



USER GUIDE | PUBLIC

SAP PowerDesigner

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Installation Guide

SAP PowerDesigner Documentation Collection

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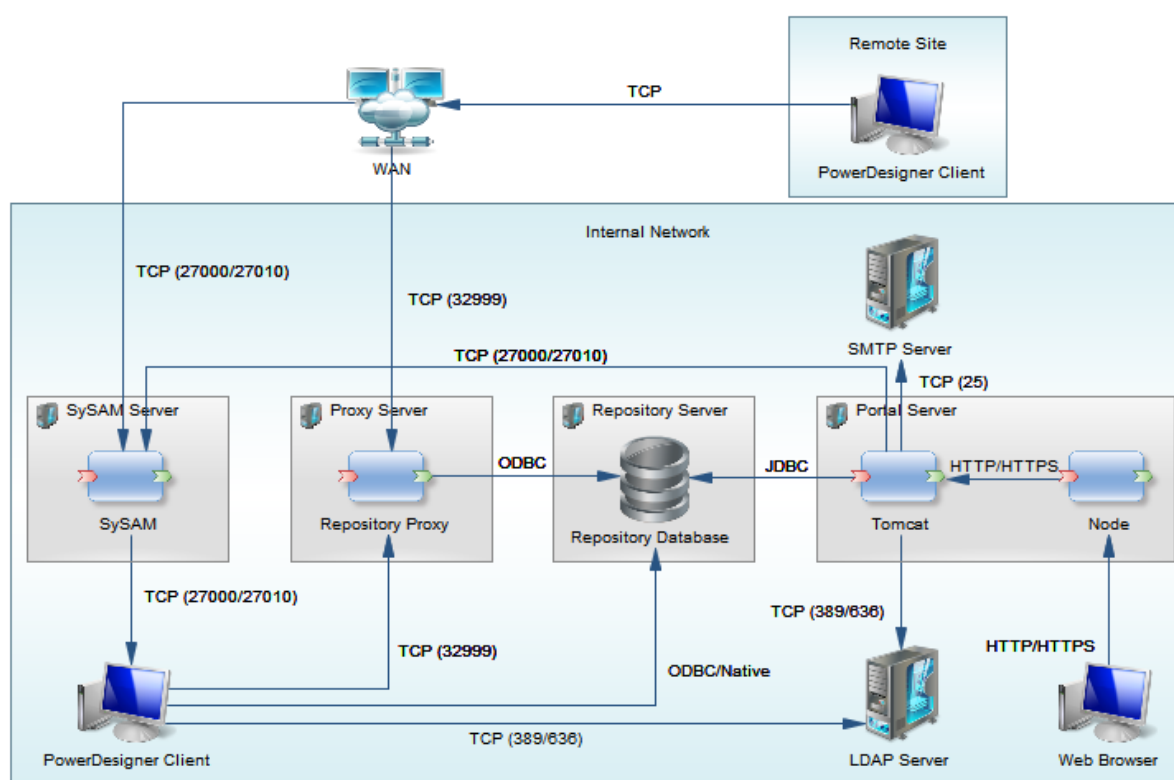
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1 Planning Your PowerDesigner Installation

The deployment of SAP® PowerDesigner® typically involves the installation of a license server, one or more repository components, and a number of client machines.

Context

A PowerDesigner environment can contain the following servers, components, and client machines:



- The PowerDesigner components can be installed on a single server or, as shown, on separate servers:
 - Repository Database - Required if using the repository.
 - Repository Proxy (Windows only) - Required if using the repository proxy.
 - SySAM Server - Required if using served or floating licenses.
 - Portal Server - Required if using PowerDesigner Web.
- Local servers - PowerDesigner can connect to these servers in your local environment:
 - LDAP Server - to delegate the authentication of repository users.
 - SMTP Server - to automate the sending of email notifications.
- Client machines - Allow users to access the repository using the following applications:

- PowerDesigner Client - Can access the repository directly or through the proxy. PowerDesigner can be installed on standard Windows machines or accessed via a virtual machine or from a central server location. Clients at remote sites are recommended to use a proxy connection.
- Web Browser - Can access the repository through PowerDesigner Web.

i Note

For installation of PowerDesigner without a repository, perform steps one and two of this procedure and then go directly to [Installing PowerDesigner \[page 15\]](#).

Procedure

1. Obtain your license key file (see [Obtaining Licenses \[page 7\]](#)).
If you do not have a license key, you will only be able to install PowerDesigner for a 30-day trial period.
2. Install the Sysam license server (see [Installing a License Server \[page 8\]](#)).
The license server is required if you intend to serve licenses instead of deploying licenses to individual users' machines.

i Note

When installing PowerDesigner in a Citrix or other desktop virtualization environment, you must install a SySAM server to serve licenses.

3. Install PowerDesigner on the administrator's workstation (see [Installing PowerDesigner \[page 15\]](#)).
This initial installation is needed to install the PowerDesigner repository, which is used to store and share models.
4. [optional] Install the repository to the administrator's workstation for testing and experimentation (see [Installing a Local Test Repository \[page 28\]](#)).
5. Choose a server capable of supporting large, long-running transactions to host your repository. We recommend as a minimum, a dual-core machine, with 2-4GB of RAM.

i Note

To calculate the size required for your repository database, estimate the number of models that will be stored and the period during which they will be developed. An average model containing 100 primary objects (tables, classes, etc.) will have an initial disk size of 5MB and the size of its initial check in will be around 10MB. Assuming an average number of edits, each subsequent check in will add 10% to the size of the file, so that after an average development period of two months (40 working days) with one check in per day, the final model file size will be $10\text{MB} \times 1.1^{40}$ or approximately 500MB. If your team will develop 20 such models during the course of the year, you should allow 10GB of space for your repository database.

If you want to use the repository proxy or PowerDesigner Web, you should install them, by preference, on the same machine where the repository is located to optimize communication between the components. If the repository server is not a Windows server or is unable to support the additional workload, then we recommend installing these components on another machine on the same LAN segment.

6. Create a database (see [Creating a Database to Contain the Repository \[page 31\]](#)) and a service to run the database (see [Running the Database as a Service \[page 32\]](#)) using one of the supported DBMSs:

- SAP® SQL Anywhere® v16, 17 (bundled with PowerDesigner, see [Installing and Authenticating SQL Anywhere \[page 30\]](#))
- SAP® Adaptive Server® Enterprise v15.7, 16.x
- SAP HANA® v1.0, 2.0
- Oracle 11g, 12c
- IBM DB2 LUW v10.5
- DB2 z/OS 11.x, 12
- Microsoft SQL Server 2012, 2014, 2016 - we recommend that you use a server that is not currently managing a high transaction load, since PowerDesigner performs long-running synchronous transactions during Check-In/Check-Out.

i Note

The most up-to-date list of supported DBMSs, is available at `<install_dir>/readme.html`.

7. Install the repository to the new database (see [Installing the Repository to the Server \[page 33\]](#)).
8. [optional] Install the repository proxy (see [Installing the Repository Proxy \[page 46\]](#)).
The proxy simplifies and offers more security for connection to your repository and may provide performance improvements in environments where clients will be connecting over a WAN or complicated LAN or when dealing regularly with large (15MB+) models.
9. [optional] Install the PowerDesigner Web server (see [Installing the PowerDesigner Web Server \[page 49\]](#)).
PowerDesigner Web provides access to your repository models via a Web browser.
10. Define a password policy, optionally connect to an LDAP server to delegate the authentication of repository users and an SMTP server for notifications, enable single sign-on for PowerDesigner Web users, and create groups and user accounts with appropriate rights and permissions to control access to the repository (see *Core Features Guide > Administering PowerDesigner > Controlling Repository Access*).
11. [optional] Customize the PowerDesigner interface to optimize it for various groups of users and define shared reference models and resources:
 - Prepare profiles to customize the PowerDesigner interface (by hiding types of models, objects, and properties and customizing menus, toolbars, and settings) and associate them with appropriate users and groups (see *Core Features Guide > Administering PowerDesigner > Customizing the PowerDesigner Interface*).
 - Prepare shared reference models and an enterprise glossary for deployment to users (see *Core Features Guide > Administering PowerDesigner > Deploying an Enterprise Glossary and Library*).
 - Prepare custom resource files (such as DBMSs, languages, and extensions) for deployment to users (see *Core Features Guide > Administering PowerDesigner > Deploying an Enterprise Glossary and Library > Deploying an Enterprise Library > Sharing Resource Files via the Library*).
12. Install PowerDesigner on user machines (see [Installing PowerDesigner \[page 15\]](#)).

i Note

If you are not using the repository proxy, you will also need to install the SQL Anywhere client (as part of the PowerDesigner installation) or an appropriate client or driver for your chosen DBMS on all client machines to allow them to connect to the repository.

1.1 Obtaining Licenses

You can evaluate PowerDesigner 's features without restriction for 30 days with a free trial license. To deploy it for productive use, you must purchase, generate, download, and deploy SySAM product licenses.

Context

Licenses are not required to view, comment on, print, or otherwise consume published diagrams and other content in the PowerDesigner Web client. A license is required when a user:

- Creates or edits a model in the PowerDesigner Web client.
- Opens a model (including viewing, creating, editing, or checking out a model) in the PowerDesigner desktop client, whether the client is installed locally or accessed from a shared administrative install on a network server.

i Note

All PowerDesigner licenses are production licenses. No development licenses are available. Licenses are required only for clients.

Procedure

1. Obtain the host ID and name of the machine to which you will deploy your licenses.

PowerDesigner licenses are available as:

- Named User Licenses - Each license permits only the named user to use PowerDesigner .
- Concurrent User Licenses - Each license permits any one user at a time to use PowerDesigner .
- Standalone Seat - Served (legacy) - This option is available only for clients who purchased this type of license for v16.5 SP03 or earlier.

Both Named User and Concurrent licenses can be either:

- Served - The license is deployed to a central SySAM license server. The user must be connected to the license server to obtain a license, and remain in contact with the license server to retain the license. For information about serving Named User licenses, see [Serving Named User Licenses \[page 10\]](#).
- Unserved - The license is deployed to the client machine where PowerDesigner is installed. The user does not need to connect to a license server.

For served licenses, you can obtain the SySAM server host ID and name during installation of SySAM, on the third page of the installation program, where you are asked to load or copy a license file to proceed.

Alternatively, obtain the machine's ethernet address, which is a 12-character hex value consisting of digits 0 through 9 and characters A through F in any of the following formats:

- 12AB34CD56EF
- 12-AB-34-CD-56-EF
- 12:AB:34:CD:56:EF

Your host id is obtained by entering the first 8 characters of the ethernet address in one of the following formats:

- 12AB34CD
- 12AB-34CD

i Note

For some platforms, host IDs can also be entered in decimal formats, with a # prefix. Example:
#1039716963.

For Windows platforms, if your machine does not have a network adapter, you can use the disk serial number as an alternate host ID. Use the `lmutil lmhostid -vsn` command or execute `DIR C:` to obtain the serial number, remove the hyphen and enter it with a `DISK_SERIAL_NUM=` prefix. For example:

`DISK_SERIAL_NUM=3e2e17fd.`

2. Go to SAP Service Marketplace (SMP) and generate your PowerDesigner license keys.
3. Copy the generated files to the `<install_dir>\SYSAM-<x-x>\licenses` directory.
4. Open a command prompt and run the following command to instruct SySAM to re-read the `licenses` directory contents:

```
sysam reread
```

1.2 Installing a License Server

PowerDesigner licenses are served from a SySAM license server. SySAM serves you a license upon request and retrieves it when it is no longer being used. If all the licenses are already in use, SySAM informs you that no license is available.

Context

You must already have obtained a license file before you can install the license server.

i Note

For information about assigning licenses to an existing SySAM server, see [Adding Additional Licenses with Imtools \[page 11\]](#).

i Note

When installing PowerDesigner in a Citrix or other desktop virtualization environment, you must install a SySAM server to serve licenses.

Procedure

1. Select the machine on which you want to install the SySAM license server.

The SySAM license server can be installed on the repository server or on another server. It must not be installed on any client workstation used to connect to the repository.

2. To download SySAM, go to <https://launchpad.support.sap.com/#/softwarecenter>, select ► *By Alphabetical Index (A-Z)* ► *S* ► *SYSAM* ► *SYSAM 2.4* ► *Installation* ►, and select the most recent item available for your operating system.
3. Click *Next* to display the license agreement page. Read the License Agreement and click the *I Agree* radio button to accept the terms of the agreement. If you click *I Do Not Agree*, the installation will be canceled.
4. Click *Next* to display the license file definition page. Click the *Load* button and browse to the folder where your license file is located (see [Obtaining Licenses \[page 7\]](#)). The content of the license file is displayed in the License key box.
5. Click *Next* to display the destination folder page. Select the suggested installation directory or browse to a new one and then click *Next* to go to the settings page.
6. Click *Next* to accept the current settings and start copying files.

The copy starts. A progress box is displayed and Setup copies files to the destination directory. When installation is complete, you can choose to start the license server as a service.

7. Click *Finish* to exit the wizard.

i Note

The ports 27000 and 27010 must be opened for the license server and for any server or client machine connecting to it. For a Windows Firewall, you may need to add the port 27000 and the SySAM executable (for example C:\Sybase\SYSAM-<x-x>\Bin\SYBASE.exe to the list of exceptions.

Additionally, on Windows and UNIX platforms, edit the license server license files to add the port number 27000 to the line beginning `SERVER` and add a new line `VENDOR SYBASE PORT=27010` directly after it. When you have finished, these lines should read as follows:

```
SERVER <server_name> <server_id> 27000
VENDOR SYBASE PORT=27010
```

1.2.1 Serving Named User Licenses

Named User licenses, which allow a specific person to use PowerDesigner, can be deployed to the user's machine or served by SySAM. To correctly serve and assign Named User licenses you must create a special SySAM option file.

Procedure

1. Create a new text file with the name `SYBASE.opt` in the `SYSAM-<x-x>\licenses` directory and enter your Named User license information using the following format:

```
GROUP <GroupName> <Member> [<Member>...]  
INCLUDE <PackageCode> GROUP <GroupName> [<GroupName>...]
```

The following parameters are available:

Parameter	Description
<GroupName>	Specifies the name by which you will identify a group of users who should have access to the same PowerDesigner package.
<Member>	Specifies the login name (without any domain) of the user to whom the Named User license is assigned. To assign multiple users, separate their names with spaces.
<PackageCode>	Specifies the PowerDesigner package to which the group is assigned. The following codes are permitted: ○ PD_EAR - PowerDesigner EnterpriseArchitect with Repository ○ PD_IAR - PowerDesigner InformationArchitect with Repository ○ PD_DMR - PowerDesigner DataModeler with Repository ○ PD_DM - PowerDesigner DataModeler ○ PD_WBPM - PowerDesigner Web BPM

For example:

```
GROUP EnterpriseUsers Jane Bill Harry  
GROUP DataUsersA Phil Jack Sally  
GROUP DataUsersB James Thomas Percy  
Group WebBPMUsers Rob, Debbie, Lisa  
INCLUDE PD_EAR GROUP EnterpriseUsers  
INCLUDE PD_DMR GROUP DataUsersA  
INCLUDE PD_DMR GROUP DataUsersB  
INCLUDE PD_WBPM GROUP WebBPMUsers
```

2. Save the file and then restart the SySAM license server to enable it.

The Named User licenses are now available for use.

i Note

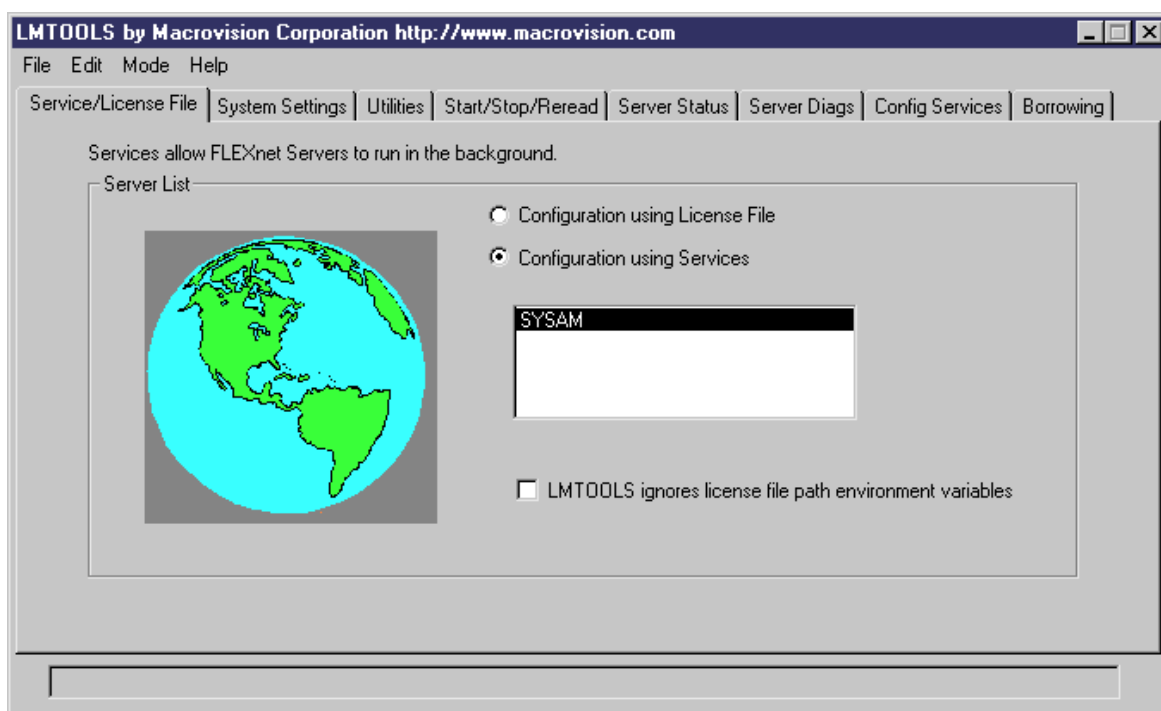
Users to whom a Named User license have been assigned should select the Served License option when installing PowerDesigner or using the License Management Wizard. SySAM detects the user's login name and serves the license accordingly.

1.2.2 Adding Additional Licenses with Imtools

The license server should configure itself correctly at installation. If you need to subsequently add additional licenses or otherwise administer the server, you can do so using Imtools.exe

Procedure

1. Double-click *SYSAM-<x_x>\Bin\Imtools.exe* to open the LMTOOLS dialog.
2. On the *Service/License File* tab, select *SYSAM* in the list of servers:



3. Click the *Start/Stop/Reread* tab and click the *Reread License File* button to force the server to read again the file sybpdcs.lic and update license number.
4. Select **File > Exit** to close the LMTOOLS dialog.

For detailed information about Imtools, see the SySAM Users Guide.

1.2.3 Troubleshooting with Lmutil

Lmutil.exe, which is available in the SYSAM-<x_x>\Bin folder provides various diagnostic possibilities.

For example, the following command can be used to find the user(s) who have currently borrowed the license(s):

```
lmutil lmstat -a -c <port>@<host>
```

where <port> and <host> are license server information.

For detailed information about Lmutil, see the SySAM Users Guide.

1.2.4 SySAM for IPv6 Environments

By default, the 32-bit Windows version of SySAM for IPv4 is provided in the PowerDesigner setup. You can add IPv6 support easily after installation by copying the appropriate executables in the installation directory.

Procedure

1. Open SYSAM-<x_x>\Bin\lmtools.exe and click the *Start/Stop/Reread* tab.
2. Select the SYSAM server in the list and click *Stop Server* (you may need to select the *Force Server Shutdown* check box if licenses are currently being borrowed).
3. Open the folder SYSAM-<x_x>\Bin\binIPv6, and copy the files lmgrd.exe and SYBASE.exe to SYSAM-<x_x>\Bin, overwriting the existing versions.
4. Return to the *Start/Stop/Reread* tab in the LMTTOOLS dialog, and click *Start Server*.

1.2.5 SySAM for 64-Bit and Non-Windows Environments

You can obtain a SySAM server for 64-bit Windows or for a non-Windows environment from the [SAP ONE Support Launchpad](#).

Note

The 32-bit version of SySAM will run on a 64-bit Windows machine, but if you prefer to install a 64-bit version, you can download it from the SAP Support Portal.

To download a 64-bit version of SySAM for Windows or a SySAM server for a non-Windows environment, go to <https://launchpad.support.sap.com/#/softwarecenter>, select **By Alphabetical Index (A-Z) > S > SYSAM > SYSAM 2.4 > Installation**, and select the most recent item available for your operating system.

Note

Any licenses that have been activated for a Windows server must be reactivated for any other platform.

1.3 Windows 64-Bit Support

PowerDesigner is available in both 32-bit and 64-bit Windows versions.

The following table lists the availability of 32-bit and 64-bit versions of the various PowerDesigner components:

PowerDesigner Component	32-Bit/64-Bit Versions
PowerDesigner Client	32-bit and 64-bit versions available through separate installers. If you are restricted from installing the 64-bit version of PowerDesigner on your 64-bit Windows machine, you may install the 32-bit version. In this situation, to ensure that PowerDesigner can communicate with your data sources, you should use the 32-bit version of the ODBC Administrator tool. 32-bit PowerDesigner cannot connect to 64-bit ODBC DSNs. For detailed information about working with 32-bit DSNs on a 64-bit version of Windows, see http://support.microsoft.com/kb/942976 .
Repository	The repository is stored in a database on your DBMS server, which may be 32-bit or 64-bit. A single repository database accepts connections from 32-bit and 64-bit clients.
Repository Proxy	32-bit and 64-bit versions available through separate installers. Both versions accept connections from 32-bit and 64-bit clients.
PowerDesigner Web Server	A single version is installed with a 32-bit or 64-bit Tomcat server selected automatically for your Windows environment.

2 Downloading PowerDesigner

You can download PowerDesigner from the [SAP ONE Support Launchpad](#). The latest version is PowerDesigner v16.6 SP09.

Procedure

1. To download PowerDesigner, go to <https://launchpad.support.sap.com/#/softwarecenter>, select ► *By Alphabetical Index (A-Z)* ► *P* ► *SAP POWERDESIGNER* ► *SAP POWERDESIGNER 16.6* ►
2. Click the *Support Packages and Patches* button, and then select *SAP POWERDESIGNER 16.6*.
3. Select the Windows 32-bit or 64-bit in the table header, and then click the item with the name *PowerDesigner 16.6 SP09 x86* (for 32-bit) or *PowerDesigner 16.6 SP09 x64* (for 64-bit) to download it.
4. Unzip the downloaded zip file to obtain executables to install the PowerDesigner desktop client (see [Installing PowerDesigner \[page 15\]](#)), the Web server (see [Installing the PowerDesigner Web Server \[page 49\]](#)) and repository proxy (see [Installing the Repository Proxy \[page 46\]](#)).

3 Installing PowerDesigner

You can install 32-bit or 64-bit PowerDesigner directly on individual client machines, including as a plugin for Eclipse. You can also perform a mass silent installation or an administrative installation to a network server.

Context

i Note

You should obtain a license key (see [Obtaining Licenses \[page 7\]](#)) and, if appropriate, install and configure your license server (see [Installing a License Server \[page 8\]](#)) before beginning.

PowerDesigner has the following minimum system requirements:

- Microsoft Windows 7, 8, 8.1 or 10 or Microsoft Windows Server 2008, 2012, or 2016 (32-bit or 64-bit)
- 2 GHz processor
- 3 GB RAM
- SVGA or higher-resolution graphics adapter and compatible color monitor (800x600)
- 1GB disk space for installation of all the core modules (and demonstration videos).

For information about the libraries and frameworks required by PowerDesigner, see [PowerDesigner Dependencies \[page 23\]](#).

i Note

Non-Administrator users may receive a warning message during installation as setup requires write access on certain directories and on the registry that they may not have. Setup can go on despite this message.

Procedure

1. In the contents unzipped from your PowerDesigner download (see *Installation Guide > Downloading PowerDesigner*), double-click `PowerDesigner166SP09x86.exe` or `PowerDesigner166SP09x64.exe`.

i Note

32-bit PowerDesigner and 64-bit PowerDesigner cannot coexist on a single machine. When installing 64-bit PowerDesigner on a machine where a 32-bit PowerDesigner client is already installed (or vice versa), you are required to approve the uninstallation of the previous client before setup can continue.

2. Choose whether to install PowerDesigner in English or in French and then click [OK](#) to go to the welcome page.
3. Click [Next](#) to go to the license selection page and select one of the following license types:

- Trial version – is a full-featured version, valid for an evaluation period of 30 days, that allows you to perform any design task. Contact SAP if you require a limited extension.
- Unserved – is deployed to a particular machine. Click [Next](#) to go to the license key page, where you must load a valid license file (see [Obtaining Licenses \[page 7\]](#)).
- Served – is provided by a SySAM license server, which manages the allocation and recuperation of licenses among a pool of users. Click [Next](#) to go to the license server page, where you must enter the name of your license server.
- Standalone Seat - Served (legacy) – is provided by a SySAM license servers, but is locked to a particular machine. This option is available only for clients who purchased this type of license for v16.5 SP03 or earlier. Click [Next](#) to go to the license server page, where you must enter the name of your license server.

For more information about PowerDesigner licensing, see *Core Features Guide > Modeling with PowerDesigner > Getting Started with PowerDesigner > Managing Your PowerDesigner License* .

4. [for served licenses] Click [Next](#) to go to the package selection page, where you can select which package to install. The list displays all the packages that are available on the server but it does not necessarily reflect the current availability of a license for a particular package.
5. Click [Next](#) to go to the license agreement page. Select the location where you are installing the software, read the License Agreement, and then click the [I Agree](#) radio button to accept its terms. If you click [I Do Not Agree](#), you cannot proceed further.

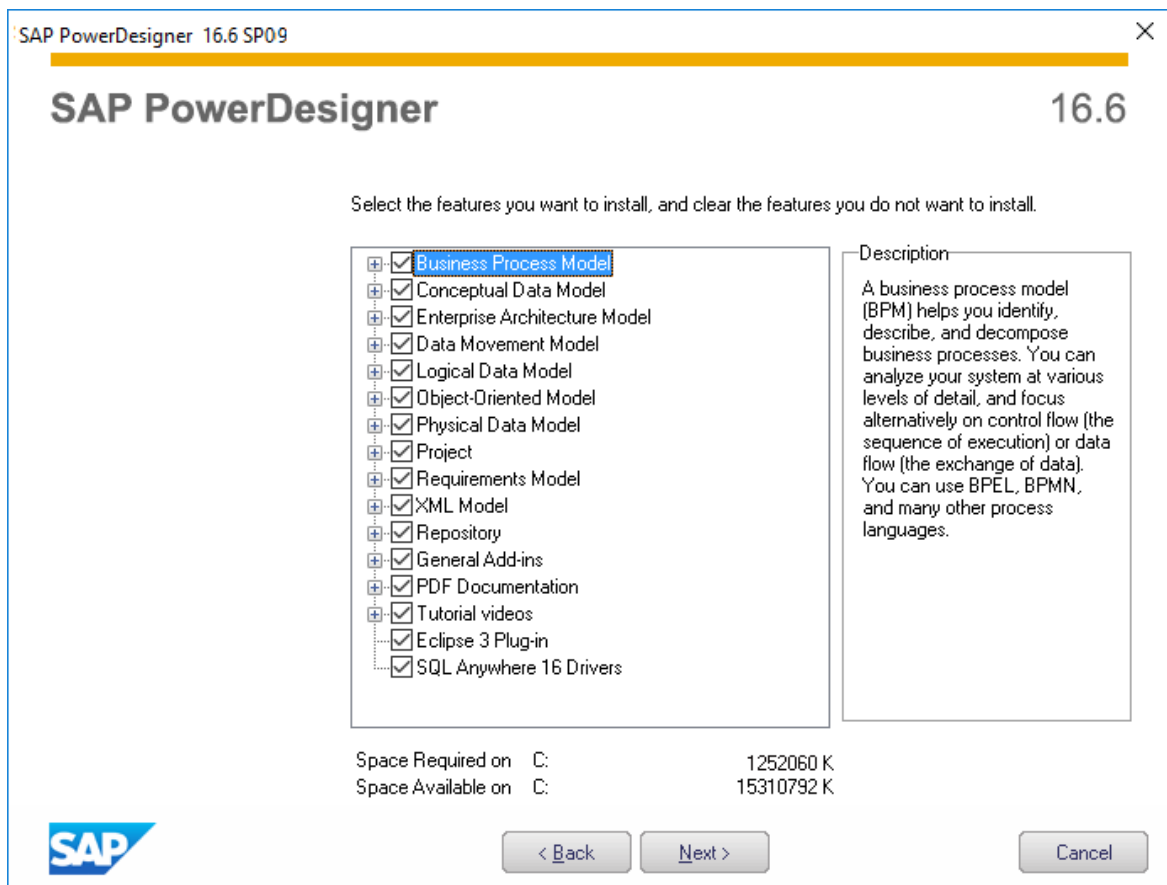
i Note

You can print the License Agreement from the Setup\Licenses directory on the product CD.

6. Click [Next](#) to go to the directory selection page. Accept the default installation directory or choose another by clicking the [Browse](#) button.

We recommend that you do not install a new major version of PowerDesigner in a directory that holds a previous version.

7. Click [Next](#) to go to the component selection page, which lists the products and features that are available to install. Each node can be expanded in order to let you select or deselect sub-features:



i Note

- The PowerDesigner plugin for Eclipse is available for Eclipse v3.2 to v4.3. For more information, see *Core Features Guide > Modeling with PowerDesigner > The PowerDesigner Plugin for Eclipse*.
- The SQL Anywhere drivers provide connectivity to a repository installed on SQL Anywhere, which is bundled with PowerDesigner (see [Installing and Authenticating SQL Anywhere \[page 30\]](#)).

Select or clear check boxes as necessary, and then click [Next](#).

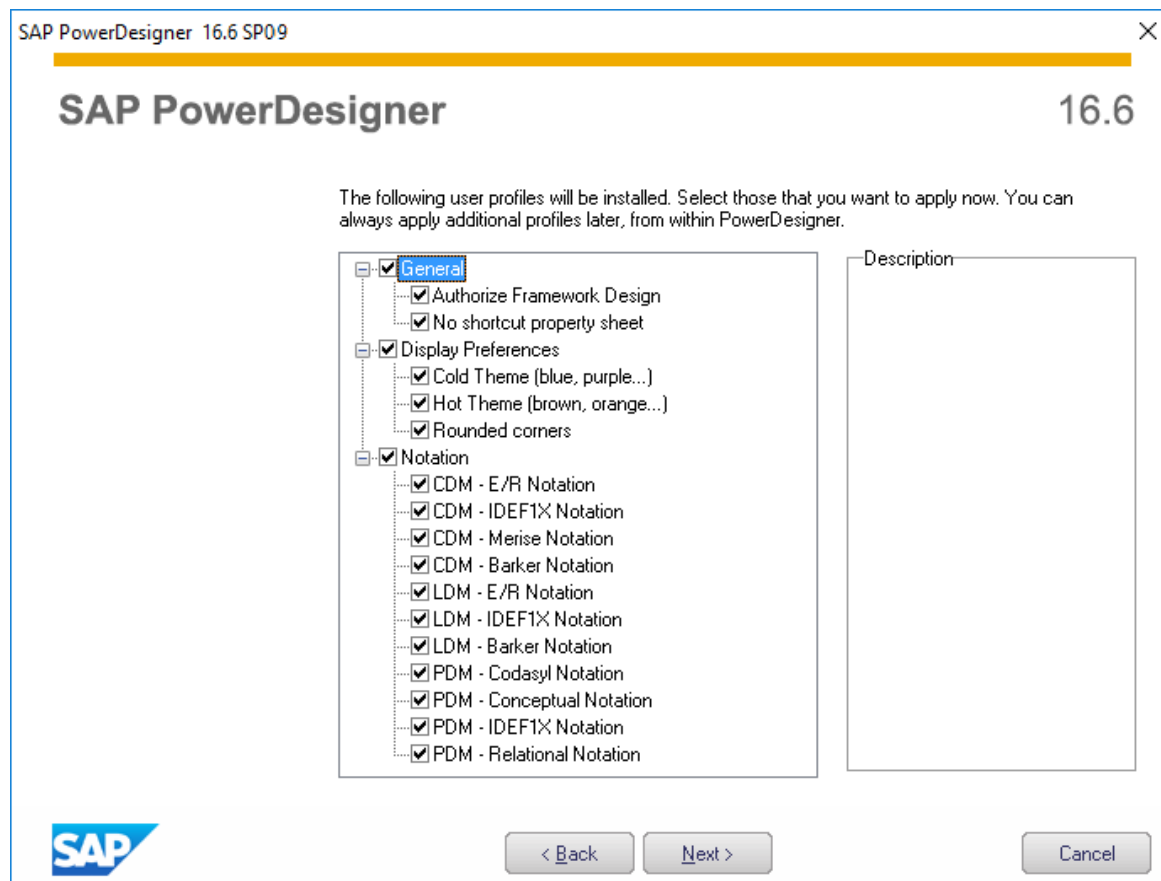
8. If you selected the Eclipse plug-in in the list of components, the Eclipse directory selection page is displayed. Click the [Browse](#) button to specify a directory containing a valid Eclipse installation.

i Note

If you had manually installed the Eclipse plug-in in PowerDesigner version 10 or 11 and want to upgrade to version 16.x you have to remove the plug-in manually. To do so, open the Eclipse directory, and remove any PowerDesigner-related folder under the \configuration, \features, and \workspace \.metadata\plugins folders.

9. Click [Next](#) to go to the user profiles page. Select the user profiles that you want to apply immediately to your installation.

Note that whatever you select on this page, all the profiles will be installed and you can apply any profiles after installation. If you select two or more contradictory profiles (for example, E/R Notation and Barker Notation, in the CDM category), the one that appears last in the list will be applied:



For more information about user profiles, including how to make your own profiles available to the installer, see *Core Features Guide > Modeling with PowerDesigner > Customizing Your Modeling Environment > User Profiles*.

10. Click [Next](#) to go to the program folders page. You can select to make PowerDesigner available from the default folder or select or create another.
11. Click [Next](#) to go to the current settings page, which lists all your selections. Select the [Keep PowerDesigner Settings](#) check box to retain any settings from a previous version of PowerDesigner.

i Note

For new major versions, even if you select to retain settings from a previous version, resource file named paths (such as `_DBMS`) pointing inside the `Resource Files` directory inside the PowerDesigner installation will be updated to point to the new installation directory in order for you to benefit from bug fixes and other improvements. If you have defined additional paths for populating your resource file lists, these will not be affected.

12. Click [Next](#) to begin the install. Setup begins copying files to the destination directory.
13. Wait for the setup to complete, and then click [Finish](#) to exit the wizard. Depending on your working environment, you may be prompted to reboot your machine.

i Note

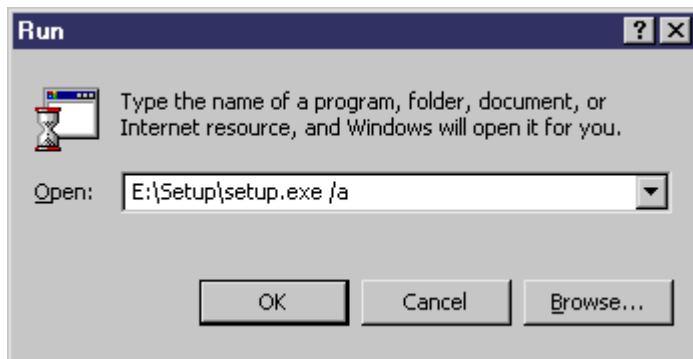
The `Readme.html` file, which contains important release information, is available in the root of your installation directory.

3.1 Installing PowerDesigner in Administrative Mode

System administrators can install PowerDesigner on a server and have client machines run the application from this central install. The client machines do not install any files but their registry is modified in order to be able to access PowerDesigner from the specified location. With this type of install, there is only one instance of PowerDesigner to deploy and upgrade, and you can choose any type of PowerDesigner license and combination of installation options on each client machine.

Procedure

1. Select **Start > Run**, type the PowerDesigner `setup.exe` path followed by `/a` in the Run dialog box and click **OK**.



2. Click **Next** to display the network location page.
3. Specify the network location where you want to copy the product files, which must be read-accessible to client machines, and then click **Install**.

You are not required to enter any product key or select any feature to install. All PowerDesigner setup files are decompressed and copied to the server, but the server registry and system files will not be affected. When this process is complete, the complete page opens.

4. Click **Finish** to exit the InstallShield Wizard.

3.1.1 Installing Clients to Access the Administrative Installation

Once you have created the administrative install on the server, you can set up the client machines. The client install is the same as the standard PowerDesigner install except that it only modifies the client machine registry to reference the files located on the server and does not copy any files, so that no space is required on the client machine.

Context

i Note

When installing many client machines with identical options, you may want to consider silent installation (see [Installing PowerDesigner in Silent Mode \[page 21\]](#)).

Procedure

1. On the client machine, map a network drive to the server location containing the administrative installation.
2. Open Windows Explorer, connect to the administrative installation location and double-click the `setup.exe` file to display the Welcome page.
3. Click [Next](#) to open the license selection page, select a license type, and then click [Next](#) again.
4. Select the appropriate installation parameters on the following pages, and then click [Finish](#) to begin the install.

Depending on your working environment, Setup may ask you to reboot your machine.

3.1.2 Upgrading an Administrative Install

You can upgrade an administrative install with an EBF or minor version release downloaded from the Web. You cannot upgrade between major versions. Each major version (12.x, 15.x, etc.) must be installed as a new administrative install in its own directory.

The procedure is different for these two types of upgrade:

- EBFs - Unzip the zip file delivered with the msi over the existing administrative install.
- Minor releases - Run the upgrade executable with the following syntax:

```
powerdesigner<ver>_upd.exe /a
```

3.2 Installing PowerDesigner in Silent Mode

When deploying PowerDesigner on a large number of machines and using the same setup options and destination folder for each machine, you can use the silent install mode, which does not require user input, and uses a response file (setup.iss) to specify the required installation options.

Context

i Note

You can perform a silent install from the product CD or from an administrative installation on a network server (see [Installing PowerDesigner in Administrative Mode \[page 19\]](#)).

Procedure

1. To create a setup.iss response file, select **Start > Run** to open the Windows Run dialog and enter the following command to open the PowerDesigner installer:

```
<PD-inst-dir>\setup\setup.exe /r /f1"<path>\setup.iss"
```

For example, the following command creates a response file in the Public folder of the **PDInstall** server, which contains the PowerDesigner installation: `\\PDInstall\Public\setup\setup.exe /r /f1"\\PDInstall\Public\setup\setup.iss"`

2. Complete the installation parameters as required and then click **Finish** to create the setup.iss file.
3. To launch a silent install on a client machine, run the following command either from the client or via an administration tool:

```
<PD-inst-dir>\setup\setup.exe /s /f1"<path>\setup.iss" [/f2"<path>\setup.log"]
```

If you do not specify a local path to the install log, then each silent install will overwrite the content of the setup.log file in the central installation directory. To obtain confirmation of a successful installation, open setup.log and search for the line `ResultCode=0`.

For example, the following command installs PowerDesigner from the PDInstall server on the client machine and writes a local log file to C:\temp:

```
\\PDInstall\Public\setup\setup.exe /s /f1"\\PDInstall\Public\setup\setup.iss" [/f2"C:\temp\setup.log"]
```

3.2.1 Uninstalling PowerDesigner in Silent mode

A silent uninstall works in a similar fashion to the silent install, but requires that you locate the InstallShield PowerDesigner maintenance file.

Context

For PowerDesigner v16.x this file is located, by default, at: `C:\Program Files\InstallShield Installation Information\{D88DF8F0-B749-4D26-AFBC-A6E588099793}\setup.exe`

i Note

It may be that your maintenance file is not found in the standard location. You can always retrieve its location file from the following registry key: `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft \Windows \CurrentVersion\Uninstall\{D88DF8F0-B749-4D26-AFBC- A6E588099793}`

Procedure

1. To create an uninstall.iss response file, select  **Start**  to open the Windows Run dialog box to invoke the installshield maintenance file with the following options:

```
<path-to>\setup.exe /r /f1"<path>\uninstall.iss"
```

Complete the installation parameters as required and then click Finish to create the uninstall.iss file at <path>. For example, the following:

```
C:\Program Files\InstallShield Installation Information\setup.exe /r /f1"C:\temp\nuninstall.iss"
```

Uses the standard maintenance file, and creates uninstall.iss in a temp directory.

2. Proceed to uninstall the client machine with the following command:

```
<path-to>\setup.exe /s /f1"<path>\uninstall.iss"
```

3.3 Uninstalling PowerDesigner and Installation Maintenance

After installing PowerDesigner on your machine, you can modify the installation by selecting  **Control Panel**  **Add/Remove Programs**  or by restarting the installation.

You can:

- Modify - your PowerDesigner installation by adding or removing program features. Select or clear components in the components page.

- Repair - your PowerDesigner installation by reinstalling it. You must have the installation CD or access to the network drive where installation files are copied.
- Remove - your installation and clean up your registry.

i Note

User files are not removed and you cannot modify your license configuration.

3.4 PowerDesigner Dependencies

PowerDesigner depends on a certain number of frameworks and libraries and will install them if they are not present in your environment.

- Microsoft .NET Framework 4.0.

i Note

After installation is complete, we recommend that you check for and install the latest security updates.

- o2003pia.msi, o2007pia.msi, o2010pia.msi - Microsoft Office Primary Interop Assemblies for MS Office 2003, 2007, and 2010 to support PowerDesigner MS Office plugins.
- msxml6-KB2758696-fra-x86.exe OR msxml6-KB2758696-fra-amd64.exe - to support the PowerDesigner XSM.
- NCo3016_Net40_x86.msi OR NCo3016_Net40_x64.msi - SAP DotNetConnector3
- vjredist.exe - Microsoft Visual J# 2.0 redistribuable to support the PowerDesigner Auto-Layout feature.
- vcredist_x86.exe OR vcredist_x64.exe - Microsoft Visual C++ 2008 and 2010 Runtime Libraries
- vstor_redist.exe - Visual Studio Tools for Office

3.5 Upgrading PowerDesigner

This topic provides guidance on issues that may arise when upgrading PowerDesigner.

i Note

If you are upgrading from a previous version, you must regenerate your PowerDesigner license keys at <https://support.sap.com/en/my-support/keys.html> .

- New PowerDesigner Web server architecture - The architecture of the PowerDesigner Web server changed with v16.6 SP02. If you have enabled SSL/SSO before this version, you will need to re-enable them for the new architecture.
- Unification of installs - Previous versions of PowerDesigner were provided as an English language installer and a separate French language installer, and the French version was called PowerAMC. From v16.6 onwards, both the English and French versions are called PowerDesigner and a single installer is delivered, which allows you to choose the installation language.

i Note

When upgrading from a version of PowerAMC, the installer will uninstall PowerAMC and install PowerDesigner, while preserving all your options and preferences. If both PowerDesigner and PowerAMC are present, the installer will only update PowerDesigner.

i Note

Upgrading from 32-bit PowerAMC to 64-bit PowerDesigner is not supported. You must first upgrade to 32-bit PowerDesigner and then upgrade to 64-bit.

- Upgrading the repository - You should always upgrade the repository proxy and PowerDesigner Web if they are deployed in your environment. See [Upgrading the Repository \[page 40\]](#).
- Upgrading to 64-bit PowerDesigner - See [Upgrading from 32-Bit to 64-Bit PowerDesigner \[page 25\]](#).
- Repository branches - Prior to v16.1, the repository browser only supported displaying a single branch at a time. When you upgrade an existing repository to v16.1 or higher, all branches will become, by default, visible for all users. You may wish to simplify viewing the repository by deleting documents and branches that are no longer used, by using permissions to hide certain branches from users or groups who have no need of them, or by migrating active models to a new repository (see [Post-Upgrade Cleanup for a Repository Containing Branches \[page 42\]](#)).
- Office add-ins - Though PowerDesigner v15.x and v16.x can be installed together on the same workstation, after the installation of v16.x, the add-ins supporting importing from MS Word and Visio will only function for v16.x.
- License Server - In general, you can serve licenses for clients using PowerDesigner v15.x and v16.x from the same SySAM license server. However, if you want to support heterogeneous versions of the Data Architect package (which is only available as an upgrade to v16.x and not as a new purchase), you will need to install a second license server on another machine and plan to serve the licenses associated with each version from a separate server.
- Resource Files - DBMS and language definition files and other resource files provided with PowerDesigner are constantly evolving. If you have not edited the resource files delivered with a previous version of PowerDesigner, then the upgrade to the latest version will happen silently. If you have previously edited a definition file or other resource file, then it will continue to work after the upgrade, but we advise you to use the [Compare](#) tool on the resource file list to review the differences between your file and the new file and, if appropriate, merge them to obtain bug fixes or new features. If you have stored standard resource files from a previous version in the repository then they will not automatically be updated. You should check in the newly-delivered versions manually to ensure that all users benefit from them (see *Core Features Guide > Administering PowerDesigner > Deploying an Enterprise Glossary and Library > Deploying an Enterprise Library > Sharing Resource Files via the Library*).

i Note

To comply with recent Microsoft recommendations, from version 16.5 onwards, PowerDesigner no longer allows you to save modifications to resource files inside the `Program Files` folder, and will propose an alternative location if you try to do so, adding the selected directory to the list of paths for that type of resource file. If you have previously created or modified resource files inside `Program Files`, your files may no longer be available, as Windows Vista or Windows 7 actually store them in a virtual mirror at, for example, `C:\Users\<username>\AppData\Local\VirtualStore\Program Files\Sybase\PowerDesigner 16\Resource Files\DBMS`. To restore these files to your lists, optionally move them to a more convenient path, and add their location to your list using the [Path](#) tool.

3.6 Upgrading from 32-Bit to 64-Bit PowerDesigner

Upgrading PowerDesigner to 64-bit requires that you upgrade your ODBC and other connections to the repository and other databases from 32-bit to 64-bit as well. If you install the 64-bit PowerDesigner client on a machine where the 32-bit client is already installed, the setup will uninstall the 32-bit client. If the upgrade is performed by an administrator who is not the PowerDesigner user, the user may need to manually modify PowerDesigner resource file paths (to files such as DBMS and language definition files, user profiles and model extensions). Other defaults and preferences will be correctly copied to the new installation.

Context

A single repository can support connections from 32-bit and 64-bit clients. The repository proxy is available in 32-bit and 64-bit versions, and both proxy versions can support connections from 32-bit and 64-bit clients.

i Note

Upgrading directly from pre-v16.6 32-bit PowerAMC to v16.6 64-bit PowerDesigner is not supported. You must first upgrade to 32-bit PowerDesigner and then upgrade to 64-bit.

Procedure

1. Open the 32-bit PowerDesigner client and select ► [Repository](#) ► [Repository Definitions](#) ► to review your repository connections. If you connect to the repository using a:
 - Proxy connection - No action is needed and you will be able to connect immediately after upgrading to 64-bit.
 - Direct connection - You will need to modify the connection, after the upgrade, to use 64-bit ODBC or other connectivity.
2. If you use PowerDesigner to connect to other databases, you will need to modify their connections to 64-bit ODBC or other connectivity as well:
 - a. Open a PDM and select ► [Database](#) ► [Configure Connections](#) ►.
 - b. Review the connections on the [ODBC Machine Data Sources](#), [ODBC File Sources](#), and [Connection Profiles](#) tabs and note those that you will want to recreate for 64-bit.
3. Close the 32-bit PowerDesigner client.
4. Launch the 64-bit PowerDesigner client setup and follow the setup instructions (see [Installing PowerDesigner \[page 15\]](#)). The installer will install the 64-bit client and remove the 32-bit client.
5. Open the 64-client and modify your repository definitions and other database connections to use 64-bit ODBC or other connectivity.
6. If an administrator has performed the upgrade on your behalf (and resource files are not stored in the repository), the installer will not have been able to modify the paths that PowerDesigner uses to find resource files. For example, if the 32-bit client was installed in its default location of `C:\Program Files (x86)\Sybase\PowerDesigner <x>` and the 64-bit client is installed in its default location of `C:`

\Program Files\Sybase\PowerDesigner <x>, then the client will not be able to find the default resource files located in the 64-bit installation, and these will not appear in your resource file lists. To make the default resource files visible:

- a. Open the resource file list. For example, to open the list of DBMSs, select ► **Tools** ► **Resources** ► **DBMS** ►.
- b. Click the **Path** tool and then click the **Add a Directory** tool, navigate to the resource file location (for example, C:\Program Files\Sybase\PowerDesigner <x>\Resource Files\DBMS) and click **OK** to add it to the path list.
- c. Click **OK** to return to the resource file list. The standard resource files will now be present.
- d. Repeat these steps for each type of resource file.

i Note

To comply with recent Microsoft recommendations, from version 16.5 onwards, PowerDesigner no longer allows you to save modifications to resource files inside the Program Files folder, and will propose an alternative location if you try to do so, adding the selected directory to the list of paths for that type of resource file. If you have previously created or modified resource files inside Program Files, your files may no longer be available, as Windows Vista or Windows 7 actually store them in a virtual mirror at, for example, C:\Users\<username>\AppData\Local\VirtualStore\Program Files\Sybase\PowerDesigner 16\Resource Files\DBMS. To restore these files to your lists, optionally move them to a more convenient path, and add their location to your list using the **Path** tool.

4 Installing the Repository

The PowerDesigner repository can be used to store your PowerDesigner models and other files relating to your design projects. An administrator must set up the repository, which is stored in a database on a server.

Context

i Note

Before installing the repository to a server, you may want to create a local install on the administrator's workstation for testing and experimentation (see [Installing a Local Test Repository \[page 28\]](#)).

For information about using the repository, see *Core Features Guide > Modeling with PowerDesigner > The Repository*.

Procedure

1. Choose a server capable of supporting large, long-running transactions to host your repository. We recommend as a minimum, a dual-core machine, with 2-4GB of RAM.

i Note

To calculate the size required for your repository database, estimate the number of models that will be stored and the period during which they will be developed. An average model containing 100 primary objects (tables, classes, etc.) will have an initial disk size of 5MB and the size of its initial check in will be around 10MB. Assuming an average number of edits, each subsequent check in will add 10% to the size of the file, so that after an average development period of two months (40 working days) with one check in per day, the final model file size will be $10\text{MB} * 1.1^{40}$ or approximately 500MB. If your team will develop 20 such models during the course of the year, you should allow 10GB of space for your repository database.

If you want to use the repository proxy or PowerDesigner Web, you should install them, by preference, on the same machine where the repository is located to optimize communication between the components. If the repository server is not a Windows server or is unable to support the additional workload, then we recommend installing these components on another machine on the same LAN segment.

2. Create a database (see [Creating a Database to Contain the Repository \[page 31\]](#)) and a service to run the database (see [Running the Database as a Service \[page 32\]](#)) using one of the supported DBMSs:
 - SAP® SQL Anywhere® v16, 17 (bundled with PowerDesigner, see [Installing and Authenticating SQL Anywhere \[page 30\]](#))
 - SAP® Adaptive Server® Enterprise v15.7, 16.x
 - SAP HANA® v1.0, 2.0

- Oracle 11g, 12c
- IBM DB2 LUW v10.5
- DB2 z/OS 11.x, 12
- Microsoft SQL Server 2012, 2014, 2016 - we recommend that you use a server that is not currently managing a high transaction load, since PowerDesigner performs long-running synchronous transactions during Check-In/Check-Out.

i Note

The most up-to-date list of supported DBMSs, is available at `<install_dir>/readme.html`.

3. Install the repository to the new database (see [Installing the Repository to the Server \[page 33\]](#)).
4. [optional] Install the repository proxy (see [Installing the Repository Proxy \[page 46\]](#)).
The proxy simplifies and offers more security for connection to your repository and may provide performance improvements in environments where clients will be connecting over a WAN or complicated LAN or when dealing regularly with large (15MB+) models.
5. [optional] Install the PowerDesigner Web server (see [Installing the PowerDesigner Web Server \[page 49\]](#)).
PowerDesigner Web provides access to your repository models via a Web browser.
6. Define a password policy, optionally connect to an LDAP server to delegate the authentication of repository users and an SMTP server for notifications, enable single sign-on for PowerDesigner Web users, and create groups and user accounts with appropriate rights and permissions to control access to the repository (see *Core Features Guide > Administering PowerDesigner > Controlling Repository Access*).

4.1 Installing a Local Test Repository

Before deploying the repository to a database server in your production environment, you may want to create a local install on the administrators workstation for testing and experimentation.

Procedure

1. Install SQL Anywhere on your local machine (see [Installing and Authenticating SQL Anywhere \[page 30\]](#)), and create a database (see [Creating a Database to Contain the Repository \[page 31\]](#)).
2. Install PowerDesigner (see [Installing PowerDesigner \[page 15\]](#)).
3. Install the repository to the database (see [Installing the Repository to the Server \[page 33\]](#)).
4. [optional] Install PowerDesigner Web (see [Installing the PowerDesigner Web Server \[page 49\]](#)).
5. Review the following sections for information about repository features and administration:
 - *Core Features Guide > Modeling with PowerDesigner > The Repository*
 - *PowerDesigner Web*
 - *Core Features Guide > Modeling with PowerDesigner > The Browser > The Glossary*
 - *Core Features Guide > Modeling with PowerDesigner > The Browser > The Library*
 - *Core Features Guide > Administering PowerDesigner*

4.2 Installing the EA Example Repository

You can install the example SQL Anywhere repository database, `EAEExample.db`, to explore the EA Example objects, diagrams, and charts in the PowerDesigner Web client.

Context

For information about:

- The EAEExample files: see *Enterprise Architecture > Planning Your Enterprise Architecture Initiative > The EA Example Model, Excel Imports, and Charts*.
- PowerDesigner Web: see *PowerDesigner Web*.

Procedure

1. Locate or install SQL Anywhere (see [Installing and Authenticating SQL Anywhere \[page 30\]](#)).
2. Copy the `EAEExample.db` database file from `<install_dir>/Examples/EAEExample` to a suitable writeable location.
3. Create a service to launch the database (see [Running the Database as a Service \[page 32\]](#)).
4. Install the PowerDesigner Web server, specifying a connection to the database (see [Installing the PowerDesigner Web Server \[page 49\]](#)), and using the following database credentials:
 - User name: DBA
 - Password: sql
5. Open your Web browser, navigate to `http://<server-name>:<port-number>/powerdesigner-web` (3030 is the default port number), and enter the following repository credentials:
 - User name: ADMIN
 - Password: EAEExample1
6. To access the charts:
 - Click the [Dashboard](#) tile, or
 - Click the [Repository](#) tile, navigate to `EA Content > EAEExample > EAEExample`, and click the [Charts](#) facet.

4.3 Installing and Authenticating SQL Anywhere

The PowerDesigner repository is delivered with an authenticated version of Sybase SQL Anywhere, which can only be used to store your PowerDesigner model repository. Note that the trial version of PowerDesigner is supplied with a lighter version of SQL Anywhere, for which the setup may be slightly different.

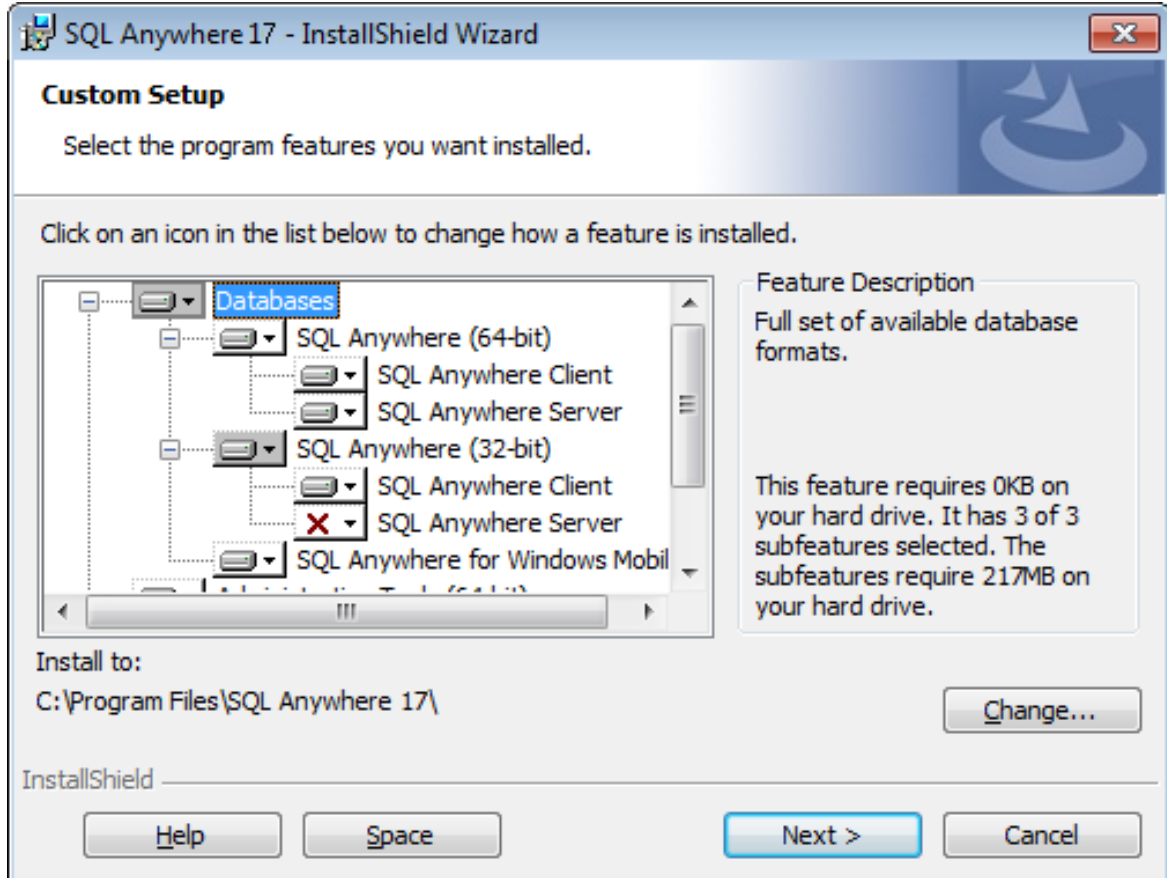
Procedure

1. Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Install SQL Anywhere 17](#). Alternatively, if you have downloaded an install, double-click `SQLAnywhere1700.exe`.

i Note

If you have downloaded a trial version of PowerDesigner from the SAP website, the authenticated version of SQL Anywhere is available for download from the same page.

2. Choose your setup language, and then click [Next](#) to open the SQL Anywhere InstallShield wizard.
3. Click [Next](#) to go to the license agreement page. Select your country or region, review and accept the license terms, and then click [Next](#) to go to the [Custom Setup](#).
4. Leave all the defaults, click [Next](#), and then click [Install](#) to start the installation.



5. When the installation is complete, you will be invited to view the ReadMe and online resources. Make your choices, and then click [Finish](#) to exit the wizard
6. Copy the `authenticate.sql` file delivered in the `Setup\support` directory of the installation media (and installed to the `Tools` directory of your PowerDesigner installation) to the `\Scripts` directory in your SQL Anywhere installation on the repository server.

Copying these statements in this way ensure that when you create a database, it will automatically be authorized for use with the PowerDesigner repository.

i Note

If you create a database before having copied the authentication instructions in this way, then you will need to authenticate it manually by opening the Interactive SQL tool, logging into your database, and running the contents of `authenticate.sql` against it and then restarting the server.

4.4 Creating a Database to Contain the Repository

Once you have installed SQL Anywhere, you must create an authenticated database on the repository server to which you will deploy the repository.

Procedure

1. Select **Start > Programs > SQL Anywhere 17 > Admin Tools > Sybase Central** to open Sybase Central.
2. Select **Tools > SQL Anywhere 17 > Create Database** to open the Create Database Wizard.
3. Click [Next](#) to go to the [Select a Location](#) page. The [Create a database on this computer](#) option is automatically selected. Click [Next](#) to go to the [Specify a Database File](#) page.
4. Enter an appropriate name and location for the database, and then click [Next](#) to go to the [Specify the Transaction Log File](#) page.

i Note

You will need to specify this file when you create a data source to allow PowerDesigner to connect to the database (see [Installing a Local Test Repository \[page 28\]](#)).

5. Make sure the [Maintain the Following Transaction Log File](#) check box is selected, accept or specify an alternate log file name and location, and then click [Next](#).
6. Continue clicking [Next](#) and accepting the default settings until you arrive at the [Specify DBA User and Password](#) page.
7. By default, the database is created with an administrator account called **DBA**, and with a password **sql**. Select these defaults or enter your own, and then click [Next](#) to go to the [Connect to the Database](#) page.

Note

You will need to enter this username and password in the repository definition (see [Installing the Repository to the Server \[page 33\]](#)) and data source (see [Installing a Local Test Repository \[page 28\]](#)).

8. Deselect the *Connect to the new database* option, and then click *Finish* to create the database.

4.5 Running the Database as a Service

To make your repository database available to clients over the network, you should run it as a service.

Procedure

1. On the database server, select **Start > Programs > SQL Anywhere 17 > Admin Tools > Sybase Central** to open Sybase Central.
2. If the *Services* tab is not visible, double-click the SQL Anywhere entry on the *Plug-ins* tab to show it.
3. Select the *Services* tab, and then click the *New Service* tool to open the Create Service Wizard, enter a name for the service and click *Next*.
4. Select *Network Database Server* and click *Next*.
5. Accept the default executable (`dbsrv17.exe`) and click *Next*.
6. Enter appropriate parameters separated by spaces or carriage returns and click *Next*. We recommend that you enter as a minimum the following parameters:

Parameter	Description
<code>-n <servername dbfilepath></code>	[required] Specifies the server name and path to the .db file. For example: <pre>-n repository c:\db\repository.db</pre>
<code>-x tcpip(port=<portno>)</code>	[recommended] Specifies the port to use. For example: <pre>-x tcpip(port=2638)</pre>

7. Click *Next* three times, accepting the remaining defaults, select *Start the service now*, and then click *Finish*. The database is now running and available to be connected to over the network.

4.6 Installing the Repository to the Server

The repository administrator must set up the repository on a database server running one of the supported DBMSs.

Context

i Note

Before installing the repository, you must have access to a database (see [Creating a Database to Contain the Repository \[page 31\]](#)) and have installed PowerDesigner on the repository administrator's workstation (see [Installing PowerDesigner \[page 15\]](#)). The database user you use to install the repository must have the right to create tables and other objects. We recommend that you begin with an empty database.

Procedure

1. On the repository administrator's workstation, start PowerDesigner and select **Repository > Repository Definitions** to open the List of Repository Definitions.
2. Click the **Add a Row** tool to create a new definition, click the **Properties** tool to open its property sheet, and enter the following values:

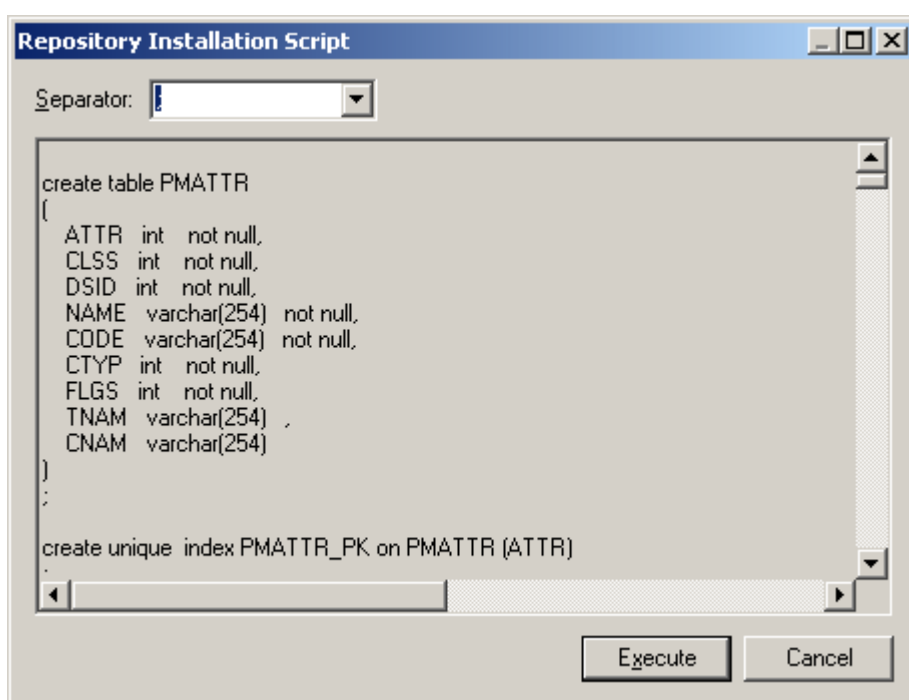
Property	Value
Repository name	Enter an appropriate name to identify the repository.
Data source name	Click the Select a Data Source tool to the right of the field and select or create the data source that you want to use to connect to the repository database. To create an ODBC machine data source for a SQL Anywhere database, see Creating a Data Source to Access the Database [page 35]. For detailed information about creating, configuring, and using connection profiles for other DBMSs, see <i>Core Features Guide > Modeling with PowerDesigner > Getting Started with PowerDesigner > Connecting to a Database</i>.
User name	Enter the administrator name you chose when creating the database.
Password	Enter the administrator password you chose when creating the database
Bytes per char	For non-Oracle unicode or multi-byte character set databases, specify the bytes per character used by the database: ○ 1-byte - For SBCS (Single-Byte Character Set) ○ 2-byte - [default] For DBCS (Double-Byte Character Set) ○ 3-byte - For Unicode or MBCS (Multi-Byte Character Set)

3. Click **Test** to test the connection and, in the event of an error, double-check your connection parameters. Then click **OK** to return to your repository definition, and click **OK** to complete its creation.

4. Select **Repository > Connect** to open the Connect dialog, enter the following values, and then click **OK**:

Property	Value
Repository name	Select the name of the repository definition you just created.
Login name	Enter ADMIN . This is the default administrator account for the repository.
Password	Leave blank. The administrator password is empty until the repository is created, after which you will be prompted to set a password.

5. A message box is displayed inviting you to install the repository. Click **Yes** to continue.
The read-only *Repository Installation Script* window opens, containing the SQL script to create the repository tables:



i Note

You cannot edit the script in this dialog, but you can, if necessary, modify the statements (for example, to add physical options) by copying the script to an external SQL editor, making the appropriate edits, and then connecting to the database to execute the script outside of PowerDesigner. The *Separator* list in the dialog lets you select the separator appropriate to your interpreter.

6. Click **Execute** to run the script and create the repository tables. This may take several minutes.

i Note

If the installation fails due to network problems, insufficient disk space, or permission problems, we recommend that you do not choose to ignore the errors, but rather abort the installation and start again.

7. When the repository has been installed, the [Change Password](#) dialog opens, prompting you to set the administrator password. Enter a password that complies with the default repository password policy as listed in the dialog, and then click [OK](#) to complete the creation of the repository.

In the [Repository](#) tab of the Browser, the root of the repository tree displays the repository name and the connected user, and is ready for use.

4.6.1 Creating a Data Source to Access the Database

Client machines running PowerDesigner will require a data source to connect to your database over the network.

Context

The instructions given here are for creating an ODBC machine data source for SQL Anywhere. For information about creating other data sources for other DBMSs, see *Core Features Guide > Modeling with PowerDesigner > Getting Started with PowerDesigner > Connecting to a Database*.

i Note

In order to create a data source on a Windows 7 machine, you may need to launch PowerDesigner or the ODBC Data Source Administrator by right-clicking its icon or menu item and selecting [Run as administrator](#).

Procedure

1. Click the [Select a Data Source](#) tool on the Repository Definition dialog, then select [ODBC machine data source](#) and click [Configure](#). On the [ODBC Machine Data Sources](#) tab of the Configure Data Connections dialog, click the [Add Data Source](#) tool, then select [System Data Source](#) and click [Next](#).

Alternately, to create a data source using the ODBC Data Source Administrator, select [Start > Settings > Control Panel > Administrative Tools > Data Sources \(ODBC\)](#), select the [System DSN](#) tab, and then click [Add](#).

i Note

If you have installed 32-bit PowerDesigner in a 64-bit environment, you must use the 32-bit version of the ODBC Administrator tool, because 32-bit PowerDesigner cannot connect to 64-bit ODBC DSNs.

2. Select [SQL Anywhere 17](#) and click [Next](#), and then click [Finish](#) to create the data source.
3. On the [ODBC](#) tab of the ODBC Configuration for SQL Anywhere dialog, enter an appropriate name such as [PD Repository](#) in the [Data source name](#) field.
4. Click the [Login](#) tab and complete it as follows:

To connect to the repository running as a service on a database server, enter:

Parameter	Value
Authentication	Select Database .
User ID	Enter the administrator name you chose when creating the database.
Password	Enter the administrator password you chose when creating the database.
Action	Select Connect to a running database on another computer .
Host	Enter the name of the database server.
Port	Enter the port specified in the service definition. The default port is 2638.
Server name	Enter the name of the server specified in the service definition
Database name	Not required

To connect to a repository running locally for testing, enter:

Parameter	Value
Authentication	Select Database .
User ID	Enter the administrator name you chose when creating the database.
Password	Enter the administrator password you chose when creating the database.
Action	Select Start and connect to a database on this computer .
Database file	Browse to and select your database file.
Database name	Enter an appropriate name such as PD Repository .
Server name	Enter an appropriate name such as PD Repository .
Start line	Enter "C:\Program Files\SQL Anywhere 17\Bin32\dbsrv17.exe" or "C:\Program Files\SQL Anywhere 17\Bin64\dbsrv17.exe" (including the quotation marks).
Stop database after last disconnect	Deselect this option if you want the repository to continue to be available after you disconnect from it.

5. Click **OK** to complete the configuration of the data source.

4.6.2 Troubleshooting the Repository Installed on ASE

This section lists known issues encountered when installing the repository on SAP Adaptive Server Enterprise.

General Considerations

The PowerDesigner repository database is required to process large transactions and we recommend that it is created and maintained by an experienced DBA. You should:

- Ensure that ASE has enough CPU and Memory. The following ASE parameters must frequently be configured higher than their default settings to optimize check in of models:
 - number of open objects
 - number of open indexes
 - number of locks
 - max memory
 - procedure cache size
 - statement cache size
- Ensure you have a reasonably large log and proper log management to handle long-running transactions.
- Use `update statistics` regularly to update information about the distribution of key values. Job Scheduler should be configured for this if the database is to be unattended.
- Change the `lock scheme` from the default **allpages** to **datapages** or **datarows** (and increase `number of locks` appropriately).
- [15.0.2 and higher] Consider enabling literal autoparameterization `literal_autoparam`
- Consider using `directio` to bypass the operating system buffer cache and write directly to disk.
- Monitor and consider modifying `default network packet size` from its default value of 2048 bytes.

Must declare variable '@dr_t_a0'. SQLSTATE = ZZZZZ

If you see the above error and are connecting to an ASE server via ODBC, open the ODBC Data Source Administrator, select your data source, and select the [Enable Dynamic Prepare](#) option on the [Connection](#) tab.

Truncated data on extraction

If you are seeing data truncated on extraction from the repository and are connecting to an ASE server via ODBC, open the ODBC Data Source Administrator, select your data source, and enter the value 10000000 in the [Text size](#) field on the [Advanced](#) tab.

If characters such as the ellipsis are being truncated, you should verify that the character set of your driver matches the setting for your database.

Connection Profile: "Error converting characters into server's character set"

If you receive such a conversion error when working with a connection profile, click the ellipsis button to the right of the [Connection parameters](#) field on the Connection Profile Definition dialog, add the `CharSet` parameter, and enter the appropriate charset value to match your repository database.

Customer-Defined Indexes

If your DBA identifies indexes that could improve repository performance they can create such indexes in the repository database. In order to avoid conflicts when creating indexes, we recommend that you:

- Use a distinct prefix in customer-defined index names to distinguish them from the standard `PM<xxxx>` indexes.
- Drop any customer-defined indexes before a repository upgrade and recreate them after the upgrade.

4.6.3 Troubleshooting the Repository Installed on DB2

This section lists known issues encountered when installing the repository on IBM DB2.

Exception During Search

If you are seeing exceptions when performing a search through the [PowerDesigner Portal](#), you should consider doubling the size of the `applheapsz` parameter, which controls the application heap size.

Connection Profile: "Error converting characters into server's character set"

If you receive such a conversion error when working with a connection profile, click the ellipsis button to the right of the [Connection parameters](#) field on the Connection Profile Definition dialog, add the `CharSet` parameter, and enter the appropriate charset value to match your repository database.

Customer-Defined Indexes

If your DBA identifies indexes that could improve repository performance they can create such indexes in the repository database. In order to avoid conflicts when creating indexes, we recommend that you:

- Use a distinct prefix in customer-defined index names to distinguish them from the standard `PM<xxxx>` indexes.
- Drop any customer-defined indexes before a repository upgrade and recreate them after the upgrade.

4.6.4 Troubleshooting the Repository Installed on SQL Server

This section lists known issues encountered when installing the repository on Microsoft SQL Server.

Optimizing Repository Reads with Snapshots

To ensure that all users reading data will get access to a snapshot and not be blocked by concurrent transactions, we recommend that you enable the following SQL Server options:

- `ALLOW_SNAPSHOT_ISOLATION`
- `READ_COMMITTED_SNAPSHOT`

i Note

No users should be connected to the repository when you enable these options.

Connection Profile: "Error converting characters into server's character set"

If you receive such a conversion error when working with a connection profile, click the ellipsis button to the right of the [Connection parameters](#) field on the Connection Profile Definition dialog, add the `CharSet` parameter, and enter the appropriate charset value to match your repository database.

Customer-Defined Indexes

If your DBA identifies indexes that could improve repository performance they can create such indexes in the repository database. In order to avoid conflicts when creating indexes, we recommend that you:

- Use a distinct prefix in customer-defined index names to distinguish them from the standard `PM<xxxx>` indexes.
- Drop any customer-defined indexes before a repository upgrade and recreate them after the upgrade.

4.6.5 Troubleshooting the Repository Installed on SQL Anywhere

This section lists known issues encountered when installing the repository on SAP Adaptive Server Enterprise.

Limiting Parallel Query Execution

For some lengthy queries, SQL Anywhere v16 or higher may decide to use "intra-query parallelism" and take too many CPUs/cores to execute the query (the limit depends on your license and `-gt*` server options), compromising database server response times until the query is completed. To restrict the number of cores that any single query can use, execute one of the following queries:

- `set option PUBLIC.MAX_QUERY_TASKS = '2';` - to restrict intra-query parallelism to doubling the number of cores allowed for any query.
- `set option PUBLIC.MAX_QUERY_TASKS = '1';` - to turn off intra-query parallelism.

Customer-Defined Indexes

If your DBA identifies indexes that could improve repository performance they can create such indexes in the repository database. In order to avoid conflicts when creating indexes, we recommend that you:

- Use a distinct prefix in customer-defined index names to distinguish them from the standard `PM<xxxx>` indexes.
- Drop any customer-defined indexes before a repository upgrade and recreate them after the upgrade.

4.7 Upgrading the Repository

When an administrator upgrades their PowerDesigner client and then connects to an existing repository for the first time, they will be prompted to upgrade the repository. Until an administrator upgrades the repository, other users who have upgraded their PowerDesigner client will not be able to connect to the repository.

Context

⚠ Caution

Always back up your repository database before upgrading it. Upgrading the repository typically creates many log entries, and you should consider increasing the log size to accommodate them.

Procedure

1. If you have deployed PowerDesigner Web (see [Installing the PowerDesigner Web Server \[page 49\]](#)), you must stop the *PowerDesigner Portal* service before upgrading the repository.
2. If you have deployed the repository proxy (see [Installing the Repository Proxy \[page 46\]](#)), we recommend that you stop the proxy service before upgrading the repository.

3. Open your upgraded PowerDesigner desktop client and select ► *Repository* ► *Connect* ► to open the Connect dialog.

Only the PowerDesigner modules that are installed on your machine will be upgraded in the repository database. For example, if you do not have the Object Oriented Model installed on your machine, that part of the repository database will not be upgraded. For this reason, you should try to perform the upgrade from a machine that has all of the modules used by your organization installed.

4. Select a direct repository definition from the list, enter your password, and click *OK*.

i Note

Upgrading the repository via the proxy is not supported.

5. You are prompted to update the repository. Click *Yes* to continue and open the Repository Update Script dialog.

Depending on the size and complexity of your repository, this dialog may take several minutes to appear.

i Note

If you created your repository database with Microsoft SQL Server or SAP ASE before PowerDesigner version 15.0, we recommend that you select *Rebuild clustered indexes* in this dialog to improve performance, particularly for document check out. If you do not select this option at upgrade time, you can select ► *Repository* ► *Administration* ► *Rebuild Clustered Indexes* ► at any time to perform the rebuild.

6. Click *Execute* to begin the repository upgrade.

The upgrade may take some time to complete. In the event of an upgrade failure due to network or permission problems, or insufficient disk space, you should restore the repository database from your backup version and retry an upgrade when problems are solved. If the upgrade fails because of the data in your database, then you should contact technical support for assistance.

7. [when upgrading from a repository before v16.1] If your repository contains branches, you are prompted to update your branches to the new implementation (see [Post-Upgrade Cleanup for a Repository Containing Branches \[page 42\]](#)). Click *OK* to continue.

i Note

Depending on the complexity of your branch structure and the size of your repository, upgrading your branches may take a considerable time. If you click *Cancel* at this point you will leave the repository in a stable state, and can relaunch the upgrade at a later point by reconnecting to the repository.

8. [when upgrading from a repository before v16.1] If your current password does not comply with the default repository password policy, you will be prompted to change your password. Enter your new password (which must comply with all the rules listed in the dialog) and then click *OK*.

i Note

Administrators can control the restrictiveness of the password policy (see *Core Features Guide > Administering PowerDesigner > Controlling Repository Access > Defining a Password Policy*).

9. The Library Synchronization dialog opens to prompt you to synchronize the contents of your local library. Make any appropriate selections and click **OK** to perform the synchronization and complete the repository upgrade.
For information about administering the library, see *Core Features Guide > Administering PowerDesigner > Deploying an Enterprise Glossary and Library*.
10. If you are using the repository proxy, then you must upgrade it (see [Installing the Repository Proxy \[page 46\]](#)).
11. If you have deployed PowerDesigner Web, upgrade it using the installer.
12. If you have deployed the repository proxy, upgrade it using the installer.

4.7.1 Post-Upgrade Cleanup for a Repository Containing Branches

The new implementation of repository branches provides many improvements over branches in v16.0 and earlier, but if your existing repository contained branches, you may want to perform some post-upgrade cleanup of your updated branch structure or create a new repository and migrate all your active documents to it.

Context

From version 16.1, branches in the repository have been completely re-architected to allow:

- The simultaneous display of all branches in the repository browser.
- Branching on a folder-by-folder basis.
- Simplified version numbering.
- Greater flexibility and control over branch contents.
- Simplified integration of changes from one branch to another.

During the repository upgrade, PowerDesigner will transform any existing branches in your repository to the new format, and your new repository will display all of your old branches as siblings directly under the root. As a result, you may experience the following issues:

- Too many branches at root making the repository difficult to view and navigate. To simplify your repository, you should consider:
 - Hiding branches when they are not needed for certain users.
 - Deleting old branches that are no longer needed for any users.

i Note

For information about working with the new repository branches, see *Core Features Guide > Modeling with PowerDesigner > The Repository > Branching Version Trees*.

- The presence of branches at the root prevents you from being able to branch sub-folders (because you cannot create a branch under another branch).

To simplify a repository and enable the creation of branches on a folder-by-folder basis, you should create a new repository and transfer all your appropriate models and other documents to it.

Procedure

1. Review your existing repository and identify the models and other documents that are still current and that you want to transfer to your new repository.
2. Create a new repository and create all the necessary users and groups in preparation for allowing your users to connect to it.
3. Set up an appropriate folder structure to allow you to organize your documents by project, and in preparation for future branching.
4. Connect to your old repository and check out all the documents you want to transfer.

i Note

To ensure that no changes are lost, you may want to perform the remaining steps outside of normal working hours or instruct your users to terminate their connections with the old repository and await permission to begin connecting to the new repository.

5. Connect to your new repository and check the documents to transfer into it.

i Note

When you check documents into the new repository, their revision histories will not be transferred with them. For this reason, you may want to retain, at least for a time, your old repository to give you continuing access to this information.

6. Continue transferring documents until everything that you need for ongoing development is in the new repository and organized in an appropriate folder structure.
7. Communicate the new repository connection information to your users and instruct them from now on to only check documents in and out of the new repository.

4.8 Porting a Repository from One DBMS to Another

You can port a repository from one DBMS to another retaining all your repository folder and branch structure and version histories by creating a new repository and using the *Import Repository* command to copy an existing repository into it. Importing a repository deletes any existing data in the database into which the repository is being imported.

Context

Note

The repository to be imported must have been updated to the latest version before beginning the import. To update a repository, connect to it with an administrator account and follow the instructions (see [Upgrading the Repository \[page 40\]](#)).

Procedure

1. Create a database on the DBMS server to which you want to port the repository.

Caution

If the target repository database does not use the same character encoding as the repository database to be imported, then the import may fail if it encounters long strings that would need to be truncated to fit into the reserved size in the new database.

2. Create a repository definition targeting your new database and then select **Repository > Connect** to connect to it and install the repository tables (see [Installing the Repository to the Server \[page 33\]](#)).
3. Select **Repository > Administration > Import Repository**, and confirm that you want to proceed.
4. Select the data source for the repository you want to import and specify the database user and password to connect with:
5. Click **Connect** to begin the import.
PowerDesigner begins to copy tables to the new repository. The process may take a considerable time. A progress bar gives an indication of the data copied, but the Browser **Repository** tab will not be updated during the import. When the import completes, PowerDesigner disconnects from the new repository.
6. Reconnect to the new repository and review its contents to confirm that the import has completed correctly.
7. If you have deployed PowerDesigner Web, reconfigure it to access the new database (see [Changing the Repository DBMS for PowerDesigner Web \[page 54\]](#)).

4.9 Deleting the Repository

You can delete the repository by using the [Drop Repository Tables](#) command, which removes all repository tables and their content from the database and cuts the connection with the database. You must make a direct repository connection to drop the repository tables; you cannot do so through a proxy connection.

Context

⚠ Caution

You cannot undo dropping the repository database. If you have not backed up your models and other contents, they will be lost.

Procedure

1. Select ► [Repository](#) ► [Administration](#) ► [Drop Repository Tables](#) ►. You will be prompted to confirm that you want to continue. Click [Yes](#) to open the Repository Table Drop Script window.
This window is read-only. You can only review the script, and not edit it. If you want to modify the script you should copy it to a script interpreter, after having selected the appropriate separator for your interpreter from the list.
2. Click [Execute](#) to begin the deletion.

5 Installing the Repository Proxy

The PowerDesigner repository proxy is an optional program that can be installed on the repository server or on another windows machine on the same LAN segment. It runs as a service, translating SQL requests from client workstations into a more efficient proprietary format, and can considerably improve performance, particularly if clients will be connecting over a WAN or complicated LAN environment or working with larger (15MB+) models. It supports client request pooling and sophisticated caching, and also simplifies the client connection to the repository, as users do not need to know details of the database hosting the repository.

Context

i Note

When upgrading the repository to a new major or minor version, or service pack (see [Upgrading the Repository \[page 40\]](#)) or when upgrading PowerDesigner clients, including for patch level releases, you should always upgrade your repository proxy.

Procedure

1. Choose whether to install the repository proxy on the repository server, or on another windows machine on the same LAN.

You should install the proxy on the same server as the repository, if possible, to optimize communication between the components. If the repository database server is not a Windows server or is unable to support the additional workload, then we recommend installing the proxy on another machine on the same LAN segment. We recommend as a minimum, a dual-core machine, with 2-4GB of RAM.

2. Create a system data source on the chosen machine to define the connection between the proxy and the repository database (see [Creating a Data Source to Access the Database \[page 35\]](#)).

i Note

The repository proxy is available in 32-bit and 64-bit versions, and both versions can support connections from 32-bit and 64-bit clients. If you upgrade a 32-bit proxy installation to 64-bit, then you must upgrade its ODBC or other connections to the repository from 32-bit to 64-bit as well (see [Upgrading from 32-Bit to 64-Bit PowerDesigner \[page 25\]](#)).

3. In the contents unzipped from your PowerDesigner download (see *Installation Guide > Downloading PowerDesigner*), double-click `PowerDesigner166SP09x86_Proxy.exe` or `PowerDesigner166SP09x64_Proxy.exe`.
4. Click [Next](#) to go to the license agreement page. Select the location where you are installing the software, read the License Agreement, and then click the [I Agree](#) radio button to accept its terms. If you click [I Do Not Agree](#), you cannot proceed further.

i Note

You can print the License Agreement from the Setup\Licenses directory on the product CD.

5. Click [Next](#) to go to the directory selection page. Accept the default installation directory or choose another by clicking the [Browse](#) button.
6. Click [Next](#) to go to the current settings page to review your choices, and then click [Next](#) to start copying files.

When setup is complete, a page is displayed with two options selected by default, to let you start the proxy service and launch the configuration tool.

7. Click [Finish](#) to exit the wizard and open the Proxy Configuration dialog.

i Note

You must have write access on `HKEY_LOCAL_MACHINE` to change proxy parameters. On a Windows 7 machine, you must launch the Proxy Configuration dialog by right-clicking its icon and selecting [Run as administrator](#). You can open the configuration dialog at any time by navigating to the proxy installation directory and launching `pdproxyconf16.exe`.

8. Click [New](#) to create a new proxy connection instance, and enter the following parameters.

Parameter	Value
Instance name	Enter an appropriate name to identify the instance.
Data source	Select the system data source you created for the repository from the list. Note that the proxy cannot access user data sources.
User name	Enter the user name used to connect to the repository database.
Password	Enter the password used to connect to the repository database.
Bytes per char	For non-Oracle unicode or multi-byte character set databases, specify the bytes per character used by the database: ○ 1-byte - For SBCS (Single-Byte Character Set) ○ 2-byte - [default] For DBCS (Double-Byte Character Set) ○ 3-byte - For Unicode or MBCS (Multi-Byte Character Set)
Port	Enter the connection port of the server on which the proxy is installed and which allows the client to communicate with the server using TCP/IP protocol. The default port number is 32999.

Parameter	Value
Log file	Select the level of logging that you want to perform and enter or browse to the path to the log file in the Name field. The following levels are available in ascending order of verbosity: ◦ None ◦ Fatal errors ◦ Errors ◦ Warnings ◦ Debug - Print all SQL statements without character string constants. ◦ Full debug - Print all SQL statements including character string constants.
Cache	Enter or browse to the path to the cache, and specify its maximum size. The default is 300MB, which is generally sufficient for optimum proxy performance.

i Note

A single proxy server can provide simultaneous connections to multiple PowerDesigner repositories of the same version. Click the [New](#) button to create an additional instance.

9. Click [OK](#) to complete your definition of proxy instances.

Users can now connect to the repository via the proxy by specifying the server name, port number and instance name in a proxy repository definition (see *Core Features Guide > Modeling with PowerDesigner > Getting Started with PowerDesigner > Accessing the Repository*).

6 Installing the PowerDesigner Web Server

PowerDesigner Web allows you to view any PowerDesigner diagram and to create and edit certain diagrams in your Web browser. The PowerDesigner installation disc includes components that are required to browse your repository from the web, along with a standard Apache Tomcat Web server. Before beginning the installation, you should already have created your repository database and have the DBMS user name and password to hand.

Context

The installer will:

- Install or upgrade Node.js to a recent 6.x Active LTS version.

i Note

You should ensure that Node.js is not used by other applications on the server, as the installer may attempt to modify the existing installation or fail in its own installation.

- [optional] Install a Tomcat 8 server (and SAP JVM 8.x).
- Install or upgrade the PowerDesigner Web server, which includes a Java component and a Node.js component.
- Deactivate the deprecated *PowerDesigner Portal* server, if it is present, and move the `cmr.war` file to `PowerDesigner Portal 16\tmp`.

i Note

To reactivate the deprecated *PowerDesigner Portal* server after installation, copy the `cmr.war` file from `PowerDesigner Portal 16\tmp` to `PowerDesigner Portal 16\Tomcat\webapps`.

- Install the repository to the database if it is not already present.

i Note

The architecture of the PowerDesigner Web server changed with v16.6 SP02. If you have enabled SSL/SSO before this version, you will need to re-enable them for the new architecture.

If the repository database server is not a Windows server or is unable to support the additional workload, then we recommend installing the PowerDesigner Web server on another machine on the same LAN segment. We recommend as a minimum, a dual-core machine, with 2-4GB of RAM.

When configuring your Java virtual machine memory, we recommend the following initial values:

Installed Memory	32-Bit Windows	64-Bit Windows		
	2GB	2GB	4GB	8GB
Initial Java heap size (Ms)	500 MB	500 MB	1000 MB	1000 MB
Maximum Java heap size (Mx)	1000 MB	1300 MB	3000 MB	6000 MB
Maximum Permanent Generation size (MaxPermSize)	250 MB	250 MB	250 MB	250 MB

As the number of concurrent users increases or your models become larger, you may need to add more cores and memory and increase these values to maintain performance.

Procedure

1. In the contents unzipped from your PowerDesigner download (see *Installation Guide > Downloading PowerDesigner*), double-click `PowerDesigner166SP09_Portal.exe`.
2. Choose the language to install PowerDesigner Web in and then click [OK](#) to go to the welcome page. The chosen language will be set as the default interface language for users connecting to PowerDesigner Web, but they can choose from any of the supported languages from the login or home page.
3. Click [Next](#) to go to the license agreement page, and select the location where you are installing the software. Read the License Agreement and click the [I Agree](#) radio button to accept the terms of the agreement. If you click [I Do Not Agree](#), you cannot proceed with the Setup program and you will have to cancel the install.

Note

You can print the License Agreement from the `Setup\Licenses` directory of the installation media.

4. Click [Next](#) to go to the directory selection page. Accept the default installation directory or choose another by clicking the [Browse](#) button.
5. Click [Next](#) to go to the application server page. By default, the installer will install a new 32-bit or 64-bit Tomcat 8 server (and SAP JVM 8.x). If you want to use one of the other supported servers, select it and specify its location. In this case, Java 7 or higher patched with all available updates and security enhancements is required. Default server ports may be provided that you must verify. At least one port is required in order to create a connection profile and connect to the repository database.

Note

If you choose an existing Tomcat server, to optimize performance, you should ensure that the following compression options are set in your `<Connector>` element in `Tomcat/conf/server.xml`:

```
compression="on"
compressionMinSize="2048"
noCompressionUserAgents="gozilla, traviata"
compressableMimeType="text/html,text/xml,application/xml,application/atom+xml,application/x-font-ttf,application/javascript,application/json,text/css"
```

i Note

If you choose the WebLogic application server, you must deploy the archive directory (by default, the `weblogic_openfolder` directory inside your installation directory) from your WebLogic Administrative Console once the setup has completed.

i Note

Support for deploying to application servers other than Tomcat is deprecated and will be removed in a future version.

SAP PowerDesigner 16.6 SP09

SAP PowerDesigner

Portal 16.6

Specify an application server to deploy the Portal.
By default, a new Tomcat server will be installed. Alternatively, you can specify your own application server location and port number.

☒ Install new Tomcat 8.0

☐ Tomcat version 6, 7, 8

☐ JBoss EAP 6.1+, WildFly 8.x

☐ WebLogic 11g or 12c (manual deployment)

Web server configuration

Http port: Https port:

Server Location

<choose directory>



- Click [Next](#) to go to the database parameters page, which lets you enter the appropriate parameters for your database.

You must specify the database user and password that PowerDesigner Web will use to connect to the database. You can:

- Specify the user and password here, or
- [MS SQL Server only] Select the [Use Windows Authentication](#) checkbox to connect via a Windows user. The specified user must be able to connect to the database and have the right to launch the portal service. If you select this option, at the end of the setup, the [SAP PowerDesigner Portal](#) service properties sheet will open. Click the [Log On](#) tab, select the [This account](#) option, enter the account name and password, and click [OK](#) to complete the installation.

i Note

If the database is empty (the repository has not already been installed to it), you must choose a temporary initial password for the repository administrator account, **ADMIN**, with which you will connect for the first time.

7. Click [Next](#) to go to the license server page and specify the name of the computer that is used as a license server.

If you do not use a license server, you can select the [I don't have a License Server](#) option. You will be able to proceed with the installation, but you will not be able to create or edit diagrams and objects through PowerDesigner Web.

8. Click [Next](#) to go to the information page which summarizes your choices.
9. Click [Next](#) to accept the current settings and start copying files.

A progress box is displayed and setup copies files to the destination directory.

10. When the setup is complete, click [Finish](#) to exit the wizard.

The server connects to the database and detects whether the repository is already created in the database and if this is not the case, it will create it. In this situation, you must connect to the repository for the first time with the following credentials:

- [User Name](#): **ADMIN**

i Note

Account names and passwords managed by PowerDesigner are case-sensitive and must only contain standard ASCII characters.

- [Password](#): Enter the temporary administrator password you specified during setup.

You will be prompted to change the password and then logged in as administrator of PowerDesigner.

6.1 Accessing the Repository Web Clients

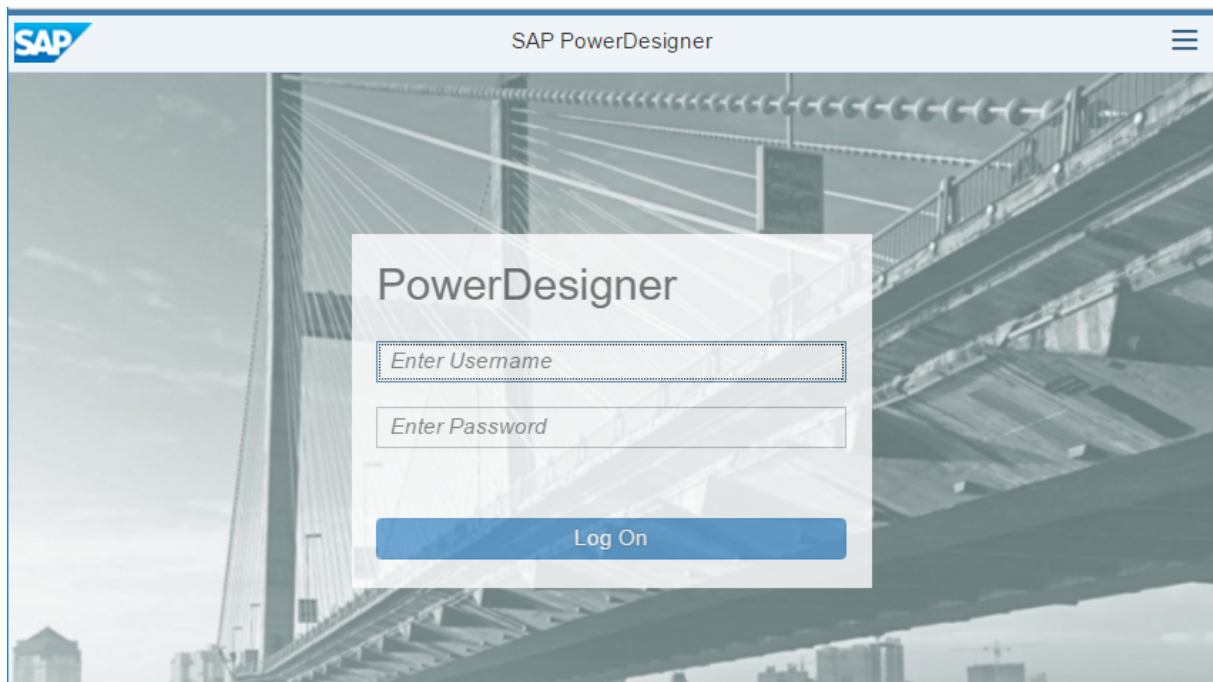
The PowerDesigner Web server is installed and controlled by the [PowerDesigner Portal](#) service. The deprecated [PowerDesigner Portal](#) server is no longer enabled by default.

To start or stop the service, navigate to ► [Start](#) ► [Programs](#) ► [SAP](#) ► [PowerDesigner Portal](#) ►, and select:

- Start [PowerDesigner Portal](#), or
- Stop [PowerDesigner Portal](#).

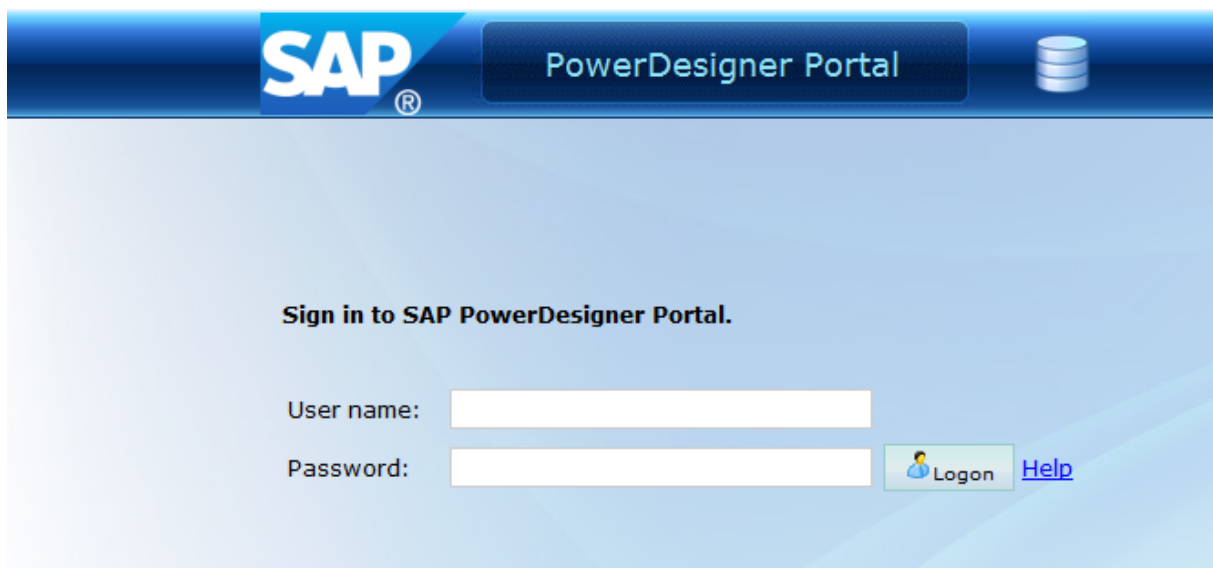
When the server is running, to access PowerDesigner Web, navigate to: `http://<server-name>:<port-number>/powerdesigner-web`

The default port number is 3030.



The deprecated *PowerDesigner Portal* Web client is deactivated by default. If it has been reactivated, navigate to: `http://<server-name>:<port-number>/cmr`

The default port number is 3040.



6.2 Changing the Repository DBMS for PowerDesigner Web

If you decide to change the DBMS on which the repository database is stored, then you must provide an appropriate JDBC driver to allow PowerDesigner Web to connect to the new database.

Context

For information about changing your repository database, see [Porting a Repository from One DBMS to Another \[page 43\]](#)

Procedure

1. Copy an appropriate JDBC driver to the `PowerDesigner Portal 16\Tomcat\webapps\cmr\WEB-INF\lib` directory.
2. From the PowerDesigner Web homepage, click ► [Administration Tasks](#) ► [Configure](#) ► [Database Server](#) ► and update the general parameters to point to the new database.
3. Restart the [PowerDesigner Portal](#) service.

6.3 PowerDesigner Web Dependencies

PowerDesigner Web depends on the following components and will install them if they are not present in your environment.

- A recent Node.js 6.x Active LTS version.
- Java 8 (The installer will install the SAP JVM 8.x and a Tomcat 8 server.)

i Note

After installation is complete, we recommend that you check for and install the latest security updates.

Important Disclaimers and Legal Information

Hyperlinks

Some links are classified by an icon and/or a mouseover text. These links provide additional information.

About the icons:

- Links with the icon  : You are entering a Web site that is not hosted by SAP. By using such links, you agree (unless expressly stated otherwise in your agreements with SAP) to this:
 - The content of the linked-to site is not SAP documentation. You may not infer any product claims against SAP based on this information.
 - SAP does not agree or disagree with the content on the linked-to site, nor does SAP warrant the availability and correctness. SAP shall not be liable for any damages caused by the use of such content unless damages have been caused by SAP's gross negligence or willful misconduct.
- Links with the icon  : You are leaving the documentation for that particular SAP product or service and are entering a SAP-hosted Web site. By using such links, you agree that (unless expressly stated otherwise in your agreements with SAP) you may not infer any product claims against SAP based on this information.

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