



SAP BASIS Introductory Training Program

Day 12 : Agenda

Landscape Concept

SLD Concept

SLD Administration

Updating SLD

Adding ABAP Systems to SLD

Adding JAVA Systems to SLD

Break

Exercise & Questions

Landscape Concept



Basic Concepts of a landscape in SLD

Server?

Database ?

SAP Product ?

Instance ?

SAP Landscape ?

Basic Concepts of a landscape in SLD

Server?

Server represents the physical hardware components of an SAP System and is usually represented by a hostname.

SAP Product ?

There are various products that are provided by SAP that handle various business processes.

E.g.:-

CRM, SRM, ECC, Solution Manager, etc.

SAP Landscape ?

SAP Landscape contains many systems that together work for various tasks in SAP.

E.g.:- One Tier, Two Tier, Three Tier, etc.

Database ?

A database is an organized collection of data. There are various database software supported by SAP.

E.g.:- Oracle, SAP HANA, SQL Server, etc.

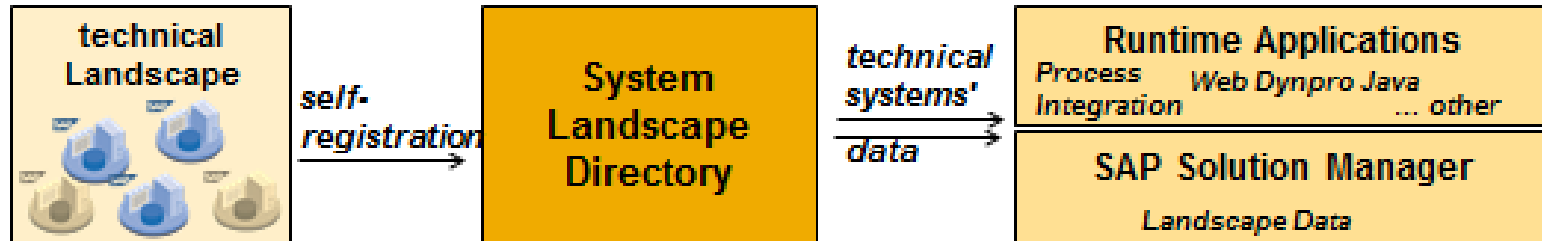
Instance ?

An SAP instance defines a group of resources such as memory, work processes and so on, usually in support of a single application server or database server within a client/server environment.

SLD Concept



Concept of SLD (System Landscape Directory)



The System Landscape Directory of SAP Netweaver (SLD) serves as a central information repository for your system landscape. A system landscape consists of a number of hardware and software components that depend on each other with regard to installation, software updates, and demands on interfaces

System Landscape Directory (SLD) is a component of SAP Netweaver and is completely implemented with Java technology.

SLD provides us with complete landscape information and allows us to maintain the systems information in a central location.

Why SLD ?

What it does ?

- Collects Data about the systems in the landscape
- Maintains software catalog
- Helps in maintaining Development Namespace Reservations
- Proves to be a central repository for the landscape information

How to access SLD ?

- Using T-Code
 - sldcheck (We can not only use this T-Code for accessing the SLD but also use it to check the configuration of SLD in a system)
- Using URL
 - `http://<HOSTNAME>:5<XX>00/sld`

Which systems need SLD ?








