

How-To Guide

Document Version: 1608

August 2016

How to Configure Integration between SAP CRM and SAP Hybris Cloud for Customer using SAP Process Integration



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1 Introduction

1.1 Business Scenario

Historically, SAP customers have made large investments in on-premise CRM application capabilities. The SAP CRM application continues to be viable in the corporate system landscape, but many customers want to enable a fresh and intuitive user experience, increased functionality, and faster delivery of new functionality. The hybrid integration scenario is a great enabler of application delivery via the cloud, because it allows the customer to preserve the investment already made in the on-premise SAP CRM application. By the utilization of solution content delivered by SAP PI, a bridge between the on-premise SAP CRM system and the SAP Hybris Cloud for Customer system is established, thus allowing the customer to take advantage of the strengths of both.

1.2 Background Information

This document details the steps required to enable bi-directional communication between an SAP Hybris Cloud for Customer and SAP CRM systems, using SAP Process Integration as the on-premise middleware layer. Configuration Scenarios designed for SAP Process Integration are enabled for configuration and deployment utilizing this document.

1.3 Prerequisites

SAP CRM

SAP CRM 7.0 is required, with at least support package BBPCRM 700 SP06 (SAPKU70006). For Attachment replication in Opportunities and Leads, SAP CRM 7.0 EHP0, SP07 is required.

SAP PI

SAP Process Integration 7.11 or higher is needed and it is always recommended to install the latest support package.

SAP Hybris Cloud for Customer

Initial setup and configuration was already performed in tenant as it is mentioned in the SAP Hybris Cloud for Customer Administrator Guide

The tasks described in this document should be performed by a qualified SAP Basis Administrator, with a solid conceptual understanding of SSL and certificate-based encryption concepts.

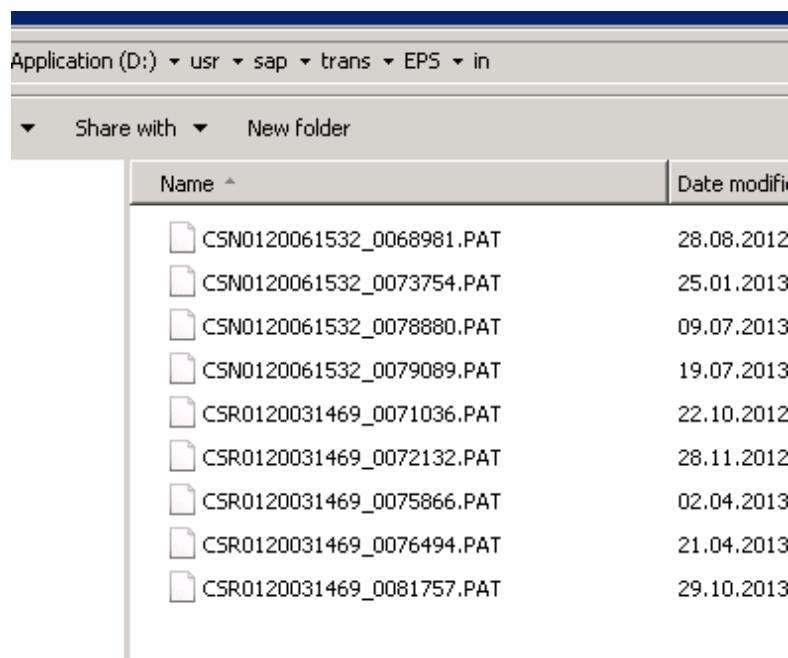


2 Connect Phase: Check and Prepare SAP CRM System

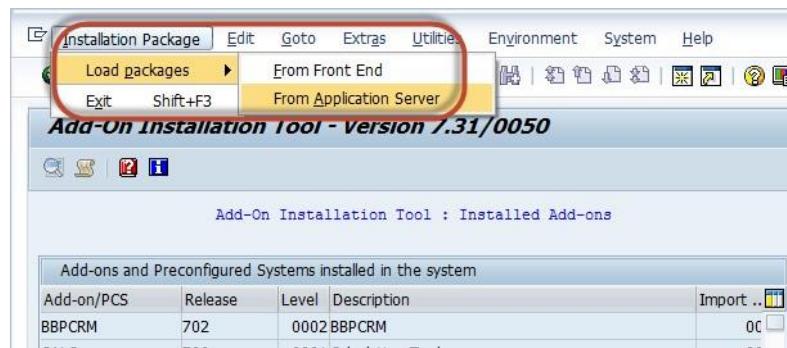
2.1 CRM Software Components

Use transaction SAINT to install the SAP Add-on to CRM and transaction SPAM to implement all the support packages into the CRM system. Remember to update the SPAM to the latest support pack before installing the add-on.

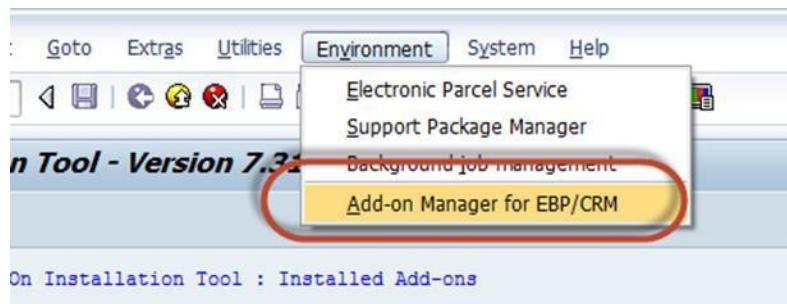
1. Copy the installation package and support packages to the EPS/in directory within the “trans” directory.



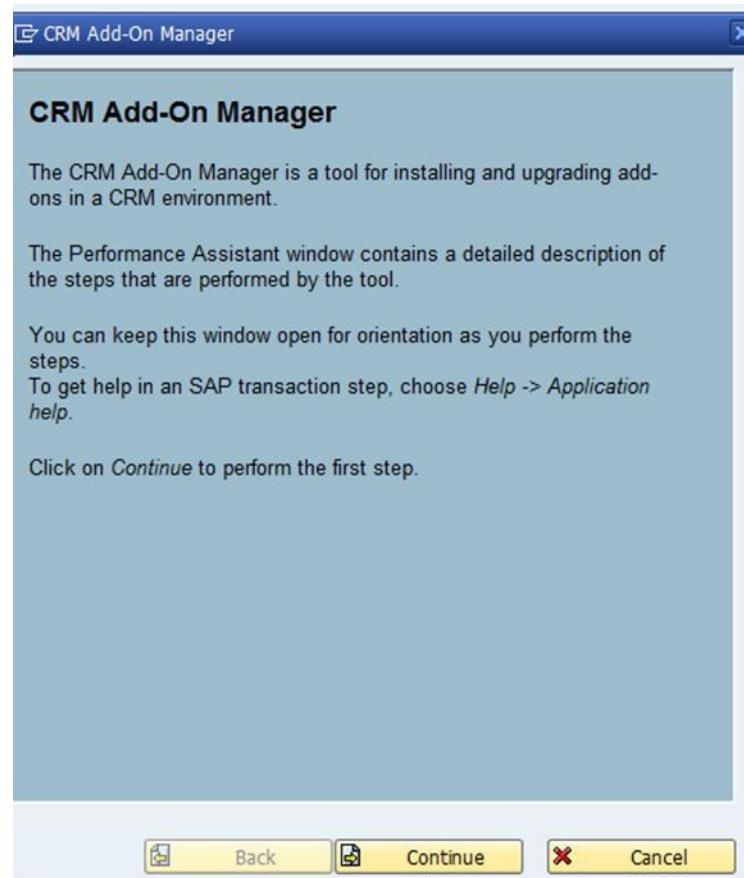
2. Call transaction SAINT and load the packages from the menu Installation Package → Load Package From Application Server.



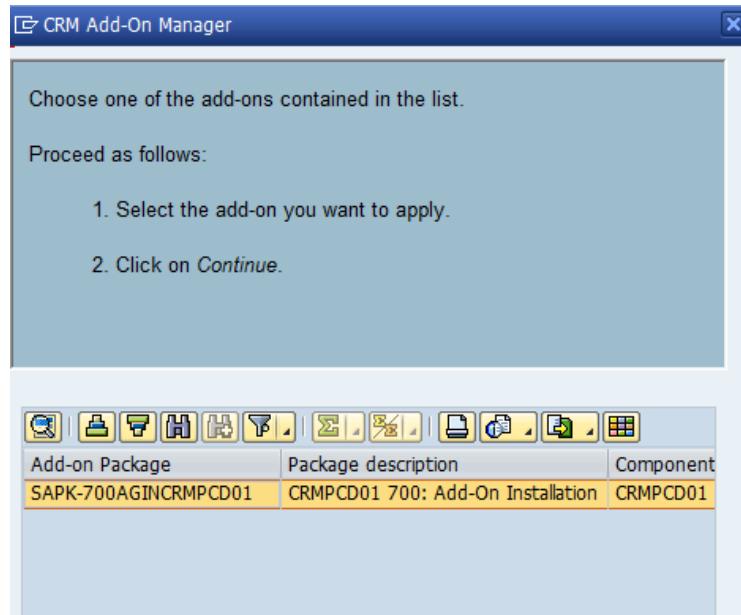
3. Once the packages are loaded, we can install the add-on from Environment -->Add-on Manager for EBP/CRM.



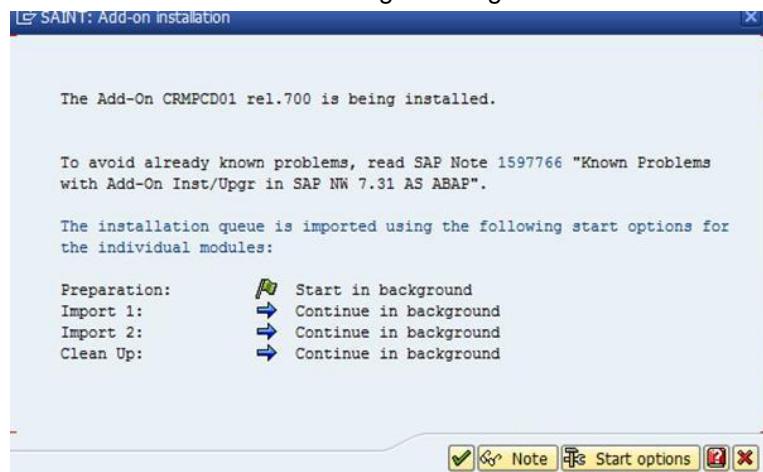
4. Click Continue



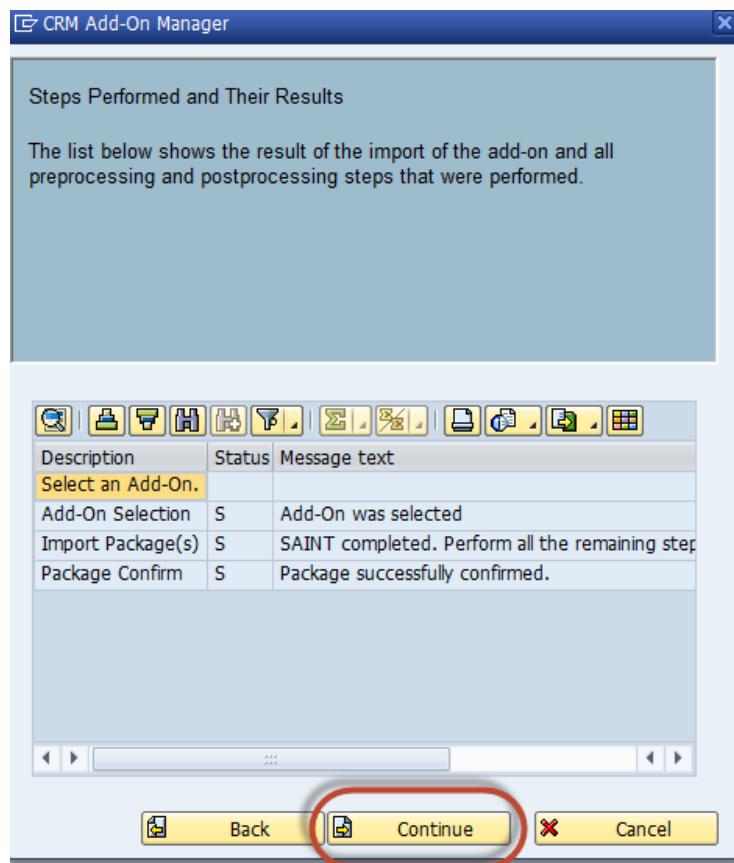
5. Verify that Add-on was recognized and click Continue.



6. Start the Installation of the add-on in dialog or background.



7. When the installation process is finished, click the Back arrow to complete the process, and click Continue.



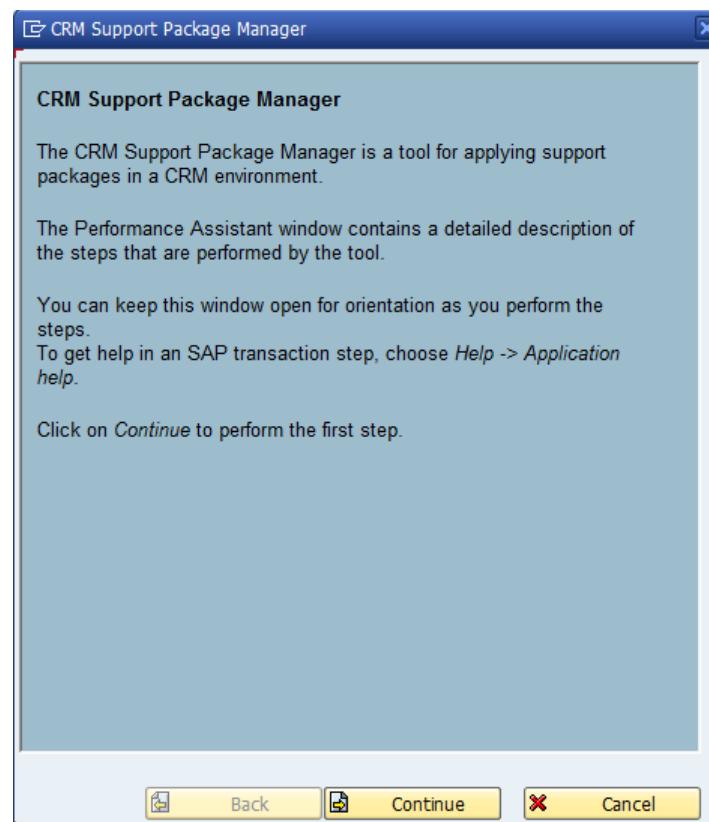
8. Click Complete



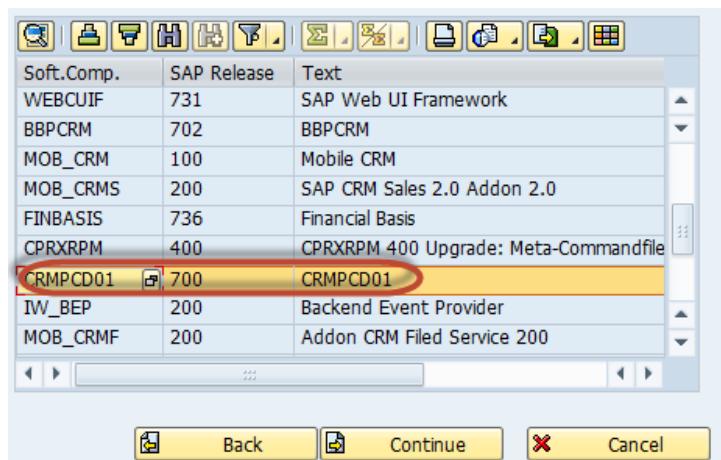
9. Call transaction SPAM to start the implementation of the support packages for this add-on, click in the menu Environment → Support Package Manager for EBP/CRM.



10. Click Continue



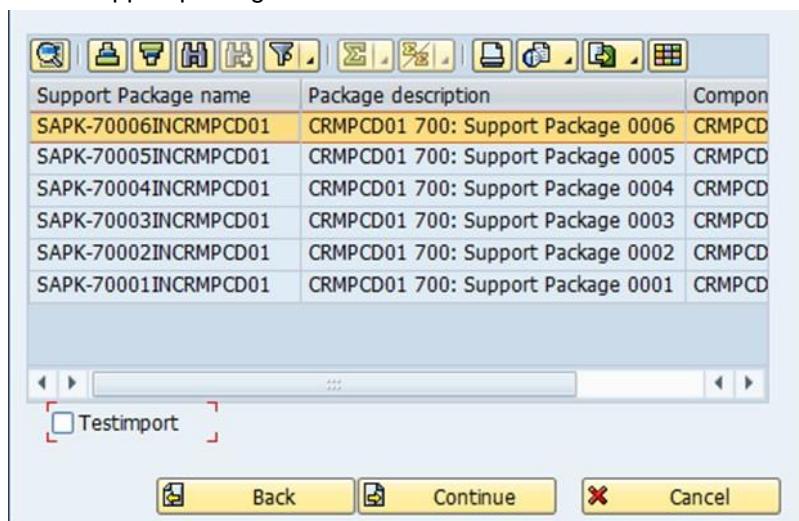
11. Select the add-on component CRMPCD01, and click Continue.



Soft.Comp.	SAP Release	Text
WEBUIF	731	SAP Web UI Framework
BBPCM	702	BBPCM
MOB_CRM	100	Mobile CRM
MOB_CRMS	200	SAP CRM Sales 2.0 Addon 2.0
FINBASIS	736	Financial Basis
CPRXRPM	400	CPRXRPM 400 Upgrade: Meta-Commandfile
CRMPCD01	700	CRMPCD01
IW_BEP	200	Backend Event Provider
MOB_CRMF	200	Addon CRM Filed Service 200

Back Continue Cancel

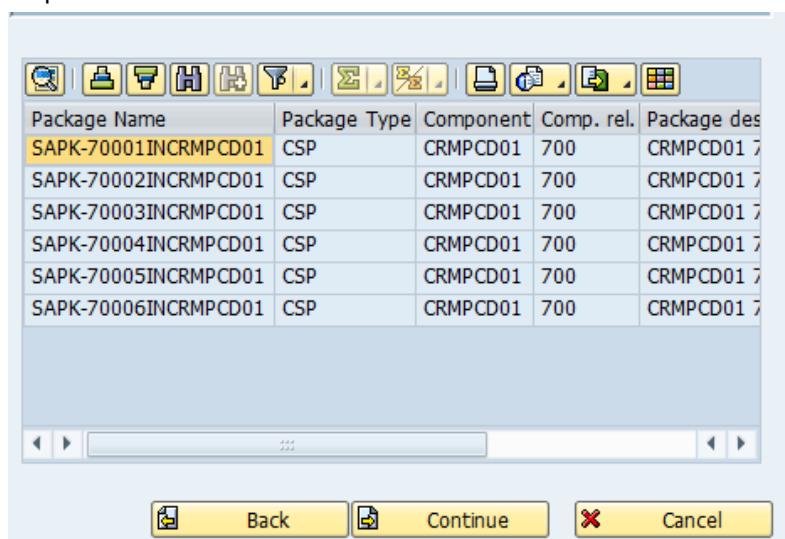
12. Select the latest support packages and click Continue.



Support Package name	Package description	Compon
SAPK-70006INCRMPCD01	CRMPCD01 700: Support Package 0006	CRMPCD
SAPK-70005INCRMPCD01	CRMPCD01 700: Support Package 0005	CRMPCD
SAPK-70004INCRMPCD01	CRMPCD01 700: Support Package 0004	CRMPCD
SAPK-70003INCRMPCD01	CRMPCD01 700: Support Package 0003	CRMPCD
SAPK-70002INCRMPCD01	CRMPCD01 700: Support Package 0002	CRMPCD
SAPK-70001INCRMPCD01	CRMPCD01 700: Support Package 0001	CRMPCD

Testimport Back Continue Cancel

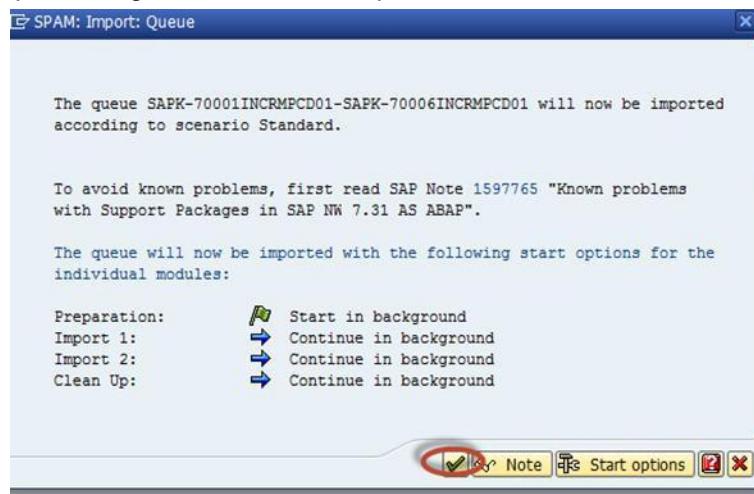
13. Validate the queue and select Continue.



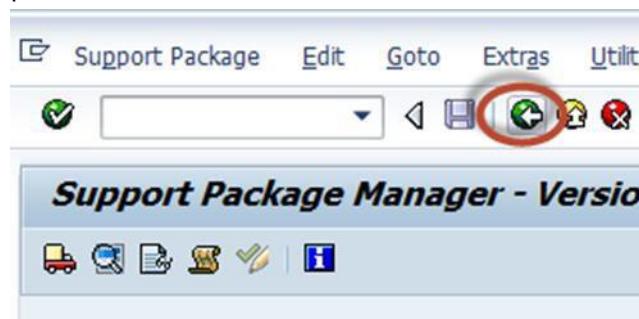
Package Name	Package Type	Component	Comp. rel.	Package des
SAPK-70001INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7
SAPK-70002INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7
SAPK-70003INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7
SAPK-70004INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7
SAPK-70005INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7
SAPK-70006INCRMPCD01	CSP	CRMPCD01	700	CRMPCD01 7

Back Continue Cancel

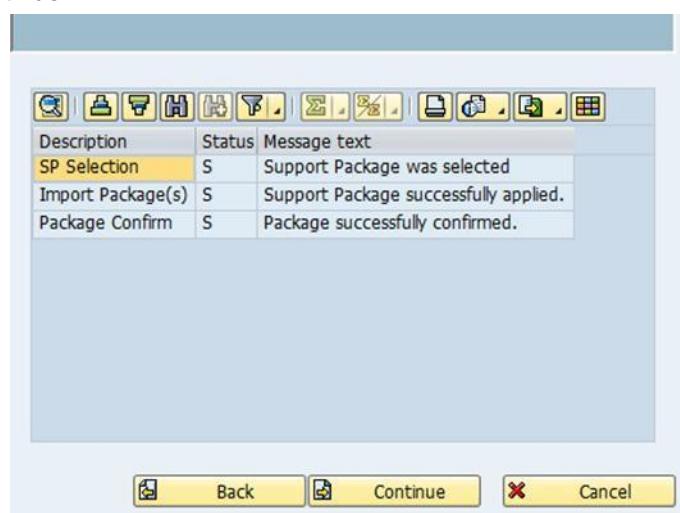
14. Select the processing mode and start the process.



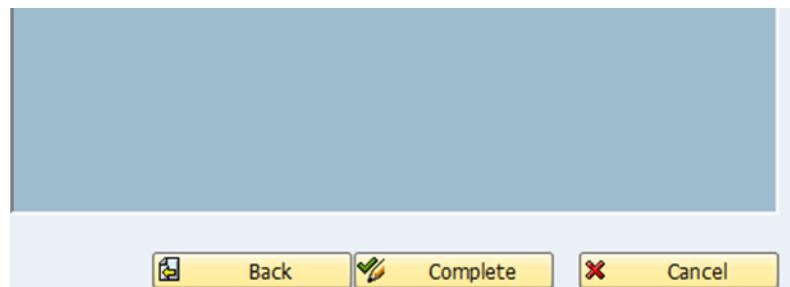
15. When the process finishes, click Back.



16. Click Continue



17. Click complete

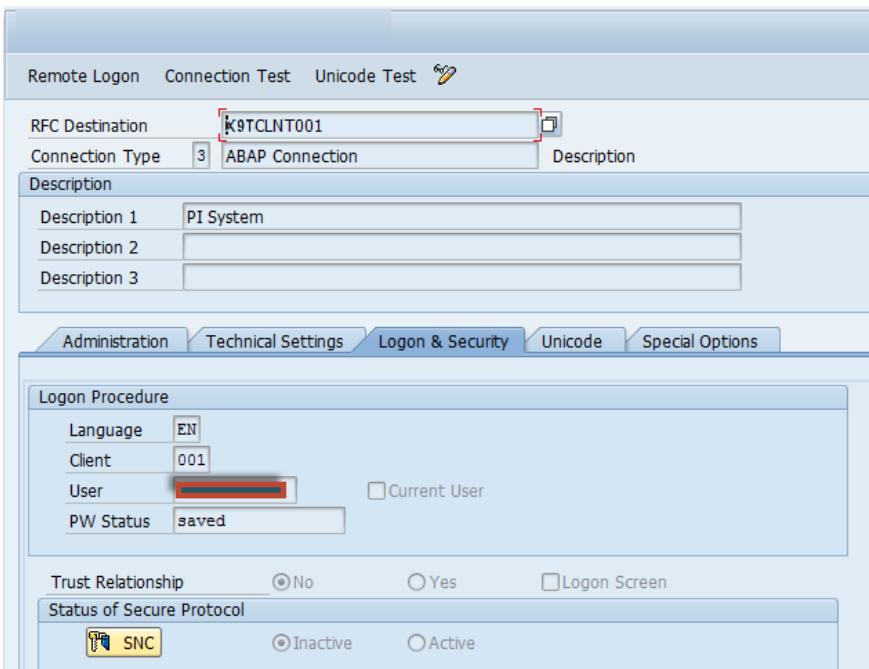


2.2 RFC Destination to PI

1. Call transaction SM59 and create and RFC destination to point the PI system of type 3.

The screenshot shows the SAP transaction SM59 interface for creating an RFC destination. The top navigation bar includes "Remote Logon", "Connection Test", "Unicode Test", and a pencil icon. The main area is titled "RFC Destination" with the value "X9TCLNT001". The "Connection Type" is set to "3 ABAP Connection". Below this, there is a "Description" section with three fields: "Description 1" containing "PI System", and "Description 2" and "Description 3" both empty. The bottom of the screen features a tab navigation bar with "Administration", "Technical Settings" (which is selected), "Logon & Security", "Unicode", and "Special Options". Under "Technical Settings", there are sections for "Target System Settings" (Load Balancing Status: No, Target Host: [redacted], Instance No.: 33), "Save to Database as" (Save as: Host, IP Address: [redacted]), and "Gateway Options" (Gateway Host: [redacted], Gateway service: [redacted]). A "Delete" button is located next to the gateway host field.

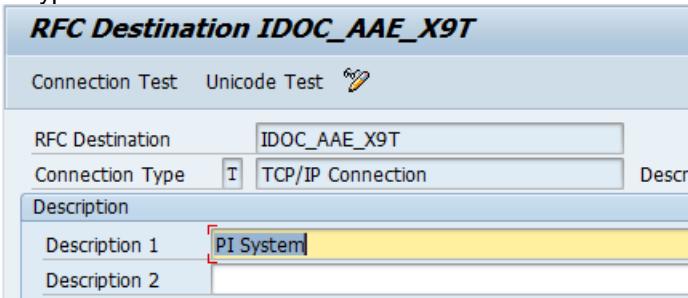
2. Click in the Logon and Security tab and enter the user and password required to connect to PI system. The PI user should have the role SAP_XI_APPL_SERV_USER.



2.3 RFC Destination to PI (IDOC AAE Adapter Only)

Note: This destination is created if you have JAVA only based PI system.

1. Call transaction SM59 and create and RFC destination IDOC_AAE_<PI system> to point the PI system of type T.



2. In Technical settings, enter registered server program ID of the PI system

RFC Destination IDOC_AAE_X9T

Connection Test Unicode Test

RFC Destination	IDOC_AAE_X9T	Description
Connection Type	TCP/IP Connection	
Description		
Description 1	PI System	
Description 2		
Description 3		

Administration Technical Settings Logon & Security Unicode Special Options

Activation Type

Start on Application Server Registered Server Program

Start on Explicit Host
 Start on Front-End Work Station

Registered Server Program

Program ID X1_IDOC_DEFAULT_PID

3. Enter Gateway details where the program ID is registered.

Administration Technical Settings Logon & Security Unicode Special Options

Activation Type

Start on Application Server Registered Server Program

Start on Explicit Host
 Start on Front-End Work Station

Registered Server Program

Program ID X1_IDOC_DEFAULT_PID

Start Type of External Program

Default Gateway Value
 Remote Execution
 Remote Shell
 Secure Shell

CPI-C Timeout

Default Gateway Value
 Specify Timeout 60 Defined Value in Seconds

Gateway Options

Gateway Host	idcx9t	Delete
Gateway service	sapgw17	

Note: The Program ID, Gateway host and Gateway service details can be found under Configuration→Infrastructure→Application Resources →inboundRA resource adapter in NWA of PI system.

2.4 Create SAP CRM User

- From transaction SU01, create a service account with required authorization.
Check SAP Note 1956819 for the authorization role to be assigned to the below user.

Maintain Users

User	CODINTEG
Changed By	
	00:00:00
Status	Not

Address Logon Data SNC Defaults Parameters Roles Profiles

Alias

User Type C Communications Data

Security Policy

Password

New Password Rules (Case-Sensitive)

New Password  

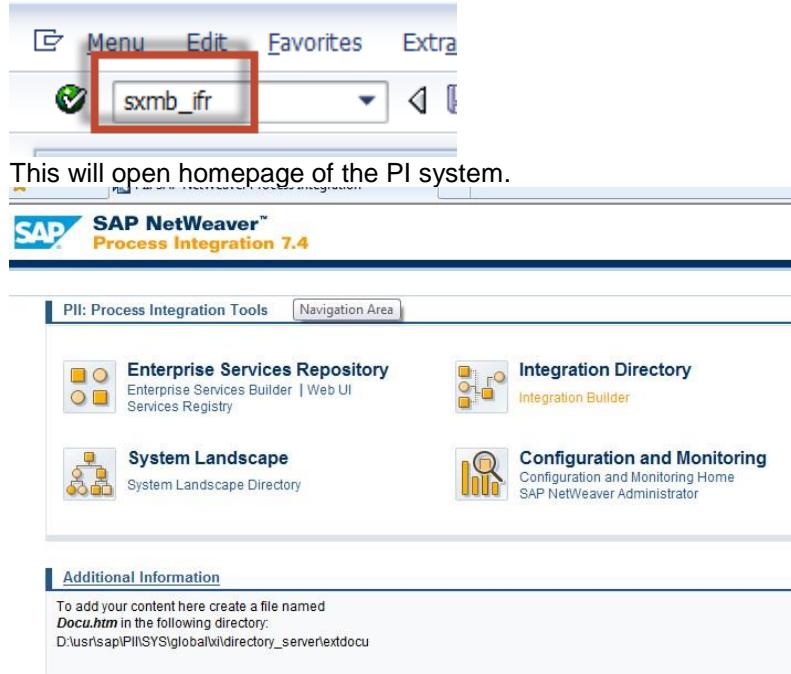
Repeat Password  

Password Status

3 Connect Phase: Check and Prepare PI System

3.1 Access PI System

1. Connect to SAP PI system using SAP Logon GUI.
2. In PI system, execute transaction SXMB_IFR.



3. This will open homepage of the PI system.



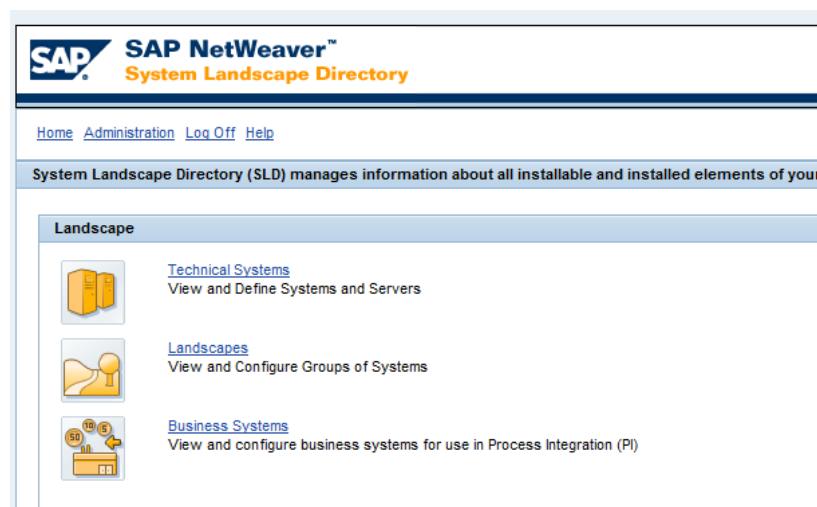
4. You can access the PI clients Enterprise Service Repository, Integration Directory and System Landscape directory.

3.2 Create SLD Configuration

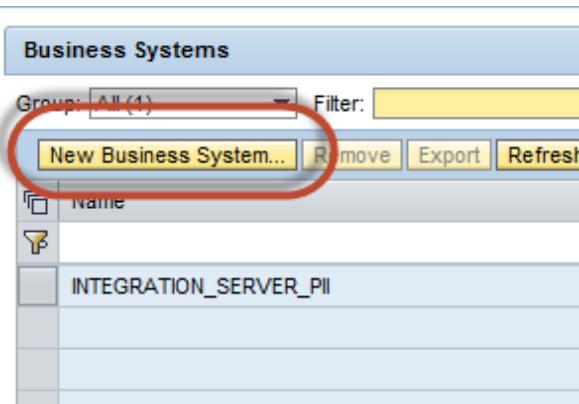
SAP CRM On-Premise

Note: The technical system of type AS ABAP for SAP CRM system should be created.

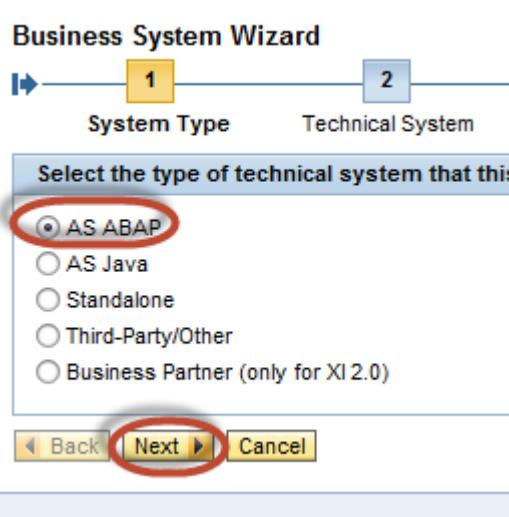
1. Connect to the SLD to create the business systems for the SAP CRM technical system using the URL <http://<hostname>:<port>/sld>.



- Click the Business Systems link and then in New Business Systems.



- Select AS ABAP and then click Next.



- Enter the system, client, and URL, and click Next.

Select the technical system for the business system

System: * Q2C on [dropdown]
Client: * 400 of Q2C [dropdown]
URL: http:// [dropdown] [info icon]

Back **Next** **Cancel**

5. Enter the name for the business system.

Business System Wizard

1 2
System Type Technical System

Enter the business system name

Name: * Q2C_400

Back **Next** **Cancel**

6. Click Next.

Business System Wizard

1 2
System Type Technical System

Select products that are installed in the system

Installed	Product
<input checked="" type="checkbox"/>	CONCEPT GATEWAY
<input checked="" type="checkbox"/>	EHP2 FOR SAP CRM 7.0
<input checked="" type="checkbox"/>	SAP CPROJECT SUITE
<input checked="" type="checkbox"/>	SAP CRM, 7.00 on CRM
<input checked="" type="checkbox"/>	SAP CRM, 7.0 on CRI

Back **Next** **Cancel**

7. Select Application System for Business System Role and the integration server of the PI that will be used, and click finish.

1 System Type 2 Technical System 3 Name

Select the role of this business system; if it is an applic

Business System Role: * Application System

Related Integration Server: INTEGRATION_SERVER_PII

[Back](#) [Finish](#) [Cancel](#)

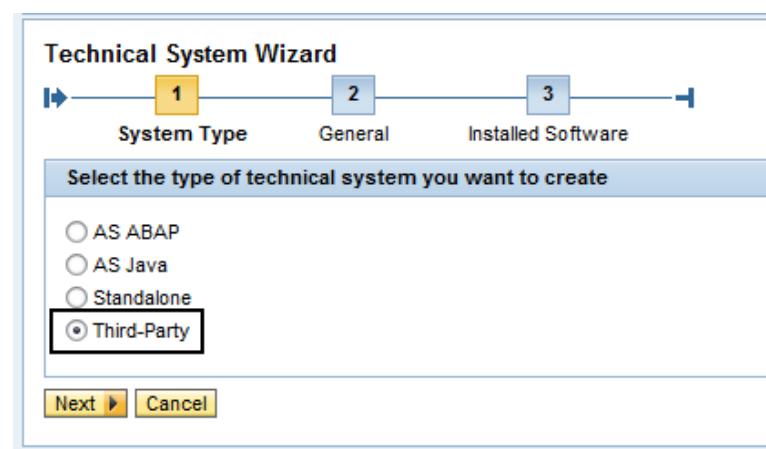
SAP Hybris Cloud for Customer

1. Connect to the SLD to create the business systems for the SAP Hybris Cloud for Customer technical system using the URL <http://<hostname>:<port>/sld>.

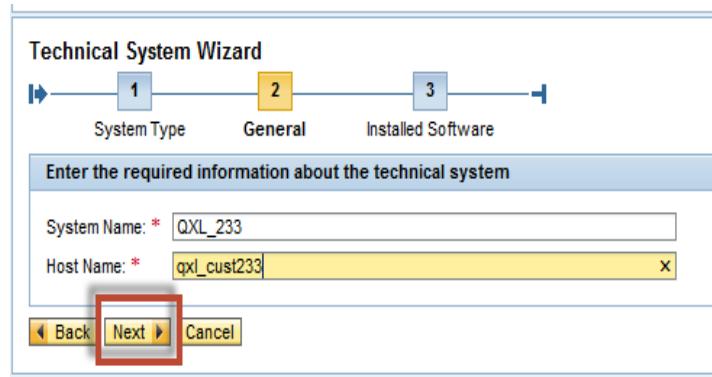
2. Click Technical Systems and then click New Technical System.

Name	Host
Q2C on dewdfgwp01247	dewdfgw
ERI on dewdfgwp01249	dewdfgw
PII on dewdfgwp01248	dewdfgw
PII on dewdfgwp01248	dewdfgw

3. Select the option Third-Party and click Next.

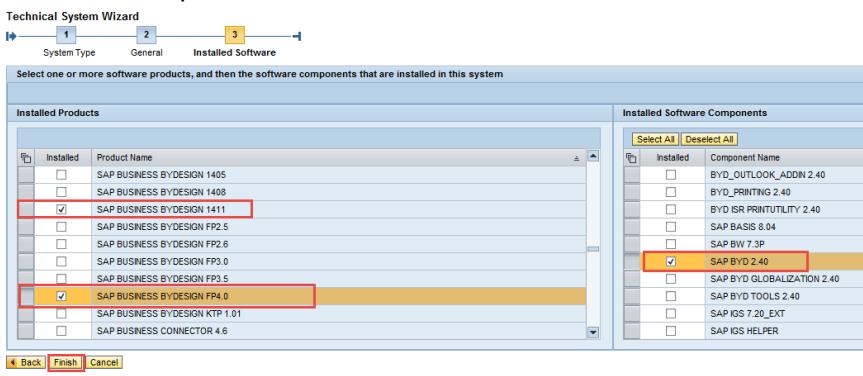


4. Enter the System Name and Host Name and click Next.



5. In the Installed software phase, check the following Installed products and Installed components:

- SAP BYD 1411 part of SAP Business BYDESIGN 1411
- SAP BYD 2.40 part of SAP BUSINESS BYDESIGN FP4.0

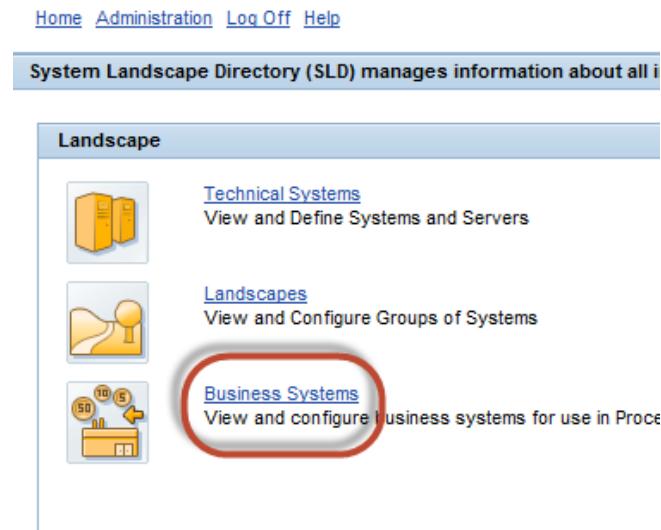


6. Choose Finish.

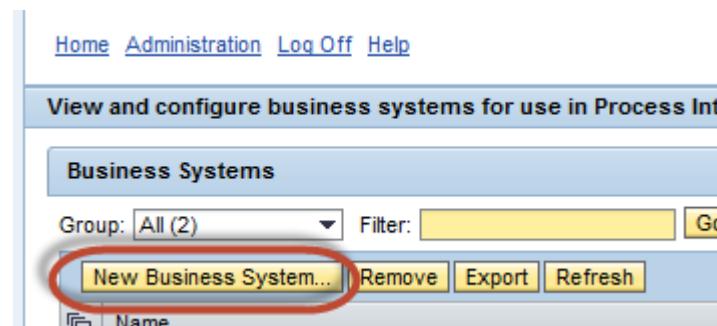
7. Click the Home button to get back to the main page.



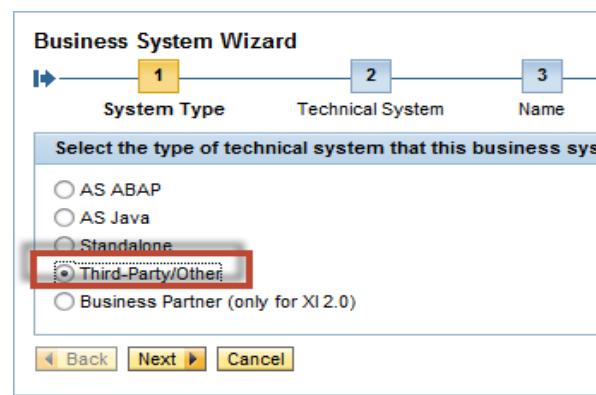
8. Click Business Systems



9. Click New Business Systems



10. Select the Third-Party/Other system type and click Next.



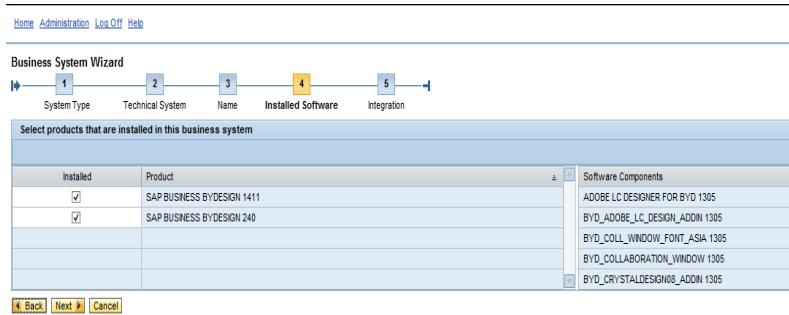
11. Select the corresponding technical system name and add the logical system name of the SAP Hybris Cloud for Customers system and click Next.

