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
• In the security step, enter the service authentication details

• Click Finish.

Classification Destination

• Destination Type - WSDL
• Destination Name - CLASSIFICATION_DESTINATION
• URL - http://<myLocalServerHost>:<SRserverPort>/ClassificationService/CS?wsdl
• System – Java
In the Security step, enter the authentication details:

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>

![Diagram of New Destination configuration](image)
Add the following details in case the system is ABAP:

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

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

8. 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**

<table>
<thead>
<tr>
<th>HTTP Proxy</th>
<th>WS Navigator</th>
<th>Reverse Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   **Http Proxy Settings**

   - **Host:** proxy
   - **Port:** 3080
   - **Username:**
   - **Password:**
   - **Exclude List:** *.*.sap.corp
   - **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.

**Important!**

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:
2. 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:

![Network Connection Configuration](image)

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.
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 fine the complete data at the 'General', 'Endpoints', 'Classification' and 'System Details' tabs
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