

SAP® PowerDesigner®  
Document Version: 16.6 – 2016-02-22

# Installation Guide

# Content

<b>1</b>	<b>Planning Your PowerDesigner Installation. . . . .</b>	<b>4</b>
1.1	Obtaining a License. . . . .	7
1.2	Installing a License Server. . . . .	8
	Serving Named User Licenses. . . . .	9
	Adding Additional Licenses with Imtools. . . . .	10
	Troubleshooting with Imutil. . . . .	11
	SySAM for IPv6 Environments. . . . .	12
	SySAM for 64-Bit and Non-Windows Environments. . . . .	12
1.3	Windows 64-Bit Support. . . . .	12
<b>2</b>	<b>Installing PowerDesigner. . . . .</b>	<b>14</b>
2.1	Installing PowerDesigner in Administrative Mode. . . . .	18
	Installing Clients to Access the Administrative Installation. . . . .	19
	Upgrading an Administrative Install. . . . .	19
2.2	Installing PowerDesigner in Silent Mode. . . . .	20
	Uninstalling PowerDesigner in Silent mode. . . . .	21
2.3	Uninstalling PowerDesigner and Installation Maintenance. . . . .	21
2.4	PowerDesigner Dependencies. . . . .	22
2.5	Upgrading PowerDesigner. . . . .	22
2.6	Upgrading from 32-Bit to 64-Bit PowerDesigner. . . . .	24
<b>3</b>	<b>Installing the Repository. . . . .</b>	<b>26</b>
3.1	Installing a Local Test Repository. . . . .	27
3.2	Installing the EA Example Repository. . . . .	28
3.3	Installing and Authenticating SQL Anywhere. . . . .	29
3.4	Creating a Database to Contain the Repository. . . . .	31
3.5	Running the Database as a Service. . . . .	32
3.6	Installing the Repository to the Server. . . . .	33
	Creating a Data Source to Access the Database. . . . .	35
	Troubleshooting the Repository Installed on ASE. . . . .	36
	Troubleshooting the Repository Installed on DB2. . . . .	38
	Troubleshooting the Repository Installed on SQL Server. . . . .	38
3.7	Upgrading the Repository. . . . .	39
	Post-Upgrade Cleanup for a Repository Containing Branches. . . . .	40
3.8	Porting a Repository from One DBMS to Another. . . . .	42
3.9	Deleting the Repository. . . . .	43
<b>4</b>	<b>Installing the Repository Proxy. . . . .</b>	<b>44</b>

---

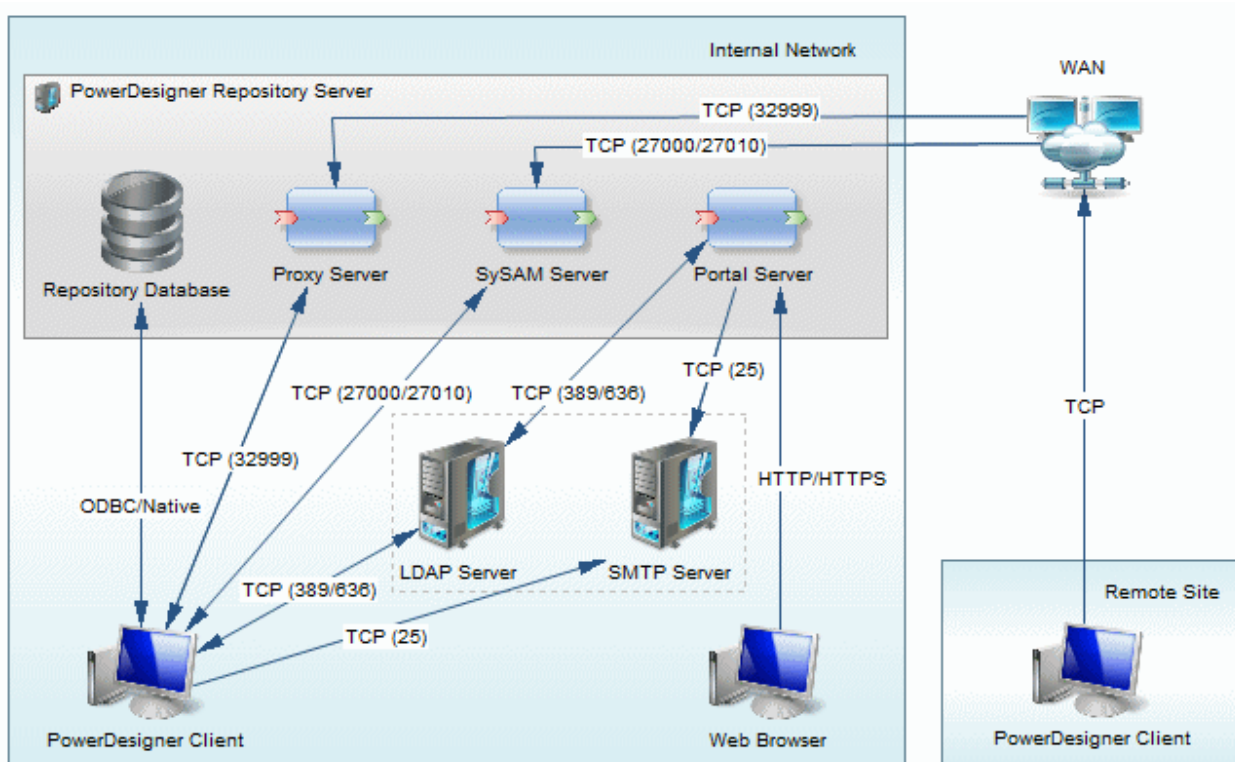
<b>5</b>	<b>Installing the PowerDesigner Web Server. . . . .</b>	<b>47</b>
5.1	Accessing the Repository Web Clients. . . . .	51
5.2	Installing the PowerDesigner Web Server on UNIX. . . . .	52
5.3	Changing the Repository DBMS for PowerDesigner Web. . . . .	54

# 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

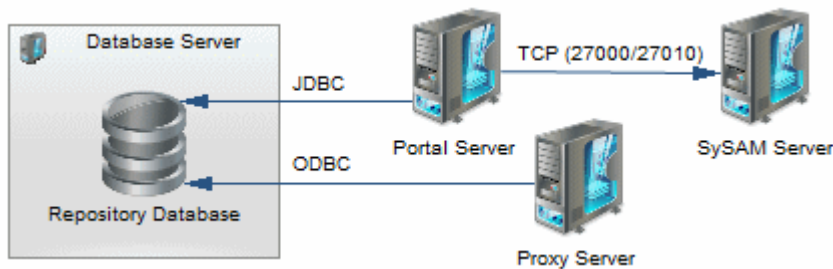
A PowerDesigner environment can contain the following servers, components, and client machines:



- The PowerDesigner repository server components are commonly installed on a single server:
  - Repository Database - Required if using the repository.
  - Proxy Server (Windows only) - Required if using the repository proxy.
  - SySAM Server - Required if using served or floating licenses.
  - Portal Server - Required if using PowerDesigner Web.

These components can, alternately, be installed on separate servers, to make use of an existing database server, or to spread the processor load to maximize performance:





- 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 \[page 14\]](#).

## Procedure

1. Obtain your license key file (see [Obtaining a License \[page 7\]](#)).  
If you do not have a license key, you will only be able to install PowerDesigner for a 15-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.
3. Install PowerDesigner on the administrator's workstation (see [Installing PowerDesigner \[page 14\]](#)).  
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 \[page 27\]](#)).
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® v11.x, 12.x, v16 (bundled with PowerDesigner, see [Installing and Authenticating SQL Anywhere \[page 29\]](#)), 16.x
  - SAP® Adaptive Server® Enterprise v15.x, 16.x
  - SAP HANA® v1.0
  - Oracle 10g, 11g, 12c
  - IBM DB2 LUW v9.x, 10.x, DB2 os/390 9.x, 10.x
  - Microsoft SQL Server 2008, 2012, 2014 - 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 \[page 44\]](#)).

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 \[page 47\]](#)).


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 \[page 14\]](#)).

### 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 a License

You can evaluate PowerDesigner's features without restriction for 15 days with a free trial license. To deploy it for use, you must purchase, generate, download, and deploy SySAM product licenses.

Go to SAP Service Marketplace (SMP) at <https://support.sap.com/licensekey>  to generate your PowerDesigner license keys. 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.

To obtain a license, you must know the host ID and name of the computer to which it will be deployed. 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 \[page 9\]](#).
- 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. Ethernet addresses are 12 character hex values consisting of digits 0 through 9 and characters A through F, which can be entered 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

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 `lsmutil lsmhostid -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`

## 1.2 Installing a License Server

If you intend to use served licenses, you can either install the SySAM license server provided as part of the PowerDesigner installation or locate an existing SySAM license server on your network, to which your PowerDesigner licenses can be assigned.

### Context

#### Note

For information about assigning licenses to an existing SySAM server, see [Adding Additional Licenses with Imtools \[page 10\]](#)

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

You must already have obtained a license file before you can install the license server (see [Obtaining a License \[page 7\]](#)).


#### Note

License servers installed with PowerDesigner v11 are not compatible with v12.0 and higher. If you no longer use PowerDesigner v11, we recommend that you uninstall the old license server.

If you borrow a mobile license and your workstation has installed other products with Flexlm served licenses, you may encounter problems returning your license to the server.

### Procedure

1. Select the machine on which you want to install the SySAM license server (this should not be a workstation on which you will install any SAP product). Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Sybase Asset Management \(SYSAM\)](#). Alternatively, if you have downloaded an install, download SySAM from the SAP Support Portal.

SySAM can be obtained by navigating to <https://support.sap.com/software/installations/a-z-index.html>, clicking  and following the installation instructions.

2. 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.
3. Click [Next](#) to display the license file definition page. Click the [Load](#) button and browse to the folder where your license file is located. The content of the license file is displayed in the License key box.
4. 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.
5. 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.

6. Click *Finish* to exit the wizard.

#### **i** Note

If a firewall is activated on the computer where the license server is installed, then the ports 27000 and 27010 must be opened in the firewall. For a Windows Firewall, you may need to add the port 27000 and the SySAM executable (for example `C:\Sybase\SYSAM-2_1\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-2_0\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:

Table 1:

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.

Parameter	Description
<PackageCode>	Specifies the PowerDesigner package to which the group is assigned. The following codes are permitted: <ul style="list-style-type: none"> <li>PD_EAR - PowerDesigner EnterpriseArchitect with Repository</li> <li>PD_IAR - PowerDesigner InformationArchitect with Repository</li> <li>PD_DMR - PowerDesigner DataModeler with Repository</li> <li>PD_DM - PowerDesigner DataModeler</li> <li>PD_WBPM - PowerDesigner Web BPM</li> </ul>

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 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.

### Note

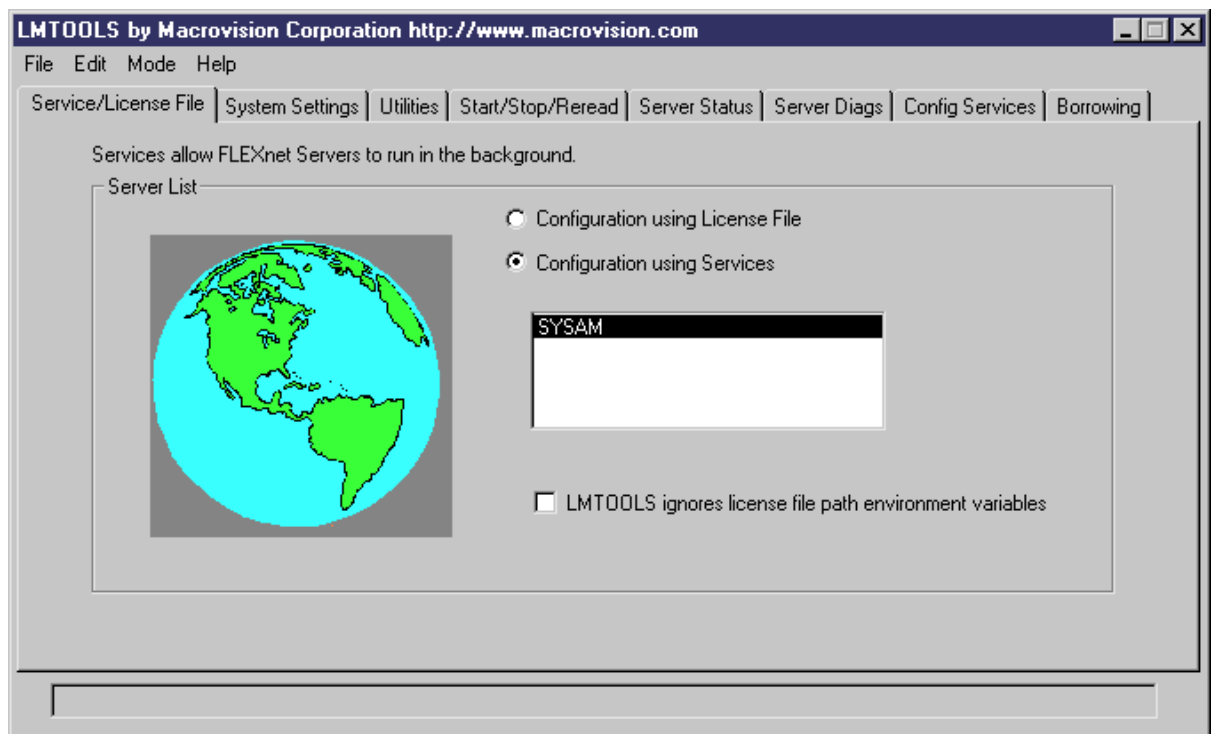
Users to whom a Named User license have been assigned should select the Served License option when installing PowerDesigner or using the License Management Wizard. SySAM detects the user's login name and serves the license accordingly.

## 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 LMTTOOLS 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 LMTTOOLS dialog.

## Results

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

### 1.2.3 Troubleshooting with Imutil

Imutil.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 Imutil, 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 Support Portal.

### 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 obtain a 64-bit version of SySAM for Windows or a SySAM server for a non-Windows environment, download it from the SAP Support Portal (<http://service.sap.com/swdc> .

### 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:

Table 2:

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 <a href="http://support.microsoft.com/kb/942976">http://support.microsoft.com/kb/942976</a> .
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 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

#### Note

You should obtain a license key (see [Obtaining a License \[page 7\]](#)) 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 or 2012 (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 frameworks and libraries and frameworks required by PowerDesigner, see [PowerDesigner Dependencies \[page 22\]](#).

#### 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. Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Install PowerDesigner 16.6 \(32-bit\)](#) or [Install PowerDesigner 16.6 \(64-bit\)](#). Alternatively, if you have downloaded an install, double-click `PowerDesigner166x86.exe` or `PowerDesigner166x64.exe`.

#### 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 15 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 a License \[page 7\]](#)).
- 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.

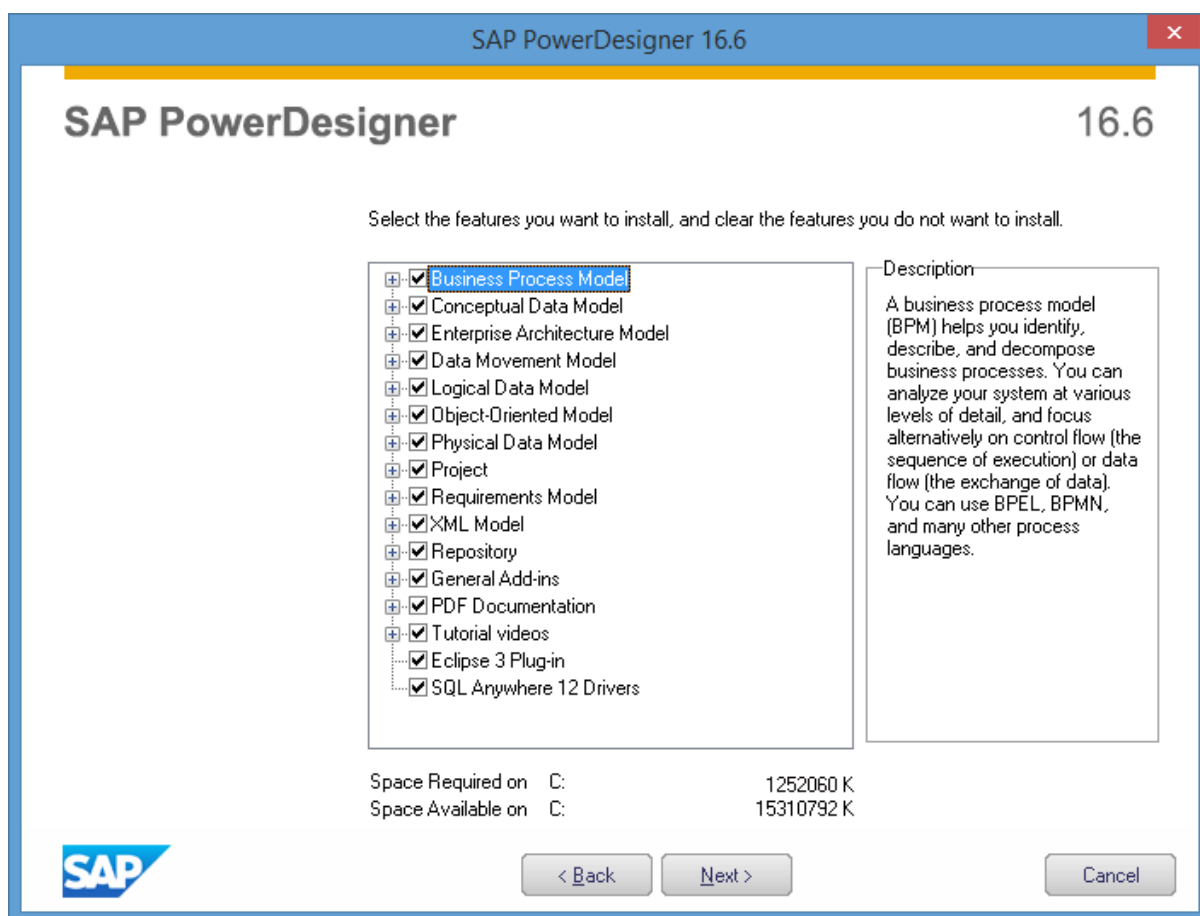
#### Note

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 \[page 29\]](#)).

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

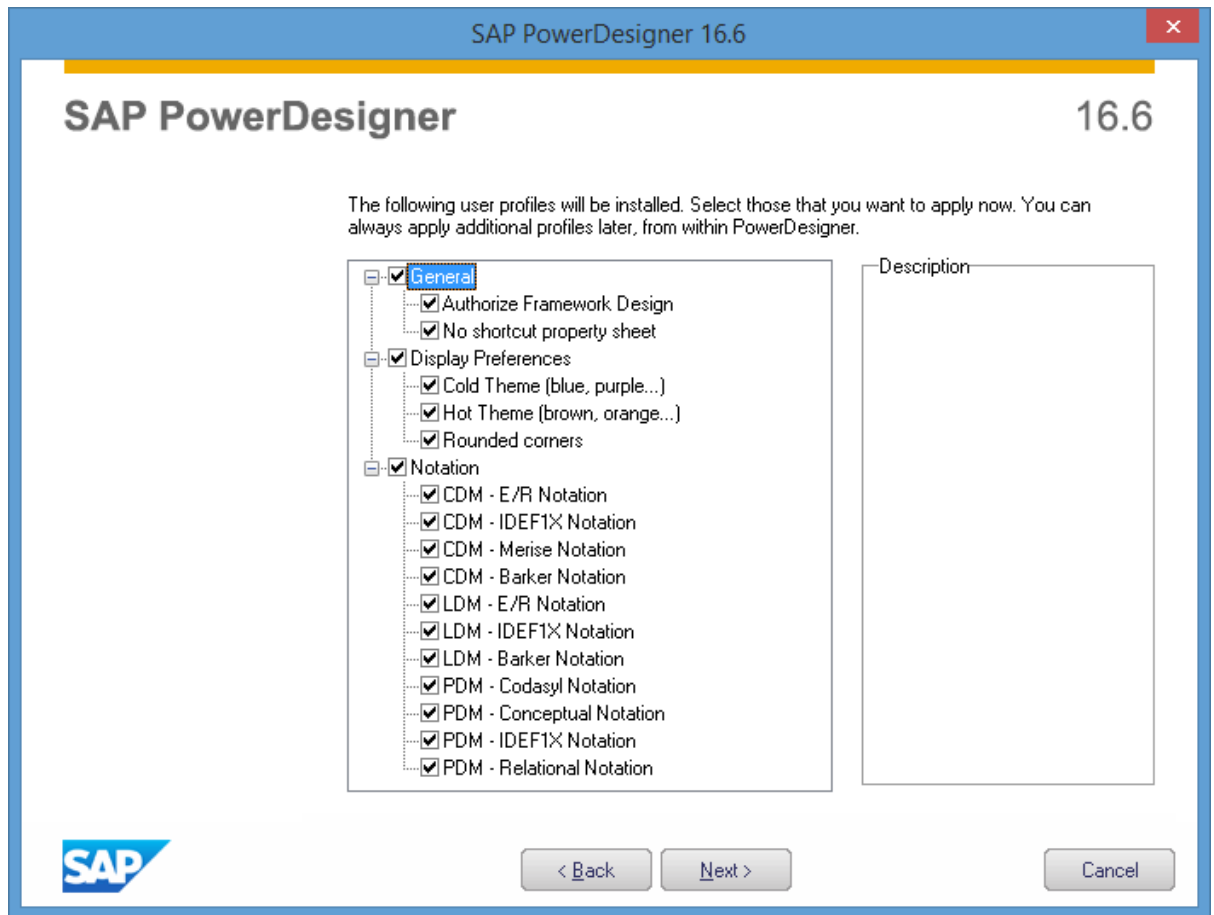
8. If you selected the Eclipse plug-in in the list of components, the Eclipse directory selection page is displayed. Click the [Browse](#) button to specify a directory containing a valid Eclipse installation.

### **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.

- 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.




#### Note

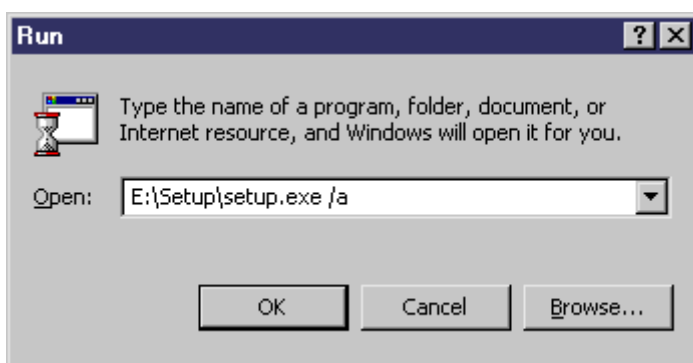
The `Readme.html` file, which contains important release information, is available in the root of your installation directory.

## 2.1 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

- Select  [Start](#)  [Run](#) , type the PowerDesigner `setup.exe` path followed by `/a` in the Run dialog box and click [OK](#).



- Click [Next](#) to display the network location page.
- 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.

- Click [Finish](#) to exit the InstallShield Wizard.



## 2.1.1 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

#### Note

When installing many client machines with identical options, you may want to consider silent installation (see [Installing PowerDesigner in Silent Mode \[page 20\]](#)).

### 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.

## 2.1.2 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`

## 2.2 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

#### 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 \[page 18\]](#)).

### 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"]
```

## 2.2.1 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`

#### 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](#)  [Run](#)  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\uninstall.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"
```

## 2.3 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.

### Note

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

## 2.4 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.

### Note


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

- Windows Installer 3.1 and Windows Imaging Component - for your Windows version.
- o2003pia.msi, o2007pia.msi, o2010pia.msi - Microsoft Office Primary Interop Assemblies for MS Office 2003, 2007, and 2010 to support PowerDesigner MS Office plugins.
- extensibilityMSM.msi - shared Addin Extensibility update for .Net 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.
- vc\_redist\_x86.exe or vc\_redist\_x64.exe - Microsoft Visual C++ 2008 and 2010 Runtime Libraries
- vstor\_redist.exe - Visual Studio Tools for Office

## 2.5 Upgrading PowerDesigner

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

### Note

If you are upgrading from a previous version, you must regenerate your PowerDesigner license keys at SAP Service Marketplace (SMP) at <https://support.sap.com/licensekey> .

- 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.

### 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.

### 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 \[page 39\]](#).
- Upgrading to 64-bit PowerDesigner - See [Upgrading from 32-Bit to 64-Bit PowerDesigner \[page 24\]](#).
- 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 \[page 40\]](#)).
- 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*).

### 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.



## 2.6 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.

#### 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](#)  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](#) .
  - 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 \[page 14\]](#)). 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.

## 3 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 \[page 27\]](#)).

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  $10\text{MB} \times 1.1^{40}$  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.

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® v11.x, 12.x, v16 (bundled with PowerDesigner, see [Installing and Authenticating SQL Anywhere \[page 29\]](#)), 16.x
  - SAP® Adaptive Server® Enterprise v15.x, 16.x
  - SAP HANA® v1.0

- Oracle 10g, 11g, 12c
- IBM DB2 LUW v9.x, 10.x, DB2 os/390 9.x, 10.x
- Microsoft SQL Server 2008, 2012, 2014 - 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 \[page 44\]](#)).  
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 \[page 47\]](#)).  
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*).

## **3.1 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 \[page 29\]](#)), and create a database (see [Creating a Database to Contain the Repository \[page 31\]](#)).
2. Install PowerDesigner (see [Installing PowerDesigner \[page 14\]](#)).
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 \[page 47\]](#)).
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*

## 3.2 Installing the EA Example Repository

An example SQL Anywhere repository database, `EASample.db`, is provided in the `<install_dir>/Examples/EASample` folder, which is intended to show examples of the charts that can be viewed in the PowerDesigner Web client.

### Context

For information about:

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

### Procedure

1. Locate or install an instance of SQL Anywhere v12 or higher and load the `EASample.db` database to it (see [Installing and Authenticating SQL Anywhere \[page 29\]](#)).
2. Create a data source to access the database (see [Creating a Data Source to Access the Database \[page 35\]](#)) using the following credentials:
  - User name: DBA
  - Password: sql
3. Install the PowerDesigner Web server, specifying a connection to the database (see [Installing the PowerDesigner Web Server \[page 47\]](#)).
4. Open your Web browser, navigate to `http://<server-name>:<port-number>/powerdesigner-web` (3030 is the default port number), and enter the following credentials:
  - User name: ADMIN
  - Password: EASample1
5. To access the charts:
  - Click the [Dashboard](#) tile, or
  - Click the [Repository](#) tile, navigate to `EA Content > EASample > EASample`, and click the [Charts](#) facet.



## 3.3 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.

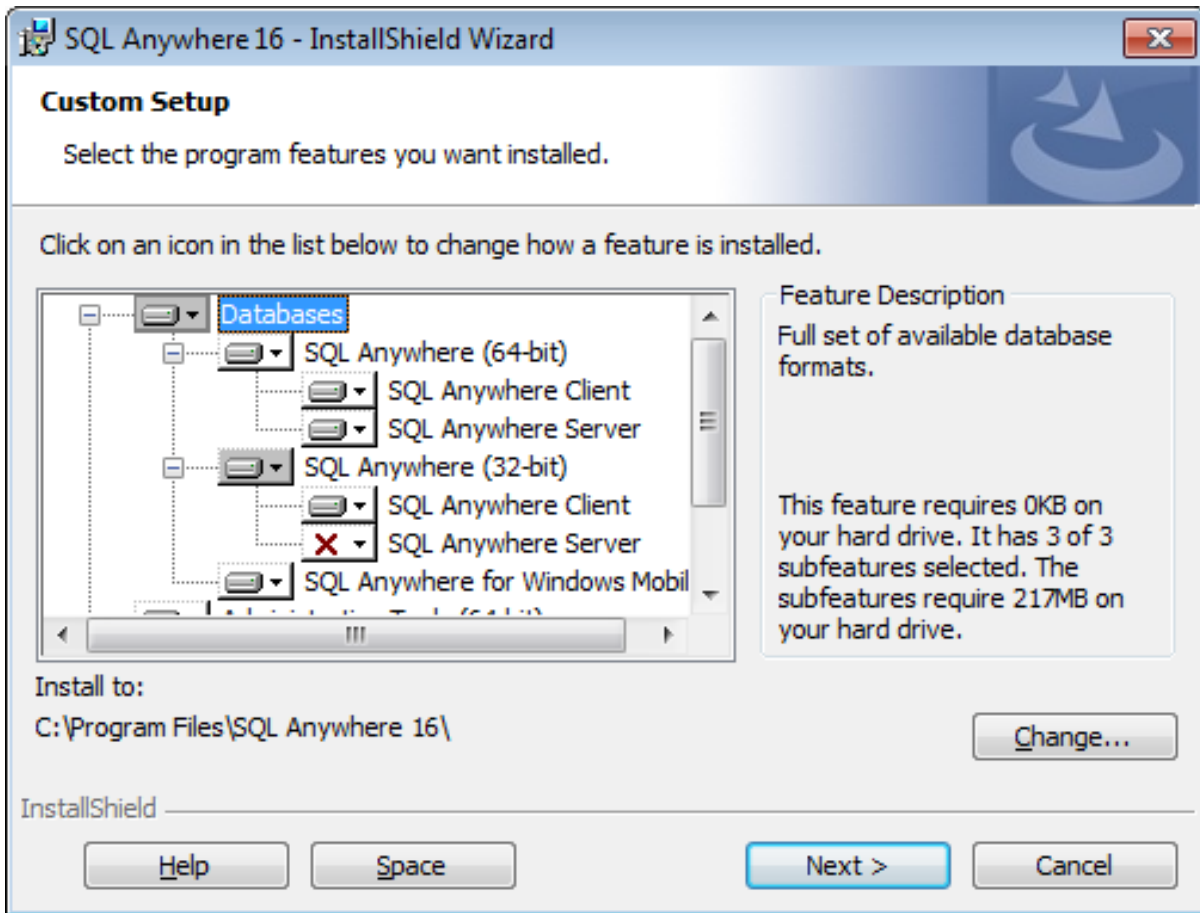
### Procedure

1. Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Install SQL Anywhere 16](#). Alternatively, if you have downloaded an install, double-click `SQLAnywhere1600.exe`.

#### 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.

## 3.4 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 16 > Admin Tools > Sybase Central** to open Sybase Central.
2. Select **Tools > SQL Anywhere 16 > 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.

#### 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 \[page 27\]](#)).

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 \[page 27\]](#)).

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

## 3.5 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 16 > 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 (`dbsrv12.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:

Table 3:

Parameter	Description
<b>-n &lt;servername dbfilepath&gt;</b>	[required] Specifies the server name and path to the .db file. For example: <pre>-n repository c:\db\repository.db</pre>
<b>-x tcpip(port=&lt;portno&gt;)</b>	[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 (see [Creating a Data Source to Access the Database \[page 35\]](#)).

## 3.6 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

#### 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 \[page 14\]](#)). 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



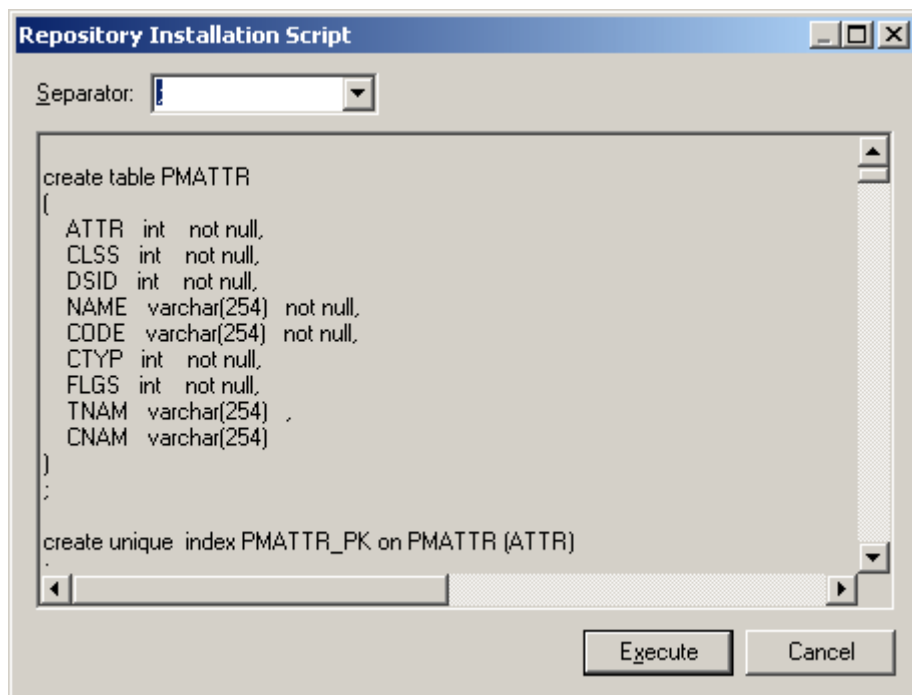
1. On the repository administrator's workstation, start PowerDesigner and select  [Repository](#) > [Repository Definitions](#)  to open the List of Repository Definitions.
2. Click the [Add a Row](#) tool to create a new definition, and click the [Properties](#) tool to open its property sheet.
3. Enter the following properties:

Table 4:

Property	Value
Repository name	Enter an appropriate name to identify the repository.
Data source name	<p>Click the <a href="#">Select a Data Source</a> 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.</p> <p>To create an ODBC machine data source for a SQL Anywhere database, see <a href="#">Creating a Data Source to Access the Database [page 35]</a>. For detailed information about creating, configuring, and using connection profiles for other DBMSs, see <i>Core Features Guide &gt; Modeling with PowerDesigner &gt; Getting Started with PowerDesigner &gt; Connecting to a Database</i>.</p>
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	<p>For non-Oracle unicode or multi-byte character set databases, specify the bytes per character used by the database:</p> <ul style="list-style-type: none"><li>○ 1-byte - For SBCS (Single-Byte Character Set)</li><li>○ 2-byte - [default] For DBCS (Double-Byte Character Set)</li><li>○ 3-byte - For Unicode or MBCS (Multi-Byte Character Set)</li></ul>

4. 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.
5. Select [Repository > Connect](#) to open the Connect dialog. Select the name of the repository definition you just created and click [OK](#) to connect.  
A message box is displayed inviting you to install the repository. This will involve running a SQL script to create the necessary tables.
6. Click [Yes](#) to continue. The read-only Repository Installation Script window opens.



#### **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.

7. 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.

8. When the repository has been installed, the Change Password dialog will open, prompting you to change 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 Browser, the root of the repository tree displays the repository name and the connected user and is ready for use.

## 3.6.1 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*.

#### 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*.

#### 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 (see [Windows 64-Bit Support \[page 12\]](#)).

2. Select *SQL Anywhere 16* 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 (see [Running the Database as a Service \[page 32\]](#)), enter:

Table 5:

Parameter	Value
Authentication	Select <b>Database</b> .

Parameter	Value
User ID	Enter the administrator name you chose when creating the database (see <a href="#">Creating a Database to Contain the Repository [page 31]</a> ).
Password	Enter the administrator password you chose when creating the database.
Action	Select <b>Connect to a running database on another computer.</b>
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 (see [Installing a Local Test Repository \[page 27\]](#)), enter:

Table 6:

Parameter	Value
Authentication	Select <b>Database.</b>
User ID	Enter the administrator name you chose when creating the database (see <a href="#">Creating a Database to Contain the Repository [page 31]</a> ).
Password	Enter the administrator password you chose when creating the database.
Action	Select <b>Start and connect to a database on this computer.</b>
Database file	Browse to and select your database file.
Database name	Enter an appropriate name such as <b>PD Repository.</b>
Server name	Enter an appropriate name such as <b>PD Repository.</b>
Start line	Enter "C:\Program Files\SQL Anywhere 16\Bin32\dbsrv16.exe" or "C:\Program Files\SQL Anywhere 16\Bin64\dbsrv16.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.

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

## 3.6.2 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.

---

## 3.6.3 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.

## 3.6.4 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`

#### 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.

## 3.7 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 \[page 47\]](#)), you must stop the *PowerDesigner Portal* service before upgrading the repository.
2. If you have deployed the repository proxy (see [Installing the Repository Proxy \[page 44\]](#)), 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*.

#### 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.

#### 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 \[page 40\]](#)). Click [OK](#) to continue.

#### 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](#).

#### 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 \[page 44\]](#)).
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.

## 3.7.1 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.

## 3.8 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 \[page 39\]](#)).

### 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 \[page 54\]](#)).

## 3.9 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.

## 4 Installing the Repository Proxy

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

### Context

#### Note

When upgrading the repository to a new major or minor version, or service pack (see [Upgrading the Repository \[page 39\]](#)) 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 \[page 35\]](#)).

#### 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 \[page 24\]](#)).

3. Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Install PowerDesigner Repository Proxy 16.6 \(32-bit\)](#) or [Install PowerDesigner Repository Proxy 16.6 \(64-bit\)](#). Alternatively, if you have downloaded an install, double-click `PowerDesigner166x86_Proxy.exe` or `PowerDesigner166x64_Proxy.exe`.



- 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.

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

- 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`.

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

Table 7:

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: <ul style="list-style-type: none"><li>1-byte - For SBCS (Single-Byte Character Set)</li><li>2-byte - [default] For DBCS (Double-Byte Character Set)</li><li>3-byte - For Unicode or MBCS (Multi-Byte Character Set)</li></ul>
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.
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.

Parameter	Value
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*).

## 5 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 the PowerDesigner Web server.
- Install or upgrade the legacy *PowerDesigner Portal* server.
- Install a node.js v4.2.2 server, which makes your process models available for browsing and importing directly into the SAP NetWeaver Developer Studio Process Composer v7.3 EHP1 SP15 or higher.

#### Note

You should ensure that a node.js server is not already in use on the server, as the installer may attempt to modify the existing installation or fail in its own installation.

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

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:

Table 8:

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. Navigate to and double-click `Autorun.exe` in your PowerDesigner DVD to launch the installer, and click [Install PowerDesigner Portal 16.6](#). Alternatively, if you have downloaded an install, double-click `PowerDesigner166_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 7 server. If you want to use one of the other supported servers, select it and specify its location. 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 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.

### 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"
```

SAP PowerDesigner Portal 16.6

## 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 7.0

☐ 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> Browse...

< Back
Next >
Cancel

6. Click [Next](#) to go to the database parameters page, which lets you enter the appropriate parameters for your database. If you select the [Use Windows Authentication](#) checkbox, you will need to select the [This account](#) option on the [Log On](#) tab of the web server service property sheet before starting the service.

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**
- [Password](#): **ChangeMe** - you will immediately be prompted to change the password.

## 5.1 Accessing the Repository Web Clients

The new PowerDesigner Web server is installed in tandem with the previously-available *PowerDesigner Portal* server and both components are controlled by the same service. You can start and stop the servers and the associated service from your Start menu.

To start or stop the servers, navigate to **Start > Programs > SAP > PowerDesigner Portal** , and select:

- Start *PowerDesigner Portal*, or
- Stop *PowerDesigner Portal*.

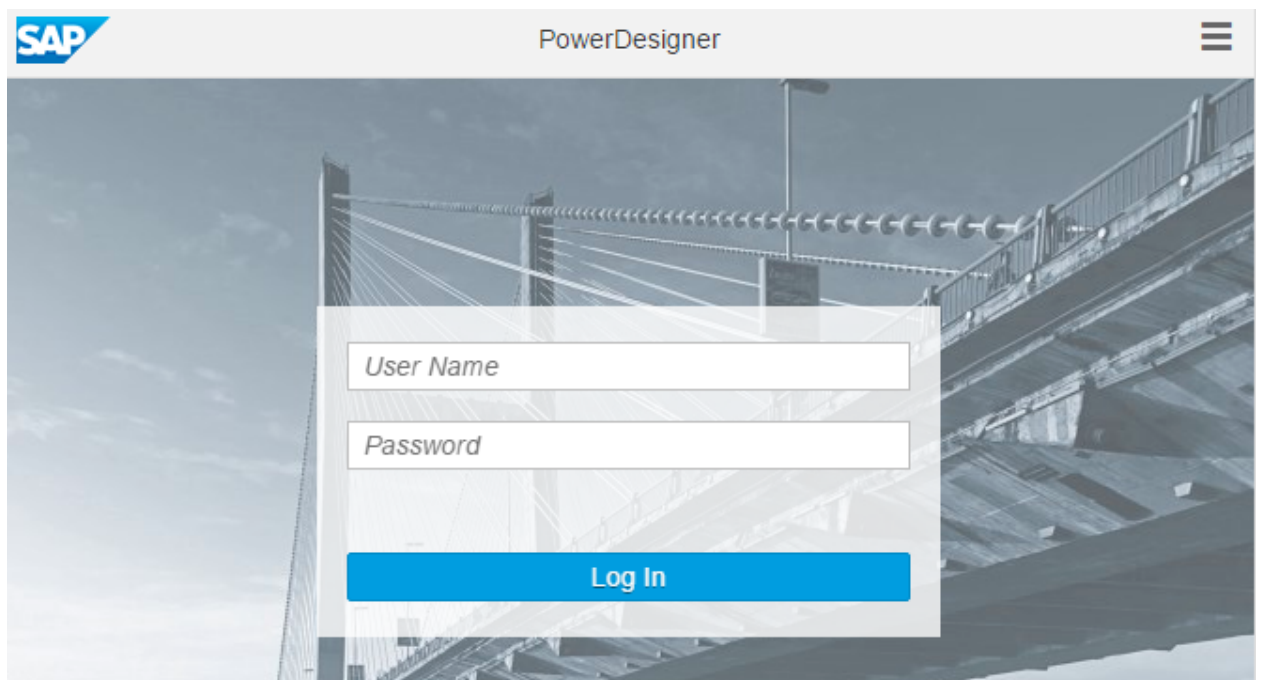
When the server is running (whether as a service or not):

To access the new PowerDesigner Web, navigate to:

`http://<server-name>:<port-number>/powerdesigner-web`

### Note

The default port number is 3030.



For information about using PowerDesigner Web, see *PowerDesigner Web*.

To access the older *PowerDesigner Portal* Web client, navigate to:

`http://<server-name>:<port-number>/cmr`

### Note

The default port number is 3030.



For information about using the [PowerDesigner Portal](#), see *Core Features Guide > Modeling with PowerDesigner > The Repository > Repository Web Clients > The PowerDesigner Portal*.

## 5.2 Installing the PowerDesigner Web Server on UNIX

We do not provide support for installing any component of PowerDesigner on UNIX. However, it is possible to manually deploy PowerDesigner Web to a UNIX environment using this procedure.

### Context

This procedure requires that you install and configure the PowerDesigner Web Web server on a Windows server in order to copy certain of the installation directories to your UNIX installation.

#### Note

Installation of the node.js server, which provides connectivity to SAP BPM 7.31 SP15 Developer Studio, is not supported on UNIX and is not covered by this procedure.



## Procedure

1. On your UNIX server, install JDK 7.0 or higher, and set the `JAVA_HOME` environment variable to its path. For example:

```
export JAVA_HOME=/usr/lib/jvm/java-7
```

2. Install Tomcat 6, 7, or 8 and set the `CATALINA_HOME` environment variable to its path. For example:

```
export CATALINA_HOME=.../apache-tomcat-7.0.54
```

3. Create a new folder at, for example, `/usr/local/sap/pdweb`, and copy the contents of the PowerDesigner Web installation directory on your Windows environment to it.
4. Extract the appropriate license library for your flavor of UNIX from `/usr/local/sap/pdweb/license/lib/sylapi 2.3.zip` to `/usr/local/sap/pdweb/license/lib`.
5. Copy the `powerdesigner-web.war` and `cmr.war` files from `/usr/local/sap/pdweb/Tomcat/webapps` to `/tmp` to edit them.

Once you have copied these files to `/tmp`, you can delete the folder `/usr/local/sap/pdweb/Tomcat`.

6. Unpack `powerdesigner-web.war` and edit the file `powerdesigner-web/WEB-INF/cmrhome.xml` so that the `Path` element reads:

```
<entry key="Path">/usr/local/sap/pdweb</entry>
```

Repack `cmrhome.xml` into `powerdesigner-web.war`.

7. Unpack `cmr.war` and edit the file `cmr.war/WEB-INF/cmrhome.xml` so that the `Path` and `SlavePath` elements read:

```
<entry key="Path">/usr/local/sap/pdweb/legacy</entry>
<entry key="SlavePath">/usr/local/sap/pdweb</entry>
```

### **i** Note

If you are using Tomcat 6, you must also remove `/WEB-INF/lib/javax.el-api-1.1.2.jar`.

Repack `cmrhome.xml` into a new `cmr.war`.

8. Copy the new `powerdesigner-web.war` and `cmr.war` files to `CATALINA_HOME/webapps`.
9. Ensure you have installed the necessary JDBC drivers to connect to your PowerDesigner repository, and that they can be found via the proper path statement.
10. Run `CATALINA_HOME/bin/startup.sh`.

### **i** Note

PowerDesigner Web is developed and tested with Tomcat on a Windows server, using standard Java programming techniques, and does not take advantage of anything proprietary to Tomcat or the Windows platform. As a result, the application can be manually installed onto other application servers and on other operating systems. For support purposes, in the case of any reported concern, engineering will reproduce the issues under the certified development and test environment to determine root cause, and if appropriate, correct defects detected under that environment only.

---

## 5.3 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 \[page 42\]](#)

### 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](#) ► [Settings](#) ► [Database Server](#) ► and update the general parameters to point to the new database.
3. Restart the [PowerDesigner Portal](#) service.

---

# Important Disclaimers and Legal Information

## Coding Samples

Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended to better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, unless damages were caused by SAP intentionally or by SAP's gross negligence.

## Accessibility

The information contained in the SAP documentation represents SAP's current view of accessibility criteria as of the date of publication; it is in no way intended to be a binding guideline on how to ensure accessibility of software products. SAP in particular disclaims any liability in relation to this document. This disclaimer, however, does not apply in cases of wilful misconduct or gross negligence of SAP. Furthermore, this document does not result in any direct or indirect contractual obligations of SAP.

## Gender-Neutral Language

As far as possible, SAP documentation is gender neutral. Depending on the context, the reader is addressed directly with "you", or a gender-neutral noun (such as "sales person" or "working days") is used. If when referring to members of both sexes, however, the third-person singular cannot be avoided or a gender-neutral noun does not exist, SAP reserves the right to use the masculine form of the noun and pronoun. This is to ensure that the documentation remains comprehensible.

## Internet Hyperlinks

The SAP documentation may contain hyperlinks to the Internet. These hyperlinks are intended to serve as a hint about where to find related information. SAP does not warrant the availability and correctness of this related information or the ability of this information to serve a particular purpose. SAP shall not be liable for any damages caused by the use of related information unless damages have been caused by SAP's gross negligence or willful misconduct. All links are categorized for transparency (see: <http://help.sap.com/disclaimer>).



**go.sap.com/registration/  
contact.html**

© 2016 SAP SE or an SAP affiliate company. All rights reserved.  
No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company. The information contained herein may be changed without prior notice.  
Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.  
These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.  
SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.  
Please see <http://www.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.