system settings > Workflow > General workflow mail texts** (`/EBY/PDWC_VTXTC`).
2. In change mode, add a new entry.
3. Select the purpose of the email.
4. Use search help to select a documentation object.
5. Click **Save**.

Workflow step email texts

Workflow step email texts are optional. If workflow step email text and subject are not defined for a given purpose, PROCESS DIRECTOR uses the general workflow email text for that purpose.

To configure workflow step email texts, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps** (`/EBY/PDWC_VSTPC`).

2. Select a workflow step and double-click the **Mail texts and subjects** dialog structure menu.
3. In change mode, add a new entry.
4. Select the purpose of the email.
5. Use search help to select a documentation object.
6. Click **Save**.

Set the URL for single document links

If you use the Web Application, you must set a URL for the *&URL&* placeholder in workflow email notifications. PROCESS DIRECTOR replaces the *&URL&* placeholder in the email with a link to a single document. When the user clicks this link, the document opens in the PROCESS DIRECTOR Web Application. You can set different URLs for different SAP systems.

You can use any of the following alternatives when specifying the URL:

http://servername:port/pdweb-app/initdo

http://servername:port/pdweb-app/initdo?

http://servername:port/pdweb-app/initdo?sapsystem=system ID

Example: http://readsoft:8080/*pdweb-app/initdo?sapsystem=RS1*

Important: Specify the complete URL path (ending in ...*init.do*), otherwise single document links will not work.

To set the URL for single document links, complete the following step.

- In the expert IMG, click **Additional settings > Mail and communication > General settings**) (`/EBY/PDWC_VGENC`).

Customize HTML emails

You can use your own CSS styles to control the appearance of HTML emails.

The standard CSS styles are stored in the SAP Web Repository with the object name */EBY/PDBO_EMAIL_CSS_STYLES*.

First, you must add your own CSS file object to the SAP Web Repository, then specify that PROCESS DIRECTOR should use this object instead of the standard CSS object. If you want to use your own documentation objects for emails, you must also add the *&HTML_EMAIL_CSS_STYLES&* alias to these objects.

Add objects to the SAP Web Repository

To add objects to the SAP Web Repository, complete the following steps.

1. In transaction `SMW0`, select **HTML templates for WebRFC applications**. and click the **Find** button.
2. In the **SAP Web Repository: Object selection** dialog box, click the **Execute** button.
3. Click the **Create** button and enter an object name and description. The object name should begin with Z.
4. Click the **Import** button, select a CSS file in your file system and click **Open**.
5. Enter a customer package or click **Local Object**.

6. Click **Save**.

Specify a cascading style sheet

To specific a cascading style sheet for HTML emails, complete the following steps.

1. In the expert IMG, click **Change system settings** > **Other** > **Other settings for emails** (`/EBY/PDBO_VEMLC`).
2. In change mode, add a new entry.
3. Enter or select your file in the **CSS styles** field.
4. Click **Save**.

Add styles to your own documentation objects

To add styles to your own documentation object, complete the following steps.

1. In SE61, create your own documentation object and enter the text in HTML format.
2. In the <body> section, type *&HTML_EMAIL_CSS_STYLES&*.
3. Click **Save**.

Enable line item approval

Line items can be approved individually, even by different processors. This feature is intended for documents where different persons are responsible for different items; for example, different people may approve items assigned to different cost centers. Workflow steps are completed when all processors have either approved or rejected their items.

Note: You should only activate line-item approval for one step per workflow.

Process description

The following describes the basic features of line-item approval:

1. A workflow is started for a document with multiple line items.
2. Recipients are either entered manually by the PROCESS DIRECTOR user, or determined by the **Workflow steps handling** BAdI. See the *PROCESS DIRECTOR SAP Reference Guide* for information on this BAdI.
3. Workflow processors open the document and can view and approve all items assigned to them as well as unassigned items.
4. After all items have been approved or rejected, the workflow step is completed.

Activate line-item approval

To activate line item approval, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps** (`/EBY/PDWC_VSTPC`).
2. In change mode, select the workflow step and click the **Details** button.
3. In the **Approval** level field, use search help to select the object and logical level for which line item approval should be possible.

4. Select the **All recipients must process** check box.
5. Click **Save**.

Assign users to items

When a user is assigned to an item, no other workflow recipients can view the item.

You can assign users to items in the following ways.

- **Post-workflow start**: Whenever the user checks the **Approve** box for the item and clicks the **Approve** button. As no items are pre-assigned to anyone, workflow recipients can initially view all items in the document. After approving one or more items, these items are cleared and other workflow recipients can no longer view or approve them.
- **Pre-workflow start**: Via the BAdI **Workflow steps handling**. ReadSoft recommends this method as the best practice.

Create a help text for a workflow step

To assist Web Application users in processing workflow steps, you can create help texts that explain what the user has to do. These texts display in the **Current messages** box in the document detail view.

You can assign several help texts to a workflow step. Add an entry for each text you want to use.

To create a workflow step help text, complete the following steps.

1. In transaction SE61, create a documentation object with the document class **General text**, and type the help text.
2. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps help texts** (`/EBY/PDWC_VSTPHC`).
3. In change mode, add a new entry.
4. In the **Object** field, select the process type for which the help text should be used.
5. Select the workflow step and the documentation object to assign to it.
6. Click **Save**.

Exclude actions from workflows

You can exclude specific actions for documents that are in a workflow. For example, you can prevent users from deleting or posting documents by excluding the corresponding actions. The menu items and buttons for the excluded actions are then not available for documents in workflow. PROCESS DIRECTOR excludes a number of actions by default from workflows, but you can override these defaults or add your own action exclusions.

You can also restrict the actions that users can perform while processing a specific workflow step. For example, you can prevent workflow step processors from editing or posting documents by excluding the corresponding actions. The menu items and buttons for the excluded actions are then not available when a document is processed in that workflow step.

Exclude actions for workflows

To exclude actions for workflows, complete the following steps.

1. In the expert IMG, click **Change system settings > Workflow > Excluded actions** (`/EBY/PDWC_VEACC`).

2. In change mode, add a new entry.
3. In the **Obj. / All obj.** field, select the process type for which the exclusion will apply.
4. Select the processor type for whom the action will be excluded.
5. Select the action to exclude.
6. Click **Save**.

Exclude actions for workflow steps

To exclude actions for workflow steps, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps** (`/EBY/PDWC_VSTPC`).
2. Select a workflow step and double-click the **Action restriction** dialog structure menu.
3. In change mode, add a new entry.
4. Select the processor type for whom the action will be excluded.
5. Select the action to exclude from the workflow step.
6. Optional. If you want the step action exclusion to override any general action exclusions that have been defined for workflows, select the **Ign. gen.** check box.
9. To view a list of currently defined general action exclusions, click the **Generally excluded actions** button.
7. Click **Save**.

Define conditions for workflows

Define workflow conditions

You can define conditions for a workflow that determine whether a document can be sent to that workflow.

To define workflow conditions, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Activate workflows** (`/EBY/PDWC_CFLAC`).
2. Click the **Configure criteria** button.
3. In change mode, add a new entry.
4. In the **Dispatcher** field, select *W Workflow process assignment*.
5. In the **Order** field, enter a number to specify the order in which the fields will appear in the workflow process assignment screen (for example, 1 for the first field, 2 for the second field, and 3 for the third field). This is also the order in which the criteria will be evaluated. You can specify up to three fields.
6. Enter the field name to be used as a criterion.
7. Click **Save**.
8. Start `/EBY/PDWC_CFLAC` again.

The criteria you added are now displayed as columns in the **Assign and use workflow processes** screen. You can now enter the field values that will be used to evaluate whether a document can be sent to this workflow.

When PROCESS DIRECTOR evaluates the criteria to determine which workflows will be available for selection in the **Workflow start dialog**, it searches first for workflows with defined criteria. If a match is found, only that workflow is displayed in the **Workflow start** dialog. If no match is found, all workflows without criteria are available for selection. This is illustrated in the following example:

Assign and use workflow processes

	Company Code	Currency	Workflow
			WF1 Workflow 1
			WF2 Workflow 2
	1000	EUR	WF3 Workflow 3
	1000	USD	WF4 Workflow 4
	1000		WF5 Workflow 5

Lines 1 and 2: All requisitions that are not for company code 1000 can be sent to workflows *WF1* and *WF2*.

Line 3: If the requisition is for company code 1000 and the currency is EUR, it can only be sent to *WF3*.

Line 4: If the requisition is for company code 1000 and the currency is USD, it can only be sent to *WF4*.

Line 5: If the requisition is for company code 1000 and the currency is neither EUR nor USD, it can only be sent to *WF5*.

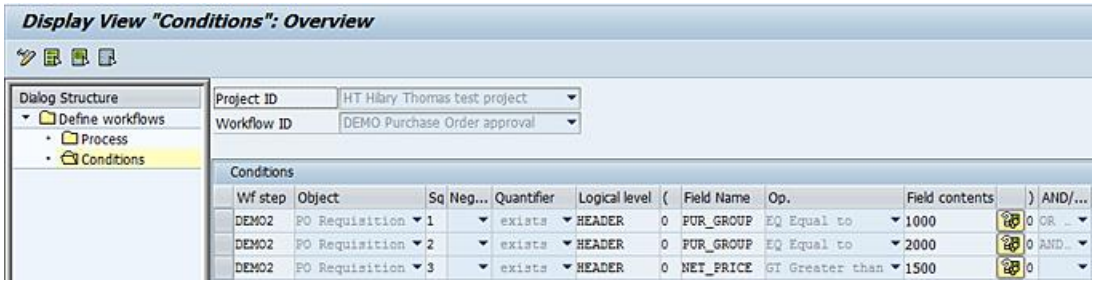
Define workflow step conditions

You can define conditions for workflow steps, so that a document is only sent to the workflow step if the conditions are met.

To define conditions for a workflow step, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define processes** (`/EBY/PDWC_VC_FLW`).
2. Select the workflow and double-click the **Conditions** dialog structure menu.
3. In change mode, add a new entry.
4. Configure the step condition settings.

   In this example, a requisition document for the purchasing groups 1000 and 2000 will only be sent to the *DEMO2* workflow step if the net price is more than 1500:



Display View "Conditions": Overview

Dialog Structure
- Define workflows
  - Process
  - Conditions

Project ID: HT Hilary Thomas test project
Workflow ID: DEMO Purchase Order approval

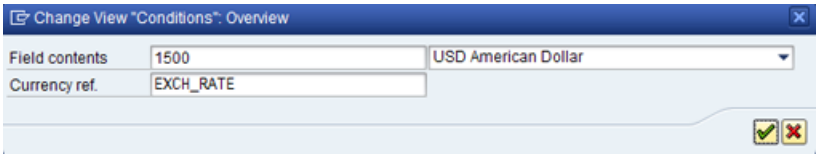
Conditions

Wf step	Object	Sq	Neg...	Quantifier	Logical level	(	Field Name	Op.	Field contents		)	AND/...
DEMO2	PO Requisition	1		exists	HEADER	0	PUR_GROUP	EQ Equal to	1000		0	OR
DEMO2	PO Requisition	2		exists	HEADER	0	PUR_GROUP	EQ Equal to	2000		0	AND
DEMO2	PO Requisition	3		exists	HEADER	0	NET_PRICE	GT Greater than	1500		0	

5. Save your changes.

Define currency conversions

If you are defining a condition based on a currency value, such as the net price, you can specify a reference currency so that the condition can be evaluated for different currencies.

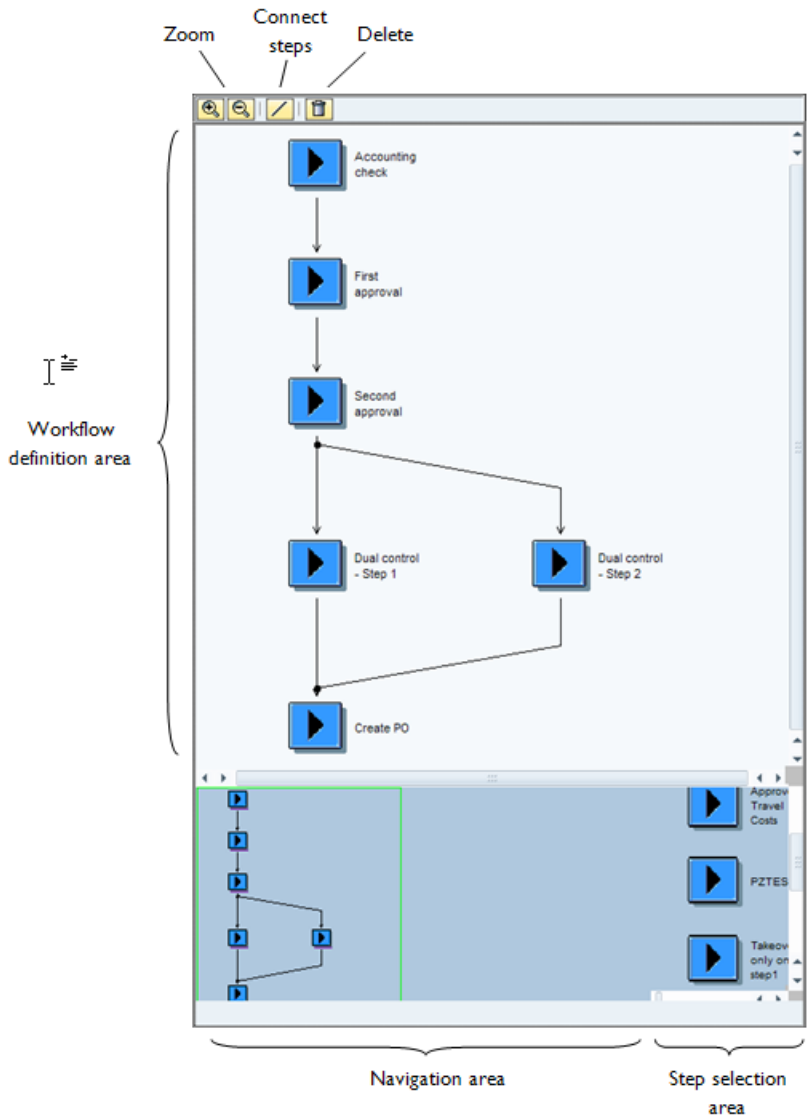


In the above example, the step condition specifies an amount of 1500 US dollars. PROCESS DIRECTOR uses the **Currency ref.** field to calculate the US dollar value of other currencies. For example, at an exchange rate of 1 EUR = 1.25 USD, a value of 1200 EUR (= 1500 USD) would meet the condition.

Use the graphical workflow editor

For complex workflows, you may find it easier to use the graphical editor to assemble workflow steps into workflows. When you add workflow steps in the graphical editor, the steps are automatically added to the **Process** table.

To use the graphical workflow editor, go to `/EBY/PDWC_VC_FLW` (**Initial settings > Workflow > Define processes**).



Navigate in the workflow

The green border represents the area currently displayed in the workflow definition area. Drag the border to enlarge or reduce the display, or use the zoom buttons. To move around in the display, click in the area within the border and drag to the desired position.

Add a workflow step

1. Click on the step in the step selection area.
2. Click again to add the step to the workflow.

Connect workflow steps

Click the **Connect steps** button . The cursor changes to a pencil .

1. Drag the pencil over the space between the two steps.

Delete a step

Click on the step, then click the **Delete** button.

Delete a connection

Click on the connector line. It is highlighted in red. Click the **Delete** button.

Configure workflow log creation

PROCESS DIRECTOR can automatically create a log of all activities that took place on a document during a workflow and add this as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document. Notes can be included in the attachment as well as the workflow log, or you can create an attachment containing only notes.

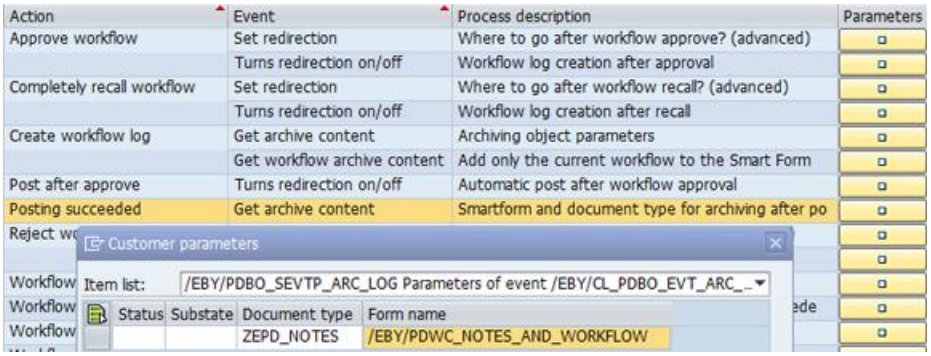
The workflow log can be created when a document is posted, approved, rejected or recalled from workflow. You can also specify that only details of the current workflow should be included in the workflow log (by default, the log contains details of all workflows to which the document has been sent).

1. In the expert IMG, click **Initial settings > Process parameters > Workflow**) (`/EBY/PDBO_EPC_WORKFL`).
2. In change mode, click the **Parameters** button for the appropriate action and process (see below).
3. Enter the parameters and save your changes.

Workflow log creation after posting

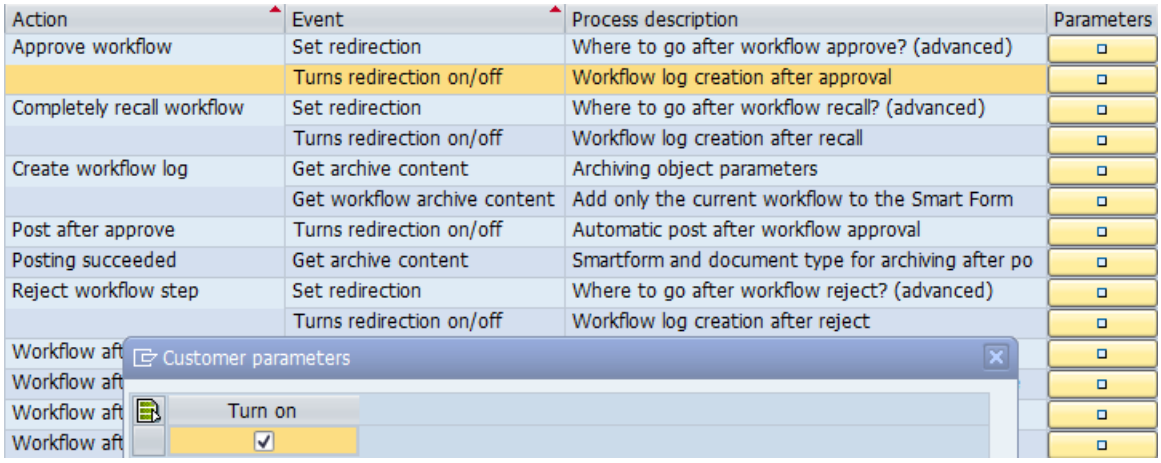
In the parameters for the action **Posting succeeded** and the process **Smartform and document type for archiving after po**, enter the document type and Smart Form to be used to create and archive the workflow log.

Use the Smart Form */EBY/PDWC_NOTES_AND_WORKFLOW* to include the workflow log and notes. Use the Smart Form */EBY/PDBO_NOTES* to create an attachment containing only notes.

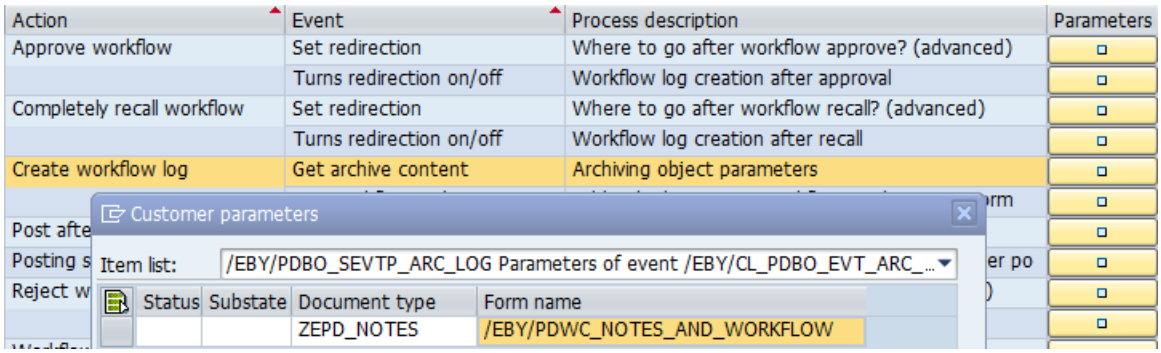


Workflow log creation after approval/rejection/recall

1. In the parameters for the appropriate action/process (for example, **Approve workflow/Workflow log creation after approval**), activate **Turn on**.

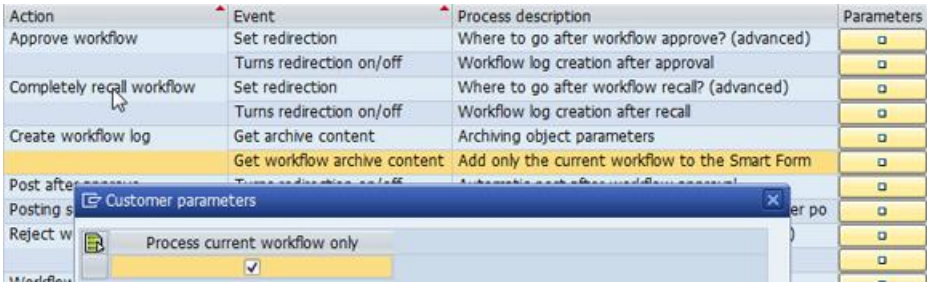


2. In the parameters for the action **Create workflow log** and the process **Archiving object parameters**, enter the document type and Smart Form to be used to create and archive the workflow log.
3. Use the Smart Form */EBY/PDWC_NOTES_AND_WORKFLOW* to include the workflow log and notes. Use the Smart Form */EBY/_PDBO_NOTES* to create an attachment containing only notes.



Include only current workflow in the log

In the parameters for the action **Create workflow log** and the process **Add only the current workflow to the Smart Form**, activate **Process current workflow only**.



Configure automatic workflow start

You can configure PROCESS DIRECTOR to automatically start a workflow on a document when checks, posting or transfer of the document fails or succeeds.

To configure automatic workflow start, complete the following steps.

1. In the expert IMG, click **Initial settings > Process parameters > Workflow** (`/EBY/PDBO_EPC_WORKFL`).
2. In change mode, click the **Parameters** button for the appropriate process.

   For example, to start a workflow when checks return an error message, click the **Parameters** button for the **Automatic workflow start after check failed** process.
3. Enter the workflow ID and select the **Turn on** check box.
4. Click **Save**.

Configure Email-based Approval

Email-based Approval allows users to approve, reject or add a note to a PROCESS DIRECTOR document via email.

The basic function of using Email-based Approval follows these simple steps.

1. A user receives an email from Email-based Approval indicating that they have a document to approve, reject, or to add a note to.
2. In the received email, the user clicks on an **Approve** link, **Reject** link or **Add Note** link (in HTML emails these may appear as buttons) that opens the user's email client and populates a new email message with the appropriate subject and body text information.
3. The user sends the message to approve or reject the document, or add a note to it.
4. The user receives a reply email confirming whether or not his action was successful.

Email-based Approval requires the deployment of the Email-based Approval Web Application (*approval-app.war*). This guide only provides information on configuring Email-based Approval in the SAP GUI. See the *Email-based Approval Configuration Guide* for information on configuring the Email-based Approval Web Application.

To configure Email-based Approval, complete the following procedures.

Note: These procedures do not apply for Accounts Payable documents. See the *Email-based Approval Configuration Guide* for information on configuring Email-based Approval for Accounts Payable.

1. Open the IMG of the process type for which you want to configure Email-based Approval.
2. Specify the Email-based Approval email address in the basic settings.
3. Define general message texts for Email-based Approval confirmation emails and the action links/buttons.
4. Activate workflow steps for Email-based Approval.

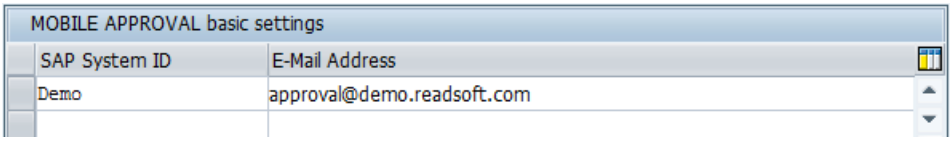
Note: The settings apply only for the selected process type. Repeat these steps to configure Email-based Approval for other process types.

Specify the Email-based Approval email address

To specify the Email-based Approval email address, complete the following steps.

1. Go to /EBY/PDWC_VMABS (**Initial settings > Workflow > Mobile Approval > Basic settings**).
2. In change mode, add a new entry.

3. Enter the SAP system ID and the email address that will be the reply *mailto:* link in the Email-based Approval emails sent to workflow recipients. You can specify different email addresses for different SAP systems.

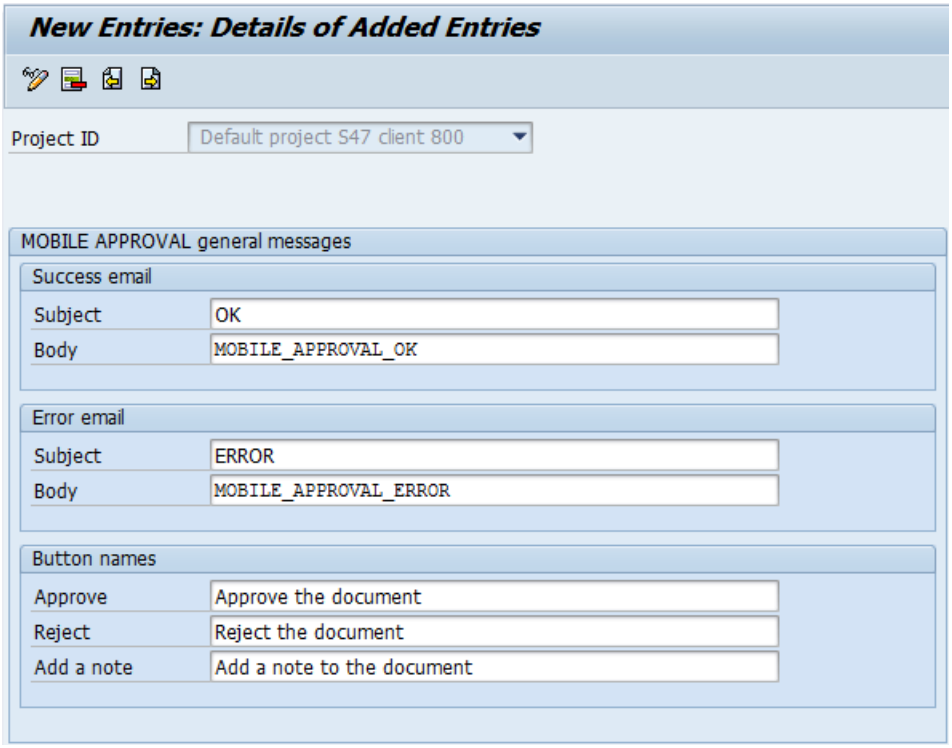


4. Click **Save**.

Define general texts

To define general texts, complete the following steps.

1. Go to /EBY/PDWC_VMAMES (**Initial settings > Workflow > Mobile Approval > General messages**).
2. In change mode, add a new entry.
3. Enter the general message text settings for the confirmation emails and the link/button names.



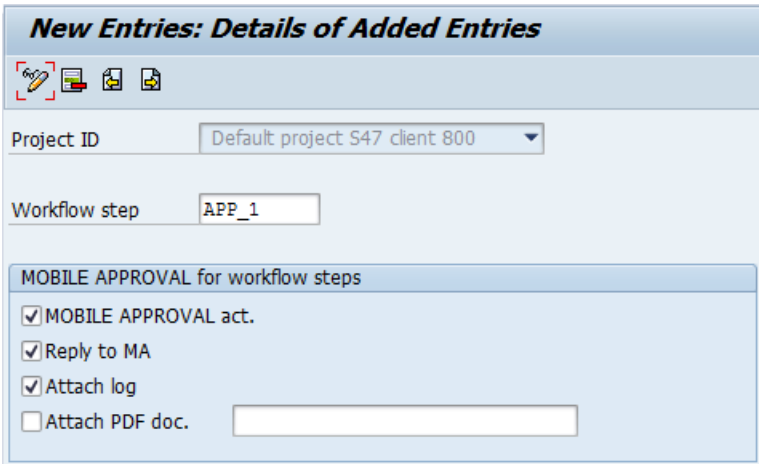
4. Click **Save**.

Activate workflow steps for Email-based Approval

To activate workflow steps for Email-based Approval, complete the following steps.

1. Go to /EBY/PDWC_VMAST (**Initial settings > Workflow > Mobile Approval > Workflow steps**).
2. In change mode, add a new entry.

3. Enter a workflow step ID and activate **MOBILE APPROVAL act**. Define other settings as required. Repeat for all workflow steps for which Email-based Approval should be activated.



4. Click **Save**.

Map external data

Map data

To transfer data from an external application, you must specify how the fields are to be mapped between the external application and PROCESS DIRECTOR. To successfully map external data to PROCESS DIRECTOR documents, you need an understanding of the data structure of the external system.

To map external data, complete the following steps.

1. In the IMG, click **Initial Settings > Mapping > map external data to PD documents** (`/EBY/PDBO_VMAPC`).
2. In change mode, add a new entry.
3. Add an entry for each field that is to be extracted from the external system and enter the settings.
4. Save your changes.

Define a mapping conversion

Mapping conversions enable you to perform functions on fields when they are imported into PROCESS DIRECTOR. For example, you can:

- Insert a fixed value or a system variable
- Insert or remove spaces or characters
- Change to upper or lower case
- Convert to a different format
- Perform arithmetic functions
- and more

To use a mapping conversion, first you need to define the conversion and then assign it to the appropriate field in the data mapping. PROCESS DIRECTOR provides a number of standard mapping conversions. See the *PROCESS DIRECTOR Reference Guide* for more information.

Define a mapping conversion

1. In the IMG, click **Initial settings > Mapping > Map external data to PD documents** (`/EBY/PDBO_VMAC`).
2. Click the **Mapping conversion functions** button.
3. In change mode, add a new entry.
4. In the **Mapping** field, enter a name for the mapping conversion.

   You only need to specify the order if a mapping conversion requires more than one function.
5. In the **Mapping function** field, select the mapping function that contains the conversion coding.
6. To enter parameters (if available) press the ENTER key and click the **Parameters** button.
7. Click **Save**.

Assign a mapping conversion to a data mapping

1. In the IMG, click **Initial settings > Mapping > Map external data to PD documents** (`/EBY/PDBO_VMAPC`).
2. In the **Mapping** column of the field on which the conversion should be performed, enter the name of the mapping conversion.
3. Click **Save**.

Example

This example checks whether the customer purchase order date field (*PURCH_DATE*) in a customer order is empty and if it is, inserts the current system date in the field. We will call our mapping conversion *PO_DATE*.

