



SAP NetWeaver '04 SR1 Installation Guide

SAP Exchange Infrastructure Release 3.0 SR1

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Type Style	Represents
<i>Example Text</i>	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation
Example text	Emphasized words or phrases in body text, titles of graphics and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, source code as well as names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as F2) or the Enter key.

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

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SAP Exchange Infrastructure 3.0 SR1 Installation

1. Installation Considerations

For more information on the overall implementation process of SAP Exchange Infrastructure 3.0 SR1, as well as a detailed description of the SAP Exchange Infrastructure components, see the documentation *Master Guide - SAP NetWeaver '04* on SAP Service Marketplace at service.sap.com/instguidesNW04.

1.1 Overview

You can install three main server components. This section provides an overview of the implementation requirements and procedures.

Overview of Allowed Installation Hosts

Components	UNICODE SAP Web AS ABAP + Java 6.40 SR1*	Business System Environment
SAP Exchange Infrastructure	X	-
Adapter Engine	X**	X***
Plain J2SE Adapter Engine	X	X****

* The following installation types are supported: Central System (Central Instance and Database Instance on one host), Standalone Database System (Central Instance and Database Instance on separate hosts), Dialog Instances for ABAP and Java

** Automatically installed with the *SAP Exchange Infrastructure*

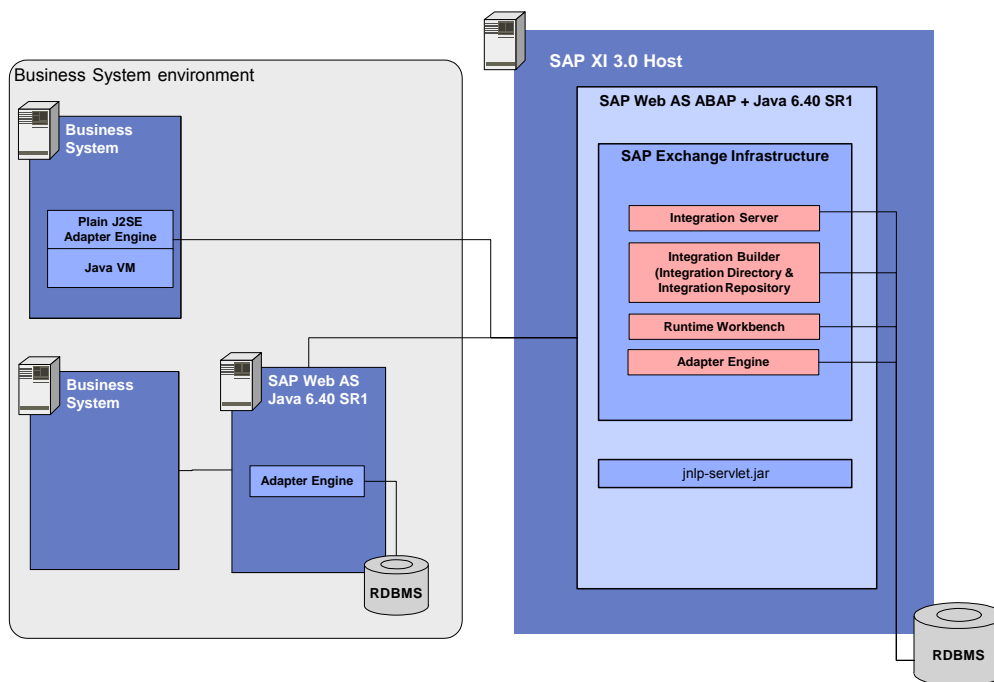
*** Java only (SAP Web AS Java 6.40 SR1 system) is a prerequisite

**** For none Web AS Java environments

The graphic below provides an overview of the relevant software components.



This graphic only applies to a minimum system landscape and also does not represent the integration logic of the SAP Exchange Infrastructure 3.0 SR1. It merely shows the components that may be installed for SAP Exchange Infrastructure 3.0 SR1.



SAP Exchange Infrastructure

Is to be installed on the central instance of a Unicode SAP Web AS ABAP + Java 6.40 SR1.

Comprises the following units:

- *Integration Server*
- *Integration Builder*
Includes the following components: *Integration Directory* and *Integration Repository*.
- *Runtime Workbench*
- *Adapter Engine*

Adapter Engine

Is to be installed on the central instance of a SAP Web AS Java 6.40 SR1. Includes the *Java Proxy Runtime* and *Java Proxy Server* that enable Java application business system to exchange data using Java proxies.

Comprises the following adapter:

- *File Adapter*
- *Mail Adapter*
- *JMS Adapter*
- *JDBC Adapter*
- *SOAP Adapter*
- *Marketplace Adapter*
- *BC Adapter*
- *RNIF Adapter*
- *CIDIX Adapter*
- *Java Proxy Server*
- *Java Proxy Runtime*

Plain J2SE Adapter Engine

Can be installed on a non-SAP Business system with JDK 1.3.1 or higher. Contains the following adapters:

- *File Adapter*
- *JMS Adapter*
- *JDBC Adapter*
- *SOAP Adapter*

1.2 Special Considerations for the Adapter Environment

There are the following installation options for the adapter environment:

- **Adapter Engine** that is to be installed on a SAP Web AS Java 6.40 SR1
- **Plain J2SE Adapter Engine** that can be installed in a non-SAP Java environment.

Adapter Engine versus Plain J2SE Adapter Engine

Both installation options contain the following adapters

File Adapter / JMS Adapter / JDBC Adapter / SOAP Adapter

The **Plain J2SE Adapter Engine** is designed to run those adapters on non-SAP Web AS released platforms

The following describes the advantages and disadvantages of using those adapters in the different flavors *Adapter Engine* or *Plain J2SE Adapter Engine*:

Installation Option	Advantages	Disadvantages
Adapter Engine	Provides complete integration into the SAP XI environment: <ul style="list-style-type: none"> • Central Monitoring available • Central Configuration available 	More resources needed for installing the SAP Web AS Java 6.40 SR1
Plain J2SE Adapter Engine	<ul style="list-style-type: none"> • Less resources needed when running in a Java environment only • Supports non-SAP Web AS 6.40 SR1 platforms 	Less integration into the SAP XI environment due to lack of central configuration and monitoring services.

Adapter Engine versus SAP Exchange Infrastructure

The **Adapter Engine** is also installed automatically with the *SAP Exchange Infrastructure* installation, but one of its components needs to be installed on the business systems in addition, others could be installed under certain circumstances on the business systems, too. The following applies:

- Using the Java Proxy environment (server or runtime) always requires installing the Adapter Engine separately on a Java-only system.
- You can use the already installed adapters (*File/JMS/JDBC/SOAP/RNIF* etc.) on the *SAP Exchange Infrastructure* server if required.

- Under certain circumstances, it may be more suitable for you to run one or more required adapters on the business system(s) or the J2EE engine. (See table below for advantages when running on a business system). Only in this case you need to install the *Adapter Engine* again on the business system (it is just an option, not mandatory)

Here are some considerations that may help you to decide when to install the adapters on the business systems:

Installation Host	Advantages	Disadvantages
Adapter on the <i>SAP Exchange Infrastructure</i> host (automatically installed) or the <i>J2EE engine (Decentral Adapter Engine)</i>	<ul style="list-style-type: none"> – No additional installation procedure required – Suitable for development or test scenarios 	<ul style="list-style-type: none"> – Data source (file, database, JMS provider) must be accessible using NFS, tcp-ports and so on (may be only available in homogeneous LAN environments) – Possible performance bottleneck due to high RAM needs. The system needs three times the amount of the maximum message size as RAM, for example.
Adapter on the business system itself (<i>Plain J2SE Adapter Engine</i>)	<ul style="list-style-type: none"> – Installation possible on Non-released SAP Web AS platforms – Only HTTP connection required between adapter and Integration server. Suitable for a more heterogeneous system landscape with mixed operating systems and authorization concepts, or for distributed WAN environments with firewalls and so on. 	<ul style="list-style-type: none"> – Additional installation procedure required for JDK and adapter itself


2. SAP Exchange Infrastructure Installation – Step by Step


This section provides an overview of the complete installation procedure. You can print out the tables below, follow the installation sequence exactly as shown in the tables and mark the step with ✓ if completed successfully.

Planning

✓	Action
	Check Implementation Considerations [on page 14]
	Check Documentation [on page 14]

Preparation

 At this point, you must have a clear installation plan to decide which SAP Exchange Infrastructure component you want to install.

✓	Action
If you want to install the component SAP Exchange Infrastructure :	
	Prepare the SAP Web AS ABAP + Java system for SAP Exchange Infrastructure [on page 15]
If you want to install the component Adapter Engine .	
	Keep in mind section Special Considerations for the Adapter Environment [on page 10]
	Prepare the SAP Web AS Java 6.40 system for the Adapter Engine [on page 19]
Basic Preparations	
	Preparing the System for SAPinst GUI [on page 21]
	Preparing Required DVDs [on page 21]

Installation

✓	Action
If you want to install the component SAP Exchange Infrastructure .	
	Check the Input Parameter for SAP Exchange Infrastructure [on page 23]
	Installing SAP Exchange Infrastructure Components [on page 25]
If you want to install the component Adapter Engine on a SAP Web AS Java 6.40 SR1 system.	
	Check the Input Parameter for the Adapter Engine [on page 25]
	Installing SAP Exchange Infrastructure Components [on page 25]
If you want to install the component Plain J2SE Adapter Engine in a business system environment.	
	Check the Input Parameter for the Plain J2SE Adapter Engine [on page 26]
	Installing SAP Exchange Infrastructure Components [on page 25]

Post-Installation

✓	Action
If you have installed the component SAP Exchange Infrastructure .	
	Checking sap.com Services [on page 31]
	Generating Roles: SAP_XI and SAP_SLD [on page 31]
	Creating User XISUPER [on page 32]
	Performing SAP XI Customizing Settings [on page 32]
	Importing the SAP Exchange Profile [on page 33]
	Performing System Landscape Directory (SLD) Configuration [on page 34]
	Creating RFC Destinations in the ABAP Environment [on page 40]
	Creating RFC Destinations in the ABAP and Java Environment [on page 41]
	Activating Services [on page 43]
	Creating HTTP Destination PMISTORE in the Java Environment [on page 43]
	Performing Basic Configuration Steps [on page 44]
	Checking the Installation – Part 1 [on page 44]
	Installing the Integration Builder Client [on page 45]
	Checking the Installation - Part 2 [on page 45]
	Importing the XI Content for Software Component Version SAP WebAS 6.40 SR1 [on page 46]
	Performing Initial Adapter Engine Cache Refresh [on page 46]
	Testing the Cache Refresh (INTEGRATION_DIRECTORY_HMI) [on page 46]
If you have installed the component Adapter Engine on a SAP Web AS java 6.40 SR1 system.	
	Configuring the SLD Data Supplier Service in the Visual Administrator [on page 47]
	Configure Gateway Service of the Central Integration Server [on page 48]
	Initial Cache Refresh Adapter Engine [en page 48]
	Check the Connection Parameters in the Exchange Profile [on page 49]
	Creating HTTP Destination pmistore in the J2EE Environment [on page 49]
If you have installed the component Plain J2SE Adapter Engine on a non-J2EE environment.	
	Activities for the Plain J2SE Adapter Engine [on page 49]
Updating the Installation	
	Applying the Latest Support Packages/Patches [on page 50]

Installation – How To

1. Installation Planning

Check Implementation Considerations

Ask the project team which scenarios and components should be implemented. This is crucial for the installation procedure.

