

Kofax Process Director Inbound Monitor Installation and Configuration Guide

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KOFAX

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About this guide

This guide is for users who install and configure Kofax Process Director Inbound Monitor™. For information on processing documents in Inbound Monitor, see the *Kofax Process Director Inbound Monitor User Guide*.

For information on installing and configuring Kofax Process Director Accounts Payable™ and Kofax Process Director™, see the following guides.

- *Kofax Process Director Import and Upgrade Guide*
- *Kofax Process Director Accounts Payable Configuration Guide*
- *Kofax Process Director Configuration Guide*
- *Kofax Process Director Advanced Configuration Guide*
- *Kofax Process Director Reference Guide*

About Kofax Process Director Inbound Monitor

Kofax Process Director Inbound Monitor receives incoming invoices or other documents as PDF files or XML attachments of any format.

Data can enter Inbound Monitor in the following ways.

- Inbound Monitor retrieves the data from emails sent to a mailbox in SAP
- Files are uploaded in bulk to Inbound Monitor from a file share
- Users manually upload files to Inbound Monitor
- Inbound Monitor receives data via the Process Director generic API /EBY/PDBO_DATA_RECEIVE

If PDFs are received, an external web service analyses the PDF to determine whether XML invoice data is embedded in it. If XML invoice data is embedded, it extracts the XML and passes it back to Inbound Monitor where it gets archived. If no XML invoice data is embedded, the PDF is placed in a file share or sent to a specific mailbox for further processing, for example, by an OCR system.

Received XML data is parsed using XSLT transformations and passed to Process Director Accounts Payable or a different Process Director document type based on the defined field mapping.

Inbound Monitor processing is highly automated, but it also offers functions for exception handling by users. This may be necessary, for example, if the archive or external service were unavailable during data entry, or if the XML format or attachment type is not recognized and Inbound Monitor was unable to correctly process the data.

Components

The installation of Inbound Monitor consists of two independent components that require different installation procedures.

- SAP AddOn as a Process Director document type, delivered as an SAP transport and with pre-configured data mapping settings
- Installation files for the ZUGFeRD Extraction Service, implemented as a Windows service

The following sections provide detailed installation instructions for these two components.

SAP components

The following components are provided for the SAP AddOn.

- Process Director Inbound Monitor transport
The SAP transport contains workbench objects and must be imported into the corresponding SAP systems. There is one transport that is required for Process Director versions 7.7 and higher only.
- Multiple XSLT mapping files
The XSLT mapping files must be uploaded separately to all the SAP systems in the system landscape.
- Process Director field mapping from the XSLT extracted data to Process Director Accounts Payable, available as an XML file.
The field mapping should be uploaded to the SAP development system. The settings will be added to a customization transport, where all the other project-specific settings can be added, and then moved across the SAP system landscape using the standard SAP transport process.

ZUGFeRD Extraction Service

This software package installs a Windows service, which is registered in all the configured SAP systems as an RFC destination. All the steps are optional when only XML attachments are processed and no PDF documents.

The shipped ZIP archive contains all the files required for registering and running the Windows service, including the configuration templates and the installation script.

SAP system requirements

- No special requirements for Process Director Accounts Payable.
- Process Director 7.9.0.6, 7.10.0.4, 7.11.0.2, 7.12 or higher.

Installation in SAP

To install Inbound Monitor, complete the following procedures.

[Define the RFC destination](#)

[Import the SAP transport](#)

[Enter the license key](#)

Define the RFC destination

In each of the SAP systems in which you process PDF documents, configure a TCP/IP RFC destination using the `SM59` transaction.

You must enter the **RFC Destination** ID later on during the standard application configuration. You must enter the **Program ID** in the Windows service installation configuration.

 For new systems, it may be necessary to adjust the security settings to specify which external Program ID can be registered using the REG_INFO value. See [SAP Help link for Gateway Security Settings](#).

RFC Destination	ZUGFERDIN	
Connection Type	T TCP/IP Connection	Description
Description		
Description 1	ZUGFeRD Inbound Extraction	
Administration Technical Settings Logon & Security Unicode Special Options		
Activation Type		
<input type="radio"/> Start on Application Server <input checked="" type="radio"/> Registered Server Program		
<input type="radio"/> Start on Explicit Host		
<input type="radio"/> Start on Front-End Work Station		
Registered Server Program		
Program ID	ZUGFeRDService	
Start Type of External Program		
<input checked="" type="radio"/> Default Gateway Value		

Import the SAP transport

Install the SAP transport using the SAP Transport Management System (STMS).

You must place the files from the transport ZIP file in the corresponding COFILES and DATA directories of the transport management system.

Verify that the import ends successfully without any import errors.

Enter the license key

The license key and other required information is in the .TXT file that you receive from Kofax after ordering the license. See the *Kofax Process Director License Installation Guide* for detailed information on licensing.