1. In `/EBY/PDBO_VMAF` add the following entries:

   Define mapping conversion

Mapping	Order	Mapping function	Short text	Param.
PO_DATE	1	/EBY/PDBO_MAF_IF	Skip next function unless condition is met	
PO_DATE	2	/EBY/PDBO_MAF_SYST	Get a system value	

2. Set the parameters as follows:

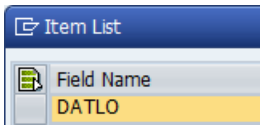
   `/EBY/PDBO_MAF_IF`

   Item List

Option	Text
EQ	

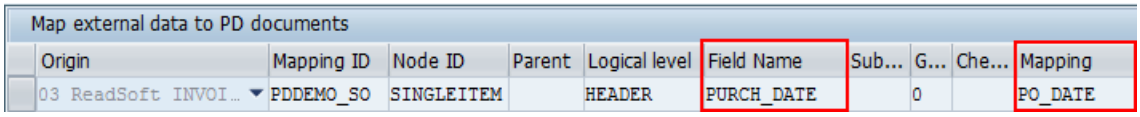
   (= blank)

   `/EBY/PDBO_MAF_SYST`



(Current system date)

3. In `/EBY/PDBO_VMAPC` enter the mapping conversion *PO_DATE* in the **Mapping** column for the *PURCH_DATE* field.



Map IDocs

Configuration in SAP

Set the function module input type for IDocs

To set the function module input type, complete the following steps.

1. Go to transaction `BD51`.
2. Set the input type for the */EBY/PDBO_EDI_IDOC_TRANSFORM* function module to **2 - Individual input with IDoc lock**.
3. Click **Save**.

Set the message and IDoc type

To set the message and IDoc type, complete the following steps.

1. Go to transaction `WE57`.
2. Create a new entry for each IDoc basic type and message type that you want to use, entering */EBY/PDBO_EDI_IDOC_TRANSFORM* as the module.
3. Click **Save**.

Set the inbound process code for IDocs

To set the inbound process code, complete the following steps.

1. Go to transaction `WE42`.
2. Select the appropriate SAP standard process code and note the settings.
3. Create a new entry and enter a custom process code and description. Copy the remaining settings from the SAP standard process code.
4. In the **Identification** field, enter */EBY/PDBO_EDI_IDOC_TRANSFORM*.
5. Click **Save**.
6. Go to transaction `SM30` and display the *TBD52* table.
7. Copy the entry for the SAP standard process code to a new entry, for example, *ZEPD_EDI*.
8. Save and exit the view.

9. Display the same table again, and change **Inbound Function Module** to */EBY/PDBO_EDI_IDOC_TRANSFORM*.
10. Click **Save**.

Modify an EDI partner profile

For all partner profiles that are to process IDocs through PROCESS DIRECTOR, you must change the process type for inbound parameters containing the message types that you want to use.

To modify a partner profile, complete the following steps.

1. Go to transaction `WE20`.
2. Select the partner profile.
3. In the **Inbound parameters** table, open or add the appropriate message type:
4. On the **Inbound options** tab, change the process code to the custom one you created.

   Note: All other parameters in the partner profiles do not need to be changed.

5. Click **Save**.

Repeat these steps all message types that you want to use.

Create an EDI profile

To create an EDI profile, complete the following steps.

1. In the IMG, click **Initial settings > Mapping > EDI profiles** (`/EBY/PDBO_VEDPC`).
2. In change mode, add a new entry.
3. Enter a profile name and a mapping ID. You must enter this mapping ID in the mapping configuration.
4. Enter the settings for the IDoc control record and processing of the IDoc, then save your changes.

Map IDoc segments to PROCESS DIRECTOR fields

To map IDoc segments to PROCESS DIRECTOR fields, complete the following steps.

1. In the IMG, click **Initial Settings > Mapping > map external data to PD documents** (`/EBY/PDBO_VMAPC`).
2. In change mode, add a new entry.
3. Add an entry for each field that is to be extracted from the external system and enter the settings.
4. Click **Save**.

Archiving

About archiving

After a user posts a document in PROCESS DIRECTOR, the document data from the data tables of PROCESS DIRECTOR can be archived. You should carry out archiving periodically based on the volume of documents and your organization's requirements.

Archiving of PROCESS DIRECTOR documents is carried out with the SAP Archive Development Kit.

PROCESS DIRECTOR provides the following archiving programs to write, delete, read, index and reload the transaction data of the PROCESS DIRECTOR tables.

Program	Name
Write Program	/EBY/PDBO_SARA_WRITE
Delete Program	/EBY/PDBO_SARA_DELETE
Read Program	/EBY/PDBO_SARA_READ
Index Build Program	/EBY/PDBO_SARA_INDEX
Reload Program	/EBY/PDBO_SARA_RELOAD
Index Deletion Program	/EBY/PDBO_SARA_INIT_INDEX

You carry out data archiving in the SARA transaction. The PROCESS DIRECTOR IMG provides a link to the SARA transaction. You should use this link rather than accessing the SARA transaction directly so that fields are automatically filled with the correct data. See the SAP documentation for full information on the SARA transaction.

Create the archiving object

You must create an archiving object for each process type you archive. This applies to all process types except PROCESS DIRECTOR Accounts Payable. For information on archiving PROCESS DIRECTOR Accounts Payable data, see the *PROCESS DIRECTOR Accounts Payable Configuration Guide*.

Prerequisite: PROCESS DIRECTOR uses the standard SAP variants **TESTLAUF** and **PRODUKTION** for the **Delete program** in the customizing settings of the archiving object. If these are not already present in the system, you must create them beforehand. See the SAP documentation for information on how to create these variants.

To create an archiving object, complete the following steps.

1. In the expert IMG of the process type that you want to archive, click **Initial settings > SARA archiving > Define archiving object** (/EBY/PDBO_SARA_AOBJ).
2. Type an archiving object name and select a request. The archiving object must begin with Z or Y.
3. Type a logical file name. To create a logical file, complete one of the following substeps.
   - Click the **Create Logical File** button.
   - Go to SAP transaction FILE.

   See the SAP documentation for information on defining logical path and file names.
4. Click the **Execute** button.

PROCESS DIRECTOR automatically creates the archiving object with the correct settings.

5. Go to transaction A0BJ.
6. Select the new archiving object and double-click the **Customizing Settings** dialog structure menu.
7. Select the **Build Index** check box.
8. Click **Save**.
9. In the **Prompt for Customizing request** dialog box, select a request and click the **Continue** button.

Archive documents

After documents have been archived, the archived data is deleted from the PROCESS DIRECTOR tables, provided the **Delete Jobs** setting in the archiving object customizing settings is set to **Start Automatically**. You can reload deleted data into PROCESS DIRECTOR if necessary, but you should be aware that reloading data can cause problems and should only be done in an emergency.

To archive PROCESS DIRECTOR documents, complete the following steps.

1. In the expert IMG, click **Initial settings > SARA archiving > SARA Archiving**.
2. Enter the archiving object.
3. Click the **Write** button.
4. Select a variant or click the **Maintain** button to create a new one. Select the **Delete with test run variant** radio button when creating your variant.
5. Click the **Start date** button to specify the starting time, and, if necessary, the **Spool Params** button to specify the spool parameters.
6. Click the **Execute** button.

   The message **New archiving job was scheduled** is displayed. Click the **Job** button to view the status of the job.

Read archived documents

To read archived documents, complete the following steps.

1. In the expert IMG, click **Initial settings > SARA archiving > SARA Archiving**.
2. The archiving object is entered automatically, but you can change it if necessary.
3. Click the **Read** button.
4. Click the **Execute** button.
5. Enter the archiving object and process type. You can use the **Operational limiters** to restrict the selection.
6. Click the **Execute** button.
7. Select the files that you want to read and click the **Continue** button.

Index archived documents

Prerequisite: To build an index, the **Build Index Allowed** option must be activated in the archiving object settings. The index entries are written to the */EBY/PDBO_TSARA* table.

If you reload archived documents, the indexes of the archived files is deleted and must be rebuilt.

To index archived documents, complete the following steps.

1. In the expert IMG, click **Initial settings > SARA archiving > SARA Archiving**.
2. The archiving object is entered automatically, but you can change it if necessary.
3. Click the **Index** button.
4. Click the **Build Index** button.
5. Select a variant or click the **Maintain** button to create a new one.
6. Click the **Archive Selection** button and select the files for which you want to rebuild the index.
7. Click the **Start date** button to specify the starting time, and, if necessary, the **Spool Params** button to specify the spool parameters.
8. Click the **Execute** button .

The message **New jobs for index build/delete were generated** is displayed. Click the **Job** button to view the status of the jobs.

To delete an index, complete the following step.

- In `SE38`, run the program `/EBY/PDBO_SARA_INIT_INDEX`.

Reload archived documents

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

Important: 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 remains in the archiving session and is not altered nor deleted.

Prerequisite: To reload documents, the **Prohibit New Session During Reload** option must be activated in the archiving object settings.

To reload archived documents, complete the following steps.

1. In the expert IMG, click **Initial settings > SARA archiving > SARA Archiving**.
2. The archiving object is entered automatically, but you can change it if necessary.
3. On the Go to menu, click **Reload**.
4. Click the **Continue** button.
5. Select a variant or click the **Maintain** button to create a new one.
6. Click **Archive Selection** and select the archive from which the data is to be reloaded.
7. Click the **Start date** button to specify the starting time, and, if necessary, the **Spool Params** button to specify the spool parameters.
8. Click the **Execute** button .

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

Note: After reloading, the indexes of the archived files are deleted and must be rebuilt.

Archiving administration

The **Archiving Session Overview** shows all archiving runs for an object.

To display the archiving session overview, complete the following step.

- In the SARA transaction, click the **Management** button. See the SAP documentation for more information.

Additional configuration tasks

Customize fields and layout

What is the view model?

Customer implementations often require that you make changes to the PROCESS DIRECTOR user interface, such as adding or removing fields, or changing the layout of grids and tab pages. You can implement most of these changes in the PROCESS DIRECTOR view model.

In PROCESS DIRECTOR, a process type's **document model** stores all data for the process type. The process type's **view model** determines which of that data is presented to the user and how it is presented. Only data that is defined in the view model is available to the user in the user interface.

The system view model

PROCESS DIRECTOR provides with a standard view model, the **system view model**, which defines the appearance and contents of the following components of the PROCESS DIRECTOR user interface.

- SAP document list
- Web Application document list
- Web Application document detail view
- Additional grids in the SAP GUI and Web Application, such as Accounts, Conditions, Schedules or Partners
- Workflow status window. In the SAP GUI this refers to the **Documents** tab.
- Document archive log

You can access the system view model in the expert IMG by clicking **Default system settings** > **Presentation and interface** > **View model** (`/EBY/PDVI_VVMO`).

Important: You may find it useful to refer to the system view model, but you should never make changes here. Instead, create a customer view model.

The customer view model

To fulfill customer requirements, you can create a customer view model for each user interface component that overrides the standard settings in the system view model. For example, you can change the following elements.

- The appearance of grids, such as the column width, column order or grid lines.
- Available buttons and menus on the grid toolbar. This only applies to the SAP GUI, not the Web Application.
- Tabs in the document detail view. This only applies to the Web Application. You configure tabs in the document detail view of the SAP GUI in transaction `/EBY/PDVI_VDSTC`.
- Available fields
- Field attributes, such as whether the field mandatory or hidden, or whether it is a text input field, a check box or a dropdown list.

You can also configure drag and drop functionality to enable users to copy data from one grid to another, for example, from a purchase order item to a goods receipt item.

When you create your customer view model, you do not need to copy all settings from the system view model into your customer view model. You only need to specify the settings that should be different from the standard. PROCESS DIRECTOR uses customized settings where available, and the standard settings where no customized settings are available.

Note: The Web Application only reflects changes to the view model after you restart the application server or refresh the context. To refresh the context, add *?refreshctx* to the end of the PROCESS DIRECTOR Web Application URL, for example: *http://localhost:8080/pdweb-app/init.do?refreshctx*.

Create a customer view model

You must create a customer view model entry for each user interface component that you want to customize.

To create a customer view model, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. In change mode, add a new entry.
3. Enter the appropriate component type, grid number and logical level.

   For example, to customize header data in the Web Application document detail view, select the component type *WA Document Detail*, grid number *1* and logical level *HEADER*. To configure the SAP GUI document overview, leave the component type blank.
   See the appropriate process type view model customization section in the *PROCESS DIRECTOR Reference Guide* for detailed information about which settings to choose.
4. Click **Save**.

Customize grid layout

You can customize the layout of the grid for a customer view model.

To customize the grid layout, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the view model component type and double-click the **Layout of grid** dialog structure menu.
3. In change mode, add a new entry.
4. To copy the settings from the system view model, click the **Copy default settings** button.
5. Make changes to the layout settings as required and save your changes.

Customize tabs

Customize Web Application tabs

You can customize the tabs that appear in the document detail view of the Web Application. For example, you can replace or hide the standard tabs or add your own tabs. You define the fields of a custom tab in the field catalog. For each field that should appear in a custom tab, enter the tab ID in the **Tab identifier** field of the field catalog.

Prerequisite: You have created a customer view model component for the Web Application document detail view.

To customize Web Application tabs, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the **WA_LIST WA Document Detail** component type and double-click the **Tabs** dialog structure menu.
3. In change mode, add a new entry.
4. Enter the tab settings, then save your changes.

   To hide a tab, check the **Remove** option. A tab is also hidden if all fields in the tab are set to **No output** in the field catalog.

Customize SAP GUI tabs

You can customize the tabs in the SAP GUI document detail screen. For example, you can replace or hide the standard tabs or add your own customized tabs. Customized tabs can be statically defined or generated dynamically at runtime. Creating static tabs is described in the *PROCESS DIRECTOR Advanced Configuration Guide*.

To customize SAP GUI tabs, complete the following steps.

1. Create a runtime generated tab.

   Note: You can only create one custom runtime generated tab. You can create up to 12 statically defined tabs.

2. Define the fields to include on the tab.

Create a runtime generated tab

To create a runtime generated tab, complete the following steps.

1. In the expert IMG, click **Change system settings > Presentation and interface > SAP GUI detail screen > Tabs at detail screen** (`/EBY/PDVI_VDSTC`).
2. In change mode, add a new entry.
3. Enter the following tab settings and save your changes.

- **Tab ordno.**: A number to specify the position of the tab in the detail screen. For example, 3 means that this is the third tab.
- **Tab label**: The name that is displayed on the tab.
- **Icon**: Use the search help to select an icon to display on the tab.
- **Program name**: */EBY/SAPLPDVI_SCREEN*
- **Scrn. no.**: *0950*
- **Class/Interface**: */EBY/CL_PDVI_SCREEN_CUSTOM*
- **Description**: A description for the tab.
- **Repl/Rem.**: Check this option to disable (hide) the standard system tab.

Define the fields that will be included on the tab.

Define fields

To define the fields that are to be included on the tab, complete the following steps.

1. In the expert IMG, click **Change system settings > Presentation and interface > SAP GUI detail screen > Fields at generated tab** (`/EBY/PDVI_VSCRC`).
2. In change mode, add a new entry.
3. Add the fields that should be displayed in the tab and save your changes.

Note: Only fields that are available in the PROCESS DIRECTOR document model are available for selection. To make a custom field that is not in the PROCESS DIRECTOR document model available here, add it to a customer include.

Important: If you are adding only custom fields to your custom tab, make sure that you add these custom fields to the field catalog of the SAP GUI header component, otherwise the tab will not display. The tab will also not display if all fields in the tab are set to **No output** in the field catalog.

Configure a custom tab

After defining a new tab, an enhanced method is available for specifying the fields and required layout options.

To do so, complete the following steps.

1. In the expert IMG, click **Change system settings > Other > Popup title, fields and dropdowns > Popup ID and title** (/EBY/PDBO_VPUIC).
2. In change mode, add a new entry.
3. In the **Popup ID** field, enter *CUSTOMER_DETAIL*.
4. In the **Popup title** field, enter any title. This title is not used in the screen for the new tab.
5. Click **Save**.
6. The **Choose Activity** popup is displayed again. Double-click **Popup fields** to enter the /EBY/PDBO_VPUFC transaction, where you can define the fields and required attributes and save the changes.

Note: Using this method overrules any options set in the already existing customization method for the fields in the new tab.

Customize fields

Redefine a standard system field

You may need to change the attributes of a standard system field, for example, make it a mandatory field, or hide it in the user interface.

To change a field definition, you cannot directly modify the system view model field catalog. Instead, you must create a new view model in the customer configuration and create a field with the same name as in the system configuration. The settings you configure for the customer view model field will then override the default settings in the system view model.

To redefine a standard system field, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the appropriate view model component and double-click the **Field catalog** dialog structure menu.
3. In change mode, add a new entry.
4. Use the **Field Name** search help to select the system view model field.
5. Click the **Copy default entry** button. This will copy the system view model field into the customer view model.

   Note: This will only work for fields that are available in the system view model. Fields that are not available in the system view model must be imported from the DDIC instead of being copied (see Adding a field to the field catalog).

6. Now you can change the attributes of the customer view model field.
7. Click **Save**.

Add a field to the field catalog

If the standard fields provided in the PROCESS DIRECTOR system view model do not fulfill customer requirements, you can add additional fields from the PROCESS DIRECTOR document model to the field catalog of a customer view model.

If you need a field that is not available in the PROCESS DIRECTOR document model, you can add it to a customer include.

To add a field to the field catalog, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`)
2. Select the view model component and double-click the dialog structure menu **Field catalog**.
3. Click **Import DDIC fields**.

   A popup appears.
4. Enter the interface structure name of the document model logical level the new field is in. The interface structure contains all fields available for that logical level.

   For example, to add a field to the header data of a requisition, enter the structure name */EBY/PDPO_SHDR_IF*; to add a field to goods receipt line items, enter the structure name */EBY/PDDN_SITM_IF*. Refer to the appropriate process type document model customization section in the *PROCESS DIRECTOR Reference Guide* for the correct name of the structure.
5. Click **Get from data dictionary**, then select the field and click the **Continue** button to confirm. This will create a default field definition in the customer view model.
6. Modify the default field definition as needed. For example, you can:
   - Change the field attributes
   - Define/redefine the field's search help
7. Optional. To verify the correctness of the configuration grid, click **Check View Model**.

   The **Log Display** dialog box opens, showing the activation logs with the results of the check.

Note: The same checks are performed as when you are creating a customer-specific structure using the SE11 transaction.

Add a customer-specific field

To fulfill customer requirements, you can extend the document model of a process type with customer-specific fields. For each user interface component, PROCESS DIRECTOR provides two customer includes (CIs) that you can use to add custom fields to the PROCESS DIRECTOR document model.

For example, you can add fields to the header data of a requisition using the customer includes *CI_EBY_PDPO_SHDR_DATA* and *CI_EBY_PDPO_SHDR_DISP*. Refer to the appropriate process type document model customization section in the *PROCESS DIRECTOR Reference Guide* to find the name of the customer include required for your customization.

- Use the customer include ending in _DATA if the custom field should be automatically persisted in the database.
- Use the customer include ending in _DISP if you only want to automatically calculate the field at runtime and display it.

Important: You should never add customer-specific fields directly to the customer include, but use your own customer-specific structure instead. For example, first create a customer-specific structure corresponding to each used 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.

Example: To add custom fields to the header data of a requisition, create a new structure *ZMY_PO_HEADER*, add the fields to this structure, then add the *ZMY_PO_HEADER* to the *CI_EBY_PDPO_SHDR_DATA* customer include.

To add a custom field, complete the following steps.

1. In SE11, create a customer-specific structure:
   1. Select **Data type**, enter a structure name and click the **Create** button.
   2. In the popup, select **Structure** and click to confirm.
   3. Enter a short description, then in the **Components** tab, add the custom field.
   4. Save your changes. In the **Create Object Directory Entry** dialog, enter a customer package name, or click the **Local Object** button if you do not want to save to a package.
   5. Click the **Activate** button .
2. In SE11, include your new customer-specific structure in the appropriate customer include of the document model:
   1. Select **Data type**, enter the name of the customer include and click the **Change** button.
   2. In the **Components** tab, enter *.INCLUDE* in the **Component** field and the name of your new customer-specific structure in the **Component type** field.
   3. Save your changes.
   4. Click the **Activate** button .

3. In SAP transaction `/EBY/PDVI_VVMOC` (**Change system settings > Presentation and interface > Configure view model**) add the field to the grid field catalog of the customer view model belonging to the document object model level you extended.

   When adding the custom field to the customer view model, use the **Import DDIC fields** button. You can pick the field from the document model structure to which you added the field in step 1.

4. For document-driven process types—configure external data mapping for the custom field, if necessary.
5. For display-only fields that should be populated, initialize the fields.

Initialize a customer-specific display field

To initialize customer specific display-only fields, create your own class that implements the interface */EBY/IF_PDBO_INTFILLER* and add custom logic to populate the fields to the */EBY/IF_PDBO_INTFILLER~FILL* method.

1. In `SE24`, create a new class.
2. In the **Interfaces** tab, enter */EBY/IF_PDBO_INTFILLER*.
3. In the **Methods** tab, double-click the method */EBY/IF_PDBO_INTFILLER~FILL*.
4. Add coding to populate the display field.
5. Click the **Activate** button.
6. Go to `/EBY/PDBO_VDMDC` (**Change system settings** > **Presentation and interface** > **Customized field data display**).
7. In the **Class/Interface** field, enter */EBY/CL_NNNN*, where *NNNN* is the process type, for example */EBY/CL_PDPO* for Requisitions, */EBY/CL_PDDN* for Goods Receipts, */EBY/CL_ICIV* for Accounts Payable, etc.
8. In the **Conversion function** field enter the class you just created.
9. Specify a counter, the object type and the logical level.
10. Save your changes.

Change field attributes

To change field attributes, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the view model component and double-click the **Field catalog** dialog structure menu.
3. In change mode, select the field and click the **Details** button.
4. Change the field attributes.
6. There are many attributes that you can change. By default, only the most common attributes are displayed. To view further attributes, click the **Open advanced view** button.
5. Save your changes.

Note: The field attributes defined in the field catalog represent the default settings for the field. You can use field statuses to apply different attributes that override these settings at a specific point in a document's life cycle, for example, to protect the field from editing during workflow processing or after it has been posted.

These are the most common cases requiring modification of the default settings:

- Change field access settings
- Disable a field
- Change data element field labels
- Change column order and sorting
- Change Web field properties

Change field access settings

Attribute	If checked
Input	The user is allowed to enter a value in this field.
No output	The field is hidden.
Checkbox	The field displayed as a checkbox.
Mandatory	The user must enter a value in this field, in case the field is empty.

Note: The standard order of precedence for field access settings applies here.

Disable a field

Check **Replace/Remove** to disable that field in the system view model.

Important: If you disable a field, field statuses will no longer apply to it.

Change field labels

These settings are listed in the section **Field labels of data element**. Unless they are redefined here, the field labels are taken from the data element definition in the DDIC.

Change column order and sorting

To change the position of the column in the grid, simply change the field's column number. To change the sort order, select the sort type.

Change Web field properties

To change web field properties, edit the settings listed in the sections **Web field properties** and **Tab and position in tab**.

Customize search helps

Define a search help

By default, the SAP GUI client uses the search help from the Data Dictionary references in the **Reference table** and **Reference** fields, so usually you do not have to define a search help for the SAP GUI. If you want to make a search help available in the Web Application, you must configure it in the field catalog.

To define a search help, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the view model component containing the field for which you want to define the search help and double-click the **Field catalog** dialog structure menu.
3. Select the field, or add it to the field catalog if it is not yet available.
4. In change mode, click the **Details** button.
5. In the **Search help** field, enter or select the search help that you want to use.
6. For the Web Application, for domains without fixed values, complete the following steps.
   1. In the **Reference to the Data Dictionary** section, in the **Ref. table name** field, enter the name of the search help reference table (REF_TABLE).
   2. Optional. In the **Ref. field name** field, enter the reference field (REF_FIELD) where the search help is used.
   3. In the **Web Field Properties** section, from the **Input type** drop-down list, select **Drop down list**.
7. Double-click the **Search help - Field assignment** dialog structure menu.
8. Click the **Generate proposal** button.
9. The search help parameters are added to the table. If necessary, make changes to the settings.
10. Click **Save**.

Configure a collective search help for the Web Application

A collective search help can contain multiple individual search helps, all of which may not be needed in the Web Application. You can therefore specify which of these search helps should be available in the Web Application, and in which order they should appear in the **Search help** selection list. You can check which search helps are available by default for a specific field by going to **Default system settings > Presentation and interface > Configure view model > Field catalog > Search help - Collective** (do not make changes here!).

In the Web Application, you can use the *pdweb-app.properties* parameter *pd_extended_search* to extend the suggestions functionality, which displays previously entered values when the user begins typing in a field. If the *pd_extended_search* parameter is activated, when the user begins typing in a field, the field's search help is called in the background and the search results are added to the suggestions list. You can specify which of the collective search help's individual search helps should be used for this background search. This is known as the "primary" search help. In the previous version of PROCESS DIRECTOR this was controlled by the *pdweb-app.properties* parameter *pd_bg_search_def*.

To configure a collective search help, complete the following steps.

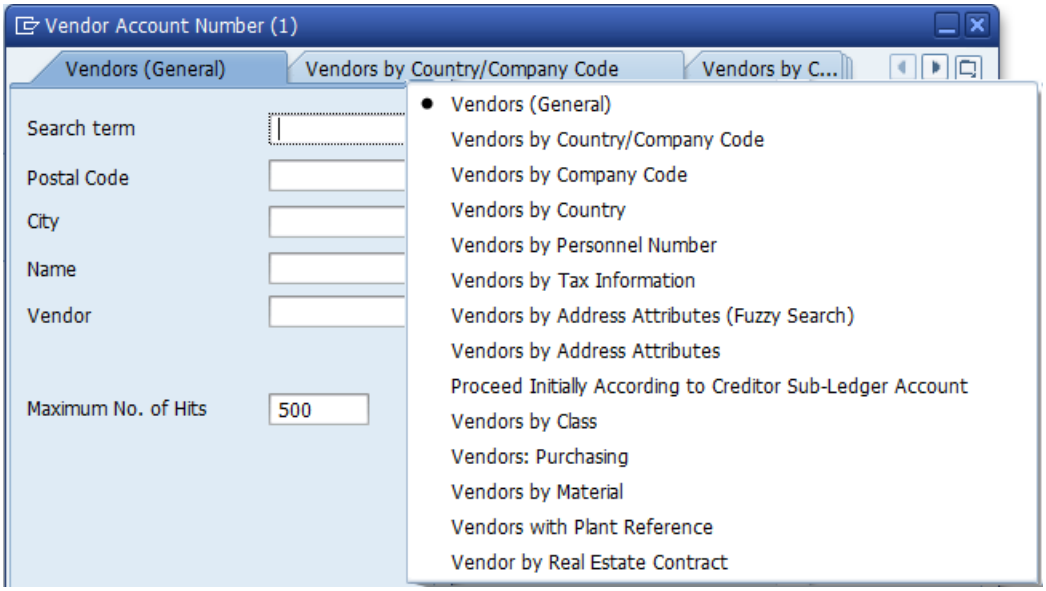
1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).

2. Select the view model component containing the field for which you want to define the collective search help and double-click the **Field catalog** dialog structure menu.
3. Select the field, or add it to the field catalog if it is not yet available.
4. Double-click the **Field catalog > Search help - Collective** dialog structure menu.
5. In change mode, add a new entry.
6. In the **Included search help** field, enter or select the search help that should be available in the Web Application.
7. In the **Sort.pos.** field, enter a number to specify the position of the search help in the selection list.
8. Optional. To use this search help for the background search, select the **Primary SH** check box.
9. Click **Save**.

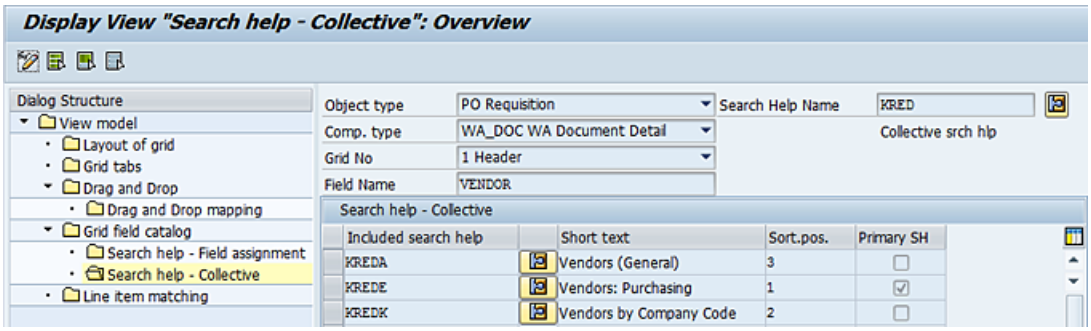
Note: You must ensure that the included search helps are not excluded from display in the Web Application.

Example

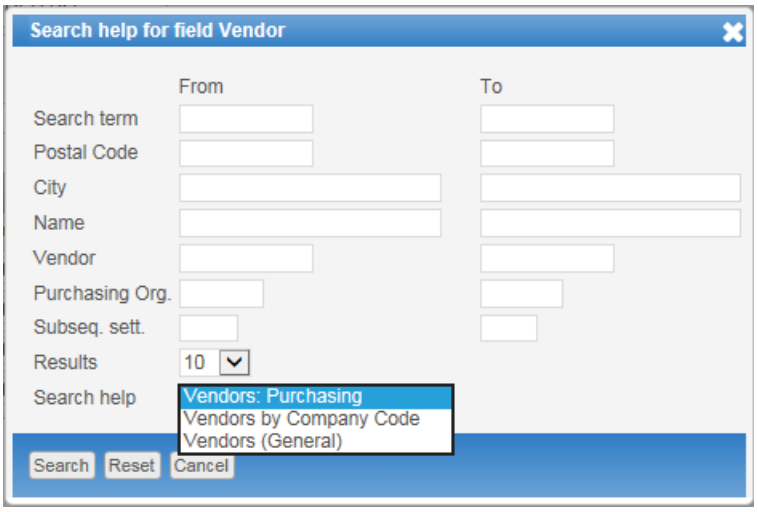
The collective search help *KRED* for the **Vendor** field in the SAP GUI contains these individual search helps:



The default system settings include only three of these search helps:



With the result that only these three search helps are displayed in the Web Application:



Here, the *KREDE* search help (**Vendors: Purchasing**) is the primary search help and will be used for the background search.

Exclude a search help from the Web Application

You can prevent search helps from being displayed in the Web Application. This is necessary, for example, for search helps that call a screen, because using such search helps will result in a short dump in the Web Application. The search helps defined here are excluded for all process types.

You can see which search helps are excluded by default in `/EBY/PDWA_VSHE` (**Default system settings > Web Application > Excluded search helps**). Do not make changes here.

To exclude a search help from the Web Application, complete the following steps.

1. In the IMG, click **Change system settings > Web Application > Excluded search helps** (`/EBY/PDWA_VSHEC`).
2. In change mode, add a new entry.
3. Enter the name of the search help.
4. Click **Save**.

Set field statuses

What is a field status?

You can use field statuses to control field display and access at a specific point in a document's life cycle. A field status specifies the settings, such as read-only, hidden or mandatory, for individual fields or all fields of a logical level.

You can assign field statuses to the following elements.

- Worklist nodes. The field status settings apply to all documents in the node.
- Document statuses. The field status settings apply to all documents that have that document status.
- Workflow steps. The field status settings apply to all documents that are in that workflow step.

Field statuses override the default settings specified for the fields in the field catalog, but only for as long as the document is in the Worklist node, document status or workflow step. By default, field statuses apply in the following order of precedence. For example, a field status applied to a workflow step overrides the field status applied to a Worklist node or document status. You can change this standard order of precedence by assigning priorities to field statuses.

Order of precedence	Field access setting
1 (highest)	Field status assigned to the document's workflow step
2	Field status assigned to the document's current document status
3	Field status assigned to the Worklist node in which the document is displayed
4	Field catalog settings

Tip: You can use the **Modify field profiles** BAdI to add custom logic to control field statuses. See the *PROCESS DIRECTOR Reference Guide* for more information.

Create a field status

To create a field status, complete the following steps.

