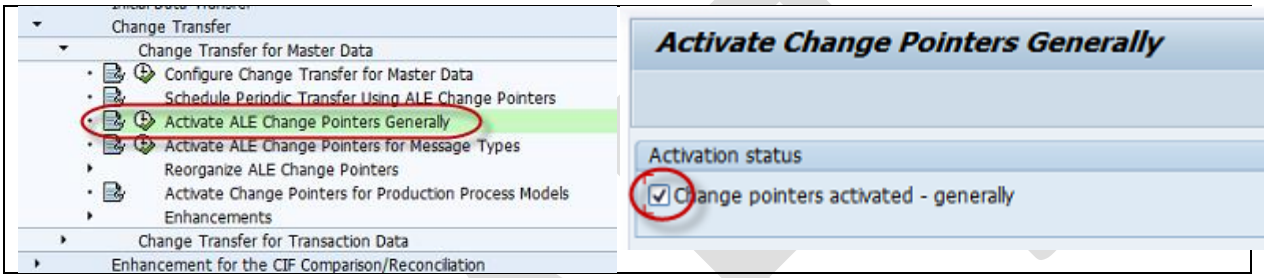
1 GUIDE TO SETUP COSMAS AND IORDER IDOCS FOR TREMCO

1.1 Purpose

This document describes the setup of the COSMAS and IORDER IDOCS for Tremco. It will not document the setup of ALE and EDI in SAP. For documentation about ALE and EDI please use general available SAP books (SAP Press), articles and the web.

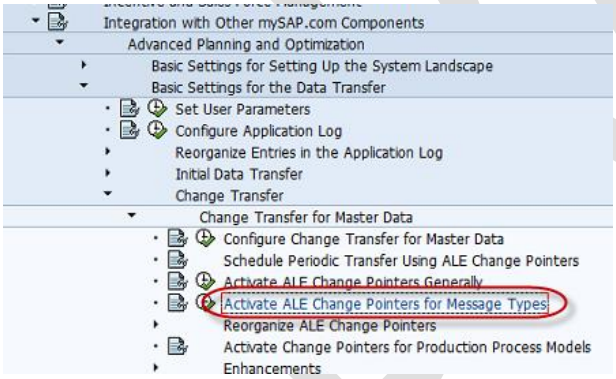
1.2 General Activation

To be able to use change pointers in an SAP system first check if the general change pointer function is set. Use the t-code 'SPRO' and look for 'Activate ALE change Pointer Generally' (see below). Make sure the checkbox is set.

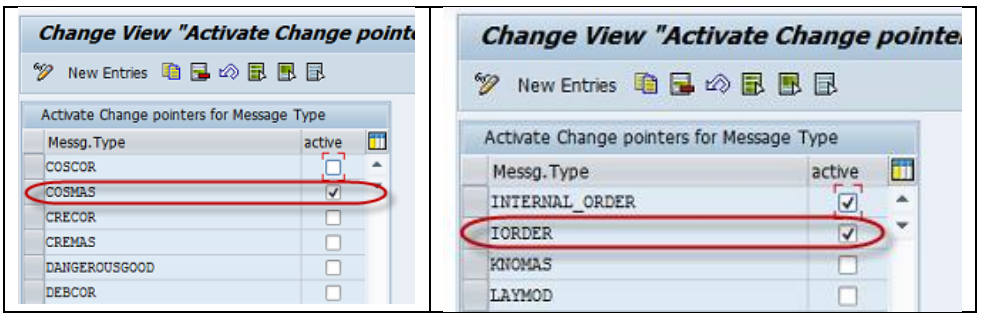


1.3 Activate COSMAS and IORDERS change pointers

To be able to use change pointers for Cost Centers and Maintenance Orders they need to be activated using t-code SPRO. Search for 'Activate ALE Change Pointers for Message Types' (see below).

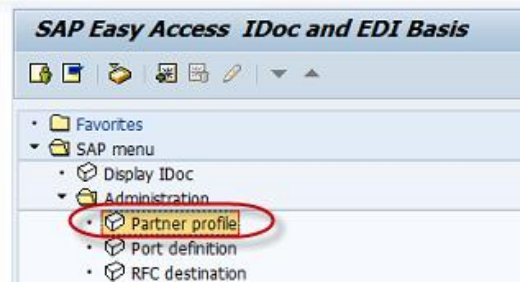


Activate both the COSMAS and IORDER change pointers by checking the checkbox.



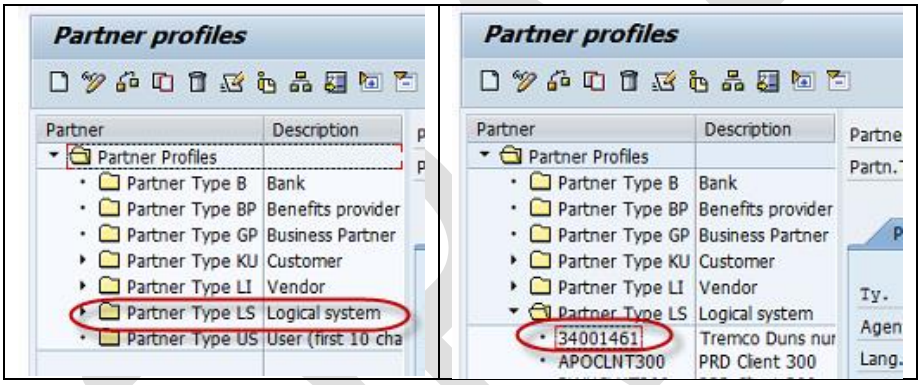
1.4 Setup of Partner profiles, Ports and RFC destination

The next step is to setup the partner profiles/logical systems, ports and RFC destinations. Below a description for setting this up for both the COSMAS and IORDER IDOCS. The setup is not sequential but sometimes a second session need to be opened to create another setup piece. We can use the t-code WEDI to setup all 3 items.

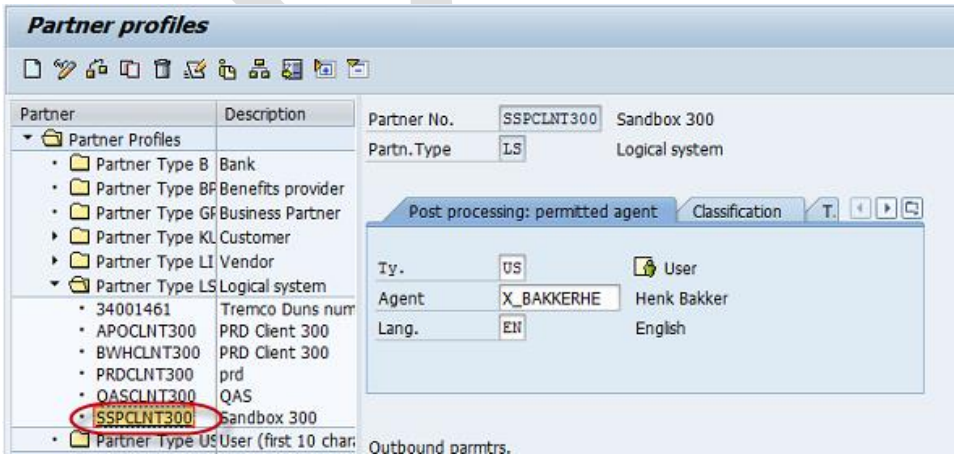


1.4.1 Partner profiles/Logical systems

First check if the logical system for the SAP system itself is setup. Ask your Basis person what the logical system for SAP is and if it is setup already. Normally you don't have access to set this up. In this case Tremco did define the systems logical system. In this case it has the name '34001461'.

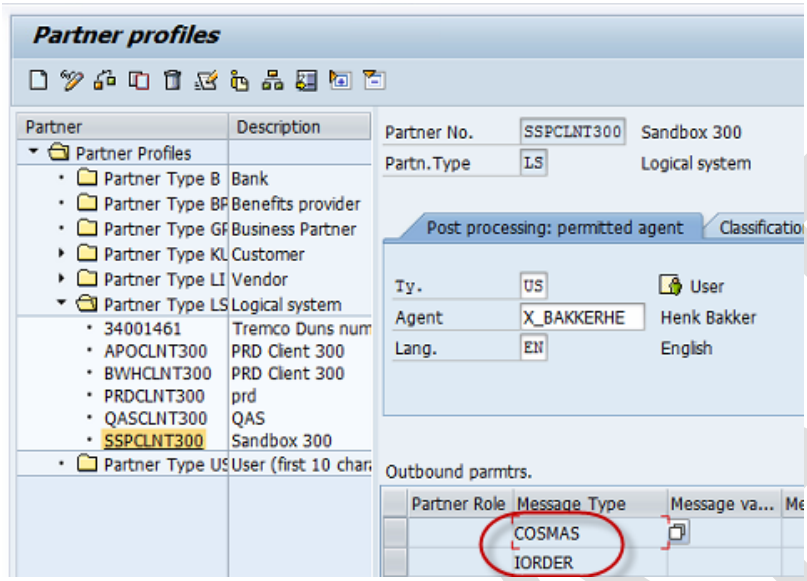


Next is the process of setting up the partner profile(s) for COSMAS and IORDER. Because they are both outbound only 1 partner type would be setup. In this case it got the name 'SSCLNT300'.

