

How to Browse an Enterprise Services Registry in Visual Composer



Applies to:

Visual Composer SAP NetWeaver Composition Environment 7.1 (Ehp0 and Ehp1)

For more information, visit the [User Interface Technology homepage](#).

Summary

This step-by-step document explains how to configure Visual Composer to consume services from a local and public service registry, using either Visual Composer in the Browser or Visual Composer in the NWDS.

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Overview

To configure Visual Composer to consume services using a Service Registry you need to define the following destinations in the NetWeaver Administrator:

- UDDI_Destination to query the UDDI-compliant registry
- Classification_Destination to provide access to the classifications in the registry
- Physical (backend) system definitions to access the physical destination of the enterprise services.

Important Notes:

- Ehp1of CE7.1 requires additional configuration of the consumer proxy
- For consuming services using a public Service Registry (e.g. ES-Workplace) – configure also the Http proxies.

Best Practice

The focus of this document is to describe the configuration steps of a J2EE server, which is installed locally in the customer's workspace.

In order to make use of the sr.workplace SOA services, the services definitions can be imported to the local SR (See instructions below).

Working with the local SR also provides the means to publish additional services that are a part of the customer's landscape.

Importing Service Definitions into the Customer's Local SR Server

The following [link](#) provided on the SDN describes the steps needed in order to take the remote sr.workplace service definitions and import them to the customer's local SR.

With the imported services, customers will be able to work directly with the SAP SOA services exposed on the DMZ, using their local SR installation.

Service Registry Destination Configurations

1. Log on to `http:// <myLocalServerHost>:<serverPort>/nwa`
2. Navigate to SOA Management→Technical configuration→Destination Template Management
3. Define the following destinations:

UDDI Destination Configuration:

- **Destination Type:** WSDL
- **Destination Name:** UDDI_DESTINATION
- **URL:** `http:// <myLocalServerHost>:<SRserverPort>/uddi/wsdl/uddi_v3_service.wsdl`
- **System:** Java

The screenshot shows the 'New Destination' configuration wizard in SAP NetWeaver. The 'General' tab is selected, and the 'Security' tab is also visible. The wizard is currently on step 1 of 2. The fields are filled as follows:

- Destination Type: WSDL
- Destination Name: UDDI_DESTINATION
- URL: `http://< myLocalServerHost >/uddi/wsdl/uddi_v3_service.wsdl`
- Socket Timeout (in milliseconds): 60,000
- System: Java ABAP
- System Name: (empty)
- Hostname: (empty)

- In the security step, enter the service authentication details

The screenshot shows the 'New Destination' dialog box in Visual Composer, specifically the 'Security' step. The 'Authentication' section is expanded, showing 'HTTP Authentication' selected. The 'User ID/Password' section is also expanded, showing fields for 'User ID' (containing 'userName'), 'Password', and 'Confirm Password'.

- Click Finish.

Classification Destination

- **Destination Type** - WSDL
- **Destination Name** - CLASSIFICATION_DESTINATION
- **URL** - http://<myLocalServerHost>:<SRserverPort>/ClassificationService/CS?wsdl
- **System** – Java

The screenshot shows the 'New Destination' dialog box in Visual Composer, specifically the 'General' step. The 'Destination Type' is 'WSDL', the 'Destination Name' is 'CLASSIFICATION_DESTINATION', and the 'URL' is 'http://<myLocalServerHost>:/ClassificationService/CS?wsdl'. The 'System' is 'Java'.

- In the Security step, enter the authentication details:

The screenshot displays the 'New Destination' configuration wizard in SAP Visual Composer. The interface is divided into two tabs: 'Destination Templates' and 'CAF Configuration'. The 'CAF Configuration' tab is active, showing a progress bar with two steps: '1 General' and '2 Security'. The 'Security' step is currently selected and highlighted in yellow. Below the progress bar, there are navigation buttons: 'Previous', 'Next', 'Finish', and 'Cancel'. The 'Authentication' section is expanded, showing a dropdown menu set to 'HTTP Authentication'. Below this, there are radio button options for different authentication methods: 'User ID/Password (Basic)' (selected), 'User ID/Password (Digest)', 'X.509 Client Certificate', 'Logon Ticket', and 'SAML Assertion'. A 'Details Off' button is located below the radio buttons. The 'Details' section is also expanded, showing a 'User ID/Password' sub-section with a minus sign icon. This section contains three input fields: 'User ID' with the value 'userName', 'Password' with masked characters '*****', and 'Confirm Password' with masked characters '*****'.

