

ReadSoft EDI COCKPIT

Configuration Guide

Version: 7.7

Date: 2020-10-05

KOFAX

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Preface

KofaxReadSoft EDI COCKPIT™ is a component of Kofax ReadSoft PROCESS DIRECTOR Accounts Payable™, which acts as an interface for incoming IDocs.

IDocs can be converted into regular ReadSoft PROCESS DIRECTOR documents that can then be edited, posted, and sent to workflows in WORK CYCLE.

IDocs often contain errors that prevent them from being posted. Data may be missing or the data may be incorrectly formatted. Correcting these errors in SAP is not the easiest of tasks. In addition, the people who have permissions to correct the data often lack the required business knowledge. ReadSoft EDI COCKPIT solves this problem by converting them into regular ReadSoft PROCESS DIRECTOR documents that can be processed by Accounts Payable staff in the usual manner.

About this guide

This guide explains how to configure ReadSoft EDI COCKPIT to enable the receipt and processing of IDocs in your KofaxReadSoft PROCESS DIRECTOR™ installation.

This document contains the following chapters:

- [Technical overview](#)
Provides a technical overview of how ReadSoft EDI COCKPIT works.
- [Installation](#)
Contains some notes on the installation.
- [Configure SAP](#)
To enable ReadSoft EDI COCKPIT, you must configure your SAP system accordingly.
- [ReadSoft EDI COCKPIT IMG](#)
A reference that describes all the settings in the ReadSoft EDI COCKPIT IMG.
- [Create test IDocs](#)
This chapter explains how to create test IDocs in ReadSoft EDI COCKPIT to test your configuration, and you can follow a document from its inception as an IDoc to its creation in ReadSoft PROCESS DIRECTOR.
- [Appendix A: Tables](#)
This chapter lists the main configuration tables in ReadSoft EDI COCKPIT.
- [Appendix B: User Exits](#)
ReadSoft EDI COCKPIT comes with several User Exit interfaces that you can use to customize the application, including the modification of IDoc data before and during processing by ReadSoft EDI COCKPIT.
- [Appendix C: Transactions](#)
A list of the most common IDoc transaction codes in SAP standard.

Chapter 1

Technical overview

ReadSoft EDI COCKPIT is a function module, which is specified in the process code in the [partner profile](#). Therefore, all partner profiles that will process incoming IDocs with ReadSoft EDI COCKPIT must use the ReadSoft EDI COCKPIT [process code](#) (ZEBY_EDI).

For documents posted using the standard SAP EDI interface, you then map all the customized data from IDoc into ReadSoft PROCESS DIRECTOR and then set the correct data in them (for example, the document status). IDoc segments must be numbered (they always are when using the INVOIC02 basic type, which is the IDoc basis type for an invoice/billing document). If the segments are not numbered, a User Exit is required to perform the mapping.

ReadSoft EDI COCKPIT can also retrieve the basic document data from the posted SAP document (SAP document number, fiscal year, FI/MM flag, and Company Code in case of FI documents) in order to add the correct document data into ReadSoft PROCESS DIRECTOR. By default, ReadSoft EDI COCKPIT takes the SAP document number from the IDoc status (message content). You can also use [User Exit 601](#) to retrieve this number using a different method.

Using this same User Exit, the fiscal year can also be set differently. For the FI/MM flag, it is determined the same way as in ReadSoft PROCESS DIRECTOR: A document is considered to be an MM document if a value exists for the purchase order or delivery note fields, either in the header or item structures. Otherwise, the document is considered an FI one. The only difference is that the source of the data is not in ReadSoft PROCESS DIRECTOR, but in the IDoc data.

For FI documents, the company code field is required to determine the posted SAP document. The SAP document number, fiscal year, FI/MM flag, and Company Code can all be determined in other ways, using [User Exits](#).

After the mapping is complete, the final task is to send the document to ReadSoft PROCESS DIRECTOR, using the regular `/COCKPIT/RFC_DATA_SUBMIT` function. For documents already posted, a posted PROCESS DIRECTOR document is created and no checks are performed.

If the [Transfer posted IDoc](#) setting is inactive, documents posted using the standard SAP EDI interface are not transferred to ReadSoft PROCESS DIRECTOR. ReadSoft EDI COCKPIT calls only the original function module.

All [messages](#) (warnings, errors and successes), are added to the PROCESS DIRECTOR document and IDoc status is also updated.

ReadSoft EDI COCKPIT can also create images or documents based on the IDoc for archiving, such as PDFs, XML, and HTML files.

Partner profiles

Different sending and receiving partners may communicate using different message types. While the information remains the same, different receivers may require different file formats.

Partner profiles contain the names of the partners that are allowed to exchange IDocs with your system. They also contain a list of the message types the partner may send, permitted formats and communication protocols

Ports

IDoc data can be sent and received through a multitude of different media. In order to decouple the media from the application using it, the media is accessed via ports.

A port is a logical name for an input/output device. A program talks to a port which is presented to it with a common standard interface. The port handles the translation between the standard interface format and the device dependent format.

Process codes

A process code is the function that processes an IDoc. Different IDocs can be processed using different process codes.

In most cases a process code points a function module in the R/3 system, but you can also use custom functions, such as `/COCKPIT/EDI_IDOC_TRANSFORM` for ReadSoft EDI COCKPIT.

Messages

Data exchanged by an IDoc and EDI is known as a message.

Messages of the same kind belong to the same message type. The message type defines the semantic context of an IDoc. The message type informs the receiver about how the message must be interpreted.

Every IDoc has log messages written to its status records, which contain information about the operations performed on the IDoc (for example, created, passed to another system, etc.)

It is possible to add specific messages. Message types 01-49 are the message numbers for outbound processes; 50-75 for inbound processes.

Document types

ReadSoft EDI COCKPIT processes three types of documents:

- [IDocs](#)
- [Collective invoices](#)
- [e-Invoices](#)

IDocs

IDocs (Intermediate Documents) are a file format used by SAP to exchange data between systems belonging to different partners.

IDocs are structured ASCII files (or a virtual equivalent). An IDoc consists of various records types: control record (sender, recipient, type, etc.), data record (segment data) and status record (statuses).

An IDoc is a kind of asynchronous document related to its direction: inbound or outbound. The IDoc type is the name of the data structure used to describe the file format of a specific IDoc.

IDocs can be processed in ReadSoft EDI COCKPIT in three different ways:

- All IDocs are processed by ReadSoft EDI COCKPIT and converted to PROCESS DIRECTOR documents. The standard SAP processing is not performed.
- Only IDocs with errors are processed by ReadSoft EDI COCKPIT. IDocs without errors are processed by the standard SAP interface and are not imported into ReadSoft PROCESS DIRECTOR.
- All IDocs are processed by ReadSoft EDI COCKPIT and converted to PROCESS DIRECTOR documents. Documents without errors are posted by the standard SAP interface, and are subsequently converted to posted PROCESS DIRECTOR documents.