An overview of scenarios, related components and technical infrastructure is given in the documentation *Master Guide – SAP NetWeaver '04*.

See also section [Installation Considerations](#) [on page 8].

As a result, the project team should have defined the following for the installation procedure:

- The scenarios to be installed
- The components to be installed
- The technical infrastructure to be used. This means, the technical infrastructure of the system landscape (which components are to be installed on which host(s)) should exist and meet the hardware and software requirements.

Check Documentation

Read **SAP Note 782801** *SAP Exchange Infrastructure 3.0 SR1 Installation* at service.sap.com/notes.

Check the Released Platforms

Check the released platforms for SAP Exchange Infrastructure at the SAP Service Marketplace at service.sap.com/platforms → *Product Availability Matrix*

Check the Exchange Infrastructure Security Guide

Before you start the installation you should check the Exchange Infrastructure Security Guide. You find this guide on SAP Help Portal at help.sap.com → *Documentation* → *SAP NetWeaver* → *SAP NetWeaver '04 (SP Stack 9)* under *Security* → *SAP NetWeaver Security Guide* → *Security Guides for the SAP NetWeaver Products* → *SAP Security Guide XI*.

2. Installation Preparation

Prepare the SAP Web AS ABAP + Java system for SAP Exchange Infrastructure

An existing **Unicode SAP Web Application Server (Web AS) ABAP + Java 6.40 SR1 system** is a prerequisite for the core SAP Exchange Infrastructure component *SAP Exchange Infrastructure*.

Therefore, before you begin with the installation, make sure that the following prerequisites are met:

Unicode SAP Web AS ABAP + Java 6.40 SR1 system

The following SAP Web AS installation types are supported:

- Central System (Central Instance and Database Instance on one host)
- Database System (Central Instance and Database Instance on separate hosts)
- Dialog Instances (for ABAP and Java)



- You must not use an SAP Web AS 6.40 derived from an upgrade.
- Never use any business system (SAP CRM or SAP SCM for example) with a **Unicode SAP Web AS 6.40 basis** as installation host for SAP Exchange Infrastructure.
- During the install of the J2EE Engine you should choose the XI specific installation option for the J2EE Engine in UME User Group management (*Use SAPGUI Transaction PFCG*)

Checking Central Instance Profile Settings

Check and adapt if necessary the following settings in the central instance profile:

1. On your SAP Web AS host open the central instance profile with a text editor.



As an alternative you can use transaction *RZ10* to maintain profiles.

The default path is:

```
/usr/sap/<SAPSID>/SYS/profile/  
<SAPSID>_DVEBMGS<instance_number>_<hostname>
```

2. Check and adapt the following:
 - If the parameter *rdisp/start_icman* exists, it must have the value TRUE. Adapt the value if necessary, otherwise you get an NO_PLUGIN_ACTIVE error message during the installation
 - On UNIX:
Only if you use an ICM port ≤ 1024 , refer to **SAP Note 421359**.
 - On Windows:
If the parameter **EXTBIND=1** exists, delete this parameter (but not the whole line).
For example, *icm/server_port_0 = PROT=HTTP,PORT=8000,EXTBIND=1*
3. Save your settings.
4. Restart the SAP system (`stopsap R3 / startsap R3`).

5. Log on to your SAP system.
6. Run transaction *SMICM* to check if the ICM and the HTTP service is running:
 - a. In the *ICM Monitor* screen, check if the *ICM status* field displays a running state (= green bullet)
 - b. Choose *Goto* → *Services*.
The *ICM Monitor- Service Display* screen appears.
Check if the HTTP service is up and running (column *Active* is signed with a green hook)

Client for SAP Exchange Infrastructure is Created

You generate the client using the client copy procedure from the source client **000** as described in the documentation *Installation Guide – Unicode SAP Web AS 6.40 on <OS>: <Database>*, section *Client Copy*.





- a. Perform the client copy before installing the J2EE engine. During the J2EE engine installation you specify the client derived from the client copy.
- b. Perform the client copy at least with a profile **SAP_UCSV** that copies also user roles and authorization profiles, which are contained in client 000.
- c. If you already installed the J2EE engine on client 000, copy the client and change the configuration according to the task below, so that the engine settings point to the copied client.

Configuring the J2EE Engine

1. Start the Visual Administrator of the J2EE engine.
If you are not sure how to start, see [How to start the J2EE Administration Tool](#) [on page 57]
2. Do the following in the Visual Administrator:

Task	How to
Check if the client for the User Management is set correctly. This may be not the case, if you have performed a client copy after installing the J2EE engine for the SAP Web AS.	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Services</i> → <i>Configuration Adapter</i> 2. In the tab <i>Display Configuration</i> (right frame) choose <i>Switch between view and edit mode</i> to activate the edit mode. 3. Choose <i>cluster_data</i> → <i>server</i> → <i>cfg</i> → <i>services</i> → <i>Property sheet com.sap.security.core.ume.service</i> 4. Choose <i>Show the detail of the selected node</i> 5. The parameter <i>ume.r3.connection.master.client</i> must be set to your SAP Exchange Infrastructure client. Adapt the value if necessary.
Adapt memory configuration for the J2EE server	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Services</i> → <i>Configuration Adapter</i>

	<ol style="list-style-type: none"> 2. Choose <i>cluster_data</i> → <i>PropertySheet instance.properties.ID...</i> 3. Choose <i>Show the detail of the selected node</i> 4. The parameter <i>ID...MaxHeapSize</i> for server0 must be set according to your platform: <ul style="list-style-type: none"> • On IBM iSeries: Set the value to 3072. • Other platforms: Set the value to 1024 5. For the parameter <i>ID...JavaParameters</i> for server0 add the following settings at the beginning of the existing properties settings: <div style="background-color: #f0f0f0; padding: 5px; margin: 5px 0;">  Never use this -XX parameter for IBM or Compaq JDKs. </div> <p>-XX:MaxPermSize=128M <existing settings>... (at least 128M)</p> <div style="background-color: #f0f0f0; padding: 5px; margin: 5px 0;">  You have to perform this step for all instances on the server. </div>
Adapt Thread settings	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Services</i> → <i>Configuration Adapter</i> 2. In the tab <i>Display Configuration</i> (right frame) choose <i>Switch between view and edit mode</i> to activate the edit mode. 3. Choose <i>cluster_data</i> → <i>server</i> → <i>cfg</i> → <i>kernel</i> → <i>PropertySheet ApplicationThreadManager</i> 4. Choose <i>Show the detail of the selected node</i> 5. The parameter <i>MaxThreadCount</i> must be set to 150. Adapt the value if necessary.
Adapt settings for database connection	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Services</i> → <i>JDBC Connector</i> 2. Under the node <i>DataSources</i> select your database. 3. Choose the tab <i>Additional</i> 4. Enter the following values: <i>Initial Connections: 10</i> <i>Maximum Connections: 100</i>
Adapt Timeout settings	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Kernel</i> → <i>Service Manager</i> 2. The parameter <i>LoadTimeout</i> must be set according to your platform: <ul style="list-style-type: none"> • On IBM iSeries Set the value to 20. • Other platforms Set the value to 5

(See [Starting and Stopping the Java System](#) [on page 58].)

Prepare the SAP Web AS Java 6.40 SR1 system for the Adapter Engine

A **Unicode SAP Web AS Java 6.40 SR1 system** is the basis for the SAP Exchange Infrastructure component *Adapter Engine*. Therefore, before you begin with the installation, make sure that the following prerequisites are met:

SAP Web AS Java 6.40 SR1 system is installed

The following installation option is supported:

- Central System (Central Instance and Database Instance on one host)



The installation options *Distributed System* and *J2EE Dialog Instance* are not supported.



During the SAP Web AS Java system installation, you must choose at least the following:

- In the Welcome screen, you must choose the installation task *J2EE System → Central System → Install a J2EE Server in Custom Mode*
- Three screens are critical, you need to enter at least the following:
 - Screen *Java System → UMEngine Configuration*
Choose *Use ABAP system for users and groups (SAP Exchange Infrastructure only)*



 - Screen *Configuring the User Management Engine (UME) against a central ABAP system*
Enter the data for of the host, where the central SAP Exchange Infrastructure is installed.

 - Screen *System Landscape Directory*
Enter the connection data for the central System Landscape Directory.

Configuring the J2EE Engine

1. Start the Visual Administrator of the J2EE engine.
If you are not sure how to start, see [How to start the J2EE Administration Tool \[on page 57\]](#)
2. Do the following:

Task	How to
Adapt memory configuration for the Java server	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server → Services → Configuration Adapter</i> 2. Choose <i>cluster_data → Property sheet instance.properties.ID...</i> 3. Choose Show the detail of the selected <i>node</i> 4. The parameter <i>ID...MaxHeapSize</i> for server0 must

	<p>be set according to your platform:</p> <ul style="list-style-type: none"> • On IBM iSeries: Set the value to 3072 . • Other platforms: Set the value to 1024 <p>5. For the parameter <i>ID...JavaParameters</i> for server0 add the following settings at the beginning of the existing properties settings:</p> <p> Never use this -XX parameter for IBM or Compaq JDKs.</p> <p>-XX:MaxPermSize=128M <existing settings>... (at least 128M)</p> <p> You have to perform this step for all instances on the server.</p>
<p>Adapt Timeout settings</p>	<ol style="list-style-type: none"> 1. In the left frame choose <i>Server</i> → <i>Kernel</i> → <i>Service Manager</i> 2. The parameter LoadTimeout must be set according to your platform: <ul style="list-style-type: none"> • On IBM iSeries Set the value to 20 . • Other platforms Set the value to 5

3. You must restart the Java system to adopt the settings.
If you are not sure how to restart, see [Starting and Stopping the Java System](#) [on page 58].

