

# Installation Guide PowerDesigner<sup>®</sup> 16.0

Windows

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# CHAPTER 1 Planning Your PowerDesigner Installation

The deployment of PowerDesigner<sup>®</sup> typically involves the installation of a license server, a repository, and a number of client machines.

**Note:** For installation of PowerDesigner without a repository, complete steps one and two of this procedure and then go directly to *Chapter 2, Installing PowerDesigner* on page 11.

- Obtain your license key file (see *Obtaining a License Key File* on page 3). 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 on page 4).

The license server is required if you intend to share served licenses among users instead of assigning individual licenses per machine.

**3.** Install PowerDesigner on the administrator's workstation (see *Chapter 2, Installing PowerDesigner* on page 11).

This initial installation is needed to install the PowerDesigner repository, which is used to store and share models.

**4.** 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, but the exact system requirements depend on your DBMS, the number of concurrent users, and the size of your repository.

**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  $10MB*1.1^{40}$  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 Portal, 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.

**5.** Install SQL Anywhere<sup>®</sup> on the repository server and create a database to house the PowerDesigner repository (see *Installing and Authenticating SQL Anywhere* on page 22).

Alternatively, create a database to house the repository in one of the other supported DBMSs:

- Adaptive Server<sup>®</sup> Enterprise
- Oracle 8 and higher
- IBM DB2 Common Server and DB2 for OS/390
- Informix 2000
- Microsoft SQL Server 2005 and higher 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.

**Note:** The most up-to-date list of supported DBMSs, is available at *http:// certification.sybase.com*.

- **6.** Install the repository to the new database (see *Installing the Repository to the Server* on page 24).
- 7. [optional] Install the repository proxy on the repository server (see *Installing the Repository Proxy* on page 28).

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.

**8.** [optional] Install the PowerDesigner Portal on the repository server (see *Installing the PowerDesigner Portal Server* on page 31).

The PowerDesigner Portal provides access to your repository models via a Web browser.

- **9.** Create user accounts and groups with appropriate rights and permissions to allow users to connect to the repository (see *Core Features Guide > Administering PowerDesigner > Controlling Repository Access*).
- **10.** [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 Shared Resources*).

**11.** Install PowerDesigner on user machines (see *Chapter 2, Installing PowerDesigner* on page 11) and provide users with their PowerDesigner usernames and passwords to enable them to connect to the repository.

**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.

# **Obtaining a License Key File**

You must have a *license key file* to install PowerDesigner. License files can be downloaded on the Sybase<sup>®</sup> Product Download Center site (SPDC) at https://sybase.subscribenet.com/.

- When you purchase PowerDesigner from Sybase, you receive an E-mail with an URL, your login, and your password for the SPDC.
- When you purchase PowerDesigner from a Sybase reseller, you receive a certificate with a Web key registration number and a download URL.

#### Host ID

Before accessing the download site, make sure you know your license configuration, the *host ID* and the *name of the computer* that will receive the license key file. You can find the host ID and the computer name in the Installation program, these details are automatically calculated and displayed in the third page of the installation where you are asked to load or copy a license file to proceed.

For Windows platforms, if your machine does not have a network adapter an alternate Hostid of type Disk Serial Number is supported. To get this host id, use the "lmutil lmhostid - vsn"command or get the disk's volume serial number by executing "DIR C:", remove "-" from the value and prefix "DISK\_SERIAL\_NUM=" to the serial number to get the host id.

Each host ID type has valid formats that will be checked when generating a license. Make sure the value entered matches these valid formats.

Ethernet addresses are 12 character hex values consisting of digits 0 through 9 and characters A through F. They may be entered in any of the following formats:

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

Host Ids are 8 character hex values consisting of digits 0 through 9 and characters A through F. They may be entered in the following formats:

- 12AB34CD
- 12AB-34CD

Note: For some platforms, host IDs can also be entered in decimal formats, in this case prefix the host id with a "#" sign. Example: #1039716963

Disk Serial Number is always entered with a "DISK\_SERIAL\_NUM=" prefix. For example: DISK\_SERIAL\_NUM=3e2e17fd

### Installing a License Server

If you intend to use standalone served or floating served licenses, you must 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.

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 Key File* on page 3).

**Note:** Do not install a license server and PowerDesigner on the same workstation. 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 FlexIm served licenses, you may encounter problems returning your license to the server.

The default SySAM server supplied with PowerDesigner can only be installed on a Windows machine. To install SySAM in other environments and to obtain detailed information about SySAM, go to *http://www.sybase.com/sysam*. Note that any licenses that have been activated for a Windows server must be reactivated for any other platform.

- 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 Sybase product), and insert the PowerDesigner CD.
- 2. Click the Install Licenses Server button to open the Sybase Software Asset Management Installshield wizard:



- **3.** Click **Next** to display the license agreement page. Read the License Agreement and click the **I Agree** radio button to accept the terms of the agreement. If you click **I Do Not Agree**, the installation will be cancelled.
- **4.** Click **Next** to display the license file definition page and perform one of the following actions:
  - If you already have a license file, click the **Load** button and browse to the folder where your license file is located. The content of the license file is automatically displayed in the License key box.
  - Download a license file from SPDC and copy the file content into the License Key box.