This screenshot shows a configuration interface for selecting a technical system. At the top, there are tabs for 'System type', 'TECHNICAL SYSTEM' (which is selected), and 'Name'. Below the tabs, a header reads 'Select the technical system for the business system'. A dropdown menu labeled 'System: *' contains the entry 'QXL_233 on qxl-cust233'. To the right of the dropdown is a small info icon. Below the dropdown, the 'Logical System Name:' field contains 'OLO7EHB' with another info icon to its right. At the bottom of the screen are three buttons: 'Back' (with a left arrow), 'Next' (with a right arrow), and 'Cancel'.

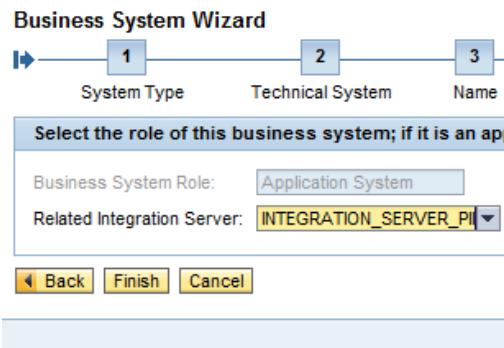
12. Enter the name of the business system and click Next.

This screenshot shows the second step of the 'Business System Wizard'. The title 'Business System Wizard' is at the top, followed by a progress bar with two steps: '1 System Type' and '2 Technical System'. Step 1 is completed, indicated by a blue bar. Step 2 is currently being worked on. Below the progress bar is a header 'Enter the business system name'. A text input field is filled with 'Name: * QXL_233'. At the bottom are three buttons: 'Back' (with a left arrow), 'Next' (with a right arrow), and 'Cancel'.

13. In the Installed Software step, select Products that are installed in the system and choose Next.



14. Select the corresponding Integration system of the PI system that will be used and click Finish.



3.3 CRM PI Software Components

1. Download the corresponding software components from the SAP Marketplace from the SAP Software Download Center.

<http://support.sap.com/swdc>

2. Select the option Support Packages and Patches → Software Downloads

The screenshot shows the SAP Support Portal with the 'Software Downloads' section selected. It includes a navigation bar with links like 'Knowledge Base & Incidents', 'Release, Upgrade & Maintenance Info', 'Software Downloads', 'Keys, Systems & Installations', 'Support Programs & Services', 'Remote Support', 'Users & Authorizations', 'Documentation', and 'SAP Solutions'. Below this is a breadcrumb trail: 'Software Downloads > Support Packages and Patches'. The main content area is titled 'Support Packages and Patches' and contains a sub-section 'Software Downloads' with icons for 'Software Downloads' and 'Download Basket'. A tip at the bottom says: 'Please use the Installations and Upgrades section to download a product for the first time, or download a specific version of a product.'

3. Choose Support Packages and Patches → By Category → SAP Content

Browse Your Company's Download Catalog

INSTALLATIONS & UPGRADES SUPPORT PACKAGES & PATCHES DATABASES

By Alphabetical Index (A-Z)
A complete A-Z index of your company's licensed products (formerly My Application Components)

By Category
All your company's licensed products listed by category

- Analytics Solutions
like Address Directories & Reference Data, Crystal Reports Viewer, SBOP Data Federator, SBOP Enterprise, ...
- SAP Application Components
like SAP Auto-ID Infrastructure, SAP BOBJ Spend Performance Mgmt, SAP CRM, SAP ERP, SAP SCM, SAP SNC, SAP SRM, ...
- SAP Business One
like the SAP Business One Release Families 8.8 & 9.0, Crystal Reports for SAP Business One, ...
- SAP Cloud Solutions
like SAP HANA Cloud Integration(DS), SAP Cloud Applications Studio, ...
- SAP Connectors
like Business Connector, ...
- SAP Content
like BI Cont, EP Content (Business Packages), ESM Docu, ESR Content (XI Content), ...

4. Choose ESR Content (XI Content)

SAP CONTENT

DOWNLOADS INFO ECCN INFO

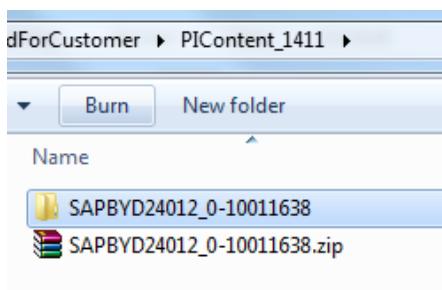
- EP CONTENT (BUSINESS PACKAGES)
- CTC CONTENT
- ESM DOCU
- ESR CONTENT (XI CONTENT)
- BI CONTENT

5. Download the latest version of the following components

- XI CONTENT SAP_BYD 2.40
- XI CONTENT CRMPCD01 700
- XI CONTENT CRMCOD01 IC 700
- XI CONTENT CRM ABAP7.0
- XI CONTENT CRM ABAP7.01
- XI CONTENT CRM ABAP7.02
- SAP BBPCRM XI CONTENT SAP CRM ABAP 7.13
- XI CONTENT SAP BASIS 7.0
- XI CONTENT SAP BASIS 7.11
- XI CONTENT SAP_BS_FOUND 747

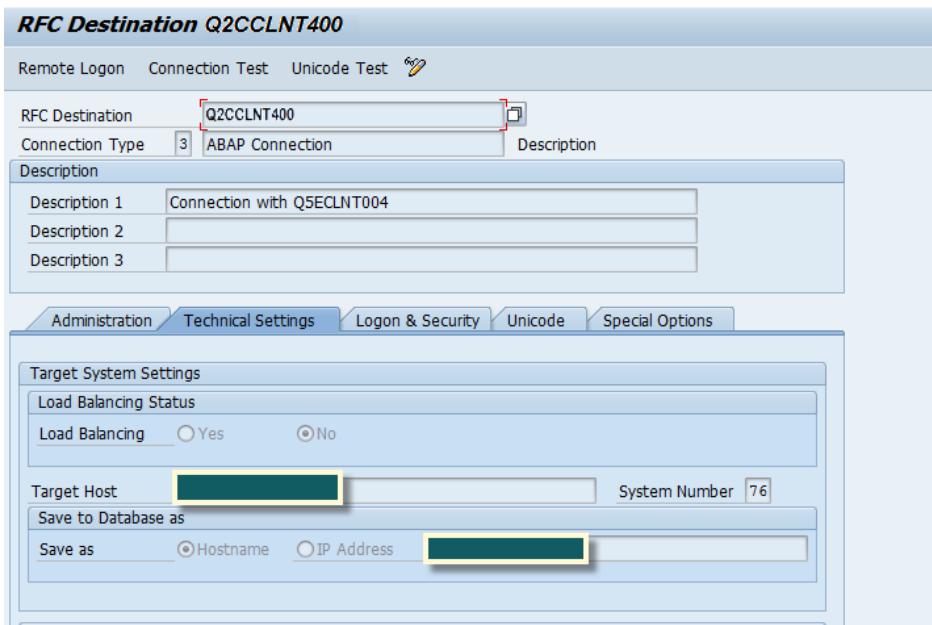
- [CRMPCD01 700](#)
- [XI CONTENT CRMCOD01 IC 700](#)
- [XI CONTENT CRMPCD01 700](#)
- [XI CONTENT SAP CRM ABAP 7.0](#)
- [XI CONTENT SAP CRM ABAP 7.01](#)
- [XI CONTENT SAP CRM ABAP 7.02](#)
- [XI CONTENT SAP BYD 2.40](#)

6. Unzip and copy the downloaded files to your local system.

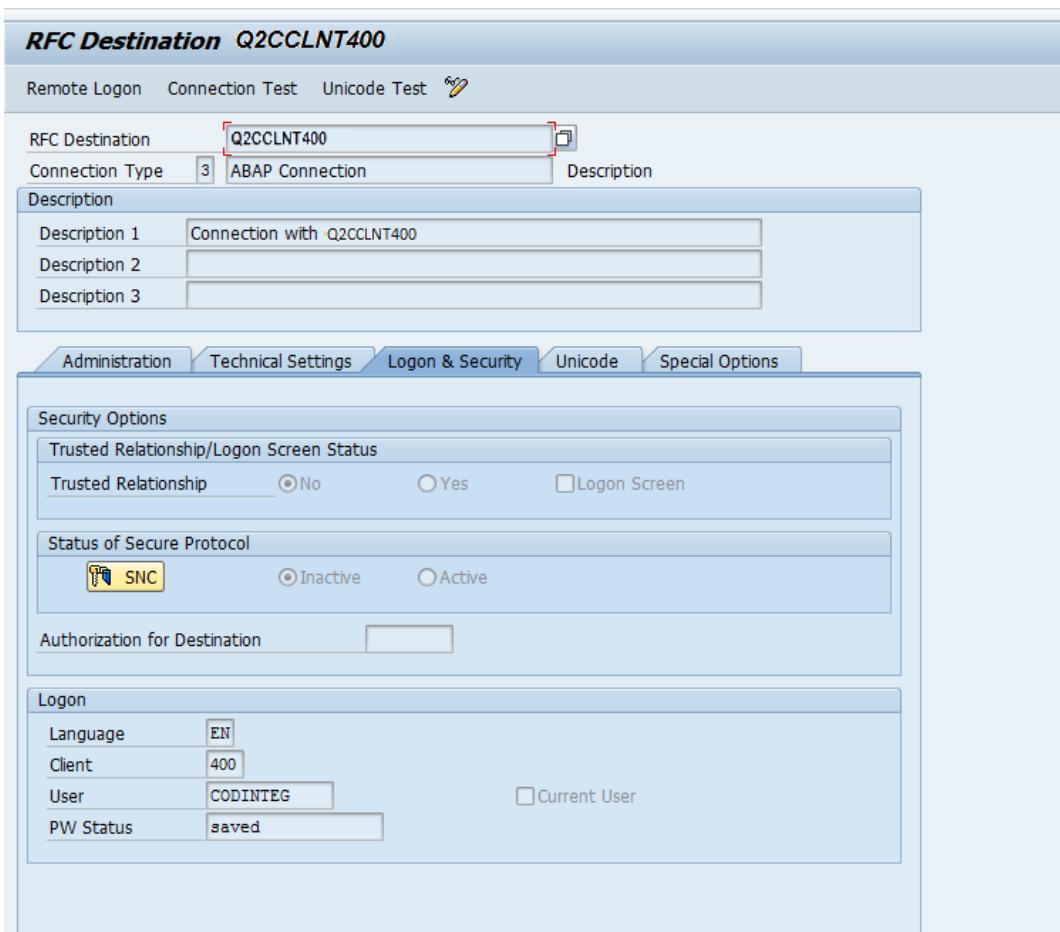


3.4 RFC Destination to SAP On-Premise

1. Call transaction SM59 and create and RFC destination to point the CRM on-premise system of type 3.



2. Click in the Logon and & Security tab and enter the user and password required to connect to CRM system, which is the service account that was created in previous steps



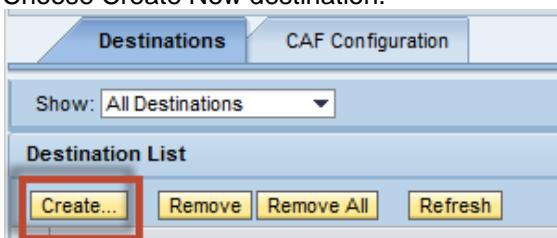
3.5 RFC Destination to SAP On-Premise (IDOC_AAE adapter only)

Note: This destination is created if you have JAVA only based PI system.

1. Open PI NetWeaver Administrator page using the URL <https://<pi-host>:<https port>/nwa>
2. Navigate to Configuration → Destinations.

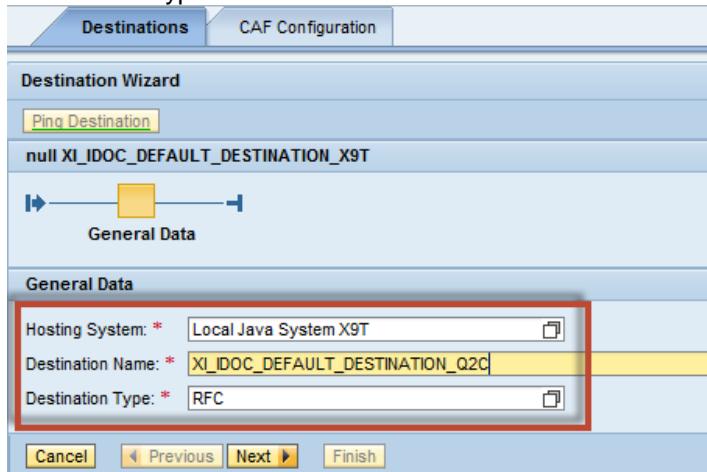


3. Choose Create New destination.

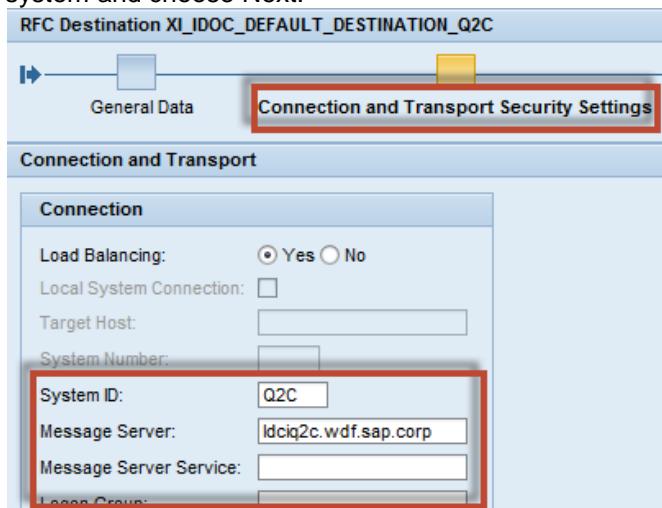


4. In General data maintain the following details:
Hosting System: Local Java System<SID of PI system>

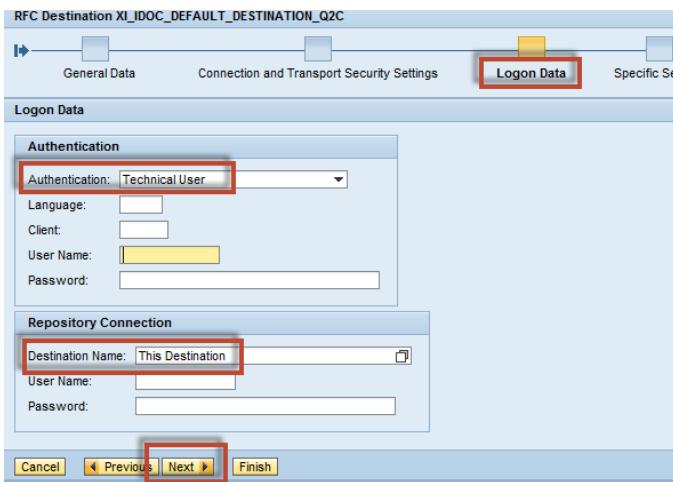
Destination Name: XI_IDOC_DEFAULT_DESTINATION_<SID of on-premise system>
 Destination Type: RFC



5. Choose Next.
6. Under Connection and Transport security settings, maintain technical settings of the CRM on-premise system and choose Next.



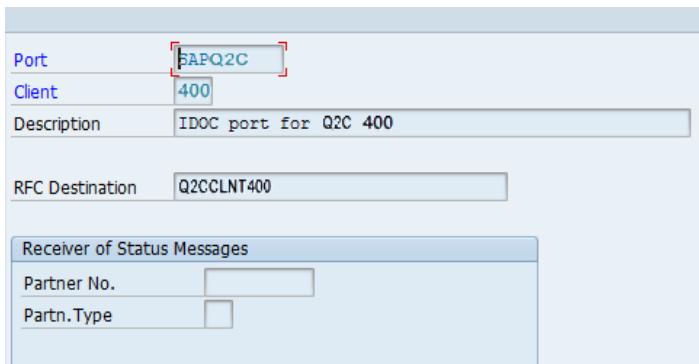
7. Maintain Logon Data details as below and choose Next:
 Authentication: Technical User
 Client : <client of the on-premise system>
 User name and password : on-premise system technical user and password
 Repository connection : This destination using value help.



- Choose Finish.

3.6 PI Port Configuration

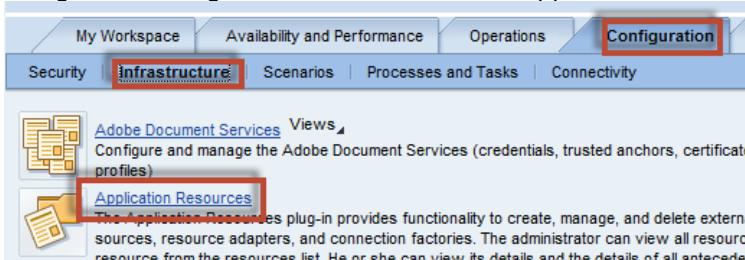
- Call transaction IDX1 and create a new port that uses the RFC destination created in the previous step.



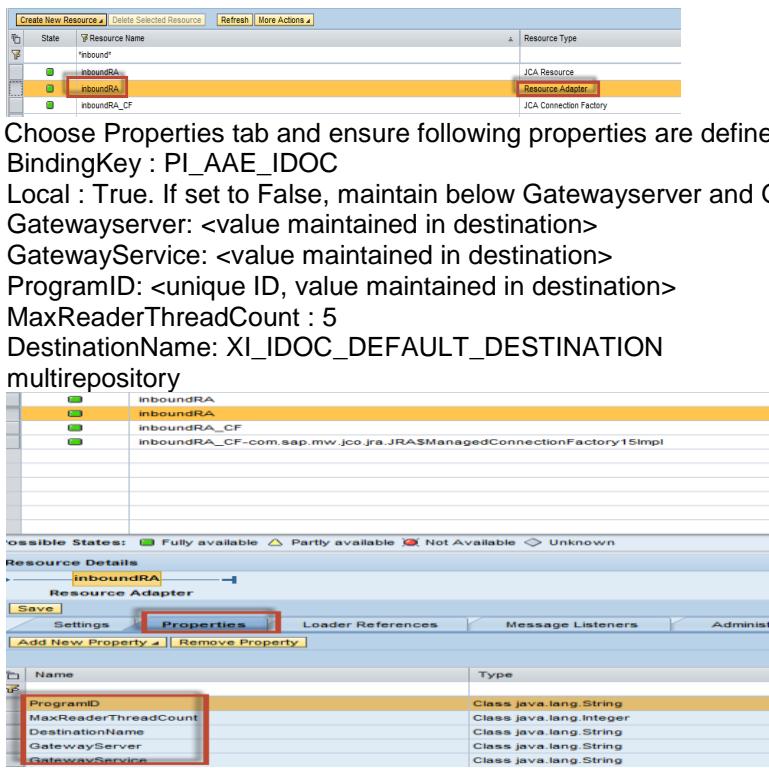
3.7 Resource Adapter (InboundRA) Configuration for IDOC_AAE Adapter

Note: This section is relevant if you have JAVA only based PI system.

- Open PI NetWeaver Administrator page using the URL <https://<pi-host>:<https port>/nwa>
- Navigate to Configuration → Infrastructure → Application resources



- Search for inboundRA Resource Adapter.



4. Choose Properties tab and ensure following properties are defined in resource details section.

BindingKey : PI_AAE_IDOC

Local : True. If set to False, maintain below Gatewayserver and GatewayService details.

Gatewayserver: <value maintained in destination>

GatewayService: <value maintained in destination>

ProgramID: <unique ID, value maintained in destination>

MaxReaderThreadCount : 5

DestinationName: XI_IDOC_DEFAULT_DESTINATION

multirepository

3.8 Import TPZ Package in ESR

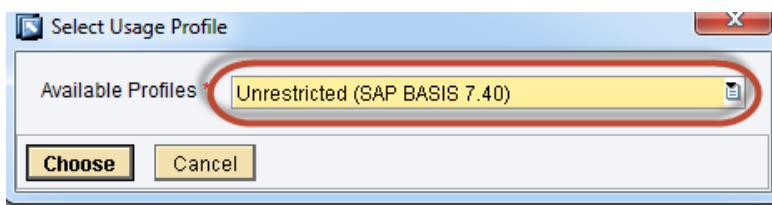
1. Call the PI URL to start the Enterprise Service Builder, example <https://<host>:<port>/dir/start/index.jsp>

2. Open the enterprise service builder clicking in the proper link

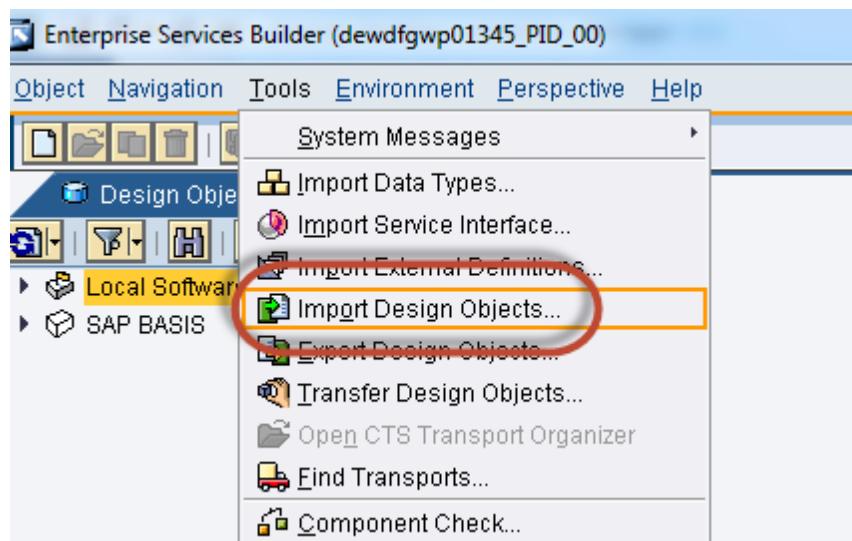


Additional Information

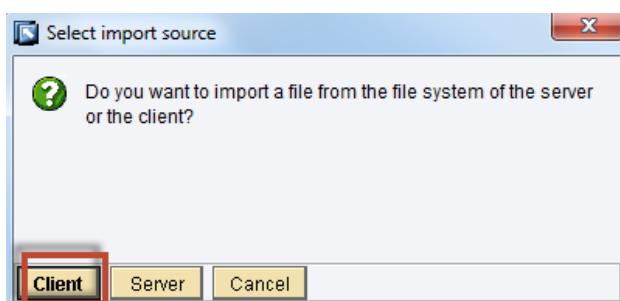
- If JAVA JRE is installed, the Java Web Start Application for the ESR opens, you have to select the usage profile, by example Unrestricted SAP Basis



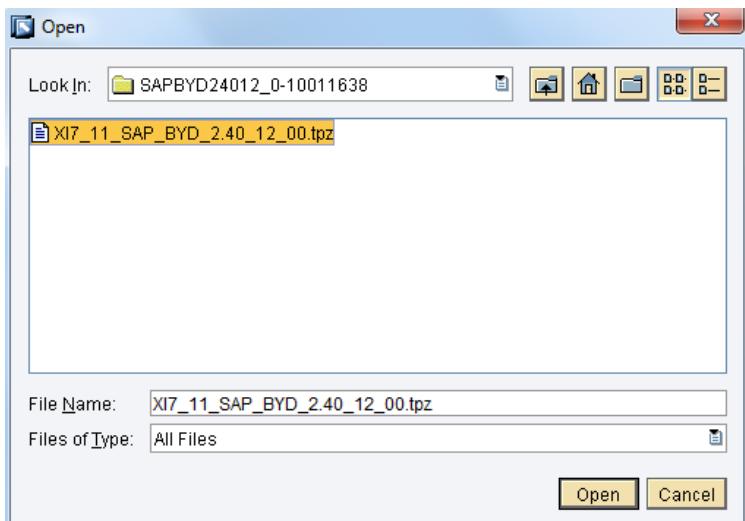
- Once the Enterprise Service Builder is open, click in the menu Tools ->Import Design Objects



- Select the option of Client from the dialog screen



- Select the components (TPZ file) that need to be imported and click Open.



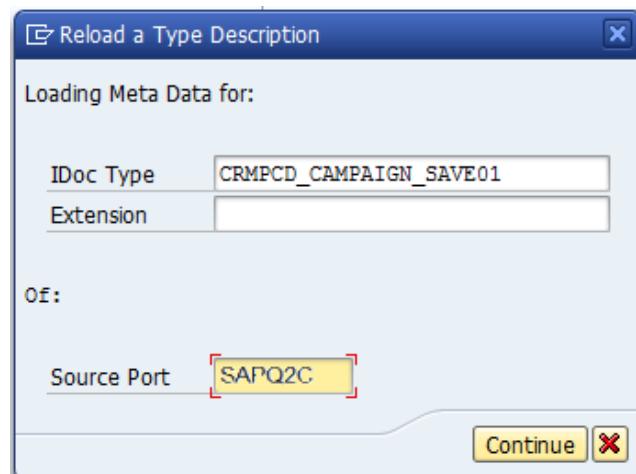
- Repeat the previous steps to import the other PI components described in Software Components section. After all content is imported they will be available in the Design Object area in ESR.

3.9 Load Metadata for IDoc Adapter

- Call transaction IDX2 and create new metadata for each of the IDoc types clicking in the

New icon CRMPCD_CAMPAIGN_SAVE01
 CRMPCD_EMPLOYEE_SAVE01
 CRMPCD_ORG_UNIT_SAVE01
 CRMPCD_PROD_HIER_SAVE01
 CRMXIF_ORDER_SAVE_U01
 CRMXIF_PARTNER_REL_SAVE_M02
 CRMXIF_PARTNER_SAVE_M03
 CRMXIF_PRODUCT_MATERIAL_SAVE02

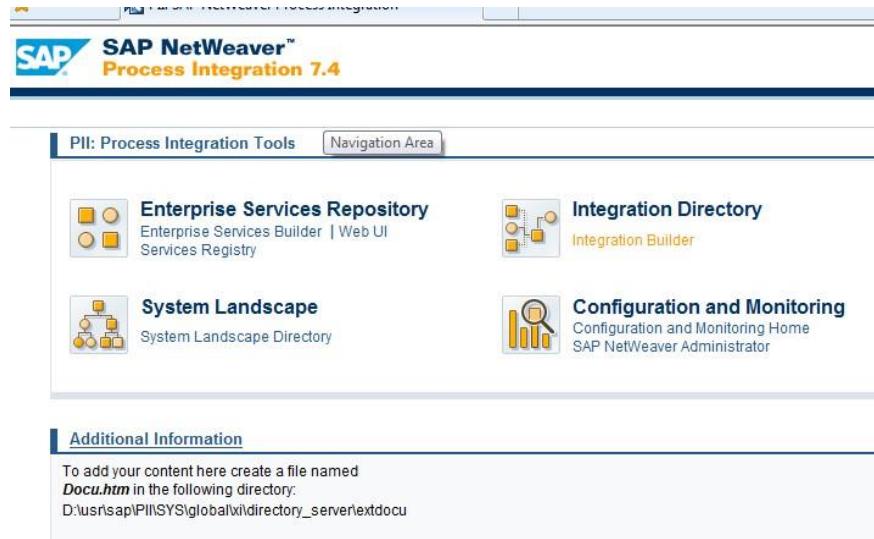
- Enter the IDoc type and the source port created above in PI Port configuration and click continue.



3. Repeat for the rest of the IDoc Types.

3.10 Open Integration Builder

1. Connect to Process Integration Tool using transaction sxmb_ifr or directly Web page with the following URL <https://<hostname>:<port>/dir/start/index.jsp>



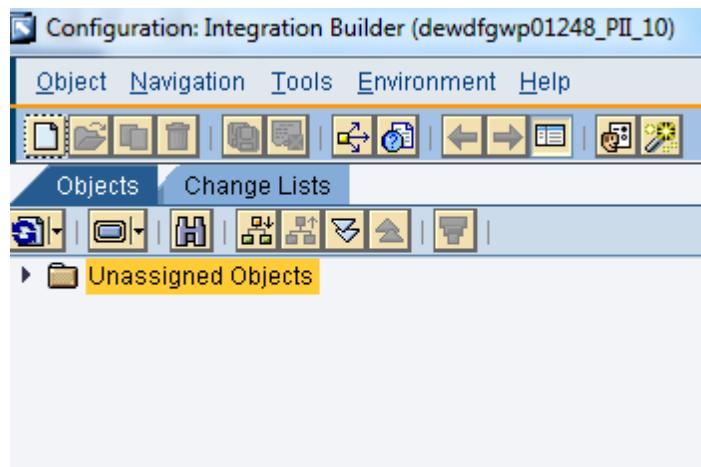
2. Click in Integration Builder link to open it



3. Provide your credentials and logon

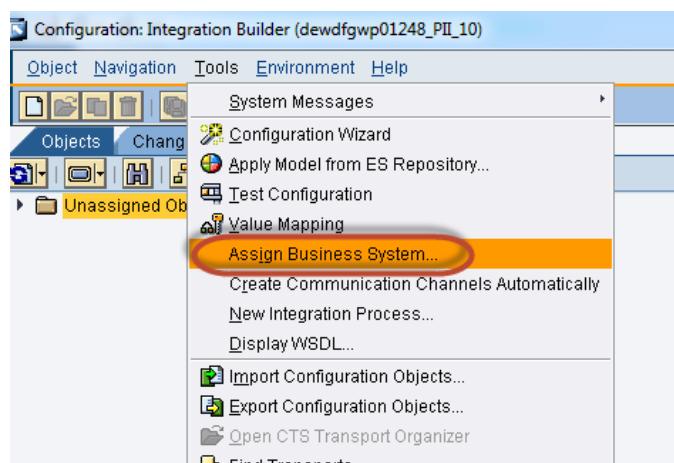
SAP NetWeaver

User *	<input type="text"/>
Password *	<input type="password"/>
<input type="button" value="Log On"/>	
Certificate Logon	

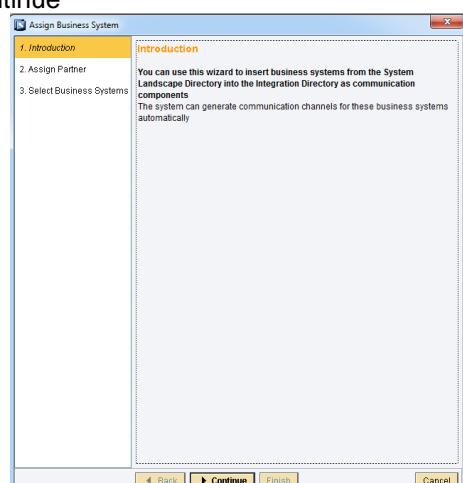


3.11 Import Business System

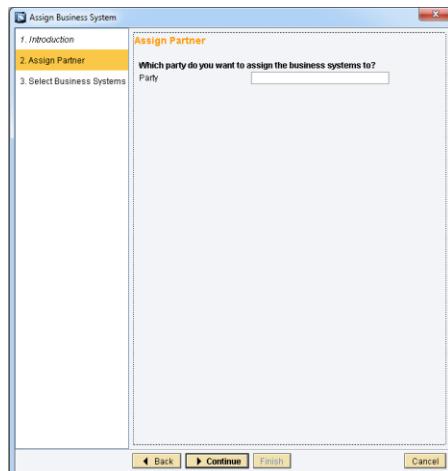
1. Within the integration builder, click in the menu Tools → Assign Business Systems.



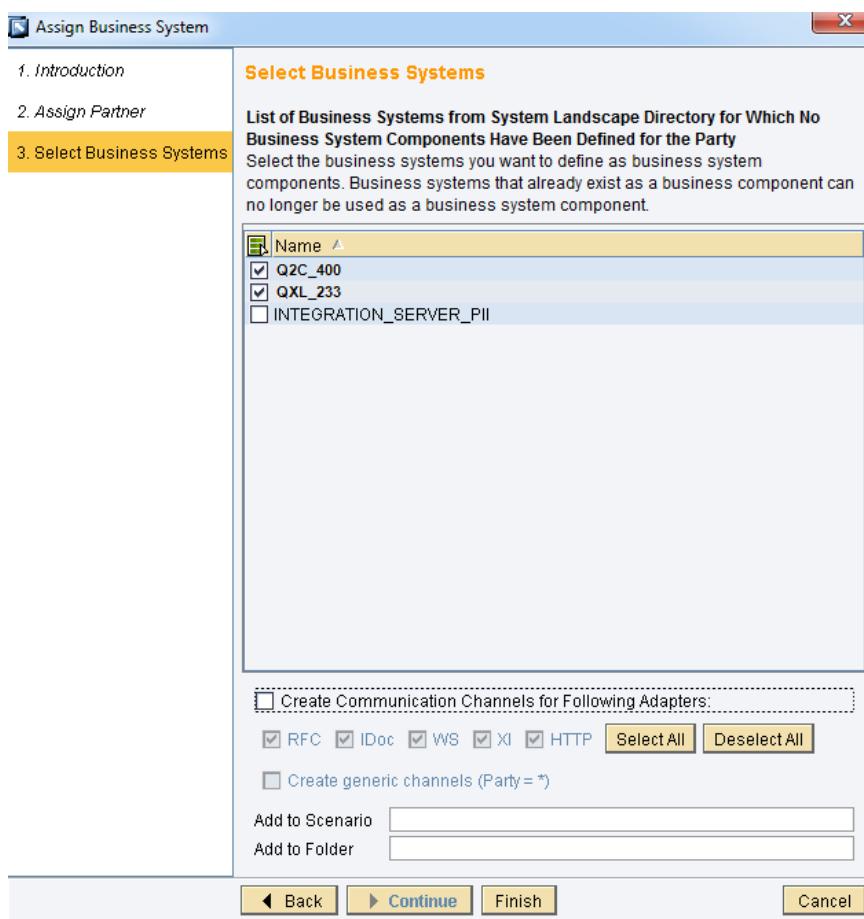
2. Click Continue



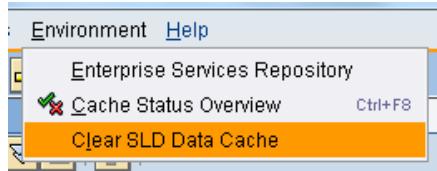
3. Click Continue



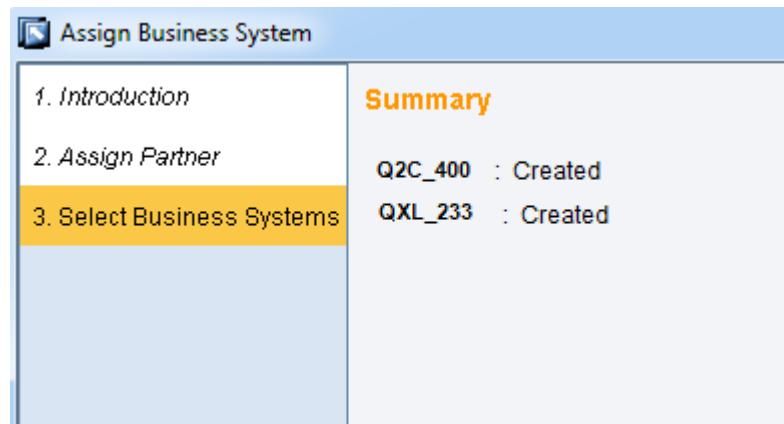
4. Select the business system for SAP CRM on-premise and SAP Hybris Cloud for Customers



Note: If the Business System is not visible, just clear the SLD cache by choosing Environment → Clear SLD Data Cache.



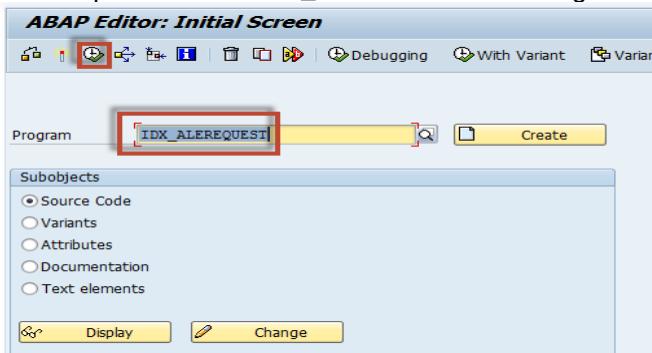
- Click Finish



- Click Close

3.12 ALEAUD Check

- Open transaction SE38.
- Enter report name as IDX_ALEREQUEST in Program field and choose Execute.



- Ensure that no entry is selected for request of ALEAUD.

4 Connect Phase: Set Up Secure Connection between CRM-PI-Cloud Systems

Note: Refer to the [How to Configure x.509 Authentication for SAP PI Systems to Connect to/from SAP Cloud for Customers Guide](#) to set up Basic Authentication and Certificate based authentication.

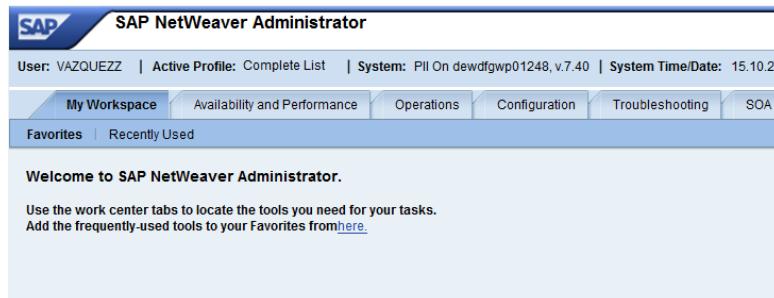
4.1 Supported Certification Authorities (PI Integration)

1. Download the root certificates from the following URL

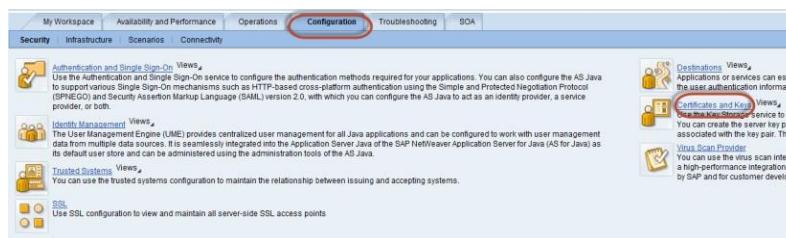
<https://secure.omniroot.com/support/sureserver/rootcert.cfm>



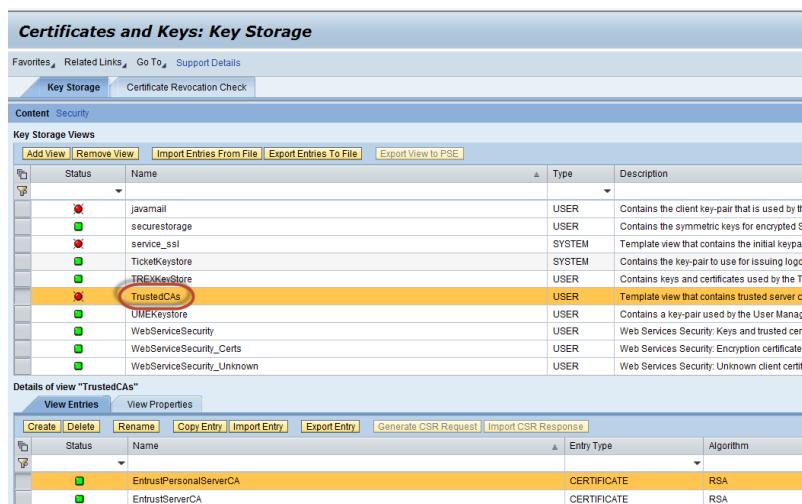
2. Open NWA in the PI system



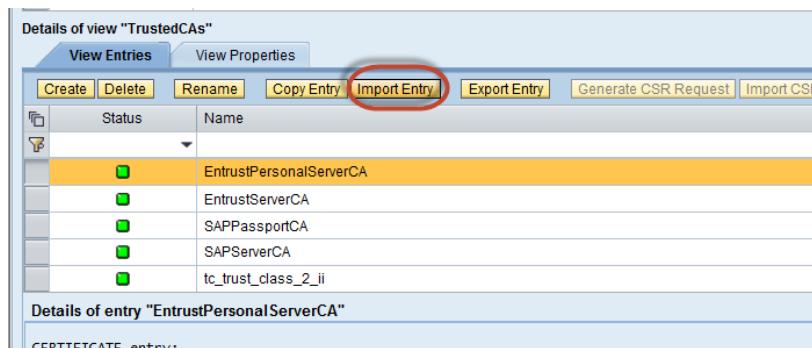
3. Under the tab Configuration, click Certificates and Keys.



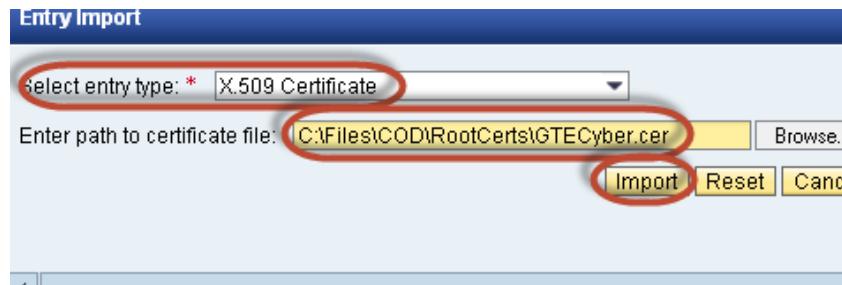
4. Look for the view called TrustedCAs, and select it.



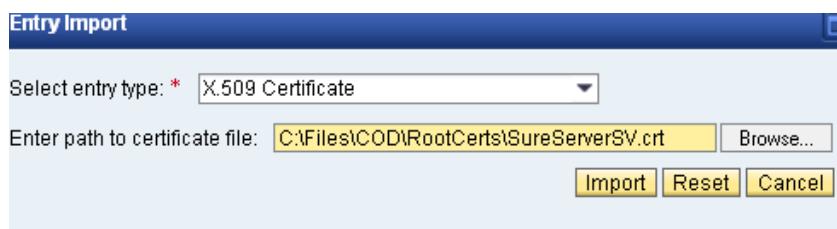
5. Import the two root certificates that were downloaded using the Import Entry button under TrustedCAs.



6. Select the entry type X.509 Certificate and the location of the certificate file and click Import.

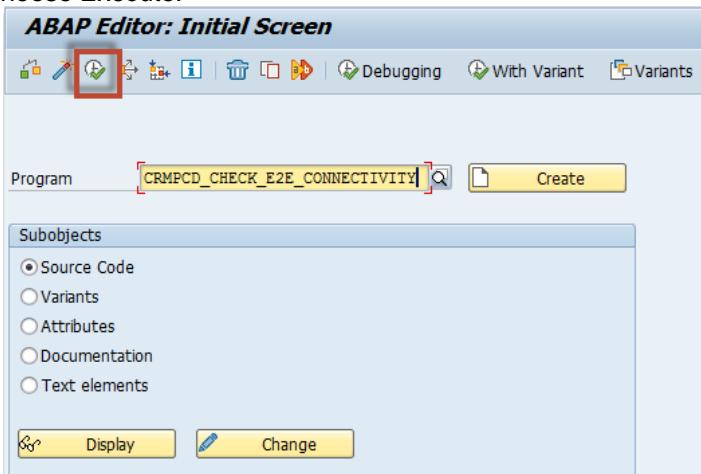


7. Repeat the process for the second certificate.



4.2 Check End-to-End Connectivity

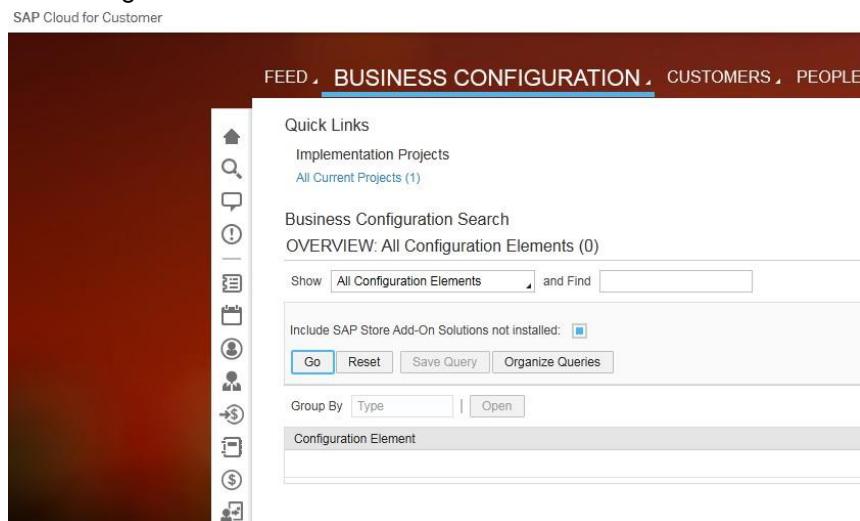
1. Go to transaction SE38 in the SAP ERP system.
2. In Program field enter report name CRMPCD_CHECK_E2E_CONNECTIVITY
3. Choose Execute.