1. In the IMG, click **Initial settings > Field status > Define field status and map field status to document status > Define field status** (`/EBY/PDVI_VFSIC`).
2. In change mode, add a new entry.
3. Enter a field status ID.
4. Optional. Enter a priority. If you do not enter a priority, the standard order of precedence for field access settings applies.
5. Select the field status and double-click the **Properties per field and level** dialog structure menu.
6. In change mode, add a new entry.
7. Set the display values per field and logical level, then save your changes.

Assign a field status to a Worklist node

To assign a field status to a Worklist node, complete the following steps.

1. In the IMG, click **Initial settings > Worklist > Worklist configuration** (`/EBY/PDBO_WLC`).
2. In change mode, select the node and click the **Basic data** button.
3. In the **Field state ID** list, select the field status.
4. Click the **Continue** button.
5. Click **Save**.
6. Generate the Worklist.

Assign a field status to a document status

To assign a field status to a document status, complete the following steps.

1. In the IMG, click **Initial settings > Field status > Map field status to document status** (`EBY/PDVI_VFSMC`).
2. In change mode, add a new entry.
3. Select the document status and the field status.
4. Click **Save**.

Tip: You can define configuration criteria to determine whether the field status is applied based on specific values.

Assign a field status to a workflow step

To assign a field status to a workflow step, complete the following steps.

1. In the IMG, click **Initial settings > Workflow > Define steps > Define workflow steps** (`/EBY/PDWC_VSTPC`).
2. In change mode, select the step and click the **Details** button.
3. In the **Step field states** field, select the field status.
4. Click **Save**.

Configure drag and drop

You can enable users to fill fields by dragging and dropping lines from one grid to another. For example, when editing a goods receipt document, the user can drag lines from the purchase order line items grid and drop them onto line items in the goods receipt grid. The fields specified in the drag and drop configuration are then copied from the PO item into the goods receipt item.

Note: This functionality does not work for popup grids, and is not available for the Web Application.

To configure drag and drop, complete the following steps.

Prerequisite: You have created a view model for the grids for which drag and drop should be available.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select the view model of the source grid (the one that will be copied from) and double-click the **Drag and Drop** dialog structure menu.
3. In change mode, add a new entry.
4. In the **D&D target** field, enter the target grid (the one that will be copied to).
5. Select the new entry and double-click the **Drag and Drop mapping** dialog structure menu.
6. In change mode, add a new entry.
7. Enter the **Source Field Name** and the **Target Field Name** of the fields whose values should be copied. Check the **Overwrite** option to overwrite an existing value in the target field.
8. Click **Save**.

Match line items

You can configure a mechanism to automatically indicate matching lines in grids. For example, when the user selects a Goods Receipt or Order Confirmation line item, the corresponding purchase order line item is automatically highlighted in the **PO Items** grid. By default, line item matching is configured to match Goods Receipt and Order Confirmation line items with PO items, and to match Payment Advice line items with Open items. You can configure line item matching for other grids and process types, where appropriate.

To configure line item matching, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. If you have not already done so, create a view model for the grid for which you want to enable line item matching. This is the source grid, that is, the one in which the user selects a line item.
3. Select the view model of the source grid and double-click the **Customer line item matching** dialog structure menu.
4. In change mode, add a new entry.
5. In the **Target grid** field, enter the grid in which corresponding lines will be highlighted.
6. Enter the **Source Field Name** and the **Target Field Name** of the fields whose values should match. PROCESS DIRECTOR requires a unique key in order to match the lines. In some cases, this unique key can be provided by just one field; in other cases, you may need to specify two or more fields to enable unique identification of matching lines.
7. Click **Save**.

Configure entry templates

What is an entry template?

An entry template is a set of default values that the user can insert into a document to speed up manual data entry. Usually, the document user uses the entry template field's search help to pick the appropriate template to apply. An entry template display field provides a search help offering both user-specific and system entry templates. From a user perspective, both template types are fully equivalent, except for the way in which they are maintained.

User-specific templates are created, owned and maintained by each individual user using the toolbar button  . They are only available to their owner. System entry templates are defined and maintained by the implementation consultant.

Create an entry template display field

To create an entry template display field, complete the following steps.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. If you do not have a customer view model for the grid, create one.
3. Select the view model component and double-click the **Field catalog** dialog structure menu.
4. Add a new field (naming proposal: `ZZ_TEMPLATE`).
5. In change mode, configure the following required fields with these settings:

- **Output Options of Columns** > **Input field**: Select this check box.
- **Parameters for Fields Without DDIC Reference** > **Data element F1**: Set it to: `/EBY/PDVI_DENTRY_TEMPLATE`.
- **Search help**: Set this to: `/EBY/PDVI_HENTRY_TEMPLATE`.

6. Optional. In change mode, override the default values using the **Texts** field. The field labels will default to the ones specified in DDIC data element definition, but if you need to, you can override the defaults here.
7. Double-click the **Search help** dialog structure menu.
8. In change mode, add a new entry.
9. Manually enter the search help parameter names, the assignment table, and the assignment field.

Search help param.	Assignment table	Assignment field
`TEMPLATE_ID`	the view model's display structure name	the entry template field name, e.g. `ZZ_TEMPLATE`
You can specify up to nine parameters: `VALUE1` to `VALUE9`	the view model's display structure name	the display structure field that you want to map the given search help parameter to

10. Save your changes.

Create an entry template maintenance button

You only need to create an entry template maintenance button if you want to allow user to maintain their own entry templates for an entry template display field.

To create an entry template maintenance button, complete the following steps.

1. Add a new field (naming proposal: *ZZ_TEMPLATE_MAINTAIN*) to the customer view field catalog containing the entry template display field for which you want to enable user template maintenance.
2. In change mode, configure the field with these settings, then save your changes.

Required settings	
Action	Set this to: *MAINTAIN_ENTRY_TEMPL Maintain entry templates*
Output Options of Columns > Tech. field	Check this checkbox.
Icons > Use icon?	Check this checkbox.

Icons > Icon 1	Recommended icon: *@Q1@* ( ).
Texts > Tool tip	Recommended text: *Maintain entry template*

Create an entry template

System entry templates are specified by the implementation consultant, and will be globally available to all users of the specified type.

Prerequisite: You must have already defined an entry template in the field catalog of the customer view model.

To create an entry template, complete the following steps.

1. Enter SAP transaction `/EBY/PDVI_ENTRY_TEMPL`.
2. Enter the following information:

Required settings	
Object type	The process type for which you want to maintain system entry templates.
Logical level	Use search help to pick the logical level containing the entry template field for which you want to maintain system entry templates.
Component type	The component type of the customer view model containing the entry template field for which you want to maintain system entry templates.
Restrict to user type	You can restrict the user type for which the maintained system entry templates will be available.

3. Click the **Execute** button to run the maintenance report.

A popup appears. Here, all currently defined templates for the entry template field(s) defined for the given object type, component type and logical level are available for maintenance.

4. Click the button to add a new line.
5. Enter a name for the template and the default values for the given fields.
6. Click the **Continue** button to save your changes.

Exclude fields from document copies

You can exclude specific fields when users copy a document. For example, you might not want the value in the **Vendor** field to be transferred to the new document when a document is copied.

To exclude a field from document copies, complete the following steps.

1. In the IMG, select **Change system settings > Model > Excluded objects (fields) being copied** (`/EBY/PDBO_VECOC`).
2. In change mode, add a new entry.
3. Select the appropriate logical level and field name that you want to exclude.
4. Click **Save**.

Define text types

You can configure the text types that are to the user in the PROCESS DIRECTOR header and item texts dialog boxes. This includes PROCESS DIRECTOR notes (text object /EBY/PD). PROCESS DIRECTOR transfers texts to SAP when the document is posted, as opposed to PROCESS DIRECTOR notes, which are archived in a PDF document upon posting, but not sent to SAP.

To define supported text types, complete the following steps.

1. In the expert IMG, click **Change system settings > Model > Supported text types for specific objects** (`/EBY/PDBO_VTIDC`).
2. In change mode, add a new entry.
3. Enter the settings, then save your changes.

Note: When posting a PROCESS DIRECTOR requisition as an SAP requisition or purchase order, PROCESS DIRECTOR uses the standard SAP copying options for item texts defined in table T165P.

Customize message texts

Users in the SAP GUI can send messages relating to a PROCESS DIRECTOR document to people within their organization or to people outside the organization.

You can provide predefined texts for these messages, which users can then edit as required. You can create your own texts or copy and edit the provided sample text objects.

Sample text object	Description
`/EBY/PDBO_DISPATCH_SAMPLE`	Sample text for the message text area.
`/EBY/PDBO_DISPATCH_USER`	Sample text for the **Sender** text area.
`/EBY/PDBO_DISPATCH_CUSTOMER`	Sample text for the **Recipient** text area.

You can use placeholders in message texts to insert variable data. For example, the placeholder *&SENDER-ADDRESS-FIRSTNAME&* will be replaced in the output by the first name of the user that creates the message and the placeholder *&SENDER-ADDRESS-LASTNAME&* will be replaced by the user's last name:

```
We are pleased to confirm your order:
Number: &HEADER-PURCH_NO_C&
Date:   &HEADER-PURCH_DATE&
```

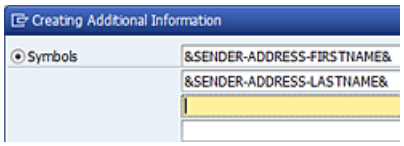
See the *PROCESS DIRECTOR Reference Guide* for more information on the available pre-defined texts and placeholders.

To customize message texts, complete the following procedures.

Create a message text

To create a message text, complete the following steps.

1. Go to transaction SE61.
2. Enter a name for your new documentation object and click the **Create** button. Alternatively, enter the name of a sample text and click the **Copy** button.
3. Type or edit the text. To insert a placeholder, click the **Insert Command** button and in the **Symbols** text box, type the placeholder name.



4. Click the **Activate** button to save your text as an active version.

Assign a message text to a document type

To assign a message text to a document type, complete the following steps.

1. In the IMG, click **Additional settings > Mail and communication > Message administration** (/EBY/PDB0_VDPSC).
2. In change mode, add a new entry.
3. Configure the message settings, then save your changes.

Tip: You can define configuration criteria to determine whether a message is available or not based on specific values.

Configure attachments

Connect attachments to SAP business objects

Attachments to PROCESS DIRECTOR documents can be connected to the corresponding business objects in SAP so that they can be viewed from within the SAP documents via the **Services for object** > **Attachment list** menu.

PROCESS DIRECTOR provides a standard system configuration that determines which business objects are connected to a specific PROCESS DIRECTOR document type. For example, a Goods Receipt document connects to the SAP business objects *BUS2017*, *MKPF* and *BUS2012*.

The archiving key structure maps the key fields of the SAP business object to the corresponding PROCESS DIRECTOR fields.

Creating an archiving key structure

To override the standard settings and create your own archiving key structure, complete the following steps.

1. In SW01, display the SAP business object to determine the key fields.
2. Create a new structure.
3. In the **Component type** field, enter the SAP key field(s).
4. In the **Component** field, enter the corresponding field(s) from the appropriate PROCESS DIRECTOR interface structure. The names of the interface structures are listed in the reference section for the process type under *Document model customization* (see the *PROCESS DIRECTOR Reference Guide*).
5. Click **Save**.

Connecting the business objects

To connect the business objects, complete the following steps.

1. Go to the /EBY/PDBO_VARC transaction (**Change system settings** > **Model** > **Related business objects for archiving**).
2. In change mode, add a new entry.
3. Select the logical level at which the SAP business object's key field(s) is located in PROCESS DIRECTOR.
4. Select the appropriate archiving key structure and SAP business object type.
5. Select the activity **PD object can connect**.
6. Click **Save**.

Configure IDoc image attachments

For documents received via EDI, you can configure PROCESS DIRECTOR to automatically create an attachment that visualizes the document. To users, this looks very similar to the images of scanned documents that they may be used to with other process types, and it can assist them in correcting errors and processing the document.

PROCESS DIRECTOR uses a Smart Form to create the attachments on transfer of the IDocs into PROCESS DIRECTOR. The partner data is taken directly from the IDoc, while the rest of the data, such as the line items, are taken from the mapping.

A pre-defined Smart Form, */EBY/PDSO_EDI*, is available for Customer Orders. For other process types, you must create your own Smart Form.

To configure attachments for IDocs, complete the following steps.

1. In transaction 0AC2, create an archiving document type for EDI Smart Forms, for example, *ZEPD_EDI*.
2. In transaction 0AC3, link the archiving document type to the appropriate PROCESS DIRECTOR process type, for example, */EBY/PDSO*.
3. In the IMG, click **Initial settings > Process parameters > Archiving** (`/EBY/PDBO_EPC_ARCHIV`).
4. In change mode, for the **Archive settings for EDI data** process, click the **Current parameters** button.
5. In the **Customer parameters** dialog box, in the **Doc. type** field, enter the name of the archiving document type that you created in 0AC2.
6. In the **Form name** field, enter the name of the Smart Form that will be used to create the IDoc attachments.
7. Click **Save**.

Configure a cover sheet

You can configure PROCESS DIRECTOR to automatically create a cover sheet for request-driven documents when these are saved in the Web Application. This enables users to attach scanned paper documents to the PROCESS DIRECTOR document. The cover sheet, which uniquely identifies the PROCESS DIRECTOR document, is printed and scanned together with the paper document using the Rescan process. The scanned document is then available as an attachment to the PROCESS DIRECTOR document.

PROCESS DIRECTOR provides Smart Form templates for creating the cover sheet, which you can use as is or adapt to your requirements. The names of these templates begin with */EBY/PDBO_COVERSHEET*.

To configure a cover sheet, complete the following steps.

1. In transaction 0AC2, create an archiving document type for cover sheets with the *PDF* document class, for example, *ZEPD_CS*.
2. In transaction 0AC3, link the archiving document type to the appropriate PROCESS DIRECTOR process type, for example, */EBY/PDPO*.
3. In the IMG, click **Initial settings > Process parameters > Archiving** (`/EBY/PDBO_EPC_ARCHIV`).
4. In change mode, for the **Cover sheet properties** process, click the **Current parameters** button.
5. In the **Customer parameters** dialog box, in the **Doc. type** field, enter the name of the archiving document type that you created in 0AC2.
6. In the **Form name** field, enter the name of the Smart Form that will be used to create the cover sheet.
7. Click **Save**.

Configure Rescan (late archiving)

What is Rescan?

The Rescan function (also known as late archiving) in PROCESS DIRECTOR enables users to attach scanned paper documents to an existing PROCESS DIRECTOR document.

You need a dedicated Rescan profile in the ReadSoft capture software (for example, in the INVOICES Scan module), and Rescan must be configured in PROCESS DIRECTOR.

The user either notes down the number of the PROCESS DIRECTOR document to which the scanned document should be attached, or prints a cover sheet, then delivers the paper document along with the cover sheet or PD document number to the Scan operator.

The Scan operator scans the document and the cover sheet, if provided. If a cover sheet is provided, the PROCESS DIRECTOR document number is read directly from the cover sheet. Otherwise, the Scan operator is prompted to enter the PROCESS DIRECTOR document number.

The scanned document is transferred to PROCESS DIRECTOR and is automatically attached to the PROCESS DIRECTOR document. If the document was already posted, the attachment is also available in the corresponding SAP document.

Configure Rescan

To configure Rescan in PROCESS DIRECTOR, complete the following procedures.

Create a mapping definition

To create a mapping definition, complete the following steps.

1. Go to the `/EBY/PDBO_VMAPC` transaction (**Initial Settings > Mapping > Map external data to PD documents**).
2. In change mode, click the **New Entries** toolbar button.
3. Select the appropriate origin (*INVOICES* or *DOCUMENTS*) and in the **Mapping ID** field, enter the name of the Rescan profile, as defined in INVOICES or DOCUMENTS.
4. Add the PROCESS DIRECTOR document number field *NUMBR* and the corresponding INVOICES or DOCUMENTS field name:

Map external data to PD documents

Origin	Mapping ID	Node ID	Parent	Logical le...	Field Name	Sub...	G...	External field name
03 ReadSoft INVOICES...	PD_RESCAN	SINGLEITEM		HEADER	NUMBR			PD_Doc_Number

You can also use the *GUID* field (this must be typed in; it is not available in the search help).

5. Save your changes.

Activate the Rescan process

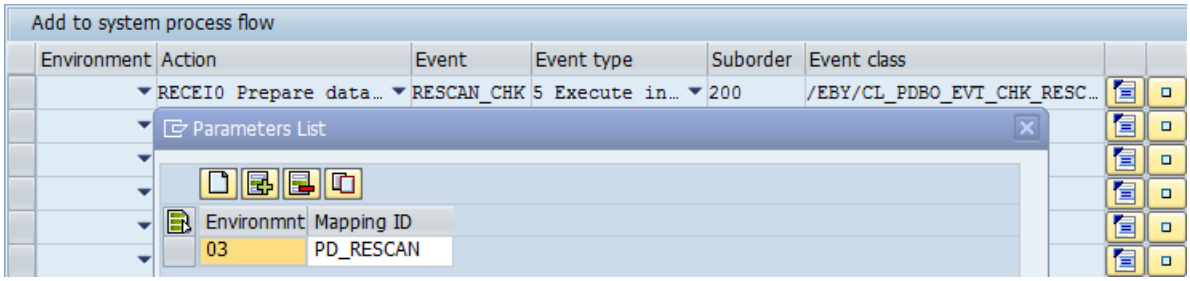
To activate the Rescan process, complete the following steps.

1. Go to the `/EBY/PDBO_VPROC_ACT` transaction (**Change system settings > Processes > Customize processes - all, in list**).
2. In change mode, add a new entry.

3. Enter the following:

Environment	Action	Event	Event type	Suborder	Event class
	RECEI0	*RESCAN_CHK*	5 Execute instead of	*200*	*/EBY/CL_PDBO_EVT_CHK_RESCAN*

4. Click the **Parameters** button and enter the appropriate environment (*03 INVOICES* or *01 DOCUMENTS*) and your mapping ID.



5. Click **Save**.

Assign a mapping ID for the RESCAN process

To assign a mapping ID for the RESCAN process, complete the following steps.

1. Go to the `/EBY/PDBO_EPC_ARCHIV` transaction (**Initial Settings** > **Process parameters** > **Archiving**).
2. In change mode, for the **Mapping ID for RESCAN process**, click the **Current parameters** button.
3. In the **Customer parameters** dialog box, click the **New line** button.
4. Enter the environment and mapping ID.
5. Click the **Continue** button.

Configure Web Application attachment deletion

You can configure which type of attachments users can delete in the Web Application. For example, you can allow users to delete normal PDF attachments, but not the PROCESS DIRECTOR workflow log or the document image.

Note: These settings do not override authorizations set by the SAP authorization object *S_WFAR_OBJ*. If this authorization object does not permit a user to delete a specific document type, they also cannot delete that document type in the Web Application, irrespective of the deletion settings in PROCESS DIRECTOR.

To configure Web Application attachment deletion, complete the following steps.

1. Go to the `/EBY/PDWA_CDATTC` transaction (**Change system settings > Web application > White list - control of attachments deletion**).
2. In change mode, add a new entry.
3. Enter the process type and the archiving document type that users should be able to delete. Leave the object type blank to allow deletion for all process types.
4. Select the appropriate deletion flag.
   - To delete both the link to the archive and the archive object itself, select **2 Background (without popup), deletion of link and archive obj**.
   - To delete only the link to the archive, select **3 Background (without popup), deletion of link**.

   Do not use options 0 and 1; they are not applicable.
5. Repeat steps 2 and 3 for all processes and document types for which deletion should be allowed.

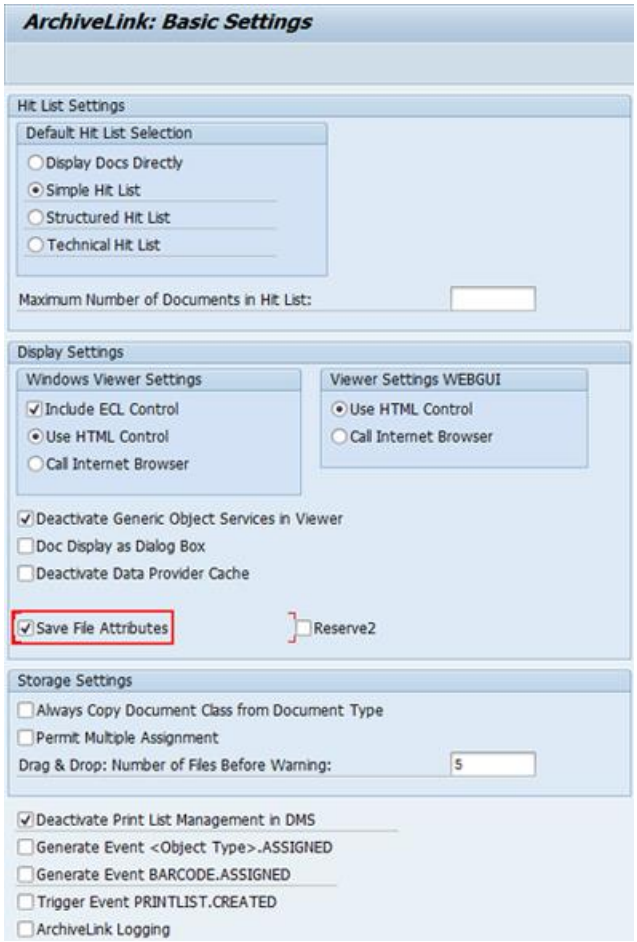
Note: If you do not add any entries here, all attachment types can be deleted, provided that the user has the SAP authorization for the document type.

Configure attachment descriptions in the Web Application

In SAP versions ECC600 and higher, attributes such as the file name and a description, can be added to attachments.

Prerequisites

- OSS Notes 1451769 and 1560955 are implemented
- The **Save File Attributes** flag is selected in the `OAG1` transaction



PROCESS DIRECTOR also supports attachment attributes in the Web Application. You can configure the attachment description in the Web Application to be hidden, mandatory, displayed but not editable, or displayed and editable for specific archiving document types.

To configuration attachment descriptions in the Web Application, complete the following steps.

1. In the expert IMG, click **Change system settings > Processes > Customize object type independent processes - all, in list** (`/EBY/PDBO_VPROC_NO_A`).
2. In change mode, add a new entry.
3. Enter the following values.

Field	Description
Environment	*WA Web Application*
Action	*WA_DEFLT_POSTPROCDOC*

Event	*WA_ADD_UPLOADINFO*
Event type	*5 Execute instead of*
Suborder	*500*
Event class	*/EBY/CL_PDWA_EVT_WDTXML_UPLOAD*

4. Click the **Parameters** button and select the desired document type and edit mode.

Exclude attachments from document copies

You can prevent attachments from being copied when users copy a document.

SAP GUI

To exclude attachments in the SAP GUI, complete the following steps.

1. In the IMG, click **Initial settings > Process parameters > Other** (`/EBY/PDBO_EPC_OTHER`).
2. In change mode, for the action **Copying existing object**, click the **Current parameters** button.
3. In the **Item list**, select **Excluded ArchiveLink document types**.
4. Add the document types that should not be copied.
5. Click **Save**.

Web Application

To exclude attachments in the Web Application, complete the following steps.

1. In the expert IMG, click **Change system settings > Processes > Customize processes - per action** (`/EBY/PDBO_VPROC`).
2. For the environment **Web Application**, select the *COPY_OBJECT* action.
3. Double-click the **Add to system process flow** dialog structure menu.
4. In change mode, add a new entry.
5. Enter the following values.

Field	Value
Event	*COPY_OBJECT*
Event type	*5 Execute instead of*

Suborder	*100*
Event class	*/EBY/CL_PDBO_EVT_COPY_OBJECT*

6. Click the **Parameters** button.
7. In the **Parameters list**, select **Excluded ArchiveLink document types**.
8. Add the document types that should not be copied.
9. Click **Save**.

Sort attachments

When attachments to PROCESS DIRECTOR documents are displayed, they are sorted according to the attachment dates. You can specify if the oldest or newest attachment should be displayed at the top of the list.

To configure the sort order of attachments, complete the following steps.

1. Go to the `/EBY/PDBO_EPC_ARCHIV` transaction (**Initial Settings** > **Process parameters** > **Archiving**).
2. In change mode, for the **Sort order of attachments (old -> new)** process, click the **Current parameters** button.
3. In the **Customer parameters** dialog box, in the **Sort indicator** field, use the search help to select the sort order that you want to apply. An **X** indicates a descending order.
4. Click the **Continue** button.

Enable upload from external files

About uploading from external files

You can allow users to upload line item data to an existing PROCESS DIRECTOR document, or to create new PROCESS DIRECTOR documents, by uploading data from an external file. When creating new documents, users can upload header and line item data, and you can define conditions for the upload.

PROCESS DIRECTOR supports upload of the file formats .asc, .cvs, .tab, .txt and .xls.

We recommend that you use UTF-8 encoding in the uploaded file. This is particularly important for non-Latin languages.

If you want to apply presets when users upload a file, configure them for the *INSERT* preset ID, not the *CREATE* preset ID.

Important: If you import currency fields, make sure you add the preset class */EBY/CL_PDBO_PRESET_CURR_OF_CC* to the presets configuration for the field and the preset ID *INSERT*. This preset class converts the currency amount to SAP internal format.

File upload for Invoice Block and Cancelation

SAP invoice documents can contain more than one line with posting key 31 and different vendor numbers. When uploading such invoices from an external file, PROCESS DIRECTOR creates different

documents for each vendor. You must include the **ITEM_NUM** field at header level in the uploaded file and the mapping configuration.

Configure the external data model for upload

Some process types are pre-configured to allow the upload of data from external files. For other process types, you must configure the external data model to allow users to upload data.

To prepare the external data model for upload of data, complete the following steps.

1. In the expert IMG, click **Default system settings > Model > Environments and external data models > external data models**.
2. In change mode, add a new entry.
3. If the required settings are not pre-configured, perform one or both of the following actions.
   - To enable line item upload, type the following values.

Field	Value
Origin	*SG SAP GUI* or *WA Web application*, depending on where you want to enable line item upload. To enable line item upload in both the SAP GUI and the Web Application, add one entry with the *SAP GUI* origin and one entry with the *Web Application* origin.
Node ID	*LISTDATA*
Parent	Leave blank.
Logical level	*ITEMS*

   - To enable document creation, type the following values.

Field	Value
Origin	*UP File upload*
Node ID	*SINGLEITEM* for header fields, *ITEM* for line item fields, *ACCOUNT* for accounting line fields.
Parent	Blank for header fields, *SINGLEITEM* for line item fields, ITEM for accounting line fields.

Logical level	*HEADER* for header fields, *ITEMS* for line item fields, ITEM_ACCOUNTS for accounting line fields.

4. Click **Save**.

Enable line item upload from a file

To enable users to upload line item data from an external file to a PROCESS DIRECTOR document, complete the following steps.

Prerequisites: You configured the external data model for file upload and set up archiving for the file formats you want to use.

1. In the IMG, click **Initial settings > Mapping > Map external data to PD documents** (`/EBY/PDBO_VMAPC`).
2. In change mode, add a new entry.
3. For each field you import, type the following values.

Field	Value
Origin	*SG SAP GUI* or *WA Web application*, depending on where you want to enable line item upload. To enable line item upload in both the SAP GUI and the Web Application, for each field in the external file, add one mapping entry with the origin *SAP GUI* and one mapping entry with the origin *Web Application*.
Mapping ID	A unique name for the mapping.
Node ID	*LISTDATA*
Logical level	*ITEMS*
Field name	The PROCESS DIRECTOR field name.
External field name	For the first field in the external file, type *FIELD01*. For the second field, type *FIELD02*, for the third field *FIELD03*, and so on.

4. Click **Save**.
5. In the IMG, click **Initial settings > Process parameters > Other** (`/EBY/PDBO_EPC_OTHER`).
6. In change mode, for the process **Parameters regarding uploaded files**, click the **Parameters** button.
7. In the fields of the **Customer parameters** dialog box, type the PROCESS DIRECTOR **Object type**, **Logical level**, **File format**, **File type**, **File separator**, **Mapping ID** and **Document type**.

8. Click the **Continue** button.
9. Click **Save**.

Enable document creation from a file

To enable users to create new documents by uploading data from an external file, complete the following steps.

Prerequisites: You configured the external data model for file upload and set up archiving for the file formats you want to use.

1. In the IMG, click **Initial settings > Mapping > Map external data to PD documents** (`/EBY/PDBO_VMAPC`).
2. In change mode, add a new entry.
3. For each field you import, type the following values.

Field	Value
Origin	*UP File upload*.
Mapping ID	A unique name for the mapping.
Node ID	*SINGLEITEM* for header fields, *ITEM* for line item fields.
Parent ID	Blank for header fields, *SINGLEITEM* for line item fields
Logical level	Logical level to which the field belongs, such as *HEADER* or *ITEMS*.
Field name	The PROCESS DIRECTOR field name.
External field name	For the first field in the external file, type *FIELD01*. For the second field, type *FIELD02*, for the third field *FIELD03*, and so on.

4. Click **Save**.
5. In the expert IMG, click **Additional settings > Other > File upload** (`/EBY/PDBO_VC_FILEUP`).
6. In change mode, add a new entry.
7. Type a **File upload ID** and **Description** and select the **File format**, **File separator**, **Mapping ID** and **Document type**.
8. Select the new entry and double-click the **File upload: Levels** dialog structure menu.
9. In change mode, add a new entry.

10. Select a **Logical level** and in the **Col. from** and **Column to** fields, type the column numbers in the external file that contain data for this level.
11. Optional. In the **Key col.** field, type the column number in the external file that indicates a new entry for the logical level. If there is no entry in this field, each valid line in the external data file creates a new entry for the logical level.
12. Optional. Configure conditions for the file upload.
13. Click **Save**.

Configure conditions for document creation from a file

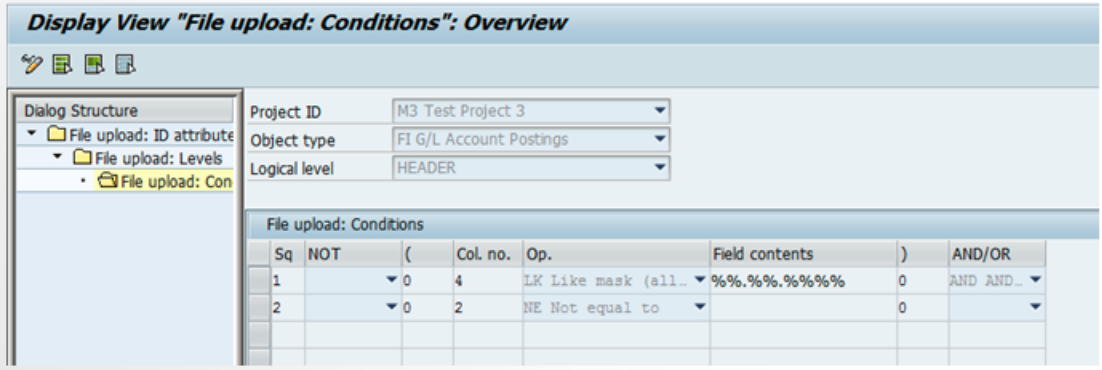
You can define conditions for the creation of documents from an external file. PROCESS DIRECTOR only adds data lines to which the conditions apply to the PROCESS DIRECTOR document.

To define conditions for document creation, complete the following steps.