- Click Finish.

Physical (Backend) System Configuration/s

Configure the backend system/s where the enterprise services are implemented and can be consumed from. The following related to non ABAP system e.g. Java:

- **Destination Type** - Services Registry
- **Destination Name** - <The name of your destination>
- **System - non ABAP** (depending on your system)
- **System Name** - <The System Name>
- **Host Name** - <The Host Name>

The screenshot shows the 'New Destination' configuration wizard in SAP. The 'Destination Templates' tab is selected, and the 'CAF Configuration' sub-tab is active. The wizard is currently on the 'General' step (indicated by a yellow box with the number 1). The 'Security' step (indicated by a grey box with the number 2) is also visible. The 'General' step contains the following fields:

- Destination Type:** Services Registry (dropdown menu)
- Destination Name: *** PS1 (text input)
- Socket Timeout (in milliseconds):** 60,000 (text input with a copy icon)
- System:** Java (radio button selected), ABAP (radio button unselected)
- System Name: *** PS1 (text input)
- Hostname: *** <myPhysicalSystem> (text input)

Navigation buttons include 'Previous', 'Next', 'Finish', and 'Cancel'. The 'Next' button is highlighted in yellow.

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Add the following details in case the system is ABAP:

- **Installation Number** - <The installation number of the system>
- **Client** - <The ABAP Client Number>

The screenshot shows the 'New Destination' configuration wizard in SAP Visual Composer. The 'General' step is active, and the 'Client' field is highlighted in yellow. The fields are as follows:

Field	Value
Destination Type	Services Registry
Destination Name *	HU2
Socket Timeout (in milliseconds)	60,000
System	<input checked="" type="radio"/> ABAP
System Name *	HU2
Hostname *	iwdf1030
Installation Number *	0120003411
Client	800

In the Security step, enter the authentication details.

Consumer proxy settings (only in Ehp1)

1. Log on to `http://<serverName>:<serverPort>/nwa`
2. Navigate to *Application and Scenario Communication* → *Single Service Administration*
3. Click on the 'Consumer Proxies' tab
4. Search for '*sr*'
5. Select the ServicesRegistrySi, and click on the 'Configuration tab'
6. In the list of the 'ServicesRegistrySi Logical Ports' select the 'ServicesRegistrySiPort'

Single Service Administration: Consumer Proxies Home History Back Forward

Service Definitions Consumer Proxies

Search Browse

Find: Search by WSDL Porttype State (All) Go

Found Proxy Definitions: 3

WSDL Porttype Name	Namespace	State	Description
ServicesRegistrySi	http://sap.com/esi/uddi/sr/api/ws/	Activated/Deployed	No data is available
SRT_WSP_MASS_CONFIG_API	urn:sap-com:document:sap:rfc:functions	Activated/Deployed	No data is available
WSRMReservedServiceVi	http://docs.oasis-open.org/ws-rx/wsrml/200808/wsdl	Activated/Deployed	No data is available

Details About ServicesRegistrySi Proxy Definition

General Configuration Logs & Traces

Runtime Configuration Designtime Configuration

ServicesRegistrySi Logical Ports

New Delete Set As Default

Logical Port

ServicesRegistrySiPort

- At the 'Web Service End Point URL' input text add the following URL:
`http://<myLocalServerHost>:<SRserverPort>/ServicesRegistrySiService/ServicesRegistrySiPort`

The screenshot shows the configuration interface for a proxy definition. It is divided into two main sections:

Details About ServicesRegistrySi Proxy Definition

- Navigation tabs: General, Configuration (selected), Logs & Traces.
- Configuration mode: Runtime Configuration, Designtime Configuration.
- ServicesRegistrySi Logical Ports**
- Buttons: New, Delete, Set As Default.
- Logical Port list: A table with one entry, "ServicesRegistrySiPort", which is highlighted in orange.