To enter your license key, complete the following steps.

1. Go to /EBY/PD_LICENSES.
2. In change mode, add a new entry.
3. Select the **ZUGFeRD** object type.
4. Enter the license information. Leave the **Licensed vol.** and **Workflow volume** fields blank.
5. Click **Save** .

Configuration in SAP

To configure Inbound Monitor, complete the following procedures.

[Configure archiving](#)

[Configure the Worklist](#)

[Upload the XSLT files](#)

[Map the data](#)

[Configure creation of a PDF visualizing XML invoice data](#)

[Configure data reception and final processing](#)

[Configure the application](#)

[Activate the SAP mailbox listener](#)

[Activate data synchronization from Process Director Accounts Payable](#)

[Required special SAP authorizations](#)

Configure archiving

Use the standard SAP configuration to create document types for PDF, XML and XMLS and assign them to the appropriate business objects. We recommend that you create two document types for PDF to differentiate between the invoice image and the email body, which can also be archived.

1. In `OAC2`, add new document types for the document classes PDF, XML and XMLS.
2. In `OAC3`, assign both document types to the `/EBY/PDXY` business object.
3. In `OAC3`, assign the document type for the invoice PDF to the `/COCKPIT/I` business object.
4. (Optional) Assign the document types for the XML and the mail body to the `/COCKPIT/B` business object.

Configure the Worklist

Use the standard Process Director Worklist configuration in transaction /EBY/PDBO_WLC to configure a Worklist for Inbound Monitor. See the *Kofax Process Director Configuration Guide* for detailed information.

After creating the Worklist, be sure to generate it to activate the new settings. You must do this in the QA or PROD system as well.

The configuration of the main node should be similar to the following example.

The screenshot shows the configuration interface for a Worklist in SAP. The main window is titled 'DEV(1)/100 Change basic data'. It is divided into several sections:

- General:** Object type is 'ZUGFERD Inbound Message monitor' and Node description is 'Inbound Message monitor'.
- Authorization:** Authorization Object is empty, and 'Show unauthorized' is unchecked.
- Data selection:** View name is '/RSE/Z6_VWRKL', Node type is 'ST Static', Max. number of hits is 50, and Upper limit of hits is 100. 'Sel. screen mandatory' is unchecked.

On the right side, there is a 'Ranges configuration' pane showing 'OBJ = 'ZUGFERD''. Below that, there are 'Operators' (AND, OR) and 'Fields' (BELNR, BUKRS) sections.

For proper monitoring, we recommend that you create Worklist tree nodes for different STATE values, such as the following ones.

Unprocessed	STATE = 'NN'
XML extracted	STATE = 'OK'
Error occurred	STATE = 'ER'
Sent to OCR	STATE = 'OC'
Sent to AP	STATE = 'AP'
Sent to PD	STATE = 'PD'
Posted	STATE = 'PO'
Paid	STATE = 'CL'
Rejected	STATE = 'XX'

Upload the XSLT files

Use the standard SAP configuration to upload the XSLT mapping instruction files and assign them to mapping IDs. For variants of the same invoice format, we recommend that you use the **Version** value to use the same mapping but different XSLT instructions, for example, FATTURA PA 1.1, FATTURA PA 1.2, EBInterface, ZUGFeRD, IDOC INVOICE0x, and so on.

To upload an XSLT file, complete the following steps.

 You must perform the XSLT upload in each system.

1. In transaction `/RSE/Z6_C2`, select the XSLT file and type a stylesheet ID and version.
2. Click **Execute** .
3. Go to transaction `/RSE/Z6_C1` and add a new entry.
4. Enter the stylesheet ID and version that you defined in `/RSE/Z6_C2` and type a unique string from the invoice data to identify the XSLT stylesheet ID assignment. When possible, use parts of the XMLNS specification.

Examples:

Display View "Inbound Monitor XSLT assignment": Overview



Inbound Monitor XSLT assignment		
Stylesheet ID	Version	Keyword in XML
CHILE	1	www.sii.cl/SiiDte
EBINTERF	4	ebinterface.at/schema/4p
EBINTERF	5	ebinterface.at/schema/5p
EXTENDED	1	urn:ferd:CrossIndustry
FATTURA	1	fatturapa/v1.2]
FATTURA	2	fatture/v1.2
FRABELEG	1	FRABELEG
INVOICE416	1	INVOIC416
MEXICO	1	www.sat.gob.mx/cfd/3
NFE	1	www.portalfiscal.inf.br/nfe
UBL	1	specification:ubl
VOUCHER	1	VoucherKI_DocumentNo
XRECHNUNG	1	rsm:CrossIndustryInvoice

5. Click **Save** .

Map the data

For the new XSLT IDs, you can copy the mapping from an existing format. The field mapping is usually done in the same way for most of the formats and may require only minimal fine tuning and different data cleanup (using mapping functions). You can use the mapping template XRECHNUNG for most of the formats.