1. In the expert IMG, click **Additional settings > Other > File upload** (`/EBY/PDBO_VC_FILEUP`).
2. In change mode, add a new entry.
3. Type a **File upload ID** and **Description** and select the **File format**, **File separator**, **Mapping ID** and **Document type**.
4. Select the new entry and double-click the **File upload: Levels** dialog structure menu.
5. In change mode, add a new entry.
6. Select a **Logical level** and in the **Col. from** and **Column to** fields, type the column numbers in the external file that contain data for this level.
7. Optional. In the **Key col.** field, type the column number in the external file that triggers a new entry for the logical level. If there is no entry in this field, each valid line in the external data file triggers a new entry for the logical level.
8. Optional. Select the new entry and double-click the **File upload: Conditions** dialog structure menu.
9. Optional. Define the file upload attributes and levels.
10. Click **Save**.

(Optional) Configure conditions for the file upload

For each logical level, it is possible to define conditions. If conditions are entered, a data line in the file will be considered valid only if the conditions are satisfied. If the data is invalid for a logical level, the data of the subordinate levels will also be considered invalid.



In this example, a valid header line must have the %%.%%.%%%% pattern in column 4, where % represents any alpha numeric character, and it also must have a value other than space in column 2. Column 4 is expected to be a date field, and this is set in the mapping by using the `/EBY/PDBO_MAF_DATECONVERT` mapping conversion function. At this level, only the pattern can be checked.

Define configuration criteria

The following functions in PROCESS DIRECTOR can be controlled by configuration criteria, which determine whether the functions are executed or not based on specific field values. You can define up to three criteria for each of these functions.

- Presets
- Checks
- Determinations
- Excluded actions
- Field statuses mapped to document status
- Messages
- Rejection reasons
- Workflows

To define configuration criteria, complete the following steps.

1. In the expert IMG, click **Change system settings > Configuration criteria > Configuration criteria** (`/EBY/PDBO_VCRFC`).
2. In change mode, add a new entry.
3. In the **Dispatcher** field, select the function for which the criteria should be available.
4. In the **Order** field, enter a number to specify the order in which the fields will appear in the configuration screen, for example, 1 for the first field, 2 for the second field, and 3 for the third field. This is also the order in which the criteria will be evaluated.
5. Enter the field name to be used as a criterion. The actual field values are entered in the relevant configuration screen.
6. Click **Save**.

Configure rejection reasons

You can configure PROCESS DIRECTOR to ensure that users enter a predefined rejection reason, a note, or both when they reject a document.

Notes:

- This applies to rejecting a document via the **Document > Reject** menu, not to rejecting a document in a workflow.
- Depending on the process type, you may need to activate the **Reject** command on the **Document** menu in the SAP GUI. For the Web Application, you need to add the **Reject document** button to the Actions bar. Document rejection is only possible in the detail view in the Web Application, not in the document list. See the *PROCESS DIRECTOR SAP Advanced Configuration Guide* for more information.

Tip: You can also use the **Rejection reason** BAdI to add your own customer logic before and after a rejection reason is entered. See the *PROCESS DIRECTOR SAP Reference Guide* for more information.

Create rejection reasons

To create a rejection reason, complete the following steps.

1. Go to /EBY/PDBO_VREJC (expert IMG > **Change system settings > Model > Rejection reasons > Rejection reason declarations**).
2. In change mode, add a new entry.
3. Specify an ID and description for the rejection reason.
4. Click **Save**.

Assign rejection reasons to document statuses

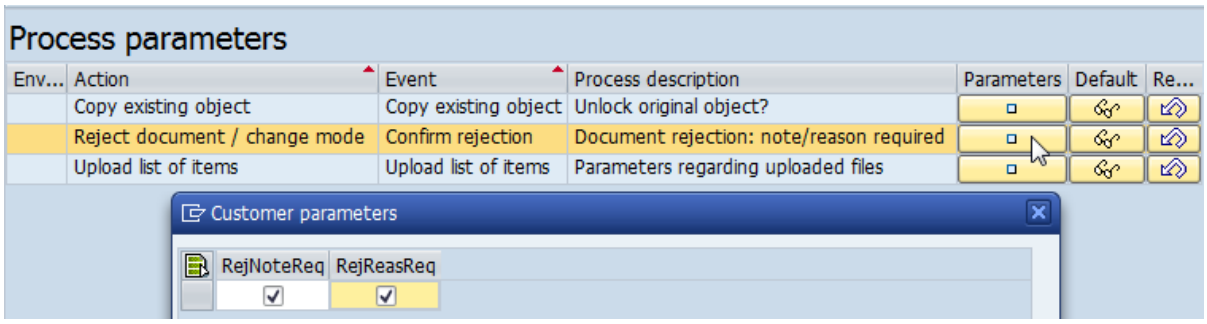
To assign rejection reasons to document statuses, complete the following steps.

1. Go to /EBY/PDBO_VROAC (expert IMG > **Change system settings > Model > Rejection reasons > Rejection reason assignments**).
2. In change mode, add a new entry.
3. Select a rejection reason. If you select a document status and/or substatus, this rejection reason will only be available when the document has this status/substatus.
4. Optionally, click **Configure criteria** to specify additional criteria for the rejection reasons.
5. Click **Save**.

Activate rejection reasons/mandatory notes

To activate rejection reasons or mandatory notes, complete the following steps.

1. Go to /EBY/PDBO_EPC_OTHER (expert IMG > **Initial settings > Process parameters > Other**).
2. In change mode, click next to the **Document rejection: note/reason required** process.
3. Select the required parameters: **RejNoteReq** (mandatory note) and/or **RejReasReq** (mandatory rejection reason).



4. Click **Save**.

Configure system messages

Filter system messages

You can set up message filters for specific messages or certain groups or types of messages. A message filter can change the message type or even remove the message entirely.

As a rule of thumb, try to define filters as specifically as possible—that is, restrict the filter to a specific action, message class and message number. For example, you might wish to suppress a specific warning that occurs when checking or posting a document. Avoid catch-all or wildcard filters—this is especially important when filtering errors.

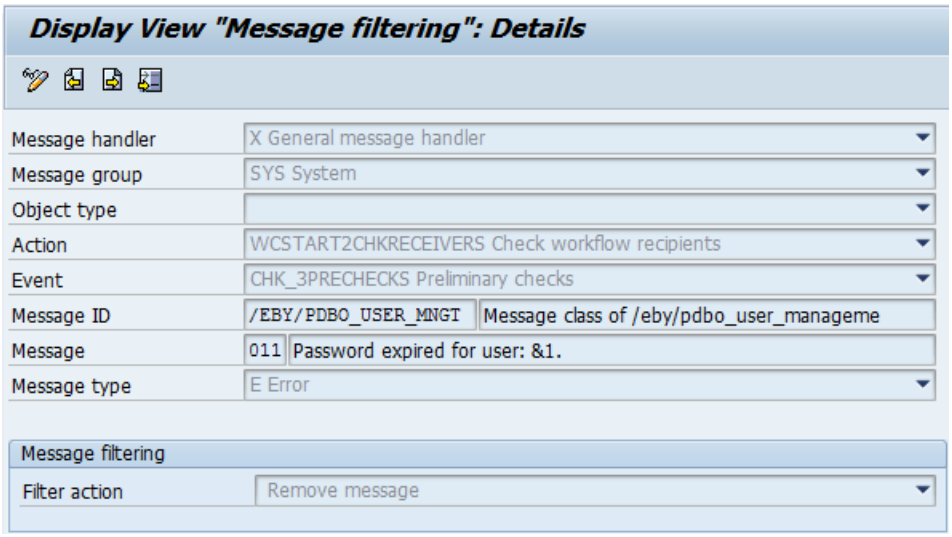
To filter system messages, complete the following steps.

1. In the IMG, click **Change system settings > Message handling > Message filtering** (`/EBY/PDBO_VMGEC`).
2. In change mode, add a new entry.
3. Add a filter, then save your changes.

Warning: Only filter success messages for the Web Application. Do not filter error and warning messages, as these can cause processes to abort without returning an error.

Example

Single sign-on is active. PROCESS DIRECTOR still checks if the SAP user account is valid. But single sign-on usually authenticates against an external system, and you get an error message from the SAP user check (for example, account expired, password expired). You can use message filters to suppress these messages.



Replace system messages

You can configure PROCESS DIRECTOR to replace specific messages with other messages for particular actions and events. This can be useful, for example, if standard SAP messages are not understandable to the user and you would like to replace them with more user-friendly versions.

To replace system messages, complete the following steps.

1. Go to `/EBY/PDBO_VMFTC` (Expert IMG > **Change system settings > Message handling > Message replacement**).
2. In change mode, add a new entry.
3. Select an action and event, or leave these fields blank if the message should always be replaced.
4. Enter the message class and number of the original message and the message class and number of the replacement message.
5. To display the original message as well as the new message, check the **Display Original Message** check box.
6. You can specify which of the original message variables (&1, &2, etc.) should be replaced by the new message variables, and which technical field names should be replaced.
7. Click **Save**.

Example

When a mandatory field is not filled in, the posting interface returns a message containing the technical name of that field, which is not usually understandable to the user. You can configure the system to replace the technical field names with descriptive labels.

For example, the SAP message 00(248) *Formatting error in the field &1; see next message* is displayed to the user as:

Formatting error in the field BSEG-SGTXT; see next message

You can replace this with the more user-friendly PROCESS DIRECTOR message `/EBY/PDBO` 124 *Field &1 is required by SAP transaction*, which displays:

Field Text is required by SAP transaction

Alternatively, you can display both the SAP message and the PROCESS DIRECTOR message:

Formatting error in the field BSEG-SGTXT; see next message

Field Text is required by SAP transaction

Configure posting

Configure posting messages

You can define which posting interface messages should be considered successful for posting, parking and other actions.

To configure posting messages, complete the following steps.

1. In the expert IMG, click **Change system settings > Posting > Message handling during posting > Message handling definition** (`/EBY/PDBO_VMEHC`).
2. In change mode, add a new entry.
3. Enter the ID and description of the actions for which you want to configure posting messages.
4. Click **Save**.

5. In the expert IMG, click **Change system settings > Posting > Message handling during posting > Message handling during posting** (`/EBY/PDBO_VMEPC`)
6. In change mode, add a new entry.
7. Enter the settings to specify the configuration for the posting interface messages.
8. Click **Save**.

Configure automatic posting on workflow approval

You can configure PROCESS DIRECTOR to automatically post documents when specific workflows are approved.

To configure automatic posting on workflow approval, complete the following steps.

1. In the expert IMG, click **Initial settings > Process parameters > Posting** (`/EBY/PDBO_EPC_POST`).
2. In change mode, for the action **Post after approve** and the process **Automatic post after workflow approval**, click the **Parameters** button.
3. Add the appropriate workflows and select the **Turn on** check box.
4. Click **Save**.

Configure automatic posting based on field values

For document-driven process types, it is possible to control whether error-free documents are automatically posted or not depending on specific field values. These values are defined in the **Allow autoposting** and **Disallow autoposting** tables.

- If a document matches a rule from the **Allow autoposting** table, it can be automatically posted. The **Disallow autoposting** table is then not processed for that document.
- If a document does not match a rule from the **Allow autoposting** table, but matches a rule from the **Disallow autoposting** table, it cannot be automatically posted.
- If a document does not match a rule from the **Allow autoposting** or **Disallow autoposting** table, it can be automatically posted.

To configure automatic posting based on field values, complete the following steps.

1. In the expert IMG, click **Initial settings > Rules > Autoposting** (`/EBY/PDBO_VAP`).
2. In change mode, add a new entry.
3. Enter the required parameters in the **Allow autoposting** or **Disallow autoposting** table.
4. Click **Save**.

Tip: You can also define the rules for automatic posting in the configuration of the `/EBY/CL_PDBO_EVT_APE_CHK` check.

Configure document splitting

You can configure PROCESS DIRECTOR to split a single document into several documents depending on the values of specific fields. The split can be performed on any second level grid (usually the **Items** grid), but not on additional grids below this level. For example, for Requisitions, the split can be performed for line items but not for accounts, schedules or conditions, because these are subgrids of the **Items** grid

and therefore not at the second level. Documents are split automatically when they are transferred to PROCESS DIRECTOR, or can be split manually by the user.

You specify the conditions for splitting by adding the fields and their values to the document splitting configuration.

- If you specify only one condition, items that meet the condition remain in the original document and items that do not meet the condition are copied into a new document and removed from the original document. The header data and data from other grids is copied into the new document.
- If you specify several conditions, items that meet the first condition remain in the original document; items that meet further conditions, and items that meet no condition, are moved into new documents.

Example 1

In this simple example, two conditions have been defined: one for items with the value 1000 in the *PLANT* field and one for items with the value 2000 in the *PLANT* field.

Document splitting condition

Group ID	Logical level	Field Name	Type	Option	Field value (Internal)	Field value (External)
1	ITEMS	PLANT	0 Fixed Value	EQ Equal to	1000	1000
2	ITEMS	PLANT	0 Fixed Value	EQ Equal to	2000	2000

This document contains line items for plants 1000, 2000 and 3000.

Items

S...	Item	Material	Mat...	Plant	Description	Order qty	SU	Net price
◇	1	ISA-2000		2000	Table	1,000		230,00
◇	2	100-500		2000	Bearing case	1,000		12,00
◇	3	100-999		1000	Napkins	10,000		4,00
◇	4	T-AS208		3000	Deluxe Taill...	1,000		68,00
◇	5	T-AS518		3000	Motorcycle...	2,000		145,00

As a result of the split:

- Item 3 will remain in the original document, because it meets the first condition (PLANT is equal to 1000)
- Items 1 and 2 will be moved to a new document because they fulfill the second condition (PLANT is equal to 2000)
- Items 4 and 5 will be moved to a new document because they do not fulfill either of the conditions

Example 2

In this example, two conditions have been defined. Each condition (specified by the group ID) has two criteria.

Document splitting condition

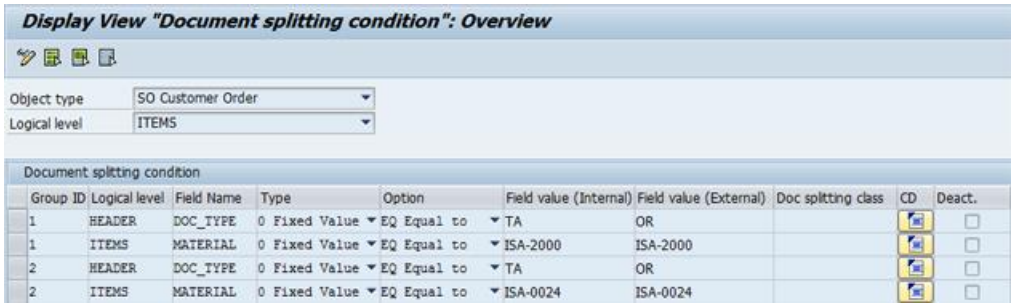
Group ID	Logical level	Field Name	Type	Option	Field value (Internal)	Field value (External)
1	HEADER	DOC_TYPE	0 Fixed Value	EQ Equal to	TA	OR
1	ITEMS	MATERIAL	0 Fixed Value	CP Contains pattern	ISA-*	ISA-*
2	HEADER	DOC_TYPE	0 Fixed Value	EQ Equal to	QT	QT
2	ITEMS	MATERIAL	0 Fixed Value	CP Contains pattern	T-AS*	T-AS*

The first condition specifies that if the document type is *OR Standard order* and the *MATERIAL* field contains a value beginning with *ISA-*, the document will be split. Items that have a value beginning with *ISA-* in the *MATERIAL* field remain in the original document; other items are moved to a new document. Documents of a document type other than *OR Standard order* containing items that have a value beginning with *ISA-* in the *MATERIAL* field will not be split.

The second condition specifies that if the document type is *QT Quotation* and the *MATERIAL* field contains a value beginning with *T-AS-*, the document will be split. Items that have a value beginning with *T-AS* in the *MATERIAL* field remain in the original document; other items are moved to a new document. Documents of a document type other than *QT Quotation* containing items that have a value beginning with *T-AS* in the *MATERIAL* field will not be split.

To configure document splitting:

1. Go to /EBY/PDBO_VDSCC (expert IMG **> Change system settings > Model > Document splitting condition**).
2. Enter the process type and the logical level on which the split will take place, for example, SO and ITEMS to move Customer Order line items into a new document.
3. In change mode, add a new entry.
4. Enter the settings to specify the conditions under which documents will be split:



Group ID	Logical level	Field Name	Type	Option	Field value (Internal)	Field value (External)	Doc splitting class	CD	Deact.
1	HEADER	DOC_TYPE	0 Fixed Value	EQ Equal to	TA	OR			
1	ITEMS	MATERIAL	0 Fixed Value	EQ Equal to	ISA-2000	ISA-2000			
2	HEADER	DOC_TYPE	0 Fixed Value	EQ Equal to	TA	OR			
2	ITEMS	MATERIAL	0 Fixed Value	EQ Equal to	ISA-0024	ISA-0024			

Document split configuration with two conditions

- Enter a number in the **Group ID** column to specify more than one criterion for a condition. The document split only takes place if all criteria in the same group are met.
- You can specify fields from different logical levels as criteria.
- You can specify fixed values, SAP values or dynamic values. Dynamic values enable you to apply your own coding to specify conditions. If you want to use your own coding, you should copy and adapt the document splitting class template */EBY/CL_PDBO_DOC_SPLIT_TEMPLT*.

Note: Do not use dynamic values together with fixed and SAP values. If you use dynamic values, do not add any fixed values or SAP values to the configuration.

- For some fields, the internal value and external value are different. For example, the internal value for the sales order document type *Standard Order* is *TA*, but the external value that is displayed in the user interface is *OR*. You must specify the internal value; the corresponding external value is automatically entered.

5. Click **Save**.

Customize actions

Exclude an action for a document status

You can exclude certain actions based on the document status or substatus of a business document. For example, it might be a customer requirement to exclude the *CHECK* action for documents that have status *NW New*.

To exclude an action for a document status, complete the following steps.

1. In the IMG, click **Change system settings > Model > Excluded actions per document status** (/EBY/PDBO_VSTEC).
2. In change mode, add a new entry.
3. Select a status and substatus (if applicable) and select the action to exclude.
4. Click **Save**.

Tip: You can define configuration criteria to determine whether an action is excluded or not, based on specific values.

Create a help text for an action

To assist users in processing documents, you can create help texts that explain what the user has to do. These texts are displayed in the **Current messages** box in the document detail view of the Web Application.

To create a help text for an action, complete the following steps.

1. In transaction SE61, create a documentation objects for the help text.
2. In the expert IMG, click **Change system settings > Processes > Action help texts** (/EBY/PDBO_VACTHC).
3. In change mode, add a new entry.
4. In the **Object** field, select the process type for which the help text should be used.
5. Select the action and the documentation object to assign to it.
6. Click **Save**.

Note: You can assign several help texts to an action. Add an entry for each text you want to use.

Process type-specific configuration tasks

Accounts Receivable

Configure line item attachment display for Accounts Receivable

With the **Attachments** icon in an Accounts Receivable line item, users can display the attachments of accounting documents that are assigned to the line item. By default, this icon is displayed regardless of whether attachments are actually available or not. You can configure PROCESS DIRECTOR to only display the **Attachments** icon if attachments are available for the item.

To configure line item attachment display, complete the following steps.

1. In the expert IMG, click **Change system settings > Presentation and interface > Customized field data display**) (`/EBY/PDBO_VDMDC`).
2. In change mode, add a new entry.
3. Enter the following values.
   - **Logical level**: *ITEMS*
   - **Conversion function**: */EBY/CL_PDPA_FILL_ITMATTIND*.

   You can leave the **Counter** field blank.
4. Click **Save**.

Customer Orders

Configure credit lock release for Customer Orders

If credit management is configured in SAP, PROCESS DIRECTOR can check credit limits for the customer and flag the PROCESS DIRECTOR Customer Order document accordingly. SAP GUI users can then release credit locks on Customer Orders in PROCESS DIRECTOR.

To configure credit lock release, complete the following steps.

Prerequisite: You have created a custom view model for Customer Orders SAP GUI header data.

1. In the IMG, click **Change system settings > Presentation and interface > Configure view model** (`/EBY/PDVI_VVMOC`).
2. Select your SAP header data custom view model and double-click the **Field catalog** dialog structure menu.
3. In change mode, add a new entry.
4. In the **Field name** field, enter **TOTSTATCCH** and click **Copy default entry**.
5. Clear the **No output** check box.
6. Click **Save**.
7. In the IMG, click **Change system settings > Model > Excluded actions per document status** (/EBY/PDBO_VSTEC).
8. In change mode, add a new entry.
9. In the **Status** field, select **OK Sales Order created**, and in the Action field, select **RELEASE_LOCK**.

10. Check the **Remove** check box.
11. Click **Save**.

The **OverallCredStat** field is now displayed in the **Sales** tab, and the **Release credit lock** button is available for posted Customer Order documents.

Electronic Bank Statements

Filter payment transactions for Electronic Bank Statements

Electronic bank statements may contain many items that are not relevant for the PROCESS DIRECTOR process, or cannot be handled by PROCESS DIRECTOR. You can therefore configure for each bank account which bank statement items are displayed in PROCESS DIRECTOR.

To filter payment transactions, complete the following steps.

1. In the IMG, click **Payment transaction filters** (`/EBY/PDES_VPTR`).
2. In change mode, add a new entry.
3. Select the appropriate application, sending bank, posting rule, and procedure for setting the posting date.

   Only items that correspond to these entries appear in the PROCESS DIRECTOR document. If you do not make any entries here, all items appear in the document.

Financial Postings

Financial Postings posting types

PROCESS DIRECTOR ships with the following posting types. You can configure these posting types to specify which transaction code, document type, transaction key, and debit and credit posting keys are used.

Process type	Posting type	Description
GL Account posting	GLAA	Aggregated accrual from PD AP
GL Account posting	GLAP	Adjustment posting
GL Account posting	GLAR	Accrual with reversal
GL Account posting	GLPR	Provision
GL Account posting	GLRA	Recurring accrual with reversal

GL Account posting	GLRE	Recurring entry
GL Account posting	GLSP	Regular posting
Customer posting	ARCR	Credit note
Customer posting	ARDI	Deferral (invoice)
Customer posting	ARIN	Invoice
Customer posting	ARRI	Recurring invoice
Customer posting	ARWO	Write-off

The posting types *GLRE Recurring entry*, *GLRA Recurring accrual with reversal*, and *ARRI Recurring invoice* serve as templates for the creation of documents. You can schedule the */EBY/PDFI_GEN_RECURRING_DOCS* program to create the documents.

For provisions, you can schedule the */EBY/PDFI_PROVISION_REMINDER* program to send email notifications when the validity date in the posted provision document is exceeded.

See the *PROCESS DIRECTOR Reference Guide* for more information on these programs.

Configure Financial Postings posting types

For each G/L Account Posting and Customer Posting type, you can change various settings, such as the transaction code or the posting keys used. You can also create new posting types.

Change settings

To change settings, complete the following steps.

1. Go to `/EBY/PDFI_PTYPEC` (G/L Account Postings) or `/EBY/PDFIC_PTYPEC` (Customer Postings) (**Financial Postings specific settings > Change system settings > Posting type configuration**).
2. In change mode, add a new entry.
3. Enter the required settings.
4. Click **Save**.

Create a new posting type

To create a new posting type, complete the following steps.

1. Go to `/EBY/PDFI_PTYPEC` (G/L Account Postings) or `/EBY/PDFIC_PTYPEC` (Customer Postings) (**Financial Postings specific settings > Change system settings > Posting type configuration**).
2. In change mode, add a new entry.

3. Enter an ID and description for the new posting type.
4. If you are creating a new posting type that requires an additional popup for the user to enter initial information before the document is created, or if the new posting type uses consumed amounts for deferrals, you must specify a reference posting type. This ensures, among other things, that the logic that creates and validates the additional popup, or calculates the consumed amounts, is also applied to the new posting type. If you do not need these features, leave this field blank.
5. Enter any other required settings. You must enter either a transaction or debit/credit posting keys. Make sure you check the **Active** check box to make the posting type available in PROCESS DIRECTOR.
6. Click **Save**.
7. Make any other necessary changes:
   - Configure excluded actions

   If your posting type is a recurring entry, you must add entries for your posting type for the document statuses *ER* and *NN* in `/EBY/PDBO_VSTEC` (**Change system settings > Model > Excluded actions per document status**), as shown in this example. This ensures that the **Link to SAP document feature** is not available for this posting type. Make sure that you check **Is prefix** to exclude all actions that begin with *FINALIZE*.

   Excl. action per object type and customer doc state/substate

Env. / All env.	Status	Substate	Post. Type	Action	Action	Is prefix	Repl./Rem.
	ER Error		GLCP	FINALIZE	Connect PD doc. to SAP doc. 1	☑	☐
	NN New or ready f…		GLCP	FINALIZE	Connect PD doc. to SAP doc. 1	☑	☐

   - Create and apply field statuses. Use configuration criteria to apply these field statuses only to your new posting type.

Set fields to clear when the posting type changes

When a user changes the posting type of a Financial Posting, it may be necessary to clear certain fields that do not apply for the new posting type. For example, when an **Accrual with Reversal** posting is changed to a **Regular** posting, the **Reversal reason** and **Reversal date** fields should be cleared. Certain fields are cleared by default (these are defined in `/EBY/PDFI_PTPC`), but you can change these settings.

To set fields to clear when the posting type is changed, complete the following steps.

1. In the IMG, click **Financial Postings specific settings > Change system settings > Fields to clear on posting type change**. (`/EBY/PDFI_PTPCC` for G/L Account Postings or `/EBY/PDFIC_PTPCC` for Customer Postings).
2. In change mode, add a new entry.
3. Select the posting type and the name of the field that should be cleared.
4. Click **Save**.

Remove duplicate messages for Financial Postings

Occasionally, when Financial Posting documents are checked, duplicate messages may be returned by the BAPI. You can configure PROCESS DIRECTOR to suppress display of the duplicates so that the message is only displayed once.

To remove duplicate messages, complete the following steps.

1. In the IMG, click **Initial settings > Process parameters > Posting** (/EBY/PDBO_EPC_POST).
2. In change mode, for the **Posting parameters** process, click the **Parameters** button.
3. In the **Item list**, select **Enable duplicate message removal** and select the **Enable** check box.
4. Optional. To specify exceptions (that is, to allow certain messages to be displayed more than once), in the **Item list**, select **Restrictions for message duplicate removal** and enter the message type, message ID and message number.
5. Click **Save**.

Tip: You can also configure duplicate message removal using the **Checks whether data can be posted** check. See the *PROCESS DIRECTOR Reference Guide* for more information on this check.

Display the Trading Partner field

After a cross-company code posting, the company codes are saved in the **Trading Partner** field. To make this information available to the user, you can change the layout to display this field on the item level.

To display the **Trading Partner** field, complete the following steps.

1. On the line items toolbar, click the **Choose Layout** button and select **Change Layout**.
2. In the **Change Layout** window, from the **Column Set** list, select **Trading Partner**, and then click the **Show selected fields (F7)** button.
3. Click the **Adopt (Enter)** button.

Generic Archiving

Configure Generic Archiving

The Generic Archiving process type (ARCH_BUS) provides a simple process for archiving captured documents. Users assign the relevant SAP business object type to the captured documents and enter the key data. They then post the document, and the archive link is created.

Configuring generic archiving requires the following steps:

1. Create a Worklist.
2. Create a field mapping.

   You only need to add the header field *OBJTYPE* to the mapping. You can map this field to an external field or use a mapping conversion.
3. Configure field data display in order to display the object description in the document list:
   1. Go to /EBY/PDBO_DVMDC (Change system settings > Presentation and interface > Customized field data display).
   2. Add the conversion function /EBY/CL_PDXY_FILL_ARCOBJ_TEXT at header level.
4. Click **Save**.

Goods Receipts

Configure colors for trigger fields

For line items in inbound deliveries, you can configure a trigger field, and also associate colors with it. When the initial value of the field is changed, the field itself or the text within the field can be displayed in a specific color.

To configure colors for a trigger field, complete the following steps.

1. In the IMG, click **Change system settings** > **Presentation and interface** > **Configure view model** (`/EBY/PDVI_VVMOC`)
2. Select the appropriate view model component and double-click the **Field catalog** dialog structure menu.
3. In change mode, add a new entry.
4. In the **Field Name** text box, use the search help to select the field that you want to configure as the trigger field.
   1. Under Other Fields, select the Trigger field color check box and click the Enter button.
   2. Configure the color, as required.
   - **Color**: Use the search help to select the color that should be used.
   - **Intens.**: If you want to intensify the color, enter 1. Entering 0 or leaving the text box empty leaves the field as is.
   - **Inverse**: Entering 1 assigns a color to the text within the field, not the cell itself. Entering 0 or leaving the field empty assigns a color to the cell, not the text.
   - **Priority**: If you define multiple trigger fields for the same line item, the color setup of the field with the highest priority is applied.
   - Click **Save**.

Payment Approvals

Retrieve payment proposal data from SAP

To make the payment proposal data from SAP available in PROCESS DIRECTOR, complete the following step.

- In transaction `SE38`, run or schedule the `/EBY/PDPR_IMPORT` program.

If you have payment proposal documents that were created in a version of PROCESS DIRECTOR prior to 7.1 Service Pack 1, you should also schedule the `/EBY/PDPR_INVOICE_UPDATER` program. This program reads the payment proposal line items and checks whether a corresponding invoice is available. If it is, PROCESS DIRECTOR saves the connection between the line item and the invoice in the database. This is necessary because prior to version 7.1 SP1, PROCESS DIRECTOR read these connections whenever users displayed a document, which had a negative effect on performance. From version 7.1 SP1, PROCESS DIRECTOR automatically saves these connections to the database.

Configure payment approval data retrieval

To configure which payment proposal data is retrieved from SAP, complete the following steps.

1. In the IMG, click **Initial settings > Process parameters > Other** (`/EBY/PDBO_EPC_OTHER`).
2. In change mode, for the **Parameters controlling document creation** process, click the **Current parameters** button.
3. Enter the parameters.

Parameter	Description
Company code	Enter a company code to retrieve only proposals for this company code.
Company Vendor Customer Payment	Check these to create individual PROCESS DIRECTOR documents for each company, vendor, customer or payment. For example, payment proposals can contain payments from more than one vendor. To create a separate PROCESS DIRECTOR for each vendor's payments, select the **Vendor** check box. To create separate documents for each payment, select the **Payment** check box.
Start date	Enter a start date to restrict the retrieved proposals to those created on or after this date.
Weeks	Enter a number of weeks to restrict the retrieved proposals. For example, if you enter 10, only proposals with a run date during the last 10 weeks will be retrieved.
Prop. only	Select this check box to retrieve only payment proposals. Clear the check box retrieve both payment proposals and payment runs.
Exceptions	Select this check box to exclude payment proposals with exceptions.
Pay. req.	Select this check box to include payment requests (transaction `F111`).

Block the payment run if the proposal is not approved

PROCESS DIRECTOR can prevent users from carrying out a payment run in transaction `F110` if the corresponding PROCESS DIRECTOR payment proposal has not been approved in the workflow.

Note: You can only activate */EBY/PDPR_F110_SJOB* in client 000, but this automatically activates it in other clients as well.

To block the payment run if the proposal is not approved, complete the following steps.

1. Go to transaction `SE19`.
2. Select the **Classic BAdI** radio button and enter the BAdI implementation name */EBY/PDPR_F110_SJOB*.
3. Click the **Change** button.

4. Click the **Activate** button.

Requisitions

Define OCI catalog settings

To use an OCI catalog with PROCESS DIRECTOR, you must specify the URL and other call-up parameters for the catalog. Apart from the assignment of the catalog to a PROCESS DIRECTOR object type, these settings are the same as SAP's catalog settings.

Note: These settings are client-specific.

To define OCI catalog settings, complete the following steps.