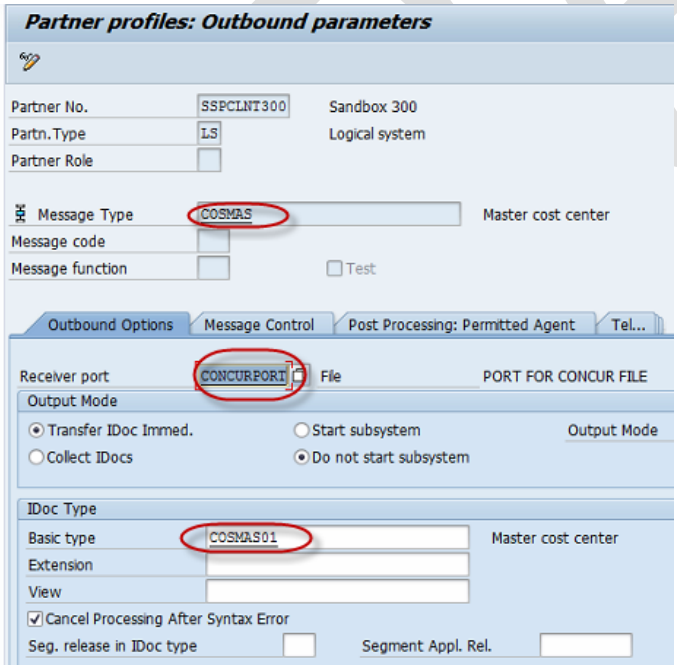


1.4.1.1 Setup Partner profile message types

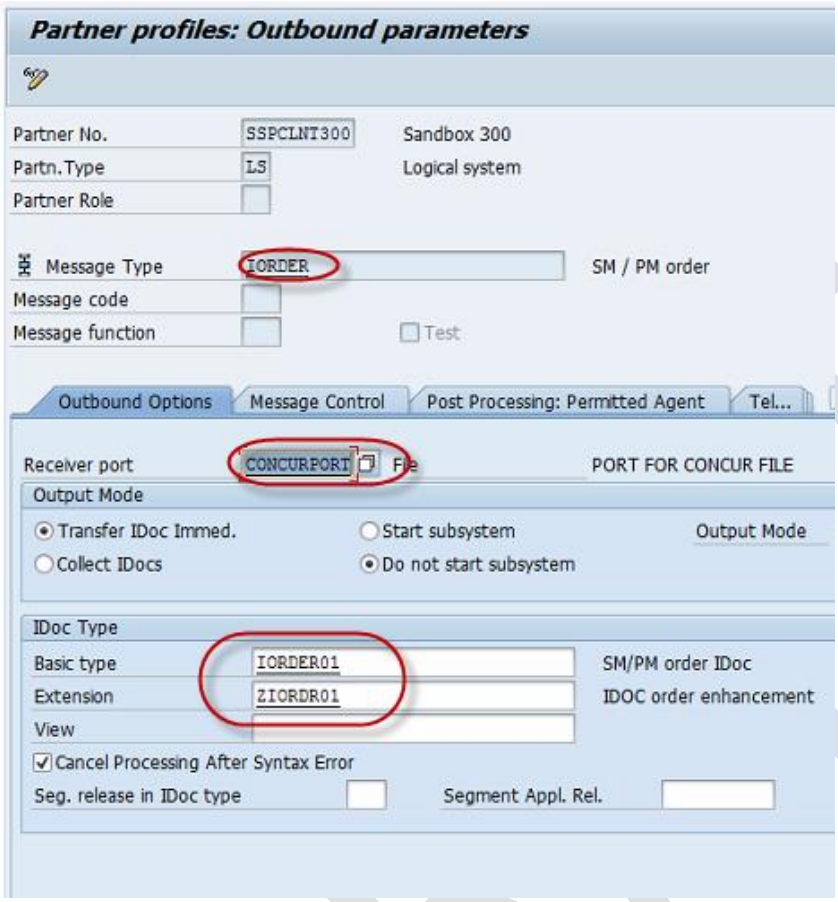
Part of the setup is the setup of both the message types. Part of this setup requires that other items are already be available. They could be created in a separate transaction.



The setup of the COSMAS message type with an already defined receiver port ‘CONCURPORT’ and COSMAS base IDOC type COSMAS01 (standard SAP).

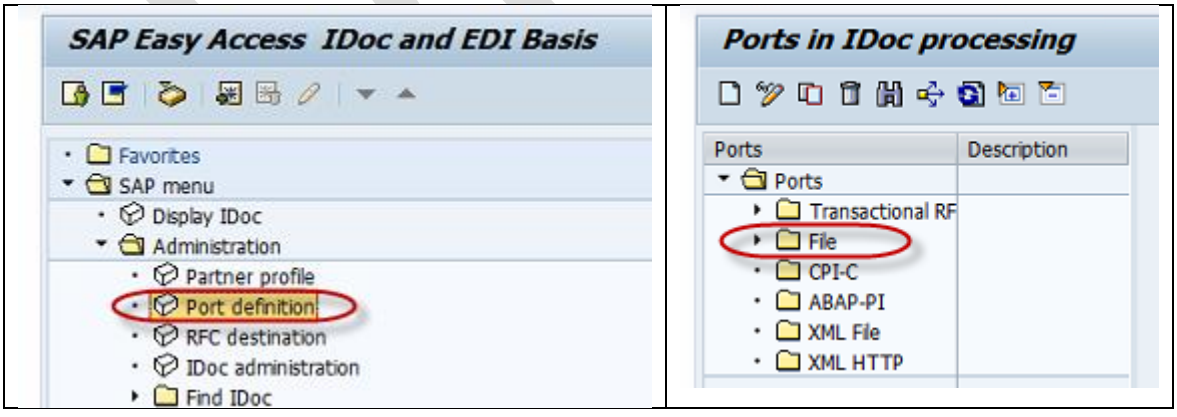


The setup of the IORDER message type with an already defined receiver port ‘CONCURPORT’, the IORDER base IDOC type IORDER01 (standard SAP) and the too be created IDOC extension ZORDER01.

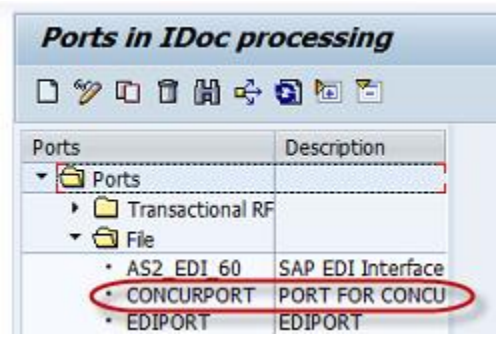


1.4.2 Setup of the port definitions

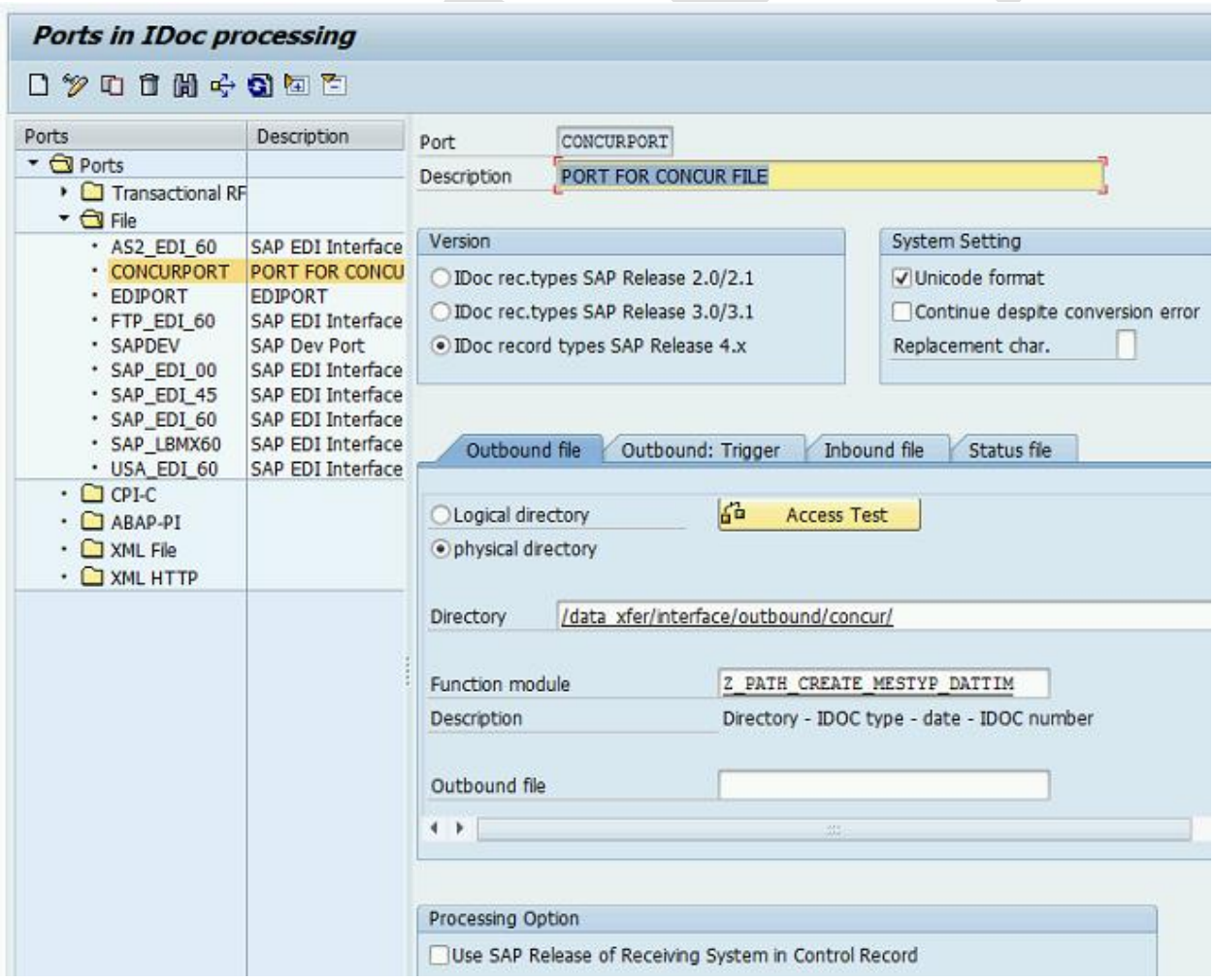
To be able to create both output files with IDOC data from COSMAS and IORDER it is required to setup a ‘File’ port.