Details About ServicesRegistrySiPort Logical Port

- Buttons: Edit, Save, Cancel.
- Navigation tabs: General, Security (selected), Web Service Addressing, Transport Settings.
- Web Service End Point URL: `150:50000/ServicesRegistrySiService/ServicesRegistrySiPort`

- Press on the 'Security' tab to define the security configuration.

Http Proxy Settings (only for public SR configuration)

The local CE server needs to perform http calls to ES Workplace on the Internet. That requires that your company's http proxy be entered in the global settings for the CE connectivity framework.

1. Log on to SAP NetWeaver Administrator (e.g. <http://<myLocalServerHost>:<myLocalServerPort>/nwa>) -> SOA Management -> Technical configuration -> SOA Middleware Global Settings -> HTTP Proxy, and maintain the correct values:

SOA Middleware Global Settings: HTTP Proxy

Save

Http Proxy Settings

Host:

Port:

Username:

Password:

Exclude List:

Bypass proxy server for local addresses:



Important!

If it is not the first time that a service registry is configured, restart the J2EE engine after the configuration

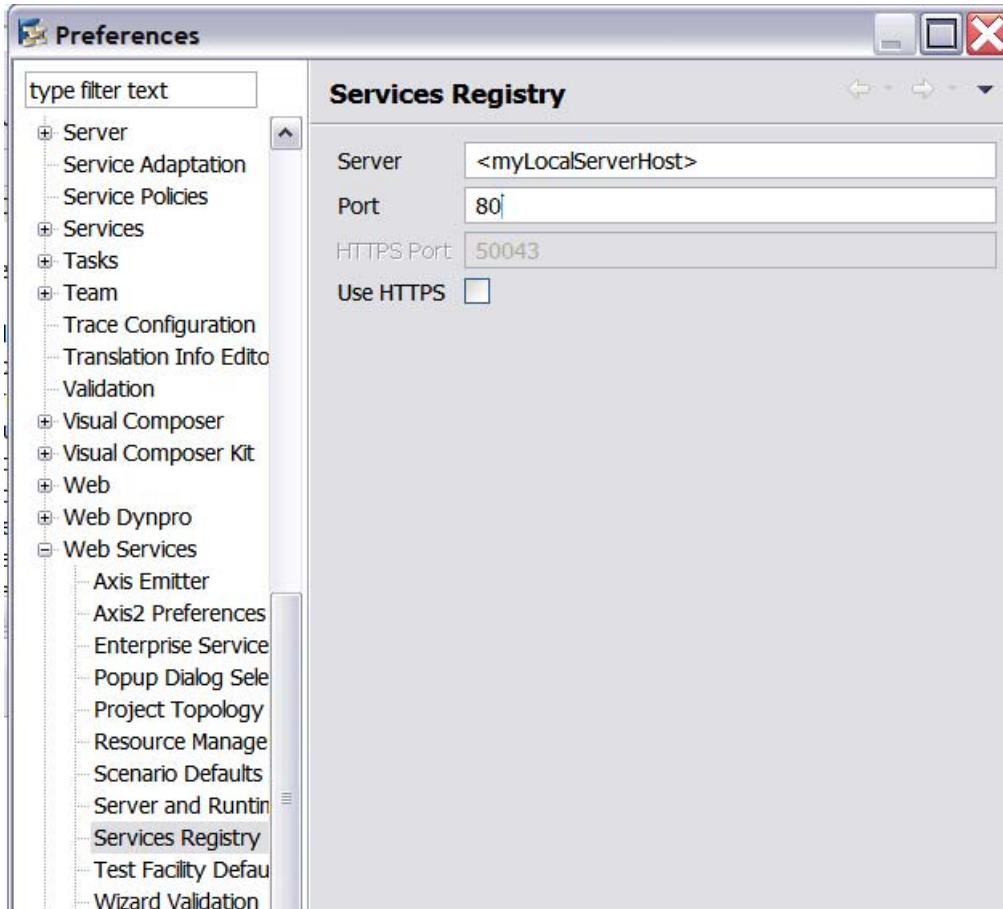


In EhP0 of CE7.1 – restart Visual Composer (by closing the browser) after you create / change a service registry destination in order to clean the cache.