1. In the expert IMG, click **Additional settings > Other > OCI catalog settings** (`/EBY/PDBO_VCAT`).
2. In change mode, add a new entry.
3. Enter the catalog ID and the catalog name. The name will be displayed to users in the catalog selection dialog.
4. Click **Save**.

Enter the call parameters

You must specify the catalog URL and any other parameters that the catalog requires on call-up. The required parameters and values must be supplied by the catalog provider.

1. Click the **OCI catalog settings** dialog structure menu and select the catalog.
2. Double-click the **Call structure** dialog structure menu.
3. Enter the required parameters, then save your changes.

Assign the catalog to a PROCESS DIRECTOR object

Assigning the catalog to a PROCESS DIRECTOR object makes the catalog available for that process type. This means that once you have specified the settings, you can use the same catalog for several process types.

1. Click the **OCI catalog settings** dialog structure menu and select the catalog.
2. Double-click the **Catalog to PD object assignment** dialog structure menu.
3. In change mode, add a new entry.
4. Select a process type and save your changes.

Activate outline agreements for Requisitions

You can activate the use of outline agreements for creating requisitions. When users create a new requisition, a dialog box appears in which they can select an outline agreement or an existing purchasing document. PROCESS DIRECTOR automatically copies the data of the selected outline agreement or purchasing document to the new requisition.

To activate outline agreements, complete the following steps.

1. In the IMG, click **Initial settings > Process parameters > Other** (`/EBY/PDBO_EPC_OTHER`).

2. In change mode, for the **Deactivation of popup to select contract** process, click the **Parameters** button.
3. Clear the **Deactivation** check box.
4. Click **Save**.

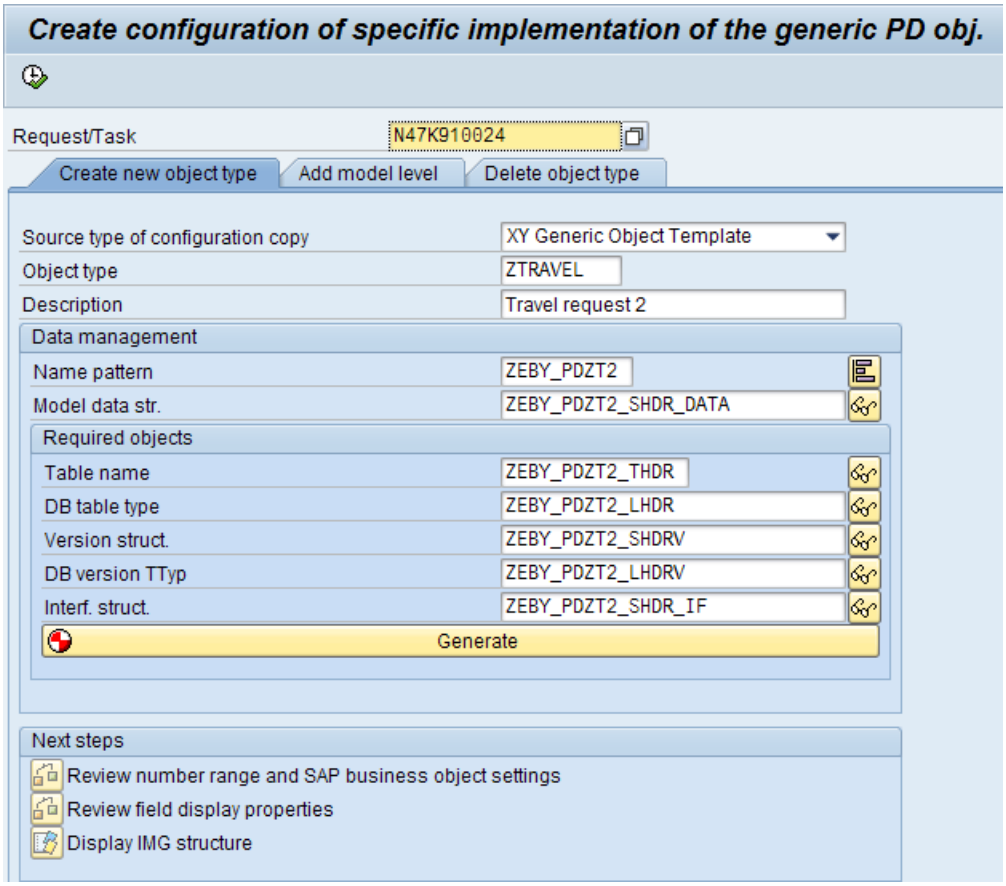
IMG reference

Settings

/EBY/PDXY_COPY

Create new object type

Example



Setting	Description
Request/Task	Use search help to pick an existing request or create a new one.
Source type of configuration copy	Unless you want to copy from an existing object type, you should set this to: *XY Generic Object Template*.
Object type	Enter a unique 2-10 character alphanumeric key. It must start with *Y* or *Z*.
Description	The description of the object type to be created.
Name pattern	The name pattern assists you in entering names for the required objects. Enter a pattern and click the **Align** button . Names based on this pattern are entered in the **Model data structure** field and in all fields in the **Required objects** section.
Model data str.	Enter the name for a structure containing the fields available on this document model level which should be persisted to the database. **Important**: This structure must already exist. For the document model level *HEADER*, you should not include any BO fields in the model data structure, as these will be automatically included in the interface structure. For new object types, the default document model level is *HEADER*.
Table name	Enter a unique name for a database table to hold header records. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button, and will have the model data structure as its line type.
DB table type	Enter a unique name for the database table's table type. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button.

Version struct.	Enter a unique name for the version structure. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button, and will include the DB table type plus a version field.
DB version TTyp	Enter a unique name for the version structure table type. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button.
Interf. struct	Enter a name for a structure with which the model can expose its own fields. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button and will include the header model data structure plus the administrative fields from the base object.

Add model level

Setting	Description
Request/Task	Use search help to pick an existing request or create a new one.
Object type	Select an object type to which you want to add model levels from the drop-down list.
Parent level of the internal data model	Select a document model level from the drop-down list to serve as the parent level for the model level you want to add.
Logical level of the internal data model	Enter an alphanumeric name for the new logical level, or use search help to pick an existing level (the level's object type must match the one selected above).
Name pattern	The name pattern assists you in entering names for the required objects. Enter a pattern and click the **Align** button . Names based on this pattern are entered in the **Model data structure** field and in all fields in the **Required objects** section.

Model data str.	Enter the name for a structure containing the fields available on this document model level which should be persisted to the database. This structure must already exist. Note that this structure is also used as the interface structure, as no administrative fields need to be exposed.
Table name	Enter a unique name for a database table to hold records of the given model level. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button, and will have the model data structure as its line type.
DB table type	Enter a unique name for the database table's table type. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button.
Version struct.	Enter a unique name for the version structure. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button, and will include the DB table type plus a version field.
DB version TTyp	Enter a unique name for the version structure table type. The name must follow the customer's development naming conventions. This object will be generated when you click the **Generate** button.

Payment transaction filters

/EBY/PDES_VPTR

Expert IMG **> Payment transaction filters**

Setting	Description
Appl	The application for which items will be filtered.
Sending bank	Use search help to select the sending bank.

Posting rule	Select the appropriate posting rule.
Text	Description of the posting rule (inserted automatically).
Posting date	Select the appropriate procedure to configure the posting date for clearing postings. Use one of the following methods. • **Posting date is not changed during posting** - The posting date of the bank statement is used. • **1 Posting date is changed to system date** - The current date is used as the posting date. • **2 Same as 1 only if the posting period is closed** - If the posting period has been closed, the current date is used as the posting date. • **3 Same as 2, but posting date is changed to 1st of month** - If the posting period has been closed, the first day of the current month is used as the posting date.

Initial settings

Licenses

Manage license keys and activate process types

`/EBY/PD_LICENSES`

Initial Settings > Licenses

Setting	Description
Object type	The process type that is to be activated. **Note**: For the *Accounts Payable* process type and its associated products, licenses are activated in `/COCKPIT/C46`.
SAP Inst Number	The SAP installation number of your system (that you provided when you ordered the license).
SAP Sys ID	The SAP system ID of your system (that you provided when you ordered the license).
Client	If the license applies only to a specific client, enter the client ID here.

State	When the license has been created, an icon is displayed that indicates the license status: •  The license is valid. A license is valid when the license key is not corrupted. •  The license key is invalid. •  The license key is valid, but is for a different system (the SAP system ID or installation number differs from that of the current system).
License key	The license key provided. This encrypted number validates the license.
License type	The type of license: **Demo**, **Test** or **Normal**.
Licensed vol.	If your license has a volume limit, enter the licensed number of documents here. This field is not available for the process type WC (global workflow license). Use the field **Workflow volume** to enter the volume for a global workflow license.
Expiration date	If your license expires on a specific date, enter the expiration date here.
Workflow active	Activate this option if your license includes the use of workflows.
Workflow volume	Enter the number of licensed documents for workflows.

Note: License counters are reset every year on 1st January to the number of purchased documents (only for licenses with no expiry date). You can view the counters for previous years by clicking the **Display counters for all years** button.

Clicking **License threshold warning recipients** allows you to customize threshold warnings so that they are displayed only to those users who are responsible for ordering the licenses, rather than to each user who starts PROCESS DIRECTOR in the SAP GUI.

List of the users who can see license threshold warnings

/EBY/PDBO_VTRU

Initial Settings > Licenses > Manage license keys and activate process types > License threshold warning recipients

Setting	Description
Processor	The ID of the user who should be notified of the license threshold warnings.
Complete name	The complete name of the user who should be notified of the license threshold warnings.
Deactivation	Selecting the **Deactivation** check box for a processor prevents that user from being able to view the license threshold warnings.

Mapping

Map external data to PD documents

`/EBY/PDBO_VMAPC`

Initial settings > Mapping

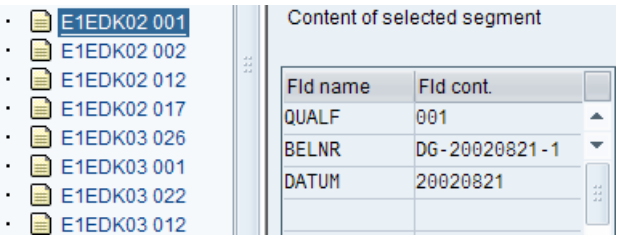
Setting	Description
Origin	For incoming external documents, select the one of the following options, depending on the source of the external data. *01 RSB* *02 PIC* *03 EICC* *ED EDI ALE IDOC Data* *UP File upload*
Mapping ID	The name of the DOCUMENTS solution specification or the INVOICES profile. For IDocs, enter a mapping ID here and enter this ID in the EDI profile. For line item upload or document creation from a file, enter the mapping ID that you specified in the upload parameters.
Node ID	This represents the level of the external structure that contains the field to be mapped to PROCESS DIRECTOR. In INVOICES 5-5, for example:

	SINGLEITEM: the field is at header level in the external system. LINEITEM: the field is at line item level in the external system. In IDocs, the node ID would be the name of the IDoc segment. For line item upload, the node ID is *LISTDATA*.
Parent	If the Node ID has a parent node in the external structure, enter the parent node here. In INVOICES 5-5, for example, a field at line item level will have the node ID LINEITEM and the parent SINGLEITEM.
Logical level	The logical level in the PROCESS DIRECTOR internal structure.
Field Name	The internal field name in the PROCESS DIRECTOR document object model.
Subnode ID	If the field is at a sublevel in the PROCESS DIRECTOR internal structure, enter the sublevel here.
Group	Grouping enables you to create more than one field in PROCESS DIRECTOR from a single field in the external system. For example, the external system may only have one type of PARTNER field, but PROCESS DIRECTOR may have three types. In this case, add three lines for the same external field and enter 1, 2 and 3 in the grouping column to differentiate the fields in PROCESS DIRECTOR.
External field name	The field name in the external system.
Check field	Only relevant for IDocs. Enter the name of the qualifier field in the IDoc segment that will be used to determine whether the external field will be mapped to PROCESS DIRECTOR. See the examples below for more information.
Check value	Only relevant for IDocs. Enter the value of the qualifier field in the IDoc segment that will be used to determine whether the external field will be mapped to PROCESS DIRECTOR.
Mapping	Here you can specify a mapping conversion function to be executed on the field. For example, you can use a mapping conversion function to automatically insert a fixed value or a system variable into the field. Click the **Map conversion functions** button to view, edit and add mapping conversion functions.

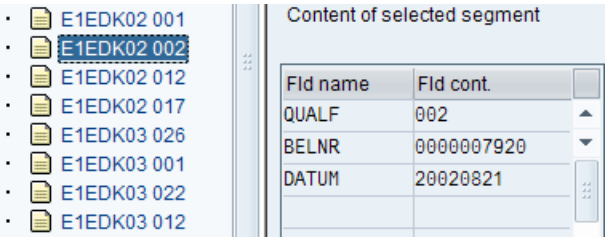
Check field and check value: examples

IDocs may contain fields that have identical names, but different contents, depending on the value of the qualifier field in the IDoc segment. The qualifier is always the first field in a qualified segment.

In this example, the field `BELNR` is contained in segments `E1EDK02 001` and `E1EDK02 002`. The value of the field `BELNR` is the purchase order number if the `QUALF` field value is 001, and the reference document number if the `QUALF` field value is 002.



Segment E1EDK02 001, qualifier = 001



Segment E1EDK02 002, qualifier = 002

If you are mapping the PROCESS DIRECTOR purchase order field to the corresponding IDoc field, you need to enter `QUALF` in the **Check field** and 001 in the **Check value** field. The `BELNR` field will then only be mapped to the PROCESS DIRECTOR field if the qualifier is equal to 001. If the qualifier is equal to 002, this line in the mapping table is ignored and the external field is not mapped.

Another example:

In segment `E1EDKA1` (document header partner information), the qualifier field `PARVW` has the value SH if the partner specified in the segment is the ship-to party and has the value SP if the partner is the sold-to party. If you need to map to the ship-to party in PROCESS DIRECTOR, enter `PARVW` in the **Check field** and SH in the **Check value** field.

See the SAP IDoc Interface / EDI documentation for more details.

Mapping conversion functions

`/N/EBY/PDBO_VMAF`

Initial settings > Mapping > Map external data to PD documents > Mapping conversion functions

Note: For request-driven process types, this configuration activity is not available in the standard IMG.

Setting	Description
Mapping	Enter a name for the mapping conversion.

Order	If a mapping requires more than one step, add each step individually and enter a number in this column to specify the order in which the steps are executed.
Mapping function	Use search help to select the function module that contains the conversion coding.
	Click this icon to view the code of the function module.
Short text	Enter a short description of the conversion function.
Parameters	Click the icon to specify parameters for the function. If parameters have already been entered, the icon color is green instead of gray: .

EDI profiles

/EBY/PDBO_VEDPC

Initial settings > Mapping

Note: The information in the **IDoc control record** section of the EDI profile must correspond to the information defined in the communication partner profile in SAP transaction WE20.

Setting	Description
Profile Name	Descriptive name for the profile.
Mapping ID	An identifier for the mapping. This ID must be entered in the mapping configuration. Click the **Mapping** button to go to the field mapping configuration.
Partner no.	Partner number of the sender of the IDoc. Along with the partner type, this number uniquely identifies the communication partner.
Partn. Type	Partner type of the sender, for example, LI for vendor or LS for logical system. The partner type determines which partner master data the IDoc interface reads.

Partn.funct.	Optional parameter that specifies the functional role of the partner, such as SH for 'ship-to party' or SP for 'sold-to party'. You only need to enter this if it is specified in the partner profile in WE20.
Message type	In EDI, message types are normally assigned to SAP document types uniquely. Their names correspond as much as possible to those of the UN/EDIFACT standard. ALE scenarios, on the other hand, often have no EDIFACT correspondence, for example when master data is transmitted. Examples: ORDERS for purchase order data INVOIC for invoice data
Message code, Msg. function	Optional parameters. If several IDoc types have the same message type, unique assignment can be maintained via the message code and the message function. You only need to enter these if they are specified in the partner profile in WE20.
Test	If a message is to be sent via IDoc for test purposes, the test flag in the partner profiles should be set. Test messages cannot be posted 'live' in IDoc inbound processing. The external system must therefore enter 'X' in the field. The field is a key field in the partner profile for both inbound and outbound processing. The remaining key fields are the three partner values (number, type and function) and the three "logical" message values (type, code and function). These seven fields therefore determine the dependent parameters, such as the port in outbound processing or the process code in inbound processing.
Post as IDoc	Activate this option if the IDoc should be posted to SAP as an IDoc. If not activated, the document will be imported into PROCESS DIRECTOR but not posted to SAP.
Process code	The process code determines which process is used to post an IDoc to SAP. Which code is entered here depends on customer requirements.
Posting copy of Data	During EDI processing an IDoc can be changed. Activate this option to post a copy of the original IDoc data instead of the changed IDoc data.
Generate SAP Data	If an IDoc is successfully posted, a new document is created in SAP. Activate this option to retrieve the data from the SAP document instead of using the data included in the IDoc.

Transfer posted IDoc	Activate this option to import all documents into PROCESS DIRECTOR. If not activated, only IDocs with errors are imported.
Stat. non posted IDoc	Once an IDoc has been processed by PROCESS DIRECTOR, it is assigned the status 53 (posted), regardless of whether it was actually posted in SAP or not. Here you can specify which status should be assigned to documents that could not be posted.

Worklist

Worklist configuration

`/EBY/PDBO_WLC`

Initial settings > Worklist

Worklist node basic data

This popup is displayed when you create a new node. To display the popup for an existing node, select the node, then click the toolbar button .

Setting	Description
Object type	Set this to the desired object type. This object type will be inherited by all subnodes of this node (if any).
Node description	This value will appear in the user's Worklist as the node name.
Auth. object	To restrict access to this node, use search help to pick an appropriate authorization object (or create one first). **Note**: Since document authorizations and customer implementations of the user exit / BAdI **Modify Worklist** take precedence over Worklist authorizations, having the proper Worklist authorization does not always mean that a user will actually be able to see or process a given document. See the *PROCESS DIRECTOR SAP Reference Guide* for more information on this BAdI. **Warning**: Unlike the Ranges configuration, the authorization object will *not* be inherited by subnodes. If access to subnodes is to be controlled, they must each be configured with their own authorization objects.
Show unauthorized	This setting is only available if you set an **Auth. object** for the node. By default, users with no display authorization for the node will not see it. If this checkbox is checked, the node will be shown grayed out and will not be double-clickable (that is, it will not display a document

	list). However, the user will still be able to expand it and access its subnodes (if any).
View name	Only required for semi-dynamic nodes, or if selection screen fields are configured. The fields in this view will be available in the **Fields and Operators** pane for defining the node's Ranges configuration. Click the button to display the fields. PROCESS DIRECTOR provides standard Worklist views for each process type: **PDnn_VWRKL**: Standard view for use with Worklist nodes (for example, nodes that display documents with a specific status). **PDnn_VWCWKL**: Standard view for use with Worklist nodes that display documents relevant to workflows (for example, documents for approval). **nn indicates the process type (for example, PO for Requisitions, DN for Goods Receipts)** **Note**: If you create your own view, make sure that it contains all fields used in the node's ranges configuration, as well as the fields *GUID*, *LFT*, *RGT* and *CREATE_TSTAMP*. If the view should be client-dependent, you must also include the field *CLIENT* and the *CLIENT* field **must** be the first field in the view. However, for improving the performance when using semi-dynamic nodes, you can omit adding the `/EBY/PDB0_TNES` table, which then invalidates the use of the *LFT* and *RGT* fields.
Node type	Select the type of node to create.
Node class	This field appears when you select the node type *O Other*. Enter a node class handler in this field. Currently this is only used when defining selection screen fields for line items.
Max. number of hits	Specifies the maximum number of documents that will be displayed in the document list for this node, and is also the default value for the **Max. number of hits** field in the selection screen. By default, the most recently created documents are displayed when this setting is applied. If you set the field attribute **Sort type** for a header field (or fields) in the field catalog, the list is first sorted by that field and then limited to the maximum number of hits. **Note**: If you enter a lower value in the **Upper limit of hits** field, this value overrides the value in the **Max. number of hits** field. An entry in the **Max. number of hits** field in the user's personal settings in PROCESS DIRECTOR also overrides this value.

Upper limit of hits	Specifies the maximum number of documents that will be displayed in the document list for this node. Enter a value in this field if you want to restrict the number of documents displayed, but do not want to set a default value for the **Max. number of hits** field in the selection screen. **Note**: An entry in the **Max. number of hits** field in the user's personal settings in PROCESS DIRECTOR overrides this value.
Sel. screen mandatory	If this option is selected, the selection screen is always displayed when the user clicks the node.
Always keep document list current and Always keep counters current	To improve Worklist performance, a buffer has been introduced for Worklist GUIDs. The system works with the buffer until you click the **Refresh** button, use the selection screen, or create a document in the Worklist node. The **Always keep document list current** and **Always keep counters current** Worklist node parameters make it possible to override the use of the buffer and access the data directly.
No counter display	By default, the node's document counter will be displayed. However, you may wish to disable this—for example, to avoid confusing users with a possible mismatch between the counter value and the total of the subnode counter values. **Best practice guideline**: Deactivate counter display unless the node is a leaf node and the document count provides useful information to the user.
Auto expanded	Only available for top-level nodes. By default, subnodes of top-level nodes are not displayed when PROCESS DIRECTOR is started. Check this checkbox to have the node automatically expanded to display its subnodes when PROCESS DIRECTOR starts. **Note**: Irrespective of this setting, the last used top-level node is automatically expanded when PROCESS DIRECTOR starts.
Disabled	If this checkbox is checked, the node will be shown grayed out and will not be double-clickable (that is, it will not display a document list). However, the user will still be able to expand it and access its subnodes (if any). This setting enables you to suppress the display of documents for the node without having to assign an authorization object to it.
Field state ID	Use the search help to select a set of field statuses that will be applied to all the document fields in that Worklist node.

Node icon	Not available for top-level nodes. By default, the node will not have an icon. If you want to specify a custom icon, you can pick one using the search help.
Transaction Code	If you specify an SAP transaction code here, the node will *not* display a document selection when double-clicked. Instead, the user will be taken directly to the specified online transaction. Since this behavior is only available in SAP GUI, make sure to suppress the display of the node in the Web Application using the **Not visible in** setting.
Control	Only required for nodes of the *IV Accounts Payable* process type. Enter the following settings. See Adding nodes for Accounts Payable for more information. • **Accounts Payable** (top-level node): ICS_DOCS • **Workflow inbox** (subnode): WC_INBOX • **Workflow history** (subnode): WC_HISTORY • **Workflow recall** (subnode):WC_RECALL
Not visible in	With this option, you can suppress the display of the node in a specific environment. By default, this option is checked for all environments except SAP GUI and Web Application. **Note**: For Worklist nodes set up prior to version 7.3, new environments (such as **Mobile Application**) are not automatically checked. You should therefore run the `/EBY/PDBO_CONFIG_WRKL_ENV_CONV` program to check the **Not visible in** option for these nodes retrospectively (unless all nodes should be shown in that environment).

Selection screen fields

Setting	Description
Table name	Usually you should set this to the Worklist node's view name. **Important note**: In case you are not using the same view for all nodes of a given document type, set this to a view containing *only* the fields that are common to *all* Worklist node views for the document type.
Field name	Use search help to pick a new selection screen field from the select table.
Long field label	This is automatically filled when you select a field name.

Order	This determines the order in which the fields are displayed in the selection screen.
No output	Only relevant for line item fields. Check this checkbox to suppress the display of the field in the selection screen dialog. This is necessary when the same field should be searched in the header and the line items, but only one input field should be displayed in the selection screen dialog.
Input type for web field	This determines the input type for the field in the Web Application.

Start-up selection screen

`/EBY/PDBO_VSSSC`

Expert IMG >Initial settings > Worklist > Start-up selection screen

Setting	Description
Object	Select the process type.
Obj. specific struc.	Name of the structure containing the field that will be displayed in the process type-specific section of the start-up selection screen.
Obj. specific field	Name of the field that will be displayed in the process type-specific section.
Order	Enter a number to determine the order in which the fields are displayed on the selection screen.
Common structure	Name of the structure containing fields that will be displayed in the **General** section of the start-up selection screen.
Common field name	Name of the field that will be displayed in the **General** section.
Input typ.	The type of field (check box, entry field, dropdown list).

Quick start menu

`/EBY/PDVI_VWLAC`

Initial settings > Worklist

Setting	Description
Component type	Select *WA_LIST WA List Header*. Other component types are currently not supported.
Node ID	Use search help to pick a Worklist node ID to which you want to switch. **Important**: If you add, remove or delete nodes in the Worklist, check this setting to ensure that the correct node is specified.
Action	• Use the *SWITCHWLNODE&CREATE* logical name to switch to the Worklist node specified in **Node ID** and create a new business document of that node's document type. • Use the *SWWLN0* logical name to switch to the Worklist node specified in **Node ID**.
Sequence	You only need to specify this if you are attaching several actions to the same Worklist node ID.
File name	A file mapping or an image file in the Web Application to be used as the display icon for the action. **Note**: You can only point to files in the Tomcat *webapps\pdweb-app\themes\procdir\images\pd\icons\big* folder here—uploading and/or maintaining images in the Web Application from within this configuration activity is currently not possible.
Obj. name	A SAP WWW gateway object. You can leave this blank.
Description for Browser Item	This is the label shown to the user by the Web Application.
Description	A tool tip/quick info label.

Rules

Autoposting

/EBY/PDBO_VAP

Expert IMG > Initial settings > Rules > Autoposting

Setting	Description
Logical level	The logical level at which autoposting should be allowed or disallowed.
Field Name	The name of the field, based on whose value autoposting is allowed or disallowed.
Option	The selection operators that are used to specify whether the values entered in the field are to be used as single values, area or search strings to limit the data selected. The following operators are provided: EQ: Equal NE: Not Equal BT: Between NB: Not Between LT: Less Than LE: Less Equal GT: Greater Than GE: Greater Equal CP: Contains Pattern NP: Not contain Pattern
Values from	The lower limit of the field value.

Presets

/EBY/PDBO_VPSVC

Initial settings > Rules

Setting	Description
Preset ID	The preset ID determines when the preset is applied. For example, to apply the preset when a document is created, select *CREATE*; to apply the preset when the document is saved, select *UPDATE*. **Note:** In SAP GUI, a *CREATE* preset with non-header level presets (for example, for the logical level *ITEM*) will only be applied to the first non-

	header level item, not to items added after the document has already been created.
Logical level	The logical level to which the preset should be applied. **Note**: Presets for fields of a logical level that can have multiple objects will cause that level to be populated with a new object if none exists yet. For example, a preset for *QUANTITY* in *ITEM* will cause a new line item to be created in order to be able to populate its *QUANTITY* field. However, if objects of that logical level already exist, no new line items will be created—the preset will only be applied to the existing items.
Field Name	The name of the field to which the preset will be applied. Leave this field blank for the preset type **Dynamic value**.
Order	This only needs to be specified if you have defined several presets for a field that need to be applied in a certain order. For example, you may want to apply a dynamic preset first and default to a fixed value if the dynamic preset did not provide a value. The preset with the highest order number is the last one performed.
Type	Type of value to insert: a fixed value, an SAP SY system variable, or a dynamic value calculated by a preset class.
Field Value	The value to enter here depends on the preset type. • **Fixed Value** preset type The value to preset in the document field set in **Field Name**. • **SAP Value** preset type The name of an SAP SY system variable, such as: *SY-UNAME* for the SAP user name (works in SAP GUI only - using this is not recommended) *SY-DATUM* for the current date *SY-UZEIT* for the time **Dynamic Value preset type** **Leave this field blank.**
Preset class	To insert a dynamic value, use search help to select a preset class. Leave this field blank for fixed and SAP values.
Overwrite value	By default, the preset will not overwrite any pre-existing field values. Check this box if you wish to allow this behavior.

Create initial object (line)	Check this box to create a new line when the preset is applied. For example, if you create a preset for a field at line item level and check this box, a new line item will be added that contains the preset value(s). **Note**: If you have presets for several fields at this level, you need to check this box for at least one preset, otherwise a new object will not be created.
Deact.	By default, the preset will be active. However, if you wish to deactivate it (for example, for debugging purposes), check this box.

Note: Keep in mind that since the BAdI **Initialize values** implementations will be called **after** presets are applied, any preset values configured here can be overridden with defaults supplied by a customer implementation of the *INITIALIZE_VALUES* interface method. See the *PROCESS DIRECTOR SAP Reference Guide* for more information on this BAdI.

Checks

`/EBY/PDBO_CHC`

Initial settings > Rules

Check settings

Setting	Description
Environment	If this is left blank, the check will be run in every environment. This is the default. If you specify an environment, the check will only be run in that environment.
Action	You can use search help to pick an action into which the check event should be inserted. For example, if you want the check event to be triggered when a user clicks the toolbar button , pick the action CHECK Check document or CHECKM Check documents (multiple), as appropriate.
Suborder	If several checks are configured for the same action, the suborder defines their order of execution. You can use the arrow buttons to change the suborder.
Check ID	Use search help to pick the check event you want to activate for that action. You can pick from a list of check events available for that process type.

Result message parameters

Setting	Description
Use default	Recommended setting
Warning	If you want to reduce messages that would normally be of type *Error* to type *Warning* for example, because you don't want a check to prevent document posting by generating errors. Warning or success messages will not be affected by this.
Success	If you want to temporarily deactivate the check for test or debugging purposes

Determinations

`/EBY/PDBO_DEC`

Initial settings > Rules

Determination selection

Setting	Description
Environment	If you leave this setting blank, the determination will be run in every environment. This is the default. If you specify an environment, the determination will only be run in that environment.
Action	Use search help to pick an action into which the determination should be inserted.
Suborder	If several determinations are configured for the same action, the suborder defines their order of execution. You can use the arrow buttons to change the suborder.
Determ. ID	Use search help to pick a determination. You can pick from a list of determination events available for that process type.

Result message parameters

Number of results	Default message type
1 result	*S Success*
0 results	*E Error*
Many results	*W Warning*

Configure searches

Setting	Description
Search ID	Use search help to pick a search ID.
Weight of search	The value determines the number of points each result in this search's result set will receive, if (and when) the total relevance of each result is computed.
When to finish	**1 Terminate if there is one result** If the determination result set contains exactly one result, the determination is finished—that is, no remaining searches for the determination (if any) will be executed. Otherwise, the next remaining search will be executed. The **When to finish** setting for that search will determine if (and how) the determination's search execution flow will continue after that. Each search result set will be kept for possible use in the determination result set computations of subsequent searches. The determination result set is always recomputed after every search. **2 Terminate if there is one result with a highest relevance** The total relevance of each result in the determination result set will be calculated (see example). **Note**: Though always available, this setting is only applicable for determinations with multiple searches. **3 Continue whether or not there are results** The next remaining search will be executed. The **When to finish** setting for that search will determine if (and how) the determination's search execution flow will continue after that.

	Note: Though always available, this setting is only applicable for determinations with multiple searches. **Important**: Do not specify this setting for the final search, otherwise the determination will *not* return results in case the final search is executed.

Result set operations

Operation	Effect on result set
Intersection	a result is only counted towards the determination's result set if it is generated by every search in the intersection
Union	a result is counted towards the determination's result set if it is generated by any search in the union

Example of relevance computation

Suppose a determination has three searches, executing in the order #1, #2 and #3 and returning results A, B and C as shown in this table:

Search	Weight of search	Results
#1	20	A B C
#2	40	A B
#3	60	C

Note: This example assumes that searches #1 and #2 are configured to Continue whether or not there are results, otherwise searches #2 and #3 would never be executed.