For the Concur interfaces the file port is called ‘CONCURPORT’. This port is specifically created for the Concur interfaces and should only be used for concur.



To be able to setup this port a number of other items in SAP should already be setup, available (see below). Ask the Basis person to setup a special directory on the application server in which the IDOC files will be stored. Make sure the directory is accessible by the SAP processes by checking the access <ACCESS TEST>. Also a function is required that specifies the file format (name). SAP did created a number of standard functions but if needed a ‘Z’ function module could be create to give the file a different name.



The directory created especially for concur interfaces:

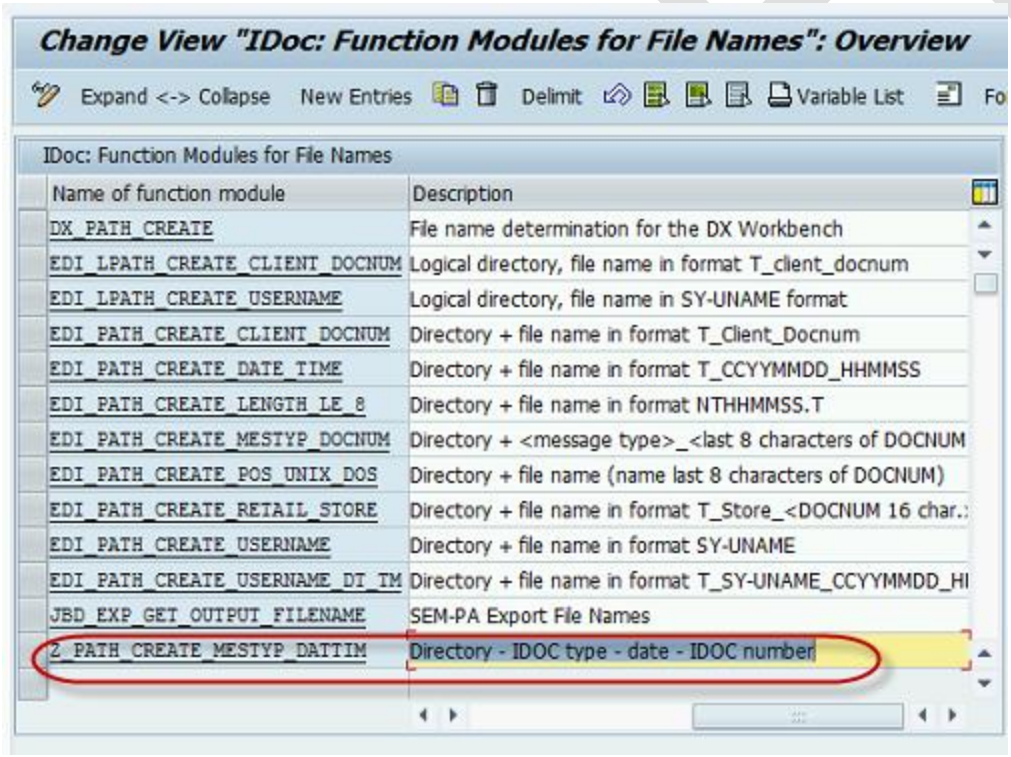
/data_xfer/interface/outbound/concur

```
/data_xfer/interface/outbound/concur
root@bsapsnd:outbound/concur> ll
total 0
-rw-r--r--   1 sndadm     sapsys           0 Feb 21 08:30 test.dat
-rw-r--r--   1 sndadm     sapsys           0 Feb 21 08:30 test.txt
root@bsapsnd:outbound/concur>
```

The function module to name the file. Use t-code se37.

Filename function module.txt

Also use t-code WE54 to connect available function modules for naming files (see below).



Change View "IDoc: Function Modules for File Names": Overview

Expand <-> Collapse | New Entries | Delimit | Variable List

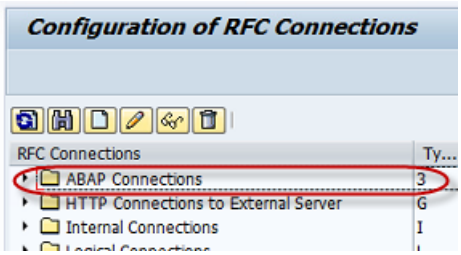
IDoc: Function Modules for File Names

Name of function module	Description
DX_PATH_CREATE	File name determination for the DX Workbench
EDI_LPATH_CREATE_CLIENT_DOCNUM	Logical directory, file name in format T_client_docnum
EDI_LPATH_CREATE_USERNAME	Logical directory, file name in SY-UNAME format
EDI_PATH_CREATE_CLIENT_DOCNUM	Directory + file name in format T_Client_Docnum
EDI_PATH_CREATE_DATE_TIME	Directory + file name in format T_CCYYMMDD_HHMMSS
EDI_PATH_CREATE_LENGTH_LE_8	Directory + file name in format NTHHMMSS.T
EDI_PATH_CREATE_MESTYP_DOCNUM	Directory + <message type>_<last 8 characters of DOCNUM
EDI_PATH_CREATE_POS_UNIX_DOS	Directory + file name (name last 8 characters of DOCNUM)
EDI_PATH_CREATE_RETAIL_STORE	Directory + file name in format T_Store_<DOCNUM 16 char.:
EDI_PATH_CREATE_USERNAME	Directory + file name in format SY-UNAME
EDI_PATH_CREATE_USERNAME_DT_TM	Directory + file name in format T_SY-UNAME_CCYYMMDD_HI
JBD_EXP_GET_OUTPUT_FILENAME	SEM-PA Export File Names
2_PATH_CREATE_MESTYP_DATTIM	Directory - IDOC type - date - IDOC number

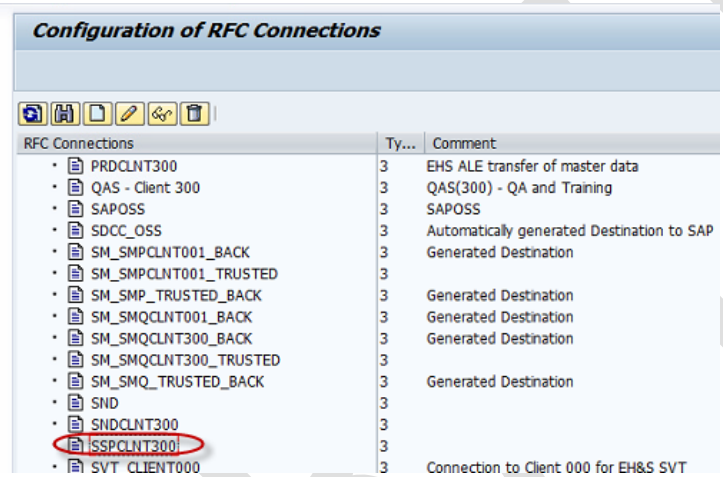
1.4.3 The setup of RFC destination

The RFC destination has the same name as the partner profile ‘SSCLNT300’. Goto ABAP Connections and define an RFC connection.