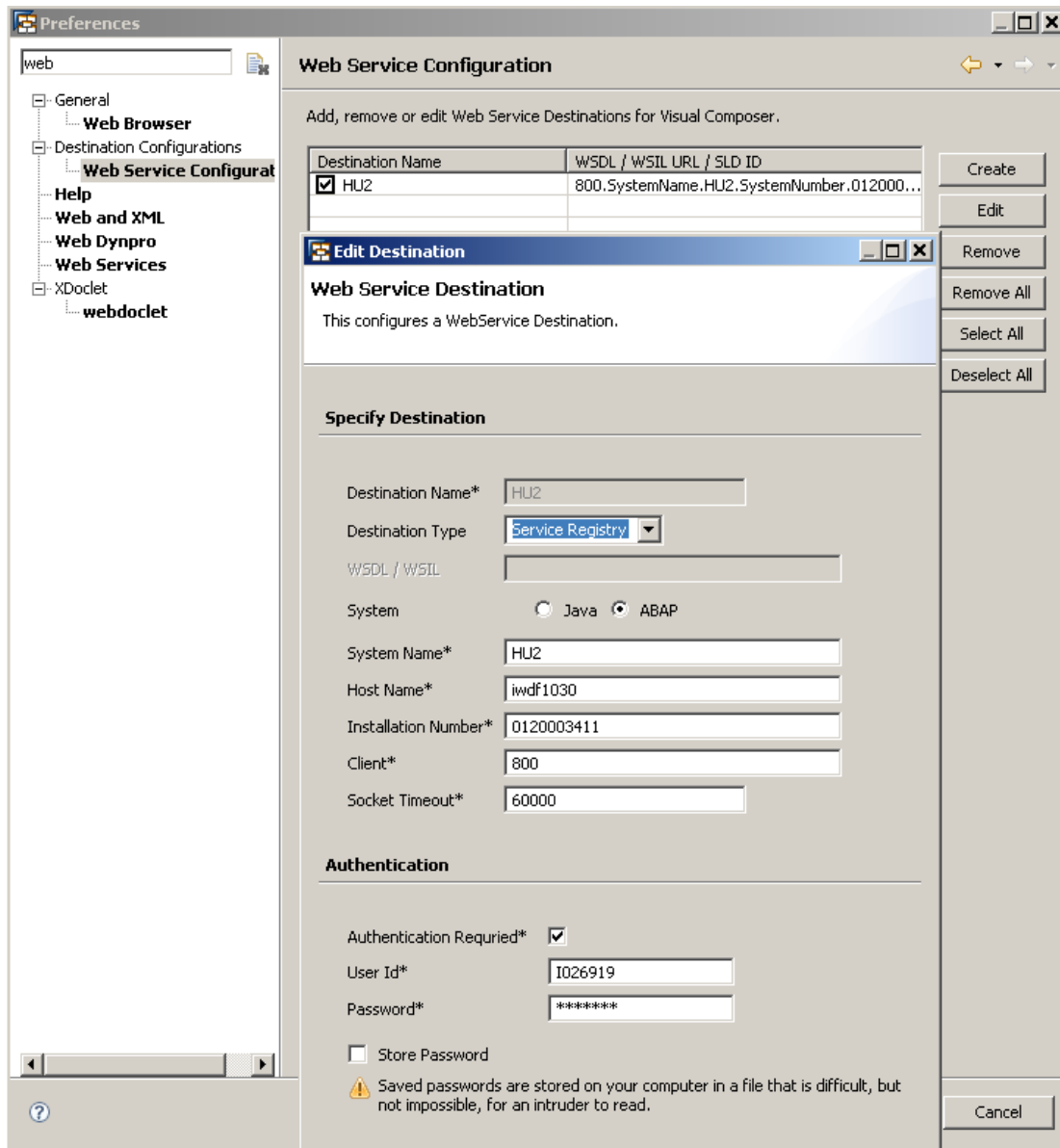
NWDS Configuration

Only for using Visual Composer in the NWDS

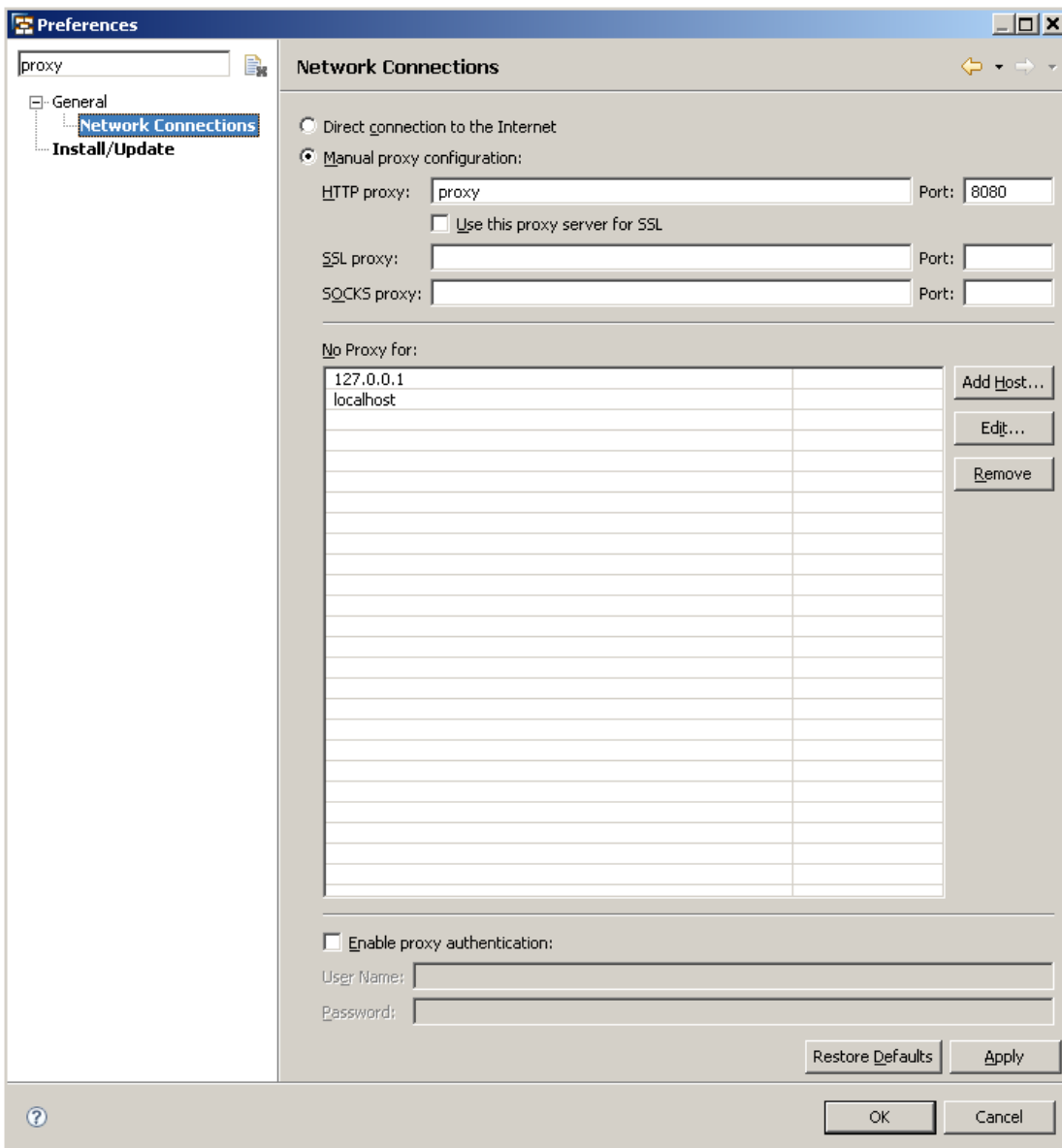
1. Configure the service registry connection:



- In the 'Web Service Configuration' create any of the SR systems destinations that you want to use.