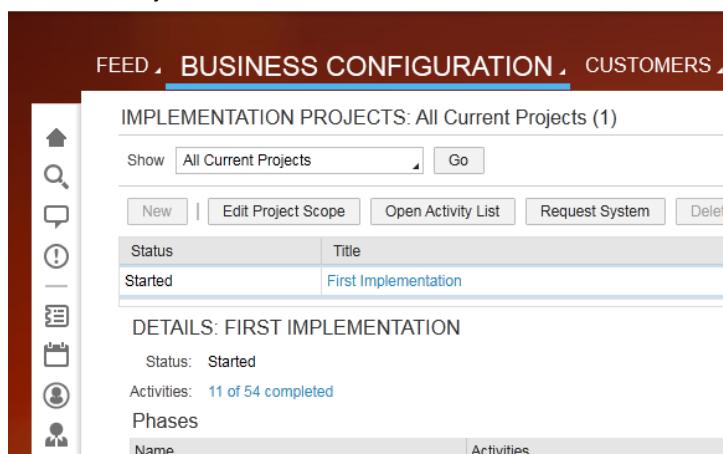
5 Configure Phase: Configure Integration in Cloud Solution

5.1 Activate SAP CRM Integration in Scoping

1. Connect to the SAP Hybris Cloud for Customer system using an Internet browser and open the Business Configuration tab.



2. Click in All Current Projects.



3. Select the project, and click Edit Project Scope.

The screenshot shows the 'EDIT PROJECT SCOPE: FIRST IMPLEMENTATION' form. It has a navigation bar with steps: 1 Country and Type of Business (highlighted in blue), 2 Implementation Focus, 3 Scoping, 4 Questions, and 5 Review. Below the navigation are buttons for 'Previous', 'Next', 'Finish', 'Cancel', and 'Save Draft'.

4. Click Next

EDIT PROJECT SCOPE: FIRST IMPLEMENTATION

1 Country and Type of Business	2 Implementation Focus	3 Scoping	4 Questions	5 Revi
<input type="button" value="Previous"/> <input type="button" value="Next >"/> <input type="button" value="Finish"/> <input type="button" value="Cancel"/> <input type="button" value="Save Draft"/>				

IMPLEMENTATION FOCUS

You can implement capabilities from the complete SAP solution.

Select Implementation Focus

Implementation Focus

SAP Cloud for Customer

5. Click Next and under Sales → New Business select Sales Lead Management, Opportunities.

Scoping Element	Select	Conflict
▶ Marketing	<input checked="" type="checkbox"/>	
▼ Sales	<input checked="" type="checkbox"/>	
▶ Account and Activity Management	<input checked="" type="checkbox"/>	
▶ Product and Service Portfolio for S...	<input checked="" type="checkbox"/>	
New Business	<input checked="" type="checkbox"/>	
■ Sales Lead Management (obs...)	<input checked="" type="checkbox"/>	
■ Opportunities	<input checked="" type="checkbox"/>	

6. Under Communication and Information Exchange → Integration with External Application and Solutions, select Integration with SAP CRM, Integration of Master Data and Integration into Sales, Service and Marketing Processes.

▼ Communication and Information Excha	<input checked="" type="checkbox"/>
▶ Business Process Management	<input checked="" type="checkbox"/>
▶ People Collaboration, Intranet and	<input checked="" type="checkbox"/>
▶ Office and Desktop Integration	<input checked="" type="checkbox"/>
▼ Integration with External Application	<input checked="" type="checkbox"/>
■ Integration with SAP ERP	<input type="checkbox"/>
■ Integration with SAP CRM	<input checked="" type="checkbox"/>
■ Integration of Master Data	<input checked="" type="checkbox"/>
■ Integration into Sales, Service,	<input checked="" type="checkbox"/>
■ Integration with Central Analytic	<input type="checkbox"/>
■ Integration with SAVO's Sales	<input type="checkbox"/>

7. Click Next, and under Communication and information Exchange → Integration with External Application and Solutions → Integration of Master Data, select the following scenarios:
- Do you want to replicate business partner data from an external application or solution to your cloud solution?
 - Do you want to replicate business partner data from your cloud solution to an external application or solution?
 - Do you want to replicate account hierarchy data from an external application or solution to your cloud solution?
 - Do you want to replicate product data from an external application or solution to your cloud solution?
 - Do you want to replicate product category data from an external application or solution to your cloud solution?
 - Do you want to replicate employee data from an external application or solution to your cloud solution?
 - Do you want to replicate sales territory data from an external application or solution to your cloud solution?

Group: Business Partners (3)		
Do you want to replicate business partner data from an external application or solution to your cloud solution?	Not Reviewed	<input checked="" type="checkbox"/>
Do you want to replicate business partner data from your cloud solution to an external application or solution?	Not Reviewed	<input checked="" type="checkbox"/>
Do you want to replicate account hierarchy data from an external application or solution to your cloud solution?	Not Reviewed	<input checked="" type="checkbox"/>
Group: Products (2)		
Do you want to replicate product data from an external application or solution to your cloud solution?	Not Reviewed	<input checked="" type="checkbox"/>
Do you want to replicate product category data from an external application or solution to your cloud solution?	Reviewed	<input checked="" type="checkbox"/>

8. Under Communication and information Exchange → Integration with External Application and Solutions → Integration into Sales, Services, and Marketing Processes, select the following scenarios:
- Do you want to replicate campaign documents from an external application or solution to your cloud solution?
 - Do you want to replicate activities from your cloud solution to an external application or solution?
 - Do you want to replicate activities from an external application or solution to your cloud solution?
 - Do you want to replicate leads from an external application or solution to your cloud solution?
 - Do you want to replicate leads from your cloud solution to External Application?
 - Do you want to replicate opportunities from your cloud solution to an external application or solution?
 - Do you want to replicate opportunities from an external application or solution to your cloud solution?
 - Do you want to delegate service requests from your cloud solution to an external application or solution?

Questions for Integration into Sales, Service, and Marketing Processes			
Group By	Group	Set as Reviewed	Set as Not Reviewed
Business Option	Reviewed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you want to replicate leads from an external application or solution to your cloud solution?	Not Reviewed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Group: Opportunities (3)			
Do you want to replicate opportunities from your cloud solution to an external application or solution?	Reviewed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you want to replicate opportunities from an external application or solution to your cloud solution?	Reviewed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you want to create follow up documents for opportunities from your cloud solution to an external application or solution?	Reviewed	<input checked="" type="checkbox"/>	<input type="checkbox"/>

9. Click Next, and then Finish

5.2 Set Up Communication System

- Under the tab Administrator, click Communication Systems.



- Click New to create a new communication system.

The screenshot shows the 'Communication Systems' list screen. At the top, there is a toolbar with buttons for 'Show' (set to 'All Communication Systems'), 'Find', 'Go', 'Group By' (set to 'None'), 'Edit', 'New' (which is circled in red), 'Delete', and 'Actions'. Below the toolbar, there is a table with two rows of data:

Communication System ID	Host Name
ACCOUNT_360_INTEGRATION	Account_360_Integration
ODP_ID	dummy

- Enter the information about the backend CRM system. It is important to note that all the information is related to the CRM system, logical system name, SAP client, and so on, with the exception of the host which, should be the hostname of how the SAP PI on-premise system will be accessed. Also make sure that you check the option of "SAP Business Suite".

Note: For attachment replication to work from SAP CRM to SAP Hybris Cloud for Customer, ensure the Business System ID maintained in the SAP Hybris Cloud for Customer communication system should match with the Business system created in SAP PI SLD pointing to SAP CRM system.

NEW COMMUNICATION SYSTEM

BASIC INFORMATION	INTERNAL COMMENT										
*ID: Q2CCLNT400 SAP Business Suite: <input checked="" type="checkbox"/> Host Name: <input type="text"/> *System Access Type: Internet	<input type="text"/>										
TECHNICAL CONTACT											
First Name: Zaren Last Name: Vazquez Email: <input type="text"/> Phone: <input type="text"/> Fax: <input type="text"/>											
System Instances											
<input type="button" value="Add Row"/> <input type="button" value="Remove"/> <table border="1"> <thead> <tr> <th>System Instance ID</th> <th>Business System ID</th> <th>IDoc Logical System ID</th> <th>SAP Client</th> <th>Preferred Application</th> </tr> </thead> <tbody> <tr> <td>Q2CCLNT400</td> <td>Q2CCLNT400</td> <td>Q2CCLNT400</td> <td>400</td> <td>5 - Web Service</td> </tr> </tbody> </table>		System Instance ID	Business System ID	IDoc Logical System ID	SAP Client	Preferred Application	Q2CCLNT400	Q2CCLNT400	Q2CCLNT400	400	5 - Web Service
System Instance ID	Business System ID	IDoc Logical System ID	SAP Client	Preferred Application							
Q2CCLNT400	Q2CCLNT400	Q2CCLNT400	400	5 - Web Service							

4. Click Actions → Set to Active.

NEW COMMUNICATION SYSTEM

<input type="button" value="Save and Close"/>	<input type="button" value="Save"/>	<input type="button" value="Close"/>	<input type="button" value="Actions"/>
<div style="border: 1px solid #ccc; padding: 5px; display: inline-block;"> <input style="background-color: #0070C0; color: white; border: none; padding: 2px 10px; margin-right: 10px;" type="button" value="Set to Active"/> <input type="button" value="Set to Obsolete"/> <input type="button" value="Undo Obsolete"/> </div>			
BASIC INFORMATION			
*ID: <input type="text" value="Q2CCLNT400"/> SAP Business Suite: <input checked="" type="checkbox"/>			

5. Click Save and Close.

NEW COMMUNICATION SYSTEM

<input type="button" value="Save and Close"/>	<input type="button" value="Save"/>	<input type="button" value="Close"/>	<input type="button" value="Actions"/>
BASIC INFORMATION			
*ID: <input type="text" value="Q2CCLNT400"/> SAP Business Suite: <input checked="" type="checkbox"/>			

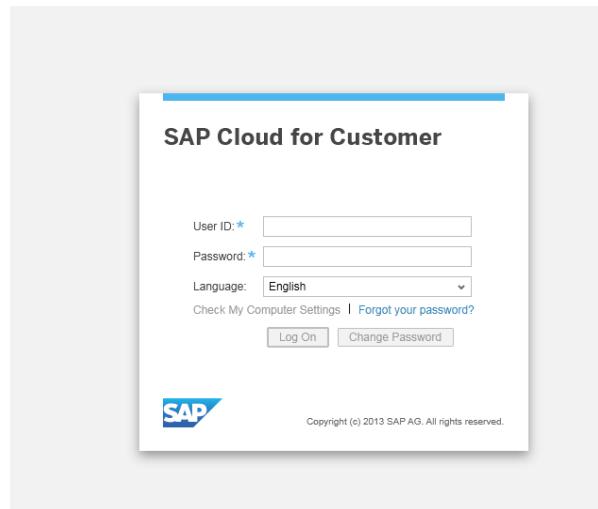
5.3 Configure Communication Arrangements

You can find a list of all the communication arrangements and the corresponding service interfaces in the **INTEGRATION: Integration Flow** spreadsheet on [SAP Service Marketplace](#).

Refer to the [How to Configure x.509 Authentication for SAP PI Systems to Connect to/from SAP Cloud for Customers](#)

Guide to set up Basic Authentication and Certificate based Authentication.

1. Login to the SAP Hybris Cloud for Customer system.



2. Open Communication Arrangement For On-Premise Integration under Administrator tab.

The screenshot shows the SAP Fiori interface with the 'ADMINISTRATOR' tab selected. Under the 'DATA INTEGRATION' section, there is a list of tasks. The task 'Communication Arrangement For On-Premise ...' is circled in red.

- ID MAPPING FOR INTEGRATION
- WEBDAV INTEGRATION
- REPORTS
 - LIST
 - GALLERY
- INCIDENTS
- WORKFLOW RULES
- APPROVAL PROCESSES
- OAUTH2.0 CLIENT REGISTRATION
- COMMUNICATION CERTIFICATES
- Common Tasks
 - Edit Security Policies
 - Configure Single Sign-On
 - Configure S/MIME
 - Exchange Rate For Foreign Currencies
 - Communication Arrangement For On-Premise ...
 - Determine Service Level
 - Manage Individual Customers
 - New Key Figure
 - Upload / Download
 - Edit ID Mapping for Integration
 - Configure OAuth 2.0 Identity Provider
 - Edit Certificate Trust List

3. Under Select Communication System tab, choose Integration Details as shown below. Enter the Business system name of the PI system.

The screenshot shows the 'NEW COMMUNICATION ARRANGEMENT' wizard. Step 1, 'Select Communication System', is active. The steps are numbered 1, 2, and 3. Navigation buttons for 'Previous', 'Next', and 'Cancel' are at the bottom.

You can create or update communication arrangements by selecting the on-premise syste

INTEGRATION DETAILS

*Integration with: SAP CRM System SAP ERP System

*Integration Middleware: HCI PI

*PI Business System: X9TCLNT001

4. Under Communication System, select the SAP CRM System Instance ID and Code List Mapping value as SAP On Premise Integration.

COMMUNICATION SYSTEM

*System Instance ID:	Q2CCLNT400
Communication System:	Q2CCLNT400
Code List Mapping:	SAP On Premise Integration

5. Choose Next.

NEW COMMUNICATION A

1 Select Communication System 2 Commu

< Previous **Next >** Cancel

You can create or update communication arrangement!

6. Under Communication Arrangements tab, select the Communication Scenarios relevant for your scope and choose Next. Choose Select All in case you want to configure all of the communication scenarios. Note: In case you do not see any of the configuration scenarios, re-check the project scoping to add the necessary scoping elements.

NEW COMMUNICATION ARRANGEMENT: SAP CRM SYSTEM

1 Select Communication System 2 Communication Arrangements 3 Communication Credentials 4 Confirmation

< Previous **Next >** Cancel

Communication Arrangements
You can select a communication scenario to create or update a communication arrangement. The table below contains only those scenarios that have been

Select All	De-Select All	Select Communication Scenario
Communication Scenarios		
Business Activity Replication from External System	<input checked="" type="checkbox"/>	
Product Replication with Sales Data from External System	<input type="checkbox"/>	
Employee Replication from External System	<input checked="" type="checkbox"/>	
Business Attribute and Assignment Replication	<input checked="" type="checkbox"/>	
Organisation Centre Replication from External System	<input type="checkbox"/>	
Social Media User Profile Replication to External System	<input checked="" type="checkbox"/>	
Campaign Replication from External System	<input type="checkbox"/>	
Lead Replication from External System	<input type="checkbox"/>	
Product Categories Replication from External System	<input type="checkbox"/>	

7. Under Inbound Communication Credentials, select the Authentication Method. For example in this case, SSL Client Certificate is selected. Choose Edit Credentials.

NEW COMMUNICATION ARRANGEMENT: SAP CRM SY

1 Select Communication System 2 Communication Arrangements **3 Communication Credentials**

< Previous Next > Finish Cancel

You can choose the relevant communication authentication required for inbound and outbound certificates.

INBOUND COMMUNICATION CREDENTIALS

Authentication Method:	SSL Client Certificate
*User ID:	_Q2CCLNT400
	Edit Credentials

8. In the Certificate tab, choose Upload Certificate and choose the PI client Certificate.

Edit Communication User

Depending on the chosen authentication method, you need to upload a certificate or define a password for the communication user. A certificate is created automatically.

User ID: _Q2CCLNT400
User Account: _Q2CCLNT400

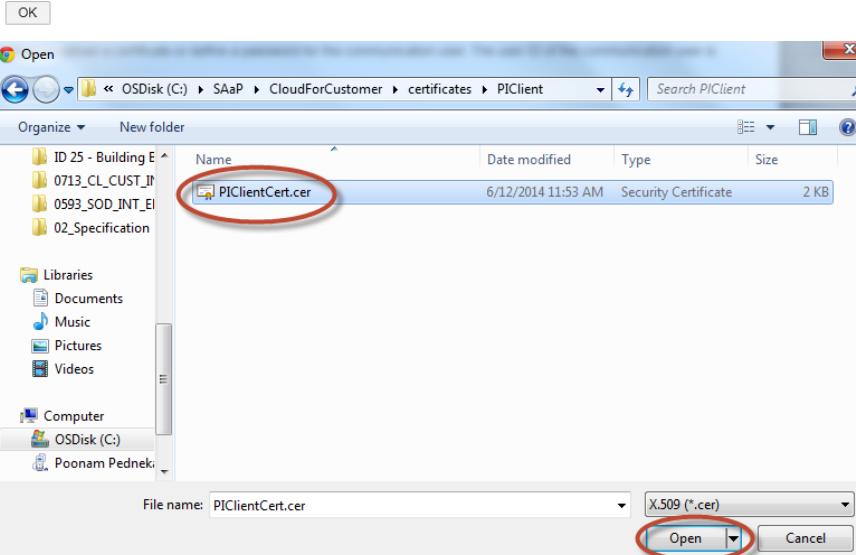
Certificate

You can upload a public key certificate that has been provided by your communication partner. If your communication partner has provided a certificate, download a PKCS#12 key pair file. The PKCS#12 file is password encrypted and contains a public key certificate and private key information.

Create and Download Key Pair **Upload Certificate** **Remove Certificate**

Certificate:

Fingerprint: 21BF88436F2A1A5E40DF102B8FA14A83D39BCCECO
Subject: CN= EDX_00163E0732641EE3BC907EC036C4D88D,OU=I000000000740018331 - Business Unit
Issuer: CN=SAP Passport CA,O=SAP Trust Community,C=DE
Serial Number: 410285385732743044548315180404736
Valid To: 20150610
E-Mail:



9. Choose Ok.

Certificate

You can upload a public key certificate that has been provided by your communication partner. If your communication partner has provided a certificate, download a PKCS#12 key pair file. The PKCS#12 file is password encrypted and contains a public key certificate and private key information.

Create and Download Key Pair **Upload Certificate** **Remove Certificate**

Certificate:

Fingerprint: 291F0BDE051847E751065DECBBAA48A98E0BF3FF
Subject: CN= EDX_00163E06B9841ED3BDD827699D84D2F7,OU=I0000000007300558
Issuer: CN=SAP Passport CA,O=SAP Trust Community,C=DE
Serial Number: 5070646938429972859866108612253630
Valid To: 20150618
E-Mail:

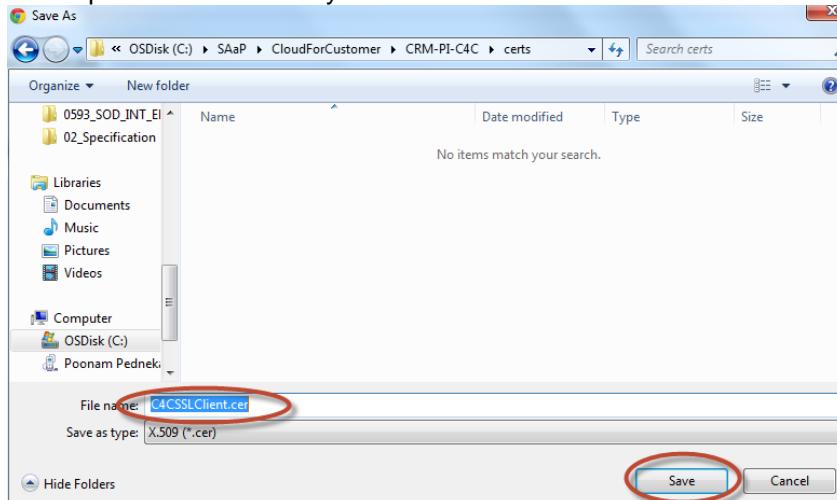


10. For Outbound Communication Credentials, select Download.

OUTBOUND COMMUNICATION CREDENTIALS

Authentication Method: SSL Client Certificate
 Certificate: SAP Business ByDesign System Key Pair Download
 Host Name: testintegration.cfe.hana.ondemand.com

11. Download the C4C Client Certificate x.509(example C4CSSLClient.cer) and choose Save. This file has to be uploaded later to PI system.



12. Choose Finish.

NEW COMMUNICATION ARRANGEMENT: SAP CRM SYSTEM

1 Select Communication System 2 Communication Arrangements 3 Communication Credentials 4 Confirmation

← Previous Next → Finish Cancel

You can choose the relevant communication authentication required for inbound and outbound certificates.

INBOUND COMMUNICATION CREDENTIALS Authentication Method: SSL Client Certificate *User ID: <input type="text" value="Q2CLNT400"/> Edit Credentials	OUTBOUND Authentication Method: SSL Client Certificate *User ID: <input type="text" value="Q2CLNT400"/> Edit Credentials
----------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------

13. Under Confirmation, Choose Close.

NEW COMMUNICATION ARRANGEMENT: SAP CRM SYSTEM

1 Select Communication System 2 Communication Arrangements 3 Communication Credentials 4 Confirmation

Close

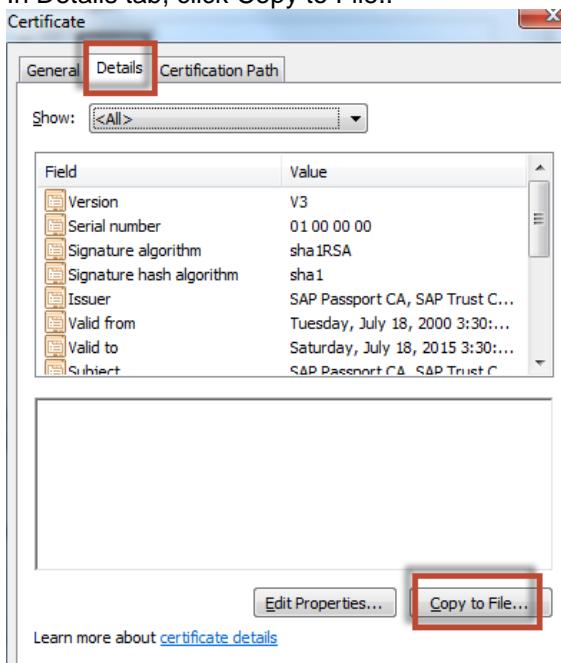
Refer to the Appendix section for creating and editing the communication arrangement manually.

5.4 Export the Root Certificate

1. Navigate to the folder where you have downloaded x.509 certificate (example C4CSSLClient.cer) of Cloud for Customer Outbound Communication arrangement as explained in previous section.
2. Open the certificate by double clicking on it.
3. In Certification Path tab, select the root certificate and choose View Certificate.



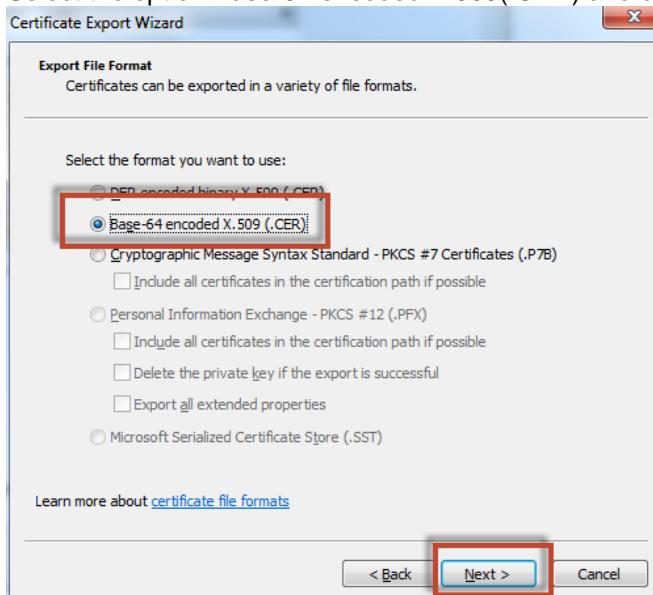
4. In Details tab, click Copy to File..



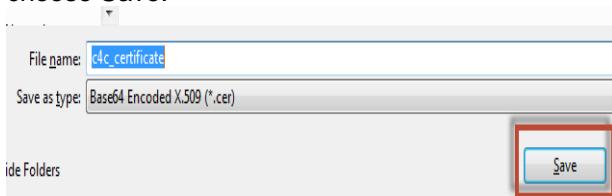
5. Choose Next in Certificate Export Wizard.



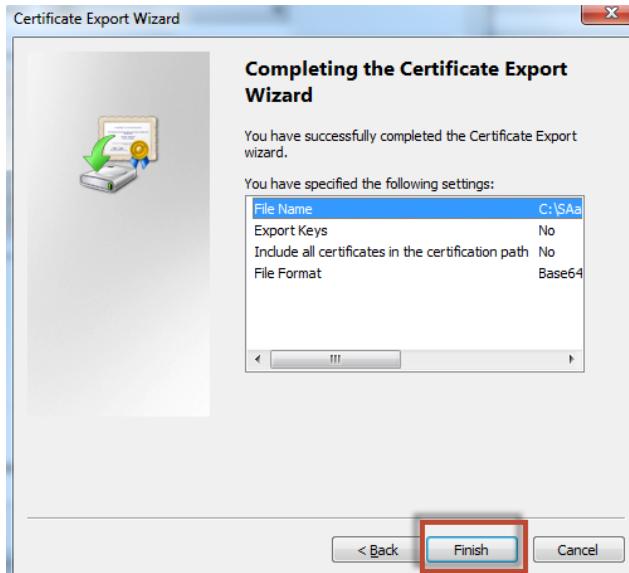
6. Select the option Base-64 encoded X.509(.CER) and choose Next.



7. Click on Browse to save the certificate in your local folder. Provide a name for the certificate and choose Save.

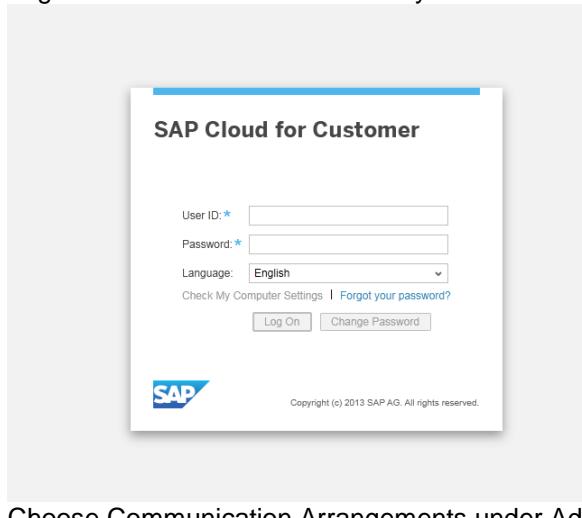


8. Choose Next.
9. Choose Finish.



5.5 Determine Short Tenant ID

1. Log in to the Cloud for Customer system.



2. Choose Communication Arrangements under Administrator → Integration.



3. Select a communication arrangement created above. Example Business Partner Replication from External system.
4. Note the short tenant ID under My Communication Data → My System.



5.6 Perform Code List Mapping

5.6.1 Manually Map the code lists

1. Connect to the SAP Hybris Cloud for Customers system using an Internet browser and open the Business Configuration tab.

The screenshot shows the SAP Cloud for Customer interface. The top navigation bar has tabs for FEED, BUSINESS CONFIGURATION (which is selected and highlighted in blue), CUSTOMERS, and PEOPLE. On the left, there is a vertical sidebar with various icons representing different business functions like implementation projects, customers, and people. The main content area is titled "BUSINESS CONFIGURATION" and "OVERVIEW: All Configuration Elements (0)". It includes search and filter options, a "Go" button, and a "Configuration Element" list.

2. Click in All Current Projects.

The screenshot shows the "IMPLEMENTATION PROJECTS: All Current Projects (1)" screen. It displays a single project entry: "Started" with the title "First Implementation". Below this, there is a "DETAILS: FIRST IMPLEMENTATION" section showing the status as "Started" and activities as "11 of 54 completed".

3. Select the project and click Open Activity List.

The screenshot shows the same "IMPLEMENTATION PROJECTS: All Current Projects (1)" screen. The "Open Activity List" button in the toolbar is highlighted with a red circle. Below the toolbar, the project details for "Started" and "First Implementation" are visible.

- Click in the Fine-Tune tab → Code List Mapping for Integration with External Application and Solutions.

Note: More details of the relevant code list mapping are available in the official integration guide for SAP Hybris Cloud for Customers within the appendix.

ACTIVITY LIST: FIRST IMPLEMENTATION

The screenshot shows the SAP Activity List interface. At the top, there are tabs: All, Prepare (1/4 Completed), **Fine-Tune (1/16 Completed)**, Integrate and Extend (9/27 Completed), Test (0/1 Completed), and Go Live (0/3 Completed). A note below the tabs states: "The Fine-Tune phase organizes all mandatory configuration activities that you need to complete in a logical sequence. It allows you to tailor the solution to your specific needs before going live by settings for your selected scope. You can also add optional configuration activities to the activity list." Below the tabs, it says "Total Activities in Project: 16" and "Open Activities: 14". There is a link to "In Progress Activities: 1". Below this, there is a search bar and a group by dropdown. The main area is a table with columns: St..., Name, Activity T..., In Project, Owner, N..., Prerequisites..., Repetition Requ..., Activ. The table contains several rows, with the last row, "Code List Mapping for Integration with External Applications and Solutions", highlighted with a red oval and circled in the screenshot.

5.6.2 Automated Configuration of Code List Mapping

- Login to the SAP Hybris Cloud for Customer system,



- In the Business Configuration WorkCenter, choose DOWNLOAD CODE LIST.

The screenshot shows the SAP Business Configuration WorkCenter. The top navigation bar includes "BUSINESS CONFIGURATION", "ADMINISTRATOR", and "CUSTOMER". The left sidebar has icons for Home, Search, and Notifications (4). The main area has tabs: "OVERVIEW" (highlighted in blue), "IMPLEMENTATION PROJECTS", "REPORTS", and "DOWNLOAD CODE LIST" (highlighted with a red rectangle). Below these are buttons for "UPLOAD CODE LIST" and "Import Elements (0)". There is a search bar and a checkbox for "Include SAP Store Add-On Solutions not installed". At the bottom, there are buttons for "Go", "Reset", "Save Query", and "Organize Queries", and a "Group By" dropdown.

3. Click on the link Download Code List.

BUSINESS CONFIGURATION ADMINISTRATOR CUSTOMERS PEOPLE MA

Code List Download

You can download the code lists and code list mappings created for integrating the Cloud solution with an external application or solution zip archive file.

[Download Code List](#)

4. Enter the details like Code List Mapping Group (example 03), Language, CSV Delimiter and select Download.

DOWNLOAD CODE LISTS AND CODE MAPPINGS

[Close](#)

You can download the code lists and code list mappings created for integrating the Cloud solution with an external application or solution zip archive file.

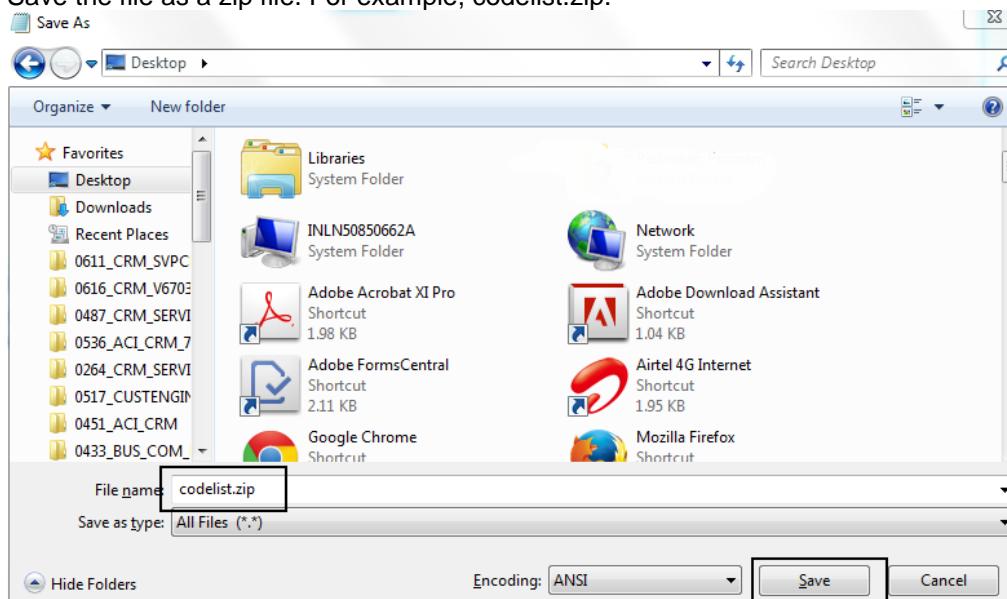
Code List Mapping Group: 03 - SAP On Premise Integration

*Language: EN - English

*CSV Delimiter: ,

Local Code: [Download](#)

5. Save the file as a zip file. For example, codelist.zip.



6. Close the window.

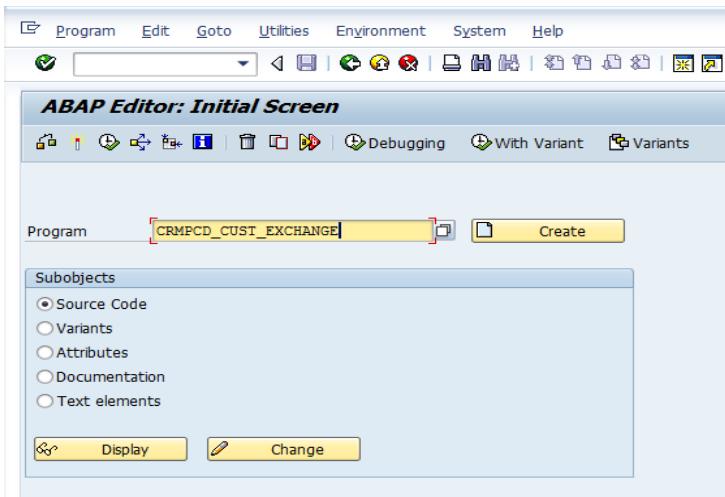
DOWNLOAD CODE L

[Close](#)

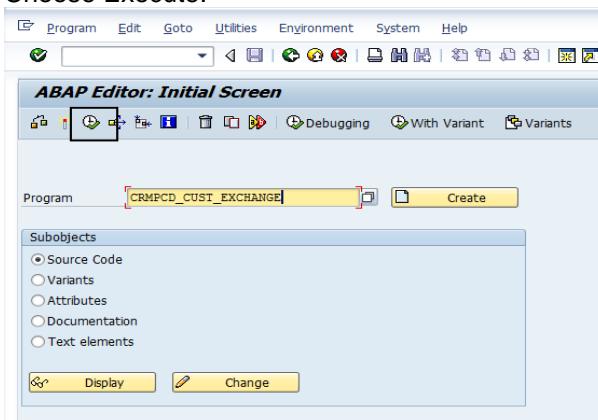
You can download the code lists and code li

7. Log in to the CRM back-end system that the Cloud for Customer system is connected to.

8. Open the transaction SE38 and run the report CRMPCD_CUST_EXCHANGE.

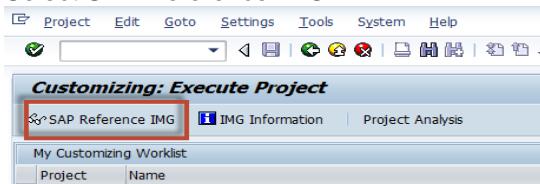


9. Choose Execute.

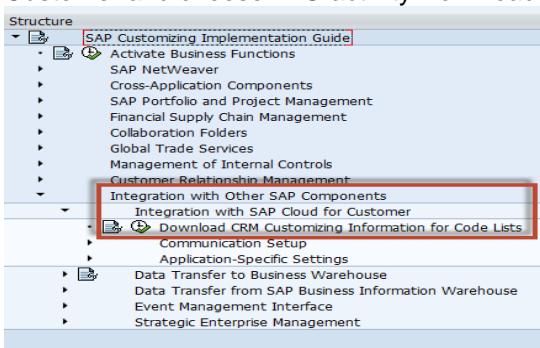


10. Alternatively, you can access the same report via IMG Menu path. Go to transaction SPRO.

11. Select SAP Reference IMG

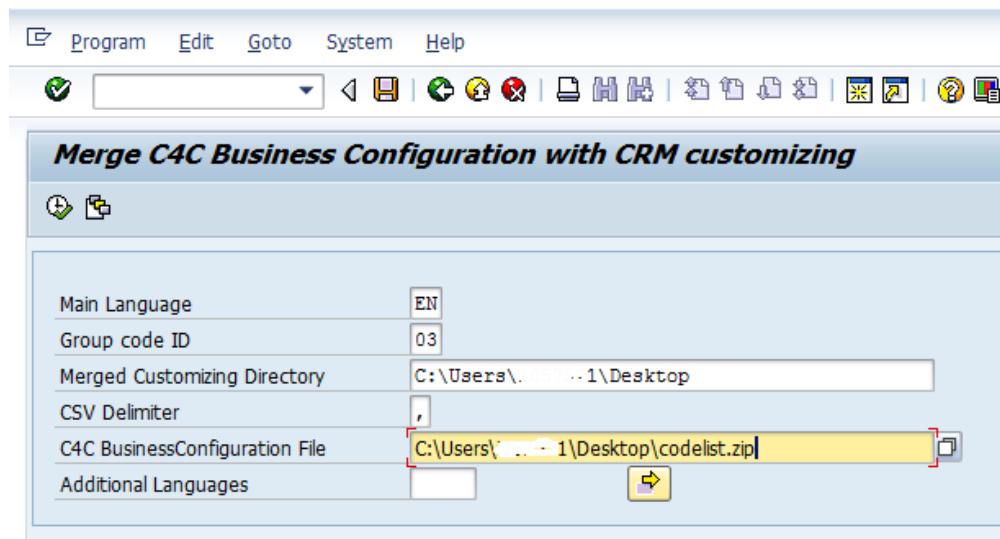


12. Expand IMG menu path Integration With Other SAP Components → Integration with SAP Cloud for Customer and choose IMG activity Download CRM Customizing Information for Code lists.



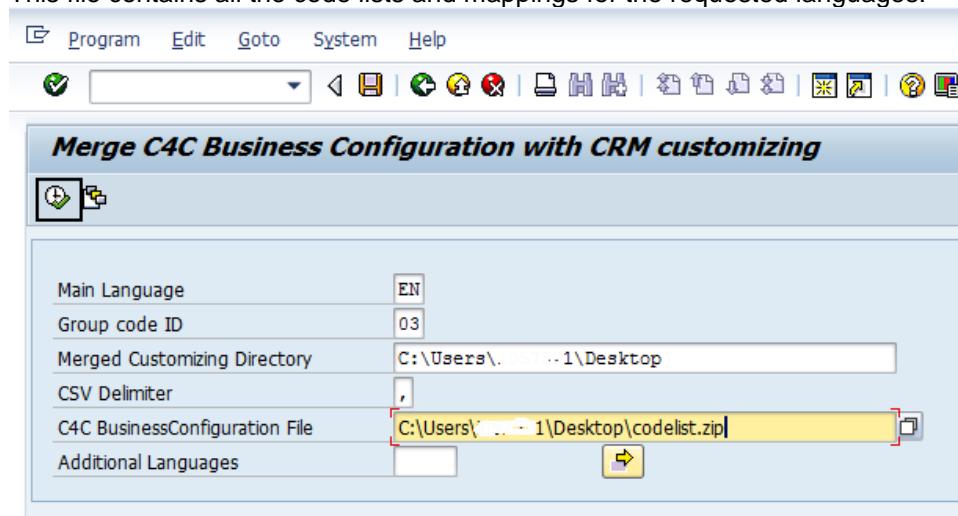
13. Enter the Main Language and other parameters as shown below

Merged Customizing directory is where you want the merged code list mappings filled. Cloud for Customer BusinessConfiguration File is the codelist.zip file that was downloaded from the Cloud for Customer system.



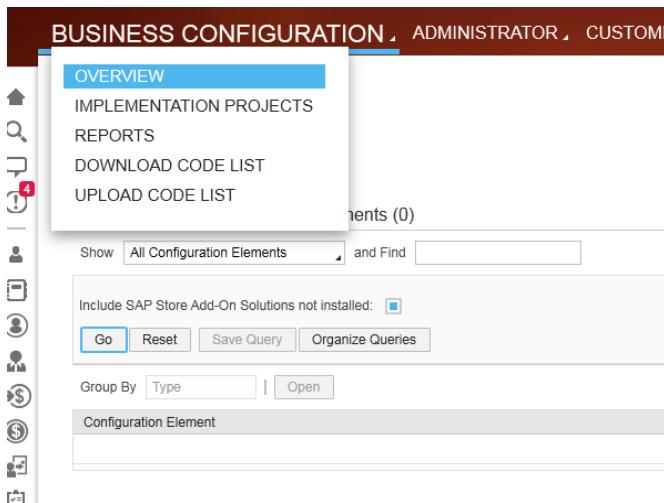
14. Choose Execute to run the report.

The output file (example CodeOutput.zip) will be found in the folder you specified. This file contains all the code lists and mappings for the requested languages.

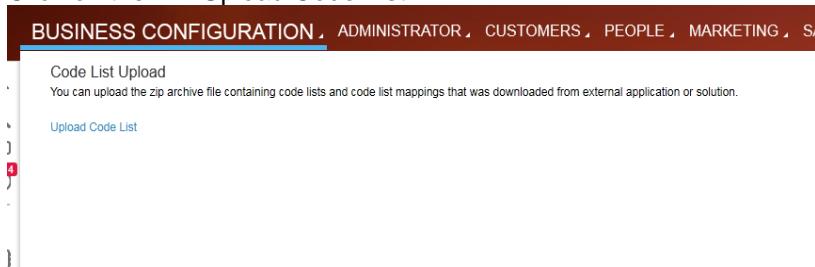


15. Login to the SAP Hybris Cloud for Customer system again.

16. In the Business Configuration Workcenter, choose UPLOAD CODE LIST.



17. Click on the link Upload Code List.



18. Select the Code List Mapping Group (example 03) and choose Upload.

Note: In case of errors during the upload, refer to SAP Note 2091243 for doing manual corrections described in the note.

UPLOAD CODE LISTS AND CODE LIST MAPPINGS

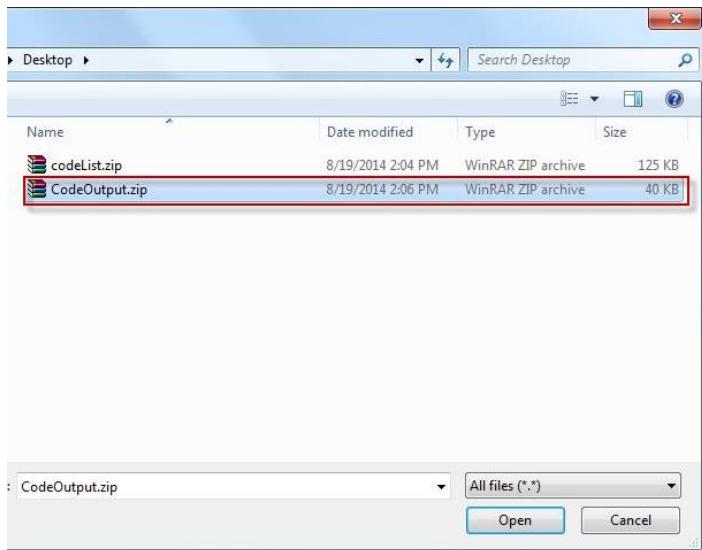
You can upload the zip archive file containing code lists and code list mappings that was downloaded from external application or solution.