- Solution Manager, PI / XI

Accessing the SLD

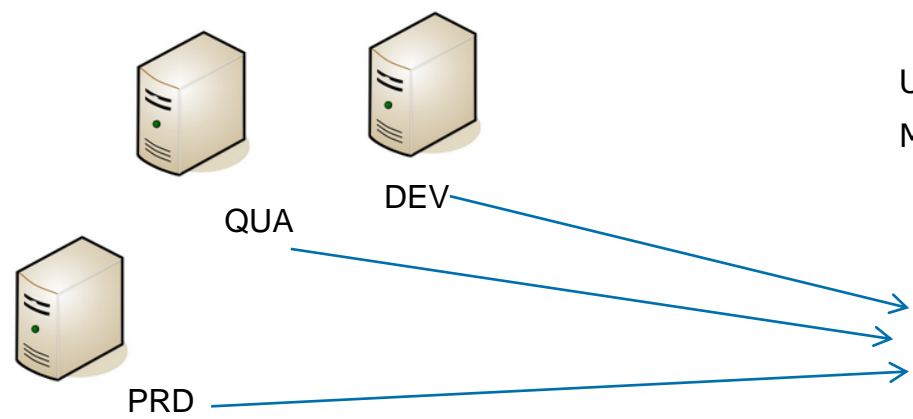
SLD can be accessed using the following URL. Input the hostname of the SLD and the HTTP Port in the URL mentioned below. Use the SLD Administrator user credentials to login.

`http://<hostname>:<HTTP_Port>/sld`

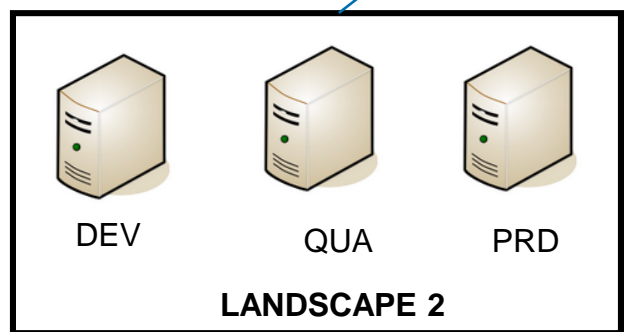
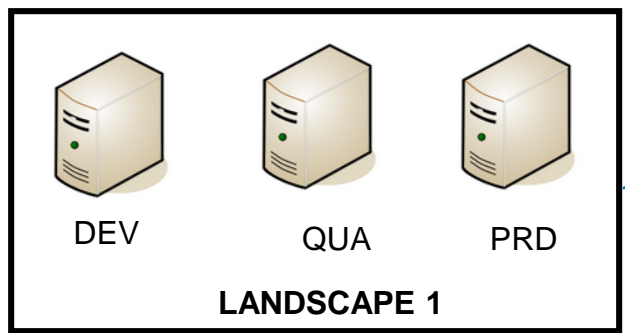
The screenshot displays the SAP NetWeaver System Landscape Directory (SLD) Home Page within a web browser window. The browser's address bar shows the URL `http://<hostname>:<HTTP_Port>/sld`. The page title is "SLD HOME PAGE". The SAP NetWeaver logo and "System Landscape Directory" text are prominently displayed at the top. Below the header, there are navigation links: [Home](#), [Administration](#), [Log Off](#), and [Help](#). The system status is shown as "System: --- Namespace: [sld/active](#)". A descriptive banner states: "System Landscape Directory (SLD) manages information about all installable and installed elements of your system landscape." The main content area is organized into three columns: "Landscape", "Software Catalog", and "Development".

Landscape	Software Catalog	Development
 Technical Systems View and Define Systems and Servers	 Products View Products in SAP Software Catalog	 Name Reservation Manage Name Reservations for NetWeaver Development
 Landscapes View and Configure Groups of Systems	 Software Components View Software Components in SAP Software Catalog	 CIM Instances / CIM Classes View and maintain data on CIM level
 Business Systems View and configure business systems for use in Process Integration (PI)		

Landscape in SLD



Uses Software Catalog as reference and
Maps the systems in the landscape to the products



Landscape




Technical Systems
View and Define Systems and Servers



Landscapes
View and Configure Groups of Systems



Business Systems
View and configure business systems for use in Process Integration (PI)