Preparing the System for SAPinst GUI

The installation tool SAPinst uses the Java based graphical user interface SAPinst GUI. SAPinst GUI needs a Java Runtime Environment (JRE).

You need to check your Java Runtime Environment (JRE), because the JRE could not be integrated into the SAPinst GUI executable for all platforms due to licensing issues.



You can run the SAPinst GUI on the installation host or, if required, you can control an installation using a standalone SAPinst GUI on a separate Windows or UNIX host.

This standalone SAPinst GUI enables you to perform the installation on a remote host while monitoring it with the SAPinst GUI from a local host. If you want to do that, see [Controlling a SAPinst Installation from a Remote Machine](#) [on page 51].

Check the existence of a released Java Runtime Environment (JRE) on the host where SAPinst GUI should run:

Platform	Required JRE for the SAPinst GUI
<ul style="list-style-type: none"> • NT IA64 • Linux-IA64 • Linux-s390x 	<p>The required JRE release is the same as the JDK release required for the SAP Web AS 640 SR1. See at service.sap.com/platforms → <i>Availability of SAP components in Detail</i> → <i>SAP Web AS / R/3 / Kernel</i></p> <ul style="list-style-type: none"> • JRE is not part of the SAP shipment. If necessary you need to download and install it. • To check the version of an already installed JRE, enter: <code>java -version</code> If the checked version does not match the required JRE you must set the environment variable <code>SAPINST_JRE_HOME</code> to the path of the required JRE (<code>C:\jdk1.4.2</code> on Windows for example or <code>/usr/lib/java/j2sdk1.4.2</code> on UNIX for example). See your operating system documentation on how to set environment variables.
<ul style="list-style-type: none"> • NT I386 • HP-UX • SUN Solaris 	<p>No special JRE required for SAPinst GUI, because the JRE is integrated in the SAPinst executables.</p> <p>As the JRE is temporary extracted on your host, you need at least about 40 – 80 MB free disk space for that. After the installation, SAPinst removes this JRE from your host.</p>
<p>Other Platforms</p>	<p>The required JRE is 1.3.0 or higher.</p> <p>JRE is not part of the SAP shipment. If necessary you need to download and install it.</p>

For more information see the respective ABAP + Java Guide at the SAP Service Marketplace at service.sap.com/instguidesNW04 → *SAP NetWeaver* → *Release '04* → *Installation* → *SAP Web AS*.

Preparing Required DVDs



We recommend that you make all required DVDs available **in parallel**.

These are the required DVDs:

- *SAP NetWeaver '04 SR1 Installation Master <DB> DVD*
- *SAP NetWeaver '04 SR1 COMPONENTS DVD*

Use one of the following methods to make DVDs available in parallel:

- *Before the installation:*
 - Have sufficient DVD drives
 - Copy DVDs manually to local hard disks
- *During the installation:*

Use the [SAPinst DVD/CD Browser Dialog](#) [on page 54]. That is, you can check the entered location and then copy the entire DVD to the path you entered in column *Copy Package to*.

3. Installing SAP Exchange Infrastructure with SAPinst


3.1 Input Parameter

As of now there is a new F1-field-help displaying information about the input parameter fields of the SAPinst screens. This new field help replaces the former “What’s this”-help on the SAPinst screens and the former input parameter tables in the installation guides.

3.2 Input Parameter for the SAP Exchange Infrastructure

To prepare for the **input phase** of the SAP Exchange Infrastructure installation on the SAP Web AS, we recommend that you write down the information that you have to enter **before** you start **SAPinst**. Having the required information ready in advance helps you avoid unnecessary delays and errors.


The following table shows the window names that appear during the installation procedure, and their prompts that are required for the installation:

Window Name	Prompt
<i>DVD/CD Browser</i>	<p>A DVD/CD Browser may ask you for the location of the installation DVD <i>SAP NetWeaver '04 SR1 Components DVD</i>.</p> <p>This dialog only appears if the system wants to check or cannot find the file <code>LABEL.ASC</code> on the DVD that contains the relevant installation information.</p> <p>Enter the location of the DVD in field <i>Package Location</i> as it is named in field <i>DVD/CD Name</i>.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p> Example:</p> <p>The field <i>DVD/CD Name</i> displays the following entry: <i>Components DVD</i>.</p> <p>Then you need to enter the following:</p> <pre><drive>:\<DVD> (on Windows) <mountpoint_<DVD> (on UNIX)</pre> </div> <p>For more information on the DVD/CD Browser dialog, see Using the SAPinst DVD/CD Browser Dialog [on page 54].</p>
<i>Stating SAP Web Application Server 6.40 SR1 Parameter</i>	<p>Enter exactly the connection parameters of the SAP Web AS on which you install the SAP Exchange Infrastructure.</p> <p>You need to have the following information:</p> <ul style="list-style-type: none"> • <i>SAP System ID (SID)</i> • The <i>Client</i> is the client that is derived from the SAP Web AS client copy. • DDIC password • <i>J2EE administrator</i> password

Window Name	Prompt
<i>Stating SAP System Administrator Account</i>	<p>Appears on Windows systems only</p> <p>You need to have the password of the SAP Web AS administrator <sid>adm.</p>
<i>Entering the Passwords for the Service Users (1-2)</i>	<p>During the installation, SAPinst automatically creates SAP Exchange Infrastructure specific service users.</p> <p>For each user, SAPinst creates also a password that you can define here.</p> <p>SAPinst displays two dialogs in a row, where you can define the password for the following users:</p> <ul style="list-style-type: none"> • XIREPUSER • XIDIRUSER • XILDUSER • XIAPPLUSER • XIRWBUSER • XIAFUSER • XIISUSER • LSADMIN


3.3 Input Parameter for the Adapter Engine

If you intend to install the *Adapter Engine* separately, (see [Installation Considerations](#) [on page 10]), you can now prepare for the **input phase** of the installation with SAPinst. We recommend that you write down the information that you have to enter **before** you start **SAPinst**. Having the required information ready in advance helps you avoid unnecessary delays and errors. The following table shows the window names that appear during the installation procedure, as well as their prompts that are required for the installation:

Window Name	Prompt
<i>DVD/CD Browser</i>	<p>A DVD/CD Browser may ask you for the location of the installation DVD <i>SAP NetWeaver '04 SR1 COMPONENTS DVD</i>.</p> <p>This dialog only appears if the system wants to check or cannot find the file <code>LABEL.ASC</code> on the DVD that contains the relevant installation information.</p> <p>Enter the location of the DVD in field <i>Package Location</i> as it is named in field <i>DVD/CD Name</i>.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p> Example:</p> <p>The field <i>DVD/CD Name</i> displays the following entry: <i>Components DVD</i>.</p> <p>Then you need to enter the following:</p> <p><code><drive>:\<DVD></code> (on Windows)</p> <p><code><mountpoint_<DVD></code> (on UNIX)</p> </div> <p>For more information on the DVD/CD Browser dialog, see Using the SAPinst DVD/CD Browser Dialog [on page 54].</p>
<i>Stating SAP Web AS Java 6.40 SR1 System Parameter</i>	<p>Enter exactly the connection parameters of the SAP Web AS Java instance on which you install the Adapter Engine.</p> <p>You need to have the following information:</p> <ul style="list-style-type: none"> • <i>SAP System ID (SID)</i> • <i>J2EE administrator account (user and password)</i>
<i>Stating SAP System Administrator Account</i>	<p>Appears on Windows systems only</p> <p>You need to have the password of the SAP Web AS administrator <code><sid>adm</code>.</p>
<i>Stating SAP Exchange Infrastructure Parameters</i>	<p>The Adapter Framework needs a connection to the host where the SAP Exchange Infrastructure is installed.</p> <p>You need to have the following information:</p> <ul style="list-style-type: none"> • <i>Host name, Instance Number and client</i> of the SAP Web AS 6.40 SR1 central instance host, where the SAP Exchange Infrastructure is installed. • <i>Exact Password</i> for the SAP Exchange Infrastructure Service user XILDUSER

3.4 Input Parameter for the Plain J2SE Adapter Engine

If you intend to install the *Plain J2SE Adapter Engine*, (see [Installation Considerations](#) [on page 10]), you can now prepare for the **input phase** of the installation with SAPinst. We recommend that you write down the information that you have to enter **before** you start **SAPinst**. Having the required information ready in advance helps you avoid unnecessary delays and errors. The following table shows the window names that appear during the installation procedure, as well as their prompts that are required for the installation:

Window Name	Prompt
<i>DVD/CD Browser</i>	<p>A DVD/CD Browser may ask you for the location of the installation DVD <i>SAP NetWeaver '04 SR1 COMPONENTS DVD</i>.</p> <p>This dialog only appears if the system wants to check or cannot find the file <code>LABEL.ASC</code> on the DVD that contains the relevant installation information.</p> <p>Enter the location of the DVD in field <i>Package Location</i> as it is named in field <i>DVD/CD Name</i>.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p> Example:</p> <p>The field <i>DVD/CD Name</i> displays the following entry: <i>Components DVD</i>.</p> <p>Then you need to enter the following:</p> <p><code><drive>:\<DVD></code> (on Windows)</p> <p><code><mountpoint_<DVD></code> (on UNIX)</p> </div> <p>For more information on the DVD/CD Browser dialog, see Using the DVD/CD Browser Dialog [on page 54].</p>
<i>Defining Plain J2SE Adapter Engine Installation Directory</i>	<p>To install the <i>SAP Plain J2SE Adapter Engine</i>, the <i>SAP System Delivery Manager (SDM)</i> is installed on your host under a unique SAP path (<code>usr/sap/<Systemname>/java</code>), where <code><Systemname></code> can be defined.</p> <p>Enter at least four characters for the <code><Systemname></code> (J2SEADP, for example).</p> <p>Appears on Windows systems only.</p> <p>You will be asked to enter the drive for the directory <code>usr/sap</code>, SAPinst then creates the directory on that drive.</p>
<i>Stating SAP System Landscape Directory Parameters</i>	<p>The <i>Plain J2SE Adapter Engine</i> needs a connection to the host where the <i>SAP System Landscape (SLD)</i> is installed.</p> <p>You need to have the following information:</p> <ul style="list-style-type: none"> • <i>Host name and Instance Number</i> of the SLD installation. • Exact <i>Password</i> for the SAP Exchange Infrastructure Service user XIAPPLUSER


3.5 Installing SAP Exchange Infrastructure Components with SAPInst

This procedure tells you how to run SAPInst to install the SAP Exchange Infrastructure components (SAP Exchange Infrastructure / Adapter Engine / Plain J2SE Adapter Engine) on released platforms.