Sybase Software Asset Mana	agement 2.2 - InstallShield Wizard		×
	Sybase <sup>®</sup> Ass	et Management	2.2
	To continue, you must provide a valid To load a license key from a lic file, cl	license key. ick the Load button:	Load
	If you have not already received a lice download site, and copy it into the lice obtain your license key, refer to your p representative.	nse key file (.lic), then you can obtain it from the 3 nse key field below. For further information about urchase documentation, or contact your local Syl	Sybase how to pase
	You will need to provide host ID and c	omputer name for downloading the license key fil	e.
	Host ID: 0013723A1684	Computer Name: OBALEN-XP	
	License Kev		
	##\$ybase Software Asset Manageme #Studio Enterprise for Windows SERVER PHOBOS 0000000000000 VENDOR SYBASE USE_SERVER PACKAGE PD_STUE SYBASE COMI PD_00M PD_ILM PD_BPI PD_PRJ \ PD_EAM PD_IAM PD_GLN ISSUED=14-oct-2010 SIGN FDG6 4A9E 0C78 F808 944 08F2 537C 8801 531E A81	IN License File. FL License for PowerDesigner PONENTS="PD_SHELL PD_CDM PD_LDM PD M PD_RQM PD_FRM PD_XSM PD_MTM PD_R 4" OPTIONS=SUITE SUPERSEDE \ 12="077E 535F FAE8 A336 09CD 70A8 B671 \ 45 5A648 77AE A36F 04FA B6A1 8C34 06B6 \ 45 53AD DA66 82D8 D094 5111 0A75"	_PDM \
SVBASE"		Next >	Cancel
- OTDASE '			

5. Click Next.

The destination folder page is displayed if no other SySAM license server is detected on the machine.

- 6. Select the suggested installation directory or browse to a new one and then click **Next** to go to the settings page.
- 7. 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:

- If SySAM had to be installed, you can choose to start the license server as a service.
- If the PowerDesigner licenses were assigned to an existing license server, you can choose to reread the licenses to refresh the server license file.
- 8. Click **Finish** to exit the wizard.

**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
```

#### 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 lmtools.exe, which is available in the SYSAM-2\_1\Bin folder.

- 1. Double-click SYSAM-2\_1\Bin\Imtools.exe to open the LMTOOLS dialog.
- 2. On the Service/License File tab, select SYSAM in the list of servers:

LMTOOLS by Macrovision Corporation http://www.macrovision.com	(
File Edit Mode Help	
Service/License File System Settings Utilities Start/Stop/Reread Server Status Server Diags Config Services Borrowing	
Services allow FLEXnet Servers to run in the background.  Server List  C Configuration using License File C Configuration using Services  SYSAM  I LMTOOLS ignores license file path environment variables	

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

For detailed information about lmtools, follow the SySAM Documentation Collection link available at *http://www.sybase.com/sysam*.

#### **Troubleshooting with Imutil**

lmutil.exe, which is available in the SYSAM-2\_1\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):