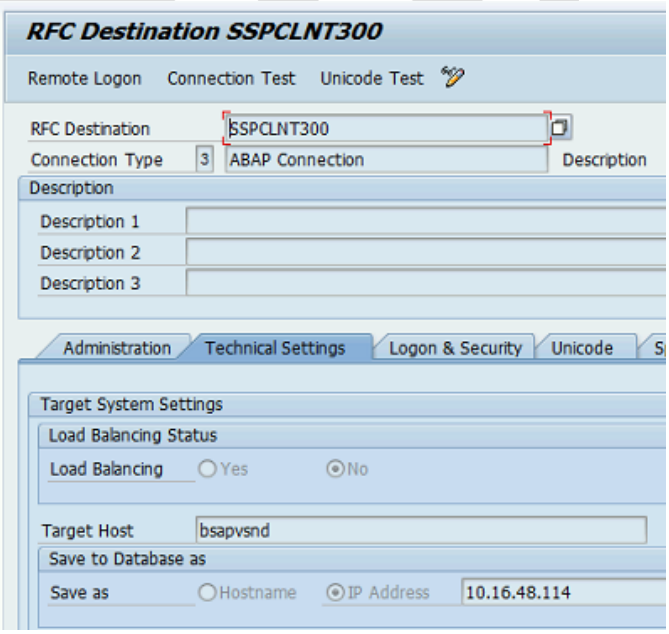
Step 1:



Step 2:



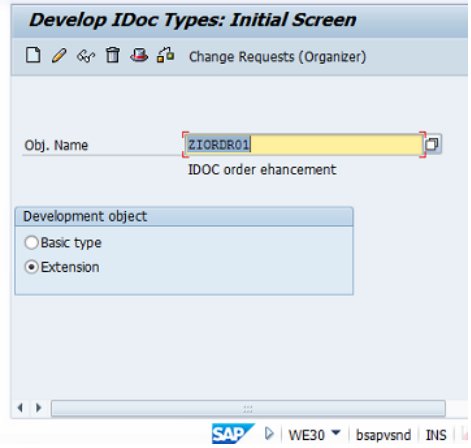
Step 3:



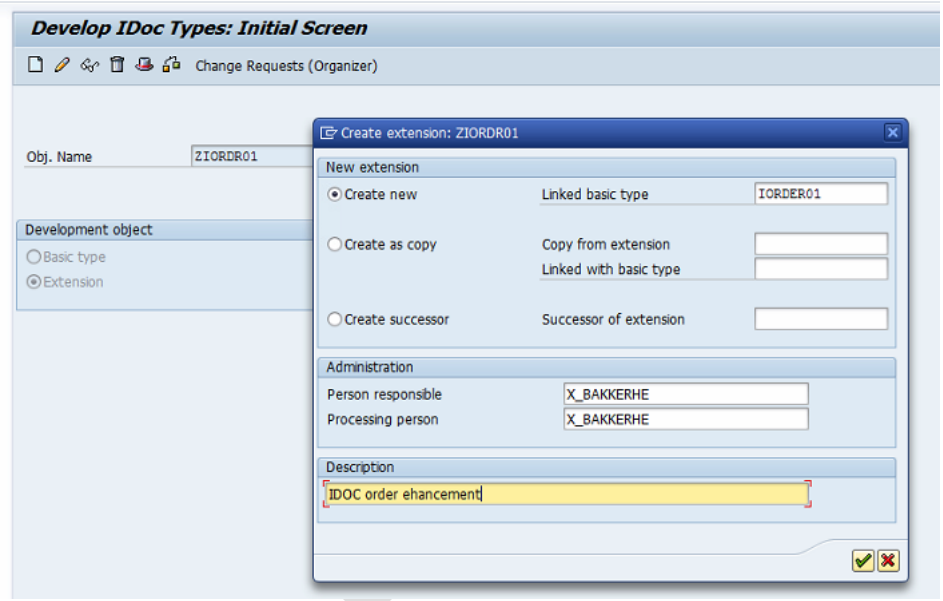
Define the target host and IP address.

1.4.4 Create the extension for the IORDER01 IDOC

In order to extend an IDOC use t-code WE30. Specify the name of the extension 'ZORDR01' (no more than 8 char).

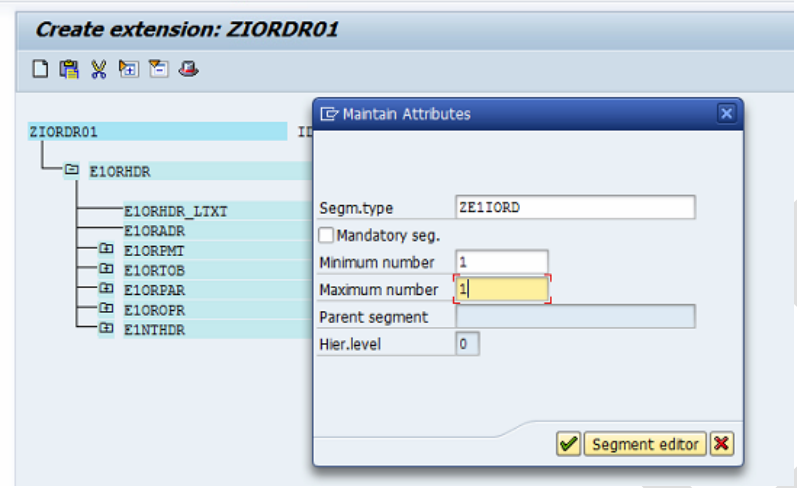


1) Give your basic IDOC type at the object name
2) Select the Extension radio button
3) Click on create button



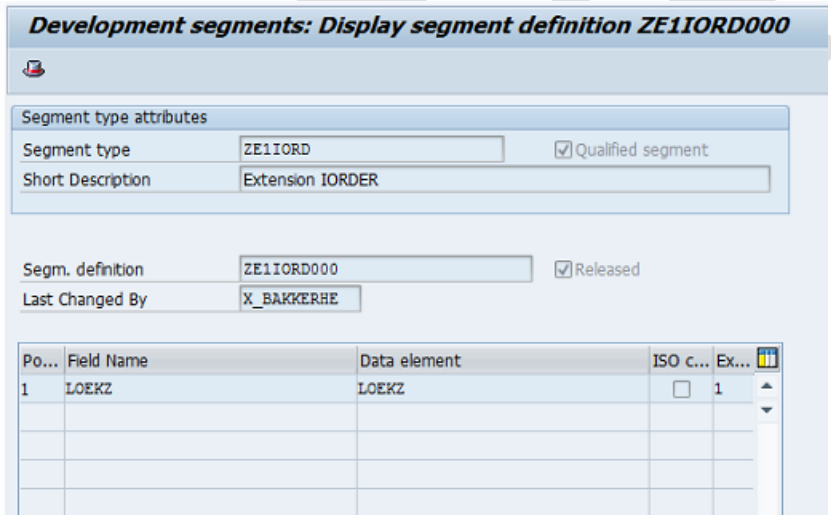
4) Click on 'Create new' and specify base type 'IORDER01'.
5) Give the description and click on continue button.

Select the segment level you want to add your new segment. Select that particular segment and click on the create segment button and place your already created segment. See next how to create the new segment. Save and release (option under edit tab).



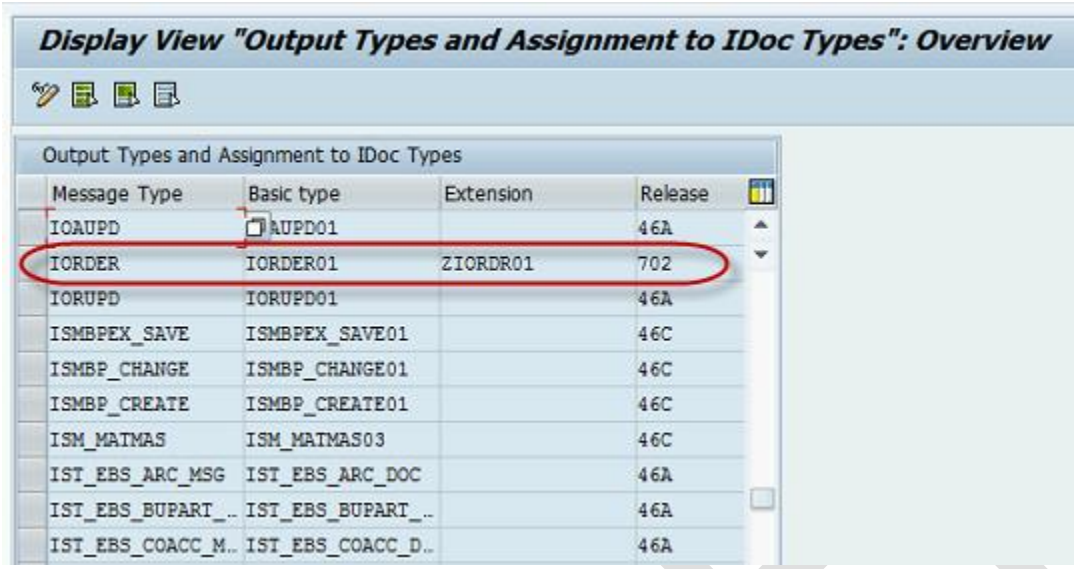
1.4.4.1 Create the extension segment

Use the t-code we31 to create a new segment. Specify the name of the new segment, the description and the field name(s) in the new segment. Make sure that you press the save and release the segment for use.