The total relevance of each result is the sum of the weights of the searches which produced it, i.e. result A gets 20 points for being in the result set of search #1 and 40 points for being in the result set of search #2, for a total of 60 points.

Result	Total relevance
A	20 + 40 = 60

B	20 + 40 = 60
C	20 + 60 = 80

In this example, result C has the highest relevance.

However, suppose that search #3 returns nothing. In this case, results A and B would be tied for first position, i.e., there would be no single result with the highest relevance.

Duplicates

`/EBY/PDBO_VDFCC`

Expert IMG **> Initial settings > Rules**

Dialog structure menus

Setting	Description
Check IDs	Define check IDs to specify fields that should be checked by the duplicate value check.
Remove IDs	Define remove IDs to remove characters from fields before the duplicate value check.
Replace IDs	Define replace IDs to replace characters in fields with other characters before the duplicate value check.

Duplicate field check

Setting	Description
Logical level	The logical level containing the field for the duplicate check.
Field name	The name of the field in PROCESS DIRECTOR.
Table to check	The name of the table containing the SAP field that should be checked.
Check table field	The name of the SAP field that should be checked.

Remove ID	Enter a remove ID to have the characters specified in this ID removed from the field before the duplicate check.
Replace ID	Enter a replace ID to have the characters specified in this ID replaced in the field before the duplicate check.
Rem. first	Select if removals should be done before replacements. If this is not checked, replacements are done before removals.

Removals

Create a new entry for each character that should be removed.

Replacements

Create a new entry for each character that should be replaced and specify the character and replacement character.

Process parameters

/EBY/PDBO_EPC

Initial settings > Process parameters

Note: You cannot change these settings, you can only change the parameters.

Setting	Description
Environment	The environment in which the settings will be applied: blank applies the settings in both SAP and Web Application, WA Web Application applies the settings in the Web Application only.
Action	The ID and description of the action for which the settings will be applied.
Event	The ID and description of the event for which the settings will be applied.
Process description	The description of the process.
Parameters	Click this button to set and view the current parameters for the process.

Default	Click this button to view the default system parameters for the process.
Reset	Click this button to revert to the default system parameters. • **C**lick the **Key descriptions** button on the toolbar to show and hide the action and event descriptions. • Click the **Technical names** button on the toolbar to show and hide the environment, action and event IDs.

Archiving

`/EBY/PDBO_EPC_ARCHIV`

Initial settings > Process parameters

Process	Description
Add only the current workflow to the Smart Form	In the parameters, activate **Process current workflow only** to include only the details of the current workflow in the workflow log. If this option is not activated, details of all workflows to which the document was previously sent, as well as the current workflow, are listed in the workflow log.
Archiving object parameters	Automatically creates a log of all activities that took place on a document during a workflow and adds this as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the workflow log. Select a status and/or substatus to create the workflow log only when the document has this status/substatus. See also Workflow log creation.
Archive settings for EDI data	Automatically creates an attachment that visualizes documents received via EDI (similar to the images of scanned documents that may be used with other process types). In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the attachment. See also Configuring IDoc image attachments.
Configure attachment deletion in WebApp	Specifies whether the archive document itself, or only the link, should be removed when users delete attachments in the Web Application.

	Note: Do not use options 0 and 1, they are not applicable.
Cover sheet properties	Automatically creates a cover sheet for request-driven documents when these are saved in the Web Application. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the cover sheet. See also Configuring cover sheets.
Exclude document types for upload	In the parameters, add document types to prevent Web Application users from adding these document types as attachments to PROCESS DIRECTOR documents.
Mapping ID for RESCAN process	Enables you to assign a mapping ID for the RESCAN process. For more information, see Configure Rescan.
Smart Form and document type for archiving after posting	Automatically adds the workflow log as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document when the document is posted. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the workflow log. Select a status and/or substatus to create the workflow log only when the document has this status/substatus.
Sort order of attachments (old -> new)	In the parameters, select the order in which the attachments should be sorted; ascending or descending, by date. For more information, see Sort attachments.
Wait x seconds for audit log archiving to finish	Enables you to delay archiving for a specified number of seconds to ensure that the PROCESS DIRECTOR workflow log and notes are archived correctly and available in the corresponding SAP documents. Enter a value here if you are experiencing problems with missing attachments in the SAP documents.
Workflow log creation after approval	Activate the **Turn on** parameter to create the workflow log when a document is approved.
Workflow log creation after recall	Activate the **Turn on** parameter to create the workflow log when a document is recalled.
Workflow log creation after reject	Activate the **Turn on** parameter to create the workflow log when a document is rejected.

Checks

`/EBY/PDBO_EPC_CHECKS`

Initial settings > Process parameters

Process	Description
Automatic workflow start after all checks succeed	Automatically starts the specified workflow on a document when the checks return no errors. In the parameters, enter the workflow ID(s) and activate **Turn on**.
Automatic workflow start after check failed	Automatically starts the specified workflow on a document when the checks return an error. In the parameters, enter the workflow ID(s) and activate **Turn on**.

Posting

`/EBY/PDBO_EPC_POST`

Initial settings > Process parameters

Process	Description
Add only the current workflow to the Smart Form	In the parameters, activate **Process current workflow only** to include only the details of the current workflow in the workflow log. If this option is not activated, details of all workflows to which the document was previously sent, as well as the current workflow, are listed in the workflow log.
Automatic post after workflow approval	Automatically posts the document when the specified workflow(s) is approved. In the parameters, enter the workflow ID(s) and activate **Turn on**.
Automatic workflow start after post failed	Automatically starts the specified workflow(s) on a document when posting of the document fails. In the parameters, enter a workflow ID and activate **Turn on**.
Automatic workflow start after post succeeded	Automatically starts the specified workflow(s) on a document when posting of the document is successful. In the parameters, enter a workflow ID and activate **Turn on**.
Smartform and document type for archiving after posting	Automatically adds the workflow log as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document when the document is posted. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the workflow log.

	Select a status and/or substatus to create the workflow log only when the document has this status/substatus.
Wait x seconds for audit log archiving to finish	Enables you to delay archiving for a specified number of seconds to ensure that the PROCESS DIRECTOR workflow log and notes are archived correctly and available in the corresponding SAP documents. Enter a value here if you are experiencing problems with missing attachments in the SAP documents.

Workflow

`/EBY/PDBO_EPC_WORKFL`

Initial settings > Process parameters

Process	Description
Add only the current workflow to the Smart Form	In the parameters, activate **Process current workflow only** to include only the details of the current workflow in the workflow log. If this option is not activated, details of all workflows to which the document was previously sent, as well as the current workflow, are listed in the workflow log.
Archiving object parameters	Automatically creates a log of all activities that took place on a document during a workflow and adds this as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the workflow log. Select a status and/or substatus to create the workflow log only when the document has this status/substatus. See also Workflow log creation.
Automatic post after workflow approval	Automatically posts the document when the specified workflow(s) is approved. In the parameters, enter the workflow ID(s) and activate **Turn on**.
Automatic workflow start after all checks succeed	Automatically starts the specified workflow on a document when the checks return no errors. In the parameters, enter the workflow ID(s) and activate **Turn on**.
Automatic workflow start after check failed	Automatically starts the specified workflow on a document when the checks return an error. In the parameters, enter the workflow ID(s) and activate **Turn on**.

Automatic workflow start after post failed	Automatically starts the specified workflow(s) on a document when posting of the document fails. In the parameters, enter a workflow ID and activate **Turn on**.
Automatic workflow start after post succeeded	Automatically starts the specified workflow(s) on a document when posting of the document is successful. In the parameters, enter a workflow ID and activate **Turn on**.
Automatic workflow start after transfer failed	Automatically starts the specified workflow(s) on a document when transfer of the document from the capture software to PROCESS DIRECTOR fails. In the parameters, enter a workflow ID and activate **Turn on**.
Automatic workflow start after transfer succeeded	Automatically starts the specified workflow(s) on a document when transfer of the document from the capture software to PROCESS DIRECTOR is successful. In the parameters, enter a workflow ID and activate **Turn on**.
Smart Form and document type for archiving after posting	Automatically adds the workflow log as an attachment to the PROCESS DIRECTOR document and the corresponding SAP document when the document is posted. In the parameters, enter the archiving document type and the name of the Smart Form that should be used to create the workflow log. Select a status and/or substatus to create the workflow log only when the document has this status/substatus.
Workflow log creation after approval	Activate the **Turn on** parameter to create the workflow log when a document is approved.
Workflow log creation after recall	Activate the **Turn on** parameter to create the workflow log when a document is recalled.
Workflow log creation after reject	Activate the **Turn on** parameter to create the workflow log when a document is rejected.

Other

`/EBY/PDBO_EPC_OTHER`

Initial settings > Process parameters

Process	Description
Document rejection: note/reason required	In the parameters, activate **Rejection note required** or/and **Rejection reason required** to ensures that users enter a predefined rejection reason, a note, or both when they reject a document. See also Configuring rejection reasons.
Parameters regarding uploaded files	These parameters are required to enable line item upload or document creation from a file.

Workflow

Define steps

Define workflow steps

`/EBY/PDWC_VSTPC`

Initial settings > Workflow > Define steps

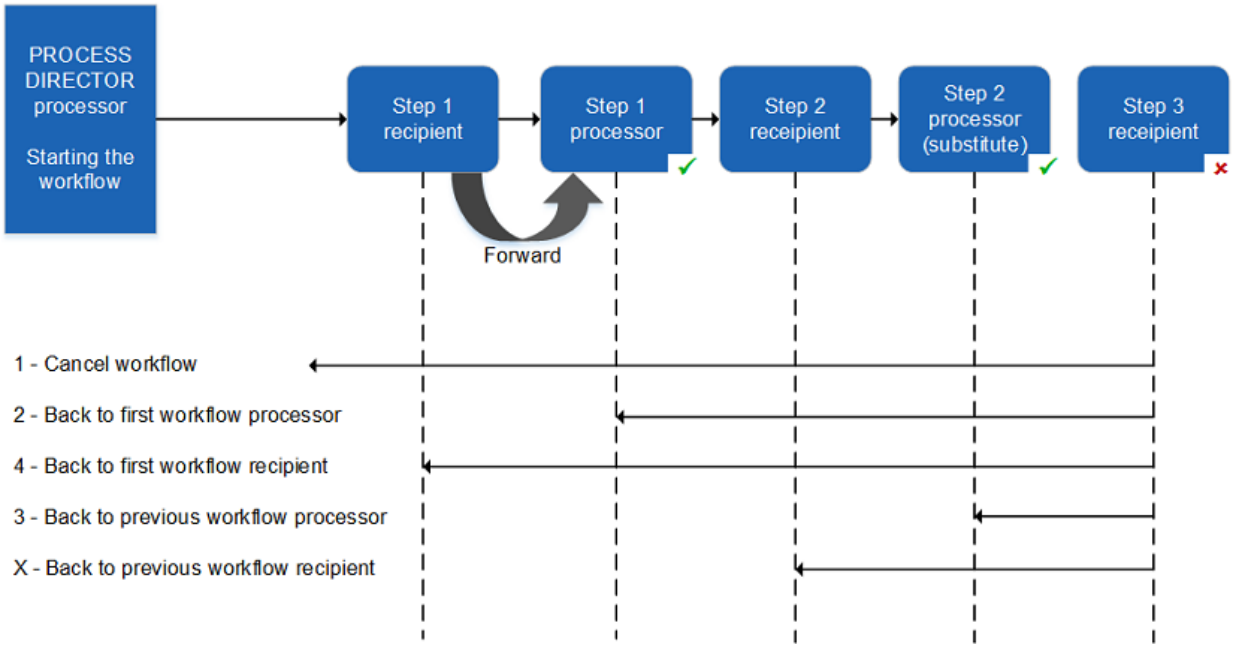
Setting	Description
Workflow step	The ID of the step
Description	Description for the workflow. This will be displayed to workflow processors and should describe what the processor has to do. **Tip**: You can add help texts to workflow steps to provide the processors with more information.
Step field states	Use the search help to select a set of field statuses that will be applied to document fields during this step.
Approval level	Only relevant for line item approval. Select the object type and level for which approval of individual line items should be possible. You must also activate the setting **All recipients must process**.
Duration	Here, you can specify a maximum step duration in days. If the maximum duration is exceeded, the step will become overdue, causing a reminder to be sent to the assigned processor(s).

	Note that workflow steps cannot finish later than the workflow itself. Therefore, if the workflow becomes due before the step does, the step is not allowed to run to its maximum duration (at runtime, the step due date is set to the workflow due date).
Forward	This setting specifies whether it is possible for processors to forward the step to other users. • **Disabled**: the step cannot be forwarded. • **Enabled**: the step can only be forwarded to pre-assigned processors. To enforce the use of pre-assigned processors, you must also activate the option **Recipients restriction check**. • **Enabled, arbitrary recipients**: the step can be forwarded to any user of the allowed user types.
Query	This setting specifies whether it is possible for processors to send queries to other users. • **Disabled**: queries cannot be sent. • **Enabled**: queries can only be sent to pre-assigned processors. To enforce the use of pre-assigned processors, you must also activate the option **Recipients restriction check**. • **Enabled, arbitrary recipients**: queries can be sent to any user of the allowed user types.
Processor assignment	Specifies what happens when a workflow assignment matches the business document. • **By workflow initiator** The person who starts the workflow can assign processors to the step. • **1 By workflow processor** The person who processes the workflow can assign processors to the step. • **2 By workflow initiator or processor** Either the person who starts the workflow or the person who processes the workflow can assign processors to the step. • **3 In background (automatic, without manual interaction)** The system automatically assigns predefined processors to the step without intervention on the part of the user. **Note**: When you select this option, make sure that you assign preset users to the step. **Note**: To approve workflow steps in bulk, select either the **By workflow initiator** or **3 In background (automatic, without manual interaction)** assignment option.
Reject	Specifies what happens when the workflow is rejected. The workflow can be canceled completely, or the document can be returned to the first or previous workflow step recipient or processor. Refer to the rejection options diagram for more details.

	Important: If it is possible for this step to be a start step of a workflow, you *must* set this to: **1 Cancel the workflow**. • **Back to first workflow processor**: Document is sent to the processor of the first step in the workflow (default behavior). • **X Back to previous workflow processor**: Document is sent to the processor of the previous step in the workflow. • **1. Cancel workflow** Entire workflow is canceled. • **2. Back to previous workflow recipient**: Document is sent to the recipient of the previous step in the workflow. • **3. Back to first workflow recipient**: Document is sent to the recipient of the first step in the workflow.
Send emails	This setting specifies whether an email notification is sent to processors when a workflow event, such as the assignment of the processor, occurs. • **No email**: no email is sent. • **Individual email**: a single email is sent immediately to the processor. • **Collective email**: an email is sent when the program `/EBY/PDWC_DUE_DATE_CHECK` is run. The email contains all workflow step notifications for that processor since the last program run.
Approval Notification	If this is checked, emails are sent to the workflow initiator when the step has been approved.
Rejection Notification	If this is checked, emails are sent to the workflow initiator when the step has been rejected.

Rejection Options

The following diagram illustrates a rejection process.



A **recipient** is the person to whom the workflow step is sent. A **processor** is the person who actually approves or rejects the workflow step.

In most cases, this will be the same person. However, if the recipient forwards the document to another person, or the recipient's substitute processes the document, the processor is not the same person as the recipient. Thus, it is possible to specify whether the document should be returned to the person who received the workflow step or to the person who actually processed it.

Recipients

Setting	Description
All recipients must process	If this is checked, all recipients of the workflow step must process and approve the document before it can move to the next step. However, for the document to be rejected, it is enough if only one recipient rejects the document.
Recipients restriction check	If this is checked, PROCESS DIRECTOR checks whether processors have been pre-assigned to the step. If processors have been pre-assigned, only these processors are available for selection in the **Start workflow** dialog. See Pre-assigning processors for more information.

Not initiator	If this is checked, the person who started the workflow cannot be assigned to the workflow step.
Principle of dual control	This setting specifies whether the principle of dual control is applied, which dictates that steps in the workflow cannot be approved by the same person. • **New recipient (not processor of immediately previous step)**: It is not possible to assign the same processor that was assigned to the step immediately before this step. • **Principle of dual control (recipient not previous processor)**: It is not possible to assign the same processor that was assigned to any of the steps before this step. • **None**: The principle of dual control is not applied.
Recipient num. limit	This setting specifies the maximum number of recipients allowed for a workflow step. If a user assigns recipients than specified in this setting, the system displays an error message. This setting is ignored, if recipients are assigned in the background by the **Workflow steps handling** BAdI. See the *PROCESS DIRECTOR SAP Reference Guide* for more information on this BAdI.

Mandatory notes

Setting	Description
Note must be created before approving workflow step	If this is checked, the step processor must add a note to the document when approving it.
Note must be created before forwarding workflow step	If this is checked, the step processor must add a note to the document when sending it to another processor.
Note must be created before rejecting workflow step	If this is checked, the step processor must add a note to the document when rejecting it.

State/substate after approval

Specify, which document status and/or substatus should be applied to the document when the workflow step is approved.

State/substate after rejection

Specify, which document status and/or substatus should be applied to the document when the workflow step is approved.

Allowed user types

PROCESS DIRECTOR differentiates the following types of user:

User type	Description
Internet users	Can only log on to the Web Application.
SAP users	Can log on to the SAP GUI and can also log on to the Web Application using their SAP user name and password.
LDAP users	Do not need a PROCESS DIRECTOR logon account; they can log on to the Web Application using their LDAP (Lightweight Directory Access Protocol) user name and password. LDAP users cannot log on to the SAP GUI.
User groups	Can be defined in `/COCKPIT/WUM1`. User groups are resolved to the individual users when the group is assigned to a workflow step (SAP GUI only; in the Web Application, the group is resolved when the workflow action - such as workflow start - is carried out). Group members with an invalid user type (that is, a type not assigned to the workflow step) are removed.

Mail texts and subjects

Setting	Description
Purpose	Defines the reason for sending the email. See General workflow email texts for information on each email purpose.
Documentation Object	The documentation object to use for the email body. You can select one of the standard PROCESS DIRECTOR documentation objects or create your own in transaction SE61. Documentation objects may contain placeholders. See the *PROCESS DIRECTOR Reference Guide* for more information.
Subject	The text to use for the email subject. May contain placeholders.

Action restriction

Setting	Description
Processor active	The processors for whom the action will be excluded. • **Minor workflow processor**: The action is only excluded for minor workflow processors. A minor workflow processor is one who is not directly assigned to the workflow, but has received a workflow query. • **Any processor**: The action is excluded for all processors, whether these are users who are processing documents in PROCESS DIRECTOR or processing documents in a workflow. • **Document not in workflow**: The action is only excluded for documents that are not in a workflow. • **Major workflow processor**: The action is only excluded for major workflow processors. A major workflow processor is one who has been directly assigned to a workflow or to whom a workflow step has been forwarded. • **Any workflow processor**: The action is only excluded for processors who are processing documents in a workflow (both major and minor processors). The action is not excluded for processors who are processing documents in PROCESS DIRECTOR. • **No workflow processor**: The action is only excluded for processors who are processing documents in PROCESS DIRECTOR. The action is not excluded for processors who are processing documents in a workflow. • (Left blank): The action is excluded for all processors.
Action	The action to exclude. Users will not be able to perform this action during the workflow step.
Ign. gen.	Select to override the general action exclusion that has been defined for this action (if any).

Define workflow steps help texts

`/EBY/PDWC_VSTPHC`

Initial settings > Workflow > Define steps

Setting	Description
Object	Process type for which the help text should be used. Select the blank entry if the text should be available for all process types.
WF step	ID of the workflow step.
Workflow step	Workflow step description (automatically entered).
Text ID	ID assigned to the help text.

Define processes

`/EBY/PDWC_VC_FLW`

Initial settings > Workflow

Settings for workflow

Setting	Description
Workflow ID	The workflow internal ID.
Description	A description of the workflow.
Duration	The maximum workflow duration, in days. If this is left blank, the maximum duration will be infinite. That is, the workflow will never become overdue (although individual workflow steps may become overdue if their duration is exceeded).
Priority	Determines the position of the workflow in the workflow selection list in the **Start workflow** dialog. Enter a number to represent the priority. Workflows are displayed in the selection list in ascending order of priority, so that a workflow with priority 0 will appear at the top of the list, followed by priority 1, 2, 3, etc. If you do not assign priorities, workflows are displayed in alphabetical order. **Note**: If the option **Sort Items by Key** is activated in the local layout options for the SAP GUI (> **Options** > **Expert** tab), the workflow selection list is sorted alphabetically regardless of the workflow priorities. Deactivate this option to sort by workflow priority.

Step condition settings

Setting	Description
Wf step	The ID of the workflow step for which the condition applies.
Object	The process type for which the condition applies.
Sq	When several conditions are defined for the same step, the sequence number specifies in which order the system checks whether the conditions apply.
Negation	Select **NOT** to negate the condition. The condition will then apply for all values *except* the specified value.
Quantifier	Use this field to specify whether: At least one item of the specified logical level must meet the condition (**exists**) All items of the specified logical must meet the condition (**all**). **Note**: If there are no items, the condition always fails to be met.
Logical level	The logical level containing the field for which the condition applies.
(	Use this field together with the **)** field to override AND/OR precedence.
Field name	The name of the field for which the condition applies.
Operator	Select a logical operator.
Field contents	The value for which the condition applies.
	Click this button to specify an amount for currency conversion.
)	Use this field together with the **(** field to override AND/OR precedence.

AND/OR	To connect two conditions, select **AND** (both conditions must be met) or **OR** (either one or the other condition must be met).

Assign processors

`/EBY/PDWC_UM`

Initial settings > Workflow

Setting	Description
User type	The selectable types are those specified in the workflow step definition.
User type	This field is automatically filled.
Recipient	Use search help to pick a recipient of the specified user type.
Preset user in assignment dialog	Activate this check box if the user should be automatically inserted as a recipient of the workflow step.
Complete name	Full name of the recipient. This field is automatically filled.
Curr. processor	This is a technical field that is automatically filled.

Activate workflows

`/EBY/PDWC_CFLAC`

Initial settings > Workflow

Setting	Description
Workflow	Select the workflow that should be available for the business document type in the **Workflow start** dialog. The processor assignment of the workflow's start step determines how a business document can get sent to the workflow.
Criteria fields (if configured)	You can define criteria to determine whether or not a given document can be sent to this workflow, based on specific field

	values. First click the **Configure criteria** button and define the criteria that you want to use. The criteria that you add appear as additional columns, in which you can enter the field values. The criteria are evaluated in the order in which they appear in the configuration screen (you specify this order when defining the criteria). When evaluating the criteria, PROCESS DIRECTOR searches first for workflows with defined criteria. If a match is found, only that workflow is displayed to users in the **Workflow start** dialog. If no match is found, all workflows without criteria are available for selection. See Defining workflow criteria for an example. **Note:** If (and only if) there is exactly one matching workflow and *all* of its start steps have the processor assignment *In background (automatic, without manual interaction)*, the document is sent to the workflow automatically. Otherwise, an automatic workflow start does not occur.

Mobile Approval

Basic settings

`/EBY/PDWC_VMABS`

Initial settings > Workflow > Mobile Approval

Setting	Description
SAP System ID	The SAP system for which the Email-based Approval (formerly MOBILE APPROVAL) email address is valid.
E-Mail Address	This email address is the reply mailto: link in the Email-based Approval emails sent to workflow recipients.

General messages

`/EBY/PDWC_VMAMES`

Initial settings > Workflow > Mobile Approval

Setting	Description
Success email	Enter the subject line text and the body text for the confirmation email sent to an Email-based Approval user to inform them their action (approve, reject, add note) was successful. For the body text, select a documentation object.

Error email	Enter the subject line text and the body text for the confirmation email sent to an Email-based Approval user to inform them their action (approve, reject, add note) could not be performed. For the body text, select a documentation object.
Button names	Add text that will be displayed in the link (or for HTML mails on the button) that the user clicks to approve or reject the document or add a note. **Note**: Success and error emails are only sent if **Reply to MA** is activated in the MOBILE APPROVAL workflow step settings.

Workflow steps

`/EBY/PDWC_VMAST`

Initial settings > Workflow > Mobile Approval

Setting	Description
Wf step	ID of the workflow step.
MOBILE APPROVAL act.	Activates the use of Email-based Approval for the workflow step.
Reply to MA	Sends a confirmation email back to the Email-based Approval user to inform them that their action (approve, reject, add note) was successful. For actions that encounter errors and are not performed successfully, email notifications are always sent, and are not controlled by this setting. You can specify the text of these emails in the General messages settings.
Log	Attaches the workflow log of the current workflow to the email.
Attach PDF doc.	Attaches the document data as a PDF. You must specify a Smart Form for the PDF.

SARA archiving

Define archiving object

`/EBY/PDBO_SARA_AOBJ`

Expert IMG > Initial settings > SARA archiving > Define archiving object

Setting	Description
Object type	Process type for which the archiving object will be created. This field is filled automatically, but can be changed.
Archiving object	Name of the archiving object. This field is filled automatically, but can be changed.
User	Name of the user creating the archiving object.
Logical file name	Name of the logical file. See the SAP documentation for information on defining logical path and file names.

SARA archiving

SARA

Expert IMG > Initial settings > SARA archiving > SARA archiving

This IMG activity provides a link to the standard SAP transaction SARA. See the SAP documentation for information on this transaction.

Additional settings

Mail and communication

Message administration

/EBY/PDBO_VDPSC

Additional settings > Mail and communication

Setting	Description
Communication area	Select *EX External communication* if the message will be sent outside the organization, such as to a vendor or supplier. Select *IN Internal communication* if the message is intended for processors, approvers or other people within the organization.
Communication type	You can set this to *E Email*, *FP Fax / Print letter*, or *F Fax.*

Text ID	Use search help to pick an appropriate documentation object of document class *TX General text*. This text will be included in the message. You can create and/or maintain documentation objects in SAP transaction SE61. PROCESS DIRECTOR ships with a number of useful standard documentation objects in */EBY/PDBO_**. See the *PROCESS DIRECTOR Reference Guide* for more information.
Sender text ID	Only relevant for the communication types *FP Fax/Print letter* and *F Fax*. Use search help to pick an appropriate documentation object of document class *TX General text*. This text is inserted in the **Sender** area of the message.
Recipient text ID	Only relevant for the communication types *FP Fax/Print letter* and *F Fax*. Use search help to pick an appropriate documentation object of document class *TX General text*. This text is included in the **Recipient** area of the message.
Email expression	Only relevant for the communication type *Email*. Enter an email address if the message should always be sent to this address. Alternatively, leave the field blank for the user to enter an email address. **Note**: For goods receipts and order confirmations, you can enter *&VENDOR-EMAIL&* to use the email address in the vendor master data, or *&PDPO-EMAIL&* to use the email address in the purchase order.
Subject	Only relevant for the communication type *Email*. Enter text for the email subject line. The user can edit this text when he creates the message.
Smartform	Use search help to pick an existing SAP Smart Form. If necessary, you can create one first.
Archive object type	Set this to *ZEPD_PDF* (or whatever name you have assigned to the PROCESS DIRECTOR PDF document type in ArchiveLink document types setup).

Message dispatch Smart Form example

Directly enter SAP transaction `SMARTFORMS`.

Copy from the Smart Form template

The easiest way to create a new SAP Smart Form for PROCESS DIRECTOR is to copy from the provided template:

1. In the **SAP Smart Forms: Initial screen**, select **Form** and enter the name of the PROCESS DIRECTOR message dispatch template: */EBY/PDBO_DISPATCH*.
2. Click the toolbar button .
3. In the **Target Object field**, enter the name of the new form to create, then click .

Settings

In the form interface import parameters (menu path **Form ... > Global Settings > Form Interface**), make sure that the *IR_CONTEXT* parameter is listed as follows, with no further import parameters aside from the standard ones:

Parameter Name	Type Assignment	Associated Type
IR_CONTEXT	*TYPE*	*/EBY/PDBO_DCL_PDBO_CONTEXT*

If you have copied your Smart Form from the PROCESS DIRECTOR message dispatch template, the import parameters should already be properly configured.

General settings

`/EBY/PDWC_VGENC`

Initial settings > Workflow

Enter the URL of the Web Application instance that the *&URL&* placeholder in workflow email notifications should resolve to.

Note: You can set different URLs for different systems.

You can use any of the following alternatives when specifying the URL:

http://servername:port/pdweb-app/initdo

http://servername:port/pdweb-app/initdo?

http://servername:port/pdweb-app/initdo?sapsystem=system ID

Example: *http://lexmark:8080/pdweb-app/initdo?sapsystem=RS1*

Warning: Make sure to specify the complete URL path (ending in *...init.do*), otherwise single document links will not work.

Other

Define substitute profile

`/EBY/PDBO_VSPRFL`

Expert IMG **> Additional settings >Other**

Setting	Description

Project ID	Name of the project for which the substitute profile is valid.
Object type	The object type for which the substitute profile is valid.
Substitute profile	Name of the substitute profile.

LDAP servers

`/EBY/PDBO_VLDPC`

Expert IMG > **Additional settings >Other**

Setting	Description
LDAP server: symbolic name	The logical name of the directory service server.
Wait time	Amount of time, in seconds, that PROCESS DIRECTOR will wait before attempting to resume communication with LDAP, for example, if the LDAP connector has stalled and cannot be reached. If PROCESS DIRECTOR cannot resume communication after this wait time, an error message is issued.
Host name of LDAP server	The host name of the directory service server.
User ID for System Logon	The logical name of the LDAP bind user that is used to enable read access to the directory service server.
ReadAnonym	Activate this checkbox if anonymous access (guest account with no password) is to be used for read access.

File upload

`/EBY/PDBO_VC_FILEUP`

Expert IMG > **Additional settings >Other**

File upload: ID attributes

Setting	Description

Project ID	Name of the project for which the uploaded file is valid.
Object type	The process type for which the uploaded file is valid.
Fileupload	The file upload ID.
File upload descr.	The description of the uploaded file.
Format	The format of the external file.
FS	Field separator (for example, comma).
Mapping ID	The ID specified in the mapping configuration.
Doc. type	The document type of the external file.

File upload: Levels

Setting	Description
Logical level	The logical level in the PROCESS DIRECTOR internal structure.
Col. from and Column to	The columns in the external file that will be uploaded.
Key col.	If there is an entry in the **Key col.** column, a value change in that column will trigger a new entry for that logical level. If there is no entry in this field, each valid line in the external data file will count as a new entry for that logical level.

File upload: Conditions

Setting	Description
Sq	When several conditions are defined for the same step, the sequence number specifies in which order the system checks whether the conditions apply.

NOT	Select **NOT** to negate the condition. The condition will then apply for all the values, except the specified value.
(	Use this field together with the **)** field to override **AND/OR** precedence.
Column number	The column in the external file to which the condition applies.
Op.	Select a logical operator.
Field contents	The value for which the condition applies.
)	Use this field together with the **(** field to override **AND/OR** precedence.
AND/OR	To connect two conditions, select **AND** (both conditions must be met) or **OR** (either one or the other condition must be met).

Change system settings

Project

Define projects

In `/EBY/PDBO_VPRJC` you can create a project.

IMG path: Expert IMG **> Change system settings > Project > Define project**

Setting	Description
Project	Two digit ID for the project. You can use letters and numbers. The project ID is case-sensitive.
Project	Description for the project.

Configuration criteria

`/EBY/PDBO_VCRFC`

Expert IMG **> Additional settings > Configuration options**

Setting	Description
Dispatcher	Function for which the criterion will be available: • Presets • Checks • Determinations • Field statuses • Message send • Rejection reason • Workflow process assignment Select **X Default** if the criterion should be available for all dispatcher functions.
Order	Order in which the criteria fields are displayed in the relevant configuration table (for example, 1 for the first field, 2 for the second field, and 3 for the third field). This is also the order in which the criteria will be evaluated.
Field name	Name of the field that will be available as a selection criterion. You can specify up to 3 fields.