```
<code>lmutil lmstat -a -c <port>@<host></code> where <port> and <host> are license server information.
```

For detailed information about lmutil, follow the SySAM Documentation Collection link available at *http://www.sybase.com/sysam*.

# Upgrading PowerDesigner

This topic provides guidance on issues relating to Office add-ins, the license server, and resource files, which may arise when upgrading PowerDesigner.

- 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 edited a definition file or other resource file from a previous version, then it will continue to work with the new version. However, we advise you to use the **Compare** tool to review the differences between your file and the file delivered with the new version and, if appropriate, merge them to obtain bug fixes or new features. For information about comparing and merging resource files, see *Customizing and Extending PowerDesigner* > *Working with PowerDesigner Resource Files*.

If you have stored resource files from a previous version in the repository then you must check them in again under the new version before you can continue to use them.

### Windows 64-Bit Support

PowerDesigner is only available in a 32-bit version, but installation on 64-bit versions of Windows is supported.

To ensure that PowerDesigner can communicate with your data sources, you should use the 32-bit version of the ODBC Administrator tool. PowerDesigner cannot connect to 64-bit ODBC DSNs. For detailed information about working with 32-bit DSNs on a 64-bit version of Windows, see *http://support.microsoft.com/kb/942976*.

# Password and Data Encryption

PowerDesigner encrypts repository passwords in the repository database and encrypts the database password for repository definitions stored in the registry. However, it does not encrypt repository passwords in the registry, nor database passwords entered in connection profiles. Consequently, to improve security, you should avoid storing database passwords in connection profiles and not enter your repository password in repository definitions (though you can securely store the database password in repository definitions).

PowerDesigner supports encryption of both passwords and data for direct connections to a repository or other database using most of the supported DBMSs via one or more of native, ODBC, and JDBC connection profiles. The following table provides information and examples for encrypting passwords and data with each type of connection:

Туре	Encryption
Native	Password and data encryption can generally be enabled with connection parameters.
	For example, the password for Sybase Adaptive Server Enterprise is encrypted by default, and you can enable data encryption by setting the Sec_Confidential connection parameter to 1.
ODBC	Password and data encryption can generally be enabled in the ODBC Configu- ration dialog.
	For example, to encrypt the password for Sybase SQL Anywhere, select the <b>Encrypt password</b> option on the <b>Login</b> tab, and to encrypt data, select an encryption method on the <b>Network</b> tab.
JDBC	It is not possible to control password and data encryption through the Power- Designer connection profile interface, but you may be able to enable encryption directly in your database client.

For more information about using PowerDesigner connection profiles, see *Core Features Guide > The PowerDesigner Interface > Getting Started > Connecting to a Database*. For detailed information about encryption and other parameters for your database, see your DBMS documentation.

**Note:** Data flowing between the respository database and repository proxy can be encrypted, but encryption is not supported for data flowing between the proxy and client machines.

# CHAPTER 2 Installing PowerDesigner

You can install PowerDesigner directly on individual client machines, including as a plugin for the Eclipse and Visual Studio IDEs. You can also perform a mass silent installation or an administrative installation to a network server.

**Note:** You should obtain a license key (see *Obtaining a License Key File* on page 3) and, if appropriate, install and configure your license server (see *Installing a License Server* on page 4) before beginning.

PowerDesigner has the following minimum system requirements:

- Microsoft Windows XP, Vista, or 7 or Microsoft Windows Server 2003 or 2008
- 1.5 GHz processor
- 1 GB RAM
- SVGA or higher-resolution graphics adapter and compatible color monitor (800x600)
- CD-ROM drive
- 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* on page 20.

**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.

1. Insert the PowerDesigner CD-ROM in your drive.

If setup does not automatically start, then double-click the SETUP.EXE file in the setup directory of the CD-ROM.

- 2. Click the **Install PowerDesigner 16.0** button to open the welcome page, and then click **Next** to go to the license selection page.
- **3.** Select one of the following license types, and then click **Next** to go to the license agreement page.
  - *Trial version* is a full-featured version, valid for an evaluation period of 15 days, that allows you to perform any design task. Contact Sybase if you require a limited extension.
  - Local standalone license is installed on and locked 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 Key File* on page 3).

- *Served standalone license* is provided by one or more SySAM license servers, and is locked to a particular machine. Click **Next** to go to the license server page, where you must enter the name of your license server.
- Served floating license is provided by one or more SySAM license servers, which manage 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.

For more information about PowerDesigner licensing, see *Core Features Guide > The PowerDesigner Interface > Getting Started > License Management.* 

- 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 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 the terms of the agreement. If you click **I Do Not Agree**, you cannot proceed with the Setup program.

**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, where setup suggests a directory in which to install PowerDesigner files. You can specify an alternate directory 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:

Sybase PowerDesigner 16.0		×
	Sybase <sup>®</sup> PowerDe	esigner 16.0
	Select the features you want to install, and clear the features y	A business process model (BPM) helps you identify, describe, and decompose business processes. You can analyze your system at various levels of detail, and focus alternatively on control flow (the sequence of execution) or data flow (the exchange of data). You can use BPEL, BPMN, and many other process languages.
SYBASE ~ 2	Company < <u>B</u> ack <u>N</u> ext>	Cancel

#### Note:

- The PowerDesigner plugin for Eclipse is available for Eclipse v3.2 to v3.6. For more information, see *Core Features Guide > The PowerDesigner Interface > The PowerDesigner Plugin for Eclipse*.
- The PowerDesigner add-in for Microsoft Visual Studio and Team Foundation is available for Visual Studio 2005, 2008, and 2010. For more information, see *Core Features Guide > The PowerDesigner Interface > The PowerDesigner Add-In for Visual Studio*.
- The SQL Anywhere drivers provide connectivity to a repository installed on SQL Anywhere, which is bundled with PowerDesigner (see *Installing and Authenticating SQL Anywhere* on page 22).
- Addins for third-party software such as MS Word and Visio are not selected by default for installation. If you want to install these addins, expand the General Addins node, and select them for installation.

Select or clear check boxes as necessary, and then click Next.

**8.** If you selected the Eclipse 3 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.

**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:

Sybase PowerDesigner 16.0	×
Sybase <sup>®</sup> PowerDesigner	16.0
The following user profiles will be installed. Select those that you want to apply now. Yo always apply additional profiles later, from within PowerDesigner.	u can
SYBASE An SAP Company < Back Next>	Cancel

For more information about user profiles, including how to make your own profiles available to the installer, see *Core Features Guide* > *The PowerDesigner Interface* > *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.

Sybase PowerDesigner 16.0		×
	Sybase <sup>®</sup> PowerDesigner	16.0
	Setup has enough information to start copying the program files. If you want to review any settings, click Back. If you are satisfied with the settings, click Next to begin copy Current Settings: License Type: Standalone Seat - Served Server: coolthing TCP Port number: 27000 License Package: Studio Enterprise Destination directory: C:\Program Files\Sybase\PowerDesigner 16 Program Folder: Sybase\PowerDesigner 16 Eclipse 3.2 or superior: C:\cclipse_us\sclipse User Profiles: Beneral\Nuthorize Framework Design (Design Framework.upf) Display Preferences\Lot Theme (blue, purple) (Blue Theme.upf) Display Preferences\Lot Theme (blue, purple) (Blue Theme.upf) Notation\CDM - <i>LP</i> Notation (CDM Lef1x.upf) Notation\CDM - Ber1X Notation (CDM Merise.upf) Notation\CDM - Barker Notation (CDM Merise.upf) Notation\CDM - Barker Notation (CDM Barker.upf) Keep PowerDesigner 15.3 settings	or change ing files.
SYBASE	Company < Back Next>	Cancel

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

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