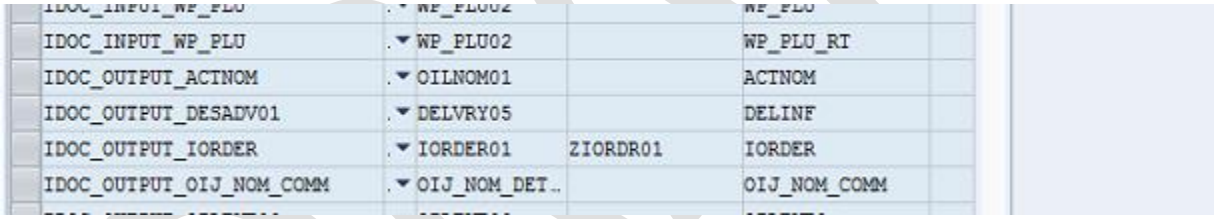
1.4.5 Assign extension to output type

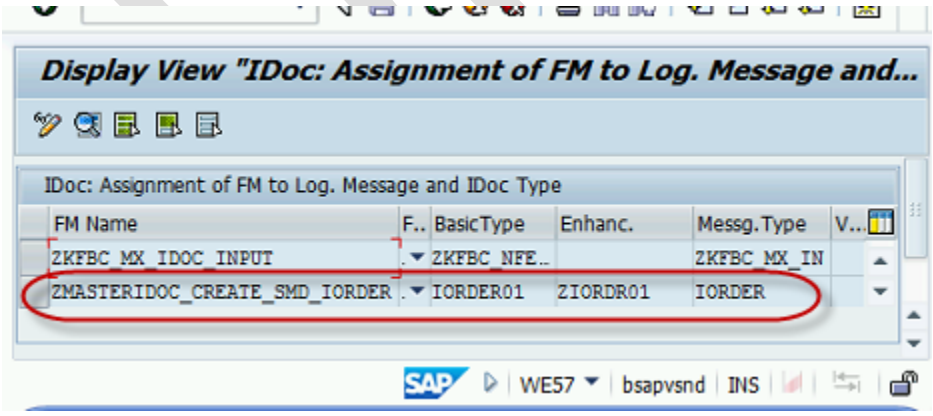
The next step is to add the extension to the output type using t-code we82.



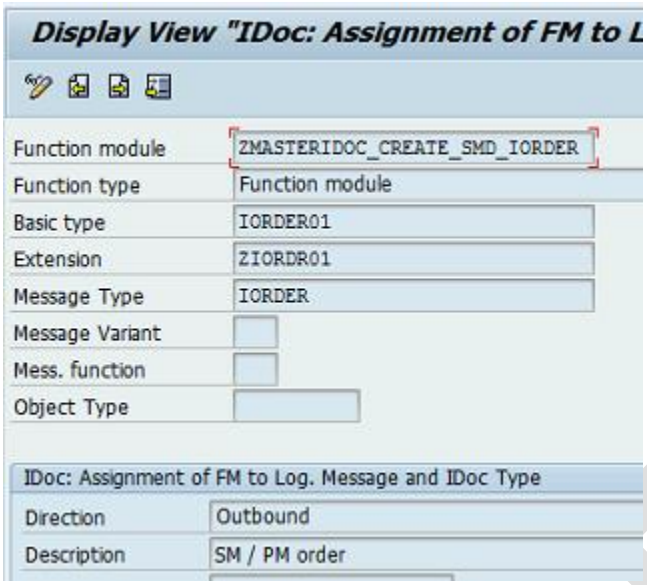
1.4.6 Assign function, base type and extension

Next is to replace the line with IDOC_OUTPUT_IORDER …. With the new function module, base type and extension.



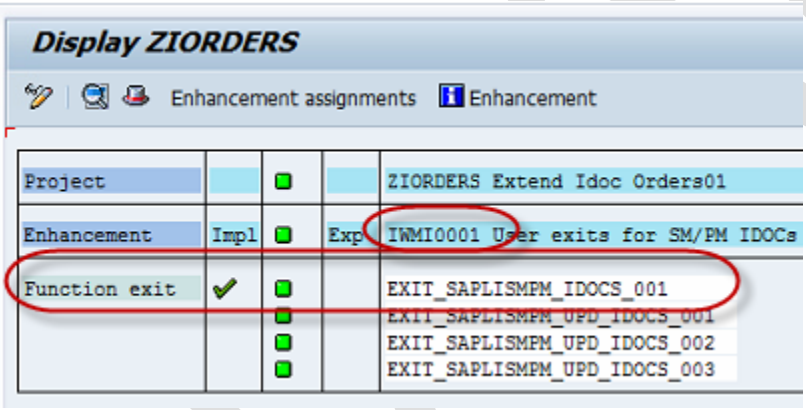


Make sure that in the details it is specified as outbound interface (double click on line).



1.4.7 Create user exit for extension ZORDR01

To create an extension use t-code cmod. Create a project (ZIORDERS) and use the enhancement IWMI0001. Use the function exit depicted below and create the user exit code.

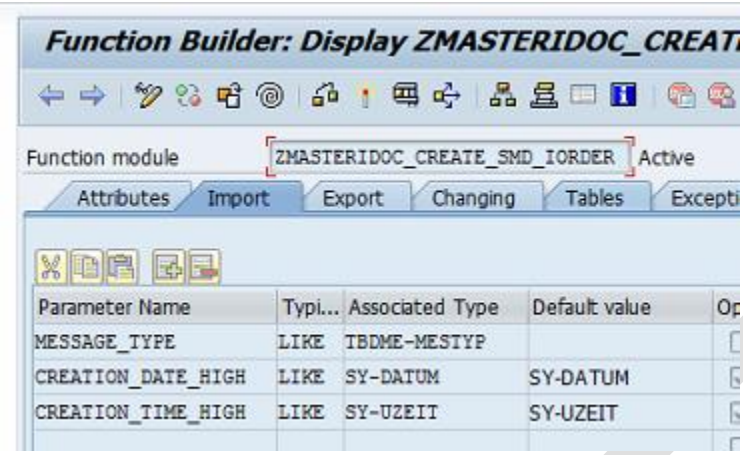


userexit extension.txt

Function Module for new IDOC

1.4.8 Function module for new IDOC IORDER01

Below is depicted the Import attributes and attached the Function module (se37).

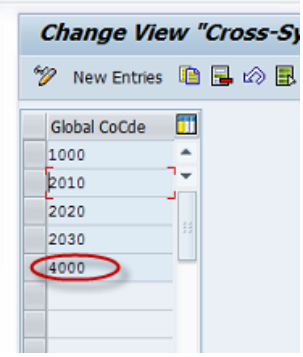


FM IDOC.txt

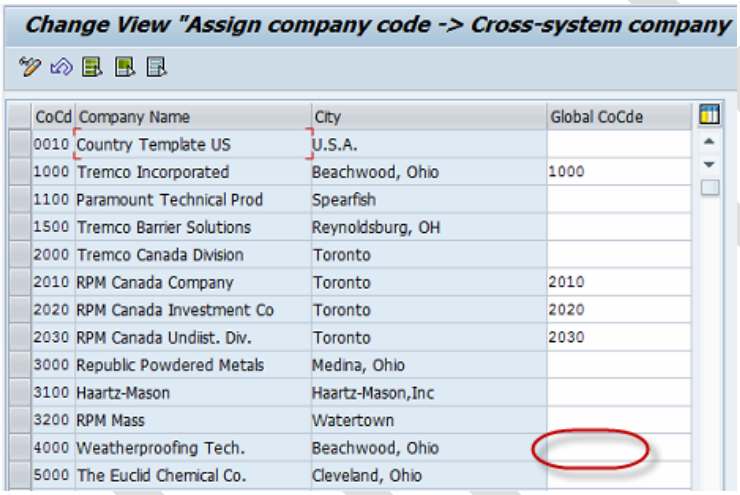
1.4.9 Global company codes (OB72, OBV7 & OBB5) - COSMAS

For the COSMAS interface it is required that we use cross company codes. They need to be defined with t-code OB72 (Global Company codes), OBB5 (Assign company code -> Cross company code).