This section describes an installation where SAPInst GUI and SAPInst server are running on the same host. If you want to perform a remote installation, that is, SAPInst GUI is running on another host, see [Controlling a SAPInst Installation from a Remote Machine](#) [on page 51].

SAPInst GUI Handling

The following push buttons are available on the different SAPInst GUI dialogs (Input screens, Installation Progress screen, Message Box):

Push Button	Meaning
<i>F1</i>	Displays detailed information about each input parameter. The new field help replaces the former "What's this"-help on the SAPInst screens and the former input parameter tables in the installation guide.
<i>Back</i>	Displays the previous dialog for editing
<i>Next</i>	Displays the next dialog for editing
<i>Cancel</i>	<p>Cancels the installation with the following options:</p> <ul style="list-style-type: none"> – <i>Stop</i> Stops the installation and leaves the installation files in the state in which they are at the current point in time. This means that you can continue the installation later from this point. – <i>Reset</i> Resets all installation input files. All files in the installation directory are removed from the system and no log files are saved. This means that you must start the installation from scratch again.
<i>Logoff</i>	<p>Cancels the connection to the SAPInst GUI only. The SAPInst server keeps on running.</p>  <p>Typical use case: You need to logoff during the installation (for what reason ever) from the host where you control the installation with SAPInst GUI. Then you can connect from another host to the running installation. Be aware, that you need the <installation DVD> for that. For more information on running SAPInst GUI standalone see Starting SAPInst GUI on a local Host [on page 52]</p>
<i>View Log</i>	Displays the content of the <i>sapinst.log</i> file during the installation.
<i>Retry</i>	Performs the installation step again (if an error has occurred).
<i>Stop</i>	Stops the installation and leaves the installation files in the state in which they are at the current point in time. This means that you can continue the installation later from this point.
<i>Reset</i>	<p>Resets all installation input files. All files in the installation directory are removed from the system. No backup is available.</p> <p>This means that you must start the installation from the beginning again.</p>

Procedure

For each of the components that you want to install (*SAP Exchange Infrastructure / Adapter Engine / Plain J2SE Adapter Engine*), you need to run SAPinst separately.

1. Depending on your operating system do the following:

- **On Windows**

- a. Log on to your installation host as user with administrator rights.
- b. Insert the *SAP NetWeaver '04 SR1 Installation Master DVD* (from now on called <installation DVD>) in your DVD drive.
- c. Run **sapinst.exe** from the following path:
<installation DVD>:\IMx\SAPINST\NT\<OS>

Normally, SAPinst creates the installation directory *sapinst_instdir* directly below path <drive>:\Program Files\
Exception:
If <drive>:\Program Files\ is not accessible or write-protected, SAPinst tries to create the directory *sapinst_instdir* directly below the temporary directory (\$TEMP). If SAPinst does not find the temporary directory, the installation terminates with the error FCO-00057.

- **On UNIX**

- a. Log on to your installation host as user *root*.
- b. Mount the *SAP NetWeaver '04 SR1 Installation Master DVD* (from now on called <installation DVD>).

Mount the DVD locally. We do **not** recommend using Network File System (NFS).

- c. Run the command **umask 22**
- d. Make sure that your DISPLAY environment variable is set to <Host_name>:0.0, where <Host_name> is the host on which the *SAPinst GUI* will be displayed.

Shell Used	Command
Bourne Shell (bsh)	DISPLAY=<Host_name>:0.0 export DISPLAY
C Shell (csh)	./setenv DISPLAY <Host_name>:0.0
Korn Shell (ksh)	export DISPLAY=<Host_name>:0.0

- e. Enter the following commands to run the script *sapinst* from the mounted <installation DVD>:

```
cd <installation DVD>/IMx/SAPINST/UNIX/<OS>
./sapinst
```



- Normally, SAPinst creates the installation directory `sapinst_instdir` directly below the temporary directory (`$TEMP` or `$TMP` or `/tmp`). Therefore make sure that your operating system is configured not to delete the temporary directory and its subdirectories when the system is rebooted.
- You need at least 40 MB free space for your temporary directory for each installation service.
- If SAPinst does not find any temporary directory, the installation terminates with the error `FCO-00058`.



If you want SAPinst to use any other installation directory than `sapinst_instdir` directly below the temporary directory, proceed as follows:

1. Create an installation directory of your choice for SAPinst with sufficient free space (at least 200 MB) and permissions `777`.
2. Change to this installation directory.
3. Enter the following command to run the script `sapinst` from the mounted *Installation DVD*:

```
<Installation DVD>/IMx/SAPINST/UNIX/<OS>/sapinst
```



SAPinst uses the port 21212 during the installation for communication with the SAPinst GUI. If this port is already used by another service you must start SAPinst as follows:

```
<Installation DVD>/IMx/SAPINST/UNIX/<OS>/sapinst \  
SAPINST_DIALOG_PORT=<free_port_number>
```

SAPinst GUI starts automatically by displaying the *Welcome* screen.

4. Depending on what you intend to install, select one of the following from the tree structure and choose *Next*:

Installation Service	Description
<i>SAP Exchange Infrastructure</i>	Installs the <i>Integration Server, Integration Builder, Runtime Workbench, RFC Adapter, Adapter Engine</i>
<i>Adapter Engine</i>	Installs the <i>Adapter Engine</i> separately, if required.
<i>Plain J2SE Adapter Engine</i>	Installs the <i>File Adapter, JMS Adapter, JDBC Adapter, SOAP Adapter</i> in a non-SAP Java environment.



SAPinst creates a subdirectory for the chosen installation service below the `sapinst_instdir` according to the service name:

- For *SAP Exchange Infrastructure*, the subdirectory is `NW04SR1/XI/XI`
- For the *Adapter Engine*, the subdirectory is `NW04SR1/XI/AF`
- For the *Plain J2SE Adapter Engine*, the subdirectory is `NW04SR1/XI/AE`

Follow the instructions on your screen. Depending on the selected installation service you can check the input parameters in the sections:

- [Input Parameters for SAP Exchange Infrastructure](#) [on page 23]
- [Input Parameters for the Adapter Engine](#) [on page 25]
- [Input Parameters for the Plain J2SE Adapter Engine](#) [on page 26]

After you have maintained all input parameters, **SAPinst** starts the installation and displays installation progress during the processing phase. If the installation was successful, the message `The installation finished successfully` is displayed.

Troubleshooting

- If an error occurs during the **dialog phase**, SAPinst:

- Stops the installation
- Displays a dialog that informs you about the error

You can now directly view the log file by choosing *View Logs*.

Finally, you must abort the installation with *Stop* or *Reset*, and try to solve the problem.

- If an error occurs during the **processing phase**, SAPinst:

- Stops the installation
- Displays a dialog that informs you about the error

You can now:

- Directly view the log file by choosing *View Logs*.
- Try to solve the problem.
- Continue the installation by choosing *Retry*.
- *Stop* or *Reset* the installation.

For more information, see [Continuing an Interrupted Installation with SAPinst](#) [on page 54].

Result

The chosen SAP Exchange Infrastructure components are installed on your host.



The SAP Web AS installation includes the following SAP Exchange Infrastructure relevant components: *IDOC adapter*, *HTTP adapter*, *System Landscape Directory*

4. Post-Installation Activities

4.1 Activities for SAP Exchange Infrastructure

You must perform the following activities on the SAP Web AS 6.40 SR1 central instance host on which you have installed the component SAP Exchange Infrastructure.

Checking sap.com Services

You need to check if the SAP XI *sap.com* services are running

1. Start the Visual Administrator of the J2EE engine.
If you are not sure how to start, see [How to start the J2EE Administration Tool](#) [on page 57]
2. Choose *Cluster* → *Server* → *Services* → *Deploy*
3. In the right frame, select the radio button *Application*.
A list of the deployed services appears.
4. Check if the following services are running
 - All services beginning with
 - `sap.com/com.sap.aii*`
 - `sap.com/com.sap.lcr*`
 - `sap.com/com.sap.xi*`
 - `sap.com/com.sap.rprof.remoteProfile`If one of the services is not running, select the services and choose *Start Application*.



Let the Visual Administrator tool open, as you need it later on again.

Generating Roles for SAP_XI and SAP_SLD

Generate all roles beginning with SAP_XI, SAP_SLD and SAP_BC_AI_LANDSCAPE_DB_RFC:

1. Call transaction PFCG.
2. Choose *Utilities* → *mass generation*. Do the following:
 - a. Field *Role*: Enter `SAP_XI*`
 - b. Select *Generate automatically*
 - c. Press <F8> and choose *Generate online*
If there is a list of profiles displayed, which are not yet generated, repeat the procedure by pressing <F8>.
 - d. Repeat the steps for roles `SAP_SLD*` and `SAP_BC_AI_LANDSCAPE_DB_RFC`
3. Choose *Utilities* → *mass comparison*. Do the following:
 - a. Field *Role*: Enter `SAP_XI*`
 - b. Select *Output error messages*
 - c. Choose *Execute (F8)*.

No error message should be displayed



You can ignore the warning message that the role `SAP_XI_CMS_SERV_USER` does not have a profile.

Creating User XISUPER

To perform the post-installation activities, you need to create the following user in your SAP Exchange Infrastructure client:

1. On your SAP Web AS host, create the user below with at least the following parameters (transaction `SU01`).

User	Last name (Tab: Address)	Password / User Type (Tab: Logon Data)	Role (Tab: Role)
XISUPER	<your_name>, for example <i>XI Super</i>	<init_password> / <i>Dialog</i>	SAP_BC_AI_LANDSCAPE_DB_RFC SAP_SLD_ADMINISTRATOR SAP_XI_ADMINISTRATOR SAP_XI_CONFIGURATOR SAP_XI_CONTENT_ORGANIZER SAP_XI_DEVELOPER SAP_XI_MONITOR

The SAP_XI* roles are composite roles

2. Save, and exit `SU01`
3. You must now log on to the Integration server host with the user XISUPER, to switch the initial password to a valid password.
4. You must restart the J2EE engine to transfer the user creation to the J2EE immediately.