# 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 administrative mode install, there is only one instance of PowerDesigner to deploy and upgrade.

You can install any type of PowerDesigner license and specify any combination of installation options on each client machine.

### Creating the Administrative Install on the Server

The first part of the administrative install consists in copying the PowerDesigner files to a server. 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.

**1.** Insert the CD-ROM in the drive to automatically launch the setup program. The initial setup dialog box is displayed. Click the **Administrative Installation** button.

or

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

Run	? ×
5	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	E:\Setup\setup.exe /a
	OK Cancel <u>B</u> rowse

The welcome page is displayed.

- 2. Click **Next** to display the network location page.
- **3.** Specify the network location where you want to copy the product files, and then click **Install**.

The setup status page displays a progress box while the files are copied to the destination directory. When this process is complete, the complete page opens.

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

#### **Installing Client Machines**

Once you have created the administrative install on the server, you can set up the client machines. The client install modifies the registry of the client machine in order to be able to reference the files located on the server, but does not copy any file onto the client machine. Consequently no space is required on the client machine.

**1.** On the client machine, open Windows Explorer, connect to the network location where you have created the administrative install and double-click the Setup.exe file.

The welcome page is displayed.

**2.** Click Next to open the license selection page, select a license type, and then click Next again.

**3.** Define 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.

#### **Upgrading an Administrative Install**

You can pass the administrative install command to an upgrade package downloaded from the web.

**Note:** 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.

Use the following syntax to upgrade your administrative install to a new minor version: upgrade\_package.exe /a

## Installing PowerDesigner in Silent Mode

If you need to deploy PowerDesigner on a large number of machines and wish to reuse *exactly* the same setup options and destination folder for each machine, you can use the silent install mode. Silent install runs without user input, by using a *response file* (called *setup.iss*) that specifies all the required installation options.

The silent installation mode does not provide any information about the installation itself. You can open the setup.log file in the directory containing the setup.exe file to have a report about the silent install. The last section of this ResponseResult file contains a line ResultCode=X. If X=0, installation was successful.

**Note:** You can perform a silent install from the product CD or from a network location where the PowerDesigner installation files have been copied (see *Creating the Administrative Install on the Server* on page 16).

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

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

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

G:\setup\setup.exe /r /fl"setup.iss"

References a network drive G:, mapped to a location where the PowerDesigner files have been copied, and creates setup.iss in the setup directory for easy access.

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

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

Each new silent install will replace the content of the setup.log file located in the Installation drive.

Use the /f2 parameter to define a local directory where the setup.log file will be stored on each client machine:

G:\setup\setup.exe /s /f2"c:\temp\setup.log"

**Note:** From a client machine, map a drive to the server where the PowerDesigner files are copied. The drive letter must be the same as that on the server. For example, if your PowerDesigner files are located on drive R:\admin\setup.exe, you must use the R drive on each client machine to access installation files.

#### 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.

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}

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"

# **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.

Sybase PowerDesigner 16.0	×
S	Sybase <sup>®</sup> PowerDesigner <b>16.0</b>
Welcome to modify the cu	the Sybase PowerDesigner 16.0 Setup Maintenance program. This program lets you ırrent installation. Click one of the options below.
C Repair	Select new program features to add or select currently installed features to remove.
C <u>R</u> emove	Reinstall all program features installed by the previous setup.
	Remove all installed features.
SYBASE AN SAP Company	< Back Next > Cancel

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.

## **Manual Fonts Installation**

If setup fails to define default fonts, you can do it manually.

- 1. Select the Fonts page in the General Options dialog box and define fonts for UI, Code and RTF Editor.
- 2. Create a new report, select **Report > Change Font** and define new fonts.
- **3.** Verify that the following registry key does not exist: HKEY\_CURRENT\_USER\Software \Sybase\PowerDesigner 16\DisplayPreferences\Font Name.
- 4. Create a registry key named Font Name (with the following string values: Name, Size, Style) for all symbols in the following registry key: HKEY\_LOCAL\_MACHINE \Software\Sybase\PowerDesigner 16\DisplayPreferences\Font Name.

### **PowerDesigner Dependencies**

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

- WindowsInstaller-KB893803-v2-x86.exe to support the installation of .NET.
- Microsoft .NET Framework 2.0 sp1 and 4.0
- 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 2.0 to support PowerDesigner MS Office plugins.
- msxml6-KB954459-enu-x86.exe to support the PowerDesigner XSM.
- vjredist.exe Microsoft Visual J# 2.0 redistribuable to support the PowerDesigner Auto-Layout feature.
- ProjectAggregator2.msi to support the PowerDesigner Visual Studio add-in.

# CHAPTER 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.

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

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, but the exact system requirements depend on your DBMS, the number of concurrent users, and the size of your repository.

**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  $10MB*1.1^{40}$  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 Portal, 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.** Install SQL Anywhere<sup>®</sup> on the repository server and create a database to house the PowerDesigner repository (see *Installing and Authenticating SQL Anywhere* on page 22).

Alternatively, create a database to house the repository in one of the other supported DBMSs:

- Adaptive Server<sup>®</sup> Enterprise
- Oracle 8 and higher
- IBM DB2 Common Server and DB2 for OS/390
- Informix 2000
- Microsoft SQL Server 2005 and higher 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.

**Note:** The most up-to-date list of supported DBMSs, is available at *http:// certification.sybase.com*.

- **3.** Install the repository to the new database (see *Installing the Repository to the Server* on page 24).
- **4.** [optional] Install the repository proxy on the repository server (see *Installing the Repository Proxy* on page 28).

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 Portal on the repository server (see *Installing the PowerDesigner Portal Server* on page 31).

The PowerDesigner Portal provides access to your repository models via a Web browser.

# 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.

- 1. Insert the software CD-ROM in the drive, and click the **Install SQL Anywhere** button. Choose your setup language, and then click **Next** to open the SQL Anywhere InstallShield wizard.
- 2. 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.
- 3. Leave all the defaults, click Next, and then click Install to start the installation.

🚏 SQL Anywhere 12 - InstallShield Wizard	×
<b>Custom Setup</b> Select the program features you want installed.	C
Click on an icon in the list below to change how a feature is in	istalled.
Image: Detabases         Image: Detabases	Feature Description Full set of available database formats. This feature requires 0KB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 137MB on your hard drive.
Install to:	
C:\Program Files\SQL Anywhere 12\	hange
Help Space	Next > Cancel

- **4.** 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
- 5. Copy the contents of the authdb.sql file delivered in the Setup\support directory of the installation media (and in the Tools directory of your PowerDesigner installation) into the file \Script\optdeflt.sql 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.

**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 authdb.sql against it.

### 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.

- 1. Select Start > Programs > SQL Anywhere 12 > Admin Tools > Sybase Central to open Sybase Central.
- Select Tools > SQL Anywhere 12 > 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 for the database, and then click **Next** to go to the Specify the Transaction Log File page.
- 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 a super-user called DBA, and with a password "sql". Select these defaults or provide your own parameters, 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* on page 24).