Code List Mapping Group:

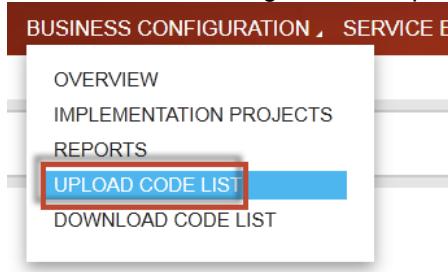
*CSV Delimiter:

Local and External Code:

19. Provide the CodeOutput.zip file from step 10.



20. Now the code list mapping in C4C is updated.
21. Go to Business Configuration → Upload Code List.



22. Click on Application Log to check the status of the code list upload.

ion or solution.

Application Log

5.7 Create CRM ID Mapping

1. Under the context menu for the tab Administrator, select the option ID MAPPING FOR INTEGRATION.



2. Click on Edit ID Mapping for Integration.

COMPETITORS ▾ PRODUCTS ▾ LIBRARIES

ID MAPPING FOR INTEGRATION

[Edit ID Mapping for Integration](#)

3. In the “Mapping Of” field, select CRM Organizations and Units and in the System Instance ID, select the communication system created in previous steps, and click Go.

ID MAPPING FOR INTEGRATION

[Save](#) [Close](#)

Show [Modified View - All Mappings](#)

*Mapping Of:	CRM Organizations and Units
ID:	<input type="text"/>
Description:	<input type="text"/>
*System Instance ID:	Q2CCLNT400
External ID:	<input type="text"/>

[Go](#) [Reset](#) [Save Query](#) [Organize Queries](#)

4. Enter the external ID of the sales organization that will be mapped from CRM with the sales organization on Cloud for Customers.

ID MAPPING FOR INTEGRATION

[Save](#) [Close](#)

Show [Modified View - All Mappings](#)

*Mapping Of:	CRM Organizations and Units
ID:	<input type="text"/>
Description:	<input type="text"/>
*System Instance ID:	Q2CCLNT400
External ID:	<input type="text"/>

[ID Mapping from Microsoft Excel®](#) [ID Mapping to Microsoft Excel](#)

ID	Description	External ID
1000	Almika	0001
AT1100	Sales Unit AT	

5. Click Save.

5.7.1 ID Mapping Using the Microsoft Excel Template

1. In the “Mapping Of” field, select CRM Organizations and Units and in the System Instance ID, select the communication system created in previous steps, and click Go. Next choose ID Mapping to Microsoft Excel.

ID MAPPING FOR INTEGRATION

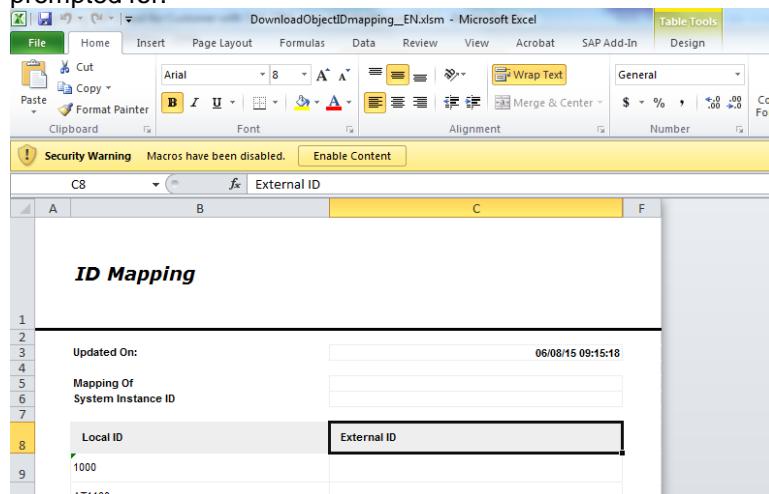
[Save](#) [Close](#)

Show [Modified View - All Mappings](#)

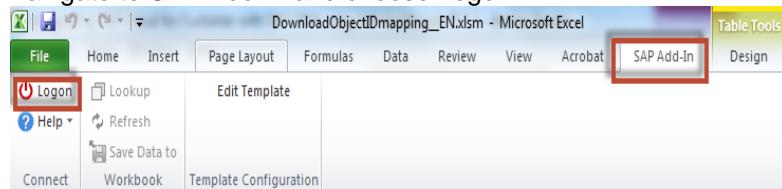
*Mapping Of:	CRM Organizations and Units
ID:	<input type="text"/>
Description:	<input type="text"/>
*System Instance ID:	Q2CCLNT400
External ID:	<input type="text"/>

[ID Mapping from Microsoft Excel®](#) [ID Mapping to Microsoft Excel](#)

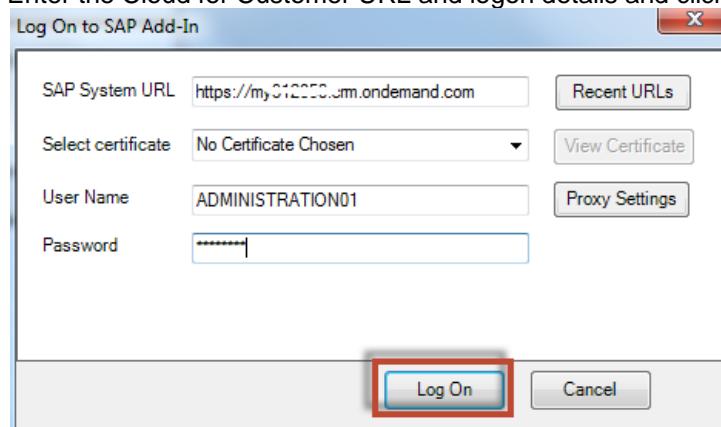
2. Data is downloaded to an excel file. Open the Excel file and enable Macros if prompted for.



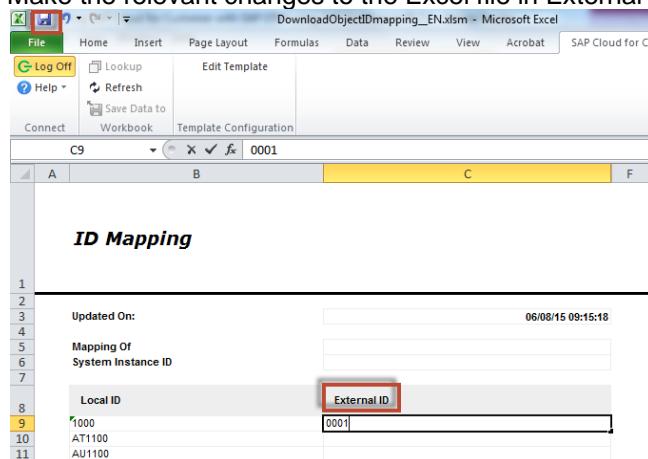
3. Navigate to SAP Add-In and choose Logon.



4. Enter the Cloud for Customer URL and logon details and click Log On.



5. Make the relevant changes to the Excel file in External ID field and choose Save.



6. Next, choose ID Mapping from Microsoft Excel in Cloud for Customer system.

ID MAPPING FOR INTEGRATION

Save Close

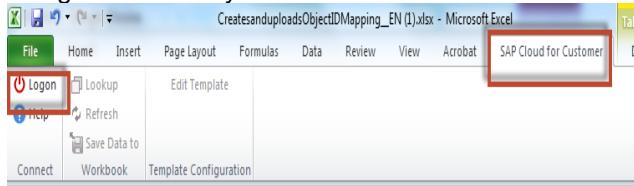
Show Modified View - All Mappings

*Mapping Of: CRM Organizations and Units
ID:
Description:
*System Instance ID: Q2CCLNT400
External ID:

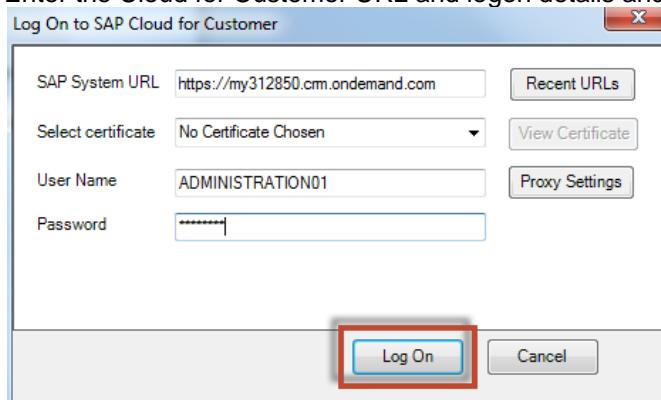
Go Reset Save Query Organize Queries

ID Mapping from Microsoft Excel® **ID Mapping to Microsoft Excel**

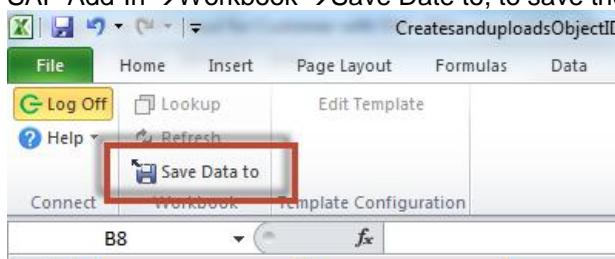
7. An Excel template is downloaded. Open the file and accept macros.
8. Navigate to SAP Hybris Cloud for Customer and choose Logon.



9. Enter the Cloud for Customer URL and logon details and choose Log On.

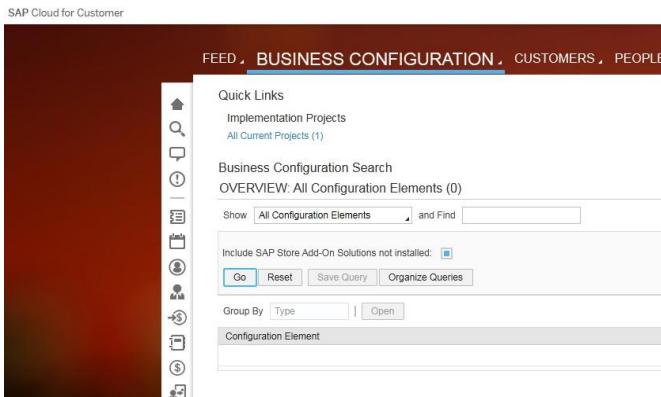


10. Copy the content from the excel file where you saved the changes and then choose SAP Add-In → Workbook → Save Data to, to save the data to Cloud.

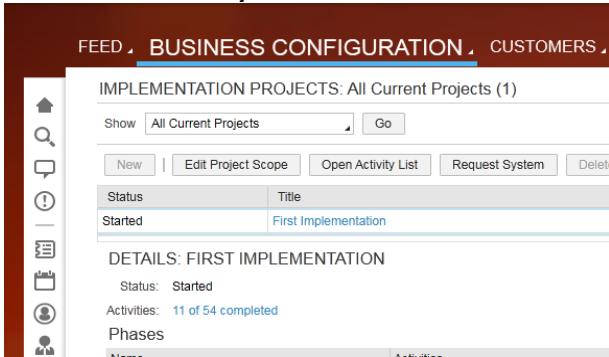


5.8 Maintain Default Communication Language

1. Connect to the SAP Hybris Cloud for Customers system using the internet browser and open the Business Configuration tab.

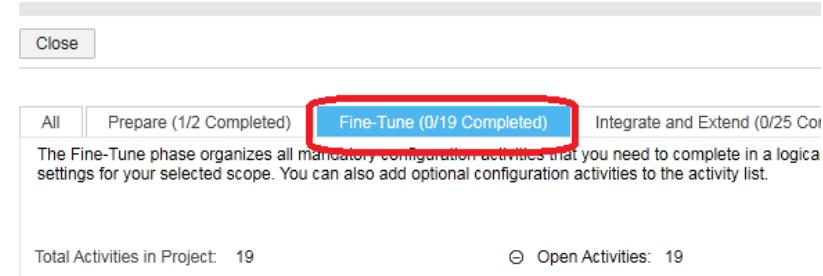


2. Click All Current Projects.

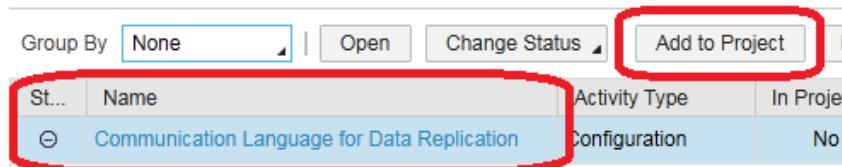


3. Choose Open Activity List.
4. On the Activity List screen, select Fine-Tune.
5. Show All Activities and find for Communication Language for Data Replication.

ACTIVITY LIST: FIRST IMPLEMENTATION



6. Select Communication Language and Click button Add to Project.



7. Open Communication Language for Data Replication.
8. Add row and select the language.
9. Save and close the activity.

If you have already entered a language for internal communication in SAP CRM, we recommend that you use the same language as the communication language in the Cloud solution. For more information, refer to the activity under *SAP Customizing Implementation*

Guide → Customer Relationship Management → Basic Functions → Text Management → Define Language for Internal Communications.

5.9 Optional: Handling of Inconsistent Address Data

1. Connect to the SAP Hybris Cloud for Customers system using the internet browser and open the Business Configuration tab.

The screenshot shows the SAP Cloud for Customer interface. The top navigation bar has tabs: FEED, BUSINESS CONFIGURATION (which is highlighted in blue), CUSTOMERS, and PEOPLE. On the left, there is a vertical sidebar with icons for Home, Search, Help, and other system functions. The main content area is titled 'BUSINESS CONFIGURATION' and shows 'OVERVIEW: All Configuration Elements (0)'. It includes search and filter options like 'Show All Configuration Elements and Find', 'Include SAP Store Add-On Solutions not installed', and 'Group By Type'. A large empty table labeled 'Configuration Element' is present.

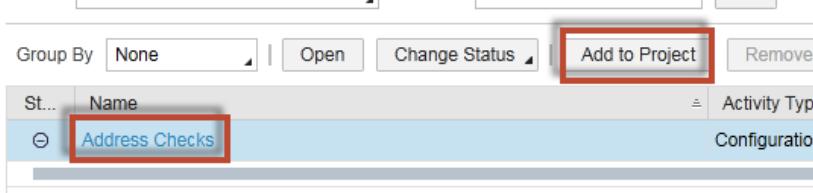
2. Click All Current Projects

The screenshot shows the 'IMPLEMENTATION PROJECTS: All Current Projects (1)' screen. The top navigation bar is identical to the previous one. The main content area shows a table with one row: 'Started' status and 'First Implementation' title. Below this, under 'DETAILS: FIRST IMPLEMENTATION', it shows 'Status: Started', 'Activities: 11 of 54 completed', and a 'Phases' section with a table header 'Name' and 'Activities'.

3. Choose Open Activity List.
4. On the Activity List screen, select Fine-Tune.
5. Show All Activities and find for Address Checks.

The screenshot shows the 'Activity List' screen. At the top, there are tabs: All, Prepare (1/4 Completed), Fine-Tune (2/27 Completed) (which is highlighted in blue), and Integrate and Extend. A descriptive text box explains the Fine-Tune phase. Below this, it shows 'Total Activities in Project: 27' and 'Open Activities: 25'. At the bottom, there is a search bar with 'Show Modified View - All Activities and Find' and a button labeled 'Address Checks' which is highlighted with a red box.

- Select Address Checks and Click button Add to Project.

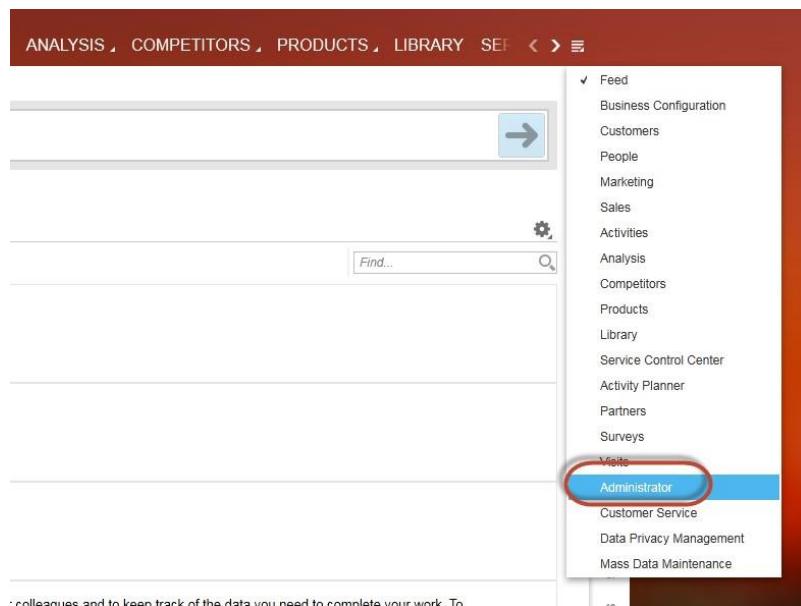


- Open Address Checks.

- Select the checkbox Allow Saving of inconsistent address based on your business requirements.
- Save and close the activity.

5.10 Configure End Points Communication Arrangements with Outbound Interfaces

- Connect to the SAP Hybris Cloud for Customers system using the internet browser and open the Administrator tab.



- Click in the communication arrangements link



- Edit the communication Arrangements with outbound interfaces adding the correct URL for the PI Web Server. The following table shows an example of the URL that have to be used where we use the Business System or Business Component, by example:

This URL can be obtained from PI sender agreement object of a business object in Integration Builder. To obtain this, double click on the sender agreement.

Select sender agreement → Display WSDL. If you scroll to the end of the window, you will find the URL

The screenshot shows the SAP Integration Builder interface. At the top, there's a navigation bar with tabs like 'ES Repository Model', 'Objects', and 'Configuration Overview'. Below this is a table view showing 'Sender' and 'Receiver' configurations. A red box highlights the 'Sender Agreement' tab in the main content area. The 'Display Sender Agreement' screen shows fields for 'Communication Party' (set to 'VDZ_012') and 'Communication Component' (also set to 'VDZ_012'). At the bottom of the screen, a red box highlights the WSDL XML code:

```

<wsdl:port name="HTTPS_Port" binding="p1:BusinessPartnerReplicationSelfInitiatedOutBinding">
  <soap:address xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" location="https://dcip75.wdt.sap.corp:501/XISOAPAdapter/MessageServlet?senderParty=&amp;senderService=VDZ_012&amp;receiverParty=&amp;receiverService=&amp;interface=BusinessPartnerReplicationSelfInitiatedOut&amp;interfaceNamespace=http%3A%2F%2Fsap.com%2Fx%2FA1S%2FGlobal" />

```

Activity Replication from External System	Appt-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityAppointmentConfirmation_Send
	Phone-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityPhoneCallConfirmation_Send
	Email-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityEmailConfirmation_Send
	Task-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityTaskConfirmation_Send
Activity Replication to External System	Appt	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityAppointmentReplication_Send
	Phone	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityPhoneCallReplication_Send
	Email	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityEmailReplication_Send
	Task	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ActivityTaskReplication_Send

Business PartnerReplication from External System	BP-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_BusinessPartnerConfirmation_Send
Business PartnerReplication to External System	BP	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_BusinessPartnerReplicationSelfInitiatedOut_Send
	BP Rel	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_BusinessPartnerRelationshipReplicationSelfInitiated
	BP Resp	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_BusinessPartnerReplicationSelfInitiatedOut_Send
Lead replication from external system	Lead-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_LeadsConfirmation_Send
	Lead-Stat	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_LeadsStatusNotification_Send
Lead replication to external system	Lead	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_LeadReplication_Send
Opportunity replication from external system	Oppt-Conf	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_OpportunityConfirmation_Send
Opportunity replication to external system	Oppt	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_OpportunityReplication_Send
Service Request Delegation to external system	Serv-Req	/XISOAPAdapter/MessageServlet?channel=:<business system>:COD_SOAP_ServiceRequestReplicationOut_Send

Example URL:

/XISOAPAdapter/MessageServlet?channel=:QXL_233:COD_SOAP_ActivityAppointmentConfirmation_Send

4. Select one of the communication arrangements and click Edit

Communication Arrangements

You can view, create, and edit communication arrangements between your company and customer.

Show All Communication Arrangements and Find <input type="text"/> Go	
<input type="button" value="Edit"/>	<input type="button" value="New"/> <input type="button" value="Delete"/> <input type="button" value="Check Completeness"/> <input type="button" value="Edit Credentials"/> <input type="button" value="React"/>
Communication Scenario	Communication Type
360 Overview – Account	Application Integration
Access documents via WebDAV	
Account Hierarchy Simple Replication from External Syst...	Application Integration
Activity Replication from External System	Application Integration
Activity Replication to External System	Application Integration
Analytics Integration	Application Integration

5. Click the Technical Data Tab

COMMUNICATION ARRANGEMENT: ACTIVITY RE

Status: Active Communication Method: Direct Connection

| |

BUSINESS DATA **TECHNICAL DATA**

COMMUNICATION SYSTEM

Communication System ID: Q2CCLNT400

System Instance ID: Q2CCLNT400

Code List Mapping:

CONTACT

Contact Name: Zareh Vazquez

Phone:

E-Mail: zareh.vazquez@zen.com

6. Click Edit Advance Settings button

ACTION ARRANGEMENT: ACTIVITY REPPLICATION FRO

Communication Method: Direct Connection

[Save as Draft](#) | [Close](#) | [Preview](#) | [Edit Advanced Settings](#) (button circled in red) | [Check Completeness](#)

TECHNICAL DATA

INTEGRATION: BASIC SETTINGS		OUTBOUND SERVICES
Enabled:	<input checked="" type="checkbox"/>	Outbound Services
Protocol:	Web Service	Service
Method:	User ID and Password	Replicates
User ID:	_Q2CCLNT40_0	Edit Credentials

From External	Uses Basic Settings	Enabled	Service
External	Uses Basic Settings	Enabled	Replicates
External	Uses Basic Settings	Enabled	Replicates

7. Click in the Outbound Tab

BUSINESS DATA [TECHNICAL DATA](#)

[Inbound](#) [Outbound](#) (button circled in red)

[Check Service](#) | [Download WSDL](#)

Enabled	Use B...	Service
<input checked="" type="checkbox"/>	Yes	Replicate Appointment from External
<input checked="" type="checkbox"/>	Yes	Replicate Call from External
<input checked="" type="checkbox"/>	Yes	Replicate Email from External
<input checked="" type="checkbox"/>	Yes	Replicate Task from External

DETAILS: REPLICATE APPOINTMENT FROM EXTERNAL

Use Basic Settings:

Application Protocol: Web Service

Authentication Method: User ID and Password

8. Select each of the outbound services and edit SSL port and Path

Check Service Check Connection Download WSDL			Application Pro
Enabled	Use B...	Service	
<input checked="" type="checkbox"/>	Yes	Replicate Appointment from External - Confirmation	Format Convers
<input checked="" type="checkbox"/>	Yes	Replicate Phone Call from External - Confirmation	Format Convers
<input checked="" type="checkbox"/>	Yes	Replicate Email from External - Confirmation	Format Convers
<input checked="" type="checkbox"/>	Yes	Replicate Task from External - Confirmation	Format Convers

DETAILS: REPLICATE APPOINTMENT FROM EXTERNAL - CONFIRMATION Authentication

Use Basic Settings:

Application Protocol: Format Conversion

Protocol: Hypertext Transfer Protocol Secure (https)

Host Name: [REDACTED]

Port: 51001

Path: /XISOAPAdapter/MessageServlet?channel=:QXL_233 :C

Service URL: [REDACTED] XISOAPAdapter/MessageServlet?channel=:QXL_233 :

9. Click Save and Reactivate

Save and Reactivate	Save as Draft	Close	Pre									
BUSINESS DATA	TECHNICAL DATA											
Inbound	Outbound											
<table border="1"> <thead> <tr> <th colspan="3">Check Service Check Connection Download V</th> </tr> <tr> <th>Enabled</th> <th>Use B...</th> <th>Service</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td>Replicate Appointment from External -</td> </tr> </tbody> </table>				Check Service Check Connection Download V			Enabled	Use B...	Service	<input checked="" type="checkbox"/>	Yes	Replicate Appointment from External -
Check Service Check Connection Download V												
Enabled	Use B...	Service										
<input checked="" type="checkbox"/>	Yes	Replicate Appointment from External -										

10. Repeat the previous steps for the rest of the communication arrangements with outbound services

Note: Once the PI configuration is complete (Section 7), you can check if there is connectivity from the cloud system to the PI system by selecting one of the outbound services and click in Check Connection. This will only check connectivity with the SOAP Adapter in PI, but not the actual communication channel. If there is any problem with SSL certificates or authentication, it will show an error here.

Enabled	Use Basic Settings	Service
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yes Replicate Appointment from External - Confirmation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yes Replicate Phone Call from External - Confirmation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yes Replicate Email from External - Confirmation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yes Replicate Task from External - Confirmation

DETAILS: REPLICATE APPOINTMENT FROM EXTERNAL - CONFIRMATION

Use Basic Settings:

Application Protocol: Format Conversion
Protocol: Hypertext Transfer Protocol Secure (https)
Host Name: [REDACTED]
Port: 51001
Path: /XISOAPAdapter/MessageServlet?channel=:QXL_233:C
Service URL: [REDACTED]

Ping successful

Note: For the Lead Replication From External System, the outbound services use two different application protocols for each of the two outbound services, you will need to uncheck the Use Basic Settings.

- For “Confirmation of replicated leads to the SAP Business Suite CRM system” use Web Service

Enabled	Use Basic Settings	Service
<input checked="" type="checkbox"/>	<input type="checkbox"/>	No Confirmation of replicated leads to the SAP Business Suite CRM system
<input checked="" type="checkbox"/>	<input type="checkbox"/>	No Lead status notification to the SAP Business Suite CRM system

DETAILS: CONFIRMATION OF REPLICATED LEADS TO THE SAP BUSINESS S

Use Basic Settings:
Application Protocol: Web Service
Protocol: Hypertext Transfer Protocol Secure (https)
Host Name: [REDACTED]
Port: 51001

- For “Lead status notification to the SAP Business Suite CRM system” use Format Conversion

Check Service | Check Connection | Download WSDL

Enabled	Use B...	Service
<input checked="" type="checkbox"/>	No	Confirmation of replicated leads to the SAP Business Suite CRM system
<input checked="" type="checkbox"/>	No	Lead status notification to the SAP Business Suite CRM system

DETAILS: LEAD STATUS NOTIFICATION TO THE SAP BUSINESS SUITE CRM SYSTEM

Use Basic Settings:

Application Protocol: Format Conversion

Protocol: Hypertext Transfer Protocol Secure (https)

Host Name: [REDACTED]

Port: 51001

Path: /XISOAPAdapter/MessageServlet?channel=:QXL_233:C

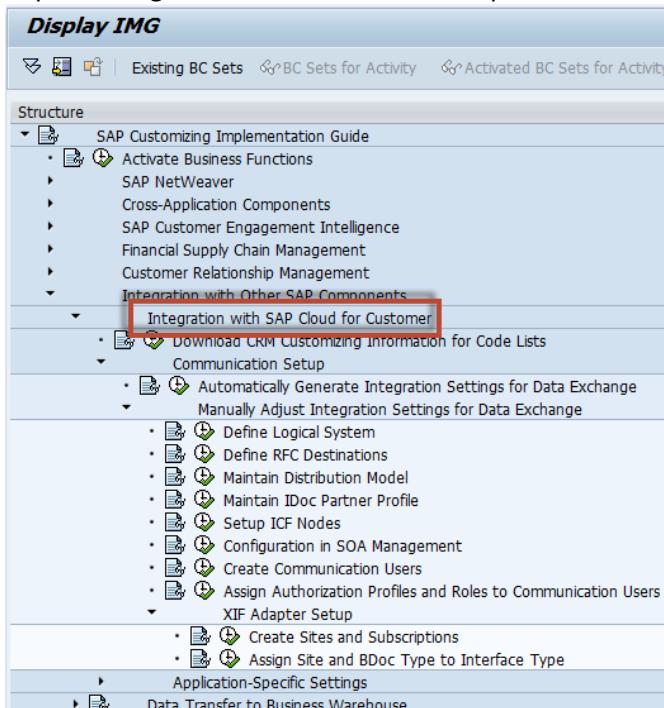
Service URL: https://dewdfgwp01248.wdf.sap.corp:51001/XISOAPAdapter/MessageServlet?channel=:H4R_240:

6 Configure Phase: Configure Integration in SAP CRM

6.1 SAP Customizing Implementation Guide in the CRM system

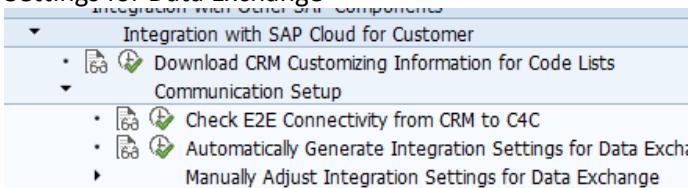
All the customization activities necessary to integrate SAP CRM with SAP Hybris Cloud for Customer are defined in a hierarchical structure in the SAP Implementation Guide Structure. The necessary documentation is also made available with the activity.

1. In SAP CRM system, execute transaction SPRO.
2. Choose SAP Reference IMG.
3. Expand Integration With Other SAP Components → Integration with SAP Cloud for Customer

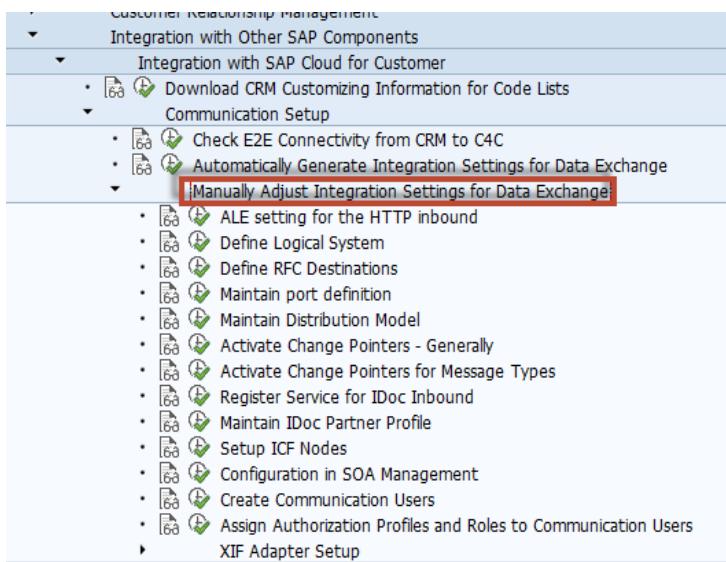


4. Navigate to Communication Setup → Automatically Generate Integration Settings for Data Exchange to run the report to perform basic configuration activities.

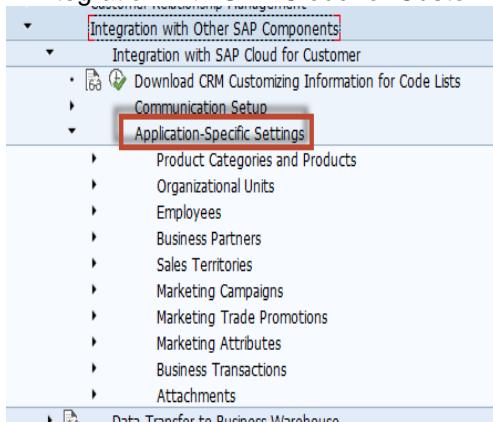
For details on the report execution, refer to the below section **Automatically Generate Integration Settings for Data Exchange**



5. To manually adjust the entries created by the above report, navigate to Communication Setup → Manually Adjust Integration Settings for Data Exchange

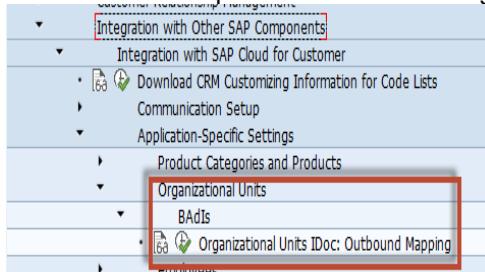


6. Based on the objects you want to replicate between CRM and SAP Hybris Cloud for Customer, perform the necessary configuration activities by navigating to Integration with Other SAP Components
→ Integration with SAP Cloud for Customer → Application-Specific Settings



7. For enhancing the standard delivered content, implement the BAdIs for the object available under Integration with Other SAP Components → Integration with SAP Cloud for Customer → Application-Specific Settings → <business object> → BAdIs

Below is an example screenshot showing for Organizational Unit Object.

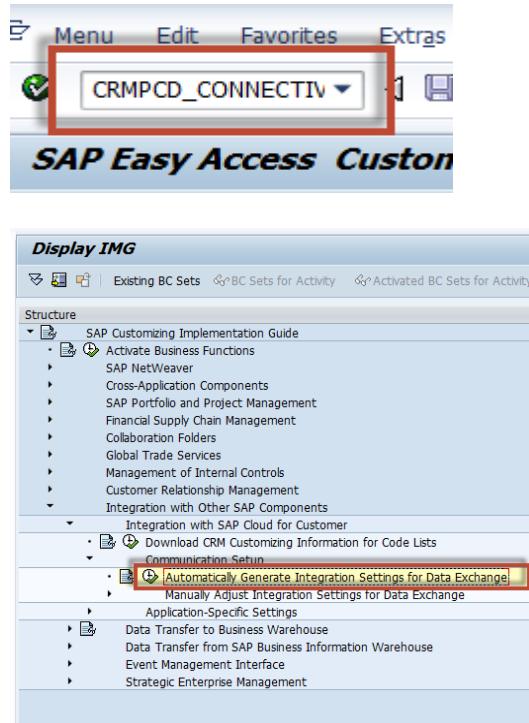


6.2 Automatically Generate Integration Settings for Data Exchange

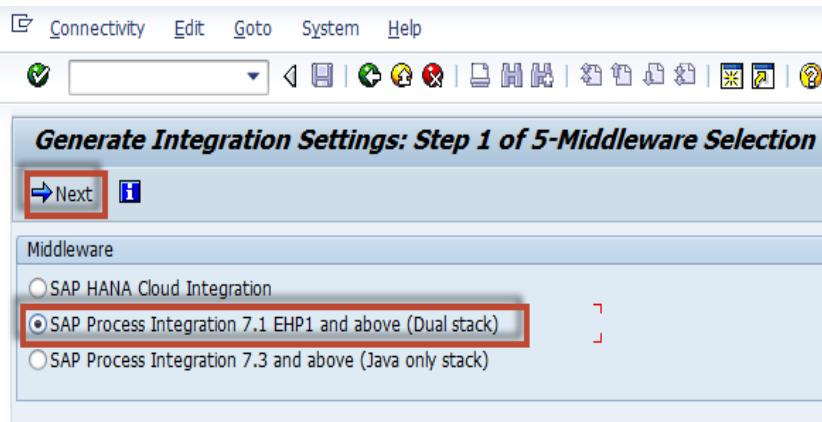
1. Execute the program CRMPCD_CREATE_CONNECTIVITY_SIM using the below options.

Transaction code	CRMPCD_CONNECTIVITY
-------------------------	---------------------

SAP CRM IMG menu	<i>Integration With Other SAP Components → Integration With SAP Cloud for Customer → Communication Setup → Automatically Generate Integration Settings for Data Exchange</i>
-------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



- Choose SAP Process Integration as the Middleware and select Next.



- Select the scenarios you would like to generate the configuration entities for and choose Next.

Note: Select the Marketing Attribute Message types for creating the ALE Distribution Model.

Generate Integration Settings: Step 2 of 5-Scope Selection

Scope

Organization Structures
 Do you want to replicate Organization Structures from SAP CRM to your cloud solution?

Business Partners
 Do you want to replicate Business Partners / Business Partner Relationships from SAP CRM to your cloud solution?
 Do you want to replicate Business Partners from your cloud solution to SAP CRM?

Employees
 Do you want to replicate Employees from SAP CRM to your cloud solution?

Products / Product Hierarchies
 Do you want to replicate Products / Product Categories from SAP CRM to your cloud solution?

Campaigns
 Do you want to replicate Campaigns from SAP CRM to your cloud solution?

4. Choose the Logical System of Cloud for Customer that you want to connect to and choose Next. In case the logical system is not created, you can create one using the button Create Logical System.

Generate Integration Settings: Step 3 of 5-General Settings

Cloud for Customer System

Logical System

Note: Logical System name should be the same as the Cloud Solution Tenant ID

General Settings

Job Schedule Interval Minutes
 Job User

5. Enter the PI system details like host name, system no and logon details of PI system. Choose Next.

Generate Integration Settings: Step 4 of 5-Settings for SAP PI 7.1

SAP Process Integration 7.1 EHP1 and above (Dual stack)

Target Host
 System No.

Gateway Options

Gateway Host
 Gateway Service

Logon

Language
 Client
 User
 Password

If JAVA based PI is selected in the first screen, then the following screen will be shown in this step. Enter the Unique Program ID, Gateway Host and Gateway Service details maintained in InboundRA resource adapter in below path of PI NWA.

Configuration → Infrastructure → Application Resources.

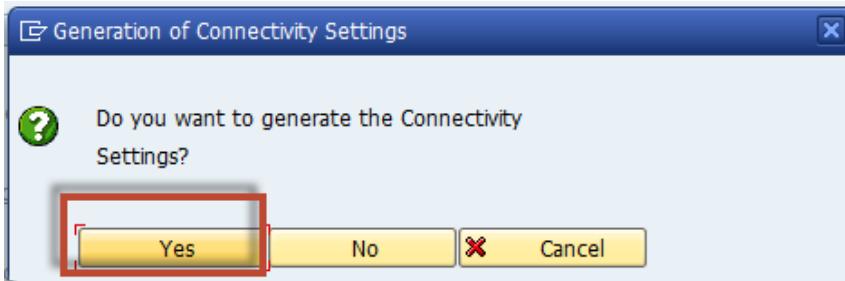
The screenshot shows the SAP Process Integration Application Resources Overview. In the Resource Adapter section, the 'inboundRA' entry is selected and highlighted with a red box. The 'Properties' tab is active, showing configuration details for the inboundRA resource adapter. The properties listed include ProgramID (XI_IDOC_DEFAULT), MaxReaderThreadCount (4), DestinationName (XI_IDOC_DEFAULT_DESTINATION), GatewayServer (localhost), GatewayService (sap_pi), and Local (false). The 'Resource Type' column indicates that 'inboundRA' is a 'Resource Adapter'.

The screenshot shows the 'Generate Integration Settings: Step 4 of 5-Settings for SAP PI' screen. It displays the configuration for an RFC Destination to PI System. The 'Program ID' field is set to 'XI_IDOC_DEFAULT_'. The 'Gateway Options' section is highlighted with a red box, containing fields for 'Gateway Host' (localhost) and 'Gateway Service' (sap_pi). Navigation buttons 'Back' and 'Next' are visible at the top.

6. In the Summary screen, select the Generate button to generate the configuration entities.

The screenshot shows the 'Generate Integration Settings: Step 5 of 5-Summary' screen. It displays the summary of the selected configuration. The 'Generate' button is highlighted with a red box. The summary includes the selected middleware (SAP Process Integration 7.1 EHP1 and above (Dual stack)) and logical system (QXL/233 HANA CRM-PI-OP Main Test Tenant). Below this, there is a section for selected scenarios from SAP CRM to your cloud solution, with checkboxes for 'Organization Structures' and 'Business Partners / Business Partner Relationships'.

7. In the confirm pop-up screen, choose Yes.



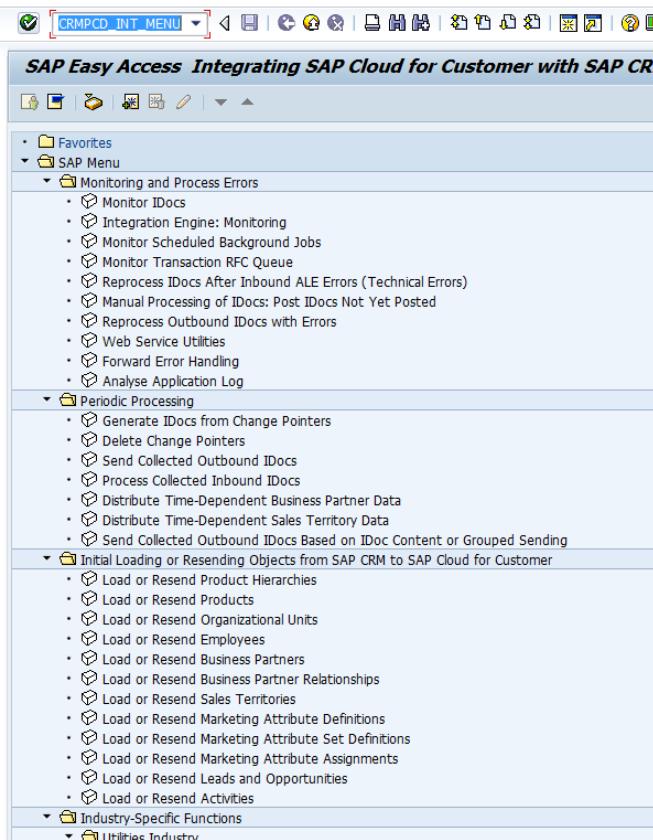
8. In the log you can check which entities were created.

Display logs						
Date/Time/User	Nu...	External ID	Object text	Sub-object text	Transac...	P
23.09.2014 11:51:09 PEDNEKEI	29	20.140.923.0...	CRMPCD_CONN...		CRMPCD_...	
			• Problem class Additional Inform	29		
<hr/>						
[<] [>] [H] [F] [Y] [E] [%] [C] [D] [U] [P] [W] [R] [O] [A] [S] [29]						
Type Message Text [Queue Registration CSA* has been created.] [Destination OLO7ESN_DEST of type 3 has been created] [Port OLO7ESN of type 1 has been created] [Site OLO7ESN already exists] [Partner linkage created for Site OLO7ESN for Partner OLO7ESN.] [Partner profile for OLO7ESN already exists] [Outbound message CRMPCD_ORG_UNIT_SAVE is already contained in the partner profil for OLO7ESN] [Outbound message CRMXIF_PARTNER_SAVE_M is already contained in the partner profil for OLO7ESN] [Outbound message CRMXIF_PARTNER_REL_SAVE_M is already contained in the partner profil for OLO7ESN] [Outbound message CRMXIF_PARTNER_SAVE_M(CNF) has been inserted into partner profil for OLO7ESN] [Outbound message CRMXIF_EMPLOYEE_SAVE is already contained in the partner profil for OLO7ESN] [Outbound message CRMXIF_PRODUCT_MATERIAL_SAVE is already contained in the partner profil for OLO7ESN] [Outbound message CRMPCD_PROD_HIER_SAVE has been inserted into partner profil for OLO7ESN] [Inbound message CRMXIF_PARTNER_SAVE_M(CNF) has been inserted into partner profil for OLO7ESN] [Inbound message CRMXIF_PARTNER_REL_SAVE_M is already contained in the partner profil for OLO7ESN] [CRM Middleware and XIF IDoc Link for Site OLO7ESN have been created] [Variant OLO7ESN for report RSARFCPP has been created] [Variant OLO7ESN_BP for report RSEOUT00 has been created] [Variant OLO7ESN_ORG for report CRMPCD_ORG_UNIT_EXTRACT has been created] [Variant OLO7ESN_EMP for report CRMPCD_EMPLOYEE_EXTRACT has been created] [Variant OLO7ESN_EMP for report RSEOUT00 has been created] [Variant OLO7ESN_BPR for report RSEOUT00 has been created] [Job C4C_OLO7ESN_OUTBOUND has been created] [Variant OLO7ESN_BP for report RBDAPP01 has been created] [Variant OLO7ESN_BPR for report RBDAPP01 has been created] [Job C4C_OLO7ESN_INBOUND has been created]						

6.3 Area Menu

An area menu is now available to consolidate all the commonly used transactions for integrating SAP CRM with the SAP Hybris Cloud for Customer solution.