Collective invoices

A collective invoice is the electronic version of a covering document that includes one or more PROCESS DIRECTOR documents. They are used as a way for both vendors and purchasers to track invoices, when vendors send large numbers of them.

The screenshot shows the SAP 'Display Invoice' interface for invoice 138874. The document type is 'FI' (Collective Invoice) and the state is '11'. The document data section includes fields for PD doc. type (XX Cock...), Text (SP75 QA_TEST_0012 10.07.2007 20:07:07), PO document, Header text (QA_TEST_0012), and Delivery note. The terms of payment from SAP section shows Payment terms ZB01, Days 2 (30), Days 1 (14), Disc. percent 2 (2,000), Cash discount (0,00), Disc. percent 1 (3,000), and Days net (45). Below this is a table of invoice items:

Status	Net amount	Gross amo...	Text	IDoc number	S. DocNo	F...
✓	100,00	49.880,00	unique text	0	146545	
✗	100,00	0,00	Line 1	0	0	

1. The status indicates it is a collective invoice.
2. A collective invoice contains
 - The list of invoices contained in the collective invoice, displaying the document number and status.
 - The scanned image of the original collective invoice. This image is also attached to the individual invoices.
 - The status:
 - 10 – Complete. All listed invoices are found in ReadSoft PROCESS DIRECTOR.
 - 11 – Uncompleted. One or more listed invoices are not in ReadSoft PROCESS DIRECTOR.

Unlike normal invoices, collective invoices cannot be posted, parked, or sent to a WORK CYCLE workflow.

e-Invoices

Electronic invoices are sent by document verification companies, in a variety of formats. ReadSoft EDI COCKPIT can process e-invoices if they are sent in IDoc format.

Chapter 2

Installation

ReadSoft EDI COCKPIT is contained as part of the ReadSoft PROCESS DIRECTOR transport. It has a separate license that you must activate. For details on installation and licenses, see the following ReadSoft guides:

- *PROCESS DIRECTOR Import Guide*
- *PROCESS DIRECTOR Accounts Payable Configuration Guide*

Chapter 3

Configure SAP

To enable ReadSoft EDI COCKPIT, you must configure your SAP system accordingly.

Essentially, your system must be modified so that incoming IDocs (for selected partners) are processed using ReadSoft EDI COCKPIT and not the standard SAP EDI interface.

Complete the following steps.

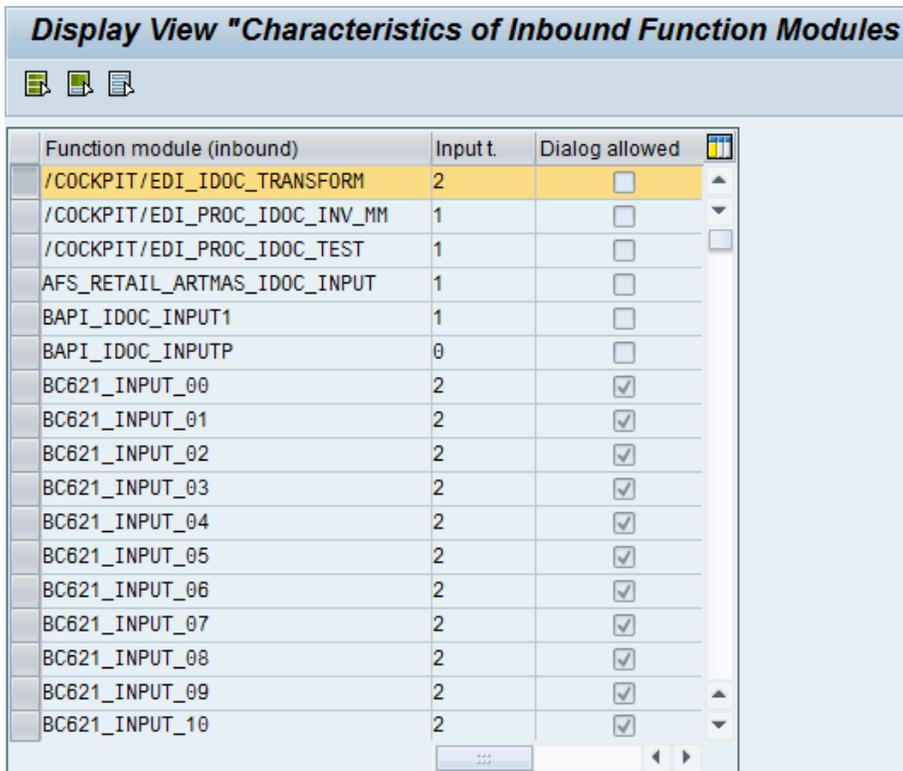
1. [Set the input type](#)
2. [Configure message and IDoc type](#)
3. [Create a process code](#)
4. [Modify partner profiles](#)

Set the input type

To set the input type, complete the following steps.

1. Go to the `BD51` transaction.

- Set the **Input type** for /COCKPIT/EDI_IDOC_TRANSFORM to **1 – Individual input**.



Note If the check boxes **Posting as IDoc** and **Transfer posted IDoc** are both checked in /COCKPIT/EI1, select the input type **2 – Individual input with IDoc lock in CALL TRANSACTION** instead.

Configure message and IDoc type

You must create multiple entries for the /COCKPIT/EDI_IDOC_TRANSFORM function module based on each entry for the standard IDOC_INPUT_INVOIC_FI and IDOC_INPUT_INVOIC_MM function modules.

- Go to the WE57 transaction.
- Go to the first instance of the IDOC_INPUT_INVOIC_FI function module. For example, for the BKPF business object.

- Use 2 – Individual input with IDoc lock in CALL TRANSACTION if 1 causes documents to lock.

Display View "IDoc: Assignment of FM to Log. Message and IDoc"

Processing by

Module	IDOC_INPUT_INVOIC_FI
Type	F

IDoc type

Basic type	INVOIC01
Extension	

Message

Message type	INVOIC	Invoice / billing document
Message code	FI	
Msg.function		

Object

Object type	BKPF	Accounting document
-------------	------	---------------------

Direction 2

- Create a new entry for the /COCKPIT/EDI_IDOC_TRANSFORM function module and copy the values from IDOC_INPUT_INVOIC_FI to it.

- Repeat steps 2. and 3. for each of the `IDOC_INPUT_INVOIC_FI` and `IDOC_INPUT_INVOIC_MM` function modules, making a copy of them for the `/COCKPIT/EDI_IDOC_TRANSFORM` function module.