8. Click **Finish** to create the database. A message box displays the progress and informs you when the creation is complete.

### Installing the Repository to the Server

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

**Note:** Before you can install the repository, you must create an empty database with an administrator user who has full rights on all the tables (see *Creating a Database to Contain the Repository* on page 23) and install PowerDesigner on the repository administrator's workstation (see *Chapter 2, Installing PowerDesigner* on page 11).

- 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:

Property	Value
Repository name	Enter an appropriate name to identify the repository.
Default login name	ADMIN
Default pass- word	Leave this field blank until the repository is created.

Property	Value
Data source name	Click the <b>Select a Data Source</b> 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.
	For detailed information about creating, configuring, and using connection profiles, see <i>Core Features Guide &gt; The PowerDesigner Interface &gt; Getting Started &gt; Connecting to a Database</i> .
User name	Enter the user name that you used to create the database.
Password	Enter the password for the user that you used to create the database.
Bytes per char	<ul> <li>For non-Oracle unicode or multi-byte character set databases, specify the bytes per character used by the database:</li> <li>1-byte - [default] For SBCS (Single-Byte Character Set)</li> <li>2-byte - For DBCS (Double-Byte Character Set)</li> <li>3-byte - For Unicode or MBCS (Multi-Byte Character Set)</li> </ul>

- 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.
- 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.

Repository Installation Script	
Separator:	
create table PMATTR { ATTR int not null, CLSS int not null, DSID int not null, NAME varchar(254) not null, CDDE varchar(254) not null, CTYP int not null, FLGS int not null, TNAM varchar(254) , CNAM varchar(254) } ;	4]
create unique index PMATTR_PK on PMATTR (ATTR)	•
Execute	Cancel

**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.

When the repository has been successfully installed, the message Repository installation completed appears in the Output window. In the repository Browser, the root of the repository tree displays the repository name, the repository user and the current branch (MyBase::ADMIN::<Default>), and is ready for use.

**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. Select **Repository > Administration > Users** to open the list of users, select the ADMIN entry, click the **Properties** tool, and enter a secure password for the administrator account.

For detailed information about working with repository users and groups, see *Core Features Guide* > *Administering PowerDesigner* > *Controlling Repository Access.* 

### **Troubleshooting the Repository Installed on ASE**

This section lists known issues encountered when installing the repository on an Sybase Adaptive Server Enterprise DBMS.

#### Commonly Required ASE Parameters

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

#### 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.

### Troubleshooting the Repository Installed on DB2

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

#### **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.

### **Upgrading the Repository**

When you upgrade PowerDesigner, all modules installed on your machine, including the repository module, are upgraded. The first time you connect to the repository after upgrading PowerDesigner, you are prompted to upgrade the repository database on the server. All PowerDesigner users connecting to a repository that has been upgraded must also upgrade.

You cannot upgrade the repository through a repository proxy connection. You must use a direct ODBC connection instead.

In case of 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.

**Warning!** Always back up your repository database before upgrading it. If you have installed the PowerDesigner Portal, you must stop the PowerDesigner Portal Service before performing an upgrade.

Only the PowerDesigner modules that you have installed will be upgraded 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. The next user of the database that has installed the OOM will upgrade that part of the database upon connection, and so on.

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

### **Dropping the Repository Tables**

The Drop Repository Tables command removes all repository tables and their content from the database and cuts the connection with the database.

**Warning!** Dropping the repository database cannot be undone. If you have not backed up your models and other contents, they will be lost. You cannot drop the repository tables through a proxy connection. You must perform a direct ODBC connection instead.

 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 interpretor from the list.

2. Click **Execute** to begin the deletion.

# Installing the Repository Proxy

The PowerDesigner repository proxy is an optional program that receives requests from client workstations and translates them into a more efficient proprietary format for communication with the repository server. 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.

You should install the proxy on the same server as the respository, if possible, to optimize communication between the components. If the repository server processor 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, but the exact system requirements depend on the number of concurrent users and the size of your repository.

The repository administrator will set up the repository proxy.

- **1.** Choose whether to install the repository proxy on the repository server, or on another windows machine on the same LAN.
- **2.** Create a data source to define the connection between the proxy and the repository database (see *Creating an ODBC System Data Source on the Proxy Server* on page 29).
- **3.** Run the repository proxy setup program to install the proxy as a service (see *Installing the Repository Proxy on the Proxy Server* on page 29).
- **4.** Launch the configuration tool to configure the proxy (see *Configuring the Repository Proxy* on page 30).

The repository proxy is now ready for use.

### Creating an ODBC System Data Source on the Proxy Server

The ODBC data source defines the connection between the proxy and the repository database. You must create a system (and not a user) data source for the proxy to communicate with the repository.

- 1. Select Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC) to open the ODBC Data Source Administrator window.
- 2. Click the System DSN tab, and then click the Add button.
- 3. Select the driver corresponding to your DBMS.

Create New Data Source	Select a driver for which you want to set up a data source Name PB DATADIRECT 0EM 5.30 ParadoxFile (*.db) PB DATADIRECT 0EM 5.30 SQL Server Wire Protocol PB DATADIRECT 0EM 5.30 TextFile (*.*) SQL Anywhere 12 SQL Native Client SQL Server UltraLite 11 Teradata	
	< Back Finish Cancel	

4. Click Finish to exit the wizard.

The configuration box is displayed. Generally, you will have to declare the data source name together with the name of the server where the database is installed.

You may also be prompted to type the name of the user that will connect to the database and a password.

- **5.** Test the connection if applicable and then save the new DSN by clicking **OK** to return to the System DSN page, where your new data source is displayed in the list.
- 6. Click OK to close the ODBC Data Source Administrator window.

#### Installing the Repository Proxy on the Proxy Server

The repository administrator is generally responsible for installing the repository proxy.

1. Insert the PowerDesigner software CD-ROM in the drive, and then click the **Install PowerDesigner Repository Proxy** button.

The Repository Proxy installation program opens to the welcome page.

2. 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 on the product CD.

- **3.** Click **Next** to go to the directory selection page. Setup suggests a location in which to install the Proxy, which you can change by clicking the **Browse** button.
- 4. Click Next to go to the current settings page which shows your choices.
- 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 the setup is complete, a page is displayed with two checkboxes selected by default, to let you start the proxy service and launch the configuration tool.

6. Click Finish to exit the wizard.

The Repository Proxy Configuration dialog opens to let you configure the repository proxy (see *Configuring the Repository Proxy* on page 30).

### **Configuring the Repository Proxy**

The Repository Proxy Configuration dialog box allows you to configure the repository proxy. This configuration phase simplifies the client connection to the repository. When connecting to a repository, the client only has to select a proxy repository definition in which the name of the proxy server, its port number and the instance of the proxy are specified.

Parameter	Description
Instances	An instance gathers the connection information between the proxy and the database server.
	Click the <b>New</b> button to create an instance of the proxy for the repository database. If you create an instance while the repository proxy is running, you must restart it for the instance to take effect. To delete an instance, select it and click the delete button.