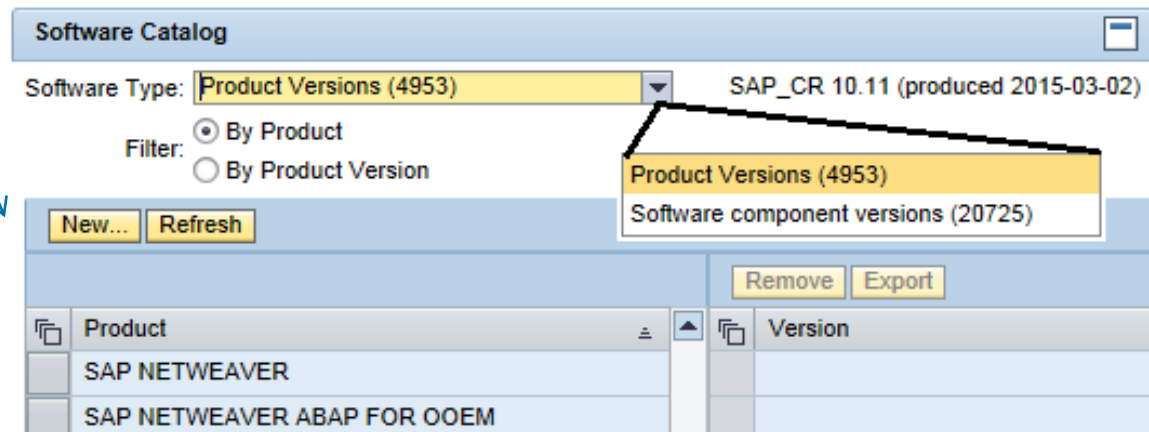


Business systems
Can be SAP / non-SAP Systems

Software Catalog in SLD



Software Catalog works as a reference and maps the systems in the landscape to the products



Development in SLD

Uses Software Catalog as reference and
Maps the systems in the landscape to the products

Reserving names of development objects in a landscape centrally from one single location so that no two objects are created with the same name in a landscape.

Types of
Objects

- Application Context Root (6)
- DB Field Name (6)
- DB Object Name (6)
- DB Pool Name (6)
- Design Time Package (6)
- Development Component Name (6)
- Installation Unit Name (6)
- Software Component Name (0)

Development



[Name Reservation](#)
Manage Name Reservations for
NetWeaver Development



[CIM Instances / CIM Classes](#)
View and maintain data on CIM level

CIM Instances

Subset:

Class:

- Select-
- Allowed Namespace Prefix (42)
- Application Server ABAP (3)
- Application Server Java (2)
- Application System Instance (5)
- BC Application Server (3)
- BC Central Service Instance (2)
- BC Client (17)
- BC Gateway (3)
- BC Message Server (3)

SLD Administration



SLD Administration

SLD can be administered using the administration link as shown below. Clicking on the details link will provide you with the details of the SLD Server

The screenshot shows the SAP NetWeaver System Landscape Directory (SLD) Administration web interface. The browser address bar displays the URL: `http://<hostname>:<HTTP_Port>/sld`. The page header includes the SAP logo and the text "SAP NetWeaver™ System Landscape Directory". Navigation links include "Home", "Administration" (highlighted with a green box), "Log Off", and "Help". The system status is shown as "System: --- Namespace: sld/active".

The main content area is titled "Administrate and configure the server". It features a status section with a green square icon and the text "SLD Running", followed by a "Stop SLD" button. A green arrow points from the text "Status of SLD Server" to this status section.

The interface is divided into two main panels:

- Server**
 - [Log](#): View server log and set logging and tracing parameters
 - [Details](#) (highlighted with a green box): View detailed information about the server
 - [Settings](#): View and change server parameters
 - [Data Suppliers](#): Configure data supplier targets
 - [System Message](#): Define a system message that is shown to every user who logs on to the SLD
- Content**
 - [Import / Export](#): Upload and download CIM models and data
 - [Synchronization](#): Update content from one or more other SLDs
 - [Changes](#): Search for content changes
 - [Namespaces](#): Manage CIM namespaces for working with different content versions
 - [Maintenance](#): Manage content of this SLD

SLD Server Details

SLD server details & JAVA System properties can be checked here.