You can access this area menu in the transaction CRMPCD_INT_MENU.



Note: During Sales quote pricing test, if you encounter any validation error in the CRM system “The value '0' is not in the value range of the XML schema type 'int' or it does not meet the specified limitations “ then ensure the level field maintained for the pricing procedure is within the range 1 to 999999999. Change this value for pricing procedure and then re-test.

7 Configure Phase: Configure Integration in PI System

7.1 Create a Key storage View and load the certificate

Note: Refer to the [How to Configure x.509 Authentication for SAP PI Systems to Connect to/from SAP Cloud for Customers Guide](#) to know more details of this authentication setup.

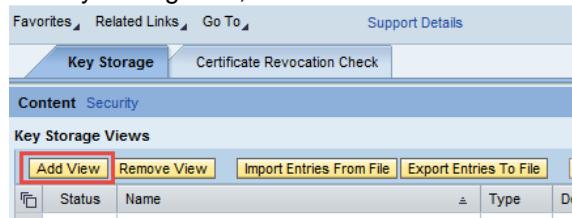
1. Logon to NetWeaver Administrator (NWA) of the SAP PI system.



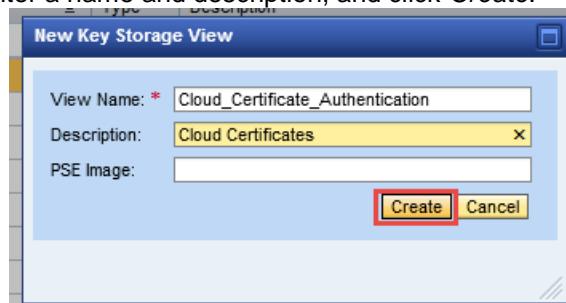
2. In the Configuration tab, click *Certificate and Keys*.



3. In the Key Storage tab, click *Add View*.



4. Enter a name and description, and click *Create*.



5. Select the view you just created, and click *Import Entry*.

		USER	ICM Server SSL Credentials Store
Cloud_Certificate_Authentication	USER	Cloud Certificates	
CTCView	USER	CTC view for storing key and certificate	
DBMS_User_Store	USER	Contains certificates assigned to users in DBMS user store	
DEFAULT	SYSTEM	Public view for common use by all components	
HCI	USER	HCI	
ICM_SSL_10520	SYSTEM	ICM Server SSL credentials store	
ICM_SSL_10520_44300	SYSTEM	ICM Server SSL credentials store	
ICM_SSL_10520_44304	SYSTEM	ICM Server SSL credentials store	

Details of view "Cloud_Certificate_Authentication"

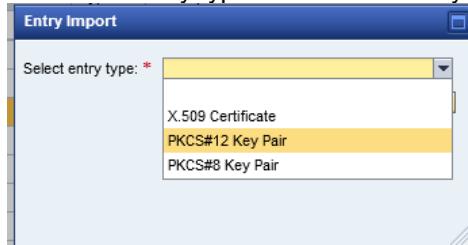
View Entries View Properties

Create Delete Rename Copy Entry Import Entry Export Entry Generate CSR Request Import CSR Response

Status Name Entry Type Algorithm Valid From

[!] There are no entries to display

6. In the Entry Import dialog, do the following:
- Select the entry type as PKCS#12 Key Pair.



- Select the file that you created as the key pair in SAP Hybris Cloud for Customer.
- Enter the corresponding password.
- Click *Import*.

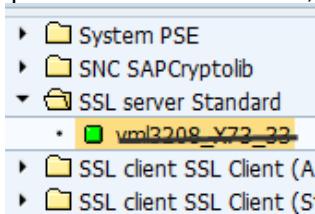


7.2 Import the Root Certificate

Note: Refer to the [How to Configure x.509 Authentication for SAP PI Systems to Connect to/from SAP Cloud for Customers Guide](#) to know more details of this authentication setup.

Load certificate into SSL Server standard for ABAP

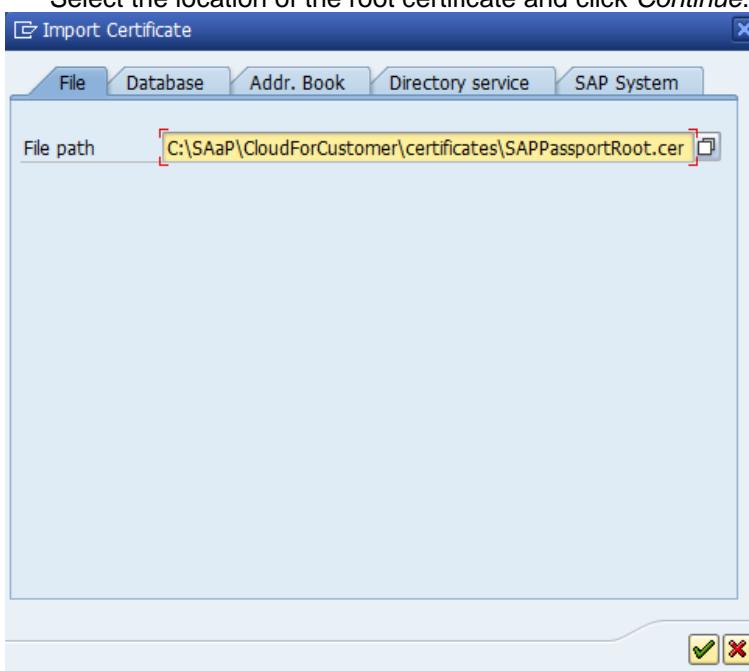
- Using SAPGUI, logon to the ABAP stack of the SAP PI system, and open transaction STRUST.
- Open SSL server standard, and click the import button under Certificate.



Certificate

Subject			
Subject (Alt.)			
Issuer			
Serial Number (Hex.)			
Serial Number (Dec.)			
Valid From		to	
Algorithm	Key Length		
Check Sum (MD5)			
Checksum (SHA1)			

3. Select the location of the root certificate and click *Continue*.



4. Under Certificate, click *Add to certificate List* and click *Save*.

Certificate

Subject	CN=SAP Passport CA, O=SAP Trust Community, C=DE		
Subject (Alt.)	uniformResourceIdentifier=http://service.sap.com/TCS		
Issuer	CN=SAP Passport CA, O=SAP Trust Community, C=DE		
Serial Number (Hex.)	01:00:00:00		
Serial Number (Dec.)	16777216		
Valid From	18.07.2000 10:00:00	to	18.07.2015 10:00:00
Algorithm	RSA with SHA-1	Key Length	1024
Check Sum (MD5)	7B:59:03:C5:33:24:05:67:D4:CB:89:A9:29:8C:EF:00		
Checksum (SHA1)	8D:71:8C:B5:F4:21:9D:5D:39:0C:79:04:8A:EA:21:85:54:37:F4:57		

Load certificate in ICM_SSL_<instanceID>_<port> view for JAVA

1. Logon to NetWeaver Administrator (NWA) of the SAP PI system.



2. In the Configuration tab, click *Certificate and Keys*.

3. Under Key Storage Views, select the view ICM_SSL_<instanceID>_<port> view and choose Import Entry for the View Entries tab.

4. Select X.509 Certificate as the entry type and choose Browse to select the root certificate SAPPassportCA from the saved location and choose Import.

5. Select View Properties tab.

6. Set the Property Value as 1 for the Property key VCLIENT.

DETAILS OF VIEW ICM_SSL_3034I_00001	
View Entries View Properties	
Add/Change	Remove
Property Key	Property V
VCLIENT	1

7.3 Create Configuration Scenarios

Based on the PI stack (dual or single), use one of the 2 sections mentioned below.

7.3.1 ABAP Based PI Stack

1. The following scenarios will be created based in ES repository models. They will be created one at the time. Each scenario has multiple connections that require communication channels to be created as follows.

For COD_CRM_MasterDataReplication:

Connection	Sender Business System Components → Communication Channel	Receiver Business System Components → Communication Channel
Business Partner Replication	COD_SOAP_BusinessPartnerReplicationSelfinitiatedOut_Send	CRM_Idoc_Receive
Business Partner Relationship Replication	COD_SOAP_BusinessPartnerRelationshipReplicationOut_Send	CRM_Idoc_Receive
Business Partner Replication Confirmation	COD_SOAP_BusinessPartnerConfirmation_Send	CRM_Idoc_Receive

For COD_CRM_BusinessDataReplication:

Connection	Sender Business System Components → Communication Channel	Receiver Business System Components → Communication Channel
Lead Confirmation	COD_SOAP_LeadsConfirmation_Send	CRM_Idoc_Receive
Opportunity Confirmation	COD_SOAP_OpportunityConfirmation_Send	CRM_Idoc_Receive
Opportunity Replication	COD_SOAP_OpportunityReplication_Send	CRM_Idoc_Receive
Lead Status Notification	COD_SOAP_StatusNotification_Send	CRM_Idoc_Receive
Service Request Delegation	COD_SOAP_ServiceRequestReplicationOut_Send	CRM_Idoc_Receive

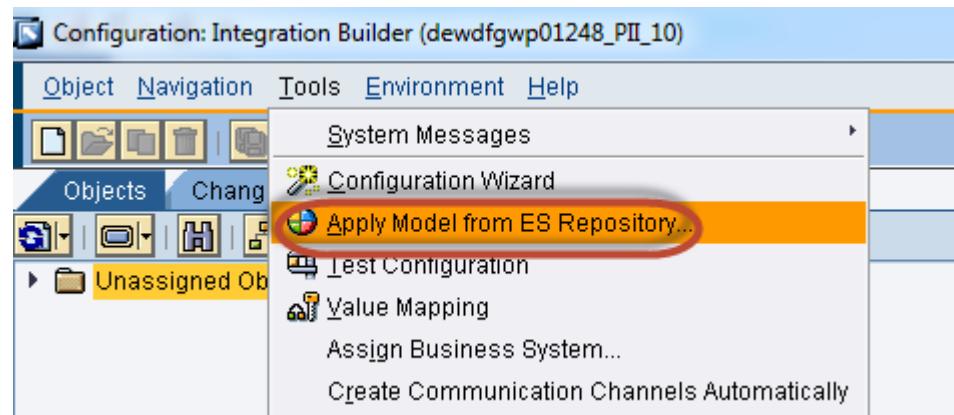
For CRM_COD_BusinessDataReplication:

Connection	Sender Business System Components → Communication Channel	Receiver Business System Components → Communication Channel
Lead Replication	N/A	COD_SOAP_LeadsReplicationIn_Receive
Opportunity Confirmation	N/A	COD_SOAP_OpportunityConfirmationIn_R eceive
Opportunity Replication	N/A	COD_SOAP_OpportunityReplicationIn_Re ceive
Customer Quote Request Notification	N/A	COD_SOAP_Oppt_CustomerQuoteReque st_Receive
Sales Order Request Notification	N/A	COD_SOAP_Oppt_SalesOrder_Receive
Service request delegation Confirmation/Replication	N/A	COD_SOAP_ServiceRequestConfirmationI n_Receive
Campaign Replication	N/A	COD_SOAP_CampaignReplicationIn_Rec eive

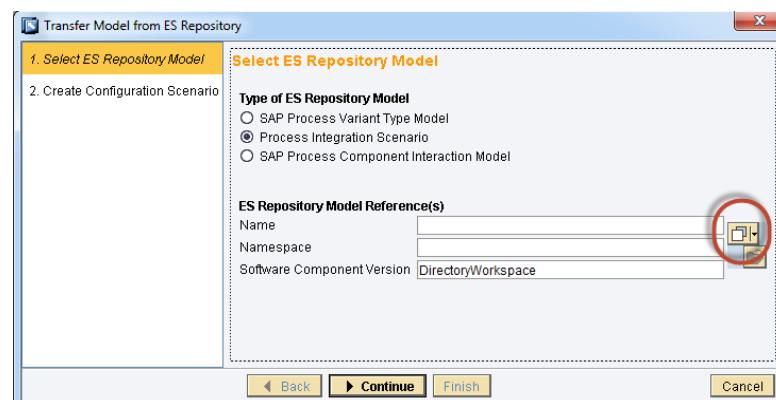
For CRM_COD_MasterDataReplication:

Connection	Sender Business System Components → Communication Channel	Receiver Business System Components → Communication Channel
Business Partner Relationship Replication	N/A	COD_SOAP_BusinessPartnerRelationshipRe plicationIn_Receive
Business Partner Replication	N/A	COD_SOAP_BusinessPartnerReplicationIn_R eceive
Material Replication	N/A	COD_SOAP_MaterialReplicationIn_Receive
Business Partner Replication Confirmation	N/A	COD_SOAP_BusinessPartnerReplicationIn_R eceive
Product Category Hierarchy Replication	N/A	COD_SOAP_ProductCategoryHierarchyReplic ationIn_Receive
Business Partner Hierarchy Simple Replication	N/A	COD_SOAP_BusinessPartnerHierarchySimpl eReplicationIn_Receive
Employee Replication	N/A	COD_SOAP_EmployeeReplicationIn_Receive
Organization Unit Replication	N/A	COD_SOAP_OrganisationUnitReplicationIn_Re ceive
Territory Replication	N/A	COD_SOAP_TerritoryReplicationIn_Receive

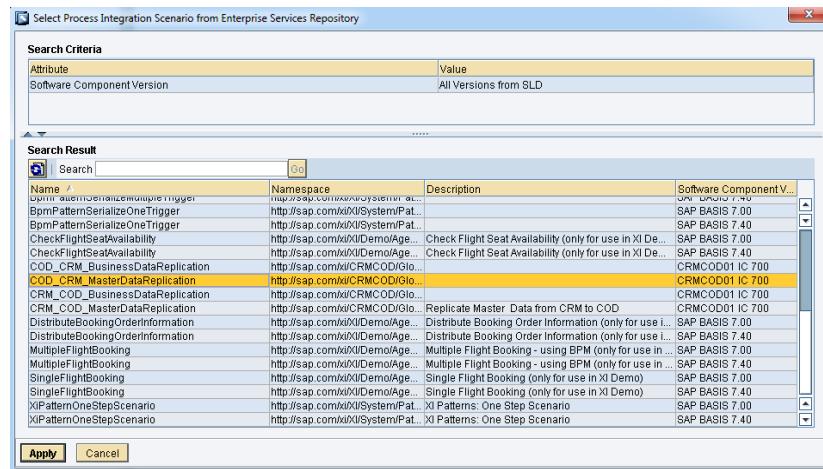
2. From within the integration builder, click in the menu Tools→Apply Model from ES Repository.



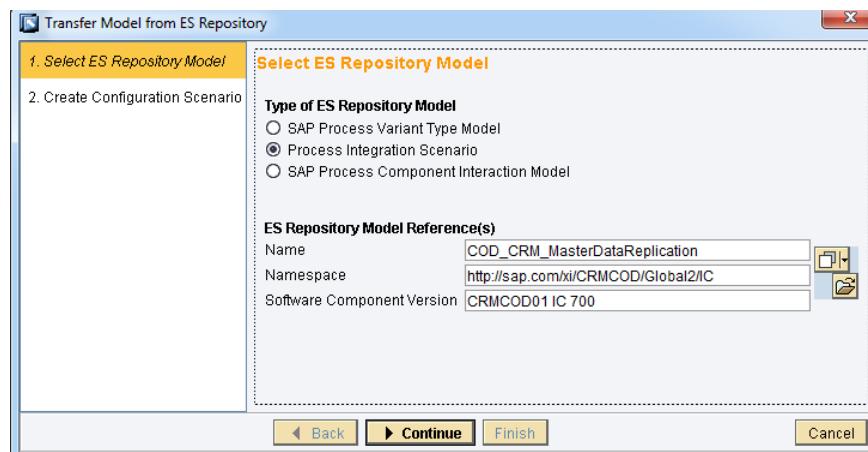
3. Click the input help button to load the available modes from the ESR repository.



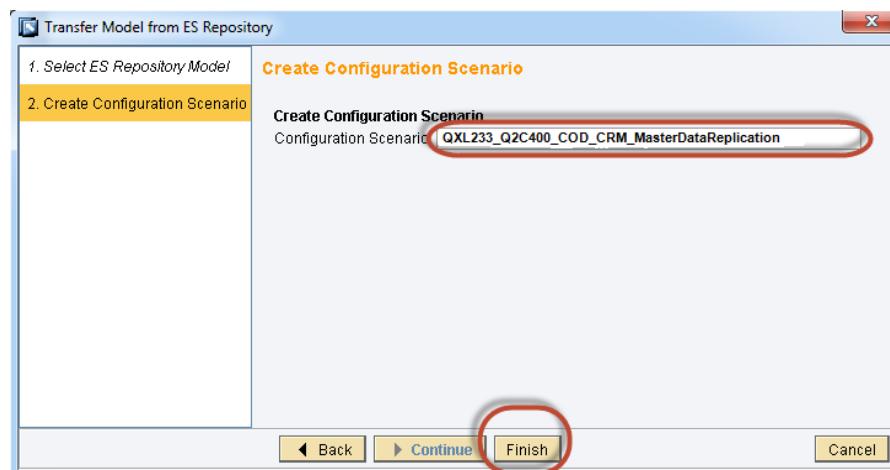
4. Look for the COD_CRM_MasterDataReplication. Select it and click Apply.



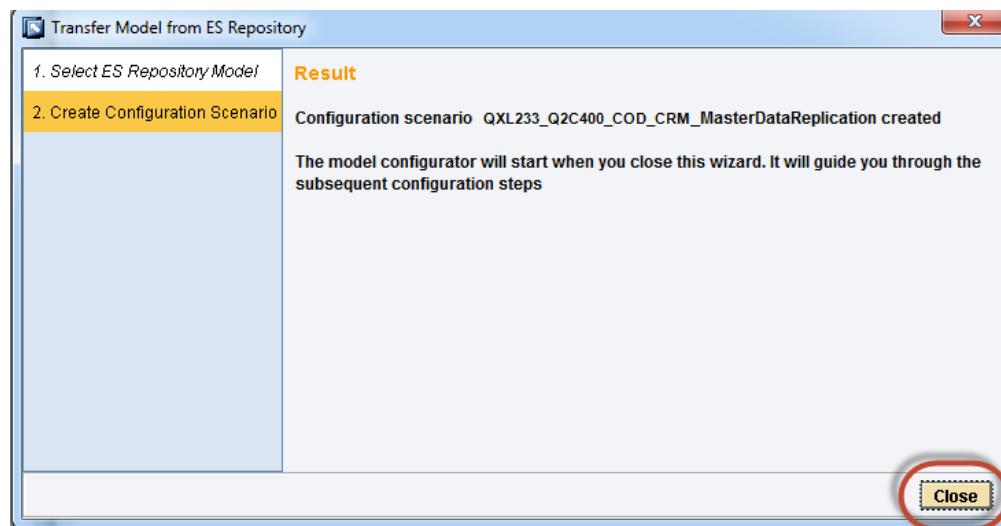
5. Click Continue



6. Define the name of the scenario and click Finish



7. Click Close

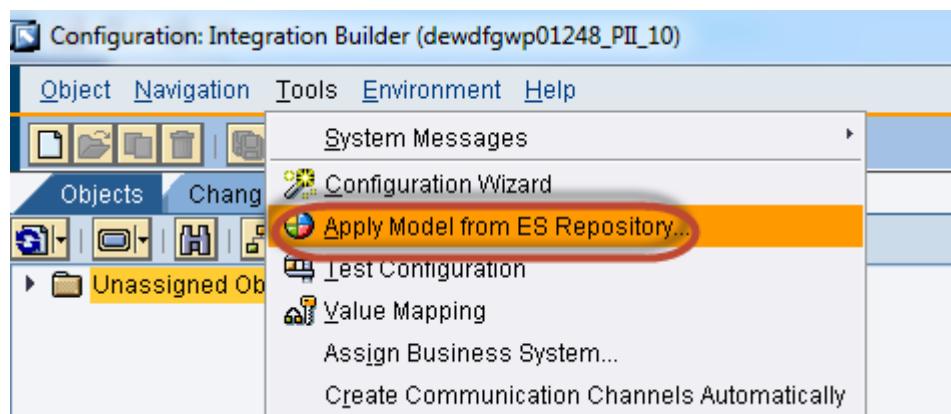


7.3.2 JAVA Based PI Stack

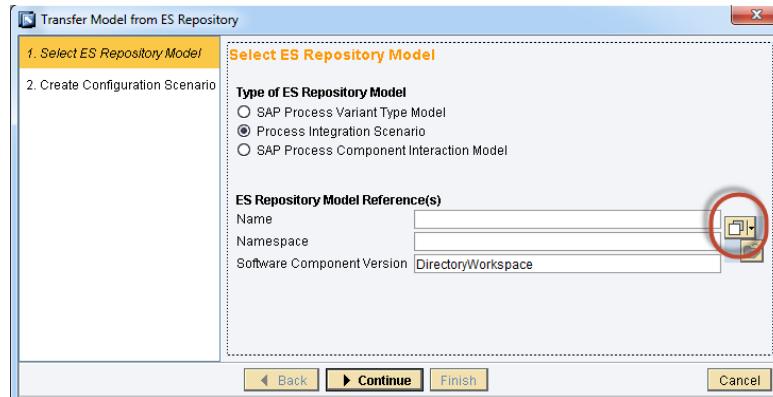
1. The following scenarios will be created based in ES repository models. They will be created one at the time. Each scenario has multiple connections that require communication channels to be created as follows.

COD_CRM_MasterDataReplication_AAE,
COD_CRM_BusinessDataReplication1_AAE
COD_CRM_BusinessDataReplication2_AAE.

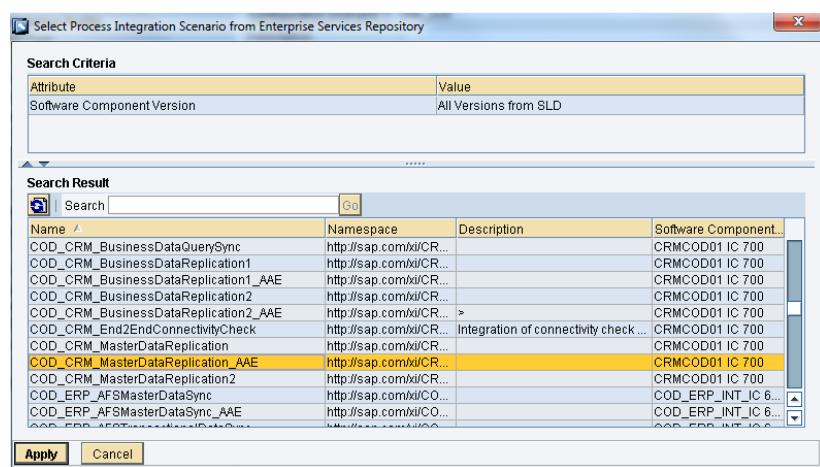
2. From within the integration builder, click in the menu Tools→Apply Model from ES Repository.



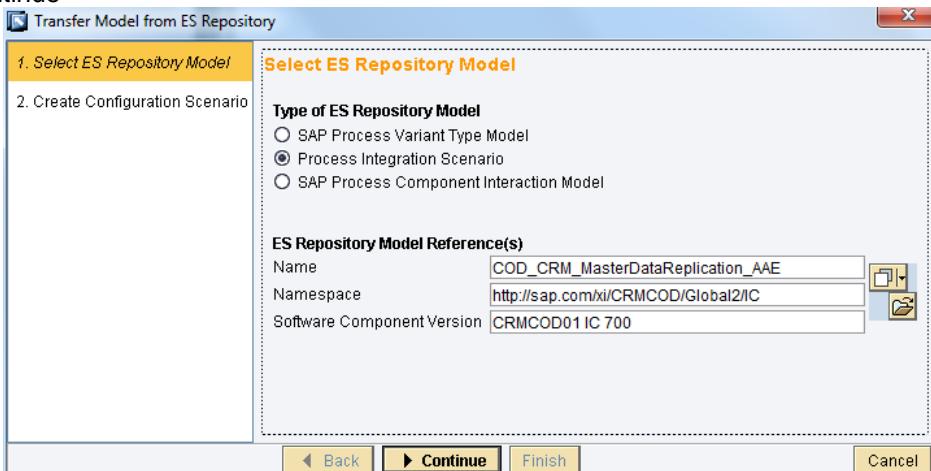
3. Click the input help button to load the available modes from the ESR repository.



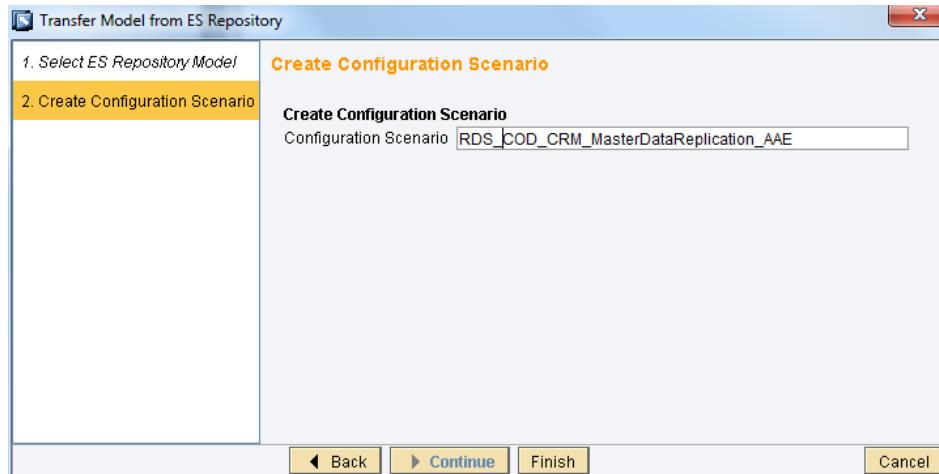
4. Look for the COD_CRM_MasterDataReplication_AAE. Select it and click Apply.



5. Click Continue



6. Define the name of the scenario and click Finish

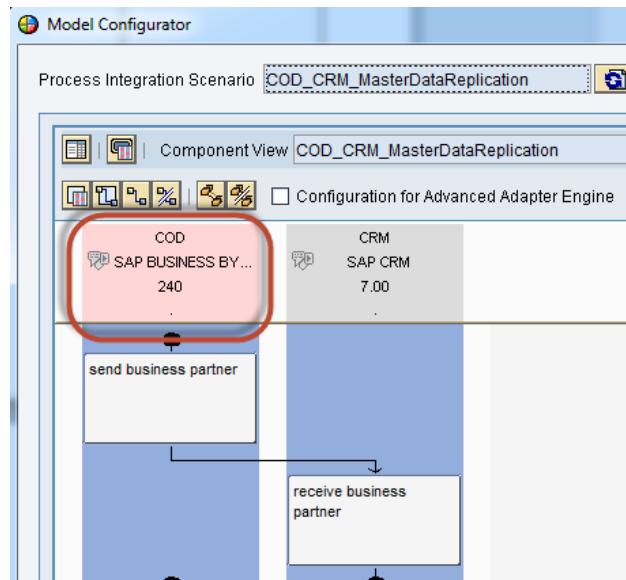


7. Click Close

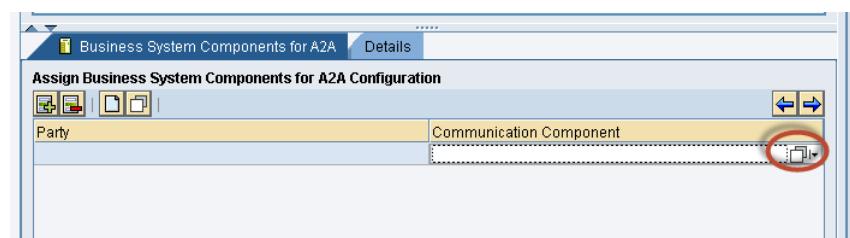
7.4 Configure Interfaces for CRM Integration

7.4.1 Assign the Business Systems to Each Components

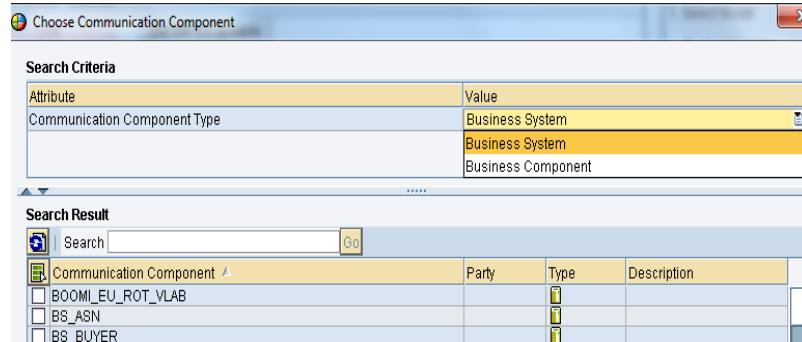
1. Assign the business systems to the scenario. Select the COD SAP Business ByDesign 240 in the Model Configurator.



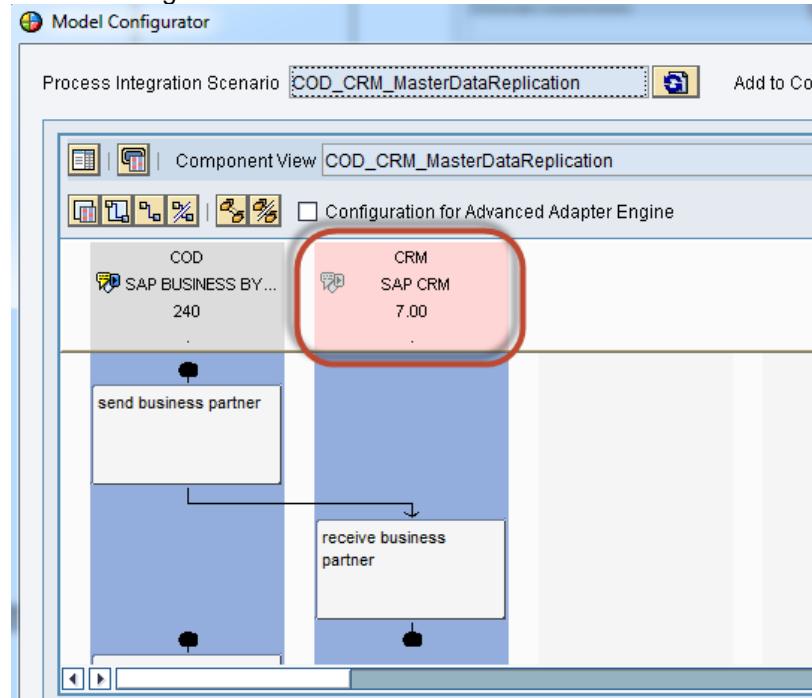
2. Assign the business system using the input help button from the Business System Component for A2A tab



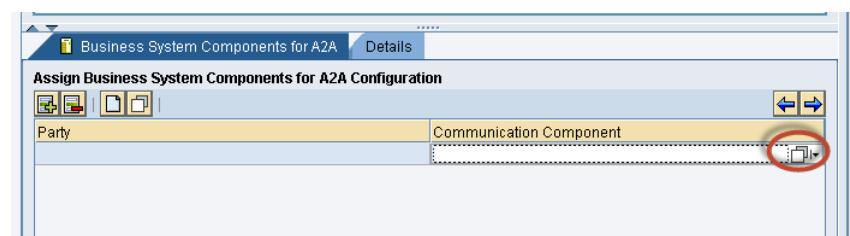
- From the Choose Communication Component screen select “Business System” in the communication component section, then select the business system created for the SAP Hybris Cloud for Customer and click Apply.



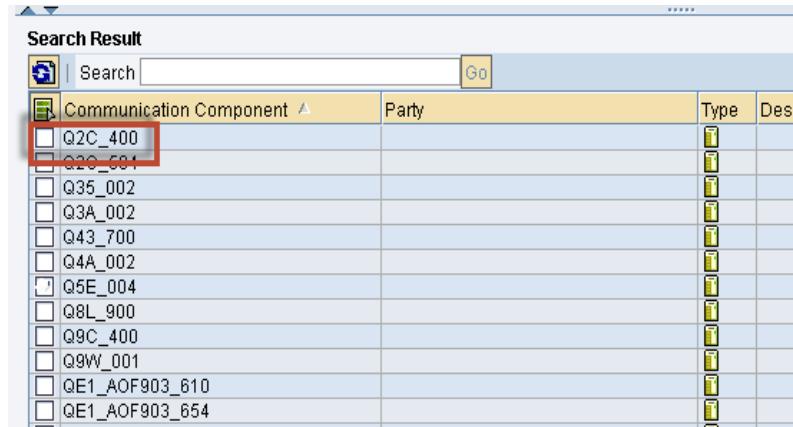
- Assign the business system for the SAP CRM on-premise system. Select the CRM SAP CRM 7.00 in the model configurator.



- Assign the business system using the input help button from the Business System Component for A2A tab.



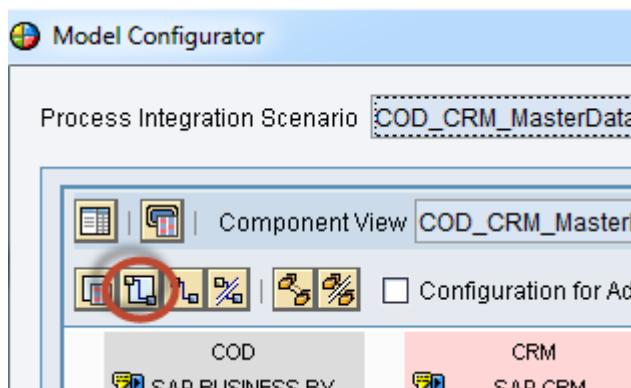
- From the Choose Communication Component screen select “Business Systems” in the communication component section, then select the business system created for the SAP CRM System and click Apply.



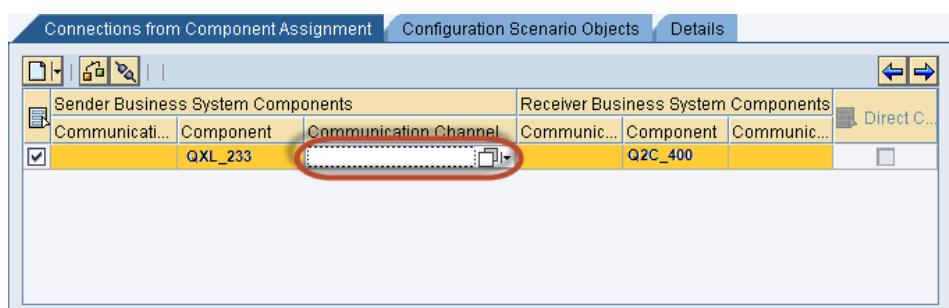
Communication Component	Party	Type	Desc
<input type="checkbox"/> Q2C_400			
<input checked="" type="checkbox"/> Q23_C01			
<input type="checkbox"/> Q35_002			
<input type="checkbox"/> Q3A_002			
<input type="checkbox"/> Q43_700			
<input type="checkbox"/> Q4A_002			
<input type="checkbox"/> Q5E_004			
<input type="checkbox"/> Q8L_900			
<input type="checkbox"/> Q9C_400			
<input type="checkbox"/> Q9W_001			
<input type="checkbox"/> QE1_AOF903_610			
<input type="checkbox"/> QE1_AOF903_654			

7.4.2 Create the Communication Channels from Templates and Assign Sender and Receiver Business System Components

- Configure the connections by clicking the Configure Connection button in the Model Configurator screen.

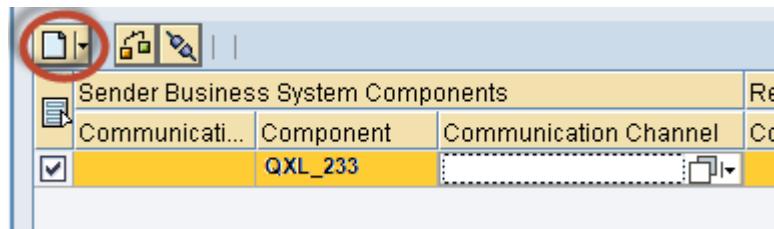


- In the Connections from Component Assignment tab, create the communication channels from the templates for each of the connection within the scenario. Select the communication channel field for the SAP Hybris Cloud for Customers or in this case the Sender Business System Component.

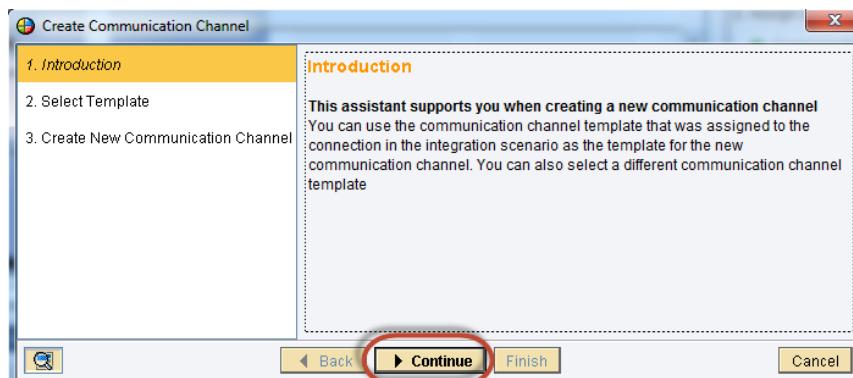


Sender Business System Components	Component	Communication Channel	Receiver Business System Components	Component	Communication Channel	Direct C...
	<input checked="" type="checkbox"/> QXL_233	<input type="button" value="..."/>			<input type="checkbox"/> Q2C_400	<input type="checkbox"/>

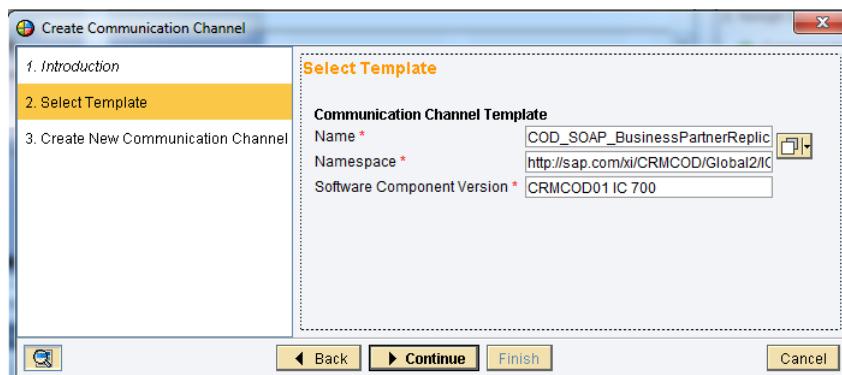
3. Click in the Create Communication Channel button and create using the template option.



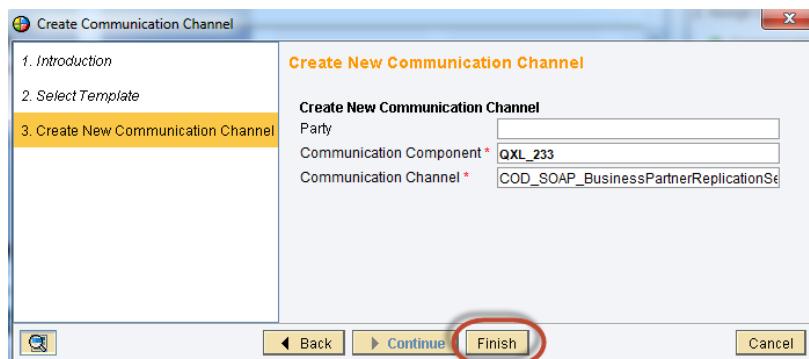
4. In the Create Communication Channel wizard click Continue.



5. Click Continue



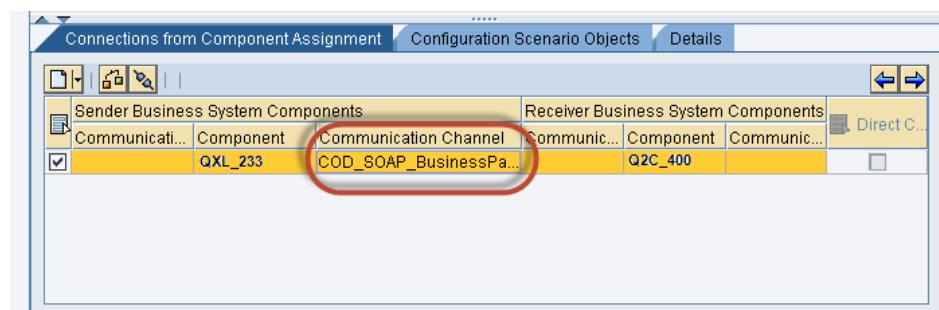
6. Adjust the name of the communication channel or just accept the standard name and click Finish.



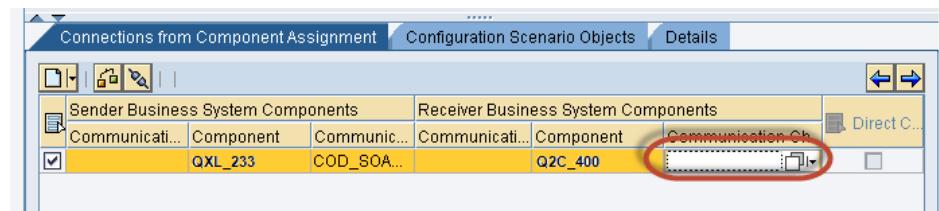
7. Click Close



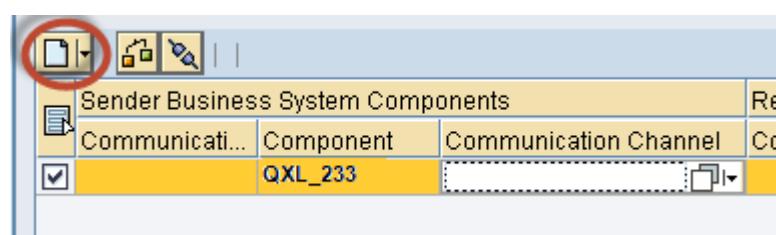
8. The communication channel for this integration scenario has been created and assigned.



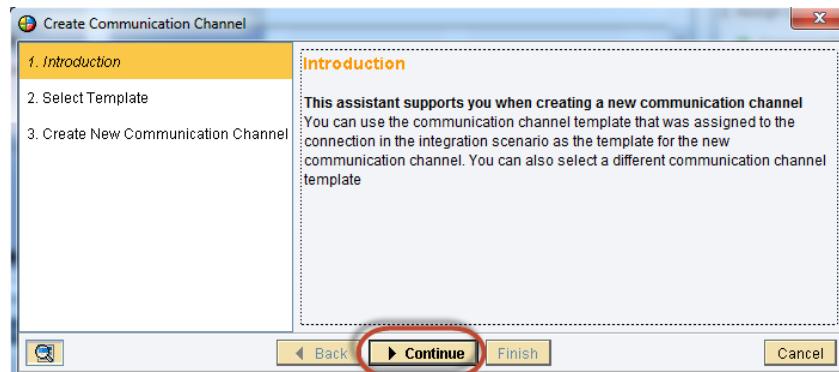
9. Click in the Communication Channel field of the Receiver Business System.



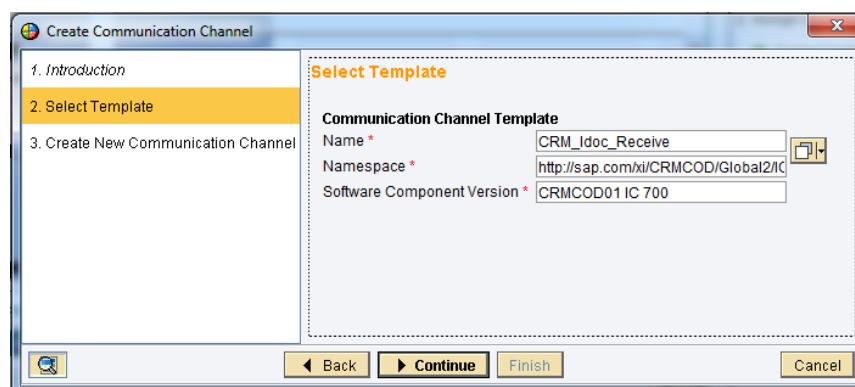
10. Click in the Create Communication Channel button.