Depending on your system, the result will look something like this:

Display View "IDoc: Assignment of FM to Log. Message and IDoc Ty

Function module	FctTyp	BasicTyp	Log.mess.type	
Obj. type	Dirctn	Extensio	Msg.code	MsgFnct.
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC01	INVOIC	
BKPF	2		FI	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC01	INVOIC	
BUS2020	2		FI	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC01	INVOIC	
BUS2081	2		MM	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC02	INVOIC	
BKPF	2		FI	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC02	INVOIC	
BUS2020	2		FI	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_IDOC_TRANSFORM	F	INVOIC02	INVOIC	
BUS2081	2		MM	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_PROC_IDOC_TEST	F	INVOIC01	INVOIC	
BUS2081	2		MM	<input type="checkbox"/>
<input type="checkbox"/> /COCKPIT/EDI_PROC_IDOC_TEST	F	INVOIC02	INVOIC	
BUS2081	2		MM	<input type="checkbox"/>
<input type="checkbox"/> AESS_BETATI_APTMAS_IDOC_INPUT	F	APTMAS01	APTMAS	

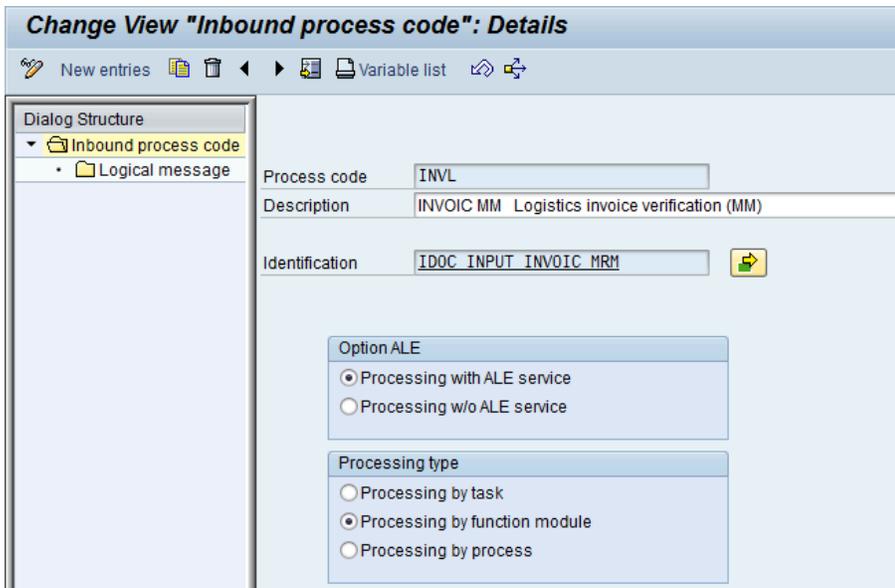
Create a process code

A custom process code is needed to convert IDocs to SAP documents. It must be based on your existing INVL process code.

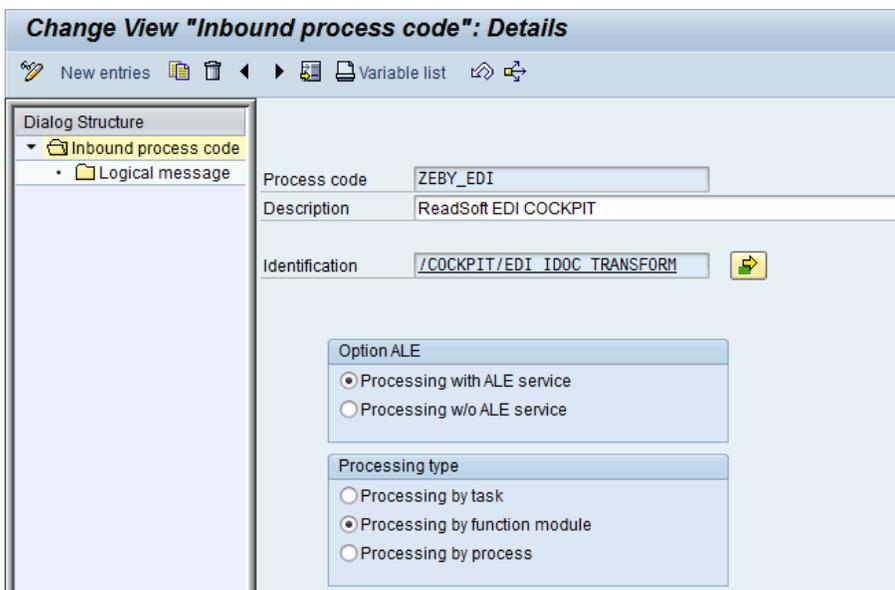
Note Process codes are client-dependent.

- Go to the `WE42` transaction.

- Go to the first instance of the INVL process code. Note the settings.



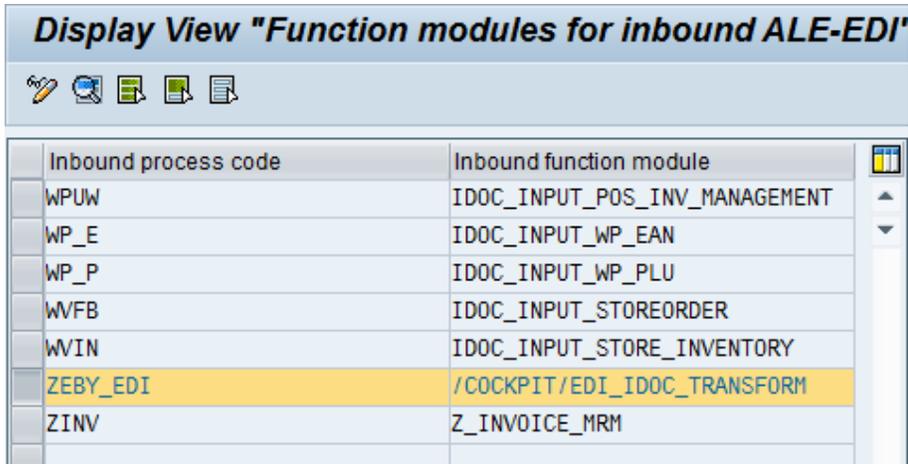
- Create a new process code, copying the settings from INVL. Use a custom process code name, for example, ZEBY_EDI.
- Specify /COCKPIT/EDI_IDOC_TRANSFORM as the function module.



- Save your entry
- Go to the SM30 transaction and display the TBD52 table.
- Copy the entry for the INVL process code to a new entry: ZEBY_EDI.
- Save, and exit the view.