The screenshot shows the SAP NetWeaver System Landscape Directory (SLD) interface. The browser address bar displays the URL: `http://<hostname>:<HTTP_Port>/sld`. The page header includes the SAP logo and the text "SAP NetWeaver™ System Landscape Directory". Navigation links for "Home", "Administration", "Log Off", and "Help" are present. The system information shows "System: ---" and "Namespace: sld/active". A section titled "View detailed information about the server" contains tabs for "General", "Data", "Data Suppliers", and "Server". The "General" tab is active, displaying the following details:

SLD Server Status:	Running
SLD Server Version:	7.4009.20141031130932.0000
Running Since:	2015-03-30 20:18 (14 days)
JVM Memory:	1812 MB / 3925 MB
J2EE Server Version:	7.40.3301.370071.20141031130932
Java VM Version:	SAP AG 1.6.0_91 on Windows Server 2012 R2 6.3
Working Directory:	F:\usr\sap\... \SYS\global\sld
Host Name:	

At the bottom of the "General" tab, there is a link for "Java System Properties". A "Download Support Information" link is also available in the top right corner of the details section.

Updating SLD



Software Catalog in SLD

SAP CR Content

Import SAP CR Content
into SLD

ZIP	CRDelta101612_0-20012029.ZIP	SP12 for SAP CR CONTENT UP TO 2014
ZIP	cimsap101611_0-20012029.zip	SP11 for SAP CR CONTENT UP TO 2014


Download SAP CR Content from
SAP Service Market Place in zip format

SLD Server						
General Data Data Suppliers Server						
Refresh Edit Namespaces...						
Namespace	Model Version	Classes	Instances	Associations	Total	Content
sld/active	1.6.41	1,148	198,533	568,144	767,825	SAP_CR 10.11 (produced 2015-03-02)


This content fills
the software catalog

Software Catalog

SLD Server



[Products](#)
View Products in SAP Software Catalog



[Software Components](#)
View Software Components in SAP Software Catalog

Software Catalog

Software Type: Product Versions (4953) SAP_CR 10.11 (produced 2015-03-02)

Filter: ☒ By Product ☐ By Product Version

New... Refresh

Product Versions (4953)
Software component versions (20725)

Remove Export

Product	Version
SAP NETWEAVER	
SAP NETWEAVER ABAP FOR OEM	

Adding ABAP systems to SLD



Adding ABAP System to SLD

In ABAP based SAP systems RZ70 is the T-Code that is used for pushing the data of the system to the SLD

Once the inputs are provided and the execute button is selected, background jobs will be scheduled in the SAP system that will keep pushing the latest data about the system to the SLD.

When Patches / Add-ons are installed on the SAP system, the data is changed which needs to be pushed to the SLD for updation.

The screenshot shows the SAP System Landscape Directory (SLD) Local Administration interface. The title bar includes 'Menu', 'System', and 'Help'. The main window is titled 'System Landscape Directory: Local Administration'. Below the title bar, there is a toolbar with various icons, including a green checkmark, a dropdown menu showing 'RZ70', and several standard SAP icons. The interface is divided into two main sections: 'Global Settings' and 'Data Collection Programs'.

Global Settings

Transport Information

- ☒ Standard RFC Destination
- ☐ Explicit RFC Destination

SLD Bridge: Gateway Information

Host: -----

Service: sapgw00

Other Settings

- ☒ Schedule background job?
- 720 Minutes

Data Collection Programs

Active	Sequ...	Program Name	Test	Display	Test
<input checked="" type="checkbox"/>		_SLD_APPL_SERV	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	1	_SLD_ASSOC	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		_SLD_BCSYS	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		_SLD_CLIENT	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		_SLD_COMPSYS	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		_SLD_DBSYS	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		_SLD_GWSRV	<input type="checkbox"/>	<input type="checkbox"/>	

Adding JAVA systems to SLD



Adding JAVA System to SLD

In JAVA based SAP systems we need to create a data supplier configuration by creating a HTTP Destination