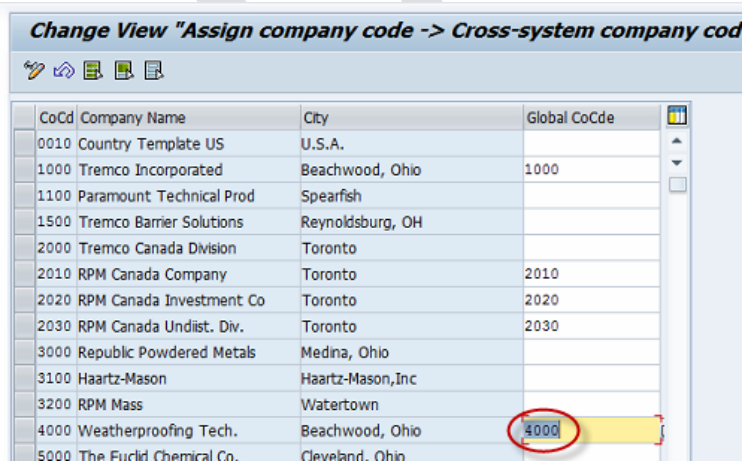
USE OB72:



OBB5



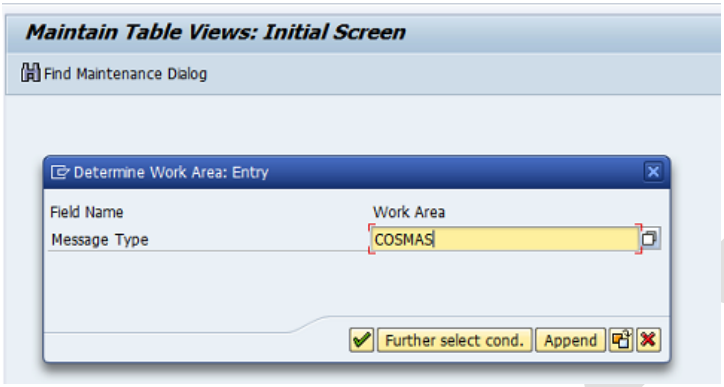
To be replaced with (enter 4000) Cross company code.



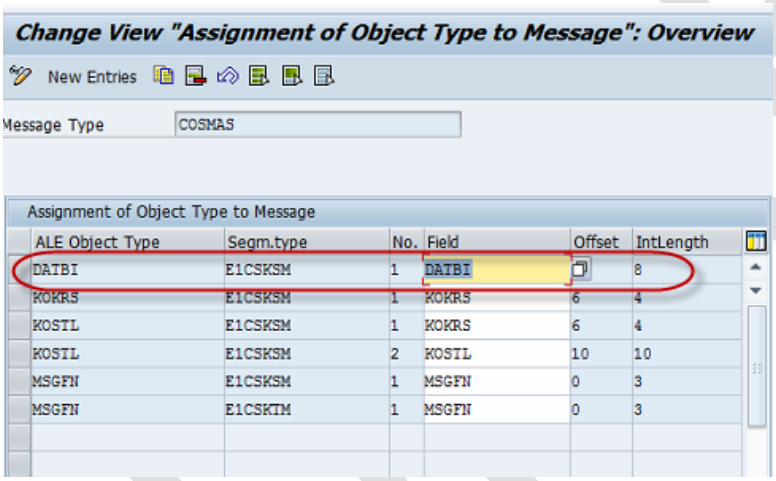
1.4.10 Interface filter setup

To be able to filter IDOCS for specific values in specific fields use t-code BD59 and t-code BD95 to define the fields that can be used as filter.

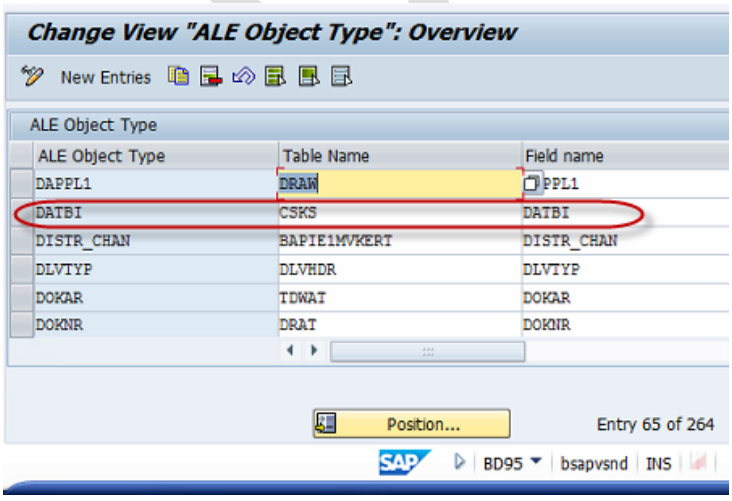
For COSMAS we need to add the date field. Below is depicted how to add this for COSMAS.



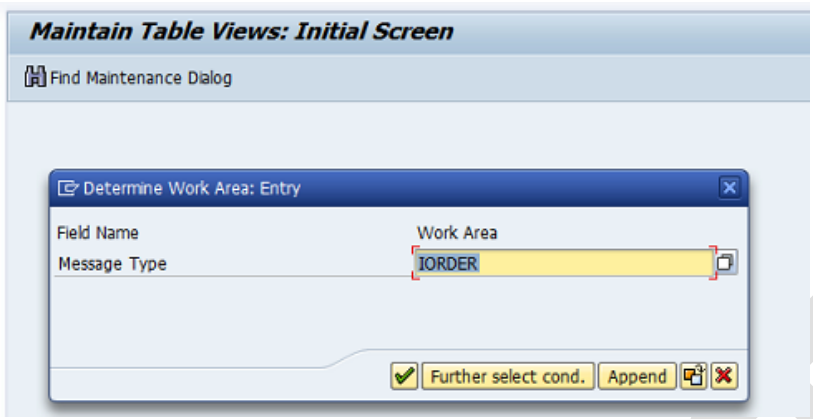
Add field for filter DATBI.



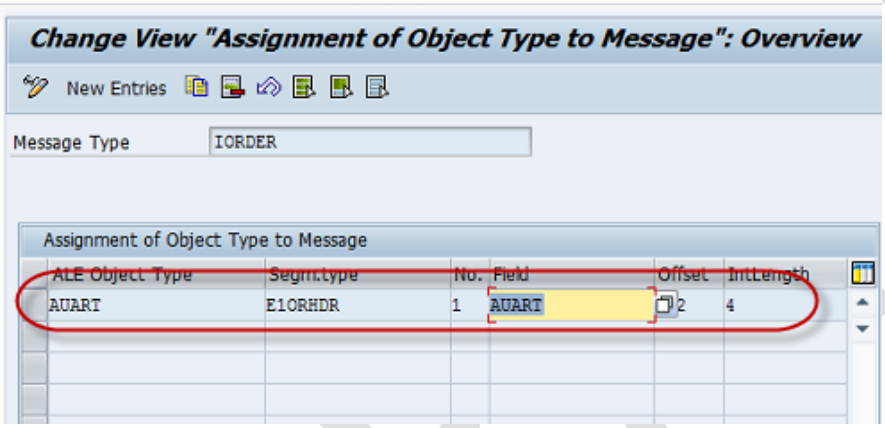
T-code BD95.



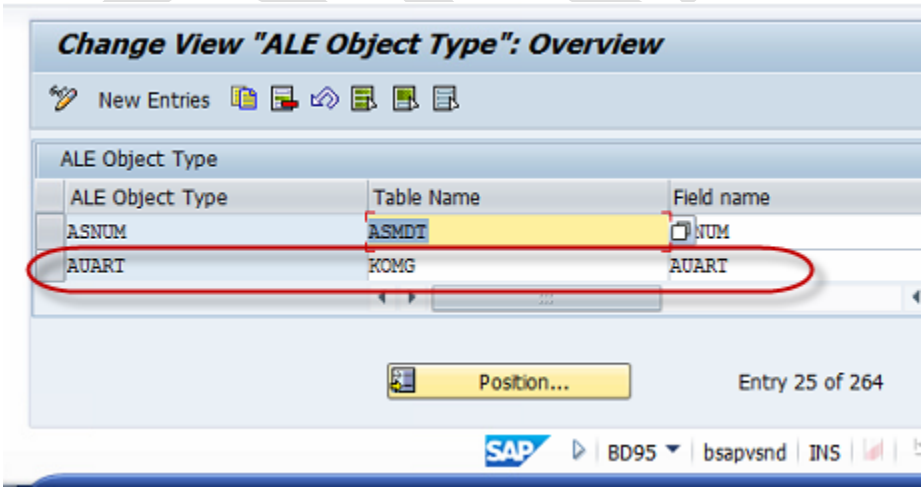
For IORDER we need to add the type field. Below is depicted how to add this for IORDER.



Add field for filter AUART.