Model

Related business objects for archiving

`/EBY/PDBO_VARCC`

Expert IMG > **Change system settings > Model**

Setting	Description
Logical level	The logical level at which the SAP key field is located in PROCESS DIRECTOR.
Action	Select an action to restrict the connection to only this action. If left blank, the connection applies to all PROCESS DIRECTOR actions.
Archiving Key Structure	The archiving key structure in which the SAP key field is mapped to the PROCESS DIRECTOR field.

Object type	The SAP business object.
Description	The business object description (entered automatically).
Activity	Select **C PD object can connect**. **R PD object can read** is currently not used.
Remove	Select to deactivate an existing Default system settings entry.

Document statuses/substatuses

Customer document statuses

/EBY/PDBO_VSTAC

Expert IMG **> Change system settings > Model > Document statuses/substatuses**

Setting	Description
Status	Enter a two-character ID, or use search help to select an existing ID.
Remove	Select to deactivate a default system settings entry.
Status description	Enter a description for the status.

Customer document substatuses

/EBY/PDBO_VSSTC

Expert IMG **> Change system settings > Model > Document statuses/substatuses**

Setting	Description
Substate	Enter a two-character ID, or use search help to select an existing ID.
Remove	Select to deactivate a default system settings entry.
Substatus descr	Enter a description for the substatus.

Customer Mapping message number to substatus code

/EBY/PDBO_VM2SC

Expert IMG > **Change system settings > Model > Document statuses/substatuses**

Application Area

Enter the application area to which the error message belongs.

MsgNo

Enter the message number denoting the error message text that should be displayed.

Substate

Enter a two-character ID, or use search help to select an existing ID.

Order

Enter to set the sequence of the messages.

Remove

Select to deactivate a default system settings entry.

Message Text

Enter a description for the message.

Rejection reasons

Rejection reason declarations

/EBY/PDBO_VREJC

Expert IMG > **Change system settings > Model > Rejection reasons**

Setting	Description
Rej.Reason	Enter an alphanumeric key (up to three digits).
Rejection Reason	Enter a description (up to 30-characters).
Remove	Select to deactivate an existing Default system settings entry.

Preset IDs

/EBY/PDBO_VPSIC

Expert IMG > **Change system settings > Model**

Setting	Description
Preset ID	Unique ID for the preset
Preset description	Description for the preset ID

Excluded actions per document status

`/EBY/PDBO_VSTEC`

Change system settings > Model

Setting	Description
Env. / All env.	Select the environment in which the action will be excluded. For example, you may want to exclude certain actions in the Web Application, but allow them in the SAP GUI. Select the blank entry to exclude the action in all environments.
Status	The document status for which the action will be excluded. See the process types reference section in the *PROCESS DIRECTOR Reference Guide* for information on the available statuses.
Substate	The document substatus for which the action will be excluded. See the *PROCESS DIRECTOR Reference Guide* for information on the available substatuses.
Action	The action to exclude.
Is prefix	If this setting is checked, the **Action** setting will be interpreted as an action name prefix. That is, the exclusion will be applied to all actions with a logical name that begins with this prefix.
Remove	Select to deactivate an existing Default system settings entry, that is, to make that action available.

Supported text types for specific objects

`/EBY/PDBO_VTIDC`

Expert IMG **> Change system settings > Model**

Setting	Description
Logical level	The logical level that the text should be made available for.
Text object	Use search help to select a text object. See the process types reference section in the *PROCESS DIRECTOR Reference Guide* for information on the available text types for each process type. Use the text type */EBY/PD* for PROCESS DIRECTOR notes.
ID	The text ID defines the type of text. For example, specific IDs identify texts as relating to terms of delivery, terms of payment, shipping instructions, etc.
Multiple	If this is checked, the processor will be allowed to attach several texts of this type (this setting is only supported for PROCESS DIRECTOR notes). Otherwise, the processor will only be allowed to attach a single text.
No copy	If this is checked, texts/PROCESS DIRECTOR notes will not be transferred to the new document when a document is copied.
Remove.	Select to deactivate an existing Default system settings entry.

Excluded objects (fields) being copied

In `/EBY/PDBO_VECOC` you can specify fields to exclude when users copy a document.

IMG path: **Change system settings > Model > Excluded objects (fields) being copied**

Setting	Description
Logical level	The logical level of the field.
Field Name	The name of the field.

Document splitting condition

`/EBY/PDBO_VDSCC`

Expert IMG **> Change system settings > Model > Document splitting condition**

Setting	Description
Group ID	Use the **Group ID** column to specify more than one criterion for a condition. The different criteria of a condition should have the same group ID. The document split only takes place if all criteria in the group are met.
Logical level	The logical level containing the field whose value will determine whether the document is split or not.
Field Name	The field whose value will determine whether the document is split or not.
Type	Type of value to insert: **Fixed Value**: To insert a fixed value. **SAP Value**: To insert an SAP SY system variable; for example, `SY-DATLO` for the current date. **Dynamic Value**: To assign a class that contains code to define the conditions. This type should be used exclusively, not in combination with a fixed or SAP Value.
Option	Select a logical operator.
Field value (Internal)	The internal ID of the field in SAP.
Field value (External)	The external field ID displayed in PROCESS DIRECTOR. This is automatically entered based on the entry in the **Field value (Internal)** field.
Doc splitting class	The class that contains the code used for defining the conditions. To use your own coding, copy and adapt the document splitting class template */EBY/CL_PDBO_DOC_SPLIT_TEMPLT*.
CD	Click to view and edit the class coding.
Deact.	By default, the condition will be active. Check this box to deactivate it.

Processes

Action help texts

`/EBY/PDBO_VACTHC`

Expert IMG **> Change system settings > Processes**

Setting	Description
Object	Process type for which the help text should be used. Select the blank entry if the text should be available for all process types.
Action	Action for which the help text should be used.
Text ID	ID assigned to the help text.
Remove	Select to deactivate the Default system settings help text for the action.

Message handling

Message filtering

`/EBY/PDBO_VMGEC`

Change system settings > Message handling

Setting	Description
Message handler	• **Entry in document history** Filters messages before they are entered in the document history. • **General message handler** Filters messages at the source, that is, as soon as they occur. • **Messages popup** Filters messages before they appear in the messages popup. **Messages transported to Fiori** • Filters the messages being sent to the Fiori interface. **Messages transported to webapp**

	• Filters messages before they appear in the PROCESS DIRECTOR Web Application. **Warning**: Only filter success messages for the Web Application. Do not filter error and warning messages, as these can cause processes to abort without returning an error. **Note**: This filter setting can be affected by the **Web Application > Set messages** user exit / BAdI. See the *PROCESS DIRECTOR SAP Reference Guide* for more information.
Message group	Only specify this if you know the exact source of the message. For example, you can specify the message group *CHK Process Director checks* to filter all check messages.
Object type	The object type for which the filter will apply.
Action	Leaving this blank will apply the filter to all actions. However, it is usually best to restrict the message filter to a specific action.
Event	If an action is specified, selecting an event will restrict the filter to the specific instance of the event within the action. Otherwise the filter will reply to all instances of the event, that is, instances in any action.
Message ID	The message class containing the message you want to suppress. To make it easier to find the appropriate PROCESS DIRECTOR message class, you can enter */EBY** and then use search help to pick the class.
Message	Select a Message ID first, then use search help to pick the message number of the message you want to suppress. If you leave this blank, all messages belonging to the message class will be filtered.
Message type	Usually, you should only use message filtering to get rid of superfluous warning or success messages. However, you can also get rid of errors or change them to warnings.
Filter action	By default, the filter action is *Remove message*. But you can also change the message type to *Debug*, *Error*, *Warning*, or *Success*. If the message type of *Error* messages is changed to *Debug*, they become *Debug Error* messages, and so on for the other message types.

	By default, *Debug* messages are hidden unless you enable their display. **Best practice guideline**: To suppress messages in the customer message filtering configuration, change the message type to *Debug*. This is because if you remove the messages entirely, you will no longer be able to enable their display for debugging without changing the configuration. This can require transports, depending on the customer environment. **Warning**: Be extremely careful when suppressing error messages, as this can potentially cause PROCESS DIRECTOR to behave incorrectly (for example, documents that are in error might be posted).
Replace / Remove	Select this check box to disable a system message filter setting. Normally, you should not need to do this.

Message replacement

`/EBY/PDBO_VMFTC`

Expert IMG **> Change system settings > Message handling**

Setting	Description
Oject type	The process type in which to replace the technical field name(s).
Action	Use search help to pick the action for which the message should be replaced. Leave blank to replace the message for all actions.
Event	The single logical unit of processing performed as part of the selected action. Leave blank to replace the message for all events.
Message ID	The message class of the original message. Its descriptive text is entered automatically.
Message	The number of the original message. Its descriptive text is entered automatically.
Replace / Remove	Select to overwrite the default system setting.
New Message ID	The message class of the new message.
New Msg Number	The number of the new message.
Display Original Message	Select this check box to display both the original message and the new message.
Message variable mapping	Select the corresponding option to indicate which message variable in the original message (for example &1, &2) should be mapped to the variables of the new message.
Technical field name replacement	Select the corresponding option to indicate in which of the original message variables the technical field name should be replaced.

Workflow

General workflow email texts

`/EBY/PDWC_VTXTC`

Expert IMG **> Change system settings > Workflow**

Setting	Description
Purpose	• **A Approval notification** To send an email to the workflow initiator when a workflow step is approved. An email is only sent if the **Approval notification** setting is activated in the step configuration. • **B Rejection notification** To send an email to the workflow initiator when a workflow step is rejected. An email is only sent if the **Rejection notification** setting is activated in the step configuration. • **F Workflow approved** To send an email to the workflow initiator when a workflow is approved. The email is sent after the `/EBY/DUE_DATE_CHECK` program has run, and only if the **Approved workflows** option is activated in this program. • **G Workflow approved, short form** To include a short notification in a collective email to the workflow initiator that the workflow has been approved. • **H Workflow recalled** To send an email to the workflow processors when a workflow is recalled. • **I Workflow recalled, short form** To include a short notification in a collective email to the workflow processors that the workflow has been recalled. • **J Workflow cancelled** To send an email to the workflow initiator when a workflow step is rejected, with the result that the entire workflow is canceled (**Reject** setting is set to **Cancel the workflow** in the step settings). The email is sent after the `/EBY/DUE_DATE_CHECK` program has run, and only if the **Recalled workflows** option is activated in this program. • **K Workflow cancelled,short form**

	To include a short notification in a collective email to the workflow initiator that the workflow has been canceled. • **L PDAP receipt** Use only for Accounts Payable to send a receipt email to the assigned processor—that is, a notification that the workflow has been assigned to him/her. • **M PDAP receipt, short form** Use only for Accounts Payable to include a short receipt notification about this workflow in a collective receipt (assuming you are sending receipts as collective receipt emails). • **O Collective email** To send a collective email to the assigned processor. A collective email is sent when the program `/EBY/PDWC_DUE_DATE_CHECK` is run. The collective email contains all workflow step notifications for that processor since the last program run. **Note**: This setting is only for use in configuring general workflow email texts; do not use it when configuring email texts for individual workflow steps. • **P Query** To send an email to the recipient of a query. • **Q Reminder, short form** To include a short reminder notification about this workflow in a collective reminder (assuming you are sending reminders as collective reminder emails). For Accounts Payable, use **V PDAP reminder, short form** instead. • **R Reminder** To send a reminder notification to the assigned processor that the workflow step is overdue. All reminder emails are triggered by the program `/EBY/PDWC_DUE_DATE_CHECK`, and are sent either as individual or as collective reminder emails, depending on the program's parameters. For Accounts Payable, use **U PDAP reminder** instead. • **S Receipt** To send a receipt email to the assigned processor—that is, a notification that the workflow has been assigned to him/her. For Accounts Payable, use **L PDAP receipt** instead. • **T Receipt, short form**

	To include a short receipt notification about this workflow in a collective receipt (assuming you are sending receipts as collective receipt emails). For Accounts Payable, use M PDAP receipt, short form instead. • **U PDAP reminder** Use only for Accounts payable to send a reminder notification to the assigned processor that the workflow step is overdue. • **V PDAP reminder, short form** Use only for Accounts Payable to include a short reminder notification about this workflow in a collective reminder (assuming you are sending reminders as collective reminder emails).
Deactivation	Check this box to deactivate sending of emails for this purpose.
Documentation Object	The documentation object to use for the email body. You can select one of the standard PROCESS DIRECTOR documentation objects or create your own in transaction SE61. Documentation objects may contain placeholders. See the *PROCESS DIRECTOR Reference Guide* for more information.
Subject	The text to use for the email subject. May contain placeholders.

Excluded actions

`/EBY/PDWC_VEACC`

Expert IMG **> Change system settings > Workflow**

Setting	Description
Obj./All obj.	The process type for which the exclusion is valid. If this field is left blank, the exclusion applies to all process types.
Processor active	The processors for whom the action will be excluded. • **Minor workflow processor**: The action is only excluded for minor workflow processors. A minor workflow processor is one who is not directly assigned to the workflow, but has received a workflow query.

	• **Any processor**: The action is excluded for all processors, whether these are users who are processing documents in PROCESS DIRECTOR or processing documents in a workflow. • **Document not in workflow**: The action is only excluded for documents that are not in a workflow. • **Major workflow processor**: The action is only excluded for major workflow processors. A major workflow processor is one who has been directly assigned to a workflow or to whom a workflow step has been forwarded. • **Any workflow processor**: The action is only excluded for processors who are processing documents in a workflow (both major and minor processors). The action is not excluded for processors who are processing documents in PROCESS DIRECTOR. • **No workflow processor**: The action is only excluded for processors who are processing documents in PROCESS DIRECTOR. The action is not excluded for processors who are processing documents in a workflow. • (Left blank): The action is excluded for all processors.
Action	The action to exclude.
Action	Description of the action. This field is automatically filled.
Remove	Select to deactivate an existing Default system settings entry, that is, to make the action available.

Web Application

Available actions for Web Application

`/EBY/PDWA_CACTC`

Expert IMG **> Change system settings > Web Application > Available actions**

Setting	Description
Object	Process type to which the setting applies. Left blank, the setting applies to all process types.
Environment	The environment in which the settings apply.

Component	Area of the GUI to which the setting applies.
Edit mode	Editing mode to which the setting applies.
Action	Action to which the setting applies.
Description	Text displayed on the button.
Tooltip	Tooltip displayed when the mouse hovers over the button.
State	The document status to which the settings apply.
Icon	Icon displayed on the button.
Icon name	SAP icon name (automatically entered).
Remove	Select to deactivate an existing Default system settings entry for the action (that is, to remove the action button).
Order	Position in which the button will appear on the Actions bar.

White list - control of attachments deletion

`/EBY/PDWA_CDATTC`

Expert IMG **> Change system settings > Web Application**

Setting	Description
Object	Process type to which the setting applies. Left blank, the setting applies to all process types.
Doc. type	Document type that can be deleted.
Del. flag	**2 Background (without popup), deletion of link and archive obj** Deletes both the link to the archive and the archive object itself. **3 Background (without popup), deletion of link**

	Deletes only the link to the archive. **Note**: Do not use options 0 and 1, they are not applicable.

Excluded search helps

`/EBY/PDWA_VSHEC`

Expert IMG > Change system settings > Web application > Excluded search helps

Setting	Description
Search help name	Name of the search help to be excluded from the Web Application.
Short text	Description of the search help to be excluded.
Remove	Select to deactivate an existing Default system settings entry.

Presentation and interface

Configure view model

Configure view model settings

`/EBY/PDVI_VVMOC`

Expert IMG > **Change system settings** > **Presentation and interface** > **Configure view model**

View model

Setting	Description
Component type	The component type of the system view model you want to override. SAP GUI — SAP GUI List Header — Document overview list in the SAP GUI A1 — Additional grid 01 — Subgrids in the document overview list or document detail view, such as account assignments,

<table>
<tr><td></td><td>
<table>
<tr><td></td><td></td><td>conditions, partners, etc.</td></tr>
<tr><td>A2</td><td>Additional grid 02</td><td>Currently not used.</td></tr>
<tr><td>ARC_LOG</td><td>Header data for archive log</td><td>Data included in the archive log that is created when a document is posted to SAP.</td></tr>
<tr><td>MS</td><td>Main screen</td><td>Currently not used.</td></tr>
<tr><td>WA_DOC</td><td>WA Document Detail</td><td>Document detail view in the Web Application.</td></tr>
<tr><td>WA_LIST</td><td>WA List Header</td><td>Document overview list in the Web Application</td></tr>
<tr><td>WC_STAT</td><td>Workflow status</td><td>Header data in the workflow status dialog.</td></tr>
</table>
</td></tr>
<tr><td>Grid No</td><td>The grid number of the system view model you want to override. Use the search help to select the appropriate grid number.</td></tr>
<tr><td>Environment</td><td>SAP GUI, Web Application, Mobile Application or Supplier Portal. You usually do not need to make an entry here as the system environment is used.

Note: This setting must be added for all view models created prior to PROCESS DIRECTOR 7.4</td></tr>
<tr><td>Environment</td><td>The system environment.</td></tr>
<tr><td>Sys. grid title</td><td>The title that is displayed to users at the top of the system grid.</td></tr>
<tr><td>Logical level</td><td>The logical level of the system view model you want to override.</td></tr>
</table>

Conversion func.	This can usually be left empty. Conversion functions can be used to convert values from one data type to another.
Grid title	The title that is displayed to users at the top of the grid.
Displaying class	This can usually be left empty. Displaying classes can be used to determine how the grid is displayed (for example, whether button controls are available or not).

Layout of grid

SAPGUI Specific settings

Setting	Description
Basic layout settings	Basic settings for the grid, such as whether it will be displayed with colored stripes, whether the column width is optimized to display the full column header and column contents or not, etc.
Main screen settings	In the **Function Code for Toolbars** field, enter the function that will be called when the user presses the button that displays the grid. Specify the other settings for the main screen, such as where on the screen the grid should be docked and whether it should be displayed automatically or not. **No docking** displays the grid in a separate window. You can also select the **No undocking possible** check box to prevent users from displaying the grid in a separate window.
Popup screen settings	Activate the **Other GUI status** option to specify which buttons and functions are available in the popup. Use transaction `EBY/PDVI_VMNO` to define the buttons and functions. If this option is deactivated, only the buttons **Save** and **Cancel** are available. You can also specify the size of the popup.
Single action exclusion	Select which button controls will not be available in the grid.
Action group exclusion	Select which button context menus will not be available in the grid.

Extended layout settings	Here you can specify a number of other settings for the grid, such as whether horizontal and vertical lines should be displayed between rows and columns, whether users can click on the column header to sort by that column, etc.

SAP GUI & Web

Setting	Description
No row add	Specify whether or not the user can add rows in the grid.
No row removal	Specify whether or not the user can remove rows from the grid.

Web Application-specific settings

Setting	Description
Initially expanded	Specify whether or not subgrids will be displayed in the Web Application when the grid is opened.
No action called when ADD button pressed	The **No action called when ADD button pressed** and **No action called when DEL button pressed** settings can help improve performance in the Web Application. If these options are activated, the Web Application does not call the SAP backend when the **Add** or **Delete** button is pressed. For example, these options are activated by default for notes, as no interaction is required with SAP when adding and deleting notes. For texts, these options are not activated by default, as adding and deleting texts requires interaction with SAP (for example, to check whether or not it is permissible to add more than one text).
No action called when DEL button pressed	
Number of lines per page	Specify the maximum number of lines that should be displayed per page in the grid.

Tabs

Setting	Description
Tab identifier	Identifier for the tab.
Parent tab	The name of the parent tab, if the tab is a subtab.

Position	Sequence number indicating the position of the tab.
Tab description	Description of the tab.
Remove	Select to deactivate an existing Default system settings entry, that is, to remove a default tab.

Drag and Drop

Drag and Drop

Setting	Description
D&D source grid	The grid number from which field values can be copied using drag and drop.
D&D target	The grid number to which field values can be copied using drag and drop.
Remove	Select to deactivate an existing Default system settings entry.

Drag and Drop mapping

Setting	Description
Source Field Name	The name of the field from which field values can be copied.
Target Field Name	The name of the field to which field values can be copied.

Field catalog

Field catalog settings

Note: The most frequently used fields are available in the simplified field catalog view. SAP-GUI fields are hidden for Web Application view model components; Web Application fields are available only for Web Application view model components.

Output Options of Columns

Setting	Description
Input	The user is allowed to enter a value in this field.
No output	The field is hidden.
Checkbox	The field is displayed as a check box. **Note**: This setting is not available for the Web Application view model components.
Hotspot	The field is set as a hotspot.
Mandatory	The user must enter a value in this field.
Tech. field	The field is visible only in the field catalog; it cannot be shown interactively.
Sort type	Specifies the order in which data is listed in reports - ascending or descending.
Sort pos.	The sorting sequence.
Column width	Determines the column width of the field. • Leave the initial value for DDIC fields. • For fields without any DDIC reference, specify the desired field output length. **Note**: This setting is not available for the Web Application view model components.
Column number	Determines the relative column position of the field for list output. The user can interactively modify the order of the columns. **Note**: This setting is not available for the Web Application view model components.
Style	Displays all the cells of the column in the style that you set here. You can use the constants of the `CL_GUI_ALV_GRID` class; for example, `MC_STYLE_BUTTON` for push buttons.

Texts

Setting	Description
Quick Info	The tool tip that should be displayed for the column header.
Heading	The heading is automatically included in the list header row, in the login language.
Column name	Determines the column heading.
Long Fld Label Medium Fld Label ShortFieldLabel	The long, medium, and short field labels can be assigned as predefined texts to the screen fields that refer to the ABAP Dictionary. If the texts have been translated, they are then displayed in the login language of the user.
ID (long)	The column identifier for the dialog functions.
Use Field Labels of Data Element	• **Col. header label**: The data element field label that should be used as the column header. • **Col. slct. label**: The data element field label that should be used for the column selection. • **Tool tip label**: The data element field label that should be used for the tooltip.

Value Display with Currency/Quantity Unit

Setting	Description
Currency ref.	The column values are displayed according to the conventions that apply for the currency you set here.
Refer. UoM	The unit of measurement that should be applied to the column values.

Parameters for Fields without DDIC Reference

Setting	Description

Data element F1	If the search help for this field is called, the description of the data element that you assign here is displayed. **Note**: You can also use this setting for fields that have a DDIC reference, if you want to display a description different from the one stored in the DDIC.
Detail view	Displays details of the related data element.

Reference to the Data Dictionary

Setting	Description
Ref. table name	The reference table name for the internal table field.
Ref. field name	The reference field name for the internal table field.

Formatting Column Contents

Setting	Description
Icon	Select this check box to output the content of the column in the output table, as an icon.
Alignment Use L (left-justified), R (right-jus.) or C (centered)	Determines the alignment of the column content in the output.

Icons

Setting	Description
Use icon?	Select this check box to use the icon as a field value.
Icon 1 Icon 2 Icon 3	Use the respective search help to select the icons that should be used for the field.

Web Field Properties

These fields are available for only the Web Application view model components.

Setting	Description
Input type	The input type for the Web Application field.
Checked	Select this check box if the radio buttons and check boxes should be selected by default.
Columns. no	The number of columns for the text area input field.
Rows number	The number of rows for the text area input field.
Button group	Use this setting to assign radio buttons to groups; radio buttons with the same group ID are displayed in the same group.
Visible length	Sets the visible length of a field in the web browser.
Reference level	The logical level in the PROCESS DIRECTOR internal structure. Use the search help to pick an existing level.
Object type	The PROCESS DIRECTOR process type to which you want to apply the settings.
Comp. type	The component type of the system view model you want to override.

SAP GUI	SAP GUI List Header	Document overview list in the SAP GUI
A1	Additional grid 01	Subgrids in the document overview list or document detail view, such as account assignments, conditions, partners, etc.
A2	Additional grid 02	Currently not used.
ARC_LOG	Header data for archive log	Data included in the archive log that is created when a document is posted to SAP.

<table>
<tr><td></td><td>
<table>
<tr><td>MS</td><td>Main screen</td><td>Currently not used.</td></tr>
<tr><td>WA_DOC</td><td>WA Document Detail</td><td>Document detail view in the Web Application.</td></tr>
<tr><td>WA_LIST</td><td>WA List Header</td><td>Document overview list in the Web Application</td></tr>
<tr><td>WC_STAT</td><td>Workflow status</td><td>Header data in the workflow status dialog.</td></tr>
</table>
</td></tr>
<tr><td>Grid No</td><td>The grid number of the system view model you want to override.</td></tr>
<tr><td>Tab and Position in Tab</td><td>

Tab identifier: The identifier of the tab determines the type of information the tab contains; for example, header or vendor data. Use the search help to pick an identifier.
Tab row: Determines the vertical order inside a tab.
Tab column: Determines the horizontal order inside a tab.
Suppress label: Select this check box if the label of the field should not be displayed in the Web Application.

</td></tr>
</table>

Other Fields

Setting	Description
Drop down alias	Select this check box to use aliases in the drop-down table of the ALV grid.
Dropdown handle	Determines the drop-down handle that should be used in the ALV grid.
Optimize Columns	Determines the way in which the columns are optimized.
Key Field	This field is a key field. **Note**: This setting is not available for the Web Application view model components.

Convers. Rout.	Use this setting if you want to override the standard conversion, by specifying a conversion routine.
W/o conv. exit	Select this check box if the conversion exit should not be considered for the output.
Value copy	ALV control: Automatic value copy
Trigger field color	Select this check box to configure the field as a trigger field. Use the **Color**, **Intens.**, **Inverse**, and **Priority** fields to configure colors for the trigger field.

Search help - Field assignment

Setting	Description
Search help parameter	The search help parameter name. Parameters define the data to be used in the search help. There must be a parameter of the search help for each field that is displayed in the search help selection screen and for each field in the hit list.
Grid number	The grid number of the system view model you wish to define the search help for.
Assignment field	The PROCESS DIRECTOR field assigned to the search help field.
Constant	Here you can enter a default value that will be displayed in the field when the search help is opened. Constants must be enclosed in apostrophes.
Search relevant field	Select to mark the field(s) from which the content is transferred to the search help when the user enters text in the field that has the search help configured in the Web Application (background search). This flag allows you to send the content of one additional field (the content of the field that has the search help configured is automatically sent). This can be useful, for example, to enable the user to search by the description as well as the key.

Search help - Collective

Setting	Description
Included search help	Search help (usually an elementary search help) that will be available in the Web Application.
Detail view	Display details of the search help.
Short text	Brief explanatory text for the search help.
Sort position	Sequence number indicating the position of the search help in the **Search help** drop-down list.
Primary search help	Select to specify that this search help will be used for the background search that is run when the user begins typing in the field.
Remove	Select to deactivate an existing Default system settings entry.

Customer line item matching

Setting	Description
Target grid	The grid in which the corresponding line item should be automatically highlighted when the user selects a line in the source grid.
Source field name	The name of the field in the source grid that should be used to match the lines in the grids.
Target field name	The name of the field in the target grid that should be used to match the lines in the grids.
Remove	Select to deactivate an existing Default system settings entry.

Status/substatus - define document icons

Document status icons

`/EBY/PDVI_VSTAC`

Expert IMG **> Change system settings > Presentation and interface > Status/Substatus - define document icons**

Setting	Description
Status	Select the document status.
Icon	In the first **Icon** column, select the icon for the document status or enter an icon code. The icon itself is displayed in the second column.
Icon name Icon description	These fields are filled by the system.

Document substatus icons

`/EBY/PDVI_VSSTC`

Expert IMG **> Change system settings > Presentation and interface > Status/Substatus - define document icons**

Setting	Description
State	Select the document substatus.
Icon	In the first **Icon** column, select the icon for the document status or enter an icon code. The icon itself is displayed in the second column.
Icon name Icon description	These fields are filled by the system.

SAP GUI detail screen

Expert IMG **> Change system settings > Presentation and interface**

Tabs at detail screen

`/EBY/PDVI_VDSTC`

Setting	Description
Tab ordno.	Enter a number to specify the position of the tab in the detail screen. For example, 3 means that this is the third tab.
Tab label	Name that will be displayed on the tab.
Icon	Use search help to select an icon to display on the tab.
Program name	Enter `/EBY/SAPLPDVI_SCREEN`.
Scrn. no.	Enter 0950.
Class/Interface	Enter `/EBY/CL_PDVI_SCREEN_CUSTOM`.
Description	Enter a description for the tab.
Repl/Rem.	Check this option to disable (hide) the standard system tab.

Background detail screen

`/EBY/PDVI_VBGDC`

Setting	Description
Program name	Enter */EBY/SAPLPDVI_SCREEN*.
Screen with tabs	Use search help to select a screen layout with tabs.
Screen w/o tabs	Use search help to select a screen layout without tabs.

Fields at generated tab

`/EBY/PDVI_VSCRC`

Setting	Description
Customer detail screen tabs	This area simply reminds you to add the necessary tab configuration in `/EBY/PDVI_VDSTC`. Click the **Configuration** button to jump to the tab configuration screen.
Fields for customer screen	Add all fields that should be displayed on your custom tab. Remember to also add the fields to the SAP GUI header field catalog, if necessary.

Basic screen

`/EBY/PDVI_VDBSC`

Setting	Description
Program name	Your custom function group for the basic screen.
Screen number	0910. If you created your own screen, enter the number of your screen.
Object TypeName	Name of your custom handler class for the basic screen.
Description	Description of the handler class. This field is filled automatically.
Replace/Remove	Select to override the default system setting.

Field status

Define field status

`/EBY/PDVI_VFSIC`

Change system settings > Field status

Create new profiles

Setting	Description
Field st.	ID for the field status.
Priority	Setting priorities for field statuses enables you to override the default order of precedence. The field status with the highest priority takes precedence over all other field statuses.

Example scenario:

It should be possible to edit documents with errors, even if these have been approved in workflow. The field status for documents with errors therefore allows editing of all fields.

A document with errors is sent to a workflow.

During the workflow, the approver can only edit one field in the document because the field status applied to the workflow step only allows editing of this field (by default, the field status applied to a workflow step takes precedence over the field status applied to a document status). The errors in the document are not corrected.

After approval, the document is displayed in the approver's **My approved workflows** Worklist node. Because the document still has errors, all fields are editable, even though the Worklist node field status does not allow editing of any fields (by default, the field status applied to a document status takes precedence over the field status applied to a Worklist node).

Assume that you do not want the approver to be able to edit any fields after approval (the errors will be corrected by the person responsible for posting the document).

To ensure that the document is not editable in the approver's **My approved workflows** Worklist node, but is editable during workflow, assign a priority of 1 to the workflow step field status, 2 to the Worklist node field status and 3 to the document status field status.

Properties per field and level

Setting	Description
Logical level	The logical level of the document.
Field Name	Use search help to pick a field belonging to the given logical level. **Note:** The settings per field (if any) will override the settings for the logical level. For example, if the logical level *ITEMS* has a **Display** value of *D Read only*, but the field *QUANTITY* has the default **Display** value, then all *ITEMS* fields except *QUANTITY* will be *D Read only*.