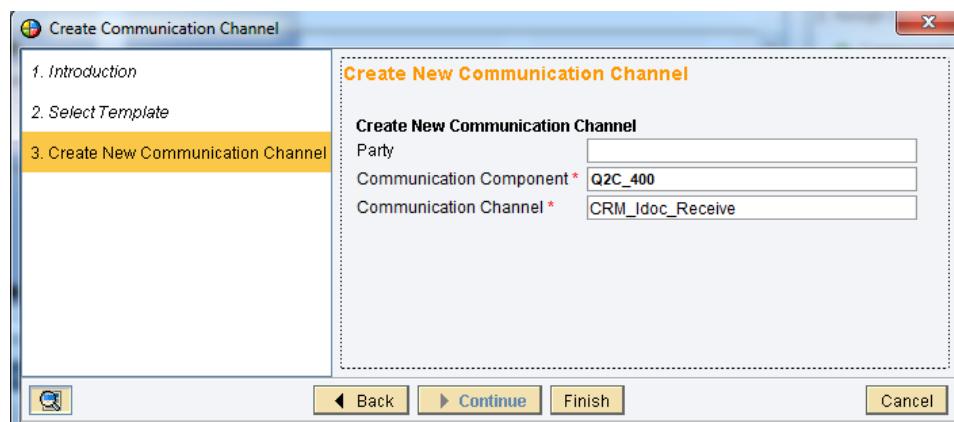
11. In the Create Communication Channel wizard, click Continue.



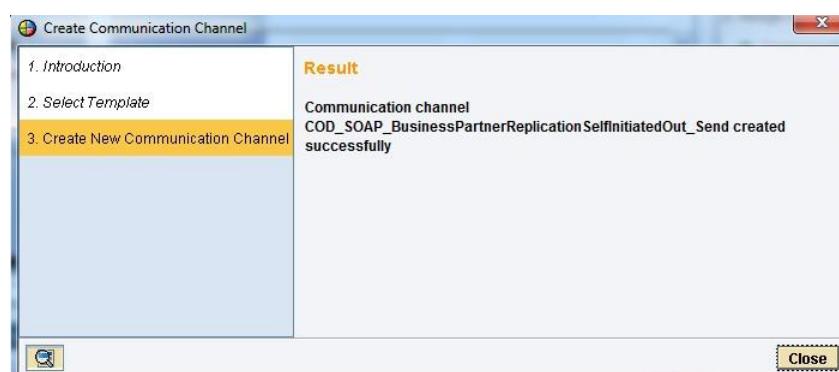
12. Click Continue



13. Verify the name of the communication channel and click Finish.



14. Click Close



15. The communication channel CRM_Idoc_Receive can be re-used for all the connection from SAP Hybris Cloud for Customer to SAP CRM on-premise and does not have to be re-created, Select the value using the input help button in the receiver communication channel.

16. Select the existing communication channel and click Apply.

Communication Channels Defined by Following Receiver Communication Component:				
Attribute	Value			
Party				
Communication Component	Q2C_400			

Search Result				
Search	Communication Component	Communication Channel for Receiver Communication Component	Adapter Type	Description
	Q2C_400	CRM_Idoc_Receive	IDoc	

Apply Cancel

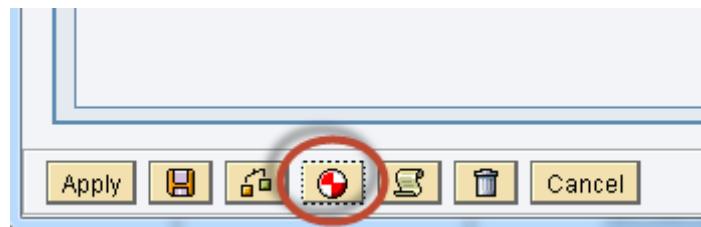
17. This connection is configured with the communication channels created. Click in the Next Connection arrow to configure the Next Connection.

Connections from Component Assignment				
Sender Business System Components	Receiver Business System Components	Direct C...		
Communication Component	Communication Component	Communication Ch...	Component	Communication Ch...
QXL_233	COD_SOA...	Q2C_400	Q2C_400	CRM_Idoc_Receive

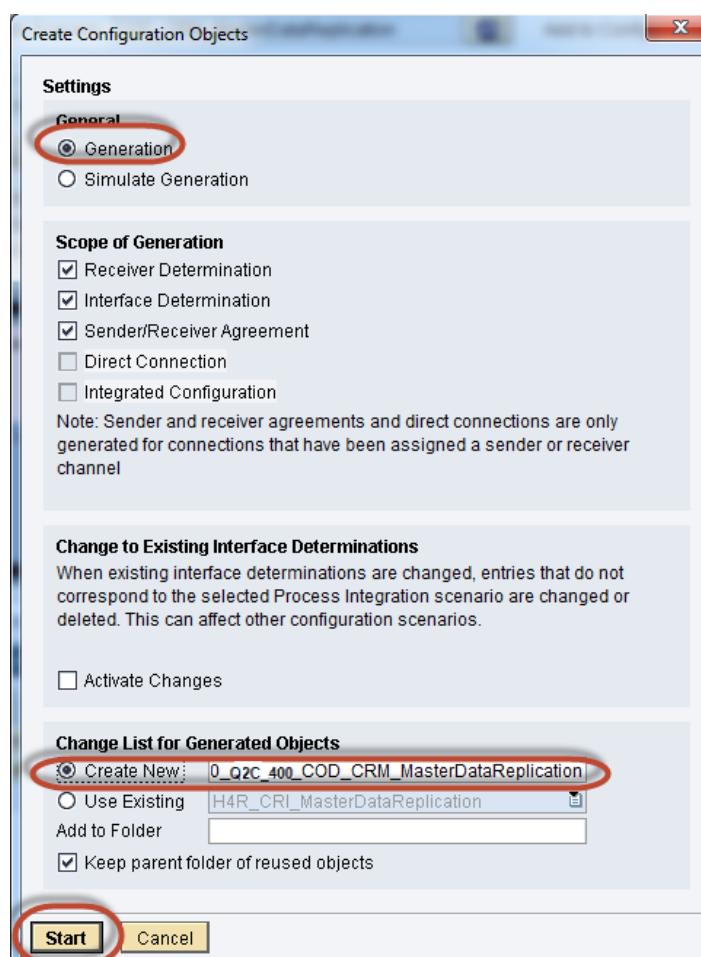
18. Repeat the previous steps for the other connections within the scenario.

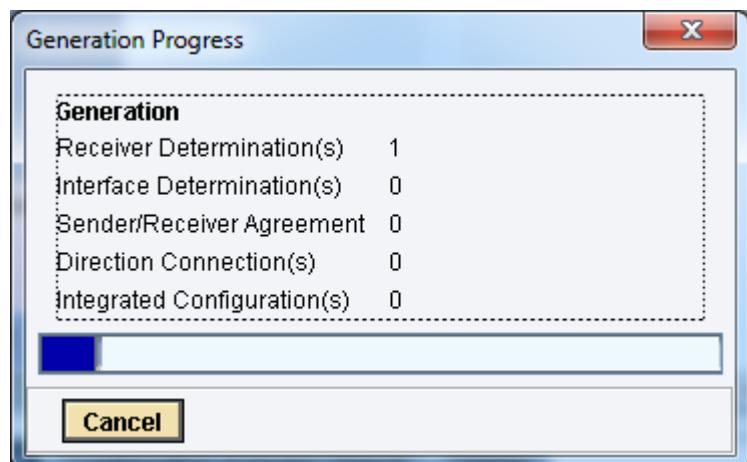
7.4.3 Generate PI Configuration Objects

- When all the communication channels were created and assigned to the connection within the scenario, now we create the configuration objects clicking in the configuration objects button

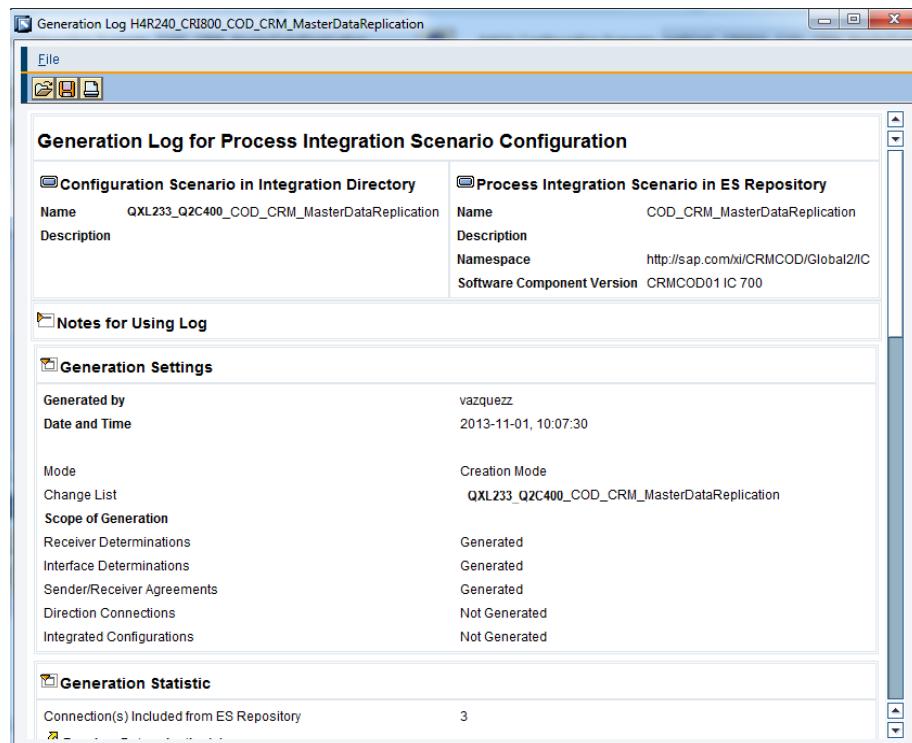


- In the Create Configuration Objects screen, select the option Generation, in the Change List, create a new list and click Start

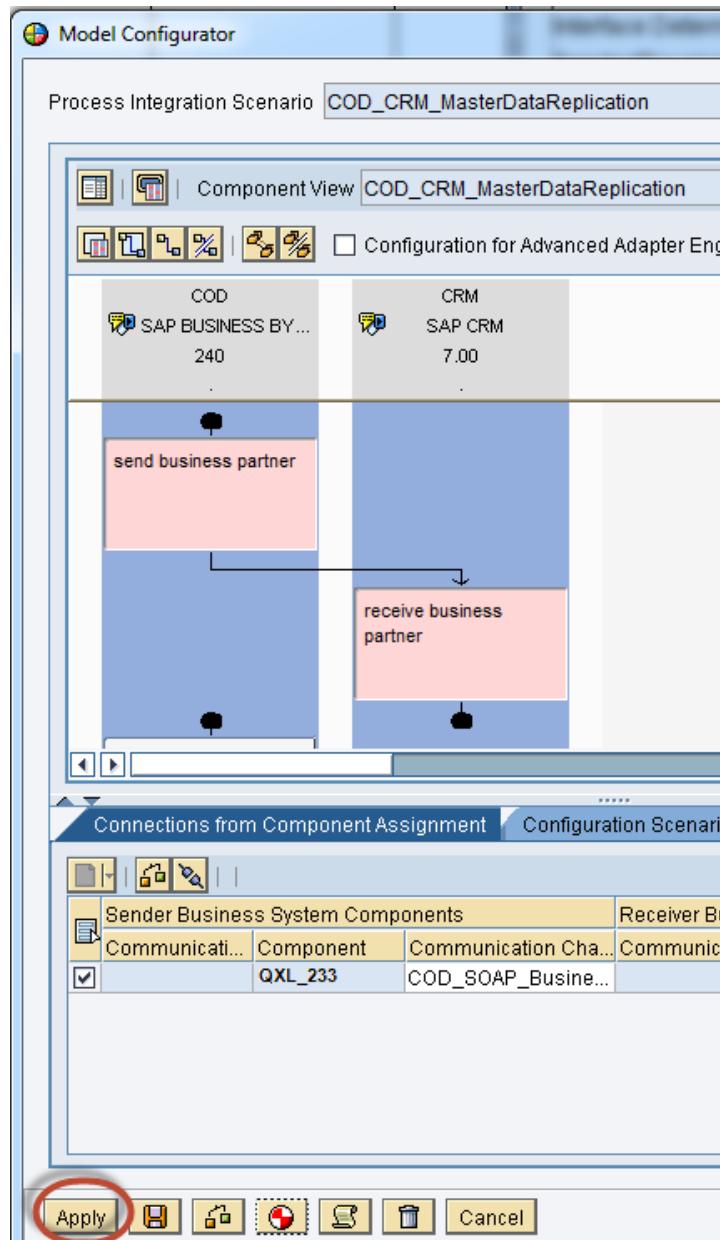




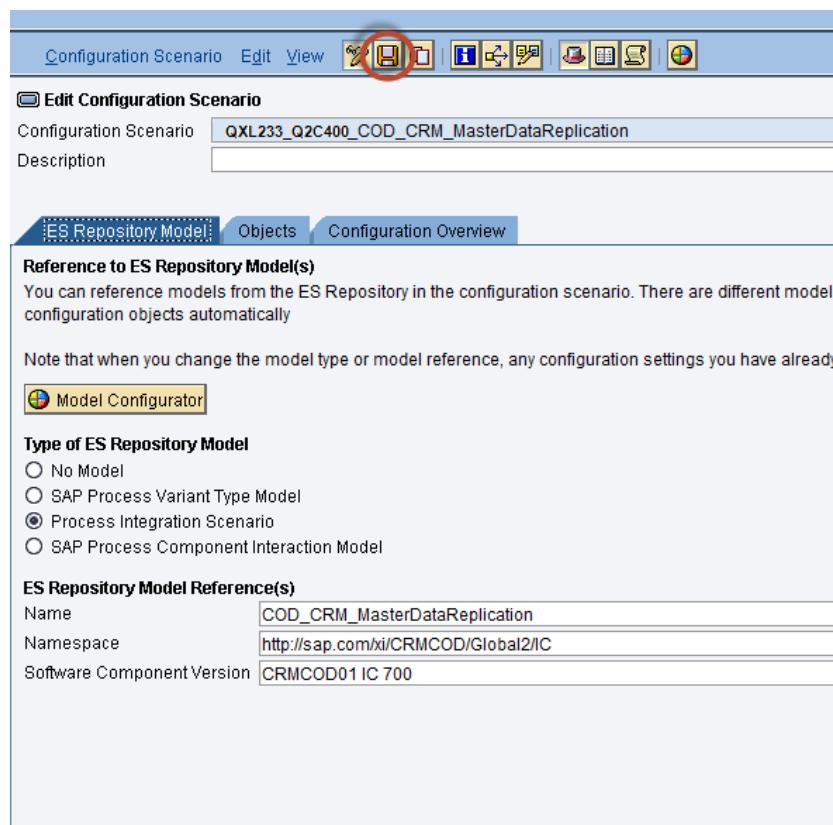
3. You can close the generation log screen



4. Click Apply

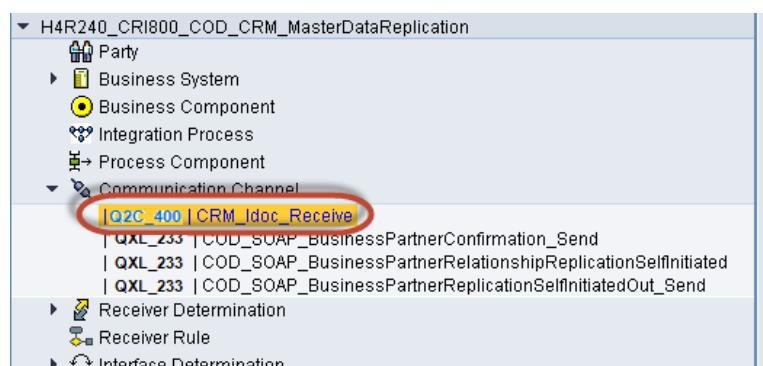


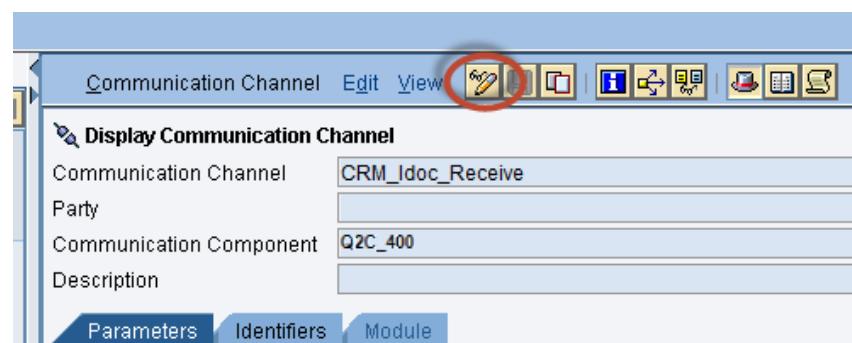
- Save the scenario. Repeat the previous steps for each of the scenarios, connections, and communication channels.



7.4.4 Configure CRM_IDoc_receive Communication Channel with Port and RFC Destination

- From the COD_CRM_MasterDataReplication scenario → Communication Channel open the communication channel CRM_Idoc_Receive



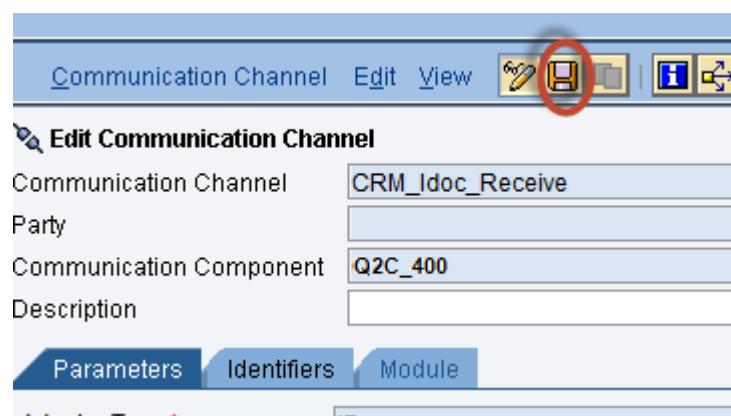


2. Adjust the business system and port

This screenshot shows the 'Edit Communication Channel' screen for 'CRM_Idoc_Receive'. It includes fields for Adapter Type (IDoc), Transport Protocol (IDoc), Message Protocol (IDoc), Adapter Engine (Integration Server), RFC Destination (Q2CLNT400), Segment Version, Interface Version (SAP Release 4.0 or Higher), Port (SAPQ2C), SAP Release (700), and several checkboxes for processing options. The 'RFC Destination' and 'Port' fields are circled in red.

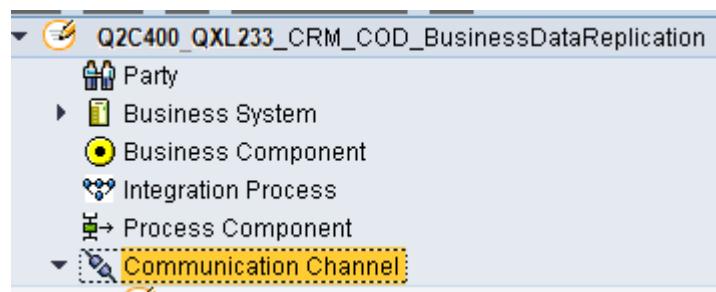
Parameter	Value
Adapter Type *	IDoc
Transport Protocol *	IDoc
Message Protocol *	IDoc
Adapter Engine *	Integration Server
RFC Destination *	Q2CLNT400
Segment Version	
Interface Version *	SAP Release 4.0 or Higher
Port *	SAPQ2C
SAP Release *	700
<input type="checkbox"/> Queue Processing	
<input checked="" type="checkbox"/> Apply Control Record Values from Payload	
<input checked="" type="checkbox"/> Take Sender from Payload	
<input checked="" type="checkbox"/> Take Receiver from Payload	
<input type="checkbox"/> Restore Original Parties for Acknowledgments	

3. Save changes clicking in the save button



7.5 Maintain Communication Channel for CRM Integration

1. On each of the scenarios, open all the communication channels where the receiver is the SAP Hybris Cloud for Customers.



2. Click the pencil to open the communication channel for edit.

3. Finally adjust all the connection parameters settings, according to the need.

Note: In case of JAVA only based PI stack, check the fields *Use Encoded headers* and *Use Query String* for the message to reach successful to the Cloud for Customer system.

Edit Communication Channel

Communication Channel: COD_SOAP_ActivityEmailConfirmationIn_Receive

Party:

Communication Component: QXL_233

Description:

Parameters **Identifiers** **Module**

Adapter Type *: SOAP http://sap.com/xi/XI/System

Sender Receiver

Transport Protocol *: HTTP

Message Protocol *: SOAP 1.1

Adapter Engine *: Central Adapter Engine

General **Advanced**

Connection Parameters

Note: For the Attachment Replication feature, ensure the sender and receiver communication channel has below settings.

Sender Communication Channel:

General **Advanced**

Inbound Security Checks

HTTP Security Level *: **HTTP**

Security Parameters

Select Security Profile

Conversion Parameters

Do Not Use SOAP Envelope

Keep Headers

Keep Attachments

Use Encoded Headers

Use Query String

Processing Parameters

Quality of Service *: **Exactly Once**

Receiver Communication Channel:

General **Advanced**

Connection Parameters

Target URL: **https://.../7/sap/bc/srt/xip/sap/attachmentfolderreplicationreq/379/attachmentfolderreplicationreq/binding?MessageId...**

Configure User Authentication

User: **.....**

Password: **.....**

Configure Certificate Authentication

Configure Proxy

Security Parameters

Select Security Profile

Conversion Parameters

Do Not Use SOAP Envelope

Keep Headers

Keep Attachments

Use Encoded Headers

Use Query String

SOAP Action

7.6 Optional - Correct the Software Component Version

In some cases depending of the SAP Process Integration release, the wrong software component version is used for the Interface Determination, which can cause errors during the activation of the objects. To correct this, perform the following:

1. Open Interface Determination

The screenshot shows the SAP Fiori interface for 'Edit Interface Determination'. It includes sections for 'Sender' and 'Receiver' with their respective communication parties and components. Under 'Receiver', there is a table for 'Receiver Interfaces' with columns for Condition, Operation Mapping, Name, and Namespace. A specific row in the table is highlighted.

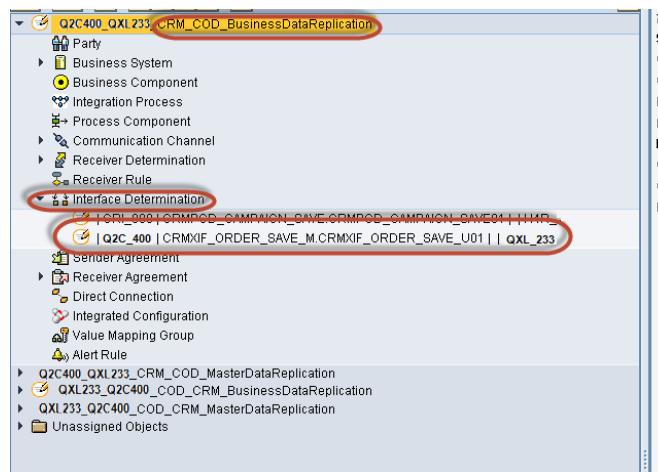
Receiver Interfaces *			
Condition	Operation Mapping	Name *	Namespace *
COD_CRM_TaskActivity_Replicate	CRMIF_ORDER_SAVE_M.CRMIF_	CRMIF_ORDER_SAVE_M.CRMIF_	urn:sap:com:document:sap:idoc.me:CRMIF_ORDER_SAVE_M.CRMIF_

2. Adjust the software component version of the sender interface

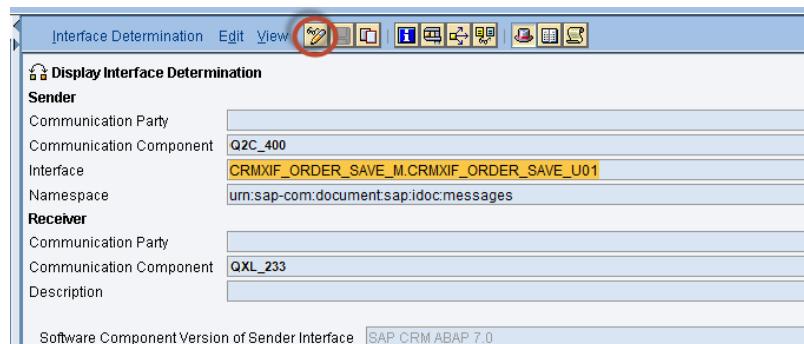
The screenshot shows the SAP Fiori interface for 'Edit Interface Determination' after adjustment. The 'Software Component Version of Sender Interface' field now contains 'CRM COD 01 IC 700'. In the 'Receiver Interfaces' table, the 'Name' column for the first row has been changed from 'CRMIF ORDER SAVE M.CRMIF...' to 'SAP BYD 2.40', which is circled in red.

Receiver Interfaces *			
Condition	Operation Mapping	Name *	Namespace *
COD_CRM_TaskActivity_Replicate	CRMIF_ORDER_SAVE_M.CRMIF_	SAP BYD 2.40	urn:sap:com:document:sap:idoc.me:CRMIF_ORDER_SAVE_M.CRMIF_

3. Within the scenario CRM_COD_BusinessDataReplication, open the interface determination for interface CRMXIF_ORDER_SAVE_M.CRMXIF_ORDER_SAVE_U01.



4. Click the Edit button.



5. Once the interface determination is opened for edit, conditions for each of the operation mapping can be added. The table below is a sample of the conditions required for each operation mapping but this can vary based on the specific needs and SAP CRM configuration.

Note: Adjust the condition based in "PROCESS_TYPE" which is the SAP CRM transaction type which can be checked from configuration table CRMV_PROC_TYPE on SAP CRM and "OBJECT_TYPE" which is used for Opportunity, Lead, and Service Request.

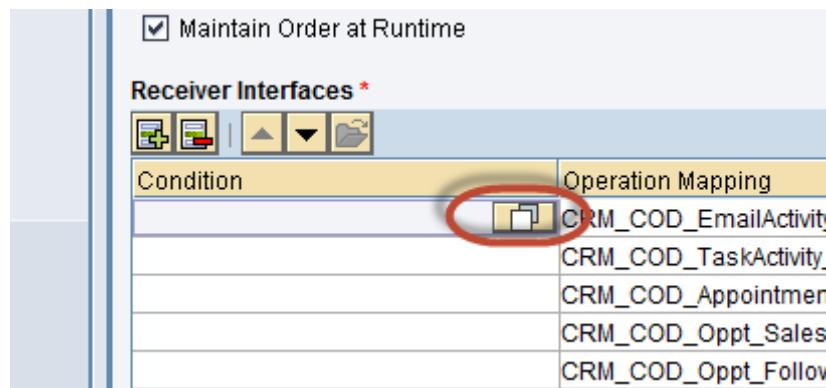
Software Component Version of Sender Interface	SAP CRM ABAP 7.0
<input checked="" type="checkbox"/> Maintain Order at Runtime	
Receiver Interfaces *	
Condition	Operation Mapping
	CRM_COD_EmailActivity_Replicate
	CRM_COD_TaskActivity_Confirmation
	CRM_COD_AppointmentActivity_Confirmation
	CRM_COD_Oppt_SalesOrder_Notify

CRM_COD_AppointmentActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0000)
CRM_COD_AppointmentActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0000)
CRM_COD_EmailActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0005) OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX03)
CRM_COD_EmailActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0005) OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX03)
CRM_COD_Lead_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000108)
CRM_COD_Lead_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000108)
CRM_COD_Opportunity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000111)
CRM_COD_Opportunity_Replicate_Bulk	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000111)
CRM_COD_Oppt_CustomerQuoteRequest_Notify	(/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = AG AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000115)
CRM_COD_Oppt_SalesOrder_Notify	(/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = TA AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000115)
CRM_COD_PhoneCallActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0002)

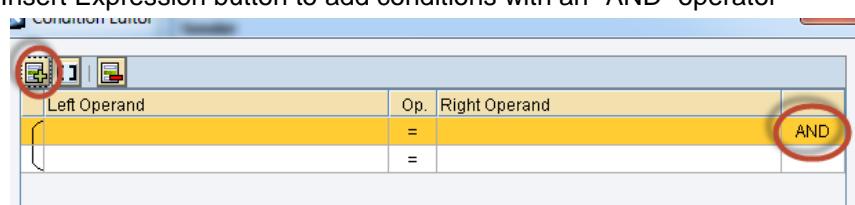


CRM_COD_PhoneCallActivity_Replication	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0002)
CRM_COD_Service_Request_Delegation_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000223)
CRM_COD_TaskActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX02)
CRM_COD_TaskActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX02)

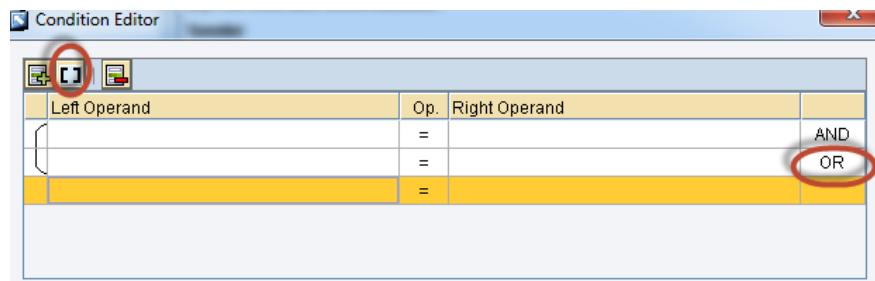
6. Click in the help input button to add the condition



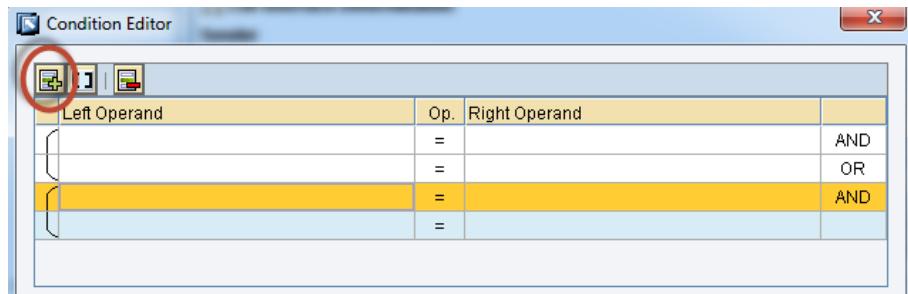
7. In the Condition Editor screen add as many conditions are required for the operation mapping, in this example we are adding the condition for CRM_COD_EmailActivity_Replicate and we will need to add the following conditions:
8. (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0005)
OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX03)
9. Click the Insert Expression button to add conditions with an “AND” operator



10. Click in the Insert Group button to add conditions with a “OR” operator



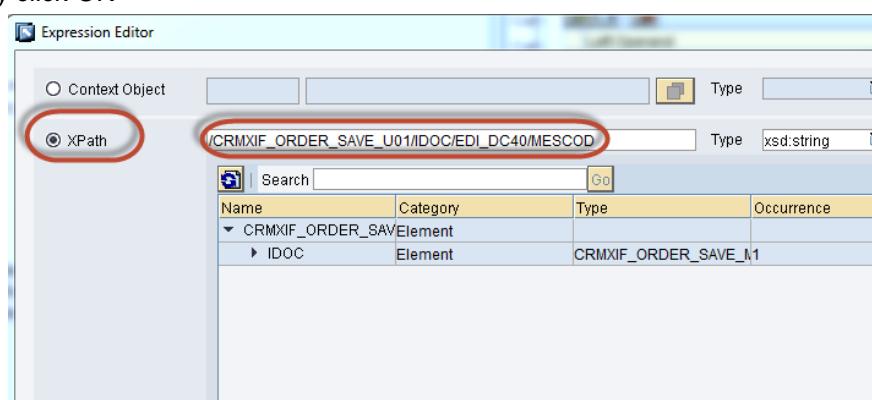
- In this case of CRM_COD_EmailActivity_Replicate we have 4 operands to allow two different process types or CRM transaction types, for that we need to add another expression



- Now we need to add the actual expressions and operands, for the Left Operand we have to click in the Input help button



- In the Expression Editor screen, select the option XPath and paste one of the expressions and finally click OK



Condition Editor		CRMXIF_ORDER_SAVE	
Left Operand	Op.	Right Operand	
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD	=		
	=		
	=		

14. Follow the previous step to add the other expressions

Condition Editor		
Left Operand	Op.	Right Operand
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD	=	
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE	=	
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD	=	
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE	=	

Preview

```
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD = AND
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = OR
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD = AND
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE =
```

15. Add the right operand typing or pasting the corresponding value for each of the expressions

Condition Editor		
Left Operand	Op.	Right Operand
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD	=	CNF
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE	=	0005
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD	=	CNF
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE	=	CX03

Preview

```
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD = CNF AND
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = 0005 OR
/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD = CNF AND
/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = CX03
```

Buttons: OK Cancel

16. The previous expression allows two PROCESS_TYPE (CRM Transaction types to be handled by this condition, 0005 and CX03).
17. If required adjust the operator to match the condition based in the table above for each of the expressions and then click OK.

The screenshot shows the SAP interface determination configuration screen. At the top, there is a table with columns 'Condition', 'Op.', and 'Right Operand'. A red circle highlights the 'Right Operand' column for the first row where the condition is 'DESS_TYPE = 0005'. Below the table is the 'Edit Interface Determination' dialog, which includes sections for Sender, Receiver, and Receiver Interfaces, along with a large table of operation mappings.

Condition	Op.	Right Operand
<code>DESS_TYPE = 0005</code>	<code>=</code>	<code>CNF</code>
<code>DESS_TYPE ≈ EX</code>	<code>≠</code>	<code>CNF</code>

Edit Interface Determination

Sender

- Communication Party: Q2C_400
- Interface: CRMXIF_ORDER_SAVE_M_CRMXIF_ORDER_SAVE_U01
- Namespace: urn:sap-com:document:sap:idoc.messages

Receiver

- Communication Party: QXL_233

Software Component Version of Sender Interface: SAP CRM ABAP 7.0

Maintain Order at Runtime

Receiver Interfaces *

Condition	Operation Mapping	Name *
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_EmailActivity_Replicate</code>	<input type="checkbox"/> EmailActivityReplicationin
	<code>CRM_COD_TaskActivity_Confirmation</code>	<input type="checkbox"/> TaskActivityConfirmationin
	<code>CRM_COD_AppointmentActivity_Confirmation</code>	<input type="checkbox"/> AppointmentActivityConfirm
	<code>CRM_COD_Opt_SalesOrder_Notify</code>	<input type="checkbox"/> UpdatingOpportunityWithSal
	<code>CRM_COD_Opt_FollowUp_Doc_Notify</code>	<input type="checkbox"/> UpdatingOpportunityWithFol
	<code>CRM_COD_Opportunity_Replicate</code>	<input type="checkbox"/> OpportunityReplicationInitiat
	<code>CRM_COD_Opt_CustomerQuoteRequest_Notify</code>	<input type="checkbox"/> UpdatingOpportunityWithCu
	<code>CRM_COD_Opportunity_Confirmation</code>	<input type="checkbox"/> OpportunityReplicationin
	<code>CRM_COD_Lead_Confirmation</code>	<input type="checkbox"/> LeadConfirmationin
	<code>CRM_COD_TaskActivity_Replicate</code>	<input type="checkbox"/> TaskActivityReplicationin

18. Follow the previous steps to define the conditions for the rest of the operation mappings.

The screenshot shows the SAP interface determination configuration screen. It displays a list of conditions and their corresponding operation mappings. The conditions are listed in the 'Condition' column, and the operation mappings are listed in the 'Operation Mapping' column. The 'Name' column contains the names of the mapped operations.

Condition	Operation Mapping	Name *
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_EmailActivity_Replicate</code>	<input type="checkbox"/> EmailActivityReplicationin
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_TaskActivity_Confirmation</code>	<input type="checkbox"/> TaskActivityConfirmationin
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_AppointmentActivity_Confirmation</code>	<input type="checkbox"/> AppointmentActivityConfirm
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = TA AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = TA</code>	<code>CRM_COD_Opt_SalesOrder_Notify</code>	<input type="checkbox"/> UpdatingOpportunityWithSal
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = AG AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = AG</code>	<code>CRM_COD_Opt_CustomerQuoteRequest_Notify</code>	<input type="checkbox"/> UpdatingOpportunityWithCu
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Opportunity_Replicate_Bulk</code>	<input type="checkbox"/> Op
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Opt_Opportunity_Replicate</code>	<input type="checkbox"/> Up
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Opportunity_Confirmation</code>	<input type="checkbox"/> Op
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Lead_Confirmation</code>	<input type="checkbox"/> Le
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_TaskActivity_Replicate</code>	<input type="checkbox"/> Ta
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_AppointmentActivity_Confirmation</code>	<input type="checkbox"/> Ph
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_PhoneCallActivity_Replication</code>	<input type="checkbox"/> Ph
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Lead_Replicate</code>	<input type="checkbox"/> Le
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_AppointmentActivity_Replicate</code>	<input type="checkbox"/> API
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_Service_Request_Delegation_Confirmation</code>	<input type="checkbox"/> Se
<code>/CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_ORDER_SAVE_U01/DOC/EDI_DC40/MESCOD = CNF</code>	<code>CRM_COD_EmailActivity_Confirmation</code>	<input type="checkbox"/> Err

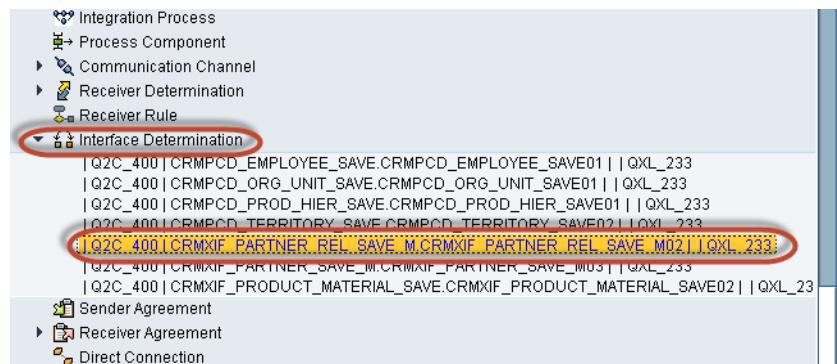
19. Save the Interface Determination and close it.

7.7 Adjust Routing Conditions for CRM Integration

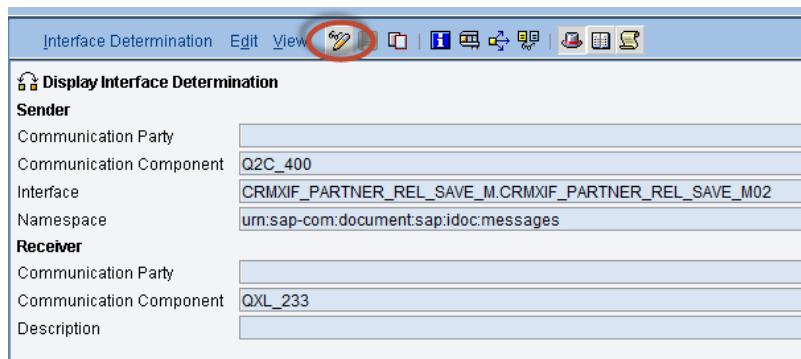
Interface

CRMXIF_PARTNER_REL_SAVE_M.CRMXIF_PARTNER_REL_SAVE_M02

1. Within the scenario CRM_COD_MasterDataReplication open the interface determination for interface CRMXIF_PARTNER_REL_SAVE_M.CRMXIF_PARTNER_REL_SAVE_M02.



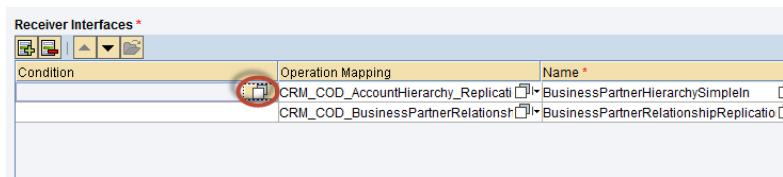
2. Click the pencil to open the communication channel for edit.



3. Once the interface determination was opened for edit, we can edit the condition for each of the operation mapping adding the condition. The table below is sample of the condition required for each operation mapping.

BusinessPartnerRelationshipRepli cationIn	/CRMXIF_PARTNER_REL_SAVE_M02/IDOC/E101XIF_PA RTNER_REL_COMPLEX/E101MXIF_PARTNER_REL_HEAD ER/E101CRMXIF_PARTNER_REL_KEYS/RELAT_CATEGOR Y ≠ BUR020
BusinessPartnerHierarchySimpleIn	/CRMXIF_PARTNER_REL_SAVE_M02/IDOC/E101XIF_PA RTNER_REL_COMPLEX/E101MXIF_PARTNER_REL_HEAD ER/E101CRMXIF_PARTNER_REL_KEYS/RELAT_CATEGOR Y = BUR020

4. Click in the help input button to add the condition.

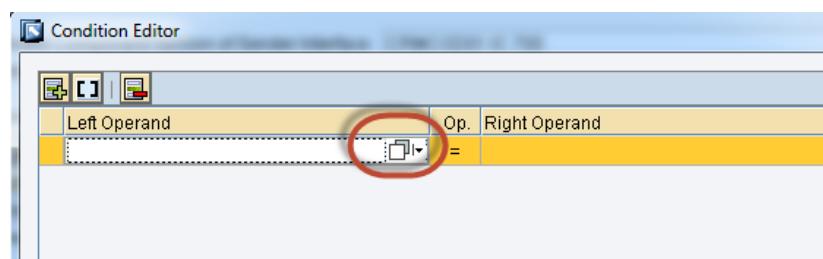


5. In the Condition Editor screen add as many condition are required for the operation mapping, in this example we are adding the condition for CRM_COD_AccountHierarchy_Replication and we need to add the following conditions:

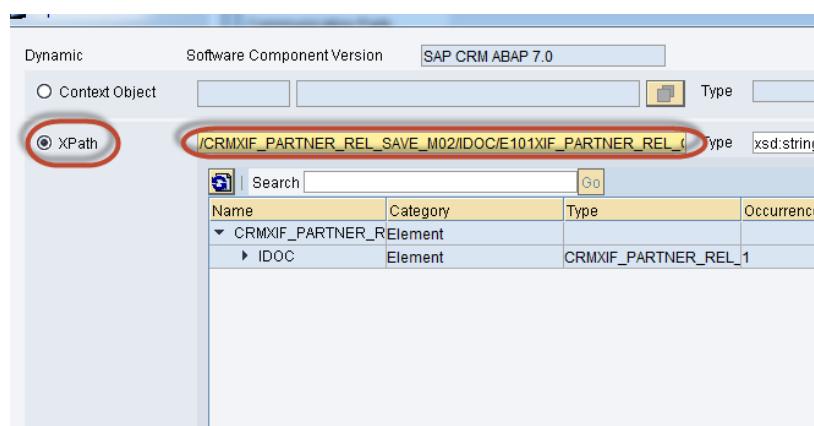
```
/CRMXIF_PARTNER_REL_SAVE_M02/IDOC/E101XIF_PARTNER_REL_COMPLEX/E101MXI
F_PARTNER_REL_HEADER/E101CRMXIF_PARTNER_REL_KEYS/RELAT_CATEGORY=
BUR020
```



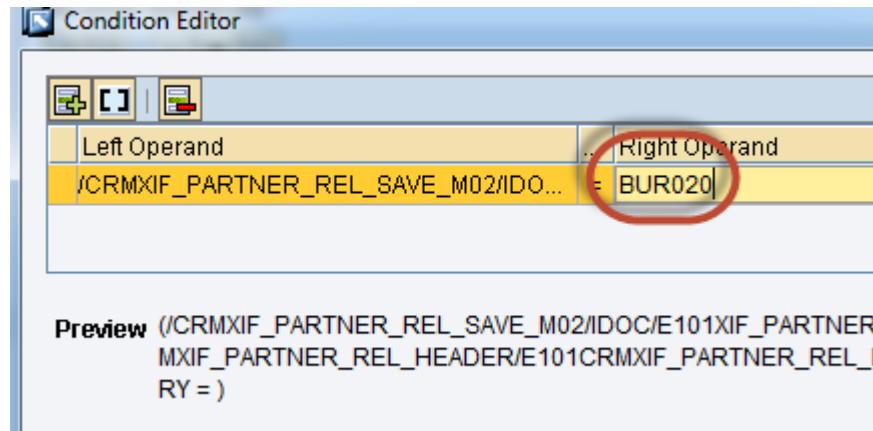
6. In the case of CRM_COD_AccountHierarchy_Replication we have 1 operand. Add the actual expressions and operands, for the Left Operand we have to click in the Input help button.