The screenshot displays the SAP NetWeaver Administrator web interface. At the top, a navigation bar includes a back arrow, a forward arrow, and a search bar containing the URL `http://hostname:5<XX>00/nwa`. Below this, the title "SAP NetWeaver Administrator" is prominently displayed. A status bar indicates the user is "Sawardekar Nakul", the active profile is "Complete List", the system is "DB5 On `ccccpdb5`, v.7.40", and the system time/date is shown. The main navigation area features tabs for "My Workspace", "Availability and Performance", "Operations", "Configuration" (which is selected), and "Troubleshooting". Under the "Configuration" tab, there are sub-tabs for "Security", "Infrastructure", "Scenarios", and "Connectivity". The "Destinations" section is active, showing a "Views" dropdown and a description: "Applications or services can establish connections to other services. When using connections of this type, you need specify the remote service address and the user authentication information to use for the connection. Many applications use the Destination service for this purpose." Below this, the "JCo RFC Provider" section is visible, with a description: "The JCo RFC Provider Service processes ABAP to Java requests, and dispatches the calls to Java applications. Selected from an ABAP system, it provides an RFC destination. Technically, the service is based on the JCo (SAP Java Connector). To receive calls from ABAP, JCo servers are started and registered at the gateways of the ABAP system. The configuration of these JCo servers is done here."

Adding JAVA System to SLD

HTTP Destination SLD_DataSupplier

Connection and Transport Logon Data

Connection Information

URL:

Additional Settings for SAP Systems

System ID:

Client:

Language:

SSL Server Certificates

☒ Ignore SSL Server Certificates

Trusted Server Certificates Keystore View:

Provide the hostname
of the SLD server,
Client 000

Provide the Logon Credentials
of the SLDDUSER

HTTP Destination SLD_DataSupplier

Connection and Transport Logon Data

Authentication:

Basic Authentication

User Name:

Password:

Adding JAVA System to SLD

Go to the Configuration Tab in the Netweaver Administrator in the JAVA system and Select infrastructure. Under this we need to select SLD Data Supplier Configuration



The screenshot displays the SAP NetWeaver Administrator web interface. At the top, the browser address bar shows the URL `http://hostname:5<XX>00/nwa`. The page header includes the SAP logo and the title "SAP NetWeaver Administrator". Below the header, a status bar provides user information: "User: Sawardekar Nakul", "Active Profile: Complete List", "System: DB5 On [redacted], v.7.40", and "System Time/Date: 28.04.2015 10:34:46 CST". The main navigation area features several tabs: "My Workspace", "Availability and Performance", "Operations", "Configuration" (highlighted with a red box), "Troubleshooting", and "SOA". Under the "Configuration" tab, there is a sub-navigation bar with "Security", "Infrastructure" (highlighted with a red box), "Scenarios", and "Connectivity". The "Infrastructure" sub-tab is active, showing a section titled "SLD Data Supplier Configuration" with a description: "The SLD Data Supplier service registers the Application Server Java in the System Landscape Directory (SLD) and provides access to SLD for other Java applications".

Adding JAVA System to SLD

Here we need to Click on Button “Collect and Send Data” This will use the same HTTP Destination that we have created earlier.

SLD Data Supplier Configuration: ... [Restore Default View](#) | [Back](#) [Forward](#) [History](#) | [Home](#) | [Help](#) | [Log Off](#)

[Favorites](#) [Related Links](#) [Go To](#) [Support Details](#) Search: [Go](#)

The SLD Data Supplier service registers this J2EE Engine in the System Landscape Directory (SLD) and provides access to the SLD for other J2EE applications. For help with configuration, click [here](#)

Last Send Info	
Target URL:	<input type="text" value="http://... 50600/sld/ds"/>
Send Time:	28.04.2015 05:35:26 CST
Automatic Send:	<input type="text" value="true"/>
Success:	<input type="text" value="true"/>

Next Send Info	
Next Automatic Send Time:	28.04.2015 17:35:26 CST
Collect and Send Data	

BREAK





Exercise & Questions

Exercise

SLD Check

Login into the SLD

Explain landscape concepts

Explain SLD Concept and why we require an SLD in our SAP System Landscape