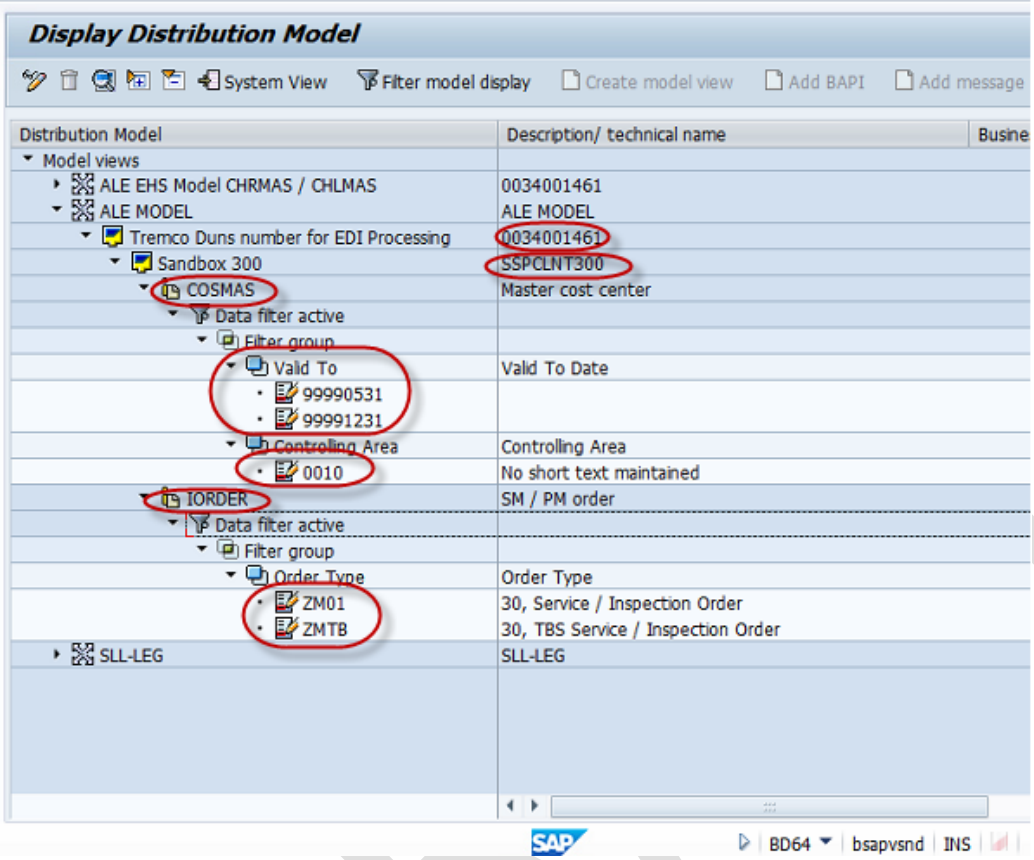


T-code BD95.

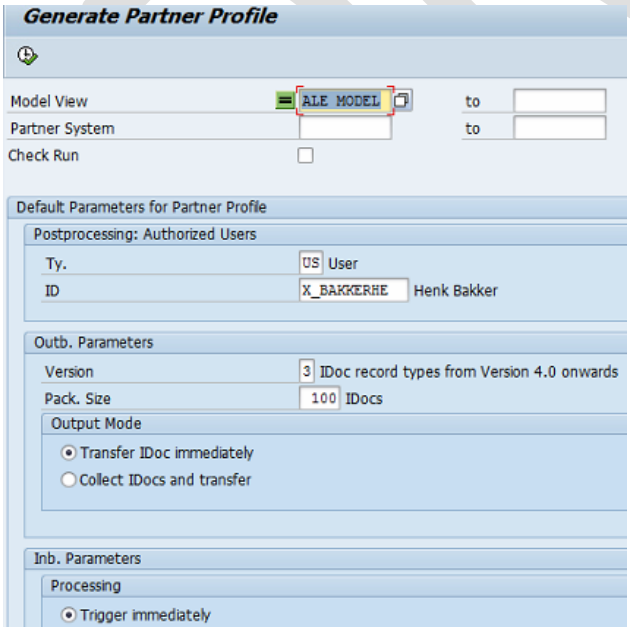


1.4.11 Create Distribution model (bd64)

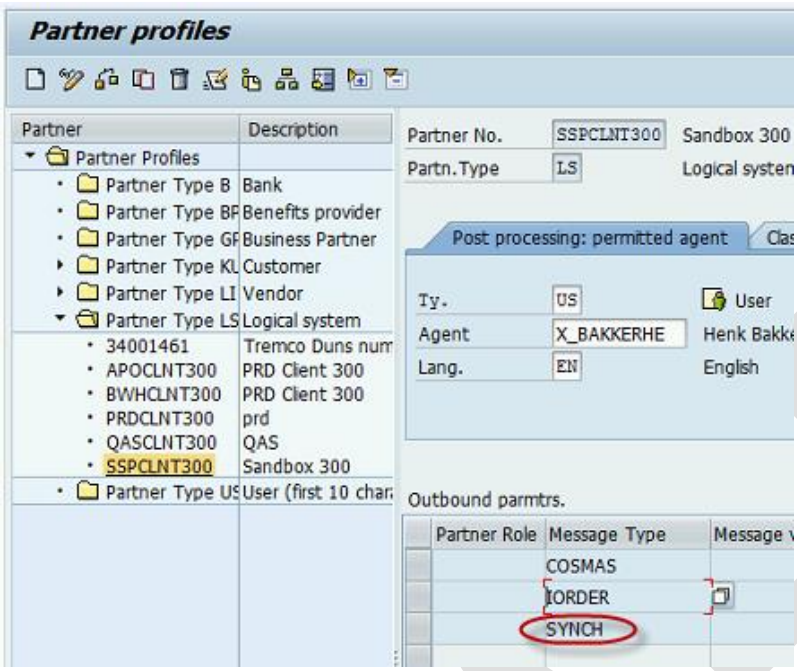
Now we can create a distribution model. In the distribution model we specify for both IDOC types the receiving and sending logical systems and filter parameters.



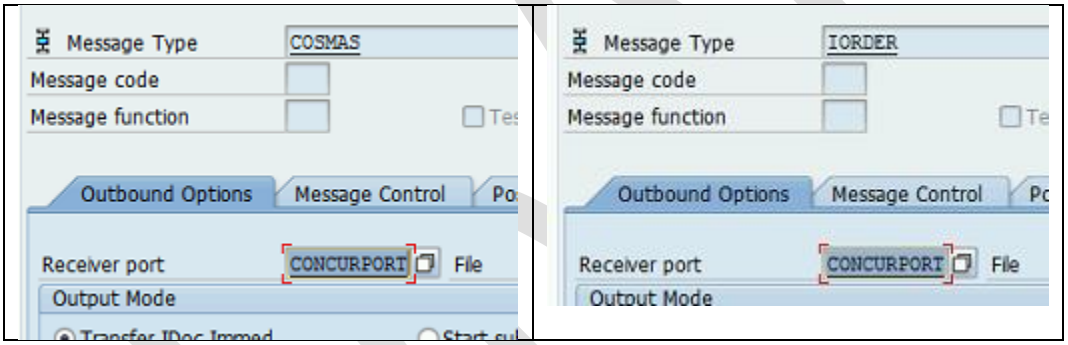
Next step is to generate the distribution model.



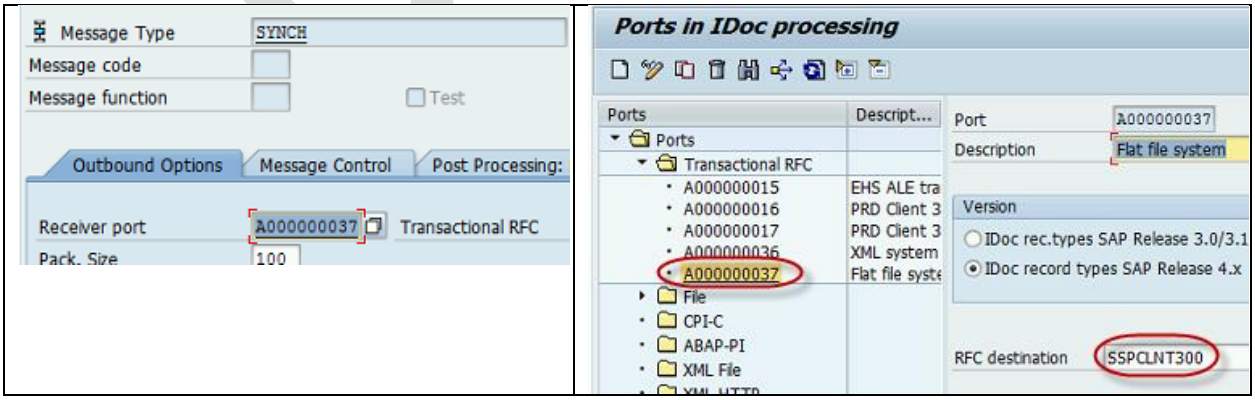
After successful generation we can see that an extra message type ‘SYNCH’ is create (see below).



Please make sure that the receiving ports are setup correctly.