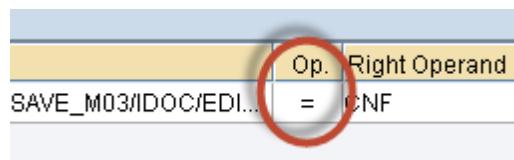
7. In the Expression Editor screen, select the option XPath and paste one of the expressions and click OK.



8. Add the right operand typing or pasting the corresponding value for each of the expressions.



- If required adjust the operator to match the condition based in the table above for each of the expressions and then click OK

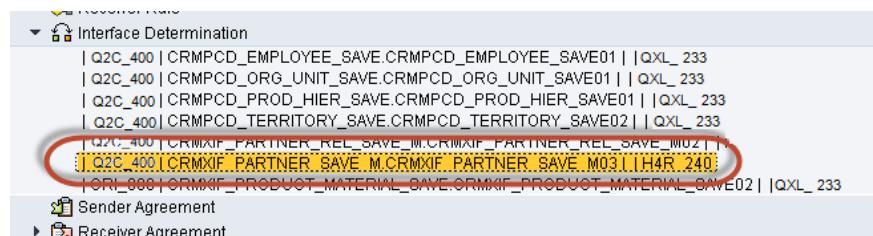


- Follow the previous steps to define the conditions for the rest of the operation mappings.

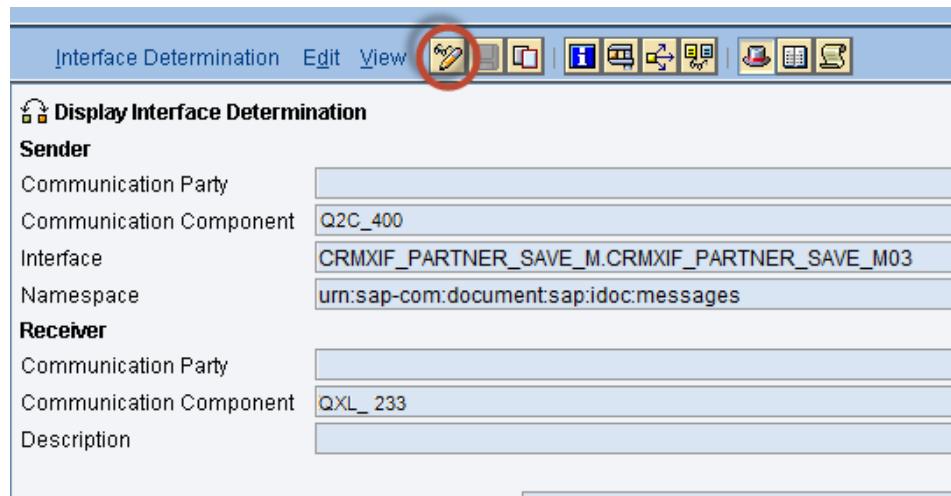
For a selected source and target system, you will find a list of routing conditions, the corresponding operation mapping and receiver interface in the *INTEGRATION: Integration Flow* spreadsheet on [SAP Service Marketplace](#).

Interface CRMXIF_PARTNER_SAVE_M.CRMXIF_PARTNER_SAVE_M0 3

- Within the scenario CRM_COD_MasterDataReplication open the interface determination for interface CRMXIF_PARTNER_SAVE_M.CRMXIF_PARTNER_SAVE_M03



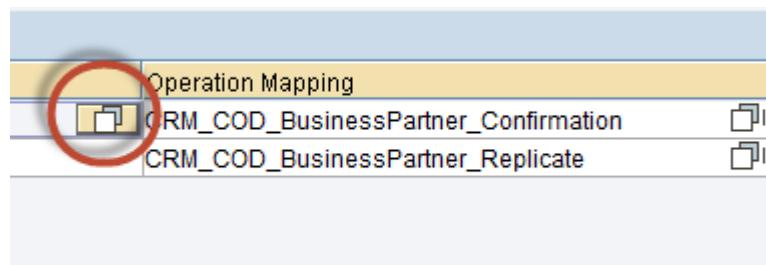
- Click in the pencil to open the communication channel for edit



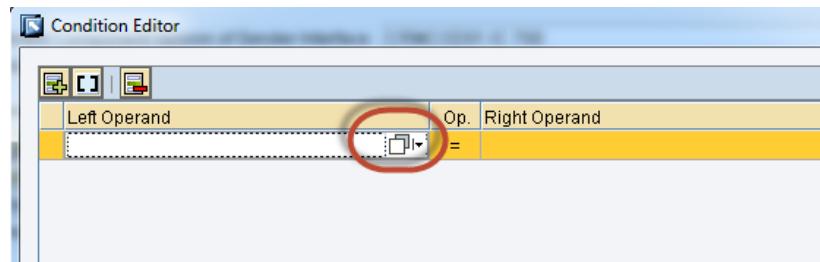
- Once the interface determination was opened for edit, we can edit the condition for each of the operation mapping adding the condition. The table below is sample of the condition required for each operation mapping.

BusinessPartnerReplicationIn	(/CRMXIF_PARTNER_SAVE_M03/IDOC/EDI_DC40/MESCOD ≠ CNF AND /CRMXIF_PARTNER_SAVE_M03/IDOC/E101CRMXI F_PARTNE R_COMPLEX/E101BUS_EI_CENTRAL_DATA/E101 BUS_EI_ROL ES/E101BUS_EI_BUPA_ROLES/DATA_KEY ≠ BUP003)
BusinessPartnerReplicationConfirmationIn	(/CRMXIF_PARTNER_SAVE_M03/IDOC/EDI_DC40/MESCOD = CNF AND /CRMXIF_PARTNER_SAVE_M03/IDOC/E101CRMXI F_PARTNE R_COMPLEX/E101BUS_EI_CENTRAL_DATA/E101 BUS_EI_ROL ES/E101BUS_EI_BUPA_ROLES/DATA_KEY ≠ BUP003)

- Click the help input button to add the condition

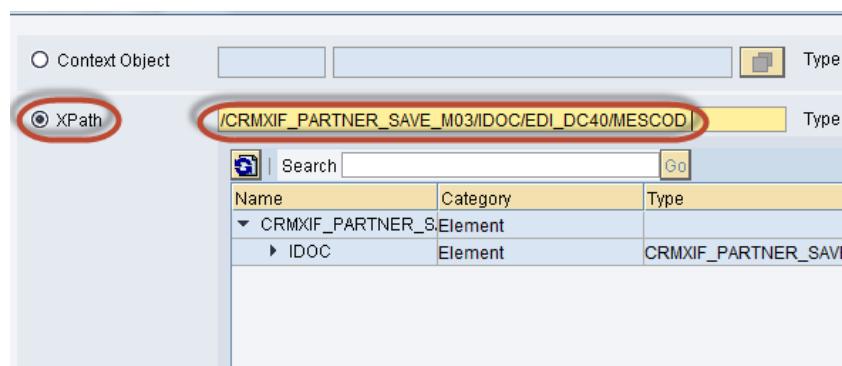


- In this case of CRM_COD_BusinessPartner_Confirmation we have 2 operand, now we need to add the actual expressions and operands, for the Left Operand we have to click in the Input help button

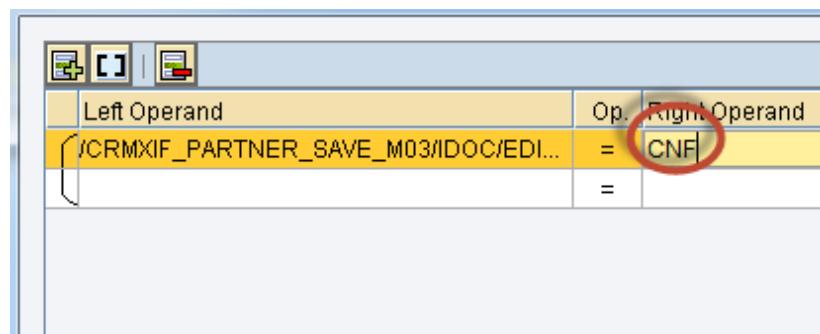


```
/CRMXIF_PARTNER_SAVE_M03/IDOC/EDI_DC40/MESCOD = CNF AND
/CRMXIF_PARTNER_SAVE_M03/IDOC/E101CRMXIF_PARTNER_COMPLEX/E101BUS_EI
_CENTRAL_DATA/E101BUS_EI_ROLES/E10 1BUS_EI_BUPA_ROLES/DATA_KEY ≠
BUP003
```

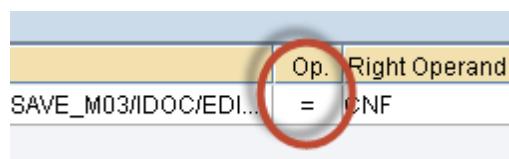
- In the Expression Editor screen, select the option XPath and paste one of the expressions and finally click OK



- Add the right operand typing or pasting the corresponding value for each of the expressions



- If required adjust the operator to match the condition based in the table above for each of the expressions and then click OK



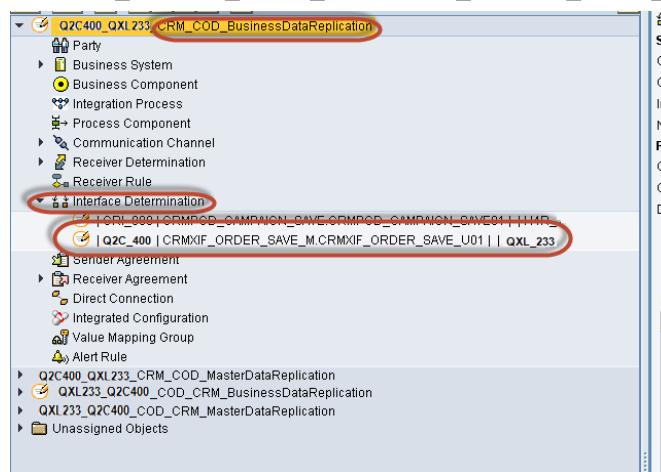
- Follow the previous steps to define the conditions for the rest of the operation mappings.

10. Save the Interface Determination and close it

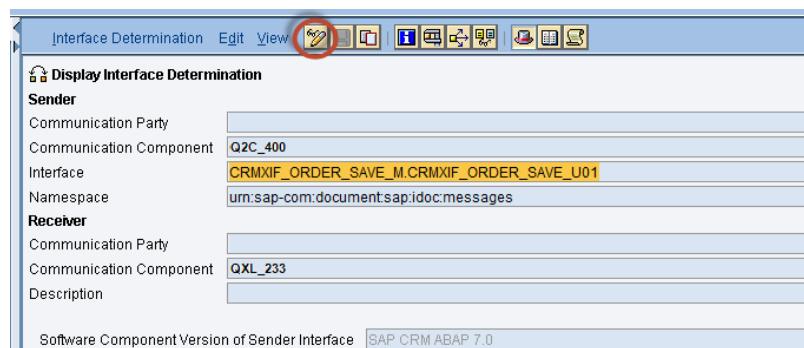
For a selected source and target system, you will find a list of routing conditions, the corresponding operation mapping and receiver interface in the *INTEGRATION: Integration Flow* spreadsheet on [SAP Service Marketplace](#).

Interface CRMXIF_ORDER_SAVE_M.CRMXIF_ORDER_SAVE_U01

- Within the scenario CRM_COD_BusinessDataReplication, open the interface determination for interface CRMXIF_ORDER_SAVE_M.CRMXIF_ORDER_SAVE_U01.

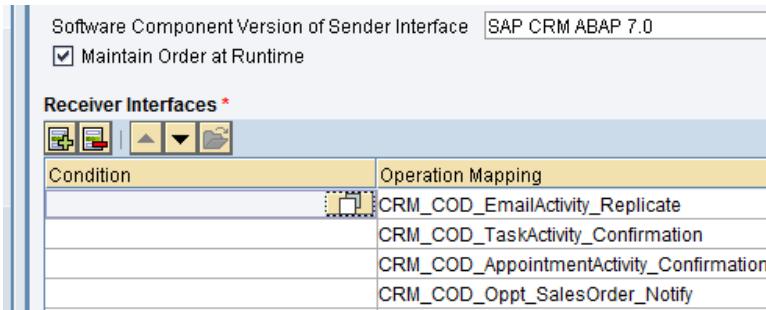


- Click the Edit button.



- Once the interface determination is opened for edit, conditions for each of the operation mapping can be added. The table below is a sample of the conditions required for each operation mapping but this can vary based on the specific needs and SAP CRM configuration.

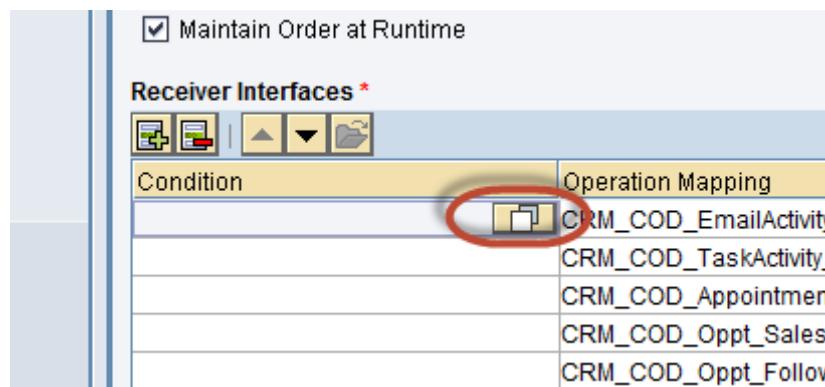
Note: Adjust the condition based in "PROCESS_TYPE" which is the SAP CRM transaction type which can be checked from configuration table CRMV_PROC_TYPE on SAP CRM and "OBJECT_TYPE" which, is used for Opportunity, Lead, and Service Request.



CRM_COD_AppointmentActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0000)
CRM_COD_AppointmentActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0000)
CRM_COD_EmailActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0005) OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX03)
CRM_COD_EmailActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = 0005) OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/PROCESS_TYPE = CX03)
CRM_COD_Lead_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000108)
CRM_COD_Lead_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000108)
CRM_COD_Opportunity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000111)
CRM_COD_Opportunity_Replicate_Bulk	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BU STRANS/OBJECT_TYPE = BUS2000111)

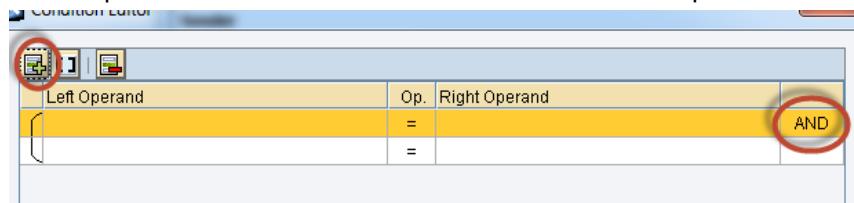
CRM_COD_Oppt_CustomerQuoteRequest_Notify	(/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = AG AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/OBJECT_TYPE = BUS2000115)
CRM_COD_Oppt_SalesOrder_Notify	(/CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = TA AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/OBJECT_TYPE = BUS2000115)
CRM_COD_PhoneCallActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = 0002)
CRM_COD_PhoneCallActivity_Replication	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = 0002)
CRM_COD_Service_Request_Delegation_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/OBJECT_TYPE = BUS2000223)
CRM_COD_TaskActivity_Confirmation	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD = CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = CX02)
CRM_COD_TaskActivity_Replicate	(/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MES COD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = CX02)

4. Click in the help input button to add the condition

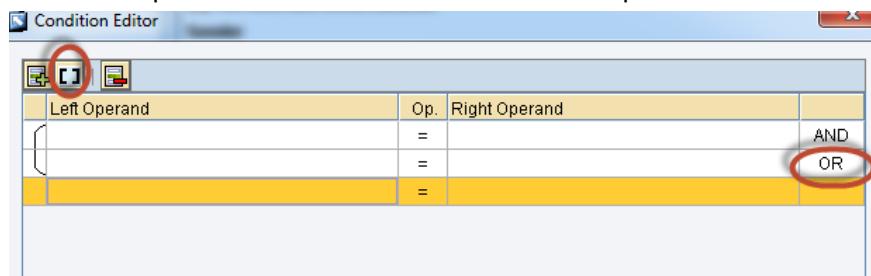


5. In the Condition Editor screen add as many conditions are required for the operation mapping, in this example we are adding the condition for CRM_COD_EmailActivity_Replicate and we will need to add the following conditions:
6. (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = 0005)
OR (/CRMXIF_ORDER_SAVE_U01/IDOC/EDI_DC40/MESCOD ≠ CNF AND /CRMXIF_ORDER_SAVE_U01/IDOC/E101CRMXIF_BUSTRANS/PROCESS_TYPE = CX03)

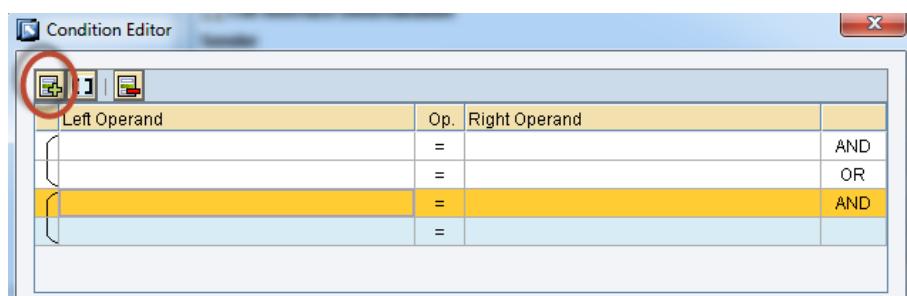
7. Click the Insert Expression button to add conditions with an “AND” operator



8. Click in the Insert Group button to add conditions with a “OR” operator



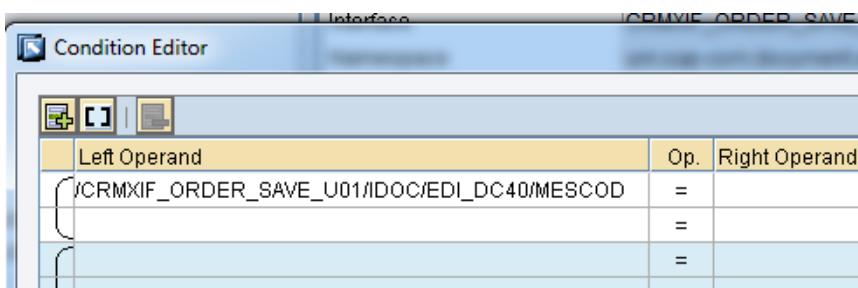
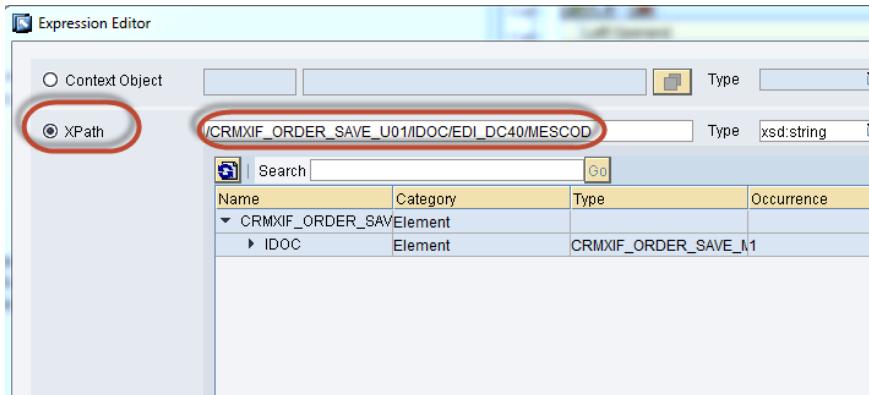
9. In this the case of CRM_COD_EmailActivity_Replicate we have 4 operands to allow two different process types or CRM transaction types, for that we need to add another expression



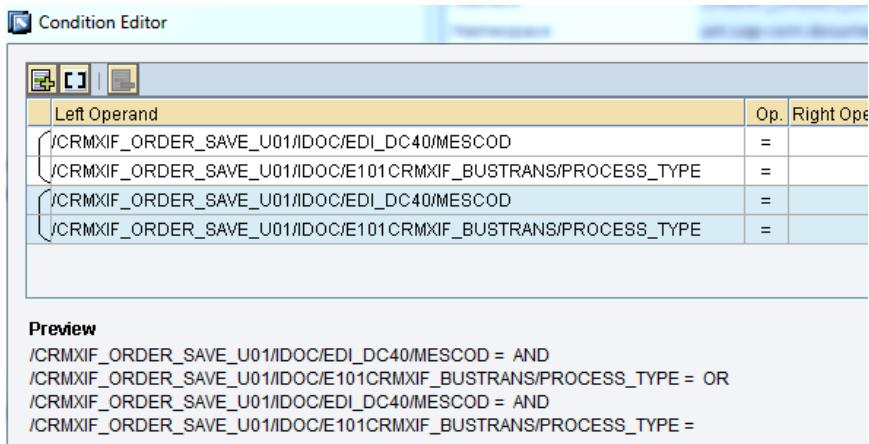
10. Now we need to add the actual expressions and operands, for the Left Operand we have to click in the Input help button



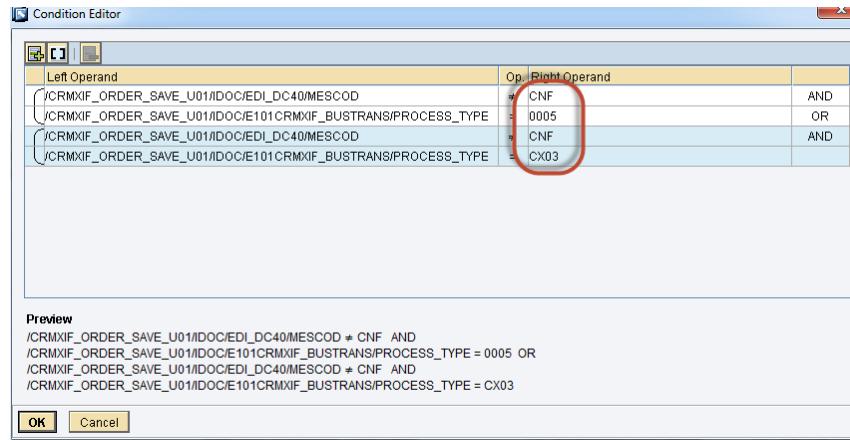
11. In the Expression Editor screen, select the option XPath and paste one of the expressions and finally click OK



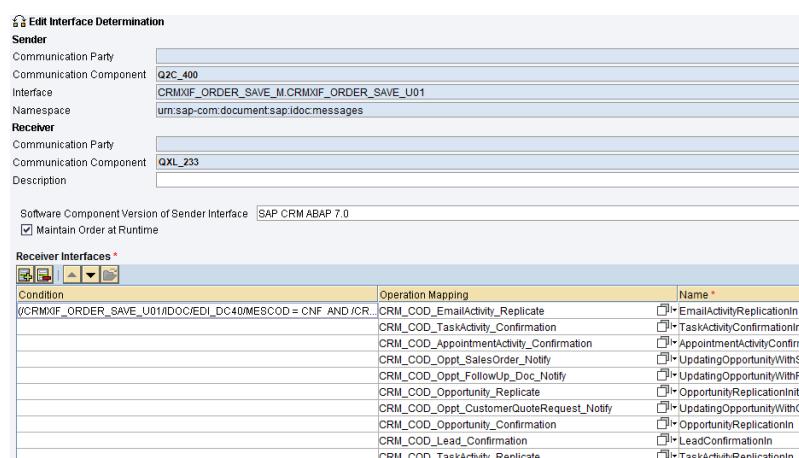
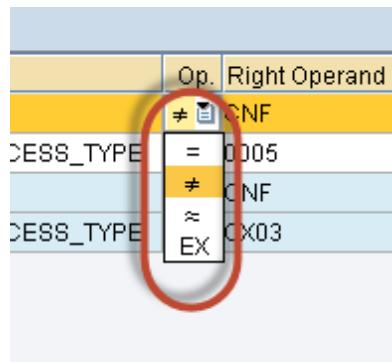
12. Follow the previous step to add the other expressions



13. Add the right operand typing or pasting the corresponding value for each of the expressions



14. The previous expression allows two PROCESS_TYPE (CRM Transaction types to be handled by this condition, 0005 and CX03).
15. If required adjust the operator to match the condition based in the table above for each of the expressions and then click OK.



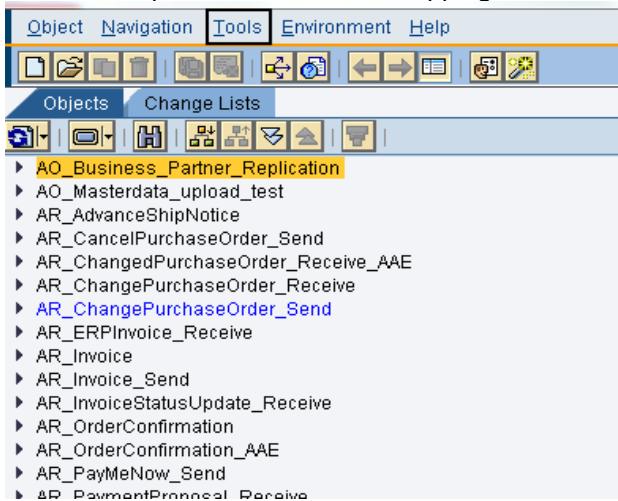
16. Follow the previous steps to define the conditions for the rest of the operation mappings.

Condition	Operation Mapping	Na
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_EmailActivity_Replicate	Err
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_TaskActivity_Confirmation	Ta
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_AppointmentActivity_Confirmation	API
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Opt_SalesOrder_Notify	Up
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Opportunity_Replicate_Bulk	Op
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = AG AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Opt_CustomerQuoteRequest_Notify	Up
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Opportunity_Confirmation	Op
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Lead_Confirmation	Le
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_TaskActivity_Replicate	Ta
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_PhoneCallActivity_Confirmation	Ph
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_PhoneCallActivity_Replication	Ph
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Lead_Replicate	Le
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_AppointmentActivity_Replicate	API
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_Service_Request_Delegation_Confirmation	Se
(CRMXIF_ORDER_SAVE_U01/DOC/EDL_DC40/MESCOD = CNF AND CRMXIF_ORDER_SAVE_U01/DOC/...	CRM_COD_EmailActivity_Confirmation	Err

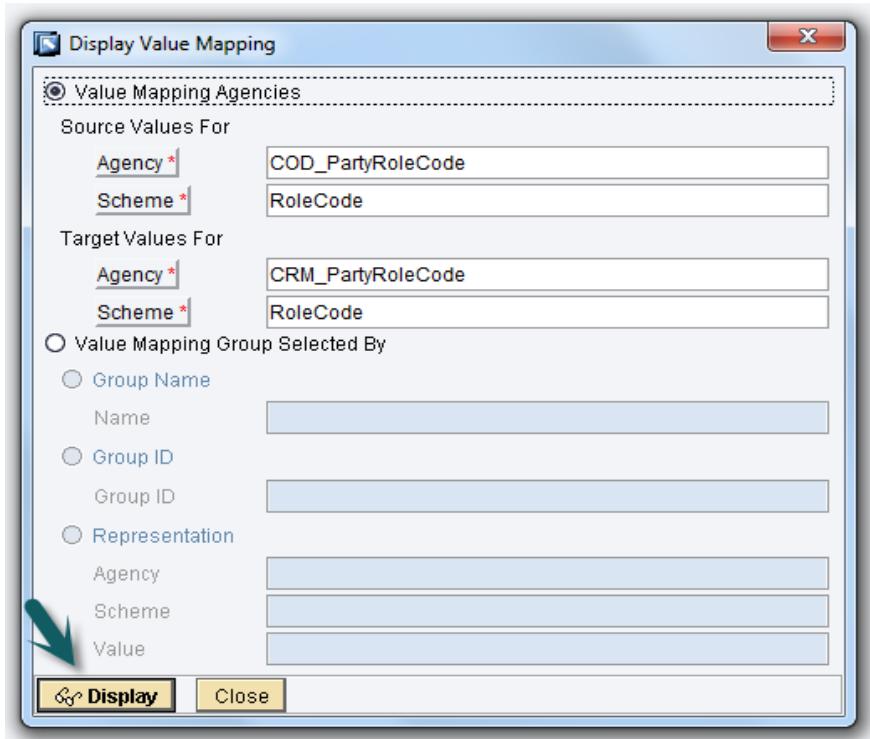
17. Save the Interface Determination and close it.

7.8 Maintain Value Mapping between Cloud and CRM PI

1. Go to menu path Tools → Value Mapping



2. Enter the Source Agency, Source Schema, Target Agency, and Target Schema and click the Display button to open the Value Mapping maintenance screen. Below screenshot is an example showing mapping for COD Party Role Code and CRM Party Role Code.



- Switch to Edit Mode to maintain the Value Mapping. The values in COD_PartyRoleCode represent concatenations of the SAP CRM Business Object Types and party role codes. The values in the CRM_PartyRoleCode is concatenation of the SAP CRM Business object types and partner functions as described in the Integration Guide.

Edit Value Mapping Agencies			
Agency *	COD_PartyRoleCode <th>Agency *</th> <td>CRM_PartyRoleCode</td>	Agency *	CRM_PartyRoleCode
Scheme *	RoleCode	Scheme *	RoleCode
Value For COD_PartyRoleCode	Value For CRM_PartyRoleCode	Group Name *	
BUS2000111 30	BUS2000111 00000023	RoleCode	
BUS2000111 46	BUS2000111 00000012	RoleCode	
BUS2000111 29	BUS2000111 00000024	RoleCode	
BUS2000108 39	BUS2000108 00000022	RoleCode	
BUS2000111 31	BUS2000111 00000021	RoleCode	
BUS2000111 39	BUS2000111 00000022	RoleCode	

- Save the Value Mapping.

Edit Value Mapping Agencies			
Agency *	COD_PartyRoleCode <th>Agency *</th> <td>CRM_PartyRoleCode</td>	Agency *	CRM_PartyRoleCode
Scheme *	RoleCode	Scheme *	RoleCode
Value For COD_PartyRoleCode	Value For CRM_PartyRoleCode	Group Name *	
BUS2000111 30	BUS2000111 00000023	RoleCode	
BUS2000111 46	BUS2000111 00000012	RoleCode	
BUS2000111 29	BUS2000111 00000024	RoleCode	
BUS2000108 39	BUS2000108 00000022	RoleCode	
BUS2000111 31	BUS2000111 00000021	RoleCode	
BUS2000111 39	BUS2000111 00000022	RoleCode	

5. Enter the Source Agency, Source Schema, Target Agency, and Target Schema and click the Display button to open the Value Mapping maintenance screen. Below screenshot is an example showing mapping for COD Hierarchy ID and CRM Logical system for Product replication.

The screenshot shows the 'Display Value Mapping' dialog box. It has two tabs: 'Value Mapping Agencies' (selected) and 'Value Mapping Group Selected By'. Under 'Value Mapping Agencies', there are sections for 'Source Values For' and 'Target Values For'. In 'Source Values For', 'Agency *' is CRM and 'Scheme *' is SNDPRN. In 'Target Values For', 'Agency *' is COD and 'Scheme *' is HIERARCHYID. Under 'Value Mapping Group Selected By', there are three radio button options: 'Group Name', 'Group ID', and 'Representation'. Each option has a corresponding input field: 'Name', 'Group ID', and 'Agency', 'Scheme', 'Value' respectively. At the bottom are 'Display' and 'Close' buttons.

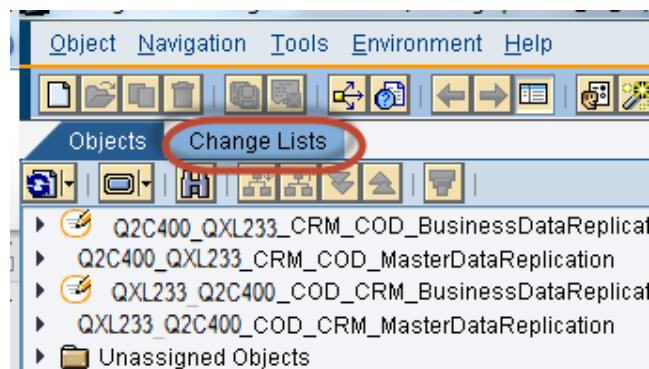
6. Switch to Edit Mode to maintain the Value Mapping. The values in CRM SNDPRN represent the logical system of the CRM system. The values in the COD HIERARCHYID represents the Hierarchy id in CRM system which is assigned to Sales application and replicated to Cloud for Customer system.

The screenshot shows the 'Value Mapping' maintenance screen in edit mode. The top menu bar shows 'Value Mapping', 'Edit', and 'View'. The toolbar includes icons for New, Open, Save, and Delete. The main area displays the 'Display Value Mapping Agencies' configuration. It lists source values (CRM, SNDPRN) and target values (COD, HIERARCHYID). Below this, a table maps specific values: R3CCLNT379 is mapped to R3PRODHIER, and HIERARCHYID is mapped to HIERARCHYID. The 'Edit' tab is selected at the top.

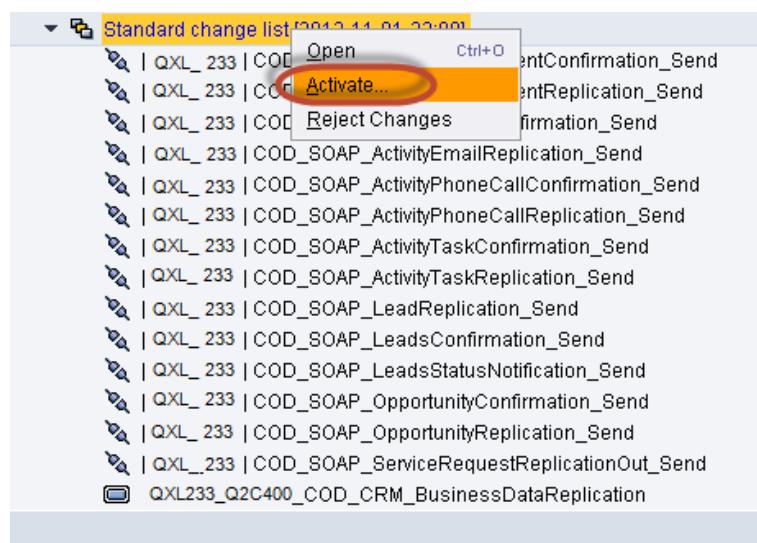
7. Save the Value Mapping.
8. Repeat the steps for all the agencies and schemes described in the Integration guide.

7.9 Activate Changes in Change List

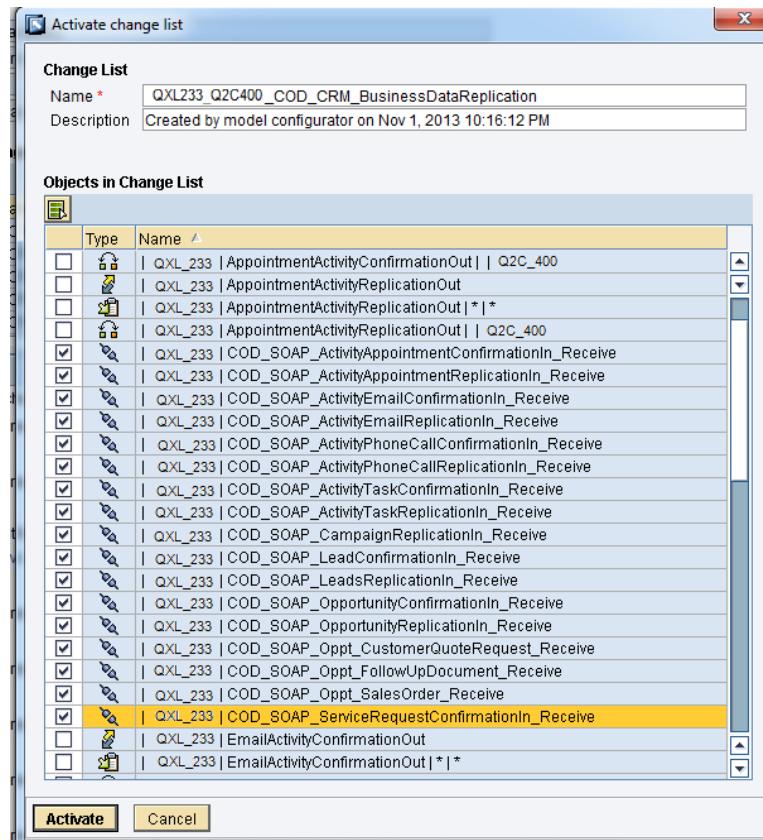
1. Click the Change Lists tab on the Integration Builder



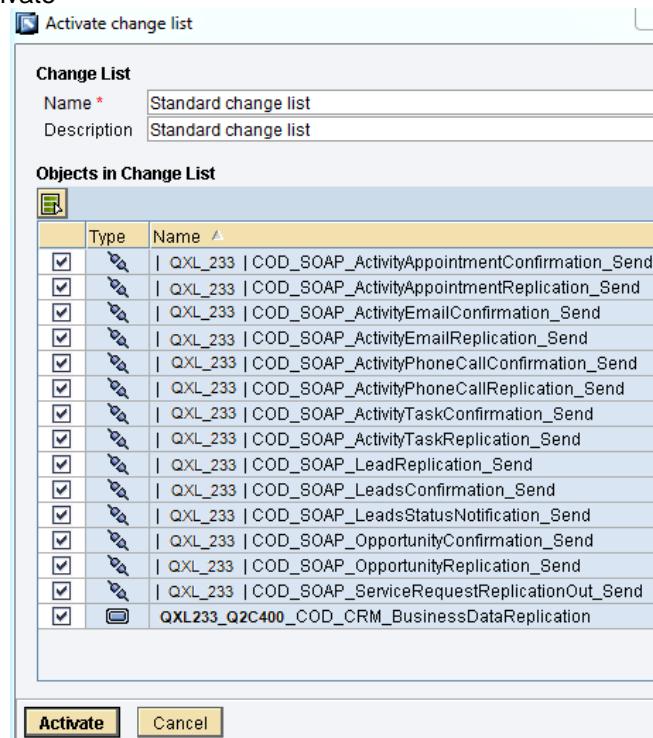
2. Expand the change list for your user and activate first all the communication channels, they should be in the Standard change List, by using the context menu for it, click Activate



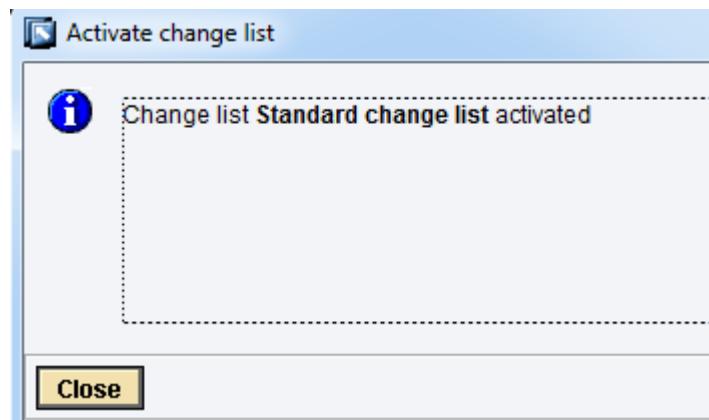
3. Some of the communication channels are directly within the other specific change list, activate first those communication channels and the rest of the objects



4. Click Activate



5. Click Close



6. Activate the rest of the activation list for each of the scenarios following the steps above.

The screenshot shows a SAP Fiori list view with a context menu open over a list item. The menu items are 'Open' (Ctrl+O), 'Activate...', and 'Reject Changes'. The 'Activate...' option is highlighted with a red circle. The list items include various integration scenarios like 'CRMPCD_CAMPAIGN' and 'CRMIF_ORDER_SAVE'.

Path	Action	Timestamp
Q2C_400 CRMPCD_CAMPAIGN	Open	Ctrl+O
Q2C_400 CRMXIF_ORDER_SAVE	Activate...	1-01-22:40
Q2C_400 CRMPCD_CAMPAIGN	Reject Changes	GN_SAVE01
Q2C_400 CRMXIF_ORDER_SAVE_M.CRMXIF_ORDER_SAVE_U01 QXL_233		VE_U01
Q2C_400 CRMXIF_PARTNER_SAVE_M.CRMXIF_PARTNER_SAVE_M03 QXL_233		GN_SAVE01 QXL_233
QXL_233 COD_SOAP_AccountHierarchyReplicationIn_Receive		
QXL_233 COD_SOAP_BusinessPartnerConfirmationIn_Receive		
QXL_233 COD_SOAP_BusinessPartnerRelationshipReplicationIn_Receive		
QXL_233 COD_SOAP_BusinessPartnerReplicationIn_Receive		
QXL_233 COD_SOAP_EmployeeReplicationIn_Receive		
QXL_233 COD_SOAP_MaterialReplicationIn_Receive		
QXL_233 COD_SOAP_OrganisationUnitReplicationIn_Receive		
QXL_233 COD_SOAP_ProductCategoryHierarchyReplicationIn_Receive		
QXL_233 COD_SOAP_TerritoryReplicationIn_Receive		
Q2C_400 QXL_233 AppointmentActivityConfirmationIn		
Q2C_400 QXL_233 AppointmentActivityReplicationIn		
Q2C_400 QXL_233 CampaignReplicationInitiatedByExternallyIn		
Q2C_400 QXL_233 EmailActivityConfirmationIn		
Q2C_400 QXL_233 EmailActivityReplicationIn		

8 Data Load Phase: Perform CRM Initial Data Load

Refer to the *INTEGRATION: CRM Initial Load Guide* on [SAP Service Marketplace](#) to load the data from SAP CRM to SAP Hybris Cloud for Customer System.

9 Monitor Phase: Monitor Message Flow across Systems

Refer to the '[Monitoring Guide](#)' to monitor data flow from SAP CRM to SAP Hybris Cloud for Customer System and vice versa.

10 Appendix

10.1 Cloud Solution: Configuration

10.1.1 Configuration of Communication Arrangements

- Under the tab Administrator, click in Communication Arrangements.



- Create the following communication arrangements as needed.

Note: Depending on the scenario you can limit the scope of the communication arrangements that must be created.

- Business Partner Replication from External System (inbound)
- Business Partner Replication to External System (outbound)
- Product Replication from External System (inbound)
- Opportunity Replication to External System (outbound)
- Opportunity Replication from External System (inbound)
- Opportunity Update from External Sales Documents (inbound)
- Lead Replication from SAP Business Suite CRM System (inbound)
- Service Request Delegation to External System (outbound)
- Campaign Replication from External System (inbound)
- Product Categories Replication from External System (inbound)
- Account Hierarchy Simple Replication from External System (inbound)
- Employee Replication from External System (inbound)
- Activity Replication to External System (Outbound)
- Activity Replication from External System (Inbound)
- Organization Unit Replication from External System (Inbound)
- Sales Territory Replication from External System (Inbound)

- For example, to create the CA for Product Replication, Click New.

