



**How-to Guide
SAP NetWeaver '04**

How To Configure IDoc Adapters

Version 1.00 – Feb 2005

**Applicable Releases:
SAP NetWeaver '04
XI 3.0 SR1 and above**

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1 Scenario

This guide deals with all the configurations required to create an IDoc adapter in Exchange Infrastructure 3.0 to send an IDoc from XI to the SAP backend system.

Unlike other types of adapters, the IDoc adapter has dependencies on the XI 3.0 ABAP configurations and the backend SAP system configurations. Those configurations information will have to be either created first or retrieved in order to complete the IDoc adapter configuration.

2 Introduction

Configuring IDoc adapter in Exchange Infrastructure 3.0 requires some configuration on the SAP systems, for both XI and the backend system where the IDoc message is to be sent. These steps, although simple, are many times missed or mis-configured, causing the delivery of messages to fail.

Since IDoc adapter uses the ABAP stack, instead of J2EE, the configuration requirements are mainly in ABAP.

Setting up IDoc adapters requires the XI integration server to be able to communicate with the backend SAP system, and also to make sure that the Logical System Name used when posting IDoc exists on the backend SAP system.

3 The Step By Step Solution

The basic steps for the IDoc configuration are outline below:

1. Configure SM59 on XI to communicate to SAP backend system.
2. Configure port on XI for IDoc communication.
3. Create or verify the Logical System Name on the SAP backend system.
4. Create or verify business system in XI's System Landscape Directory.
5. Verify the Logical System Name of the business system.
6. Verify or add the Logical System Name for the sender business system.
7. Create/configure the Communication Channel for the IDoc receiver adapter

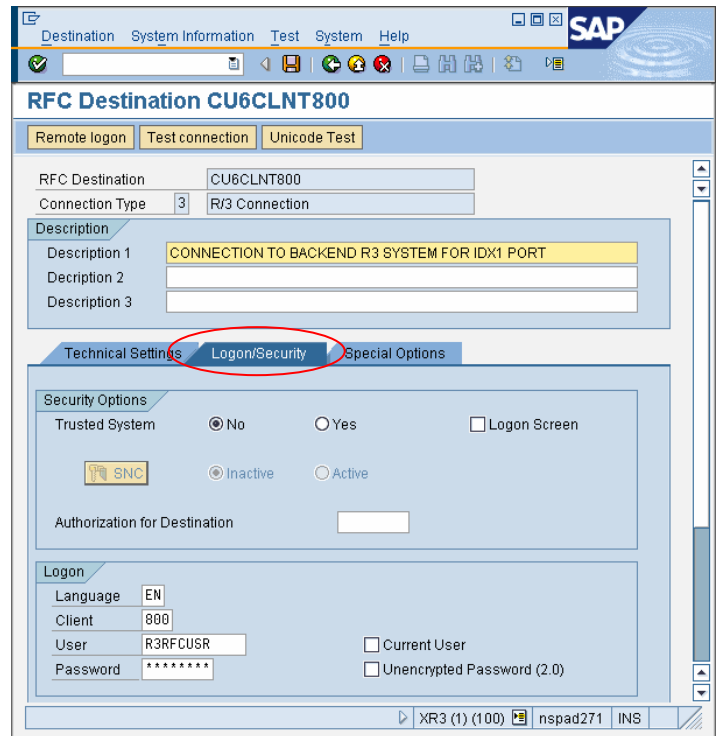
3.1 Configure SM59 on XI to communicate to SAP backend system.

1. Using transaction SM59, create an RFC destination with Connection Type = "3".

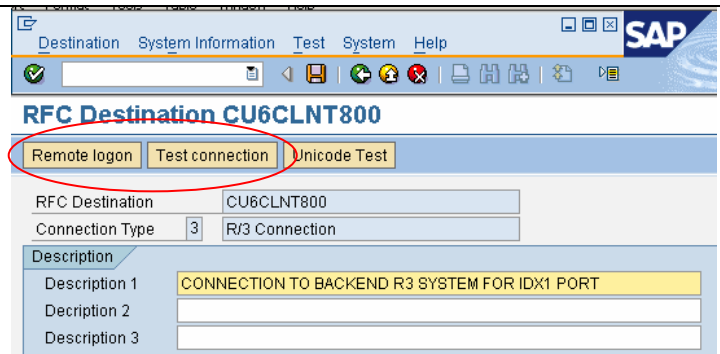
In this example, the RFC destination name is "CU6CLNT800".