3. At the 'Network Connection' configured manually the proxy that you're using:



Please note, the above instructions (referring to NWDS) will only allow you to model your application in design time, in order to deploy and execute the application you will have to follow the instructions for configuring SR on the VC Server side.

Appendix 1 - SLD ID data completion for physical systems

There may be cases where the NWA logical settings do not match the SR settings when Visual Composer is trying to locate the enterprise services. Such cases can occur when there is no SLD ID definition of the physical system in the SR.

Currently, Visual Composer doesn't have the ability to search for services on a physical system with an empty SLD ID (which is not a valid one).

In order to obtain this capability, a workaround should be done which will generate the necessary data for each system with a non valid SLD ID, so Visual Composer will be able to search services over it.




The following describe the workaround step by step:

1. Log on to <http://<serverName>:<serverPort>/WSNavigator>
2. Press on the 'Services Registry' radio button and search for
3. In the 'Find:' input text add the following string: '*sr*' and press on 'Go' button.

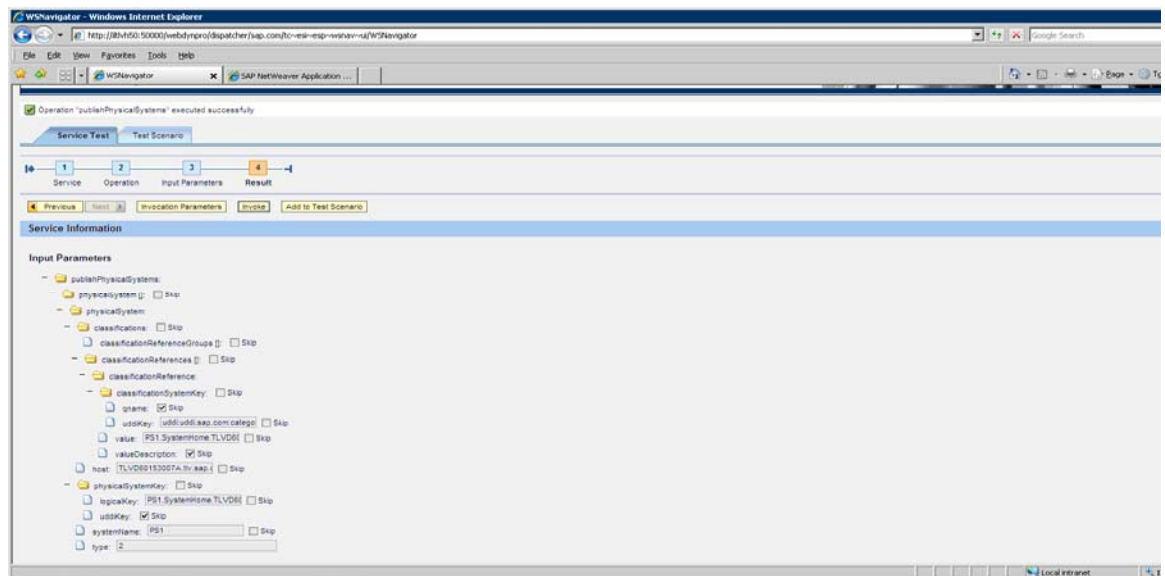
The screenshot shows the 'Service Test' interface in Visual Composer. The 'Service' tab is active, and the search process is indicated by numbered steps 1 through 4. The 'Search Service Interfaces' section has 'Services Registry' selected. The 'Find:' input field contains '*sr*' and the 'Go' button is visible. Below, a table titled 'Found Service Definitions: 8' lists various service definitions. The 'ServicesRegistrySi' entry is highlighted in yellow.