9. Display the same table again, and change **Function module** from IDOC_INPUT_INVOIC_MRM to /COCKPIT/EDI_IDOC_TRANSFORM.

Display View "Function modules for inbound ALE-EDI"



Inbound process code	Inbound function module
WPUW	IDOC_INPUT_POS_INV_MANAGEMENT
WP_E	IDOC_INPUT_WP_EAN
WP_P	IDOC_INPUT_WP_PLU
WFB	IDOC_INPUT_STOREORDER
WIN	IDOC_INPUT_STORE_INVENTORY
ZEBY_EDI	/COCKPIT/EDI_IDOC_TRANSFORM
ZINV	Z_INVOICE_MRM

Modify partner profiles

For all partner profiles that are to process IDocs using ReadSoft EDI COCKPIT, you must change the process type for inbound parameters for the invoice message type.

Note In the ReadSoft EDI COCKPIT configuration, you have the option to process certain IDocs via the standard SAP EDI interface, rather than ReadSoft EDI COCKPIT (for example, those with no errors).

1. Go to the WE20 transaction.
2. Select a partner profile that is to process IDocs using ReadSoft EDI COCKPIT.
3. In the **Inbound parameters** table, open the first entry containing the **INVOIC** as the **Message type**.
4. On the **Inbound options** tab, change the **Process code** to the custom one you created. See [Create a process code](#).

This process code points to the /COCKPIT/EDI_IDOC_TRANSFORM function module, which will be used to process incoming IDocs.

5. Repeat steps 3. and 4. for all other **INVOICE** message type entries.

- Repeat steps 2-5 for all partner profiles that are to process IDocs using ReadSoft EDI COCKPIT. The other parameters in the partner profiles do not need to be changed.

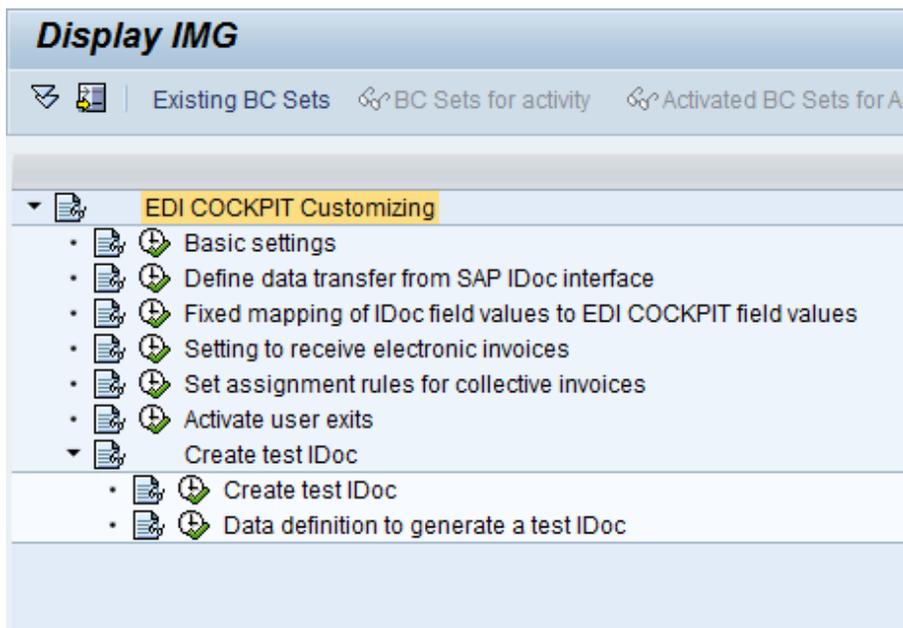
Example Example of an inbound parameter for FI invoices using a custom process type.

The screenshot shows the 'Partner profiles: Inbound parameters' configuration screen in SAP. The title bar includes a pencil icon. The main area contains several input fields and checkboxes. The 'Partn.number' field is set to '10000' and 'Partn.type' is 'LI', both associated with 'IDES AG' and 'Vendor'. The 'Message type' is 'INVOIC' (Invoice / billing document) and 'Message code' is 'FI'. There is a 'Test' checkbox. Below these are three tabs: 'Inbound options', 'Post processing: permitted agent', and 'Telephony'. The 'Inbound options' tab is active, showing a 'Process code' field set to 'ZEBY EDI' (highlighted in yellow), a 'Syntax check' checkbox which is checked, and a 'Processing by function module' section with two radio buttons: 'Trigger by background program' (unselected) and 'Trigger immediately' (selected). The 'Process code' field is also associated with 'INVOIC FI Invoice receipt (Fin...)'.

Chapter 4

ReadSoft EDI COCKPIT IMG

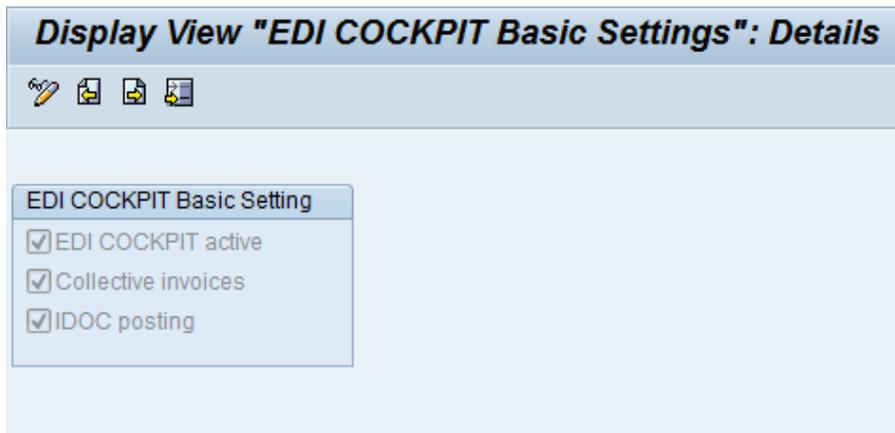
The `/COCKPIT/EI` transaction opens the configuration menu for ReadSoft EDI COCKPIT in SAP.



- Basic settings
- Define data transfer from SAP IDoc interface
- Fixed mapping of IDoc field values to ReadSoft EDI COCKPIT field values
- Settings to receive electronic invoices
- Set assignment rules for collective invoices
- Activate user exits
- Create test IDoc

Basic settings

`/COCKPIT/EI2`



Setting	Description
EDI COCKPIT active	Enables ReadSoft EDI COCKPIT. If disabled, ReadSoft EDI COCKPIT does not process incoming IDocs. Instead, ReadSoft EDI COCKPIT places a status message in the created IDocs in the system.
Collective invoices	Enables the processing of collective invoices.
IDOC posting	Enables the processing of IDocs. Note: If this option is enabled, PROCESS DIRECTOR documents with unplanned multi-account assignments cannot be posted; the Perform function must be used instead.