Performing SAP XI Customizing

On your SAP Web AS host, do the following:

1. Log on as user with **SAP_ALL** rights (you cannot use DDIC or SAP*).
2. Call transaction `SWF_XI_CUSTOMIZING` to perform basic settings for the SAP Exchange Infrastructure.
The screen *Automatic Workflow Customizing* appears.
3. Make sure that the node *Maintain Runtime Environment* has a green hook (not a red cross).
If there is a red cross, do the following:
 - a. Select the node *Maintain Runtime Environment*.
 - b. Press `F9`.
The system now performs the automatic customizing including all sub nodes.
4. Choose *Maintain Definition Environment* → *Maintain Prefix Numbers*
5. Press `F8`.
The screen *Prefix Numbers for Workflow and Organizational Management* appears.
6. Press `Ctrl + F1` to activate the edit mode.
7. In the box *Available Prefix Numbers for Workflow and Organizational Management*, choose *Create*.
8. In the dialog box, you need to enter a *Prefix number* higher than 900 and choose *Save*.



You need to enter a transport request according to your Transport Management System (TMS) and choose *Save* again.


- Exit the transaction.
- Run report `RSWF_CATID` by calling transaction `SE38`.
On the selection screen select the options *ABAP Classes* and *XML Objecttypes* and execute the report.

Assign Application Roles to User Groups

- Start the J2EE Engine Visual Administrator.
- Choose *Cluster* → *Server* → *Services* → *SLD Data Supplier*
- On the *Runtime* tab in the right frame, push the button "Assign Application Roles to User Groups". Confirm the dialog.

Importing the SAP Exchange Profile

You must import the SAP Exchange Profile manually.

- On your SAP Integration server host, open the following URL:
`http://<J2EE_host>:<J2EE_Port>/exchangeProfile`
The following naming convention applies for `<J2EE_Port>`:
`5<J2EE_instance_number>00`. **50000**, for example, if your J2EE instance is **00**
- Enter the log on information:
User Name: `XISUPER`
Password: `<xisuper_password>`
The *Exchange Profile* page appears.
- Choose *Connection*
The *Server Settings* page appears
- Enter the required information for the SAP Exchange Infrastructure host.
Use the logon information of user `XILDUSER`
- Choose *Set*.
The *Exchange Profile* page appears.
- Choose *Import*.
The *Import Profile* page appears.
- Choose *Browse* and select the following file:
`/usr/sap/<SID>/SYS/global/exchange_profile.xml`
 If you cannot run a Web Browser on your XI host, you need to copy the file `exchange_profile.xml` from the XI host to a host where a Web browser runs.
- Choose *Import Data*.
The profile will be imported.



As the file *exchange_profile.xml* contains secure information like passwords, we highly recommend to delete the file after importing or to save it by using high security standards, such as encryption.

Performing System Landscape Directory (SLD) Configuration

The System Landscape Directory 6.40 SR1 is installed as a part of the SAP Web AS Java 6.40 SR1 system.



The following steps are required to configure the SLD for XI:

- Applying **SAP Note 712594**
- Maintaining SLD Connection Parameters in the Integration Server
- Maintaining Server Settings in the SLD
- Updating the CR Data
- Configuring the SLD Bridge
- Maintaining a Business System for the Integration Server

Applying SAP Note 712594

Make sure that you have applied the SLD gateway settings according to **SAP Note 712594**.

Maintaining SLD Connection Parameters

1. Log on to the SAP System as user DDIC and call transaction **SLDAPICUST**.
The screen *Maintain SLD Access Data* is displayed.
2. Choose *Display* <-> *Change*, and then proceed as follows:
 - a. Choose *Insert Row*.
 - b. Enter the connection parameters to the SLD:
 - Host Name: host name of the SLD host
 - Port: HTTP port of the J2EE engine (The following naming convention applies: 5<J2EE_instance_number>00. **50000**, for example, if your J2EE instance is **00**).
 - User
 - Password. As user enter **XIAPPLUSER**
 - c. Set your entry as *Primary*.
 Only the *Primary* marked entry is active.
 - d. Save.

Maintaining Server Settings in the SLD

1. **On your SLD host**, start the SLD configuration by entering the following URL in your Internet browser:

`http://<host>:<HTTP_port>/sld`

where <host> is the host name of the SLD host and <HTTP_port> is the HTTP port of the J2EE engine (The following naming convention applies: 5<J2EE_instance_number>00. 50000, for example, if your J2EE instance is 00).

2. Enter the log on information:

User Name: `XISUPER`

Password: `<xisuper_password>`

The *System Landscape Directory* page appears.

3. Choose *Administration*.

The *Administration* page appears.

4. Make sure that the field *Status* indicates *Stopped*.

The server must be stopped to perform this activity. If the server is running choose *Stop Server*.

5. Choose *Server Settings* and enter the following:

- a. *Object Server:*

Enter the host name where your SLD is located
Choose the *Information* button for more information.

- b. *Working Directory:*

Enter the path to the global SLD directory
(`/usr/sap/<SAPSID>/SYS/global/sld`)

6. Under *Persistence* select *Database*.

7. Leave the fields under *ABAP Connection Parameters* empty.

8. Choose *Set*.

9. Start the SLD server as follows:

- a. From the menu, choose *Administration*

- b. Choose *Start Server*.

Updating the CR Data in the SLD

The SLD server implements the *DMTF Common Information Model (CIM)* (www.dmtf.org). Before you start to use the SLD server, you have to import two data packages successively:

- *cimsap.zip*: This file contains all relevant class definitions from the CIM specification v. 2.6 and the SAP extension schema. When you start the SLD on SAP Web AS 6.40 SR1 for the very first time, this package will be imported automatically into the default CIM namespace `sld/active`.
- *CR_Content.zip*: This file contains all instances that represent information about available SAP components.

To import these files:

1. **On your SLD host**, start the SLD configuration by entering the following URL in your Internet browser:

`http://<host>:<HTTP_port>/sld`



If you cannot run a Web Browser on your SLD host, you need to copy the files

cimsap.zip and *CR_Content.zip* from the SLD host (from `/usr/sap/<SAPSID>/SYS/global/sld/model/`) to a host where a Web browser runs.

2. In the *System Landscape Directory* page on your SLD host, choose *Administration*.

The *Administration* page appears.

3. Choose *Import*.

The *Import Selection* page appears.

4. If the *cimsap.zip* file has been uploaded during the SLD start continue with the import of *CR_Content.zip*.

5. In the field *Import File* browse for the file *cimsap.zip*.

If you run the Web browser on the SLD host, the file is located at `/usr/sap/<SAPSID>/SYS/global/sld/model/`, else browse for the directory where you have copied the file.

6. Choose *Import*.



Leave all options deactivated for the initial data import.

Loading the files to the SLD server may take up to 20 minutes.

7. Repeat the procedure for the file *CR_Content.zip*



Since *CR_Content.zip* contains all available SAP components, the content of this file grows with time. The extensions contain information about new components (new releases and Support Packages, for example). This content in the SLD has to be updated from time to time. You can download the most up-to-date files from the SAP Service Marketplace. See **SAP Note 669669** for details.

Configuring the SLD Bridge

Configuring the SLD Bridge contains the following activities:

- Configuring the SLD Clients with the SLD Administration
- Maintaining the ABAP Connection
- Configuring the SLD Data Supplier Service in the Visual Administrator

Configuring the SLD Clients with the SLD Administration

1. In the *System Landscape Directory* page on your SLD host, choose *Administration*.

The *Administration* page appears.

2. Choose *Data Supplier Bridge*.

The *Data Supplier Bridge Administration* page appears.

3. Set the Update local SLD (sld/active) to *true*

4. Under Gateway enter:

Server: `<host_name_of_SLD>`

Service: `<gateway_service_of_SLDhost>`

5. Choose *Set*.
6. *Start* the SLD Bridge.

Maintaining the ABAP Connection

1. On your SAP XI host, call transaction **RZ70**.
2. In the group box *Transport Information*, enter in the *Host* field the host name of the gateway where your SLD bridge is registered.
3. In the *Service* field, enter the service name of the gateway.
4. In the group box *Data Collector Programs*, choose with the quick info *Proposal*.
The system displays a dialog box asking you whether you want to use the default installation settings.
5. Choose *Yes*.
6. Save these settings by choosing with the quick info *Activate Current Configuration*.
7. Choose with the quick info *Start Data Collection*.

The system displays a list of the executed programs on a separate screen. This screen also informs you whether the initial transfer of data by RFC was successful.



You can ignore the message *Could not open file rfcexec.sec*.

Configuring the SLD Data Supplier Service in the Visual Administrator

1. Start the J2EE Engine Visual Administrator.
If you do not know how to start, see section [How to start the J2EE Administration Tool](#) [on page 57].
2. Choose *Cluster* → *Server* → *Services* → *SLD Data Supplier*
3. On the *Runtime* tab in the right frame, select the tab *HTTP Settings*.
4. Enter the data required for the HTTP connection from the SLD service to the SLD as follows

Host: Enter the name of the host where the SLD bridge runs.

Port: specify the HTTP standard access port of the SLD.

where this is HTTP port of the J2EE engine (The following naming convention applies: 5<Java_instance_number>00. **50000**, for example, if your Java instance is **00**).

User: Specify a Java user that already exists on the host where the SLD Bridge runs (XISUPER, for example)

Password: Enter the user password.

If you want to use HTTPS for the connection from the SLD service to the SLD, choose *Use HTTPS*

The *Trust Store* field is now ready for input.




A trust store contains the root certificates of the trusted roots, and checks the authentication of a received server certificate. The default setting for the trust store is *TrustedCAs*. You can change this setting if necessary. For a list of the available trust stores, see the *Key Storage* service (*Runtime* → *Views*).

5. Save your entries.

If an error *occurs*, an error message appears. If your entries were saved successfully, the connection data is saved in encrypted form in the secure store in the database.