WSDL Porttype Name	Namespace	State	Description
CMSRTSVi	urn:CMSRTSWsd/CMSRTSVi	Configured	No data is available
ESRegistryWSSi	urn:ESRegistryWSSi	Configured	No data is available
ESRegWSSi	urn:ESRegWSSi	Configured	No data is available
ServicesRegistryFlatSi	http://sap.com/esi/uddi/sr/api/ws/	Configured	No data is available
ServicesRegistrySi	http://sap.com/esi/uddi/sr/api/ws/	Configured	No data is available
test_wsrv2ejbSEI	http://com/sap/vc/sad	Configured	No data is available
WSReverseProxyConfiguration	urn:sap-com:document:sap:reverseproxy	Activated/Deployed	No data is available
WSRMCallbackVi	urn:WSRMCallbackWsd/WSRMCallbackVi	Configured	No data is available

4. Select the SrevicesRegistrySi line and press 'Next'
5. Under the 'Operation Name', search for 'publishPhysicalSystems' operation, select it and press on 'Next'.
6. Fill the service information parameters with the following (see appendix2 for details on how to get this information) :

1. Click on the icon  in the physical system[]
2. Uncheck Classifications check box
3. Click on the icon  in the classificationReferenceGroups[]
4. Click on the icon  in the classificationReferences[]
5. Uncheck the classificationSystemKey check box
6. Uncheck the uddiKey check box and fill in the value: <localUddiKey>
7. Uncheck the value check box and fill in the value: <localSystemHostName>
8. Uncheck host check box and fill in <localHostName>
9. Uncheck the physicalSystemKey check box

10. Uncheck the logical key check box and fill in the value:
11. <System name>.<SystemHome>.<host name>
12. Uncheck the systemName check box and fill in the <system name> value
13. Uncheck type and fill in the value: 2



7. Click on 'Next' button
8. Click on 'Invoke' button

You have now generated an SLD ID for the physical system.

Appendix 2: How to get information from a services registry

1. Navigate to `http://<SRmachineName>:<SRmachinePort>/sr`
2. In the 'Search' combo box, select the physical system that you want some details about and press on 'Go'
3. Select a service from the list and then you can find the complete data at the 'General', 'Endpoints', 'Classification' and 'System Details' tabs

The screenshot displays the SAP Enterprise Services Registry interface. At the top, there are tabs for 'Service Definitions', 'ServiceGroups', 'Classifications', 'Manage', and 'Permissions'. Below these, there are buttons for 'Search', 'Browse', and 'Publish'. The main section is titled 'Search Services' and contains a search form with a 'Find:' input field, a 'Search by' dropdown menu (set to 'WSDL Porttype...'), a 'System' dropdown menu (set to 'PS2 on tlv6015...'), a 'State' dropdown menu (set to '(All)'), and a 'Go' button. Below the search form, it indicates 'Found Service Definitions: 2' and shows a table with the following data:

WSDL Porttype Name	Namespace	State	Description	System
MapServiceSoap	http://SAP.Demo/RenderService/	Configured	No data is available	PS2 on tlv60153007a.dhcp.tlv.sap.corp
WebService101Soap	http://tempuri.org/	Configured	No data is available	PS2 on tlv60153007a.dhcp.tlv.sap.corp

Below the table, there is a section titled 'Details About Service Definition MapServiceSoap' with sub-tabs for 'General', 'Endpoints', 'Classifications', 'System Details', and 'Used by'. The 'General' tab is active, showing the following details:

- WSDL Port Type Name: MapServiceSoap
- Internal Name: MapService
- Namespace: http://SAP.Demo/RenderService/
- Logical key: 843884C5DA705367268261D218D54BA5
- UDDI key: uddi:f2034e10-6396-11dd-8c48-0050568f6d00
- WSDL: <http://10.26.146.247/SAP.Demo.WebService.Maps/MapService.asmx?wsdl>
- Documentation URL: There is no Documentation URL available
- Description: No data is available

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