Define data transfer from SAP IDoc interface

/COCKPIT/EI1

Define profiles

You must create an entry in this table for every partner profile in your system (WE20) for which you want to use ReadSoft EDI COCKPIT to process incoming documents.

Profile definition fields

The first fields, listed below, define the partner profile to activate ReadSoft EDI COCKPIT processing. The profiles you define here must match those in SAP standard (WE20) in order for ReadSoft EDI COCKPIT to process incoming documents from that partner. There is one exception, the Partner number, which can be different between the two profile definitions. A match is found as long as all other fields are identical.

Profile name	Partner function	Message function
Partner number	Message type	Test
Partner type	Message code	

Note If a profile is marked as Test, documents from this profile cannot be posted.

Other fields

Setting	Description
Posting as IDoc	Posts documents as standard IDocs, using the Process code (below).
Process code	The code used to post the IDoc. This code is used to lookup the function in the TDB52 table to perform the posting, for example, IDOC_INPUT_INVOIC_FI.
Posting copy of data	Posts a copy of the original IDoc.
Generate SAP data	Determines the method of populating data in the resulting PROCESS DIRECTOR document for IDocs posted outside of ReadSoft EDI COCKPIT. <ul style="list-style-type: none"> Active: Data is got from SAP. Inactive: Data is got from the IDoc.
PD document type	The PROCESS DIRECTOR document type to use for created documents. It is also possible to change this due to different conditions in a User Exit.
Transfer posted IDoc	IDocs posted using the SAP standard IDoc interface are sent to ReadSoft PROCESS DIRECTOR and posted documents created there.
Status non-posted IDoc	The IDoc status for unposted documents. If no value is specified, 53 (posted) is used.
SmartForm MM for PDF SmartForm FI for PDF	ReadSoft EDI COCKPIT allows you to create a paper-like PDF file before transferring the document to ReadSoft PROCESS DIRECTOR. The PDF file is connected to the PROCESS DIRECTOR document as the primary image. There are two templates that you can use: one for FI and one for MM documents. You can change or copy them as needed: /COCKPIT/EDI_FI and /COCKPIT/EDI_MM.
Archive document type	The document type used to archive the above SmartForms.
e-Invoicing ID	This field is obsolete.
Receiver ID	This field is obsolete.

Define structures

Every structure has its own set of field definitions or mappings that indicate which field from which segment, in the incoming IDoc, is mapped to which field and structure in ReadSoft PROCESS DIRECTOR.

Setting	Description
Segment name	The segment ID in the IDoc. A segment is a structure of an IDoc's data.
Structure	The type of field in ReadSoft PROCESS DIRECTOR.

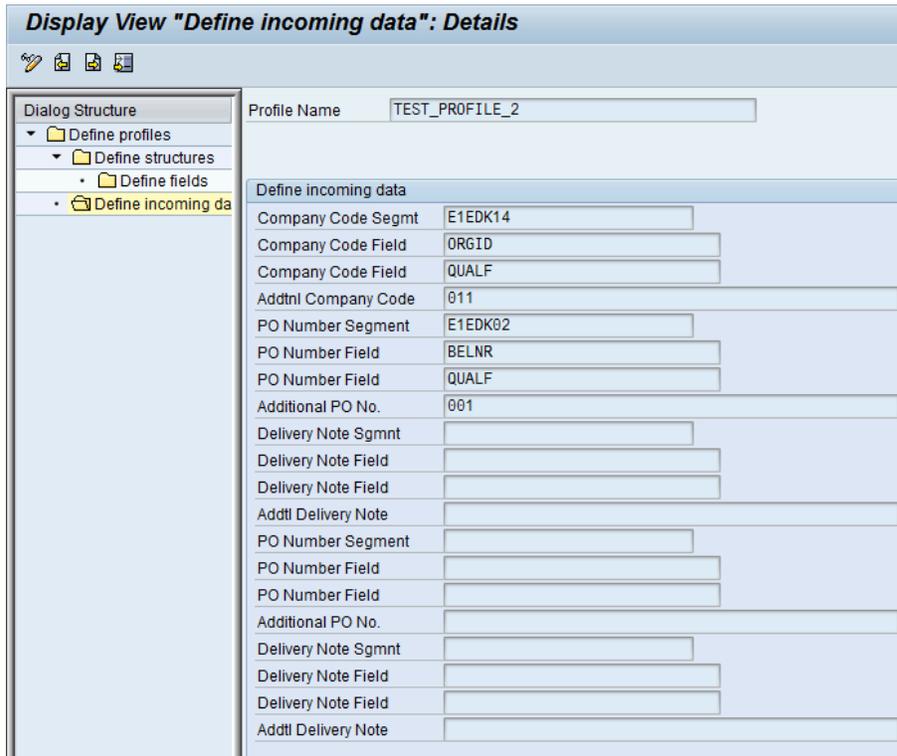
Define fields

Here, the fields between the IDoc and PROCESS DIRECTOR document are mapped.

Setting	Description
Field name	The ID of the ReadSoft PROCESS DIRECTOR field.
Segment name	The segment ID in the IDoc.
IDoc field name	The ID of the IDoc field.
Additional field	...
Field value	You can specify a pre-determined value for the field here. If you do, you must leave the Field name and Segment name blank.
Item ID	Use when some fields from segments needs to be changed permanently. For example when USD should always be changed to EUR. This configuration takes place in the <code>/COCKPIT/CEDIM</code> table. If the value in the incoming IDoc segment field matches that required in the <code>/COCKPIT/CEDIM</code> table, it is changed to value from that table.
Search type	<ul style="list-style-type: none"> • 1 - Field search in this segment The field is searched in the defined segment name. This is useful for getting data for one entry table (for example, Header structure). • 2 - Field search in dependent segment The field is searched in all of the sub-segments (tree-like structure) of the defined segment name. This is useful for getting data for many table entries. It means that one segment in IDoc with this name will cause one entry in many entries table (Items, Accounts and Taxes structures). • 3 - Field search in other segments The field is searched in every main segment in the incoming IDoc. This is useful for getting information for headers.
Add values	<p>Can be used when the data in an IDoc is stored in many of the same IDoc fields (e.g. long texts).</p> <ul style="list-style-type: none"> • Active – The data is concatenated and put into one ReadSoft PROCESS DIRECTOR field. • Inactive – Only the first IDoc field is saved in the ReadSoft PROCESS DIRECTOR field.