To upload and adjust the mapping, complete the following steps.

1. In transaction `/EBY/CONFIG_DUMP`, select **Upload from XML**.
2. In the **Upload xml file** group, select a request and the mapping_zugferd_ap.xml file.
3. Click **Execute** .
4. In the IMG for **IV Incoming Invoice**, go to **Initial settings > Mapping > Map external data to PD documents** (`/EBY/PDBO_VMAPC`).
5. Adjust the mapping with the origin type EICC.

Display View "Map external data to PD documents": Overview

Project ID: Ultimate demo
Object type: IV Incoming Invoice

Mapping conversion functions

Origin	Mapping ID	Node ID	Parent	Logical level	Field Name	Sub...	G...	External field name	Check field	Check value	Mapping
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ACCOUNT	NET_AMOUNT		0	FIELD47			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ACCOUNT	TAX_RATE		0	FIELD46			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ACCOUNT	TEXT		0	FIELD49			ALT_TEXT
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	ITEM_AMOUNT		0	FIELD47			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	LFSNR		0	FIELD35			PO_AS_LIFNR
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	MATERIAL		0	FIELD49			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	PO_NUMBER		0	FIELD34			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	PO_UNIT		0	FIELD45			MEINS_IV
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	QUANTITY		0	FIELD44			
03 EICC	XRECHNUNG	LINEITEM	SINGLEITEM	ITEM	TAX_RATE		0	FIELD46			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	COMP_CODE		0	FIELD32			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	CURRENCY		0	FIELD15			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	DEL_COSTS		0	FIELD13			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	DOC_DATE		0	FIELD02			DATEFORMAT
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	GROSS_AMOUNT		0	FIELD11			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	HEADER_TXT		0	FIELD04			
03 EICC	XRECHNUNG	SINGLEITEM		HEADER	IBAN1		0	FIELD22			

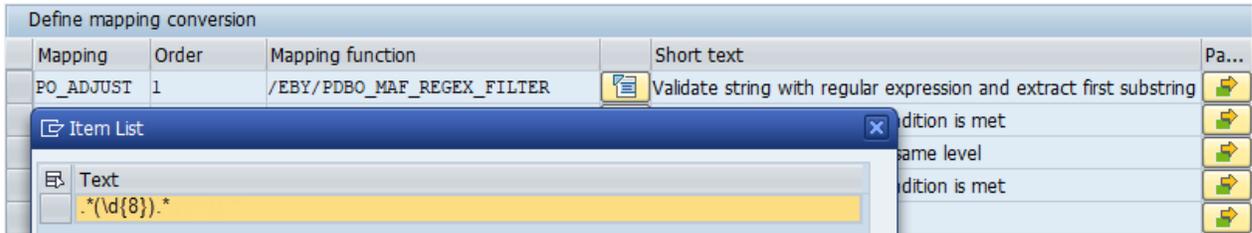
Mapping functions

You can adjust the external data using mapping functions, for example, remove prohibited characters, convert data formats, convert ISO units to SAP units, and others.

Since Process Director 7.5 the mapping conversion function `/EBY/PDBO_MAF_REGEX_FILTER` is available to extract values from an extracted string using regular expressions.

In the parameters, define the first pattern you want to extract from the mapped string. Always test the function module manually before applying the changes!

For example, PO_ADJUST with the parameter `.*(\d{8}).*` will extract an 8 digit number from a long string.