Alternatively, you can use an RFC connection to send data to the SLD (tab page *RFC Settings*). However, we recommend that you use this type of connection for test purposes only.

6. If you want to test your settings by sending test data to the SLD, click  with the quick info text *Trigger data transfer to System Landscape Directory*.
7. To apply the new configuration immediately, restart the SLD service as follows:
 - a. On the Cluster tab page, click *SLD Data Supplier* with the secondary mouse button.
 - b. Choose *Stop*.
 - c. When the service has been stopped, click *SLD Data Supplier* with the secondary mouse button again, and choose *Start*.

The service is restarted within a few seconds, and the first data transfer to the SLD takes place after several minutes.

Maintaining the Product for the Technical System

1. In the *System Landscape Directory* page on your SLD host, choose *Technical Landscape*.

The Technical system Browser page appears.
2. In the *Name* column choose the technical system that you have created above for the Integration Server by performing transaction **RZ70**.

A table appears where you can maintain the technical system.
3. In the row *Installed Products* choose *Add a new Product*

A new list of available products appears.
4. In the scrollable list *Product Name* select the product *SAP Exchange Infrastructure 3.0*.

The list *Installed Software Component Versions* appears.
5. Make sure that all components are selected.
6. Choose *Save*.

Maintaining a Business System for the Integration Server

You have to maintain a Business System.

1. In the *System Landscape Directory* page on your SLD host, choose *Business Landscape*.

The *Business Landscape* page appears.
2. Choose *New Business System...*

The page *Business System Wizard – Details...* appears.
3. Enter the <SAPSID> of the Integration Server host and choose *Next*.

The page *Business System Wizard – Technical System Type* appears.
4. Select *Web AS ABAP* and choose *Next*.

The page *Business System Wizard - Select System* appears.

5. Select the technical system and the client that you have created above for the Integration Server and choose *Next*.

The page *Business System Wizard – Installed Products* appears.

6. Choose *Next*.

The page *Business System Wizard – Integration Server* appears.

7. Select *Integration Server* as *Business System Role* and enter the following in the field *Pipeline URL*:

http://<host>:<HTTPport>/sap/xi/engine?type=entry

where <host> is the host name of the Integration Server. You can find <HTTPport> by logging on to the Integration Server and running transaction SMICM (choose *Goto* → *Services* and see entry for HTTP).

8. Choose *Finish*.

Creating RFC Destinations in the ABAP Environment

You need to create the following RFC destinations in transaction SM59 (ABAP)
INTEGRATION_DIRECTORY_HMI

1. Log on to your SAP Exchange Infrastructure central instance host.
2. Call transaction **SM59**.
3. Choose *Create*.
4. Enter at least the following:

RFC destination: **INTEGRATION_DIRECTORY_HMI**

Connection type: **H**

Description: <your description>

5. Choose **ENTER**
6. Choose the following tabs and enter the required data:

Tab: *Technical Settings*

- *Target Host:* host name of the J2EE engine
- *Service No.:* HTTP port number (The following naming convention applies:
5<Java_instance_number>00 → **50000**, if your Java instance is **00**)
- *Path Prefix:* **/dir/CacheRefresh**

Tab: *Security/Logon*

- Select *Basic Authentication*
Confirm both the popup and the warning.
- As logon data enter the client of your SAP XI system and the user XIISUSER with the valid password



Save your entry now, before you switch to next tab, otherwise your entries may be lost.



Press *Enter* to go to the next screen.

Tab: *Special Options*

- *Timeout:* **900**
- *HTTP Settings:*
Compression: **inactive**
Compressed Response: **No**
- *HTTP Cookies:* **Accept Cookies: Yes (All)**

7. Choose *Test Connection*.

The test has been executed successfully if the response status code is 500 and you find **REQID not found** in the HTTP body.

8. Save your settings.

Creating RFC Destinations in the ABAP and Java Environment

You need to create the following RFC destinations in transaction SM59 (ABAP) and the Visual Administrator (Java):

- *AI_RUNTIME_JCOSEVER*
- *AI_DIRECTORY_JCOSEVER*
- *LCRSAPRFC*
- *SAPSLDAPI*

Depending on your client settings, it may be necessary to be logged on your SAP Exchange Infrastructure host as SAP system user with the authorization to maintain customizing tables and to release transport orders. Note, that user "SAP*" or "DDIC" does not have these authorizations.

Maintaining the RFC Connections (Transaction SM59)

1. Log on to your SAP Exchange Infrastructure central instance host.
2. Call transaction **SM59**.
3. Choose *Create*.
4. Enter at least the following:
RFC destination: AI_RUNTIME_JCOSEVER
Connection type: T
Description: <your description>
5. Choose **ENTER**
6. Choose the tab *Technical settings* and do the following:
 - a. Select *Registered Server Program*
 - b. In the *Program ID* field, enter: **AI_RUNTIME_<SID>**
where <SID> is the SAP system ID of your *Integration Server* host.



Use uppercase letters only.

- c. Enter *Gateway host* and *Gateway service* of your *Integration Server* host.



To find out the required parameters:

- a. On the *Integration Server* host, call transaction **SMGW**
 - b. Choose *Goto* → *Parameters* → *Display* (see entries for *gateway hostname* and *gateway service*)
7. Choose tab *Special Options* and select the flag *Unicode* in the box *Character Width in Target System*.
 8. Save your settings.

9. Repeat the steps 3 – 8 for the remaining destinations:

Destination	Values
AI_DIRECTORY_JCOSERVER	Program ID: AI_DIRECTORY_<SID>, where <SID> is the SAP system ID of your SAP XI host
LCRSAPRFC	Program ID: LCRSAPRFC_<SID>, where <SID> is the SAP system ID of your SAP XI host.
SAPSLDAPI	Program ID: SAPSLDAPI_<SID>, where <SID> is the SAP system ID of your SAP XI host.

10. Leave the transaction SM59 open for later tests.

J2EE Configuration for the Destinations (Visual Administrator)

- On your SAP Exchange Infrastructure central instance host, start the J2EE Engine administration tool.
If you do not know how to start, see section [How to start the J2EE Administration Tool](#) [on page 57].
- Choose *Cluster* → *Server* → *Services* → *JCo RFC Provider*
- In the section *RFC destination*, enter exactly the same program ID and gateway options for **AI_RUNTIME_JCOSERVER** that you used in the step *Maintaining the RFC connection* above.
Additionally, set the number of processes to 10.
- In the section *Repository*, do the following:
 - Enter the parameter for the **SAP XI** host: Application Server, System Number, Client and Language.
 - For User and Password maintain the login parameters for the user SAPJSF.
 - Select the flag *Unicode*.
- Choose *Set*.
- Repeat the steps 3 – 6 for the remaining destinations:

Destination	Values
AI_DIRECTORY_JCOSERVER	<ul style="list-style-type: none"> Corresponding values from SM59 Number of processes: 10
LCRSAPRFC	<ul style="list-style-type: none"> Corresponding values from SM59 Number of processes: 3
SAPSLDAPI	<ul style="list-style-type: none"> Corresponding values from SM59 Number of processes: 3

Testing the RFC Destination


After you have maintained all RFC destinations in both the ABAP and Java environment, you can check all the connections above as follows:

- Call transaction **SM59** again.
- Open your RFC destination.
- Choose *Test Connection*.
No error should be displayed.

Activating the ICF Services

Refer to **SAP Note 736312** to activate the relevant SAP XI ICF services.

Creating HTTP Destination pmistore in the Java Environment

1. On your SAP Exchange Infrastructure central instance host, start the J2EE Engine administration tool.
If you do not know how to start, see section [How to start the J2EE Administration Tool](#) [on page 57].
2. Choose *Cluster* → *Server* → *Services* → *Destinations*
3. In the right frame select the node *HTTP* in the *Runtime* tab.
4. Choose *New*.
5. Enter the exact string `pmistore` as destination name.
 Use lowercase letters only.
6. Choose *HTTP* → *pmistore* and enter at least the following:
 - *URL*: `http://<xi_host>:<ABAP_Port>/sap/bc/spi_gate`
The following naming convention applies for `<ABAP_HTTP_Port>`: `80<xxx>`.
You can find the required port number by running transaction `SMICM` and choosing *Goto* → *Services*.
 - *Select BASIC* as *Authentication*.
 - *Username*: `XIRWBUSER`
 - *Password*: Enter the password that you entered during the SAP XI installation
7. Choose *Save*.

Performing Basic Configuration Steps

If you get a warning about missing authorizations during this procedure, you can ignore it by pressing **ENTER**.

Configuring the Role of the Integration Server

1. On your SAP XI host, call transaction **SXMB_ADM**.
2. In the *Integration Engine: Administration* screen double-click *Integration Engine Configuration*.



Logon data for the user XISUPER is required (see [Creating User XISUPER](#) [on page 32]).

The screen *Integration Engine: Configuration Data* appears.

3. In the screen *Integration Engine: Configuration Data* do the following:
 - a. Choose *Edit* → *Change Global Configuration Data*
 - b. In the *Global Configuration Data* box select **Integration Server** as *Role of Business System*.



Leave the other fields empty.

4. Save your settings.

Registering Queues Used by the Integration Server

1. Call transaction **SXMB_ADM** again.
2. In the *Integration Engine: Administration* screen double-click *Manage Queues*.
The screen *Register Queues* appears.
3. Choose F8 to register the default settings.



If errors occur (because the queue name has already been used, for example), deregister all the proposed queues so that you can reregister them afterwards. To do this, choose *Goto* → *QRFC Monitor*.

4. Exit the transaction.

Checking the Installation – Part 1

You can now perform a simple installation check by calling some transactions and links.

1. Log on to your SAP Exchange Infrastructure host and call transaction **SLDCHECK**.
Everything is fine if no errors are stated.
2. On your SAP Exchange Infrastructure host, call transaction **SXMB_IFR**.
The page *SAP Exchange Infrastructure 3.0 SR1* should now appear.



You can also start the page by entering the following URL in a Web browser:

```
http://<XI_host>:<Java_Port>/rep/start/index.jsp
```

where **<XI_host>** is the host name of your SAP Exchange Infrastructure host and **<Java_Port>** is the HTTP port.

The following naming convention applies for **<Java_Port>**:

```
5<Java_instance_number>00. 50000, for example, if your Java instance is 00.
```

3. The following links should work.

Do not touch the *SAP Integration Builder* links and the link *Administration*. They do not work now and will be relevant only for a later check.