Defining incoming data

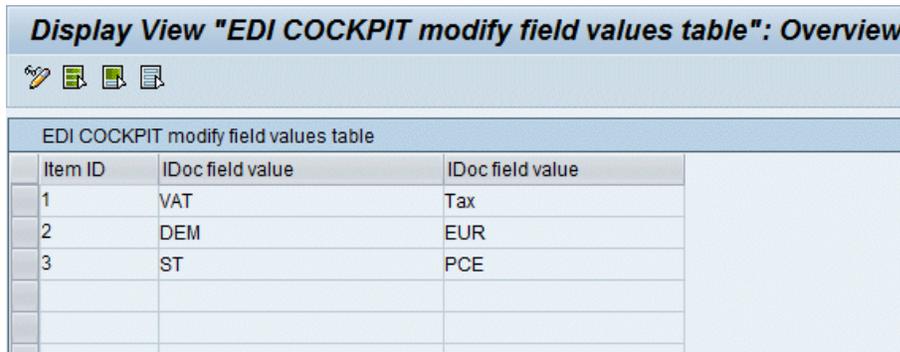
The purpose of this table is to assist in the determination of the company code, the document type (FI/MM), and the fiscal year of the incoming IDoc. In some cases, fields are duplicated in this table (for example, Company code field), allowing you to specify more than IDoc field that may represent it.



Fixed mapping of IDoc field values to ReadSoft EDI COCKPIT field values

/COCKPIT/EI3

Here you can change the values in IDoc documents. Field values are changed by searching for values only, not field names.



Setting	Description
Item ID	The ID of the mapping entry. The first entry must be 1, the second 2, and so on.

Setting	Description
IDoc field value	The value in the IDoc.
IDoc field value	The new value, which is saved in the PROCESS DIRECTOR document.

Settings to receive electronic invoices

/COCKPIT/EI7

This table is used to configure the receipt of electronic invoices from document verification companies.

Define sender and receiver profiles

Setting	Description
Sender ID Receiver ID	The ID of the sender and receiver.
Data type	The type of file containing the IDoc (XML, flat text).
Path name	Path for a temporary file to load the IDoc file into ReadSoft EDI COCKPIT, if an empty default directory is used.
IDoc_beginning	A string representing the beginning of an IDoc in the incoming XML or flat text file.
Cut string at start	Option if the start of the string should be removed or not.
IDoc_end	A string representing the end of an IDoc in the incoming XML or flat text file.
Cut the end string	Option if the end of the string should be removed or not
Segment name IDoc field name	A name of a segment and a field in IDoc where a new invoice GUID is written to pass to ReadSoft EDI COCKPIT.
Segment Name IDoc Field Name Receiver port Rec.partn.type Rec.partn.funct Receiver Sender port Partn.type Partn.funct Partn.number Message type Message code Msg.function	IDoc control record data. A new IDoc is created with these values in the control record. The values should fit to the customer's EDI SAP settings and to profiles set in /cockpit/ei1.
Port for XML Port for File	The port to use for creating the IDoc from XML and text files (SAP 4.7 and later only).

Define number and type of incoming files

This table defines the attachments expected from the sender.

Setting	Description
Sender ID Receiver ID	The ID of the sender and receiver.
Sort number	Order of files.
File name pattern	The name of the incoming file. Does not have to be exact, wildcards such as '*' or '?' can be used here.
MimeType	Binary data or text data.
Document type	The document type used for archiving the attachment.
Document (attachment) type	Indicates whether the attachment is an IDoc, an image, or another kind of file. <ul style="list-style-type: none"> • Other (unknown) • IDoc – will be converted to IDoc • Primary attachment – will be inserted as the primary image in ReadSoft PROCESS DIRECTOR (PDF, TIFF, etc.)

Set assignment rules for collective invoices

/COCKPIT/EI6

ReadSoft PROCESS DIRECTOR creates documents for collective invoices as well as the invoices the collective invoice contains. In order to create the PROCESS DIRECTOR document for the collective invoice, this mapping table is used.

Important The Profile Name field must be left blank. It is not yet used.

Setting	Description
Invoice	The ID of the field on the invoice.
Collective invoice	The ID of the field on the collective invoice.

Activate user exits

/COCKPIT/EI13

Setting	Description
User Exits	The ID of the ReadSoft EDI COCKPIT User Exit template/interface. It is necessary for the correct connection of the User Exit to the processes to be adjusted.
Function module	The name of the User Exit.

Setting	Description
No standard	Indicates the User Exit replaces standard functionality in ReadSoft EDI COCKPIT.
	Shortcut to view and edit the User Exit.

Create test IDoc

Create test IDoc

/COCKPIT/EI5

For the test documents you create, you must provide some basic information about the sender and receiver.

Setting	Description
IDoc type	The IDoc template number. You can create up to nine IDoc templates, from which the IDocs are created. The field values for each IDoc type are specified in /COCKPIT/EI4.
Number of IDocs to create	The number of IDocs to create.
Recipient/Partner settings	Information about the recipient of the test IDocs. Test flag – All of the settings relevant to partner settings in the SAP ALE (Application Link Enabling) / EDI (Electronic Data Interchange) settings. All these settings can be maintained in WE20 transaction code.
Sender settings	Information about the sender of the test IDocs.

Data definition to generate a test IDoc

/COCKPIT/EI4

This table contains the field values for the IDocs you wish to create.

Setting	Description
IDoc type	The IDoc template number. You can create up to nine IDoc templates, from which the IDocs are created.
Segment order	All segments must be numbered sequentially.
Segment name	The name of the segment for the INVOIC02 basic type.
Field name	The field ID for the segment.
Field value	The value to be added to the created IDoc.

Chapter 5

Create test IDocs

You can create test IDocs in ReadSoft EDI COCKPIT to test your configuration, including User Exits you have implemented.

You specify the values for the IDoc fields. Resulting IDocs are the **INVOIC02** basic type.

- [Create IDocs](#)
- [View IDocs](#)
- [Send IDocs to ReadSoft PROCESS DIRECTOR](#)

Create IDocs

To create test IDocs, complete the following steps.

1. Go to the [/COCKPIT/EI4](#) transaction and specify the data for your document(s).
2. Go to the [/COCKPIT/EI5](#) transaction and generate the documents.