The screenshot displays the SAP SM59 transaction interface for configuring an RFC destination. The title bar shows 'Destination System Information Test System Help' and the SAP logo. The main window title is 'RFC Destination CU6CLNT800'. Below the title, there are three buttons: 'Remote logon', 'Test connection', and 'Unicode Test'. The 'RFC Destination' field is set to 'CU6CLNT800' and the 'Connection Type' is '3' (R/3 Connection). The 'Description' section contains three fields: 'Description 1' with the text 'CONNECTION TO BACKEND R3 SYSTEM FOR IDX1 PORT', 'Description 2', and 'Description 3'. Below the description is a tabbed interface with three tabs: 'Technical Settings', 'Logon/Security', and 'Special Options'. The 'Technical Settings' tab is active and shows 'Target System Settings' with options for 'Balance Load' (Yes/No), 'Target Host' (tsph1874.phl.sap.corp), 'System Number' (00), and 'Save as' (HostName/IP Address, 10.3.82.214). The 'Gateway Options' section includes 'Gateway host' and 'Gateway service' fields, along with a 'Delete' button. The status bar at the bottom indicates 'XR3 (1) (100) nspad271 INS'.

2. Enter the logon information:



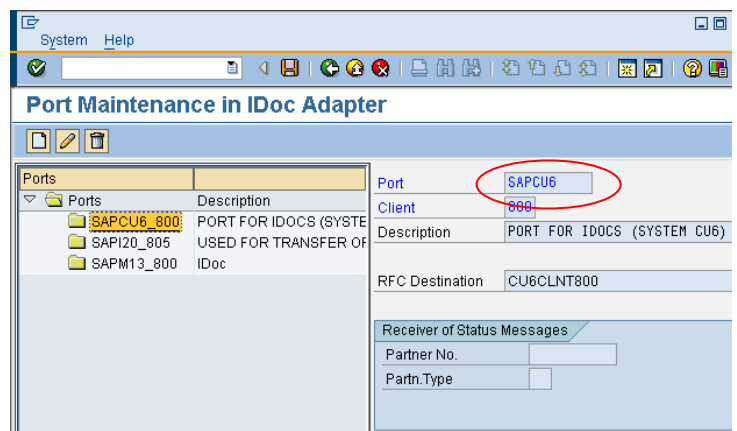
3. Test the connection by clicking on “Testing connection” and “Remote logon”. Both must be successful.



3.2 Configure port on XI for IDoc communication.

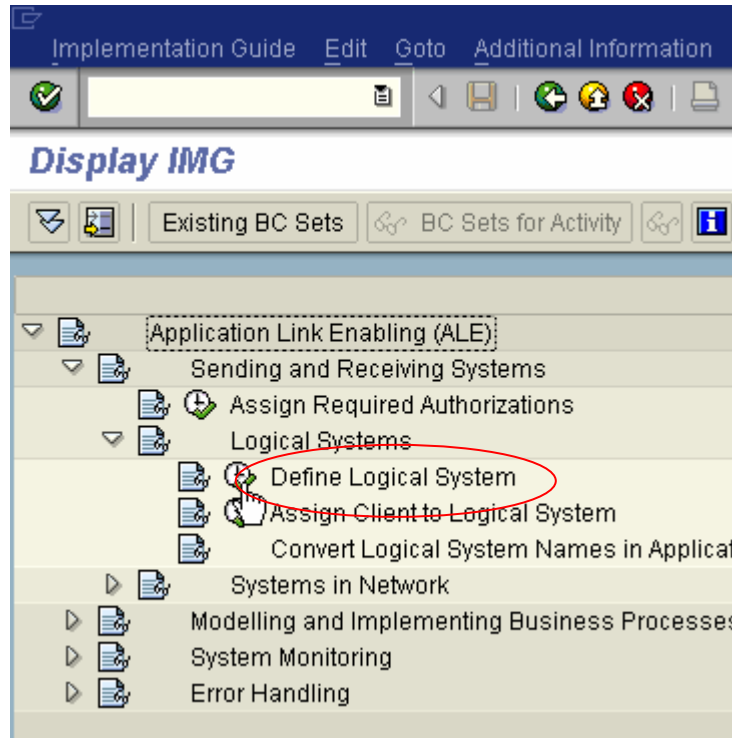
4. Go to transaction IDX1 on XI, and create a port. In this example, the Port name is “SAPCU6”.