Communication Arrangements

You can view, create, and edit communication arrangements between your company and customers or partners.

Show All Communication Arrangements and Find Go

Edit **New** | **Delete** | **Check Completeness** **Edit Credentials** **Reactivate**

Communication Scenario	Communication Type
360 Overview – Account	Application Integration
Access documents via WebDAV	
Analytics Integration	Application Integration

Details: 360 Overview – Account

3. Select the CA to be created, and click Next.

NEW COMMUNICATION ARRANGEMENT:

1 Select Scenario 2 Define Business Data 3 Define Technical Data 4 Review 5 Confirmation

◀ Previous Next ▶ Finish Close | Preview | Check Completeness Save as Draft

Functionality not included with regular SAP OnDemand solution license! Any scoping and use of this functional party solution provider for this particular scoping option. Please contact SAP for further information on SAP app

Communication Scenarios

Communication Scenario	Communication Type
Opportunity with Customer Order Processing in ERP	Application Integration
Opportunity with Print Preview of Sales Documents in ERP	Application Integration
Opportunity with Sales Order Pricing in ERP	Application Integration
Opportunity with Sales Order Processing in ERP	Application Integration
Product Replication from External System	Application Integration
Product Replication with Sales Data from External System	Application Integration
Query Accounts	Application Integration
Query Appointment Activities	Application Integration

4. Select the communication system and the code list mapping, and click Next.

◀ Previous Next ▶ Finish Close | Preview | Check Completeness Save as Draft

COMMUNICATION SYSTEM

*System Instance ID:

Communication System:

Code List Mapping:

CONTACT

5. Select the protocol “Web Service” and the required authentication method. For example, in this case, User ID and Password were selected.

1 Select Scenario 2 Define Business Data 3 Define Technical Data 4 Review 5 Confirmation

Communication Method: Direct Connection

INBOUND COMMUNICATION: BASIC SETTINGS

Inbound Communication Enabled:

*Application Protocol: Web Service

*Authentication Method: User ID and Password

*User ID: _Q2CCLNT400 Edit Credentials

Services Used

Replication of Products with Sales Data from SAP ERP... Uses Basic Settings Enabled

6. Edit the password of the service account by clicking “Edit Credentials”.

Edit Communication User

Depending on the chosen authentication method, you need to upload the certificate automatically.

User ID: _Q2CCLNT400

User Account: _Q2CCLNT400

Password Locked:

Change Password Certificate

Password: ······

Confirm Password: ······

OK

7. In the case of the CA that has outbound communication, configure the outbound communication.

NEW COMMUNICATION ARRANGEMENT

1 Select Scenario 2 Define Business Data 3 Define Technical Data

Previous Next > Finish Close Preview Edit Advanced Settings Check Completeness

Communication Method: Direct Connection

INBOUND COMMUNICATION: BASIC SETTINGS

Inbound Communication Enabled:

*Application Protocol: Web Service

*Authentication Method: User ID and Password

8. Click Next and then Finish.



COMMUNICATION SYSTEM

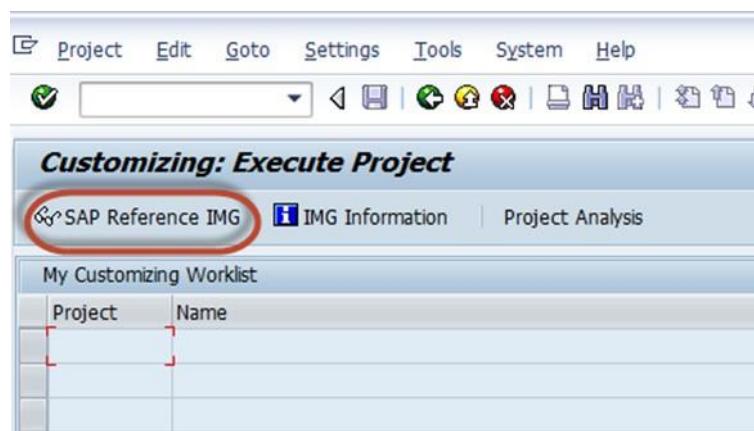
System Instance ID: Q2CCLNT400
 Communication System ID: Q2CCLNT400
 My System: 0M1OSUI

Repeat this process for the rest of the communication arrangements.
 For more information see, Create a Communication Arrangement for an On-Premise Integration task in the [Communication Arrangements Quick Guide](#).

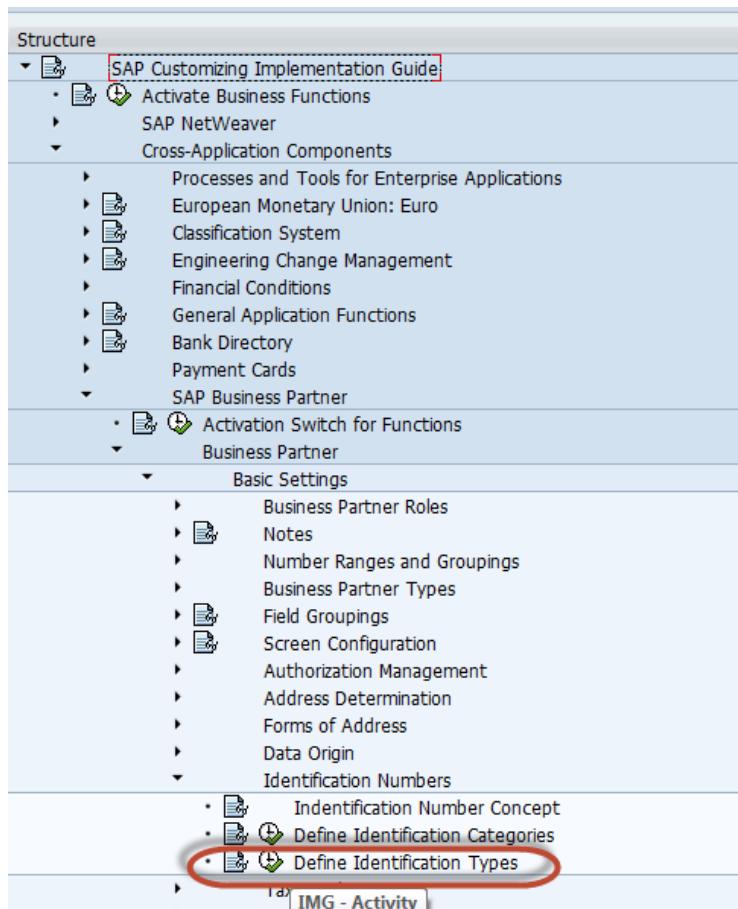
10.2 SAP CRM: Configuration

10.2.1 Create Business Partner Identification Type

1. Call transaction SPRO and click SAP Reference IMG.



2. Click SAP Customizing Implementation Guide → Cross-Application Components → SAP Business Partner → Business Partner → Basic Settings → Identification Numbers → Define Identification Types.



3. Choose New Entries



4. Enter the following settings and save the new entry

ID type: CRMPCD

Description: CoD Identification

Number ID Category: CRMPCD

Select the checkboxes for Persons and Organization

New Entries: Details of Added Entries

ID Type CRMPCD

General Data

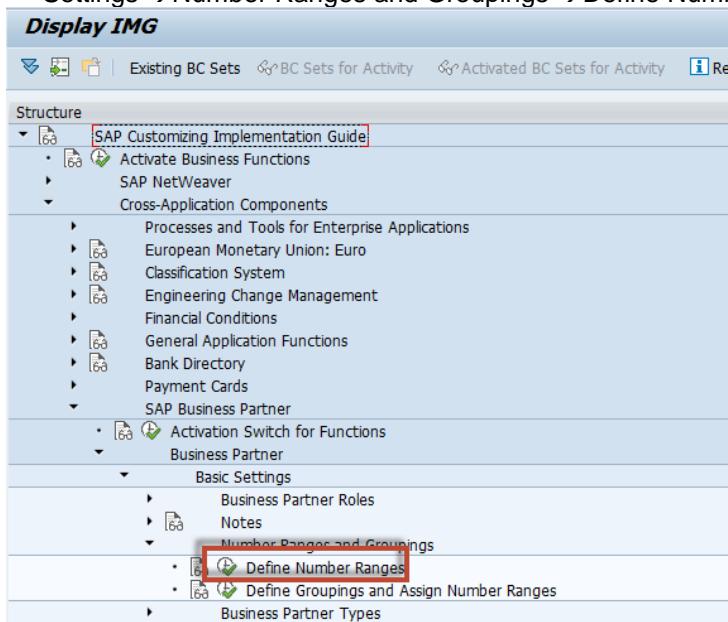
Description	CoD Identification Number
ID Categ.	CRMPCD
<input type="checkbox"/> Propose ID Type	

Identification tType Relevant for BP Categories

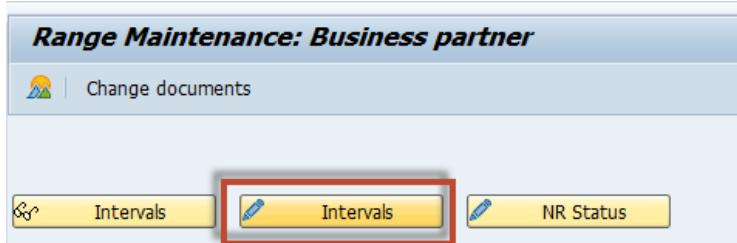
<input checked="" type="checkbox"/> Persons
<input checked="" type="checkbox"/> Organizations
<input type="checkbox"/> Groups

10.2.2 Create Business Partner Number Range

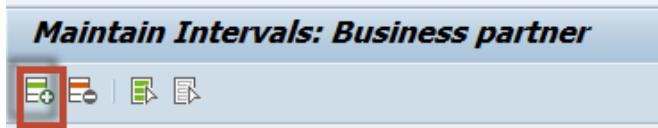
- 1 Execute Transaction SPRO
- 2 Click on SAP Reference IMG node.
- 3 Navigate to Cross-Application Components → SAP Business Partner → Business Partner → Basic Settings → Number Ranges and Groupings → Define Number Ranges



- 4 Choose Change Intervals.



- 5 Choose Insert line to maintain a new number range interval.



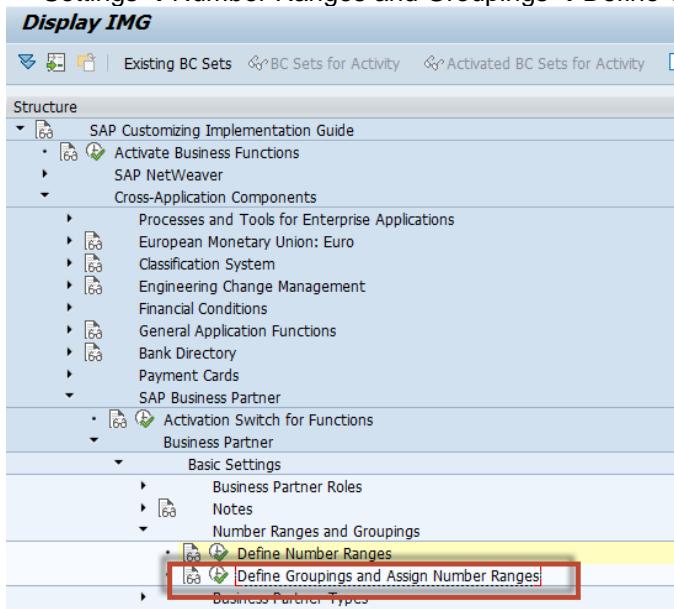
- 6 Enter a No, From No., To Number and check field External Assignment. Below is an example screenshot for No Y3. This will ensure the account number in SAP CRM system is the same as in SAP Hybris Cloud for Customer system.

Y3 0001000000	000123456789	0	<input checked="" type="checkbox"/>
Y4 0004000000	0004999999	9	<input type="checkbox"/>

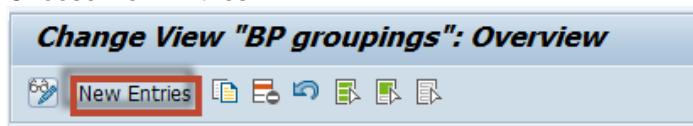
- 7 Choose Save.

10.2.3 Create Groupings and Assign Number Ranges

- 1 Execute Transaction SPRO.
- 2 Click on SAP Reference IMG node.
- 3 Navigate to Cross-Application Components → SAP Business Partner → Business Partner → Basic Settings → Number Ranges and Groupings → Define Groupings and Assign Number Ranges



- 4 Choose New Entries.



- 5 Enter Grouping, example Y3, short name, description, Number Range created above and check field External. Below is an example screenshot.

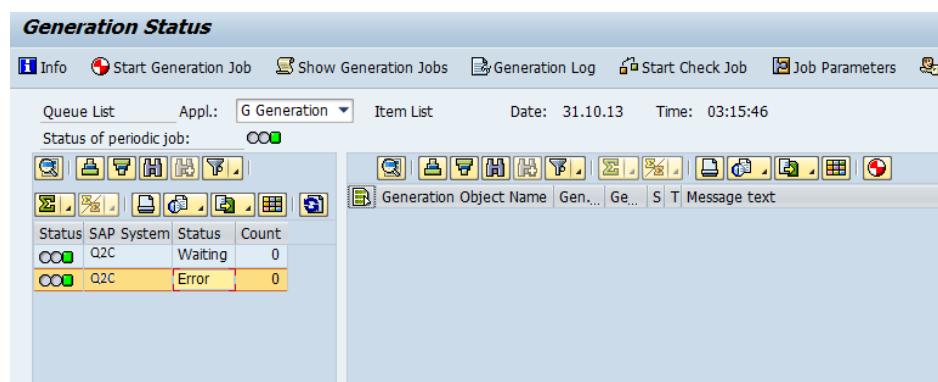
Y2	Sold-to party	Sold-to party	Y2	<input checked="" type="checkbox"/>	<input type="radio"/>
Y3	CRM Customer	CRM Customer	Y3	<input checked="" type="checkbox"/>	<input type="radio"/>
Y4	ORG BP	Business Partner (Organizational Unit)	Y4	<input type="checkbox"/>	<input type="radio"/>

- 6 Choose Save.

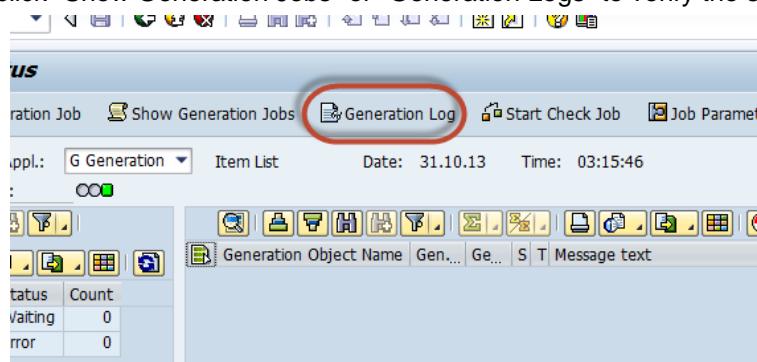
10.2.4 BDoc Configuration

10.2.4.1 Generation of BDoc Services

1. Call transaction GENSTATUS to verify the status of the middleware generation and mainly for the following objects are not waiting or in error:
 - BUS_TRANS_MSG (Lead, Opportunity, Service Request, Business Activity, Task)
 - BUPA_MAIN (Business Partner)
 - BUPA_REL (Business Partner Relationship)
 - PRODUCT_MAT (Product Material)
 - MKTPL_MKTELEM (Campaign)
 - HIERARCHY_PROD (Product Category Hierarchies)



2. You can click "Show Generation Jobs" or "Generation Logs" to verify the status of BDOC generation.



10.2.4.2 Middleware Queues

1. Call transaction SMQR check if the queue CSA* is registered.

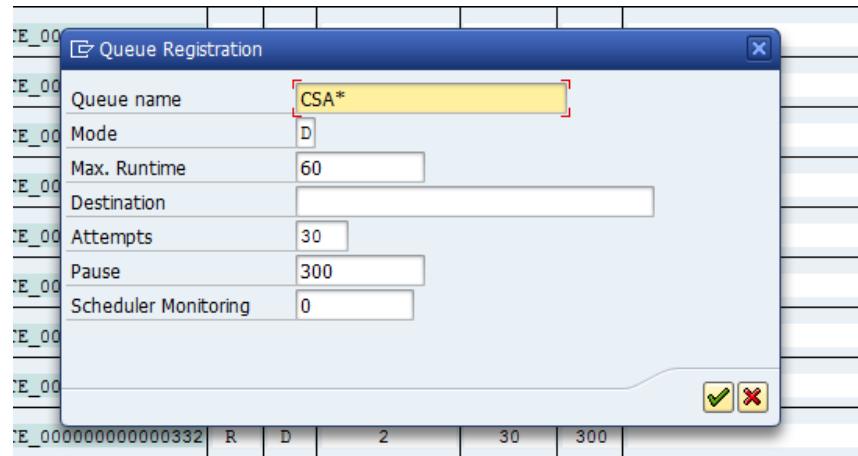
The screenshot shows the SAP GUI interface for the qRFC Monitor (QIN Scheduler). The top menu bar includes Registration table, Edit, Goto, Information, System, and Help. Below the menu is a toolbar with various icons. The main title is "qRFC Monitor (QIN Scheduler)". Underneath, there are tabs for Registration, Register without activation, Deregistration, and qRFC Monitor. The "Scheduler Information" section displays the following details:

Scheduler Status	:	Inactv.
Last Update (Every 2 Minutes)	:	06.08.2012 13:11:48
Name of AS Group (DEFAULT = All):	:	DEFAULT
Number of Entries Displayed	:	126
Host ID	:	iwdfvm2738_IS2_01
Number of Active Connections	:	0

The "Queue List" section shows a table of queues:

C1.	Queue name	Type	Mode	Max. Runtime	Attempts	Pause	Destination with LOGON Data
800	AIC*	R	D	60	30	300	
800	Q2C*	R	D	60	30	300	
800	CRM_CONFIGURATION	R	D	60	30	300	
800	CRM_CRM*	R	D	60	30	300	
800	CRM_MKTPL_APO_INT	R	D	60	30	300	

2. If not, register the queue by clicking the Registration button and manually register the queue with the following parameter:



10.2.5 Create Logical System for SAP Hybris Cloud for Customer System on SAP CRM

1. Open one of the communication arrangements created previously from SAP Hybris Cloud for Customers.



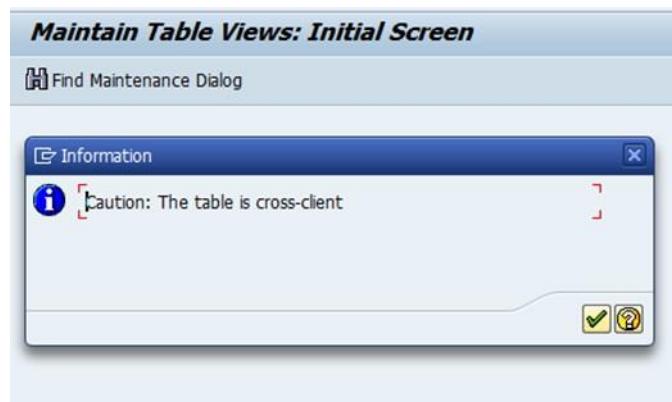
2. Select the communication arrangement, and click Edit.

The screenshot shows the 'Communication Arrangements' list screen. It includes a search bar, buttons for 'Edit', 'New', 'Delete', 'Check Completeness', 'Edit Credentials', 'Reactivate', and 'Edit API Keys'. The table lists communication scenarios, types, and partners. One row is selected, showing details: 'Product Replication with Sales Data from External System' (Communication Scenario), 'Application Integration' (Communication Type), and 'Q2CCLNT400' (Communication Partner). A note at the bottom states: 'Details: Product Replication with Sales Data from External System' and 'Communication Method: Direct Connection'.

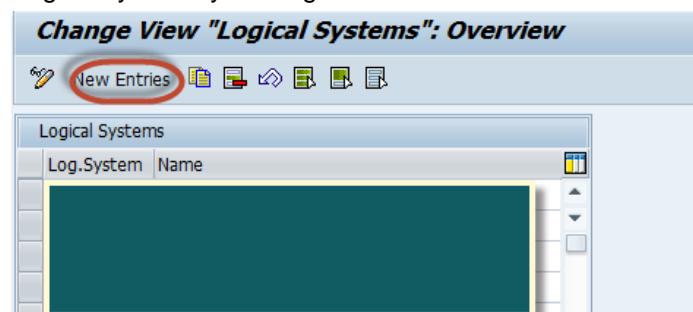
3. The logical system name is the field labeled "My System". Right click in the field and click Copy.

The screenshot shows the edit screen for the selected communication arrangement. It has a header 'PRODUCT REPPLICATION WITH SALES DATA FROM EXTERNAL SYSTEM'. Below it is a 'Check Completeness' button. The main area is titled 'MY COMMUNICATION DATA' and contains a table with a single row: 'My System: 0M1CSLII' and a 'Copy' button next to it. The 'Copy' button is circled in red.

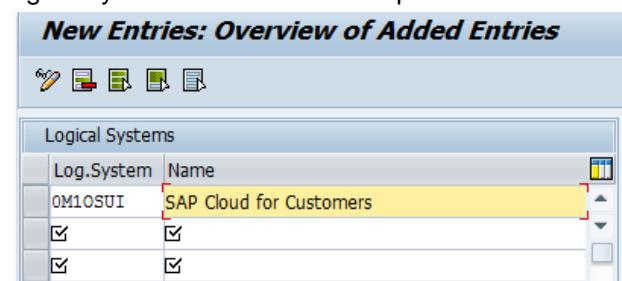
4. Call transaction BD54 in SAP CRM.



5. Create the logical system by clicking New Entries.



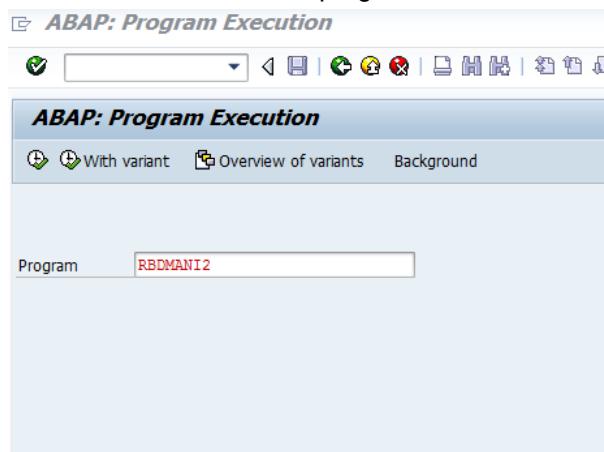
6. Enter the logical system name and a description.



7. Click Save

10.2.6 Inbound IDoc Setup- Reprocessing of IDocs with Temporary Sequence

1. Open transaction SA38 and execute program RBDMANI2.



2. Enter the following parameters

Message Type =

CRMXIF_PARTNER_REL_SAVE_M Sender

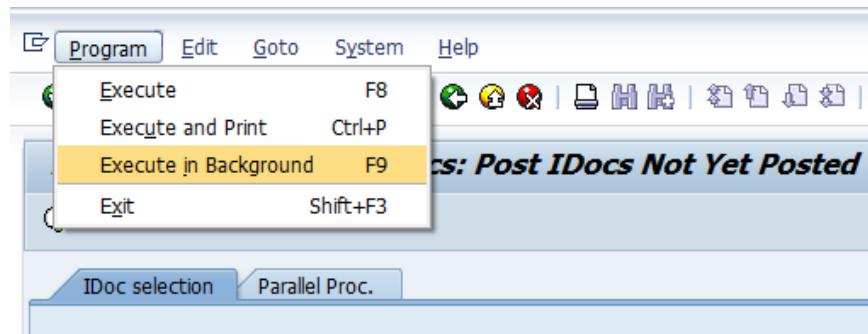
partner Type = LS

Sender partner no. = <logical system name of the Cloud system>

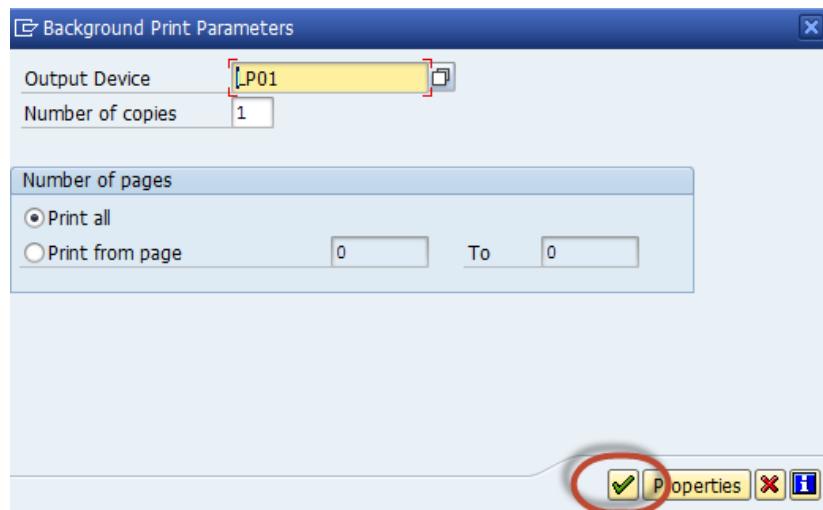
The screenshot shows the 'Manual Processing of IDocs: Post IDocs Not Yet Posted' screen. It has tabs for 'IDoc selection' and 'Parallel Proc.'. The 'IDoc selection' tab is active. Parameters entered include:

- IDoc number: [] to []
- Created on: [] to []
- Created at: 00:00:00 to 23:59:59
- Message type: PARTNER_REL_SAVE_M
- Message Variant: [] to []
- Message function: [] to []
- Sender partner type: LS
- Partner Function of Sender: [] to []
- Sender partner no.: OLO7EGU

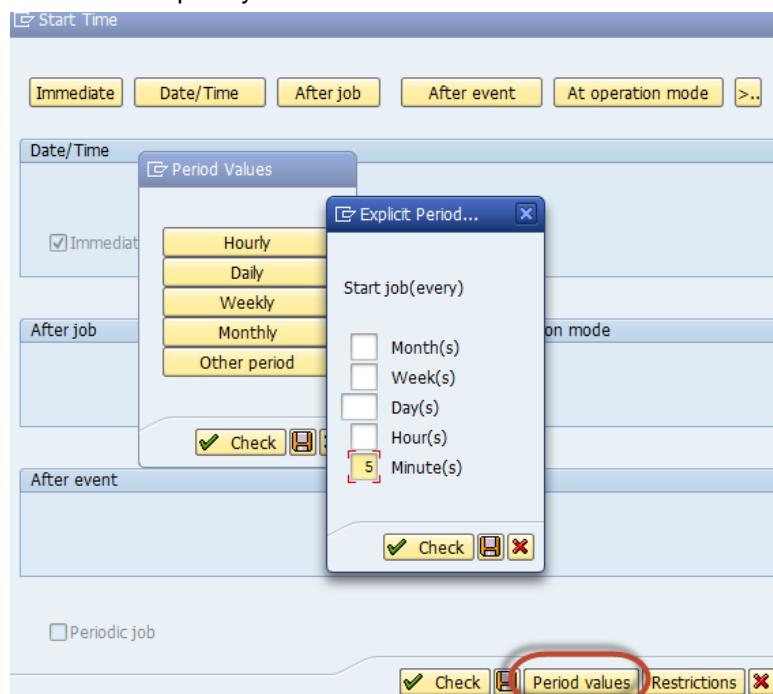
3. Schedule the program to be executed in background selecting the menu Program→ Execute in Background.



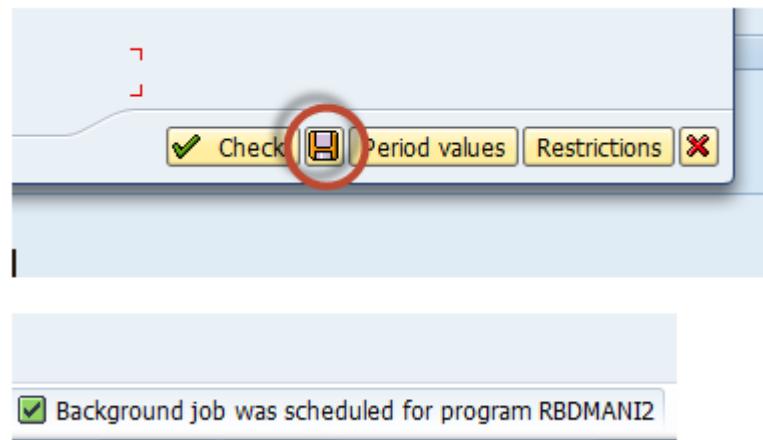
- Verify the output device and click Check.



- The job has to be scheduled and be repeated, the frequency can vary depending of the specific needs. The frequency can be defined in the Period values button.



6. Finally click in the Save icon to schedule the periodic background job.



10.2.7 SOAMANAGER Configuration for Attachment Replication

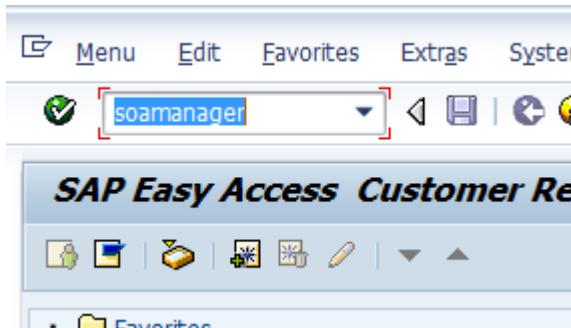
Pre-requisite:

To ensure attachment message flow from and to SAP CRM system, ensure the following is done in the SAP CRM system:

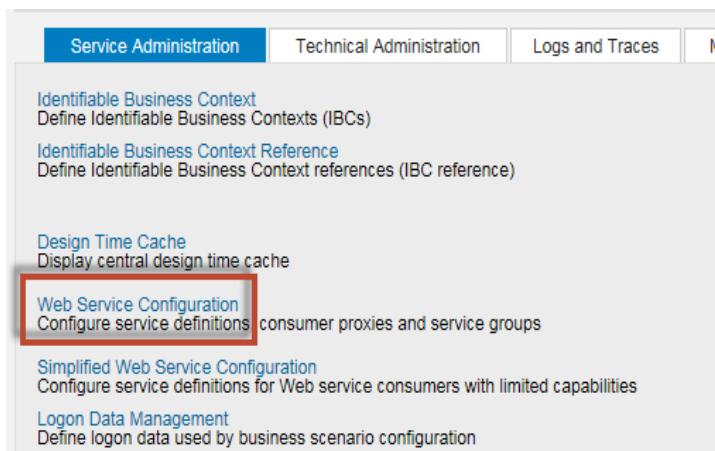
1. Check if RFC destination BGRFC_SUPERVISOR is available with the user BGRFC_SUPER assigned.
2. User BGRFC_SUPER must have role SAP_QAP_SOAMANAGER assigned and User type is Service and User Group assigned as Tester.
3. In transaction SRT_TOOLS, double click on bgRFC Configuration under Technical Configuration and ensure the RFC destination is maintained under the tab Define Supervisor Dest.

10.2.7.1 Configuration to send attachments from SAP CRM to SAP Hybris Cloud for Customer

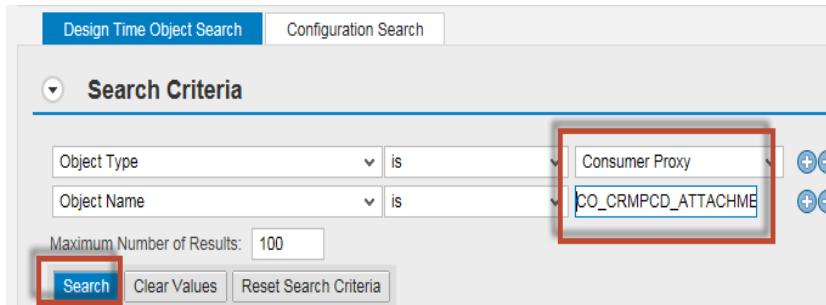
1. Call transaction SOAMANAGER and login with your credentials if asked for.



2. Choose Web Service Configuration under the tab Service Administration.



3. Choose Object Type as Consumer Proxy and enter Object Name as CO_CRMPCD_ATTACHMENT_FOLDER_RE and choose Search.



- Open the Consumer Proxy by selecting the hyperlink.

Search Result		
Internal Name	Type	Name
CO_CRMPCD_ATTACHMENTFOLDERRE	Consumer Proxy	AttachmentFolderReplicationRequest_Out

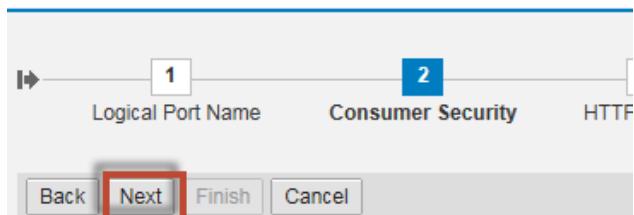
- In Configurations tab, choose Create Manual Configuration.

The screenshot shows the 'Details of Consumer Proxy: CO_CRMPCD_ATTACHMENTFOLDERRE' configuration screen. The 'Configurations' tab is selected. In the 'Define Logical Ports' section, the 'Create' button is highlighted with a red box.

- Enter Logical Port Name and Description and check field Logical Port is Default. Choose Next.

The screenshot shows the 'New Manual Configuration of Logical Port for Consumer Proxy 'CO_CRMPCD_ATTACHMENTFOLDERRE'' step 1 screen. It includes tabs for Step 1 through Step 6. The 'General Configuration Settings' section contains fields for 'Logical Port Name' (CRM_COD_ATTACHMENT) and 'Description' (CRM to COD Attachment). The 'Logical Port is Default' checkbox is checked and highlighted with a red box. The 'Next' button is highlighted with a red box.

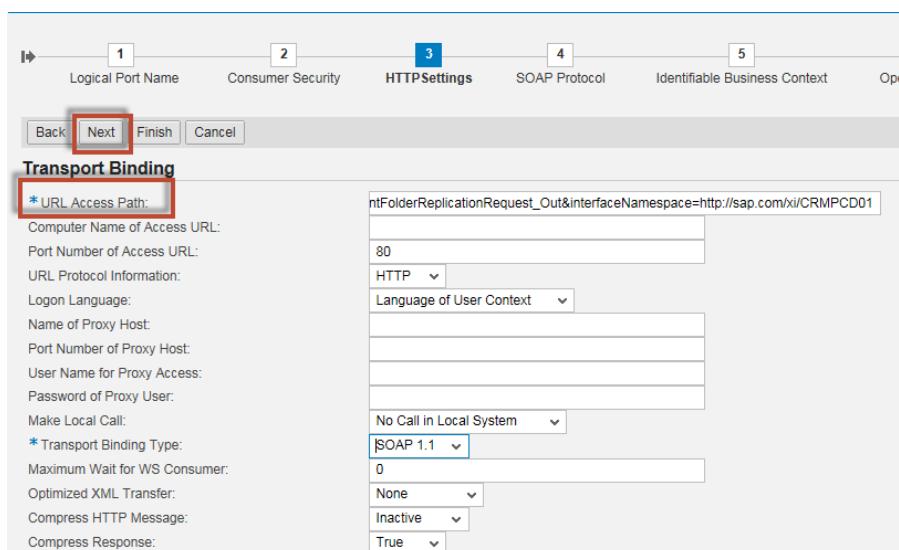
- Select Authentication Setting as User ID/Password and choose Next.



8. The value for URL Access Path can be retrieved from WSDL of the Sender Agreement configured in PI system and represents the endpoint on PI. Choose Next.

Example of the URL parameter:

/XISOAPAdapter/MessageServlet?senderParty=&senderService=Q2CCNLT400&receiverParty=&receiverService=&interface=AttachmentFolderReplicationRequest_Out&interfaceNamespace=http://sap.com/xi/CRMPCD01



9. Under SOAP protocol, choose RM Protocol as SAP RM, Message ID Protocol as SAP Message ID and Data Transfer scope as Basic Data Transfer. Choose Next.

Logical Port Name Consumer Security HTTPSettings **SOAP Protocol**

Reliable Messaging (Asynchr.)

RM Protocol: **SAP RM**

Message ID (Synchronous)

Message ID Protocol: **SAP Message ID**

Metering of Service Calls

Data transfer scope: **Basic Data Transfer**

Transfer protocol: **Transfer via SOAP header**

10. Choose Next twice.
11. Choose Finish. The logical port is created and set as Default.

Logical Port Name Consumer Security

Finish

Operation

AttachmentFolderReplicationRequest_Out

10.2.7.2 Configuration to send attachments from SAP Hybris Cloud for Customer to SAP CRM

1. Select Object Type as Service Definition and Object Name as ATTACHMENTFOLDERREPLICATIONREQ and choose Search.

Web Service Configuration (Q2C;400)

Design Time Object Search Configuration Search

Search Criteria

Object Type	is	Service Definition
Object Name	is	ATTACHMENTFOLDERRE

Maximum Number of Results: 100

Search Clear Values Reset Search Criteria

Search Result

Internal Name	Type	Name
ATTACHMENTFOLDERREPLICATIONREQ	Service Definition	AttachmentFolderReplicationRequest_In

- Select the hyperlink in the result list.

Search Result

Internal Name	Type
ATTACHMENTFOLDERREPLICATIONREQ	Service Definition

- Under Configurations, choose Create Service.

Details of Service Definition: ATTACHMENTFOLDERREPLICATIONREQ

Overview **Configurations** Classifications Details

Define Services and Bindings

Create Service Activate Deactivate Delete Republish Display as List

Service/Binding	Actions

- Provide a Service Name, Description, and Binding Name. Choose Next.

Configuration of New Binding for Service Definition 'ATTACHMENTFOLDERREPLICATIONREQ'

1 Service and Binding Name 2 Provider Security 3 SOAP Protocol Operations

Back **Next** Finish Cancel

Service Information

* Service Name: Attachment_Folder_Replication
Service Description Text: Attachment Folder Replication

Binding Information

* New Binding Name: AttachmentRep

- Under Provider Security, check SSL(https) for Transport Level Security and X.509 SSL Client Certificate for Transport Channel Authentication.

Configuration of New Binding for Service Definition 'ATTACHMENTFOLDERREPLICATIONREQ'

1 Service and Binding Name 2 Provider Security 3 SOAP Protocol 3 Operation Settings

Transport Guarantee
Transport Level: None

Transport Level Security
 None (http)
 SSL (https)

Message Level Security
 None
 Symmetric Message Signature and Encryption
 Asymmetric Message Signature
 Asymmetric Message Signature and Encryption
 Secure Conversation
 Extended Signature and Header Protection

Authentication Settings
Authentication Level: Basic

Authentication Method
 No Authentication

Transport Channel Authentication
 User ID/Password
 X.509 SSL Client Certificate

Checklist: Create Client Connection, Create Application Ticket

6. Choose Next.

1 Service and Binding Name 2 Provider Security

Transport Guarantee
Transport Level: None

7. Choose Next.

Transport Binding

Alternative Access URL:

Calculated Access URL:

Calculated Protocol:

Make Local Call:

State Management Timeout:

Identifiable Business Context

Type of IBC Identification on receiving side:

8. Choose Finish.

1 Service and Binding Name 2 Provider Security 3 SOAP Protocol 3 Operation Settings

Operation
AttachmentFolderReplicationRequest_In

9. Service definition is created and binding generated,

Details of Service Definition: ATTACHMENTFOLDERREPLICATIONREQ

Note: The binding could be used as a target url in the PI receiver agreement.

10.2.7.3 Configuration for receiving pricing information from SAP CRM

1. Select Object Type as Service Definition and Object Name as EXTERNALSALESDOCUMENTDATAQUERY and choose Search. Select the hyperlink in the result list.

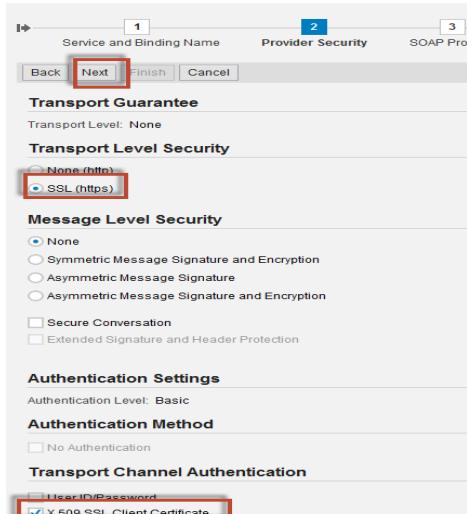
2. Under Configurations, choose Create Service.

Details of Service Definition: EXTI

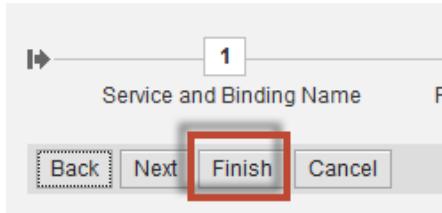
3. Provide a Service Name, Description, and Binding Name. Choose Next.

Configuration of New Binding for Service Definition 'EXTI'

4. Under Provider Security, check SSL(https) for Transport level security and X.509 SSL Client Certificate for Transport Channel Authentication. Choose Next.



5. Choose Finish.

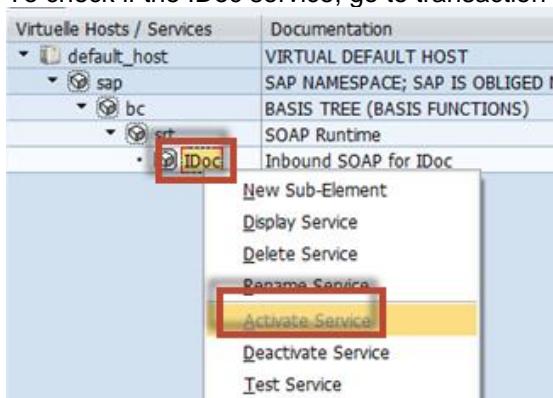


6. Service Definition is created and Binding Generated.

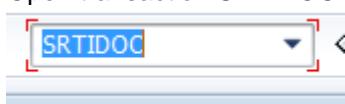
Note: During Sales quote pricing test, if you encounter any validation error in the CRM system "The value '0' is not in the value range of the XML schema type 'int' or it does not meet the specified limitations " then ensure the level field maintained for the pricing procedure is within the range 1 to 999999999. Change this value for pricing procedure and then re-test.

10.2.8 Inbound IDoc Setup – Register Service for IDoc Inbound

1. To check if the IDoc service, go to transaction SICF and right click on the service name.



2. Open transaction SRTIDOC.



3. Click the Register Service checkbox and enter the following parameters for service attributes and choose Execute.

URI SOAP Application: urn:sap-com:soap:runtime:application:idoc

Name of Web Service Definition: GENERIC

Call Address (ICF Path) : /sap/bc/srt/idoc

Register Service for SOAP Runtime (No Operation/Configuration)

Register Service
 Cancel Registration

Service Attributes

URI SOAP Application	urn:sap-com:soap:runtime:application:idoc
Name of Web Service Definition	GENERIC
Call Address (ICF Path)	/sap/bc/srt/idoc
Number of Virtual Host	

10.2.9 ALE Setting for the HTTP Inbound

1. Open transaction OYEA.



2. Choose *Edit* and set Start W/O Event Linkage under IDoc Inbox HTTP in the Global Parameters for IDoc Interface screen.

The screenshot shows the 'Global Parameters for IDoc Interface' configuration screen. The 'Global Parameters' tab is selected. Under the 'IDoc Inbox HTTP' section, the checkbox 'Start W/O Event Linkage' is checked and highlighted with a red box.

3. Choose Save.