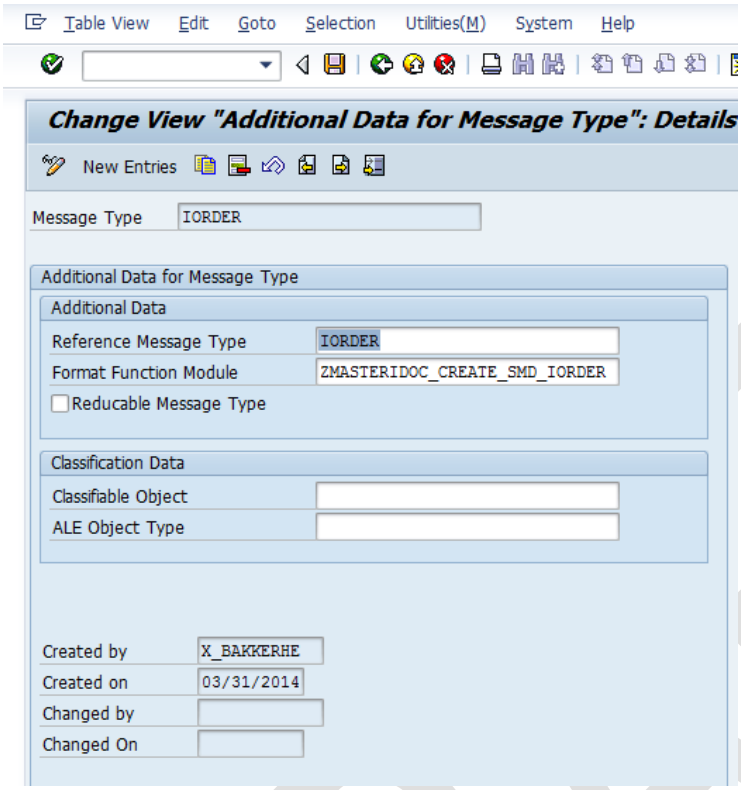


For the SYNCH message type we need a Transactional RFC (check if available).



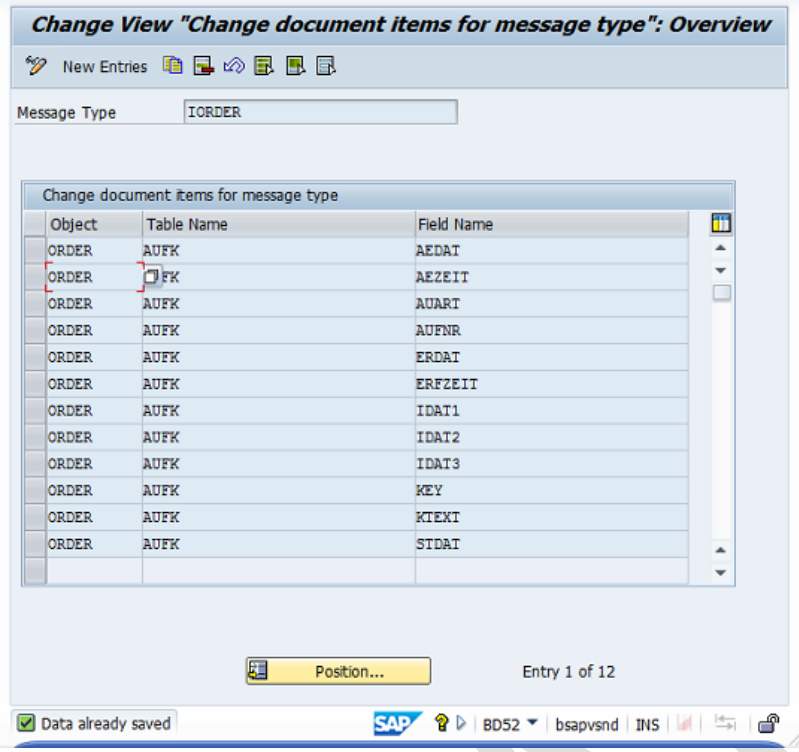
1.4.12 Define IORDER entry for BD21

Use t-code BD60 to add the following entry.

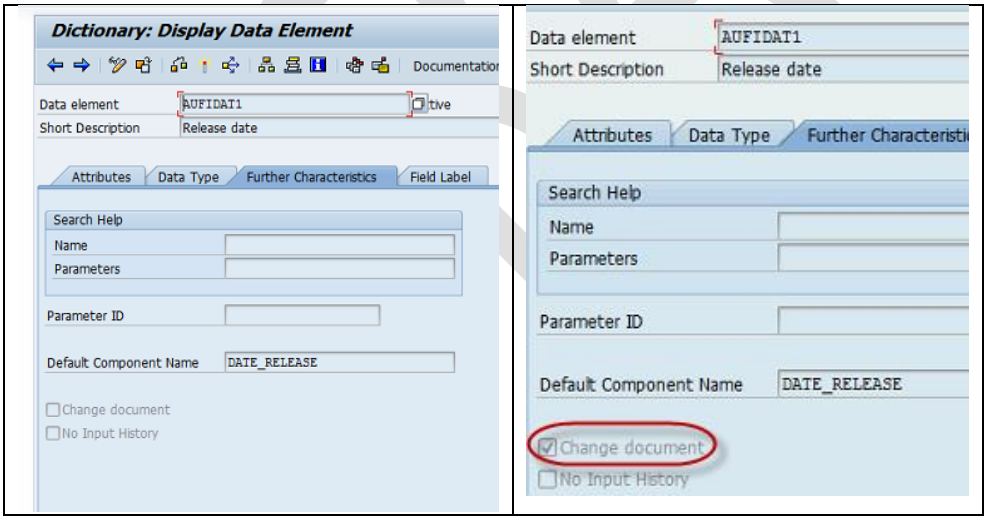


1.4.13 Define the change pointer fields for IORDER

For COSMAS the change pointers have already been defined by SAP. For the IDOC IORDER use t-code BD52 to define all the fields that should be a change pointer. For the initial create of the document define the field ‘KEY’ as change pointer.



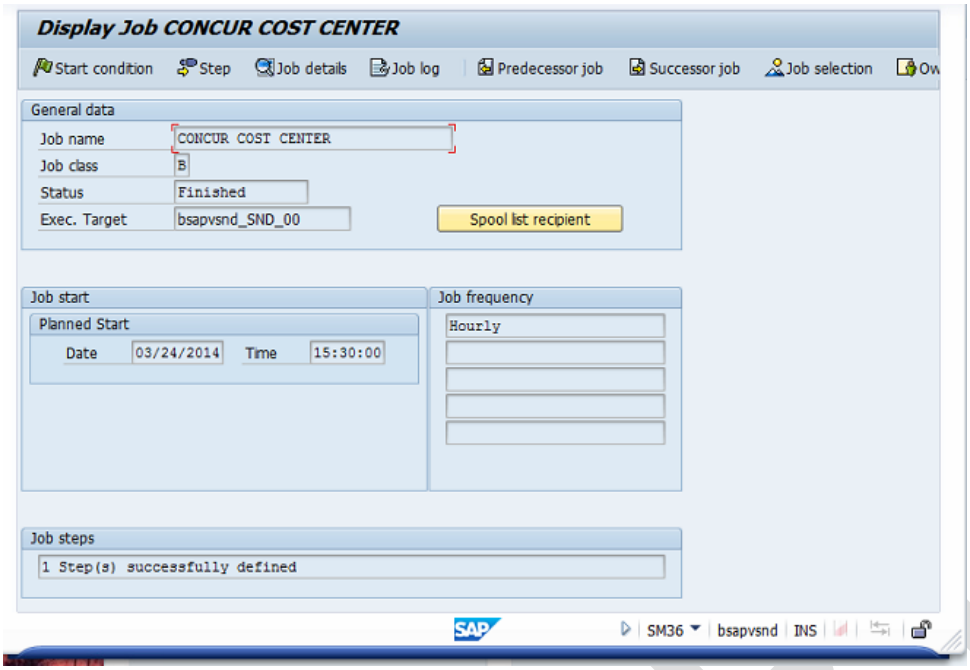
Because SAP normally using change pointers only for Master Data changes it is required that for every field we check the field element type for the option Change document (see below as example for IDAT1).



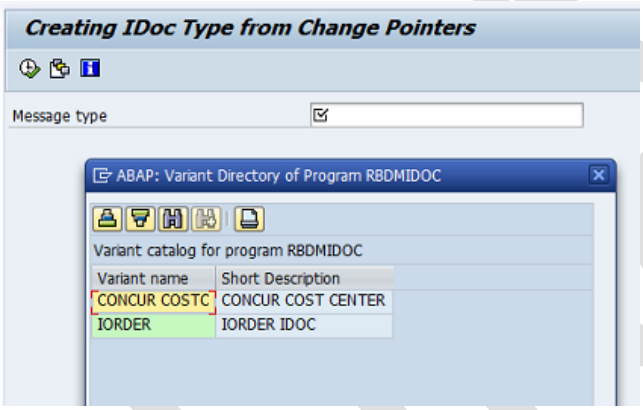
1.4.14 Setup Hourly jobs for execution of BD21 with variant for COSMAS and IORDER

Last thing to do is to setup the jobs that will generate every hour the COSMAS and IORDER files based on the changes in change pointers. The job is running t-code bd21 with a variant.

JOB:



Variant:



Variant itself: