BEA WebLogic Portal™

WebLogic Portlets for SAP Installation Guide

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WebLogic Portlets for SAP Installation Guide

This document explains how to install the BEA WebLogic Portlets for SAP application.

The BEA WebLogic Portlets for SAP application integrates BEA WebLogic Portal with the SAP R/3 4.6C System.

This guide contains the following sections:

- Installation Prerequisites for BEA WebLogic Portlets for SAP
- Installing BEA WebLogic Portlets for SAP
- Configuring the BEA WebLogic Portal
- Downloading the Third Party Software
- Configuration and Settings for BEA WebLogic Portlets for SAP
- Activating the License for BEA WebLogic Portlets for SAP
- Uninstalling BEA WebLogic Portlets for SAP
- Troubleshooting

Installation Prerequisites for BEA WebLogic Portlets for SAP

This section contains the following topics:

- Hardware Requirements
- Software Requirements

- Administrator Privileges
- Licensing and Encryption

Hardware Requirements

The server should have the following configuration:

- Pentium 4, 1GHz or higher
- 1 GB RAM or more
- 40GB HDD

Software Requirements

The following software must be installed on the server:

- BEA WebLogic Platform 8.1 SP2 or higher
- SAP Version 4.6 C Patch Level 44
- One of the following databases should be available:
  - Oracle 8i or higher
  - MS SQL Server 2000 SP2
- Internet Explorer 6 or higher

Administrator Privileges

You must have BEA WebLogic Platform administrator privileges in order to install and configure the BEA WebLogic Portlets for SAP application.

Licensing and Encryption

The WebLogic Platform software cannot be used without a valid license. You can purchase licenses for the entire WebLogic Platform product or for individual components. For information about the licenses available for WebLogic Platform, contact your sales representative or visit the BEA corporate Web site at http://www.bea.com.

About 128-Bit Encryption

Secure sockets layer (SSL) encryption software is available with two levels of encryption: 56-bit and 128-bit. Licenses for the 128-bit client version of SSL are available in the United States and Canada. With proper authorization, customers outside the United States and Canada may also acquire licenses with 128-bit encryption enabled.

A WebLogic Platform license comes with 56-bit encryption enabled by default. Enabling 128-bit encryption for SSL requires that a 128-bit encryption license be present in the `license.bea` file of the target BEA Home directory before you install the WebLogic Platform software.

Installing BEA WebLogic Portlets for SAP

This section includes the following topics:

- Installing BEA WebLogic Portlets for SAP
- Reviewing the Installation

Before you start the BEA WebLogic Portlets for SAP installation, make sure you meet the Installation Prerequisites for BEA WebLogic Portlets for SAP.

Installing BEA WebLogic Portlets for SAP

BEA WebLogic Portlets for SAP can be installed on both Unix and Windows operating systems using graphical-mode installation.

Graphical-Mode Installation on Windows System

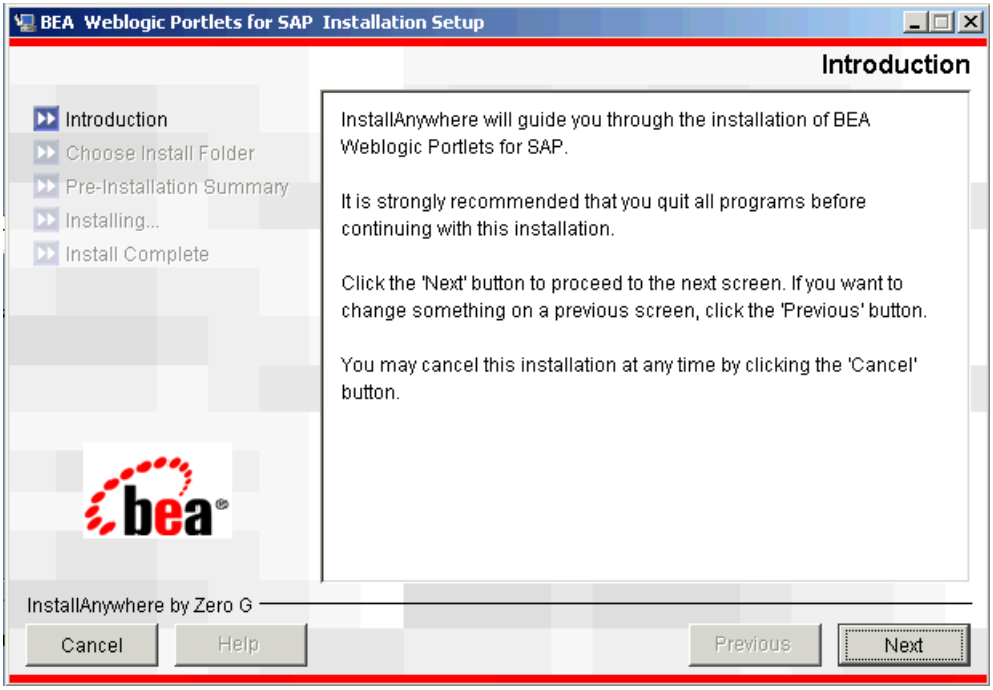
To start the installation on Windows system:

1. Log in to the Windows system.
2. Insert the BEA WebLogic Portlets for SAP CD-ROM into the CD-ROM drive.
3. Navigate to the folder and run the installation file `SAPportlets_win_811.exe`.
4. The program prepares your system for the installation task, as shown in Figure 1.

Figure 1 Installation Initialization Screen

5. The Introduction screen appears, as shown in Figure 2. Click Next to continue.

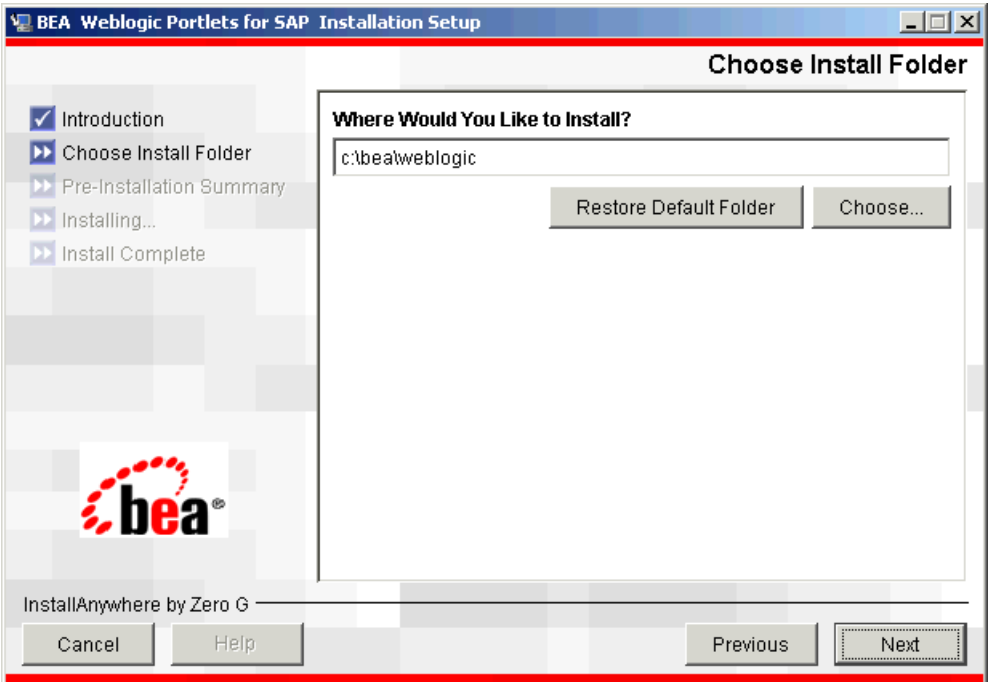
Figure 2 Introduction Screen



6. In the Choose Installation Folder screen (as shown in Figure 3), specify the path of the installation directory or click Choose to select the `\bea\weblogic<version>` directory. This is the path where BEA WebLogic Portlets for SAP will be installed. Click Next to continue.

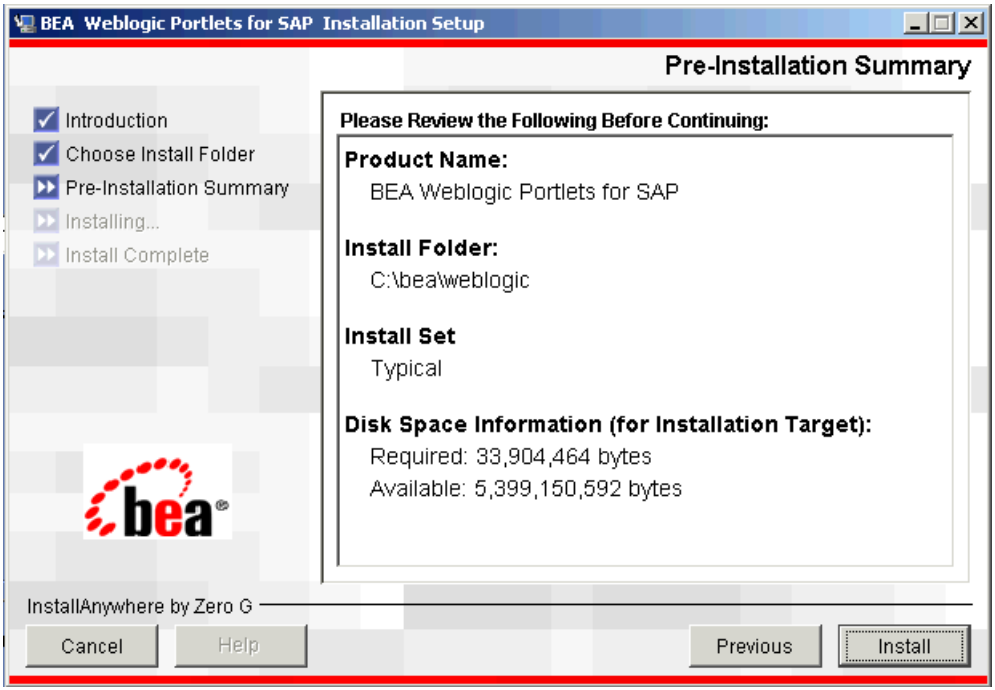
   Note: If a folder other than `\bea\weblogic<version>` is selected then you need to manually copy the templates files from `<selected folder>\workshop\templates` to `\bea\weblogic<version>\workshop\templates`.

Figure 3 Choose Installation Folder Screen



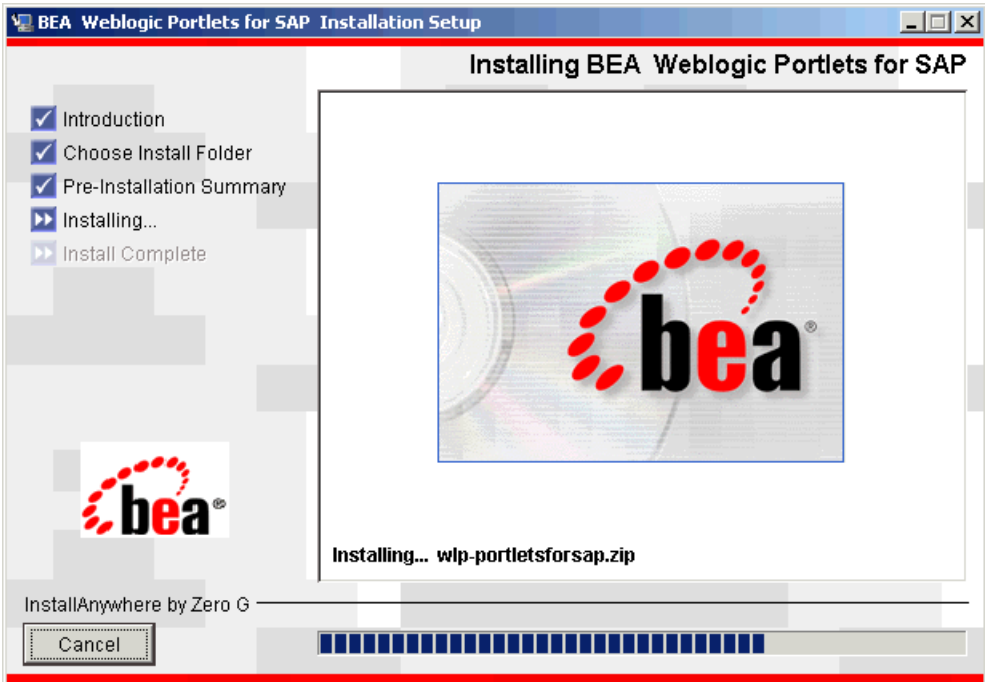
7. The Pre-Installation Summary screen displays your installation preferences, as shown in Figure 4. Click Install to continue.

Figure 4 Pre-installation Summary Screen



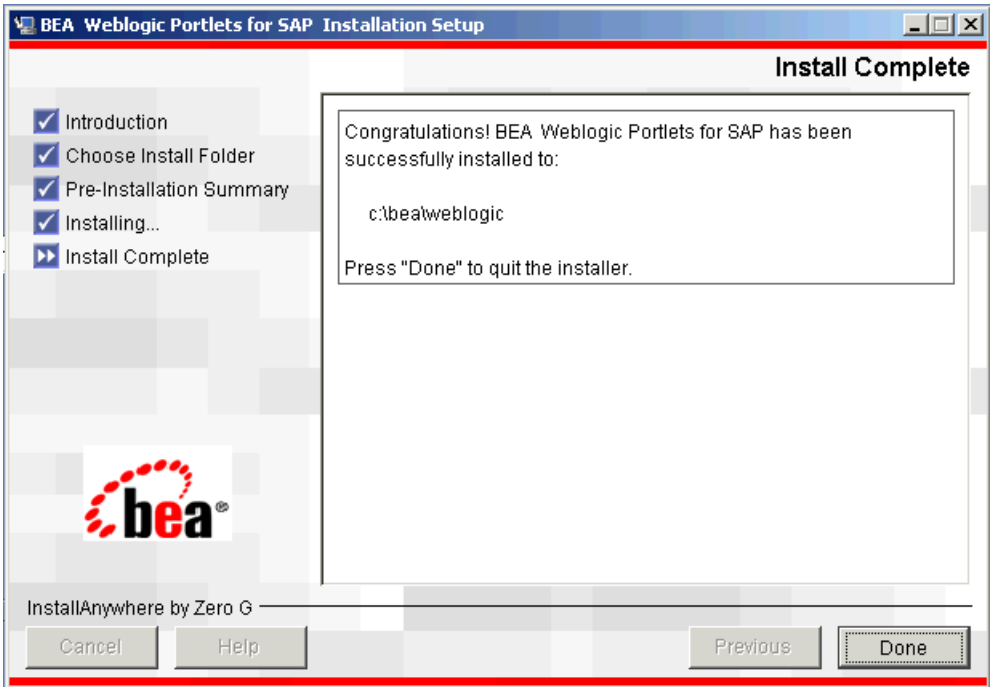
8. The Installing BEA WebLogic Portlets for SAP Installation Setup screen displays the progress of the installation, as shown in Figure 5.

Figure 5 Installation Setup Screen



9. The Install Complete screen confirms that BEA WebLogic Portlets for SAP was installed successfully, as shown in Figure 6. Click Done to complete the installation.

Figure 6 Install Complete Screen



Graphical-Mode Installation on Unix System

To start the installation on Unix system:

1. Log in to the Unix system.
2. Mount the BEA WebLogic Portlets for SAP CD-ROM into the CD-ROM drive.
3. Open a command-line shell.
4. Go to the CD-ROM directory and navigate to the folder for the installation program `SAPportlets_solaris_811.bin`.
5. Invoke the procedure by entering the following command:

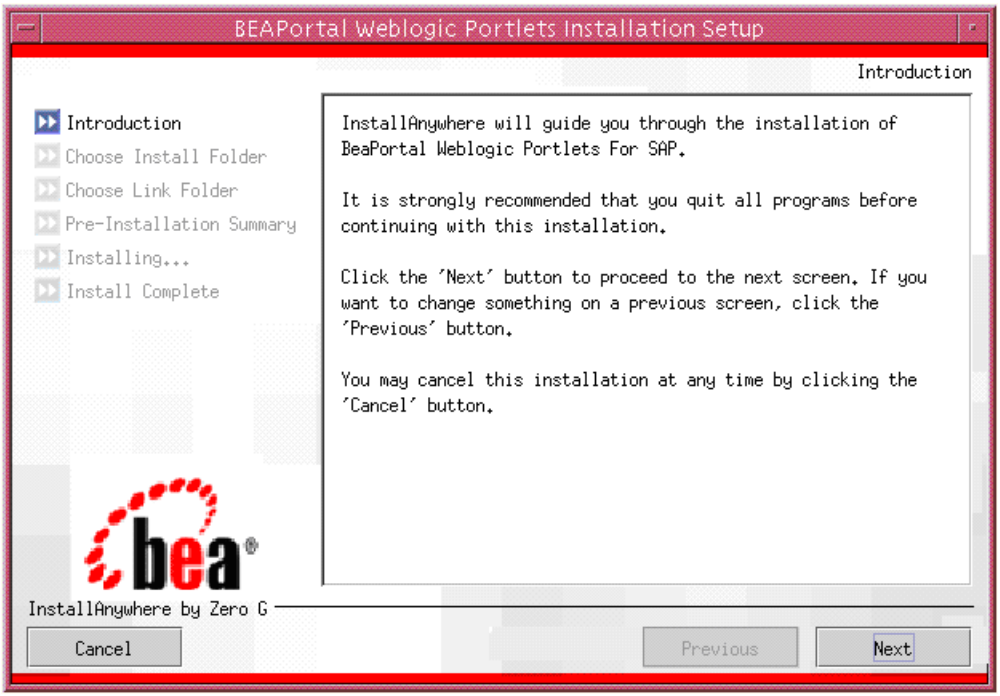
   ```
   ./SAPportlets_solaris_811.bin
   ```

6. The program prepares your system for the installation task, as shown in Figure 7.

Figure 7 Installation Initialization Screen

7. The Introduction screen appears, as shown in Figure 8. Click Next to continue.

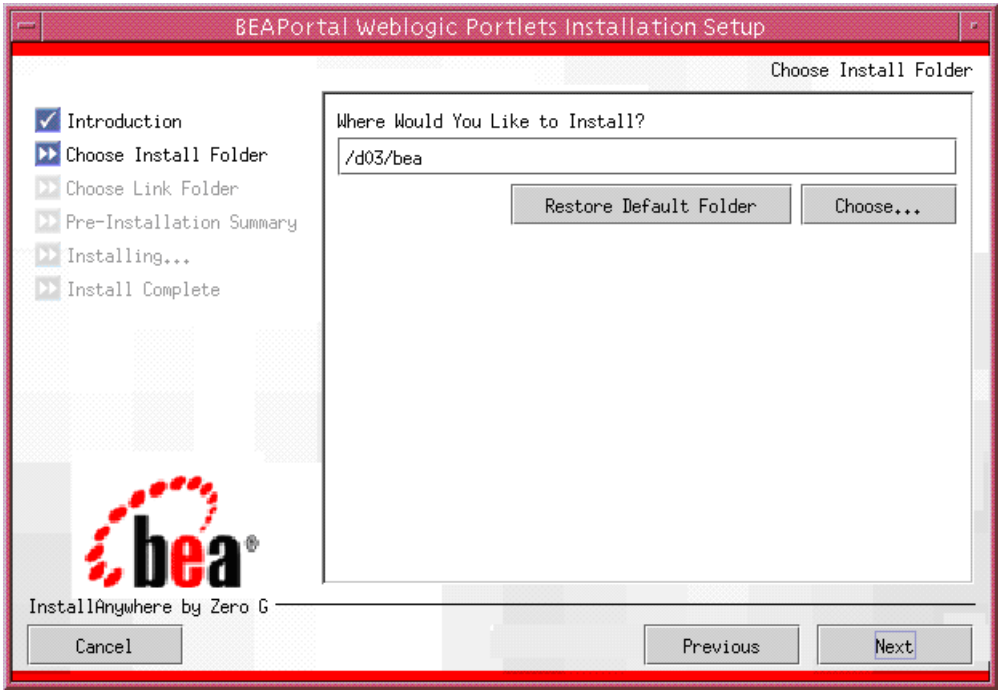
Figure 8 Introduction Screen



8. In the Choose Installation Folder screen (as shown in Figure 9), specify the path of the installation directory or click Choose to browse for the path where you want to install BEA WebLogic Portlets for SAP. Click Next to continue.

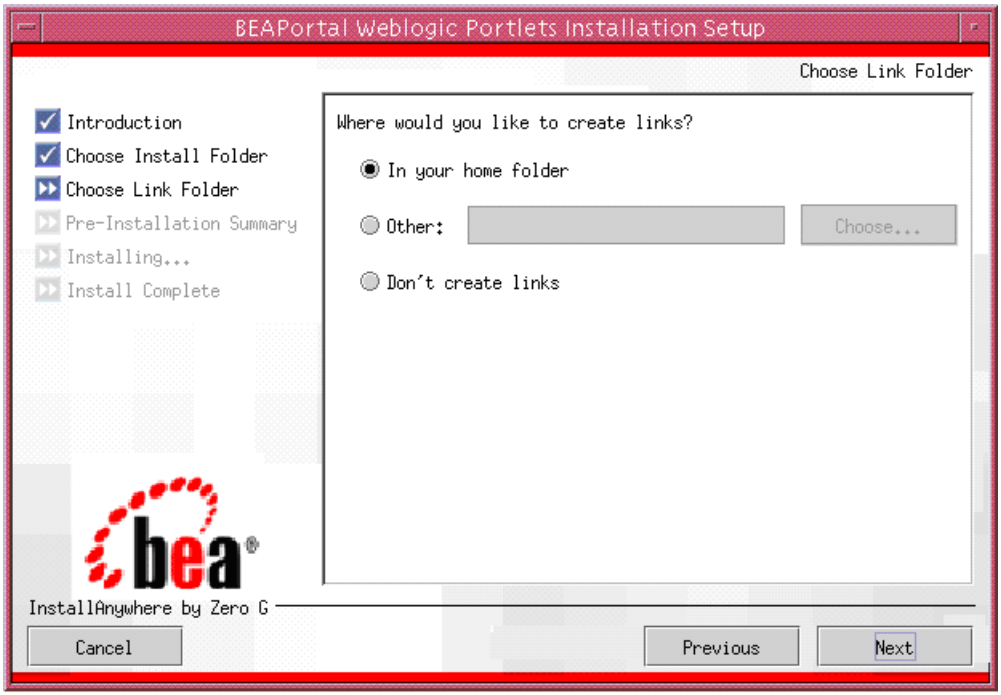
   Note: If a folder other than `/bea/weblogic<version>` is selected then you need to manually copy the templates files from `<selected folder>/workshop/templates` to `/bea/weblogic<version>/workshop/templates`.

Figure 9 Choose Installation Folder Screen



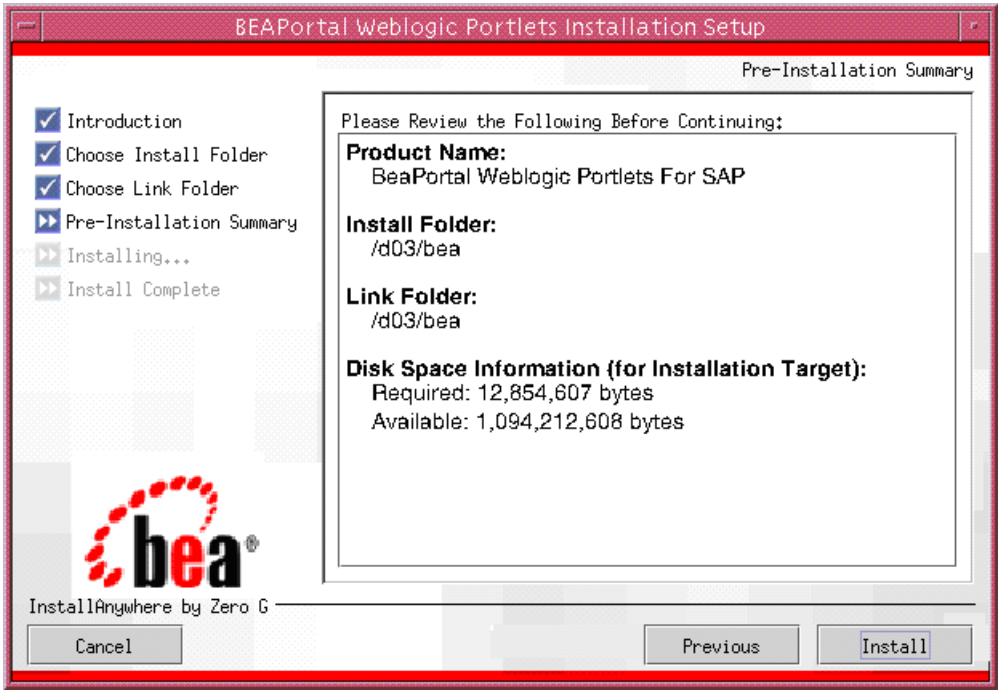
9. In the Choose Link Folder screen, you can create links for the application, as shown in Figure 10. Click Next to continue.

Figure 10 Choose Link Folder Screen



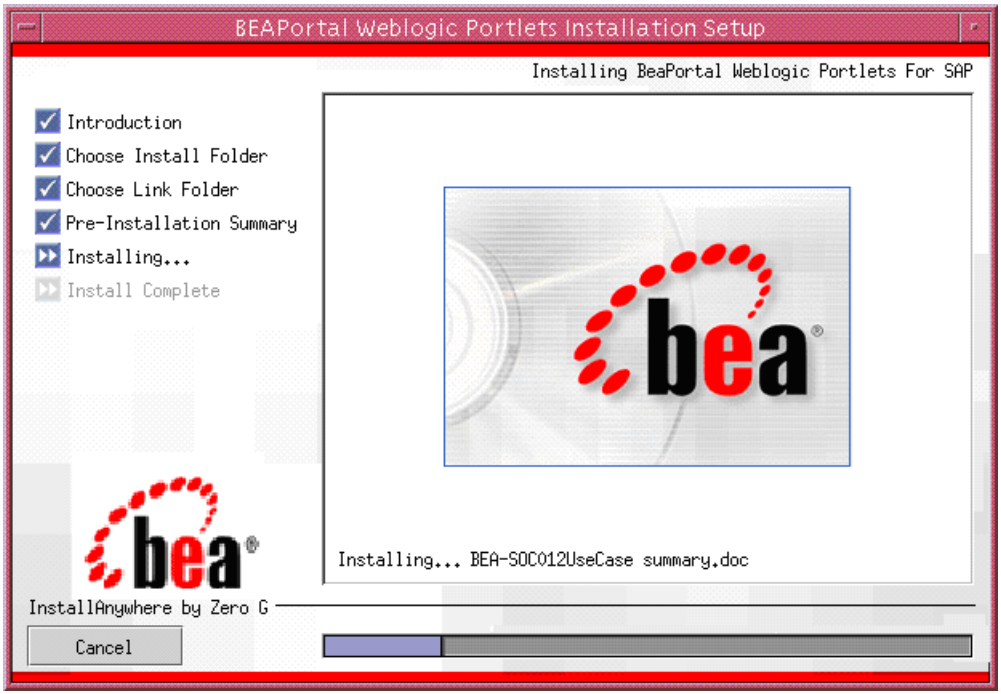
10. The Pre-Installation Summary screen displays your installation preferences, as shown in Figure 11. Click Install to continue.

Figure 11 Pre-installation Summary Screen



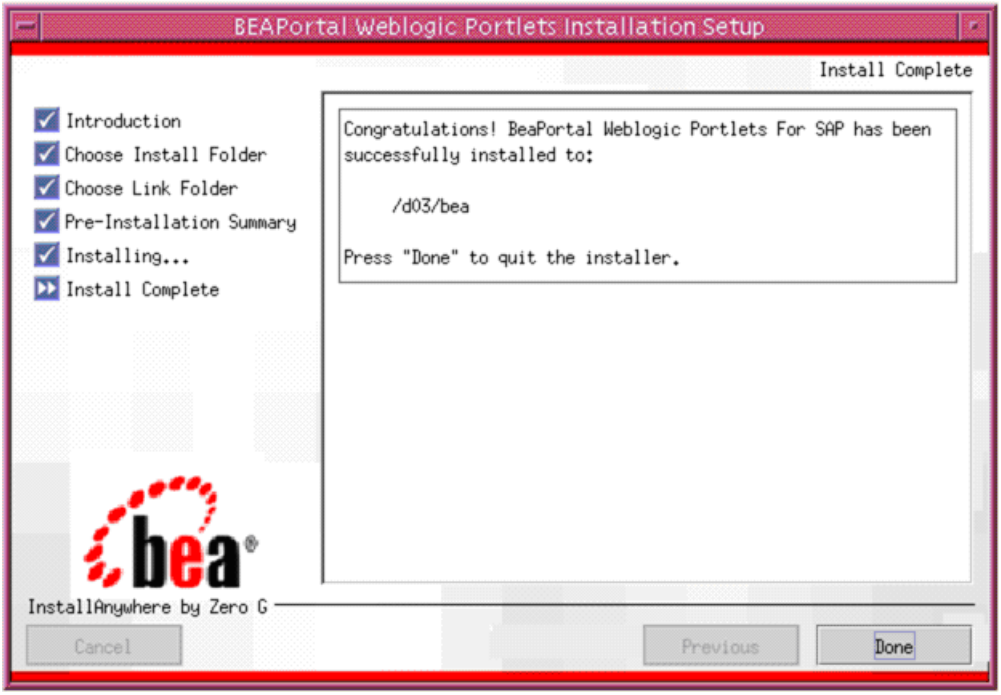
11. The Installing BEA WebLogic Portlets for SAP screen displays the progress of the installation, as shown in Figure 12.

Figure 12 Installing Screen



12. The Install Complete screen confirms that BEA WebLogic Portlets for SAP was installed successfully, as shown in Figure 13. Click Done to complete the installation.

Figure 13 Install Complete Screen



Reviewing the Installation

The installer will install files in the following directories:

- Product Documentation will be copied into a directory at `<%BEA_HOME%>\weblogic<version>\portal\thirdparty\sapportlets\docs`

  Note: Depending on the type of installation the product documentation might be shipped separately.

- Sample view templates (for `.jsp` and `.jpf` files) will be copied into a directory at `<%BEA_HOME%>\weblogic<version>\portal\thirdparty\sapportlets\newportlet`

- WebLogic Domain Extension Template – Use the Existing domain or Create Domain using WebLogic Wizard. (See "Creating WebLogic Configurations Using the Configuration Wizard" at http://edocs.bea.com/platform/docs81/confgwiz/index.html).

- Workshop Application Template will be copied into `<%BEA_HOME%>\weblogic<version>\workshop\templates`
- DDL and DML scripts will be copied into a subdirectory of `<%BEA_HOME%>\weblogic<version>\portal\thirdparty\ sapportlets\scripts`

Configuring the BEA WebLogic Portal

After the installation is completed, perform the following steps using WebLogic Workshop.

For a new portal application:

1. Create a new Basic WebLogic Portal Domain using the Configuration Wizard.
2. Create a new Portal Application in WebLogic Workshop.
3. Create a new Portal Project.
4. In the WebLogic Workshop's Application window, right-click the `data` directory and choose Install > PortletsForSAPPropertySet.
5. In the WebLogic Workshop's Application window, right-click the portal project directory and choose Install > Portlets for SAP.

Downloading the Third Party Software

Table 1 shows you what to download, where to download it, and where to store it.

Table 1 List of JAR files required for BEA WebLogic Portlets for SAP

JAR file	Component	Download from /Copy From	Directory

`xercesImpl.jar`
`xalan.jar`
`xml-apis.jar`
`xmlParserAPIs.jar`
	XMLhelper	Download from http://xml.apache.org/dist/xerces-j/old_xerces2/	`<\%BEA_HOME%>\user_projects\application\<protalapplication>\<portalproject>\WEB-INF\lib`
			Example:
			`C:\bea\user_projects\applications\BeaPortalNetApp\beaportal\WEB-INF\lib`

Table 1 List of JAR files required for BEA WebLogic Portlets for SAP (Continued)

For Windows:
`jRFC12.dll`
`librfc32.dll`
`jCO.jar`
Note: The file names may vary depending on the version.
	SAPDataEngine	Download from https://websmp103.sap-ag.de/connectors	1. Copy the `jRFC12.dll` and `librfc32.dll` files to `C:\WINNT\system32` directory.
			2. Copy the `jCO.jar` to a directory.
			3. Open the `setDomainEnv.cmd` file, located in the domain folder.
			Modify the CLASSPATH to the directory pointing to the location where the file is copied.

For Linux:
`librfccm.so`
`libsapjcorfc.so`
`sapjco.jar`
	SAPDataEngine	Download from https://websmp103.sap-ag.de/connectors	1. Copy the files to a directory.
			2. Open the `commEnv.sh` file, located at the following path `<%BEA_HOME%>/weblogic<version>/common/bin`.
			Modify the `LD_LIBRARY_PATH` to the directory where the files are copied.
			3. Open the `setDomainEnv.sh` file located in the domain directory.
			Modify the CLASSPATH to the directory pointing to the location where the file sapjco.jar is copied.

Configuration and Settings for BEA WebLogic Portlets for SAP

This section contains the following topics:

- Setting Up SAP Portlets Repository
- Registering Java Data Source

Setting Up SAP Portlets Repository

This topic contains the following procedures:

- Creating Schema and Importing Metadata
- Configuring the PORTALnet.properties File

Creating Schema and Importing Metadata

To create schema and import metadata for BEA WebLogic Portlets for SAP in MS SQL Server run the following scripts in MS SQL Server's Query Analyzer in the order given below:

1. `MSSQL_PNET_DROP_TABLE.SQL`
2. `MSSQL_PNET_ CREATE_TABLES.SQL`
3. `MSSQL_PNET_DROP_FKEYS.SQL`
4. `MSSQL_PNET_CREATE_FKEYS.SQL`
5. `MSSQL_PNET_INSERT_SCRIPTS.SQL`

To create schema for BEA WebLogic Portlets for SAP in Oracle database run the following scripts in Oracle's SQL Plus in the order given below:

1. `ORACLE_PNET_DROP_TABLE.SQL`
2. `ORACLE_PNET_CREATE_TABLES.SQL`
3. `ORCLE_PNET_INSERT_SCRIPTS.SQL`
4. `ORACLE_PNET_DROP_SEQUENCE.SQL`
5. `ORACLE_PNET_CREATE_ SEQUENCE.SQL`
6. `ORACLE_PNET_DROP_FKEYS.SQL`
7. `ORACLE_PNET_CREATE_FKEYS.SQL`

Configuring the PORTALnet.properties File

To configure the properties file:

1. Open the `PORTALnet.properties` file from the `\bea\user_projects\applications\<application>\<project>\WEB-INF\classes` subfolder for the product installed and change the settings.

   For example:
   `C:\bea\user_projects\applications\BeaPortalNetApp\beaportal\WEB-INF\classes`

2. Modify the repository connection information, `DATASOURCE=<datasource_ name>`

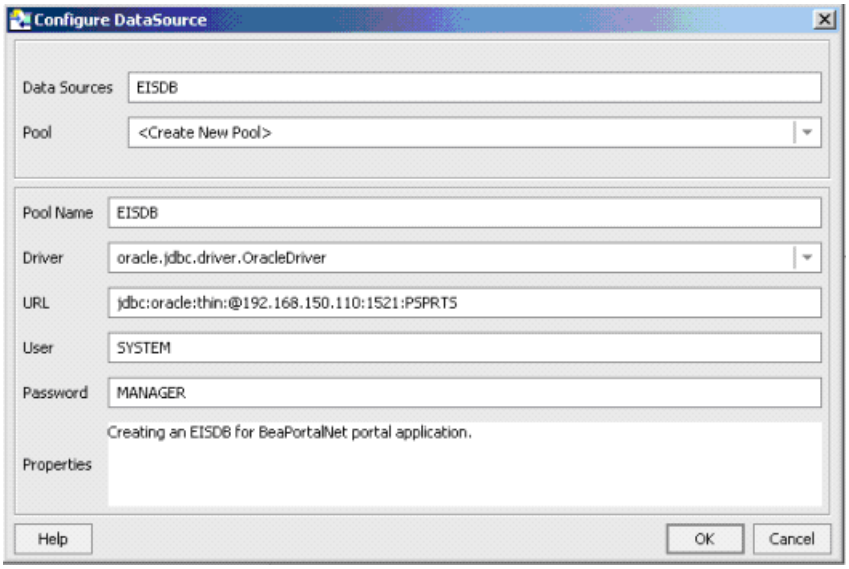
   For example: `DATASOURCE=EISDB`

Registering Java Data Source

To create a Java Data Source:

1. Start the WebLogic Server for your domain.
2. Go to Tools > WebLogic Server > DataSource Viewer. The DataSource Viewer window appears.
3. Click New Data Source to add a new data source. The Configure DataSource window appears, as shown in Figure 14.

Figure 14 Configuring Datasource Screen



4. Enter the Data Sources as EISDB.
5. Select the Pool as <Create New Pool>.
6. Enter the Pool Name as EISDB.
7. Configure the Driver, URL, User, and Password, and click OK.

Activating the License for BEA WebLogic Portlets for SAP

To activate the license for BEA WebLogic Portlets for SAP:

1. Copy the license file `license.bea` into the `<%BEA_HOME%>` directory.
2. Restart the WebLogic Portal server.
3. Log in to BEA WebLogic Portlets for SAP with the `weblogic` account.

Uninstalling BEA WebLogic Portlets for SAP

To uninstall BEA WebLogic Portlets for SAP:

1. Shut down any servers that are running. If any of these servers is configured as a Windows service, you should stop the service(s) before uninstalling the software.
2. Navigate to the directory where BEA WebLogic Portlets for SAP is installed.
3. Navigate to the `Uninstall_Bea Weblogic Portlets for SAP` directory.
4. Run the `BEAPortal Weblogic Portlets Uninstallation Setup.exe` uninstallation program.
5. Click Next to start the uninstall program.
6. Select Complete Uninstall or Uninstall Specific Features option and click Next.
7. Click Done to exit the uninstallation program.

Troubleshooting

Use Table 2 to troubleshoot installation issues.

Table 2 Troubleshooting WebLogic Portlets for SAP

No.	Problem	Cause
1	Running the scripts throws SQL error	Make sure that you run the scripts in the order specified in the installation document.
2	Unable to connect to the database	Check if the JDBC Drivers are configured properly.

Table 2 Troubleshooting WebLogic Portlets for SAP

3	Invalid datasource entry error	Check if the DataSource is configured properly in WebLogic Workshop.
4	Cannot connect to SAP	Verify if the files `jRFC12.dll` and `librfc32.dll` are placed under the `system32` directory.