View IDocs

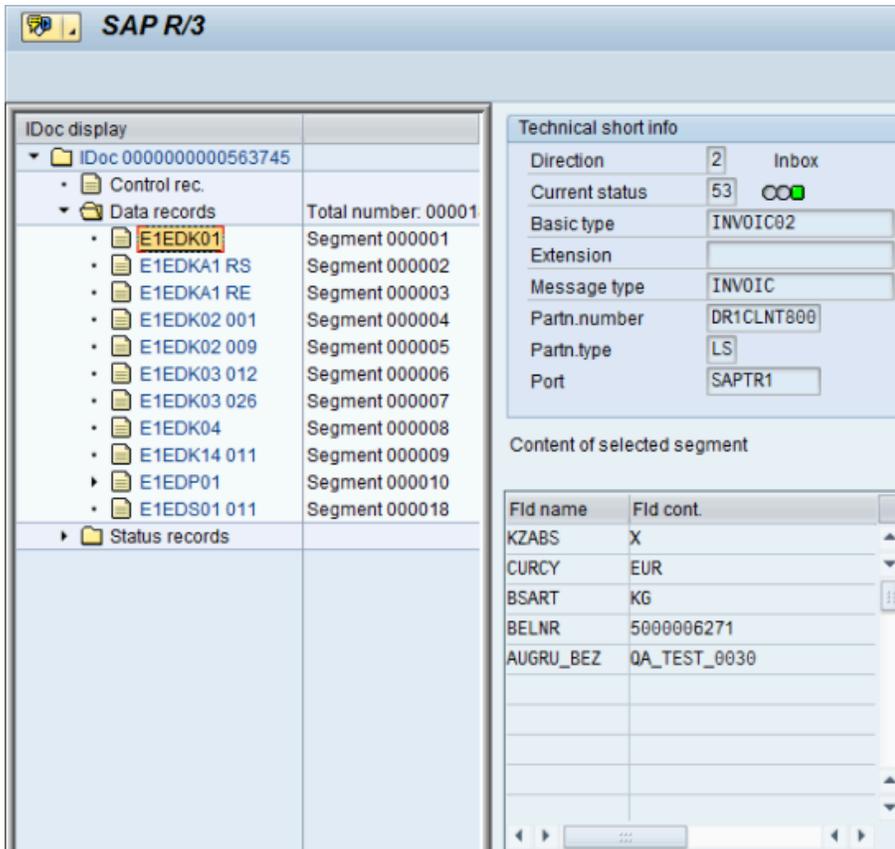
After the IDocs are created, you can view them in WE02.

1. In the WE02 transaction, enter the selection criteria, as required.

The Selected IDocs screen shows all IDocs that match your selection.

IDoc number	Seg...	Sta...	Sta...	Partner	BasicType	Date created	T
00000000005637...	18	53	CC	LS/ /DR1CLNT...	INVOIC02	15.07.2011	1
00000000005637...	18	53	CC	LS/ /DR1CLNT...	INVOIC02	15.07.2011	1
00000000005637...	18	53	CC	LS/ /DR1CLNT...	INVOIC02	15.07.2011	1
00000000005637...	18	53	CC	LS/ /DR1CLNT...	INVOIC02	15.07.2011	1
00000000005637...	18	53	CC	LS/ /DR1CLNT...	INVOIC02	15.07.2011	1

- To view the details of a specific IDoc, click the **IDoc**  button. The IDoc Display screen opens.



The screenshot displays the SAP R/3 IDoc Display screen. The main window is titled "SAP R/3" and "IDoc display". The left pane shows a tree view for IDoc 0000000000563745, with segments listed from E1EDK01 to E1EDS01 011. The right pane is divided into "Technical short info" and "Content of selected segment".

Technical short info

Direction	2	Inbox
Current status	53	OO
Basic type	INV0IC02	
Extension		
Message type	INV0IC	
Partn.number	DR1CLNT800	
Partn.type	LS	
Port	SAPTR1	

Content of selected segment

Fid name	Fid cont.
KZABS	X
CURCY	EUR
BSART	KG
BELNR	5000006271
AUGRU_BEZ	QA_TEST_0030

Send IDocs to ReadSoft PROCESS DIRECTOR

After you have created your IDocs, you can send them to ReadSoft PROCESS DIRECTOR and test that ReadSoft EDI COCKPIT handles them correctly.

1. Go to the WE19 transaction and enter the IDoc number you generated in /COCKPIT/EI5.

Test tool for IDoc processing

Template for test

- Existing IDoc
- BasicType
- withEnhancement
- Via message type
- File as template
- w/o template

A preview of the IDoc is displayed.

Test tool for IDoc processing

Standard inbound | Inbound function module | Inbound file | Standard outbound processing

EDIDC 80000000000056374546C 53 2SAPTR1 LI0000007777

E1EDK01	XEUR		
E1EDKA1	RS 2000		
E1EDKA1	RE .EBYDOS AG		
E1EDK02	001		
E1EDK02	0094432234		
E1EDK03	01220040325		
E1EDK03	02620040630		
E1EDK04	16.00	1.60	
E1EDK14	0111000		
E1EDP01	10	1	PC
E1EDP02	0014500013181		10
E1EDP19	00168		
E1EDP19	002TEST 1		
E1EDP26	00310		
E1EDP26	0051		
E1EDP04			
E1EDS01	01111.60		

- In the IDoc preview window, click the **Standard inbound** button.

Note This button is enabled only when all the EDI settings in the SAP system are configured correctly.

A partner profile is found. Note this document will be sent to ReadSoft EDI COCKPIT.

Test inbound IDoc via partner profile

Partner profile found

Sender

Partn.number: DR1CLNT800
 Partn.type: LS Logical system
 Partner func.:

Logical Message Type

Message: INVOIC Invoice / billing document
 Message code: MM
 Msg.function: Test flag

Processing details

Process code: ZEBY_ED ReadSoft EDI COCKPIT
 Function name: /COCKPIT/EDI_IDOC_TRANSFORM
 EDI COCKPIT

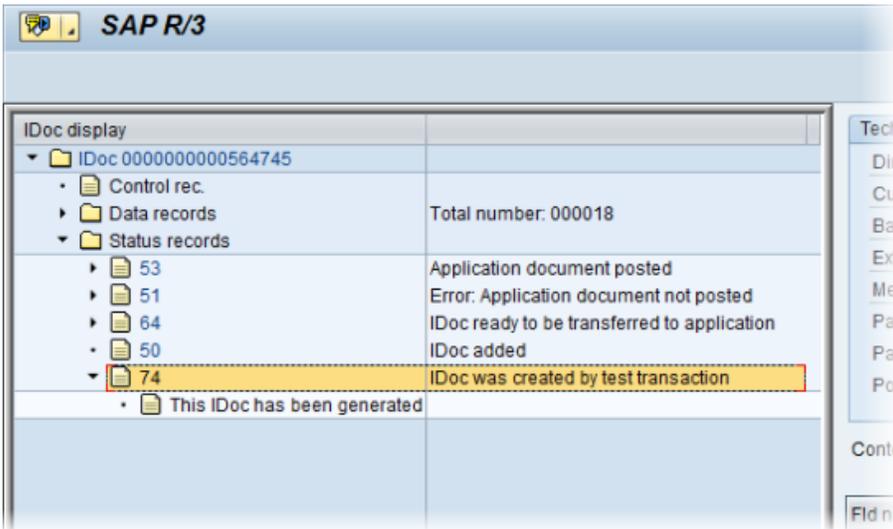
ALE service

Confirmation that the IDoc was successfully sent.