All fields	Check this box if you want the properties to apply to all fields of the given logical level. If this box is checked, the **Field Name** field should be empty. **Note:** This setting will not apply to fields that are marked as hidden in the field catalog—a hidden field can only be made visible/editable by explicitly specifying the field name in the field status.	
Display	**For one or all fields of the given logical level—** **that is, if <u>either</u> *Field Name* is specified <u>or</u> *All fields* is checked**	
	Value	**When to use**
	A Prevent row addition	This setting is not applicable.
	D Read only	If you want to display the field(s), but not allow its contents to be edited.
	H Field hidden	If you want to prevent the field(s) from being displayed.
	M Field mandatory	If you want to make it mandatory for the user to enter a value in case the field is empty.
	R Prevent row removal	This setting is not applicable.
	Field editable / allow row addition and removal	The default setting. The field(s) become editable and row addition/removal is possible. **Note**: The field catalog settings for this field will be overridden.
	For the entire logical level— **that is, if *Field Name* is blank <u>and</u> *All fields* is unchecked**	
	Value	**When to use**
	A Prevent row addition	This setting prevents you from adding a row with that logical level. For example, if the logical level is *ITEMS*, you may not add any line items to the document.

	D Read only	This setting prevents row addition and removal, but does not affect the editability of the logical level's individual fields.
	H Field hidden	This setting is not applicable.
	M Field mandatory	This setting is not applicable.
	R Prevent row removal	This setting prevents the user from deleting a row with that logical level. For example, if the logical level is *ITEMS*, the user may not delete any line items from the document.
	Field editable / allow row addition and removal	The default setting. The field(s) become editable and row addition/removal is possible. **Note**: The field catalog settings for this field will be overridden.

Map field status to document status

`/EBY/PDVI_VFSMC`

Change system settings > Field status

Setting	Description
Status	Select a document status (customer statuses will also be available if you have defined any).
Substatus	The substatus field allows you to store a piece of additional information about the document status—for example, a PROCESS DIRECTOR Requisition with the document status *OK Posted* can have a substatus value describing whether it was posted as an SAP Purchase Order or as an SAP Purchase Requisition. If this is left blank, the assignment will apply to any substatus.
Field status ID	Use the search help to select a set of field statuses that will be applied to document fields for documents with this status.

Posting

Message handling during posting

Message handling definition

`/EBY/PDBO_VMEHC`

Expert IMG > **Change system settings > Posting**

Setting	Description
Handling	ID of the action for which you want to configure posting messages.
Description	Description of the action for which you want to configure posting messages.

Message handling during posting

`/EBY/PDBO_VMEPC`

Expert IMG > **Change system settings > Posting**

Setting	Description
Message ID	The message class containing the message.
Short Description	A short description of the message (entered automatically).
MsgNo	The message number of the message.
Message text	The text of the message.
Msg type	The type of message displayed: • **E Error** • **S Success** • **W Warning** • **Use default** (uses the standard system setting for the message)

Message handling	The ID and description of the action for which you want to configure the message.
Remove	Select to deactivate an existing Default system settings entry.

Umbrella Solution

Umbrella source systems

`/EBY/PDUM_VSYSC`

Expert IMG **> Change system settings > Umbrella Solution**

Setting	Description
System ID	System ID of the remote system whose documents should be available in the umbrella system.
RFC Destination - Background	An RFC destination for "background" processing to enable users to view documents of this system in the umbrella system. Access is via the umbrella RFC user.
RFC Destination - Dialog/Online	(Optional) An RFC destination for "online/dialog" processing with the **Current User** flag set. Transactional processing such as jumping to a document or posting a document should be performed by real users, not the RFC user. Setting this flag will force users to log on with their own credentials in order to process the document. They only need to log on to a remote system once per session to process documents of that system.
Deactivate	Check to disconnect the system from the umbrella solution.

Dialog Remote Function Modules

`/EBY/PDUM_VFMDC`

Expert IMG **> Change system settings > Umbrella Solution**

Setting	Description
System ID	System ID of the remote system.

Function Module	Name of the function module. Users will be force to log on the first time this function module is called.
Short text	Description of the function module.
Remove	Select to deactivate a Default system settings entry.

Umbrella - Workflow description mapping

`/EBY/PDUM_VWCMC`

Expert IMG **> Change system settings > Umbrella Solution**

Setting	Description
System ID	System ID of the remote system.
Workflow	ID of the workflow in the remote system.
Remote workflow description	Description of the workflow in the remote system.
Workflow description	Description of the workflow in the umbrella system.

Other

Other settings for emails

`/EBY/PDBO_VEMLC`

Expert IMG **> Change system settings > Other > Other settings for emails**

Setting	Description
Background	Name of the file to use as the background image for HTML emails.
CSS styles	Name of the CSS file to use for HTML emails. You must add this file to the SAP Web Repository.

User types handling

/EBY/PDBO_VUSTC

Setting	Description	
User type	Type of user (Internet, SAP or LDAP)	
User type factory	Assign the appropriate user type factory. This setting is required.	
	I Internet user	*/EBY/CL_ICWC_USER_FACTORY_INT*
	L LDAP user	*/EBY/CL_PDBO_USER_FACTORY_LDAP*
	S SAP user	*/EBY/CL_PDBO_USER_FACTORY_SAP*
	G User group	*/EBY/CL_ICWC_USER_FACTORY_GRP*
Position	Enter a number to define the priority (1 being the highest priority). The user with the highest priority will be entered as the default value for the user type in the **Workflow start** dialog. PROCESS DIRECTOR uses the defined order of priority to authenticate users when they log on to the Web Application. For example, it searches first for SAP users with the given logon credentials, then Web Application users, then LDAP users.	

Popup title, fields and dropdowns

Popup ID and title

/EBY/PDBO_VPUIC

Expert IMG **> Change system settings > Other > Popup title, fields and dropdowns > Popup ID and title**

Setting	Description
Popup ID	Unique identifier for the popup.

Popup title	Text that appears at the top of the popup.

Popup fields

`/EBY/PDBO_VPUFC`

Expert IMG > **Change system settings > Other > Popup title, fields and dropdowns > Popup fields**

Setting	Description
Popup ID	Unique identifier for the popup.
Table Name	Name of the interface structure that contains the field. Refer to the appropriate process type document model customization section in the *PROCESS DIRECTOR Reference Guide* for the correct name of the structure. For example, the interface structure for vendor master header data is `/EBY/PDMDVM_SHDR_IF`.
Field Name	Name of the field. The field must be available in the interface structure and the field catalog. If you want to use a custom field, you must add it to the appropriate customer include.
Order	Enter a number to determine the position of the field in the popup (higher numbers at the bottom).
Popup v.t.	Type of value to insert: a fixed value, an SAP system variable, or a parameter ID. **Parameter ID** enables you to insert a default value from SAP memory in the field. If you select **Parameter ID**, you must enter the appropriate parameter in the **Set/Get parameter ID** field.
Value	Value that is inserted in the field. Enter a fixed value or an SAP system variable, depending on what you entered in the **Popup value type** field.
Set/Get parameter ID	Enter a value in this field if you selected **Parameter ID** in the **Popup value type** field. For example, to enter the company code that is defined in the user profile, select *BUK*. The *BUK* parameter and its value must have been entered in the user profile in the **Parameters** tab. See the SAP documentation for more information on Set/Get parameters.
Fld attrib	Determines how the field is displayed and whether it can be edited. • **[Blank] Normal intensity, data entry possible**: Normal field that can be edited. • **01 Highlighted, data entry possible**: The field label is highlighted in a different color and can be edited.

	• **02 Normal intensity, data entry not possible**: Normal field that cannot be edited. • **03 Highlighted, data entry possible**: The field label is highlighted in a different color and cannot be edited. • **04 Do not display**: The field is not displayed.
Required	Check to make the field mandatory (it must be filled in).
Label only	Check to display only the field label, not the value.
Value only	Check to display only the field value, not the label.
Dropdown	Specifies whether values can be entered in the field or selected from a drop down list. • **[Blank] No drop down box - regular input field**: Normal input field. • **D Input field with drop down box**: Field with drop down list to select values. You specify the values for the drop down list in the popup dropdowns screen .
Repl./Rem.	Check to override the default system setting.

Popup dropdowns

/EBY/PDBO_VPUDC

Expert IMG **> Change system settings > Other > Popup title, fields and dropdowns > Popup dropdowns**

Setting	Description
Popup ID	Unique identifier for the popup.
Field Name	Name of the field.
Single value	Value that is displayed in the dropdown list.
Short text	Text description for the value that is displayed in the dropdown list.
Replace / Remove	Check to override the default system setting.

User exits / BAdIs

Platform

Basic

BAdI Screen PBO/PAI

User exits / BAdIs > Platform > Basic

This platform user exit / BAdI currently provides the interface methods *PBO*, *PAI*, *SET_PAI_OKCODE* and *EXCLUDE_FUNCTION_CODES* that you can implement to add your own customer logic for the screen display. For example, you can use this BAdI to display or verify values.

PBO method

Calling sequence

This method is called in the SAP GUI when the screen is refreshed after an action is processed.

Method signature

Type	Parameter	Description
	IR_SELOBJECT	Selected object
	IR_MAINSCREEN	Main screen object
	IC_EDITMODE	GUI edit mode

PAI method

Calling sequence

This method is called in the SAP GUI before an action is processed.

Method signature

Type	Parameter	Description
	IR_SELOBJECT	Selected object
	IR_MAINSCREEN	Main screen object

	CC_OKCODE	Screens, function code triggered by PAI

SET_PAI_OKCODE method

Calling sequence

This action is called in the SAP GUI before an action is processed.

Method signature

Type	Parameter	Description
	IR_SELOBJECT	Selected object
	IR_MAINSCREEN	Main screen object
	CC_OKCODE	Screens, function code triggered by PAI

EXCLUDE_FUNCTION_CODES method

Calling sequence

This method is called in the SAP GUI when the screen is refreshed after an action is processed.

Method signature

Type	Parameter	Remarks
	IT_UCOMM_MAPPING	Map GUI commands to actions
	IT_SELECTED_OBJECTS	Table of /EBY/CL_PDBO (any PD document)
	IR_MAINSCREEN	Main screen object
	CT_EXCLUDED_FCODES	This parameter is pre-populated with the list of function codes excluded for any of these reasons: not assigned to an action

		it is the function code of a button that calls the detail screen, but we are already in the detail screen because of state not authorized It is possible to re-enable a disabled action by deleting its function code from *CT_EXCLUDED_FCODES*. To do this, you need to know the function code mapping of the action.

BAdI Modify Worklist

User exits / BAdIs > Platform > Basic

This platform user exit / BAdI currently provides the interface method *MODIFY_WORKLIST* that you can implement to add your own customer logic for the PROCESS DIRECTOR Worklist configuration.

Typical usages of this user exit / BAdI are to:

- change the currently selected Worklist node
- change the Worklist construction, for example, by disabling some nodes (greying them out) or removing them entirely

MODIFY_WORKLIST method

Calling sequence

In the SAP GUI environment, this user exit is called during PROCESS DIRECTOR startup and when the **Refresh** toolbar button is clicked (action *REFRESH_ALL_OBJECTS Refresh list of objects*).

1. At PROCESS DIRECTOR startup when the Worklist tree is built.
2. At PROCESS DIRECTOR startup when the user's previous Worklist node is restored (*action=STARTPROCESSDIRECTOR*, */EBY/CL_PDVI_FORW_REFRESH* does *RAISE EVENT refresh_data* which triggers */EBY/CL_PDVI_WORKLIST_TREE->EXPEND_NODES_FOR_SELECTED* which calls *REFRESH_TREE_FULL*).
3. After pressing refresh button (*fcode=REFRESH*, *action=REFRESH_TREE_AND_OBJ*, */EBY/CL_PDVI_FORW_RSH_WRK_TREE* does *RAISE EVENT refresh_tree* which triggers */EBY/CL_PDVI_MAINSCREEN->ON_REFRESH_TREE* which calls *REFRESH_TREE_FULL*).

REFRESH_TREE_FULL calls the BAdI.

In the Web Application environment, this user exit is called from the action *WA_GET_TREE_DATA Retrieve Worklist data XML*, immediately after retrieving the last Worklist node visited by the user.

Method signature

Type	Parameter	Remarks
	IR_CONTEXT	Reference to the user session context

Change the currently selected Worklist node

To change the currently selected node, simply assign a Worklist node to the *CHANGING* parameter *CR_SELECTED_NODE*.

Note: Under certain conditions, such reassignments of the currently selected Worklist node can be overridden by an implementation of the user exit / BAdI **Set Worklist node of a single document link**.

One way to obtain an existing Worklist node is to search for it by node ID via the method *IR_WORKLIST->FIND_NODE2*. This only works for static nodes and semi-dynamic nodes which are not under dynamic nodes, because this method uses the static node ID taken from the Worklist configuration.

Change the Worklist construction

Removing nodes completely is not recommended, since you can lose access to a document in case a change in its properties causes it to be assigned to a removed node.

Warning: Document access can be lost even if a removed node becomes visible again after the BAdI implementation is deactivated, because the document won't be visible in that node until the next update action is performed on it—which can never happen unless document is visible in some other node.

Note: Since this user exit / BAdI is called *after* Worklist node authorization checks have been performed, any nodes added to the Worklist by a **Modify Worklist** implementation are *not* subject to authorization checks (unless you explicitly perform authorization checks in your coding).

To make a Worklist node invisible, Call *IR_WORKLIST->GET_NODE_FOR_EXT_ID* to find a node using its external ID, and then set *MB_INVISIBLE = ABAP_TRUE* on that node.

BAdI Modify field profiles

User exits / BAdIs > Platform > Basic > Modify field profiles

This user exit / BAdI currently provides the interface method *MODIFY_FIELD_STATES* that you can implement to add your own customer logic when field statuses are applied.

MODIFY_FIELD_STATES method

Method signature

Type	Parameter	Remarks
	IC_OBJ	Object type
	IC_COMP_TYPE	Screen component type
	IC_GRID_NO	Grid number
	IC_DMILEVEL	Logical level of the internal data model

	IC_GRID_CONF	Grid configuration
	IT_OBJECTS	Table of objects
	IR_CONTEXT	Reference to the user session context
	CR_STATES	Field states / field profile

BAdI Set Worklist node of a single document link

User exits / BAdIs > Platform > Basic

When a user clicks a single document link in a workflow notification email or SAP Business Workflow work item, the document will open up in a default Worklist node that is calculated from the document GUID.

This platform user exit / BAdI currently provides the interface method *SET_NODE* that you can implement to add your own calculation routine for determining this default Worklist node.

You can change to any node that the document belongs to.

Note: The document will not be displayed in the overview list if you change to a node that does not contain the document as part of its document selection.

SET_NODE method

Calling sequence

This method is only called when resolving SAP Business Workplace work items and single document links in workflow notification emails. This method is called **after** the user exit / BAdI **Modify Worklist**.

Method signature

Type	Parameter	Remarks
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method.
	CR_NODE	Worklist node

BAdI Determination results

User exits / BAdIs > Platform > Basic > Determination results

This user exit / BAdI currently provides the interface method *PROCESS* that you can implement to add your own customer logic after determinations have been performed.

PROCESS method

Calling sequence

This method is called after determinations have been performed, but before checks run.

Method signature

Type	Parameter	Remarks
	IC_OBJ_TYPE	Document type
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IR_CONTEXT	Action chain context
	IS_BO_HEADER	Basic document header
	CR_OBJECT	Document object

BAdI Rejection reason

User exits / BAdIs > Platform > Basic > Rejection reason

This user exit / BAdI currently provides the interface methods *BEFORE_REJECT* and *AFTER_REJECT* that you can implement to add your own customer logic before and after a rejection reason is entered.

BEFORE_REJECT method

This method can be used, for example, to exclude mandatory rejection reasons/notes for a specific company code, or change the rejection reason descriptions.

Calling sequence

This method is called before the **Rejection reason** popup is displayed.

Method signature

Type	Parameter	Remarks
	IR_OBJECT	Abstract PROCESS DIRECTOR basis object
	CS_REJECT_REQ	Document rejection requirements
	CT_REASON	Document rejection reason descriptions

AFTER_REJECT method

This method can be used, for example, to change values in the document or create a PDF note after document rejection.

Calling sequence

This method is called after the user selects a rejection reason.

Method signature

Type	Parameter	Remarks
	IR_OBJECT	Abstract PROCESS DIRECTOR basis object

Web Application

BAdI Set messages

User exits / BAdIs > Platform > Web Application

This user exit / BAdI currently provides the interface method *SET_MESSAGES* that you can implement to add your own customer logic to modify messages sent to the Web Application.

SET_MESSAGES method

Method signature

Type	Parameter	Description
	IR_CONTEXT	Reference to the user session context

	IR_WA_CONTEXT	Web Application session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method.
	CT_MESSAGES	Messages with localized text

BAdI Set actions

User exits / BAdIs > Platform > Web Application

This user exit / BAdI currently provides the interface method *SET_ACTIONS* that you can implement to add your own customer logic to modify which actions are available to the Web Application. You can use this method to enable any action, even if it is not in the Web Application's base action pool.

SET_ACTIONS method

Method signature

Type	Parameter	Description
	IR_CONTEXT	Reference to the user session context
	IR_WA_CONTEXT	Web Application session context
	CT_ACTIONS	List of actions for the Web Application
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method.

BAdI User logon

User exits / BAdIs > Platform > Web Application

This user exit / BAdI currently provides the interface methods *SSO_USER_CHECK*, *USER_CHECK* and *USER_PW_CHANGE* that you can implement to add your own customer logic to modify the behavior of the application during logon to the Web Application.

PROCESS DIRECTOR provides a standard implementation for Accounts Payable, */EBY/ICWC_USER_LOGON*, which should be activated if PROCESS DIRECTOR should call User Exit 923, *User check during logon to the Web Application*, when users log on to the Web Application or change their password (either the initial password or the password in the user profile).

SSO_USER_CHECK method

Calling sequence

This method is called during user logon to the Web Application from a mobile device. It can be used to extend the search logic for the user ID, and indicates whether or not a user can access the Web Application from a mobile device.

Method signature

Type	Parameter	Description
	VALUE(IC_SSO_ID)	SSO ID used for logon to the Web Application
	VALUE(IC_USER_ID)	ID used for logon to the Web Application
	VALUE(IC_USER_TYPE)	PROCESS DIRECTOR user type
	VALUE(IT_TMAL)	Table of logons with SSO ID

USER_CHECK method

Calling sequence

This method is called during user logon to the Web Application. It can be used to provide additional logic for authenticating the user, or to replace the user who logs in with an alternative user. In the latter case, checks such as checking the password, or checking whether the account is locked, are performed with the logon user ID, but authorization checks are performed against the data of the alternative user. For example: Dave has authorization to display the Financial Postings Worklist node, but Roger does not. Dave logs on to the Web Application, but the Financial Postings node is not displayed because Roger (the alternative user) does not have authorization to display it.

Method signature

Type	Parameter	Description
	VALUE(IC_USER_ID)	Current processor
	VALUE(IC_USER_TYPE)	PROCESS DIRECTOR user type

	VALUE(IC_PASSWORD)	PROCESS DIRECTOR user password type
	CS_USER_DATA	Structure containing user data
	CS_MESSAGE	Return parameter

USER_PW_CHANGE method

Calling sequence

This method is called when users change their password in the Web Application. It can be used to extend the logic for authenticating the user.

Method signature

Type	Parameter	Description
	VALUE(IC_USER_ID)	Current processor
	VALUE(IC_USER_TYPE)	PROCESS DIRECTOR user type
	VALUE(IC_PASSWORD)	PROCESS DIRECTOR user password type
	VALUE(IC_NEW_PASSWORD)	PROCESS DIRECTOR user password type for new password
	CS_MESSAGE	Return parameter

Workflow

BAdI Workflow email handling

User exits / BAdIs > Platform > Workflow

This user exit / BAdI currently provides the interface method *BEFORE_CREATE_MAIL* that you can implement to add your own customer logic for handling workflow emails.

BEFORE_CREATE_MAIL method

Calling sequence

This method is called before a workflow email is created. Workflow emails are sent out by the `/EBY/PDWC_DUE_DATE_CHECK` program.

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.

	IT_STEP_PROCESSORS	List containing all processors of the current and next steps
	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IR_OBJECT	Base class of all ABAP objects
	CB_CANCEL_MAIL	Indicates if the email should be created
	CS_SENDER	PROCESS DIRECTOR user and user type
	CT_RECIPIENTS	List of user IDs of email recipients
	CT_CC_RECIPIENTS	List of user IDs of email CC recipients
	CC_SUBJECT	Email subject
	CT_TEXT	Email text
	CC_LANGU	Email language
	CT_ALIASES	Aliases and their replacements
	CC_MAIL_PURPOSE	Email purpose
	CC_EMAIL_TYPE	Email type

BAdI Workflow handling

User exits / BAdIs > Platform > Workflow

This user exit / BAdI currently provides the interface methods *BEFORE_START*, *AFTER_START* and *AFTER_FINISH* that you can implement to add your own customer logic for handling workflows.

This user exit / BAdI is filter-dependent and allows you to filter on object (process type) and workflow.

BEFORE_START method

This method can be used, for example, to determine whether the workflow is valid or not.

Calling sequence

This method is called before a workflow starts.

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IR_WORKFLOW	Reference to the workflow object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type and workflow ID.

	CB_INVALID	To render the workflow invalid, set this parameter to *ABAP_TRUE*.

AFTER_START method

Calling sequence

This method is executed for all workflows that are pending for the document.

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IR_WORKFLOW	Reference to the workflow object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type and workflow ID.

AFTER_FINISH method

Calling sequence

This method is only called when the workflow is finished (that is, the last step of the workflow has been approved).

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IR_WORKFLOW	Reference to the workflow object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type and workflow ID.

BAdI Workflow steps handling

User exits / BAdIs > Platform > Workflow

This user exit / BAdI currently provides the interface methods *CHECK_RECEIVER_VALIDITY*, *CHECK_STEP_VALIDITY*, *USER_DETERMINATION*, *AFTER_FINISHED_STEP*, *GET_ITEM_APPROVER* and *CHECK_ACTION* that you can implement to add your own customer logic for handling workflow steps.

This user exit / BAdI is filter-dependent and allows you to filter on object (process type), workflow and workflow step.

Explanation of terms

Term	Explanation
Current steps	Steps for which the state is **Active**, that is, a processor is currently working on them.
Next steps	Steps whose position in the workflow definition is the same or greater than the position of the current step. In the case of steps with the same position as the current step, only those steps for which step processing has not yet started are taken into account. If the workflow has not yet started, all steps are considered as next steps.
Previous step(s)	Steps for which the state is **Done**. Invalid steps are not considered as previous steps.
Step being processed by the user / Steps being processed by the BAdI	This differentiation is due to the architecture used for the BAdI implementation. The **step being processed by the user** refers to the step that the user is currently processing in the PROCESS DIRECTOR application. When the user performs an action that triggers the BAdI, for some methods all steps of the workflow must be processed. This is performed in a loop, one step at time. In this case, the PROCESS DIRECTOR application processes not only steps that are being processed by the user, but also other steps in the workflow - these are then **steps being processed by the BAdI**.

CHECK_RECEIVER_VALIDITY method

This method can be used, for example, to determine whether a user is valid for a specific workflow action or not.

Calling sequence

This method is called in the following cases:

- For the APPROVE action – for next steps only
- For the CONTINUE action – for current and next steps
- For the WORKFLOW START action – for current and next steps
- For the FORWARD action – only for the step currently being processed by the user
- For the QUERY action – only for the step currently being processed by the user

Method signature

Type	Parameter	Remarks
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps

	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IS_RECEIVER	The step recipient is passed here
	IR_STEP	Reference to the step object
	IR_RECEIVER	Reference to the step receiver object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.
	CB_INVALID	To render the recipient invalid, set this parameter to *ABAP_TRUE*.

CHECK_STEP_VALIDITY method

This method can be used, for example, to determine whether a step is valid or not.

Calling sequence

This method is called in the following cases:

- For the APPROVE action – for next steps only
- For the CONTINUE action – for current and next steps
- For the WORKFLOW START action – for current and next steps

This method is called **after** workflow step conditions (if any) have been evaluated for the given step.

Method signature

Type	Parameter	Remarks
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps

	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IS_RECEIVER	The step recipient is passed here
	IR_STEP	Reference to the step object
	IR_RECEIVER	Reference to the step receiver object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.
	CB_INVALID	To render the step invalid, set this parameter to *ABAP_TRUE*.

USER_DETERMINATION method

This method can be used, for example, to add or remove workflow step processors.

Calling sequence

This method is only called for valid steps. It is called in the following cases:

- For the APPROVE action – for next steps only
- For the CONTINUE action – for current and next steps
- For the WORKFLOW START action – for current and next steps
- For the FORWARD action – only for the step currently being processed by the user
- For the QUERY action – only for the step currently being processed by the user

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps
	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps

	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IR_STEP	Reference to the step object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.
	CT_USERS	List of user IDs

AFTER_FINISHED_STEP method

Calling sequence

This method is called for all steps whose status is **Done** for the actions APPROVE, RECALL COMPLETE, RECALL PROCESSOR, REJECT, REPLY.

This method is called **after** a step is approved or rejected. If the step is a final step, this method is called before the **Workflow handling** user exit / BAdI method *AFTER_FINISH*.

Method signature

Type	Parameter	Remarks
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data

	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps
	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IR_STEP	Reference to the step object
	IR_CURRENT_DOCUMENT	Reference to the current document

	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.

GET_ITEM_APPROVER method

This method can be used, for example, to assign processors for line item approval. The approver is returned using the *CS_APPROVER* parameter and should be one of the step processors, who are available in the *IT_LINE_PROCESSORS* table.

Calling sequence

This method is called for active steps for which user assignment is necessary and line item approval is enabled. Each item of the document is processed in a loop. This method is called on workflow start and step approval.

Method signature

Type	Parameter	Description
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.

	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.
	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps
	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IT_LINE_PROCESSORS	Possible processors for the step
	IR_STEP	Reference to the step object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.
	CS_APPROVER	Approver data
	CB_PRESET_APPROVED	Preset the **Approved** flag

CHECK_ACTION method

Calling sequence

This method is called before any other workflow BAdI method. It is called during the approve, reject, forward, and query actions.

Method signature

Type	Parameter	Remarks
	IC_ACTION	Action for which the BAdI is executed (domain */EBY/PDWC_MACTIVITY*): *APR* - approve *QRY* - query *FWD* - forward *RJC* - reject
	IS_COORDINATES	Structure containing information about the current action chain, action and envelope
	IC_WC_ID	Workflow ID
	IS_WC_HDR	Structure containing workflow header data
	IS_WC_CONF	Structure containing workflow configuration
	IT_WC_ALL_STEPS	Table containing all workflow steps and their data
	IC_STEP_ID	Workflow step ID. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_CONF	Structure containing workflow step configuration. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IS_STEP_DATA	Structure containing workflow step data. This parameter refers to the step that is being processed by the BAdI method, by the user.

	IN_STEP_POSITION	This value represents the position of the step that is currently being processed by the user. **Note**: When the workflow is in the start phase but has not yet started, the value is set to 0. The same value is set when the workflow has already finished.
	IT_STEP_USER_TYPES	User types available for the step. This parameter refers to the step that is being processed by the BAdI method, not by the user.
	IT_STEP_PROCESSORS	List containing all processors of the current and next steps
	IT_STEP_APPROVERS	List containing all step approvers of the current and previous steps
	IT_NEXT_STEPS	List containing all next steps with their details
	IT_CURR_STEPS	List containing all current steps with their details
	IT_PREV_STEPS	List containing all previous steps with their details
	IR_STEP	Reference to the step object
	IR_CURRENT_DOCUMENT	Reference to the current document
	IR_CONTEXT	Reference to the user session context
	VALUE(FLT_VAL)	Filter values passed implicitly to the BAdI and explicitly to the method. Structure contains object type, workflow ID and step ID.
	EB_CANCEL	To render the action on a step invalid, you can set this parameter to *ABAP_TRUE*.
	ET_MESSAGES	List of messages to be added to the queue. Message of type 'E' (error) has the same meaning as the parameter *EB_CANCEL* set to *ABAP_TRUE*.

Catalog settings

OCI catalog settings

`/EBY/PDBO_VCAT`

Expert IMG **> Catalog settings >OCI catalog settings** (available only for PO Requisitions)

PROCESS DIRECTOR supports the parameters *HTTP_METHOD=POST* and *HTTP_METHOD=GET* to call an OCI catalog from the PROCESS DIRECTOR Web Application. Add the appropriate parameter to the OCI catalog settings.

Field	Description
Seq. Number	The sequence number determines the order in which the parameters are transferred. **Note**: The URL should always be the first parameter in the sequence.
Type	The parameter type. • **URL**: The URL used to call up the catalog. For long URLs, you can add several lines and distribute the name over these lines, which must all have the type URL. • **SAP Field**: If you select this type, you can enter the name of an SAP system variable, the content of which is then used at runtime. For example, if you enter **sy-langu** as the parameter value, the SAP system language is transferred as a parameter. • **Fixed value**: The value specified in the field **Value of Parameter for Catalog** is transferred. • **Return URL**: This is required so that the data from the catalog can be transferred to PROCESS DIRECTOR. **HOOK_URL** is usually used as the return URL parameter. Do not enter a parameter value for the return URL; this is determined at runtime. **Note**: All parameters that follow the return URL in the sequence apply to the return URL and not to the URL.
Name of Parameter for Catalog	The name of the parameter (supplied by the catalog provider). **Note**: You do not have to enter a name for parameters of the type **URL**.
Value of Parameter for Catalog	The value for the parameter (supplied by the catalog provider).

Financial Posting specific settings

Change system settings

Posting type configuration

`/EBY/PDFI_PTYPEC`

`/EBY/PDFIC_PTYPEC`

Setting	Description
Post. Type	Unique identifier for the posting type.
Post. Type Descr.	Posting type description.
Reference Post Type	You only need to specify a reference posting type if you are creating a new posting type that requires an additional popup for the user to enter initial information before the document is created, or if the new posting type uses consumed amounts for deferrals. The new posting type inherits logic and settings from the reference posting type, such as: Display of an additional popup on document creation, as well as field validation and checks for this popup. Values for the credit and debit indicators at line item level. Posting interface data preparation to determine which data is transferred to the SAP transaction during simulation or posting. Calculation of consumed amounts for deferrals Field statuses and excluded actions are not inherited and must be configured manually.
Transaction Code	SAP transaction code to be used for posting. Only transaction codes supported by PROCESS DIRECTOR are available.
Document type	SAP document type.
Transaction	SAP transaction key. Based on this value, the system retrieves the default SAP posting keys that have been configured for the transaction key.

Debit posting key	SAP posting key for debit posting. If a transaction key is not specified, the system uses this posting key for the debit lines of the PROCESS DIRECTOR document.
Credit posting key	SAP posting key for credit posting. If a transaction key is not specified, the system uses this posting key for the credit lines of the PROCESS DIRECTOR document.
Cust. Post. Key	SAP posting key for the customer position. **Note**: This parameter is only for Customer Postings.
Resulting Post. Type	Posting type set on each document that is generated from a recurring entry. **Note**: This parameter is only for Recurring entries.
Recurr. ind.	Select to flag this posting type as a recurring entry. **Note**: This parameter is only for Recurring entries.
Use FI post. interf. to post - no BAPI	Select to use the posting interface. When this check box is not selected, the BAPI is used for posting.
Active	Select to activate the posting type for use in PROCESS DIRECTOR.
Replace / Remove	Select to override the default system setting.

Fields to clear on posting type change

`/EBY/PDFI_PTPCC`

`/EBY/PDFIC_PTPCC`

Expert IMG **> Financial Posting specific settings > Change system settings**

Setting	Description
P. Type	PROCESS DIRECTOR FI/FIC posting type.
Field Name	The name of the field that will be cleared.

Remove	Select to deactivate an existing Default system settings entry.