- The Port name must be in the form of “SAPxxx”, where xxx is the system ID of the backend SAP system.
- The Client must be the client number of the backend SAP system.
- Select the RFC Destination which was created in the previous step.

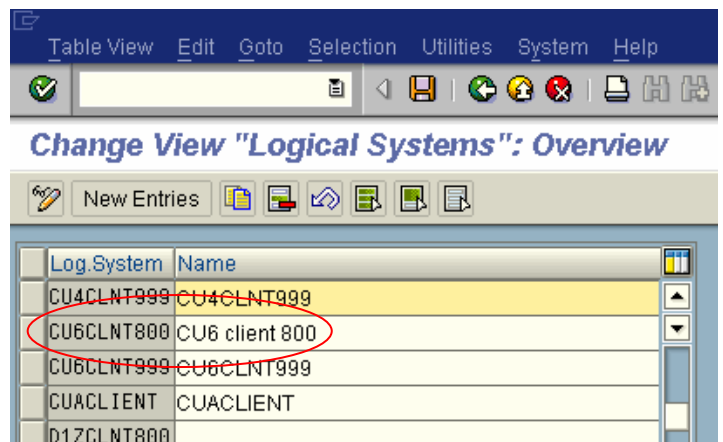


3.3 Create or verify the Logical System Name on the SAP backend system.

5. Enter transaction SALE on the SAP backend system.



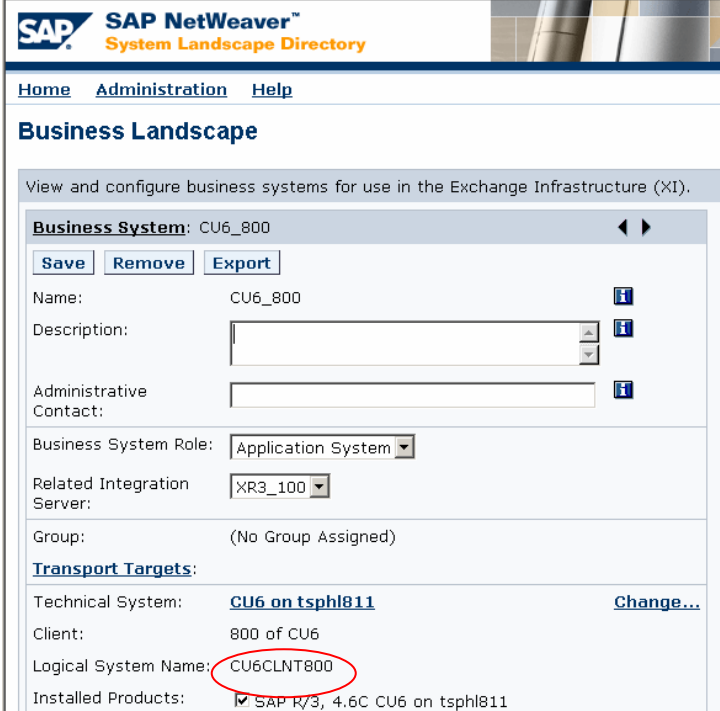
6. Create or verify the Logical System Name. In our example, CU6CLNT800 is verified.



3.4 Create or verify business system in XI's System Landscape Directory.

The business system name for the SAP backend system must contain a valid Logical System Name. This Logical System Name is the one verified or created in the previous step.

7. In the System Landscape Directory, select the SAP backend business system. If one does not exist, then create the business system. Verify the Logical System Name.



The screenshot shows the SAP NetWeaver System Landscape Directory interface. The main heading is "Business Landscape" with a sub-heading "View and configure business systems for use in the Exchange Infrastructure (XI)". The current business system is "CU6_800". The configuration details are as follows:

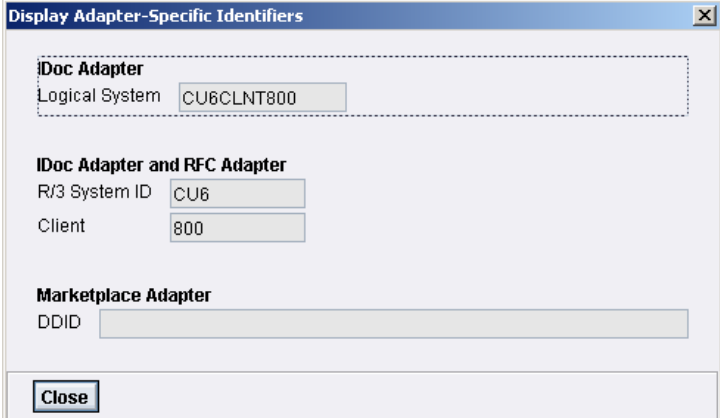
Name:	CU6_800
Description:	[Empty field]
Administrative Contact:	[Empty field]
Business System Role:	Application System
Related Integration Server:	XR3_100
Group:	(No Group Assigned)
Transport Targets:	
Technical System:	CU6 on tsphl811
Client:	800 of CU6
Logical System Name:	CU6CLNT800
Installed Products:	<input checked="" type="checkbox"/> SAP R/3, 4.6C CU6 on tsphl811

3.5 Verify the Logical System Name of the business system.

8. In the Integration Directory, double-click on the business system (in our example, it is CU6CLNT800).

Navigate the menu:
Service • Adapter Specific Identifiers..

If information is empty or incorrect, then it will have to be synchronized with the content of the System Landscape Directory. Follow the steps below for synchronization.



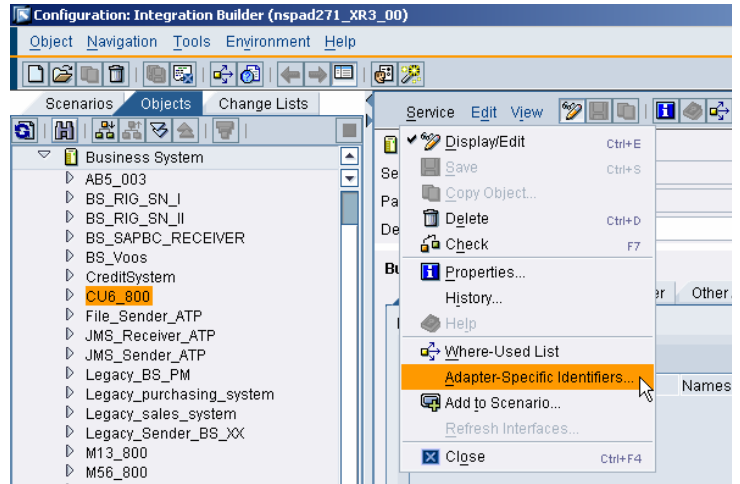
The screenshot shows the "Display Adapter-Specific Identifiers" dialog box. It contains the following information:

IDoc Adapter	
Logical System	CU6CLNT800
IDoc Adapter and RFC Adapter	
R/3 System ID	CU6
Client	800
Marketplace Adapter	
DDID	[Empty field]

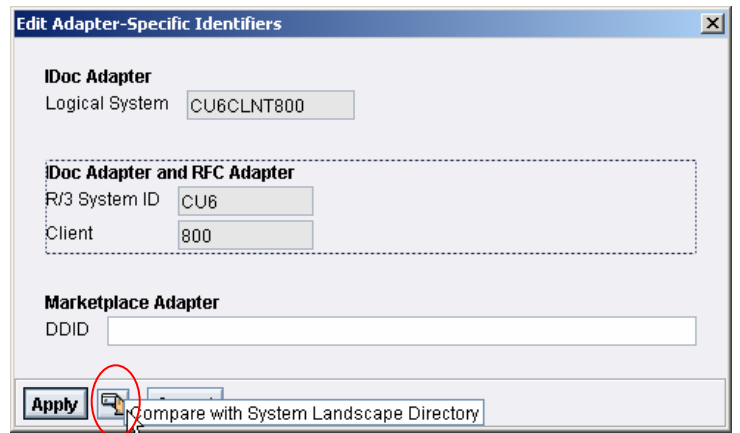
A "Close" button is located at the bottom left of the dialog box.

9. (Optional) Synchronization of the business system in Integration Directory to the business system in System Landscape Directory.

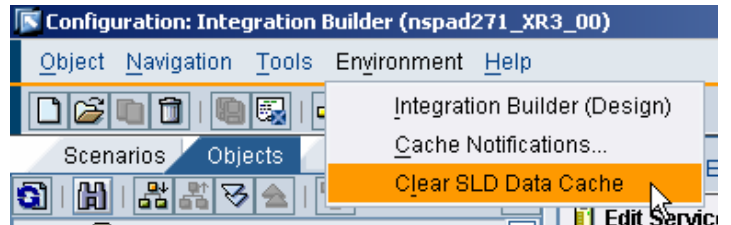
- Double-click on the business system in the Integration Directory.
- Switch to Edit mode.
- Select menu: Service • Adapter-Specific Identifiers



10. (Optional) Within the dialog box, click on the button as indicated below to re-synchronize.



11. (Optional) If the expected data from the System Landscape Directory is not updated, then the SLD cache may need to be cleared first.



3.6 Verify or add the Logical System Name for the sender business system.

When the 3rd Party Business System is the sender, repeat steps 3.4 and 3.5 for the sender system. The sender business system must have a logical system name or the IDoc cannot be delivered.

If the sender business system already exists and does not have a Logical System Name, it can be added using the System Landscape Directory.

12. In the System Landscape Directory, display the Business System and click on "Change".

SAP NetWeaver™
System Landscape Directory

Home Administration Help

Business Landscape

View and configure business systems for use in the Exchange Infrastructure (XI).

Business System: JMS_Sender_ATP

Save Remove Export

Name: JMS_Sender_ATP

Description:

Administrative Contact:

Business System Role: Application System

Related Integration Server: XR3_100

Group: (No Group Assigned)

Transport Targets:

Technical System: TS_RIG_SN_II on nspad271 [Change...](#)

Logical System Name:

Installed Products: ProductC, 1.0 TS_RIG_SN_II on nspad271

13. Enter the Logical System Name and "Save".

SAP NetWeaver™
System Landscape Directory

Home Administration Help

Business Landscape

View and configure business systems for use in the Exchange Infrastructure (XI).

Associate Business System JMS_Sender_ATP with

System: TS_RIG_SN_II on nspad271

Logical System Name: JMSBS1

Save Cancel

Namespace: sld/active XR3

14. Re-synchronize the Integration Directory, by following synchronization instructions in step 3.5. (intentionally left blank)

3.7 Create/configure the Communication Channel for the IDoc receiver adapter.

15. In the Integration Directory, create an IDoc receiver communication channel.
- The RFC Destination is from step 3.1.
 - The Port is from step 3.2.

The screenshot shows the 'Display Communication Channel' configuration in SAP. The 'Parameters' tab is active, showing the following settings:

- Communication Channel: IDOC_Receiver
- Party: (empty)
- Service: CU6_800
- Description: (empty)
- Adapter Type: IDoc (http://sap.com/xi/XI/System SAP BASIS 6.40)
- Transport Protocol: IDoc
- Message Protocol: IDoc
- Adapter Engine: Integration Server
- RFC Destination: CU6CLNT800 (circled in red)
- Segment Version: (empty)
- Interface Version: SAP Release 4.0 or Higher
- Port: SAPCU6 (circled in red)
- SAP Release: 48C (circled in red)

There are also checkboxes for 'Queue Processing' and 'Apply Control Record Values from Payload', both of which are unchecked.

NOTE:

There is no need to create an IDoc sender Communication Channel for XI. Instead, the backend SAP system must be configure to send the IDoc to XI.

4 Appendix

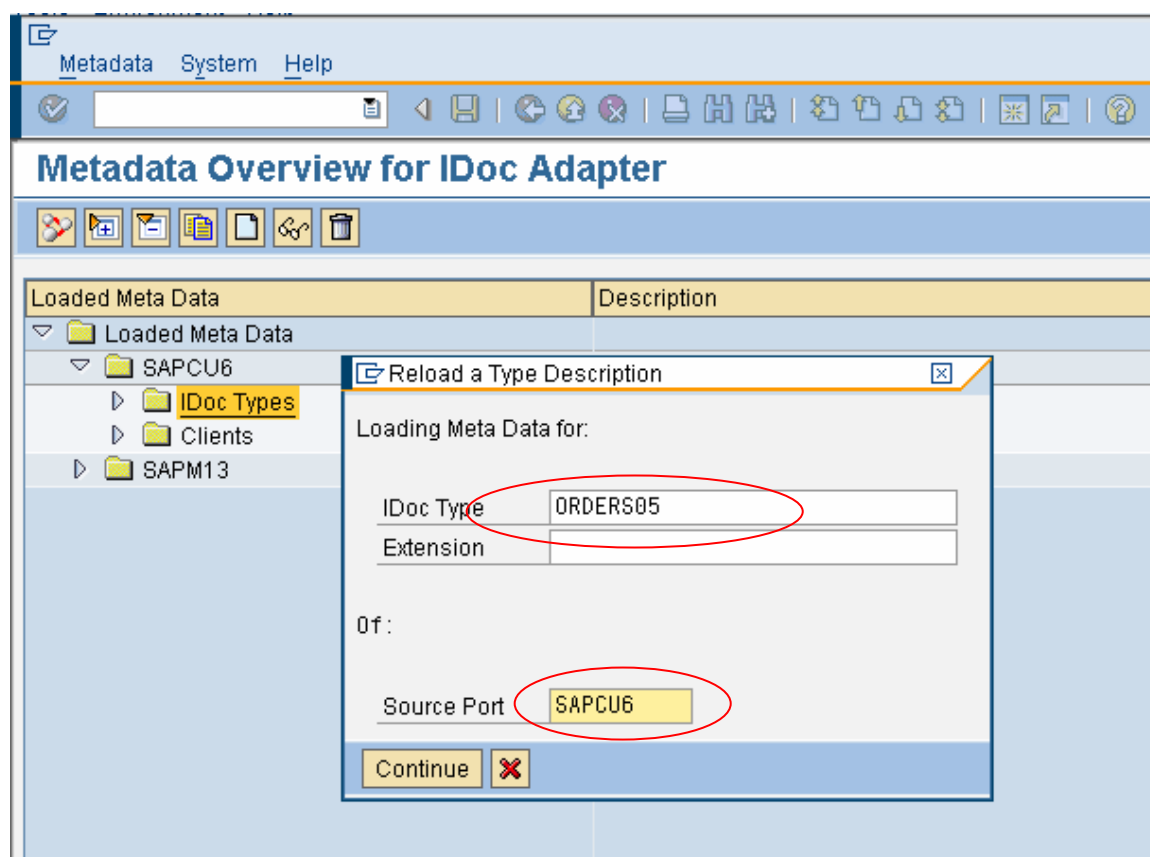
Transaction: IDX2

There are a couple of situation where IDX2 can be useful on the XI system.

1. When we want to test connection between the XI and SAP backend system.
2. When an IDoc has changed, and the meta data stored in XI needs to be update.

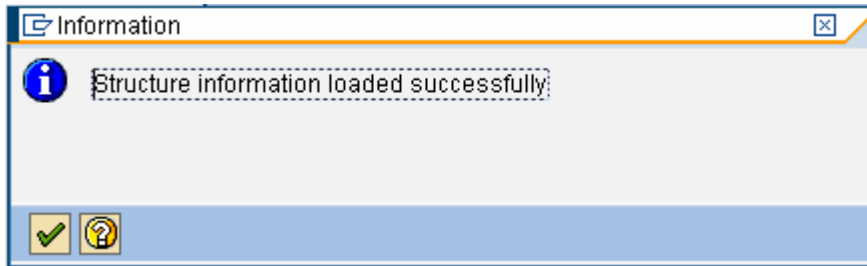
When an IDoc is sent from the SAP backend system to XI, XI will first check to see if the meta data for the IDoc is already in its persistent cache. If not, then XI will use the configuration in IDX1 to retrieve the IDoc meta data from the backend system. If the meta is already in cache, then it will NOT do so. Therefore, when an IDoc has changed, it is necessary to manually update the new meta data on XI, or delete it from the cache, so that the latest version can be retrieved. IDX2 is used for this purpose.

Go to transaction IDX2 and click on “Create”.



Enter the IDoc Type and the Source Port as defined in step #2. Click “Continue”.

If successful, the following will show up. If error occurs, then the IDX1 configurations will need to be re-checked.



Metadata System Help

Metadata Overview for IDoc Adapter

Loaded Meta Data	Description
Loaded Meta Data	
SAPCU6	System: SAPCU6
IDoc Types:	
CREMAS03	IDoc Type:CREMAS03
ORDERS05	IDoc Type:ORDERS05
Clients	
SAPM13	System: SAPM13

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