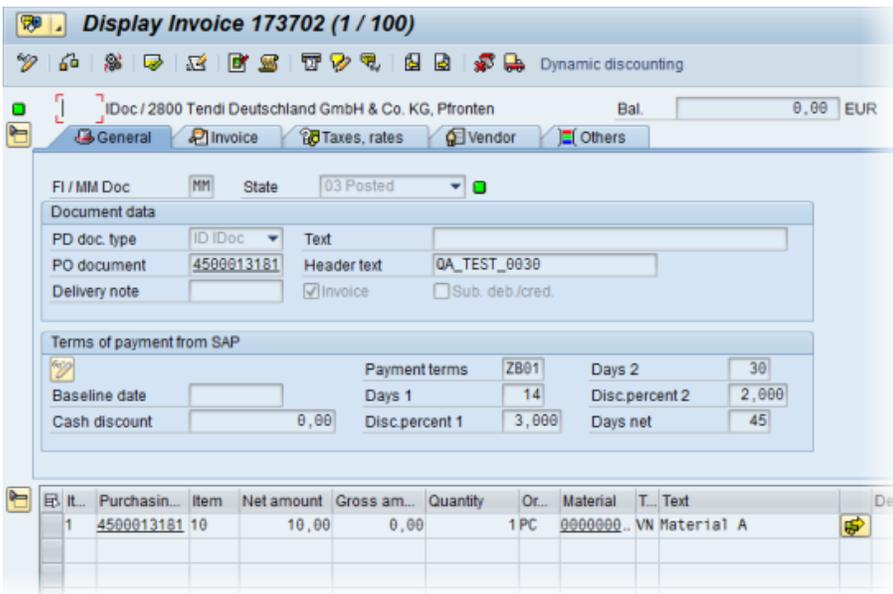
Information

IDoc number 000000000564745 transferred to application

The status of the IDoc shows that it was sent.



The resulting document in ReadSoft PROCESS DIRECTOR. The Message logs show its IDoc origins.



Appendix A

Tables

The three main configuration tables are:

Table	Content	Description
/COCKPIT/CEDIP	Profiles	Connects the partner profile data to the process code used to process incoming IDocs. The table also contains other configuration data.
/COCKPIT/CEDIS	Structures	Contains the mapping between the segments and PROCESS DIRECTOR document structures (HEADER, ITEMDATA, and so on), for each profile.
/COCKPIT/CEDIF	Fields	Contains the mapping between the IDoc and ReadSoft PROCESS DIRECTOR fields.

Appendix B

User Exits

ReadSoft EDI COCKPIT comes with several User Exit interfaces that you can use to customize the application to suit business requirements.

Function modules called from the User Exit interfaces can be found in the `/COCKPIT/EDI_EXIT_SAMPLE` function group.

These function modules can be copied and subsequently modified in order to guarantee a stable interface.

Interface structure

The interface structures and the tables in the local interface of the User Exit function templates start with I, E, and C.

Prefix	Description
E	Data is exported only. Changes are possible.
I	Data is imported only. Changes are not incorporated.
C	Data can be changed. Changes are possible.

List of User Exits

- User Exit 600 – Change of IDoc data before processing
- User Exit 601 – Check SAP document of an IDoc
- User Exit 602 – Retrieve SAP document number for a posted IDoc
- User Exit 603 – Determine fiscal year for a posted IDoc
- User Exit 604 – Determine company code for a posted IDoc
- User Exit 605 – Check if IDoc is an FI or MM document
- User Exit 606 – Changes before mapping of IDoc to a PROCESS DIRECTOR document
- User Exit 607 – Changes before transferring IDoc to ReadSoft PROCESS DIRECTOR
- User Exit 608 – Changes before transferring IDoc to ReadSoft PROCESS DIRECTOR
- User Exit 609 – Change of IDoc data after processing
- User Exit 610 – Determine posting function of an IDoc
- User Exit 611 – XML import, changes in files
- User Exit 612 – XML import, changes in XML before transfer to IDoc

Template

ENDFUNCTION.

User Exit 608 – Changes before transferring IDoc to ReadSoft PROCESS DIRECTOR

This User Exit is called when an IDoc is not posted in SAP (using the standard SAP EDI interface) due to some error. Using this User Exit, you can call an alternative function module (that is, not /COCKPIT/RFC_DATA_SUBMIT) to transfer the document to ReadSoft PROCESS DIRECTOR. When using this User Exit, you must ensure that /COCKPIT/RFC_DATA_SUBMIT is not called.

Template

FUNCTION /COCKPIT/USEX_RFC.

```

**-----
**"Local interface:
** EXPORTING
** REFERENCE(EB_NO_STANDARD) LIKE BOOLE-BOOLE
** TABLES
** T_TAB_ITEM STRUCTURE /COCKPIT/SITEM_EXT
** T_TAB_TAX STRUCTURE /COCKPIT/STAX_EXT
** T_TAB_ACCOUNT STRUCTURE /COCKPIT/SACCT_EXT
** T_TAB_CONTENT TYPE /COCKPIT/EDI_TBL1024
** T_TAB_MESSAGES STRUCTURE BAPIRET2
** CHANGING
** VALUE(CN_CONTENT_LENGTH) TYPE SAPB-LENGTH
** VALUE(CS_STR_HEADER) LIKE /COCKPIT/SHDR_EXT STRUCTURE
** /COCKPIT/SHDR_EXT
** VALUE(CS_STR_CHECK) LIKE /COCKPIT/SCHECKDATA STRUCTURE
** /COCKPIT/SCHECKDATA
** VALUE(CC_GUID) LIKE /COCKPIT/SIF-INVOICE_GUID
** VALUE(CN_DOCNO) LIKE /COCKPIT/THDR-DOCNO
** EXCEPTIONS
** ERROR_OCCURED

```


Appendix C

Transactions

Listed below are some popular transaction codes for processing IDocs in SAP.

Prefix	Description
WE02	View IDocs
WE19	Test tool for IDocs
WE20	Maintain partner profiles
WE21	Maintain system ports
WE30	Create IDoc types
WE31	Create segments
WE42	Maintain process codes
WE57	Assign function modules to messages and IDoc types
WE81	Create message type
WE82	Assign IDoc types to message types
BD57	Characteristics of inbound function modules