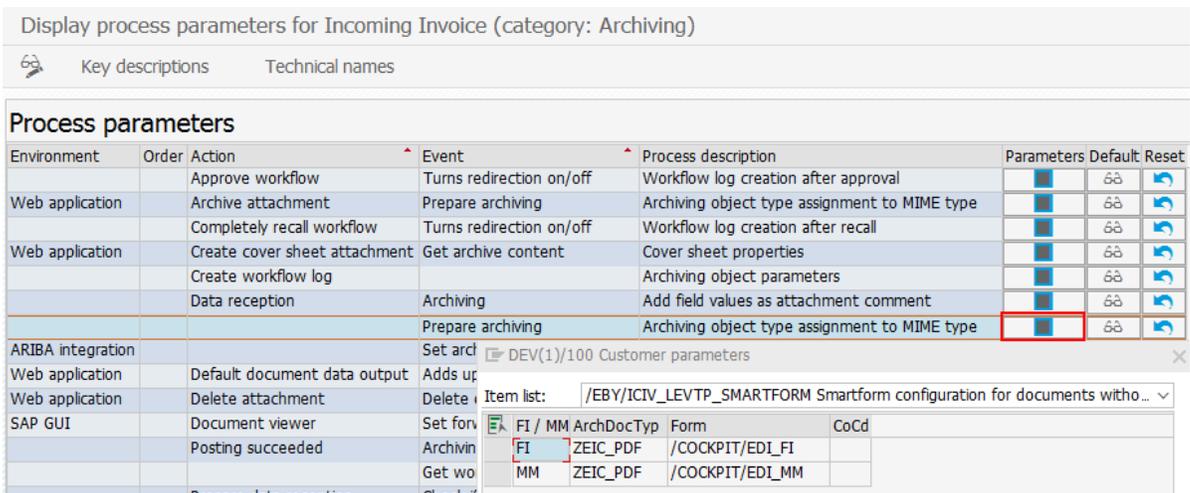


Configure creation of a PDF visualizing XML invoice data

You can configure Inbound Monitor to automatically create an attachment that visualizes the XML invoice data, similar to the one that is used for EDI data visualization. You can select specific forms for FI or MM invoice data for individual company codes. The archive document type is mandatory.

To configure creation of a PDF to visualize the XML data, complete the following steps.

1. In the IMG for **IV Incoming Invoice**, go to **Initial settings > Process parameters > Archiving** (/EBY/PDBO_EPC_ARCHIV).
2. In change mode, for the event **Prepare archiving**, click **Customer parameters**  for the **Archiving object type assignment to MIME type** process.
3. In the **Item list**, select **Smart Form configuration for documents without invoice image**.
4. Specify the archive document type and the Smart Form to use for FI and MM invoices. You can also specify a company code to limit use of the Smart Form to this company code.



5. Click **Save** .

Configure data reception and final processing

In the /RSE/Z6_CMAIL transaction you can maintain the following configuration settings.

Display View "Maintenance view Inbound Monitor Configuration"

CoCode	E-Mail Recipient	File upload ID	Identifier	E-Mail Address	Sender	Obj...	Logical Destination	Create Archive	Regex for filename
1001	0001@inbound.com			OCR@rsonline.com	JONES		Q76CLNT800_TRUSTED	<input type="checkbox"/>	
1000		PDF						<input type="checkbox"/>	
1000	inbound_monitor@kofax.com	PDF						<input type="checkbox"/>	
1000	inbound_monitor@kofax.com	XML						<input type="checkbox"/>	^(.*)\d+\$
7000	danfe_PD@kofax.com	XML_DN				DN		<input type="checkbox"/>	
7000	nota_fiscal@kofax.com	XML_NF						<input type="checkbox"/>	

CoCode

Company Code

E-mail Recipient

Map an internal mailbox to company codes.

If an email is sent to multiple recipients in copy, the E-Mail Recipient entry also controls which address to store in the message monitor.

File upload ID

Map file upload IDs to company codes.

When only one file upload ID is defined, the manual file upload does not prompt the user to select an ID.

Identifier

A value that allows you to control to which remote system the data is sent to.

E-mail Address, Sender

Define whether mailbox documents for OCR processing should be sent to the sender of the mail. The default is the current system user.

Object type

Define the Process Director document type to create after XML data extraction. The default is Process Director Accounts Payable (IV Incoming Invoice).

Logical Destination

Define whether data should be sent to a remote system.

Create Archive

Define whether attachment data should be sent for renewed archiving if the systems do not share the same content repository.

Regex for filename

Define a common filename pattern to add multiple attachments to a new document using the mass file upload option.

A detail screen is available for the maintenance of these values.

Configure the application

You can make the usual adjustments to the user interface, as described in the *Kofax Process Director Configuration Guide*.

To open the application customizing, complete the following step.

- Go to transaction `/EBY/PDBOC` and select the **ZUGFERD Inbound Message monitor** object type.

For Inbound Monitor, the following settings are mandatory. You configure these settings in the IMG under **Initial settings > Process parameters**.

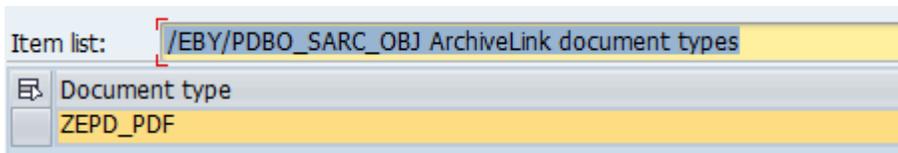
Define the archive document type and RFC destination for the Extractor service

You must define the RFC destination for the ZUGFeRD extractor service and the archive document type that the service analyzes to determine whether XML invoice data is embedded in it.

To configure the archive document type and the RFC destination, complete the following steps.

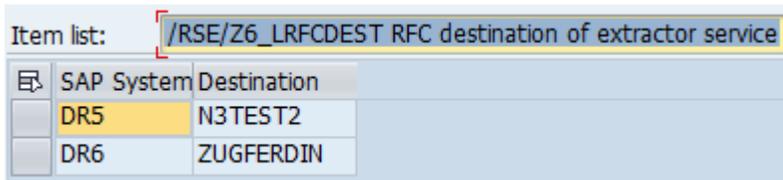
1. Select **Process parameters > Other**.
2. In change mode, for the **RFC destination and PDF for XML-extraction** process, click **Customer parameters**.
3. Select the archive document type that must be taken into account for the ZUGFeRD analysis when PDF documents are processed.

This document type must be configured in `OAC3` for the `/EBY/PDXY` business object.



4. In the **Item list**, select **RFC destination of extractor service**.

Add an entry for each of the used SAP systems.



i If you do not want to use the extractor service, but use an external OCR provider, set the destination NONE to skip the service and forward PDF documents to a mailbox.

- Optional. If the documents must be passed by the service to OCR, you can hand over some values to an existing Kofax Invoices instance. In the **Item list**, select **Structure to handover values to OCR** and add the fields and their values.

Item list: /RSE/Z6_LOCR_VALUES Structure to handover values to OCR

Field Name	Value
BUKRS	
NUMBR	
SYSTEMID	SY-SYSID

The field values are automatically populated by the extractor service into an additional text file.

```
[VARIABLES]
AR_OBJECT=ZEPD_PDF
ARC_DOC_ID=005056B54D671EEAB1ECF4BBA51E9D79
ARCHIV_ID=Z1
ARCTABLE=
FILENAME=00000000000091.pdf
MIMETYPE=application/pdf
ORDNO=000
SAP_OBJECT=
BUKRS=
NUMBR=00000000000091
SYSTEMID=GDE
```

Define archiving parameters

You must define the following parameters for archiving.

i The document type for all the settings must match the customer's OAC3 configuration.

To define archiving parameters, complete the following steps.

- Select **Process parameters > Archiving**.
- To archive the email body after XML processing, in change mode, for the **Smartform and document for archiving after po** process, click **Customer parameters**.
- Select the status AP, the document type ZEPD_NOTES and the form name /EBY/PDWC_NOTES_AND_WORKFLOW.

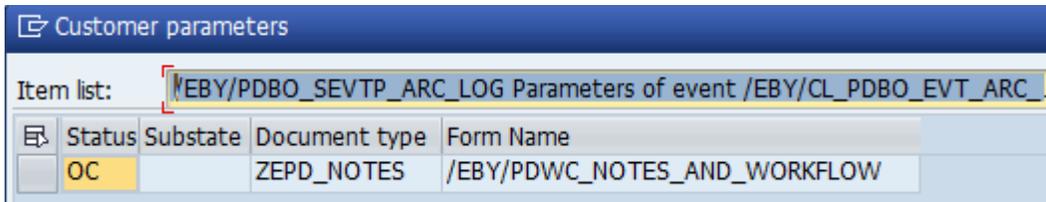
Customer parameters

Item list: /EBY/PDBO_SEVTP_ARC_LOG Parameters of event /EBY/CL_PDBO_EVT_ARC

Status	Substate	Document type	Form Name
AP		ZEPD_NOTES	/EBY/PDWC_NOTES_AND_WORKFLOW

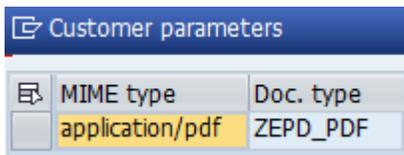
- To archive the email body when the document is handed over to an OCR solution, for the **Archiving object parameters** process, click **Customer parameters**.

5. Select the status OC, the document type ZEPD_NOTES and the form name /EBY/PDWC_NOTES_AND_WORKFLOW.



Status	Substate	Document type	Form Name
OC		ZEPD_NOTES	/EBY/PDWC_NOTES_AND_WORKFLOW

6. To assign the archive document type of the email when there is no unique assignment of the PDF to the archive document type, for the actions **Data reception** and **Set document state** and the **Prepare archiving** event, click **Customer parameters**  for the **Archiving object type assignment to MIME type** process.
7. Select the MIME type application/pdf and the document type ZEPD_PDF.



MIME type	Doc. type
application/pdf	ZEPD_PDF

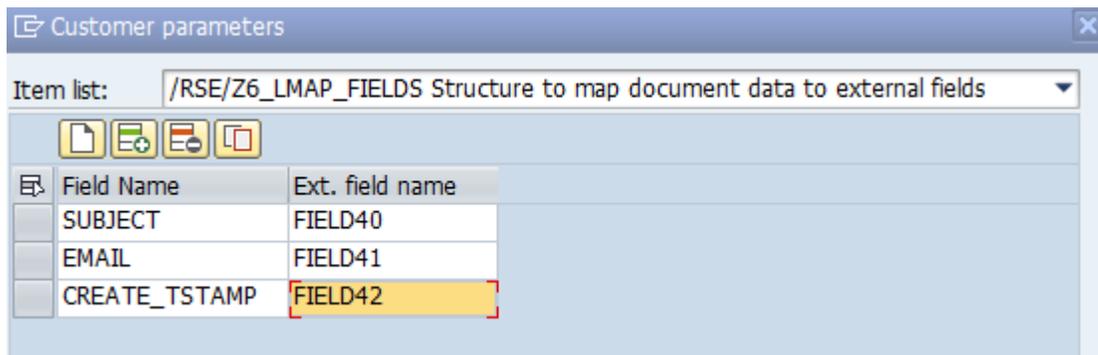
8. Optional. To ensure that this document type is used as the invoice image when you receive PDF documents, complete the following steps.
 - a. Select **Process parameters > Posting**.
 - b. In change mode, for the **PDF invoice archive type** process, click **Customer parameters** .
 - c. In the **Item list**, select **ArchiveLink document types**.
 - d. Select the document type ZEPD_PDF.

Map email data to external fields

You can map field values from the email reception, such as email subject, email address, creation date, and so on, to the external field structure. The external fields 40-52 are not used for header fields in the standard XSLT files and are available for use as external field name values.

To map email data to external fields, complete the following steps.

1. Select **Process parameters > Posting**.
2. In change mode, for the **PDF invoice archive type** process, click **Customer parameters** .
3. In the **Item list**, select **Structure to map document data to external fields**.
4. Add the email fields and the external fields to which they will be mapped.



Split emails into multiple documents for specific attachments

When Inbound Monitor receives an email with multiple attachments, you can split the attachments to create a separate Inbound Monitor document for each attachment, or for each attachment type, such as PDF or TXT. Attachment splitting can take place automatically on data entry, or users can split attachments manually. Inbound Monitor does not automatically process manually split documents.

Configure manual split

To configure manual split, complete the following steps.

1. Select **Process parameters > Archiving**.
2. In change mode, for the **Archive documents that need to be copied** process, click **Customer parameters** .
3. Add the document type ZEPD_PDF.

Configure automatic split

To configure automatic split, complete the following steps.

1. Select **Process parameters > Archiving**.
2. In change mode, for the **Split documents with multiple attachments** process, click **Customer parameters** .
3. Add the document type ZEPD_PDF.

Send documents to a mailbox for OCR processing

You can configure Inbound Monitor to send documents to a mailbox for further processing, for example, by an OCR system.

To send documents to a mailbox, complete the following steps.

1. Select **Process parameters > Checks**.
2. In change mode, for the **OCR document handling** process, click **Customer parameters** .
3. Select the **Deactivation** check box to activate forwarding to a mailbox.

4. In the **Item list**, select **ArchiveLink document types** and add the attachment document types that should be forwarded.
5. In the **Item list**, select **Language dependent email subject** and specify the email subject line. The default is the original subject line or document number. You can add additional entries for other languages.

Customer parameters

Item list: /EBY/PDBO_LEVTP_MAIL_SUBJECTS Language dependent email subject

Subject	Language
Test line &HEADER-NUMBR& defined	EN
Testzeile Deutsch	DE

6. In the **Item list**, select **Event parameter with general text ID** and select an SAP general text to use as the standard mail body text.

Customer parameters

Item list: /EBY/PDBO_SEVTP_TEXT_ID Event parameter with general text id

Text ID
/EBY/PDBO_DISPATCH_POST

The sender is the current SAP user (communication user) or the one specified in the central configuration table. This can be controlled on the company code level.

Configure document creation from attachments with a filename pattern

An upload of multiple files with a filename pattern creates a single document where this pattern is used as an identifier.

In the `/RSE/Z6_CMAIL` transaction, in the **Regex for filename** field, you can assign a filename pattern to the **File upload ID**.

The default filename pattern is files with similar names and different extensions, such as `file_123.pdf`, `file_123.xml`, `file_123.txt`.

If the pattern matches an unprocessed previous pattern, the attachment will be added to the existing document.

To use this functionality, ensure that the uploaded documents are excluded from autoposting after the reception. For details, see the *Kofax Process Director Configuration Guide*.

Send documents to a remote system

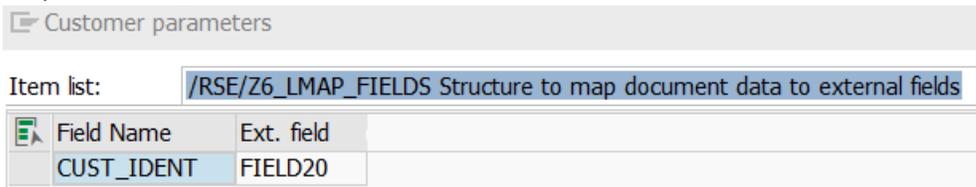
You can transfer documents from Inbound Monitor to a remote target system.

