

How-to Guide: Middleware Settings for Download of IPC Configuration (KB) Data from R/3 to ISA System



Applies to

The IPC (Internet Pricing and Configurator).

For more information, visit the [Customer Relationship Management homepage](#).

Summary

This guide is an extension to one of the other published guides in SDN > 'How-to-guide: Middleware settings for Download of IPC Configuration (KB) data from R/3 to CRM System'. This document is an accelerator for Consultants using the IPC in an 'Internet Sales' project. It provides an end-to-end guide to the middleware table settings, event registrations and allied customizing required to download Knowledgebase data from an R/3 system to an ISA system. The document explains settings for two scenarios:

1. SCE in AP (ISA-R/3 scenario) for ISA (Release 5.0 or higher) and ECC (Release 5.0 or lower) i.e. ERP 2004.
2. SCE in ECC (ERP) and optionally CRM (R/3-CRM / ISA-R/3 scenario) with ECC (Release 6.0) i.e. ERP 2005 or higher.

(This is not an official SAP document.)

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Author Bio



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R/3 System to ISA System

For the AP Standalone system, we have no Middleware, because this is a part of the CRM. However, data needs to be exchanged between the R/3 system and the AP Standalone. For this, we have the programs **CFG_AP_INITIALISE_DB** and **CFG_AP_REQUEST_DB**. They use the function modules **AP_SCE_INIT**, **AP_SCE_DELT**, **AP_SCE_EXTRACT**.

1. SCE in AP (ISA-R/3 scenario) for ISA (Release 5.0 or higher) and ECC (Release 5.0 or lower) i.e. ERP 2004.

The SCE in AP scenario is used ONLY if you are using the SCE and the ERP installed on two different Net weaver Boxes. This is a hybrid scenario to be used if an ERP 2004 or older system is used with the Internet Sales 5.0 or higher releases. So the IPC runs in a separate Net weaver Box apart from the ERP system.

For the AP system a new consumer has to be registered. This is done in the table 'CRMCONSUM' where the possible consumers for the data transported by the R/3 Adapter are specified. But before you register a new consumer you need to define an RFC Destination (Tx. SM59) to establish the connection between two systems

A. Connecting ERP System with the AP System

1. To define an RFC destination in the SAP R/3 system, access the activity using Transaction SM59
2. Choose Create
3. Create a New RFC Destination with Connection Type 3 (ABAP Connection)
4. In the RFC Destination put the Logical system name of the AP System (<AP system name>CLNT<client>)

RFC Destination Q5CCLNT505

Remote Logon Connection Test Unicode Test

RFC Destination: Q5CCLNT505
 Connection Type: 3 ABAP Connection Description:

Description

Description 1: Q5CCLNT505
 Description 2:
 Description 3:

Administration **Technical Settings** Logon & Security MDMP & Unicode Special Options

Target System Settings

Load Balancing Status
 Load Balancing: Yes No

Target System: Q5C
 Msg. Server: us0091.wdf.sap.corp
 Group: PUBLIC

Save to Database as
 Save as: Hostname IP Address us0091.wdf.sap.i

Gateway Options

Gateway Host:
 Gateway service:

B. Register a New Consumer in ERP

For the AP System a new consumer has to be registered. This is done in the table 'CRMCONSUM' where the possible consumers for the data transported by the R/3 Adapter are specified.

CONSUMER	AKTIV	TEXT	Q_PREFIX
IPC	X	IPC	IPC

Data Browser: Table CRMCONSUM Select Entries

Table: CRMCONSUM
 Displayed Fields: 5 of 5 Fixed Columns: 2 List Width

MANDT	CONSUMER	AKTIV	TEXT	Q_PREFIX
<input type="checkbox"/> 100	IPC	X	IPC DATA LOADER	IPC

In the table 'CRMRFPPAR' the connections to the consumers are defined.

OBJNAME: **SCE** is the adapter object for Configuration Master Data.

CONSUMER	OBJNAME	DOWNLOAD	RFCDEST	RFC IN QUE	BAPINAME	USE IN Q
IPC	SCE	I	RFCDEST	INQUE	AP_SCE_INIT	X
IPC	SCE	D	RFCDEST	INQUE	AP_SCE_DELT	X

The field DOWNLOAD defines the type of the download (I: Initial Download, D: Delta Download).

I: To initialize the configuration database downloading of all given knowledge bases (existing Knowledge bases will be overwritten).

D: To download knowledge bases for changed data only (delta download).

RFCDEST: Replace RFCDEST with the appropriate RFC destinations of the AP system. When you create the RFC destination, remember to grant full authorizations in object S_RFC to the AP SU01 connection user.

BAPINAME: AP_SCE_INIT for Initial Download & AP_SCE_DELT for Delta download

USE IN Q: Enter X in the USE IN Q field to enable the use of buffers

Table CRMRFPCPAR Display

Check Table...	
MANDT	505
CONSUMER	IPC
OBJNAME	SCE
RFCDEST	Q5CCLNT505
DOWNLOAD	I
RFC QUEUE	
RFC IN QUE	
BAPINAME	AP_SCE_INIT
INFO	
INACTIVE	<input type="checkbox"/>
DISCARD DAT	<input type="checkbox"/>
USE IN Q	<input checked="" type="checkbox"/>
SEND XML	<input type="checkbox"/>
HOLD DATA	<input type="checkbox"/>
CRM REL	500
LAST UPD	17.06.2009
USERNAME	CRMOLTP
CHANGEDATE	19.06.2006
CHANGETIME	14:05:51
REM LOGSYS	Q5CCLNT505

Table CRMRFPCPAR Display

Check Table...	
MANDT	505
CONSUMER	IPC
OBJNAME	SCE
RFCDEST	Q5CCLNT505
DOWNLOAD	D
RFC QUEUE	
RFC IN QUE	
BAPINAME	AP_SCE_DELT
INFO	
INACTIVE	<input type="checkbox"/>
DISCARD DAT	<input type="checkbox"/>
USE IN Q	X
SEND XML	<input type="checkbox"/>
HOLD DATA	<input type="checkbox"/>
CRM REL	500
LAST UPD	17.06.2009
USERNAME	CRMOLTP
CHANGEDATE	19.06.2006
CHANGETIME	14:09:45
REM LOGSYS	Q5CCLNT505

C. Activating Event Control

The activation of the event control is a prerequisite for the replication of the Delta data from the R/3 system to the ISA system. You need to maintain following setting in the Table **TBE11**

Data Browser: Table TBE11 Select Entries 1

Table: TBE11
 Displayed Fields: 3 of 3 Fixed Columns: 1 List Width 0250

APPLK	AKTIV	TXTSU
<input type="checkbox"/> BC-MID	X	Middleware

D. Register Event Handler in R/3 System

To enable the **Delta download** of knowledge bases for the Configuration Engine in ISA, you have to register or change an event. You register the event handler using table **TBE31** and indicate it as follows:

EVENT	LAND	APPLK	FUNCT
00550002		BC-MID	CRS_SCE_COLLECT_DATA_CHANGE

Go to SE16 and maintain following entries:

Data Browser: Table TBE31 Select Entries 1

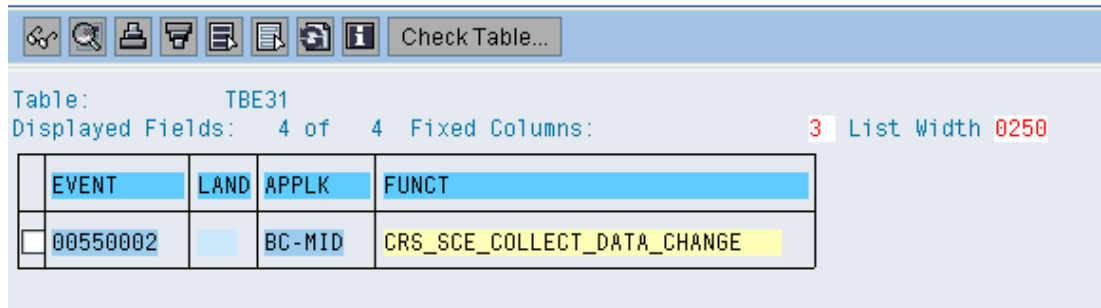


Table: TBE31
 Displayed Fields: 4 of 4 Fixed Columns: 3 List Width 0250

EVENT	LAND	APPLK	FUNCT
00550002		BC-MID	CRS_SCE_COLLECT_DATA_CHANGE

E. How to Perform Initial Download of Configuration (KB) Data

Before you can use the SCE in the AP you have to initialize (activate) the configuration database. The initialization can be done by the report **CFG_AP_INITIALISE_DB**. The report calls the function **AP_SCE_EXTRACT** to trigger the initialization.

AP_SCE_EXTRACT: This function selects the destination of the R/3 system and calls the function **CRS_FIRST_DOWNLOAD_TRIGGER** in the R/3 (Plug In) with consumer IPC.

CRS_FIRST_DOWNLOAD_TRIGGER: This function calls the 'Data Extractor' implemented by the function 'CRS_SCE_EXTRACT'. After the extraction the data is send back to the consumer registered in the table 'CRMRFPCPAR'. For the initial download a new function has to be registered to implement the receiver at the AP System. The new function will be 'AP_SCE_INIT'.

AP_SCE_INIT: The function module checks whether the configuration database is active in the AP or not. In case of an active configuration database the basic transport function

COM_CFG_DB_TRANS_CLASSIC_INIT is called to store the data to the AP database. In case of an error while storing the data to the database a message is thrown and message log is generated.

F. How to Perform Request Download of Configuration (KB) Data

Go to Transaction Se38 -> start the Report **CFG_AP_REQUEST_DB** and execute. This should download the knowledge Bases from the ERP System

G. How to Perform Delta Download of Configuration (KB) Data

For the delta download a new function has to be registered to implement the receiver at the AP System. The new function is 'AP_SCE_DELT'.

AP_SCE_DELT: The function module checks whether the configuration database is active in the AP or not. In case of an active configuration database the basic transport function

COM_CFG_DB_TRANS_CLASSIC_DELT is called to store the data to the AP database. In case of an error while storing the data to the database a message is thrown to abort the processing

2. SCE in ECC (ERP) and Optionally CRM (R/3-CRM / ISA-R/3 scenario) with ECC (Release 6.0) i.e. ERP 2005 or Higher.

From ERP 2005, the IPC has been integrated and now runs in the AP of the same ERP system where VC modeling takes place. This scenario is used if you have a Vehicle Manager in ERP and you wish to use the SCE for configuration.

All the settings remain the same as in Scenario 1 [SCE in AP (ISA-R/3 scenario) for ISA (Release 5.0 or higher) and ECC (Release 5.0 or lower) i.e. ERP 2004.] except for the settings in the table TBE31 and the report you use to activate the configuration database.

A. Registering a New Event Handler in TBE31 as Follows

EVENT	LAND	APPLK	FUNCT
00550002		BC-MID	COM_SCE_COLLECT_DATA_CHANGE

The new function module COM_SCE_COLLECT_DATA_CHANGE calls the old function module CRS_SCE_COLLECT_DATA_CHANGE to transport the data to the CRM and the function module ECC_SCE_COLLECT_DATA_CHANGE to send data to ECC.

Hence one event handler takes care of transporting the Knowledgebase to the SCE in ERP as well as in the CRM. In case you do not wish to use the SCE in ERP, you may continue to use the old CRS_SCE_COLLECT_DATA_CHANGE event handler.

B. Activating the Configuration Database

Before you can use the SCE in the ECC you have to initialize (activate) the configuration database. The initialization can be done by the report **CFG_ERP_INITIALISE_DB**.

Related Content

http://help.sap.com/saphelp_srm50/helpdata/en/05/9b8139437eac2ae10000000a11402f/frameset.htm

http://help.sap.com/erp2005_ehp_02/helpdata/en/fd/4d92a133d011d5b67a0004ac160649/content.htm

SDN Document:

[How-to-Guide: Middleware Settings for Download of IPC Configuration \(KB\) data from R/3 to CRM System](#)

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