Link	Page must appear
<i>Client Installation Guidelines</i> Log on data: None	<i>Client Installation Guidelines</i>
<i>System Landscape Directory</i> Log on Data: XISUPER	<i>System Landscape Directory</i>
<i>Runtime Workbench</i> Log on Data: XISUPER	<i>XI Runtime Workbench</i>

Installing the Integration Builder Client

The client applications of the Integration Builder run on top of Java^(TM) Web Start 1.4.2, which is part of J2SE 1.4.2.

Install Java^(TM) Web Start as described under the link *Client Installation Instructions* on the SAP Exchange Infrastructure page (see above).



If you have problems when starting Java Web Start, refer to **SAP Note 580351**.

Checking the Installation - Part 2

Prerequisite

Java^(TM) Web Start is installed.

Procedure

1. Call the SAP Exchange Infrastructure page (see above) on the host where Java^(TM) Web Start is installed.
2. The following links must work:



After choosing the links mentioned below, *Java Web Start* automatically downloads the latest version of the tool, starts the tool and asks for log on data.

Starting may take some time. Please be patient.

Link	Screen must appear
<i>Repository (Design)</i> Log on Data: XISUPER	<i>Integration Builder: Design</i> Exit the tool.
<i>Directory (Configuration)</i> Log on Data: XISUPER	<i>Integration Builder: Configuration</i> Exit the tool.
<i>Administration</i> Log on Data: XISUPER	<i>Java WebStart(TM) – Initialization Status</i> Exit the tool.

Importing the XI Content for Software Component Version SAP Basis 6.40 SR1

1. Copy `XI3_0_SAP_BASIS_6.40_09_00.tpz` from `<Components DVD>/XI/XI_CONTENT` to directory `/usr/sap/<SAPSID>/SYS/global/xi/repository_server/import/`
2. On your SAP XI host, call transaction `SXMB_IFR`.
3. Choose *Repository (Design)*.
4. Choose `→ Tools → Import Design Objects`
2. Choose the file `/usr/sap/<SAPSID>/SYS/global/xi/repository_server/import/XI3_0_SAP_BASIS_6.40_09_00.tpz`
5. Import the file.

Performing Initial Adapter Engine Cache Refresh

Perform the initial cache refresh of the Adapter Engine by executing the following URL:

```
http://<host>:<Java-Port>/CPACache/refresh?mode=full
```

Where `<host>` is the Adapter Engine host and `<Java-Port>` is the HTTP port of the J2EE engine (The following naming convention applies:

`5<Java_instance_number>00. 50000`, for example, if your Java instance is `00`).

Log on data: `XIDIRUSER` with password

Check that the response indicates that the cache refresh has been successfully executed.

Testing the Cache Refresh (*INTEGRATION_DIRECTORY_HMI*)

Prerequisites

- XI Content for Software Component Version SAP Web AS 6.40 SR1 is imported.
- A valid SAP license for the SAP Web Application Server must have been applied. With the temporary SAP licence the automatic cash refresh provided by the destination `INTEGRATION_DIRECTORY_HMI` will fail.

Procedure

1. On your SAP Exchange Infrastructure host, call transaction `SXMB_IFR`. The page *SAP Exchange Infrastructure 3.0 SR1* should now appear.



You can also start the page by entering the following URL in a Web browser:

```
http://<XI_host>:<Java_Port>/rep/start/index.jsp
```

where `<XI_host>` is the host name of your SAP Exchange Infrastructure host and `<Java_Port>` is the HTTP port.

The following naming convention applies for `<Java_Port>`:

`5<Java_instance_number>00. 50000`, for example, if your Java instance is `00`.

2. Choose *Directory (Configuration)*.
3. Choose the tab *Objects*.
4. Create the new business service `Test` and save this service.
5. Activate the change list.

6. Logon to your SAP system and call transaction `SXI_CACHE`.
 - a. Double-click *Services*
Check that service *Test* is displayed.
 - b. Choose *XI Runtime Cache* → *Display Refresh Error*.
No error should appear.
7. Log on to the *Integration Builder Directory*.
 - a. Choose *Environment* → *Cache Notifications*
 - b. Check that all cache notifications have a green status.

4.2 Activities for the Adapter Engine

Perform these activities only for an Adapter Engine that is installed separately on a Java system.

Configuring the SLD Data Supplier Service in the Visual Administrator

1. Start the J2EE Engine Visual Administrator.
If you do not know how to start, see section [How to start the J2EE Administration Tool](#) [on page 57].
2. Choose *Cluster* → *Server* → *Services* → *SLD Data Supplier*
3. On the *Runtime* tab in the right frame, select the tab *HTTP Settings*.
4. Enter the data required for the HTTP connection from the SLD service to the SLD as follows
Host: Enter the name of the host where the SLD bridge runs.
Port: specify the HTTP standard access port of the SLD where this is the HTTP port of the J2EE engine
The following naming convention applies: 5<Java_instance_number>00.
50000, for example, if your Java instance is 00.
User: Specify a Java user that already exists on the host where the SLD Bridge runs (XISUPER, for example).
Password: Enter the user password.
If you want to use HTTPS for the connection from the SLD service to the SLD, choose *Use HTTPS*.
The *Trust Store* field is now ready for input.




A trust store contains the root certificates of the trusted roots, and checks the authentication of a received server certificate. The default setting for the trust store is *TrustedCAs*. You can change this setting if necessary. For a list of the available trust stores, see the *Key Storage* service (*Runtime* → *Views*).

5. Save your entries.

If an error occurs, an error message appears. If your entries were saved successfully, the connection data is saved in encrypted form in the secure store in the database.



Alternatively, you can use an RFC connection to send data to the SLD (tab page *RFC Settings*). However, we recommend that you use this type of connection for test purposes only.

6. If you want to test your settings by sending test data to the SLD, click the blue arrow  with the quick info text *Trigger data transfer to System Landscape Directory*.
7. To apply the new configuration immediately, restart the SLD service as follows:
 - a. On the Cluster tab page, click *SLD Data Supplier* with the secondary mouse button.
 - b. Choose *Stop*.
 - c. When the service has been stopped, click *SLD Data Supplier* with the secondary mouse button again, and choose *Start*.

The service is restarted within a few seconds, and the first data transfer to the SLD takes place after several minutes.

Configure Gateway Service of the Central Integration Server

On the Adapter Engine host, you need to enter the gateway service of the central Integration server in the file *services* as follows:

1. Open the file *services* by using a text editor.

You can find the file

- On Windows: <drive>\WINNT\system32\drivers\etc\
- On UNIX: /etc/

2. Enter the gateway service entry as follows:

```
sapgw<xx> <port>/tcp #SAP System Gateway Port
```

where <xx> is the instance number of the SAP Web AS where the SAP Exchange Infrastructure is running and <port> is the gateway port of the SAP Web AS.



You can copy and paste the correct entry from the *services* file on the SAP Exchange Infrastructure host.

Performing Initial Adapter Engine Cache Refresh

Perform the initial cache refresh of the Adapter Engine by executing the following URL:

```
http://<host>:<Java-Port>/CPACache/refresh?mode=full
```

Where <host> is the Adapter Engine host and <Java-Port> is the HTTP port of the J2EE engine (The following naming convention applies:

5<Java_instance_number>00. 50000, for example, if your Java instance is 00).

Log on data: *XIDIRUSER* with password

Trigger Data Transfer to the SLD

1. Start the J2EE Engine Visual Administrator.
2. Choose *Cluster* → *Server* → *Services* → *SLD Data Supplier*.
3. On the *Runtime* tab in the right frame, choose *Assign Application Roles to User Groups*.
4. Confirm the dialog.

Checking the Connection Parameters in the Exchange Profile

5. Open the local Exchange Profile by entering the following URL in your Web browser:

`http://<host>:<Java_port>/exchangeProfile`

where <Java_port> is the HTTP port of the J2EE engine (The following naming convention applies: 5<Java_instance_number>00. 50000, for example, if your Java instance is 00).

XISUPER logon data are required.

6. Choose *Connection* and check if the connection parameters point to the central Integration Server.

Creating HTTP Destination pmistore in the Java Environment

1. On your SAP Exchange Infrastructure central instance host, start the J2EE Engine administration tool. If you do not know how to start, see section [How to start the J2EE Administration Tool](#) [on page 57].
2. Choose *Cluster* → *Server* → *Services* → *Destinations*
3. In the right frame select the node *HTTP* in the *Runtime* tab.
4. Choose *New*.
5. Enter the exact string `pmistore` as destination name.



Use lowercase letters only.

6. Choose *HTTP* → *pmistore* and enter at least the following:
 - *URL*: `http://<xi_host>:<ABAP_Port>/sap/bc/spi_gate`
The following naming convention applies for <ABAP_HTTP_Port>: 80<xxx> .
You can find the required port number by running transaction `SMICM` and choosing *Goto* → *Services*.
 - *Select BASIC* as *Authentication*.
 - *Username*: `XIRWBUSER`
 - *Password*: Enter the password that you entered during the SAP XI installation
7. Choose *Save*.

4.3 Activities for Plain J2SE Adapter Engine

If you have installed the *Plain J2SE Adapter Engine* in a non-SAP Java environment, you configure the adapter according to the documentation provided in the file *adapter.pdf*.

You can find the file *adapter.pdf* on the Plain J2SE Adapter Engine host at

`/usr/sap/<Systemname>/SYS/global/tech_adapter/Administration/Documentation`

5. Applying the Latest Support Packages/Patches

You must apply the latest Support Package (at least Support Package 10) for SAP Exchange Infrastructure 3.0 SR1 and its related software components according to documentation *SAP NetWeaver '04 SR1 Support Package Guide – SAP NetWeaver Support Package Stack <stack_number>* (see service.sap.com/instguidesNW04).



For more information on the SAP XI 3.0 patch procedure see **SAP Note 750511**.

If the system is to be used in a High Availability environment, you need to perform the post-installation steps as described in the *High Availability Guide – SAP XI 3.0* (see service.sap.com/instguidesNW04 → *Operations* → *SAP XI*).

Appendix

1. SAPinst - Installation Tool-specific Information

1.1 Controlling a SAPinst Installation from a Remote Machine

Purpose

You can run the SAPinst GUI in standalone mode to perform a remote installation.

This enables you to install an SAP system on another host (the remote host) while monitoring the installation with the SAPinst GUI on your local Windows or UNIX computer (the local host).

Prerequisites

Make sure that you have performed the preparation activities for your local host (SAPinst GUI host) and your remote host.

For more information, see the section [Installation Preparations](#) [on page 15].

Both computers are on the LAN and can ping each other.

To test this:

- Log on to your remote host and enter the command `ping <local host>`.
- Log on to the local host and enter the command `ping <remote host>`.

Process Flow

1. [Starting SAPinst on the Remote Host](#) [on page 52]
2. [Starting SAPinst GUI on the Local Host](#) [on page 52]

Starting SAPinst on the Remote Host

Use

You use this procedure to set up your **remote** host where SAPinst server should run only. The remote host is the host where you want to install the SAP system.

Procedure

1. Log on to your installation host as user with administrator rights.
2. Depending on your operating system do the following:
 - **On Windows**
 - a. Open a command prompt and run the following command:
`<installation_DVD>:\SAPINST\NT\I386\sapinst.exe SAPINST_START_GUI=false`
 - **On UNIX:**
 - a. Make sure that your DISPLAY environment variable is set to `<Host_name>:0.0`, where `<Host_name>` is the host on which the *SAPinst GUI* will be displayed.

Shell Used	Command
Bourne Shell (bsh)	DISPLAY=<Host_name>:0.0 export DISPLAY
C Shell (csh)	./setenv DISPLAY <Host_name>:0.0
Korn Shell (ksh)	export DISPLAY=<Host_name>:0.0

- b. Run the following commands:
`cd <installation_DVD>/SAPINST/UNIX/<OS>/`
`./sapinst SAPINST_START_GUI=false`

SAPinst now starts and waits for the connection to the SAPinst GUI. That is, you see the following at the command prompt:

```
guiengine: no GUI connected; waiting for a connection on host
<host_name>, port <port_number> to continue with the
installation
```

3. Start the SAPinst GUI on your local host, as described in [Starting SAPinst GUI on the Local Host](#) [below]

Starting SAPinst GUI on the Local Host

Use

You use this procedure to set up your **local** host when you want to run SAPinst GUI standalone on your local host.

Typical examples for running or starting SAPinst GUI only are:

- Controlling a SAPinst installation from an other host
- Connecting a SAPinst GUI after choosing the push button *Logoff* during the installation.

Procedure

1. Log on to your installation host as user with administrator rights.
2. Depending on your operating system do the following:
 - **On Windows**

- a. Run `startinstgui.bat` from the following path:
`<installation_DVD>:\SAPINST\NT\I386`

- **On UNIX:**

- a. Make sure that your `DISPLAY` environment variable is set to `<Host_name>:0.0`, where `<Host_name>` is the host on which the *SAPinst GUI* will be displayed.

Shell Used	Command
Bourne Shell (bsh)	<code>DISPLAY=<Host_name>:0.0</code> <code>export DISPLAY</code>
C Shell (csh)	<code>./setenv DISPLAY <Host_name>:0.0</code>
Korn Shell (ksh)	<code>export DISPLAY=<Host_name>:0.0</code>

- b. Run the the following commands:

```
cd <installation_DVD>/SAPINST/UNIX/<OS>
./startInstGui.sh
```

The SAP Installation GUI Connection dialog appears.

- 3. Enter the host name of the *Installation Host* and the same *Port* as SAPinst uses on the remote host and choose OK.

SAPinst GUI now connects to the SAPinst server and the first dialog of the installation appears.

1.2 Continuing an Interrupted Installation

Use

SAPinst does not abort the installation in error situations. Therefore, you can continue an interrupted installation when you have:

Not canceled the installation


That is, the error dialog box is still displayed and SAPinst is waiting for your input. You proceed as follows:

In the error dialog box, you choose *Retry*.

SAPinst now retries the installation step.

Already canceled the installation

That is, the installation was aborted. There are the following situations:

If you have canceled with...	Meaning
Stop	<p>Since SAPinst records the installation progress in the <code>keydb.xml</code> file, you can continue the installation from the failed step without repeating previous steps.</p> <p>During this procedure, you can <i>Reset</i> the installation, too, if required.</p>
Reset	<p>You must restart from the beginning, that is, with the default <code>keydb.xml</code> file as delivered.</p>  <p>In some cases, you must uninstall already installed components, before repeating the installation from the beginning. For example, this applies to an SAP system installation. For more information, see the description on how to de-install a component in the corresponding installation guide.</p>

Prerequisites

You have solved the problem that caused the error situation.

Procedure

1. Log on to your installation host as user with administrator rights.
2. Depending on your operating system do the following:
 - **On Windows**

Run `sapinst.exe` from the following path:
`<installation_DVD>:\SAPINST\NT\I386`
 - **On UNIX:**
 - a. Make sure that your `DISPLAY` environment variable is set to `<Host_name>:0.0`, where `<Host_name>` is the host on which the *SAPinst GUI* will be displayed.

Shell Used	Command
Bourne Shell (bsh)	DISPLAY=<Host_name>:0.0 export DISPLAY
C Shell (csh)	./setenv DISPLAY <Host_name>:0.0
Korn Shell (ksh)	export DISPLAY=<Host_name>:0.0

- b. Run the following commands:

```
cd <installation_DVD>/SAPINST/UNIX/<OS>
./sapinst
```

4. From the tree structure in the *Welcome* screen, select the installation service that you want to continue and choose *Next*.



If there is only one component to install, SAPinst directly displays the dialog *What do you want to do?* without presenting the *Welcome* screen.

The *What do you want to do?* screen appears.

5. In the *What do you want to do?* screen, decide between the following alternatives and choose *OK*.

Alternative	Behavior
<i>Run a new Installation</i>	The installation will not be continued . Instead, SAPinst deletes the mentioned installation directory for the chosen installation service and starts the installation from the beginning. The log files from the old installation are put into a backup directory with the following naming convention: <log_day_month_year_hours_minutes_seconds > (log_01_Oct_2003_13_47_56, for example).
<i>Continue old installation</i>	The installation of the mentioned installation service will be continued from the point of failure.

1.3 Using the SAPinst DVD/CD Browser Dialog

During the installation procedure SAPinst **first checks** and **finally verifies** the availability and location of the required installation_DVD. SAPinst does this by displaying a *SAPinst DVD/CD Browser* dialog, asking for the file LABEL.ASC that contains the information of the software package to be installed.

SAPinst displays the *SAPinst DVD/CD Browser* dialog in the following situations:

- SAPinst wants to check the availability of the software package.

You can recognize this situation by the flag *Check Location* displayed in the *SAPinst DVD/CD Browser* window. Choose one of the following actions:

Action	Result
Do not enter any <i>Package Location</i> and leave the flag <i>Check Location</i> deselected.	SAPinst skips the check and you can continue the installation procedure. However, SAPinst asks later for the missing LABEL.ASC (see final bullet point below).
Enter the path of the <i>Package Location</i> and leave the flag <i>Check Location</i> deselected.	SAPinst skips checking the label location, but your entered package locations are used later for the installation. SAPinst only asks again for a missing LABEL.ASC if the package location is incorrect (see final bullet point below).
Enter the path of the <i>Package Location</i> and select the flag <i>Check Location</i>	SAPinst checks the label location and displays an error message if the location is incorrect. If all locations are correct, SAPinst does not ask again for the LABEL.ASC files.

- SAPinst cannot find the correct LABEL.ASC but needs the location of the software to process the installation now.

You can recognize this situation because *Check Location* in the *SAPinst DVD/CD Browser* window is empty. You now have to enter the path to the correct LABEL.ASC. Otherwise, the installation cannot continue.

Additionally, you can copy the installation package by entering a location in the column *Copy Package to*.

2. J2EE Engine Specific Information

2.1 How to start the J2EE Administration Tool

1. Start the tool

- **For an ABAP + Java system:**

- On Windows:
Run `\usr\sap\\DVEBMGS<xx>\j2ee\admin\go.bat`
- On UNIX:
Run `/usr/sap/<SAPSID>/DVEBMGS<xx>/j2ee/admin/go`

- **For a Java system:**

- On Windows:
Run `\usr\sap\\JC<xx>\j2ee\admin\go.bat`
- On UNIX:
Run `/usr/sap/<SAPSID>/JC<xx>/j2ee/admin/go`

The *J2EE Engine – Administration* screen with the dialog box *Connect to J2EE Engine* appears.

2. To connect do the following:

SAP Web AS Java variant	How to connect
<i>J2EE system</i>	Choose <i>Connect</i> to use the <i>Default</i> login and enter the password for the <i>Administrator</i> user of the J2EE engine.
<i>J2EE Add-In</i>	<p>You cannot use the <i>Default</i> login. Instead do the following:</p> <ol style="list-style-type: none"> 1. Choose <i>New</i>. 2. Enter a display name and choose <i>Direct Connection to a dispatcher Node</i>. 3. Choose <i>Next</i>. 4. Enter at least the following: <ul style="list-style-type: none"> • <i>User Name: J2EE_ADMIN</i> • <i>Host: <host_name></i> of the J2EE engine • <i>Port: <P4_Port></i> The following convention applies for the port: 5<Java_instance_number>04. For example, if your Java instance number is 15, the P4port is 51504. 5. Choose <i>Save</i> and connect with your new login account by choosing <i>Connect</i>. 6. Enter Password for the <i>J2EE_ADMIN</i> user and choose <i>Connect</i>.

2.2 Starting and Stopping the J2EE Engine

http://<host>:<J2EE_port>/examples/webadmin

Starting/Stopping in an SAP Web AS ABAP + Java system

1. Call transaction **SMICM** in the SAP system.
2. Choose *Administration* → *J2EE-Server*.

The following functions are available:

- Send soft shutdown (with or without restart)
- Send hard shutdown (with / without restart)
- Set the restart flag of the J2EE Engine.

Starting/Stopping a SAP Web AS Java system

You start / stop the J2EE engine as follows:

- On Windows:
Use the SAP Management Console (*Start* → *Programs* → *SAP Management Console*)
- On UNIX:
Run *startsap* / *stopsap* from *usr/sap/<SAPSID>/JCxx/exe*



The command *stopsap* shuts down the database, the enqueue and message server, and the J2EE engine.

Before running the command *startsap*, you must make sure that the database is running. The command *startsap* does not start the database.

Check if the engine is up and running by entering the following URL in your browser
http://<hostname>:5<instance_number>00 -> The J2EE homepage should appear.