In the `/RSE/Z6_CMAIL` transaction, use the **Logical Destination** field to define whether the data should be sent to a remote system. You can also use the **Create Archive** check box to define

whether the attachment data should be sent for renewed archiving if the systems do not share the same content repository.

Configure the **Identifier** field to use a document value from the XML data to control to which remote system the document is sent to.

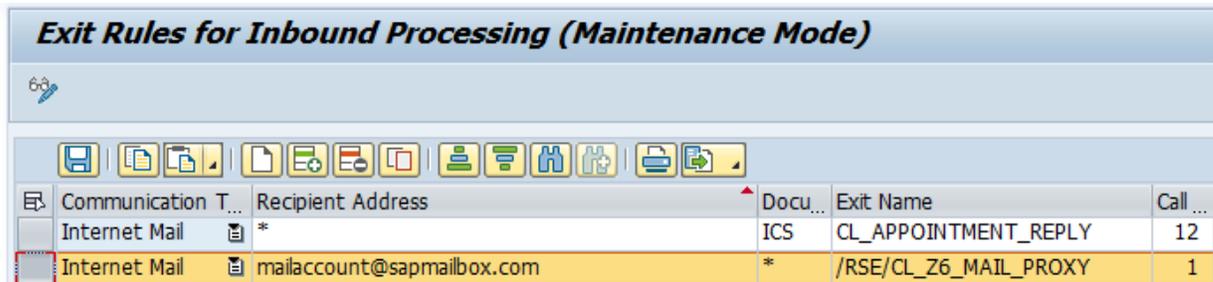
1. Select **Process parameters > Posting**.
2. In change mode, for the **Posting parameters** process type, click **Customer parameters** .
3. In the **Item list**, select **Structure to map document data to external fields**.
4. Map the CUST_IDENT field to the external field.



Activate the SAP mailbox listener

To activate automatic email takeover inside SAP, complete the following step.

- In transaction SO50, add an entry in each SAP system.



The **Recipient Address** must match the email account from which you want emails to be imported into Inbound Monitor.

You can maintain multiple mailboxes as separate entries, or work with placeholders (*).

Activate data synchronization from Process Director Accounts Payable

To enable automatic updates from Process Director Accounts Payable to Inbound Monitor, you must use User Exits.

The following User Exit templates are available for this task. If synchronization is activated in the /COCKPIT/C6 posting transaction, the DOCIMPORT User Exits are called.

User Exit number	Description	Template
020	Final transfer	/RSE/Z6_ZUGFERD_USEX_FIN_TRANS
053	Import MM doc data	/RSE/Z6_USEX_DOCIMPORT_MM
054	Import FI doc data	/RSE/Z6_USEX_DOCIMPORT_FI
072	Reject final	/RSE/Z6_USEX_REJECT_FINAL

In general, a function module is available to update the data in Inbound Monitor with the following interface.

```
CALL FUNCTION '/RSE/Z6_ZUGFERD_SYNC_TO_PD'
  EXPORTING
    ic_action = 'UPDATE'
    is_hdr    = ls_hdr
  * ic_numbr = <any_field_from_COCKPIT_that_holds_the_number>
  IMPORTING
    eb_ok    = lb_ok
  EXCEPTIONS
    OTHERS   = 0.
```

The `ic_numbr` value is required only if the attachment `archive_id` of a scanned invoice was not passed through an optional OCR solution to the Process Director Accounts Payable solution. For XML based invoices, the update works without this value.

Required special SAP authorizations

Users need the following authorizations.

- Normal users: transaction /EBY/PD
- Key users: transactions /EBY/PD* and /RSE/Z6*

Authorization object	Activities
S_DEVELOP	ACTVT = 03
S_WFAR_OBJ	ACTVT = 03
F_LFA1_APP	ACTVT = 03
S_BDS_DS	ACTVT = 03
SRFC_ADM	ACTVT = 36 RFCDEST= the one used in SM59
S_RFC	ACTVT = 16

ZUGFeRD Extractor RFC installation and configuration

The software package contains an SAP_ZUGFeRD_Extractor_RFC subfolder, with several files.

Copy the files to the Windows server and adjust the configuration templates SAP_ZUGFeRDExtractor.ini and SAP_ZUGFeRDExtractor.exe.config, then run InstallService.bat.

You can uninstall misconfigured services by running UninstallService.bat.

SAP_ZUGFeRDExtractor.ini

In this template, you specify the location of an optional Kofax Invoices installation, or the location for the LOG information and non-ZUGFeRD files, for scanning. Depending on any additional information pushed to the service, you can place the files in different directories.

To enable Invoices to use additional extracted data, you must install a special event handler, which is not included in this package.

In order to start Windows Services without any errors, create the same folders on your local computer as in LogPath parameter in the SAP_ZUGFeRDExtractor.ini file.

For the general configuration, adjust the following settings.

Example:

```
[COMMON_SETTINGS]
LogPath           = E:\INVOICES_GlobalPaths\INVOICES_58\LOG
LogLevel         = 3
[EXTRACTOR_DIRECTORIES]
;Fieldname in ET_FIELD_VALUES (see SAP configuration above)
;based on field values the files are placed into different directories
TriggerVariable  = BUKRS
Default#ItrpImportPath = E:\INVOICES_GlobalPaths\INVOICES_58\IMPORT_ZUGFeRD
;Field value#ItrpImportPath =
1000#ItrpImportPath  = E:\INVOICES_GlobalPaths\INVOICES_58\IMPORT_ZUGFeRD\0001
2000#ItrpImportPath  = E:\INVOICES_GlobalPaths\INVOICES_58\IMPORT_ZUGFeRD\0002
```

SAP_ZUGFeRDExtractor.exe.config

In this XML configuration file, you enter the connection details for the SAP RFC destinations.

In <ClientSettings>, enter the parameters for each SAP server connected to the Extractor RFC service.

Parameter	Description
NAME	ID to identify the SAP connection.
USER PASSWD	Valid SAP account username and password.
CLIENT	Three-digit SAP client identifier.
ASHOST	Host name of the application server.
SYSNR	SAP system number.
POOL SIZE	Number of open connections.
MAX POOL SIZE	Maximum number of open connections.

Example:

```
<ClientSettings>
  <DestinationConfiguration>
    <destinations>
      <add NAME="SAP_SystemID1" USER="USERNAME" PASSWD="QWEr123$"
        CLIENT="000" LANG="EN" ASHOST="hostname_1" SYSNR="00"
        POOL_SIZE="5" MAX_POOL_SIZE="10"/>
      <add NAME="SAP_SystemID2" USER="USERNAME" PASSWD="QWEr123$"
        CLIENT="000" LANG="EN" ASHOST="hostname_2" SYSNR="00"
        POOL_SIZE="5" MAX_POOL_SIZE="10"/>
      <add NAME="SAP_SystemIDn" USER="USERNAME" PASSWD="QWEr123$"
        CLIENT="000" LANG="EN" ASHOST="hostname_n" SYSNR="00"
        POOL_SIZE="5" MAX_POOL_SIZE="10"/>
    </destinations>
  </DestinationConfiguration>
</ClientSettings>
```

In <ServerSettings>, enter the server configuration parameters.

Parameter	Description
NAME	ID to identify the SAP connection.
GWHOST	Host name of the gateway.
GWSERV	Service name of the gateway.
PROGRAM ID	Name of the registered program in the SAP SM59 transaction.

Example:

```
<ServerSettings>
  <ServerConfiguration>
```

```

<servers>
  <add NAME=" SAP_SystemID1" GWHOST="hostname_1" GWSERV=""
        PROGRAM_ID="ZUGFeRDServer" REPOSITORY_DESTINATION="
        SAP_SystemID1" REG_COUNT="1"/>
  <add NAME=" SAP_SystemID2" GWHOST="hostname_2" GWSERV=""
        PROGRAM_ID="ZUGFeRDServer" REPOSITORY_DESTINATION="
        SAP_SystemID2" REG_COUNT="1"/>
  <add NAME=" SAP_SystemIDn" GWHOST="hostname_n" GWSERV=""
        PROGRAM_ID="ZUGFeRDServer" REPOSITORY_DESTINATION="
        SAP_SystemIDn" REG_COUNT="1"/>
</servers>
</ServerConfiguration>
</ServerSettings>

```

InstallService.bat

To install the Windows Services, as configured above, run the InstallService.bat command file and enter the following values.

```

Service-Name:
SAP_SystemID1

Description:
Any description - shows up in windows services

Config-Name:
SAP_SystemID1

UDP send Port:
5200

```

- Service-Name and Description appear in Windows Services.
- The Config-Name must match a name from the <ClientSettings> in SAP_ZUGFeRDE extractor.exe.config.
- The UDP Send Port must be available and open by the firewall.

The installation LOG file, SAP_ZUGFeRDE extractor.InstallLog, will be generated. By doing this, 1-n services for different SAP destinations can be installed.

i By default the service is not started, and it is not defined to be automatically started. A Windows administrator must do this in the standard Windows Services configuration.

UninstallService.bat

To uninstall misconfigured services, run the UninstallService.bat command file and enter the service name that you specified during the installation:

```

Service-Name:
SAP_SystemID1

```