Instance name	Specifies the name of the instance selected in the Instances box.
Data source	Specifies the name of the system ODBC data source used to connect to the repository database. Note that user data source cannot be used by the proxy server.
User name	Specifies the user name used to connect to the repository database.

The Repository Proxy Configuration dialog box lists instances on the left side, and proxy parameters on the right side:

Parameter	Description
Password	Specifies the password used to connect to the repository database.
Port	Specifies 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 operations	Specifies to generate a log file. Select the Including success checkbox to display successes in the log file, and enter a path to the log file in the Name field.
Cache Directory	Specifies the path to the cache.
Max size	Specifies the maximum size for the cache. The default is 300MB.

Now that configuration is complete, you can set up client machines to connect to the repository via the proxy (see *Core Features Guide > The PowerDesigner Interface > Getting Started > Accessing the Repository*).

## Installing the PowerDesigner Portal Server

The PowerDesigner Portal allows you to view the contents of your repository in your standard web browser. The PowerDesigner installation disc includes database access and web application layers 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.

For maximum responsiveness, we recommend that you install the database access layer on the same machine as your repository database, while the web application layer can be installed on any appropriate machine. While each instance of the PowerDesigner Portal database access layer can only communicate with a single repository database, a single web application instance can communicate with multiple database access layers and provide a single point of access for users browsing multiple repositories.

If the repository server processor is not a Windows server or is unable to support the additional workload, then we recommend installing the PowerDesigner Portal on another machine on the same LAN segment. We recommend as a minimum, a dual-core machine, with 2-4GB of RAM, but the exact system requirements depend on the number of concurrent users and the size of your repository.

**Note:** For information about using the PowerDesigner Portal, see *Core Features Guide* > *The PowerDesigner Interface* > *The PowerDesigner Portal.* 

1. Insert the PowerDesigner software CD-ROM in the drive, and then click the **Install PowerDesigner Portal** button.

The PowerDesigner Portal installation program opens to the welcome page.

- 2. Click Next to go to the license page, and select the type of license that you want to use:
  - Trial For evaluating PowerDesigner and the PowerDesigner Portal
  - **PowerDesigner Portal** For using the PowerDesigner Portal without allowing users to edit object comments, descriptions, and annotations
  - **PowerDesigner Portal Composer** For allowing users to edit object comments, descriptions, and annotations, which requires a separate license. If you select this option, you will be prompted to specify the licence server that manages this license (see *Installing a License Server* on page 4).
- **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 on the product CD.

**4.** Click **Next** to go to the web server page. If you have already installed one or more PowerDesigner Portal servers, you can select the second option to install the web application layer only. You will then be prompted to specify connection information for a PowerDesigner Portal server to which it will connect. Setup suggests a location in which to install the PowerDesigner Portal, which you can change by clicking the **Browse** button.

Sybase PowerDesigner Portal 16	i.0	×
S	ybase <sup>®</sup> PowerDesigner Portal	16.0
	Click the type of setup you prefer.	
	<ul> <li>PowerDesigner Portal Server</li> <li>Installs the Database Access and Web Application layers</li> </ul>	
	C Web Application Layer only For use with a PowerDesigner Portal Server already installed elsewhere	
	Destination Folder C:\Program Files\Sybase\PowerDesigner Portal 16 Brow	wse
SYBASE	Company < Back Next >	Cancel

**5.** Click **Next** to go to the application server page. By default, the installer will install a new Tomcat Server. If you want to use one of the other supported servers, select it and specify its location. Default sever 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 PowerDesigner Portal installation directory) from your WebLogic Administrative Console once the setup has completed.

Sybase PowerDesigner Portal 16.0
Sybase <sup>®</sup> PowerDesigner Portal 16.0
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 6.0
C Tomcat version 5.x, 6.x or 7.0
C JBoss version 4.x, 5.x
C EAServer version 6.2
C WebLogic 9.2 or 10.3 (manual deployment)
Web server configuration Http port: 3030 Https port: 3443
Server Location
<choose directory=""></choose>
SYBASE AN SAP Company < Back Next> Cancel

- 6. Click **Next** to go to the JDK page. By default, a new JDK is installed. If you want to use an existing JDK, deselect the check box and specify its location.
- 7. Click Next to go to:
  - [for a full PowerDesigner Portal server install] The database parameters page 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.

Sybase PowerDesigner Portal	16.0				×
S	ybase <sup>®</sup> P	owerDesign	er Po	ortal	16.0
	Specify the databas than Sybase SQL Ar	e parameters for your repository. If your ywhere or ASE, you must specify an a	r repository is appropriate J[	stored in a DBI )BC driver jar fi	MS other le.
	Database type:	Sybase SQL Anywhere			•
_	JDBC driver class:	com.sybase.jdbc3.jdbc.SybDriver			
	JDBC driver jar:	jconn3.jar		Bī	owse
	Host:	localhost		Port: 263	38
	Database name:				
•	User:	dba	Password:		
		Use Windows Authentication			
					Test
SYBASE" M	SAP Company	< Back			Cancel

• [for an application layer only install] The connection information page of the PowerDesigner Portal server lets you enter the appropriate parameters for connecting to the existing repository web server instance. You must enter at least one port:

Sybase PowerDesigner Portal 16.0	×
Sybase <sup>®</sup> PowerDesigner Portal	16.0
Specify the connection information of the PowerDesigner Portal Server.	
Remote PowerDesigner Portal Server name	
Remote PowerDesigner Portal Server HTTP port	
Remote PowerDesigner Portal Server HTTPS port	
	Cancel

- 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.

The install begins. A progress box is displayed and Setup copies files to the destination directory. When the setup is complete, one of the following pages appears depending on your selection on the web server page:

- [PowerDesigner Portal server] The completion page opens with two check boxes selected by default to let you:
  - Start the PowerDesigner Portal Server service
  - Open the PowerDesigner Portal Web page
- [web application layer] The completion page opens with a check box selected by default to let you open the service configuration page and enter its account name and password. Then you will have to start the service.

10. Click Finish to exit the wizard.

#### Accessing the PowerDesigner Portal Web Site

You can start and stop the PowerDesigner Portal server and the associated service by navigating to the server from your Start menu.

By default, these commands appear as sub-items of **Programs > Sybase > PowerDesigner Portal**, and selecting the appropriate sub-item:

- Start the PowerDesigner Portal Server
- Start the PowerDesigner Portal Server Service
- Stop the PowerDesigner Portal Server
- Stop the PowerDesigner Portal Server Service

When the server is running (whether as a service or not), navigate to the following address:

#### http://server-name:port-number/cmr

Where *server-name* is the name of the machine on which you have installed the PowerDesigner Portal server, and *port-number* is the port specified during installation. Note that cmr is the name of the PowerDesigner Portal program and is a required part of the address.

The following screen will appear:

SIDASE	PowerDesigner F	Portal
Sign in to Sybase Por To sign in, select a co	verDesigner Portal. nnection profile, enter user	r name and password.
Connection profile:	LOCAL	
Show profile information	on <u>Advanced options</u>	
User name:		

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For information about using the PowerDesigner Portal, see *Core Features Guide > The PowerDesigner Interface > The PowerDesigner Portal.* 

#### **PowerDesigner Portal Security**

All passwords saved in the repository configuration files are encrypted and are decrypted at runtime. User passwords are encrypted when making connection to the repository.

The default keys used for the encryption and decryption process are saved in the following file:

install\_dir/keystore/common.keystore

For security purposes, we recommend that you generate your own key and keystore file. The keystore information is saved in the following file:

install\_dir/keystore/config/cmrcommon.xml

This file contains the following XML structure:

You can edit the following nodes:

- keyStoreFilePath Specifies the path to the keystore file. Default value: *install\_dit/* keystore/.
- keyStoreFileName Specifies the name of the keystore file.
- keyStoreAlias [required] Specifies the name of the alias of the key in the keystore.
- keyStorePassword [required] Specifies the password to read the keystore.

You can use the following command to generate a 512 byte key and keystore file:

```
JDK_HOME\bin\keytool -genkey -keyalg RSA -keysize 512 -alias
keyStoreAlias -keypass keyStorePassword -keystore keyStoreFilePath
\keyStoreFileName -storepass keyStorePassword
```

For example: to generate a new key using the default values specified in the cmrcommon.xml file:

```
JDK_HOME\bin\keytool -genkey -keyalg RSA -keysize 512 -alias
cmrenkey -keypass changeit -keystore install_dir\keystore
\common.keystore -storepass changeit
```

Note that all PowerDesigner Portal web application layer installations that need to connect to a PowerDesigner Portal Server must use the same keyStore file. We recommend that you update periodically the key in the keystore. If a new key is being used, make sure to change the passwords in *install\_dir*/keystore/config/repository.xml file to a plain password. PowerDesigner Portal will automatically encrypt any plain passwords in this file.

For example: the database access password.

```
<bean
class="com.sybase.cmr.infra.server.persistence.db.connection.DBCPCo
nnectionProvider"
        id="cmr.connection.provider">
            cparam name="databaseProfile" value="asa90.xml" />
            cparam name="dbtype" value="Sybase ASA 10.x" />
            cparam name="connectionURL"
```

```
value="jdbc:sybase:Tds:localhost:2638" />
<param name="jdbcDriverClass"
value="com.sybase.jdbc3.jdbc.SybDriver" />
<param name="dbhost" value="localhost" />
<param name="dbport" value="localhost" />
<param name="dbname" value=" />
<param name="dbname" value="localhost" />
<param name="user" value="dba" />
<param name="password" value="sql" />
<param name="initialPoolSize" value="1" />
<param name="minIdle" value="3" />
<param name="maxIdle" value="1" />
<param name="maxActive" value="10" />
<param name="maxActive" value="10" />
<param name="isolationLevel" value="1" />
</param name="isolationLevel" value="1" />
</param name="maxActive" value="10" />
</param name="maxActive" value="10" />
</param name="isolationLevel" value="1" />
</param name="isolationLevel" value="10" />
</param name="isolationLe
```

The mail server password:

```
<bean class="java.lang.Object" id="cmr.server.config.smtp">
        <param name="mail_notification_resume" value="true" />
        <param name="mail_notification_include_before_resume"
value="false"/>
        <param name="smtp_host" value="" />
        <param name="smtp_port" value="" />
        <param name="smtp_port" value="" />
        <param name="smtp_ssl" value="false" />
        <param name="smtp_auth" value="false" />
        <param name="smtp_auth" value="false" />
        <param name="smtp_auth" value="false" />
        <param name="smtp_auth" value="false" />
        <param name="smtp_auth_account" value="" />
        <param name="smtp_auth_password" value="" />
        <param name="smtp_password_authentication" value="false" />
```

#### Installing the PowerDesigner Portal Server on UNIX

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

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

1. On your UNIX server, install JDK 6.0 or higher, and set the JAVA\_HOME environment variable to its path. For example:

```
export JAVA_HOME=/usr/lib/jvm/java-6-sun
```

**2.** Install Tomcat 5.5 or 6.0 and set the CATALINA\_HOME environment variable to its path. For example:

```
export CATALINA_HOME=.../apache-tomcat-6.0.28
```

**3.** Create a new folder called CMR, and set the CMR\_HOME environment variable to its path. For example:

export CMR\_HOME=.../CMR

- **4.** Copy the contents of the CMR\_HOME directory on your Windows environment to the CMR\_HOME directory on the UNIX server.
- 5. Extract the appropriate license library for your flavor of UNIX from CMR\_HOME/ license/lib/sylapi 2.2.0.7.zip to CMR\_HOME/license/lib.
- 6. Copy the cmr.war file from the CATALINA\_HOME/webapps directory on your Windows environment to the CATALINA\_HOME/webapps directory on the UNIX server.
- 7. Unzip cmr.war and edit the file cmr.war/WEB-INF/cmrhome.xml to remove the content of the Path element, so that it reads <entry key="Path"></entry>. Rezip cmrhome.xml into a new cmr.war and deploy the new cmr.war.
- **8.** 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.
- 9. Run CATALINA\_HOME/bin/startup.sh.

#### **Multiple PowerDesigner Portal Instances on One Server**

We do not provide support for running multiple instances of the PowerDesigner Portal on a single physical server. However, it is possible to manually configure your installation to do so using this procedure.

1. Install the initial PowerDesigner Portal normally.

In this example, we will install the Portal to C:\Portal:

**2.** Create a second installation directory for the second instance of the Portal, and add a subdirectory to hold the second instance of Tomcat.

In this example, we will create a second installation directory at C:\Portal2

3. Install the second Tomcat or other server to C:\Portal2\Tomcat and specify a different listening port.

In this example, we will use port number 3030 for the first Tomcat and 9090 for the second instance

- 4. Copy C:\Portal\Tomcat\webapps\cmr.war to C:\Portal2\Tomcat \webapps\cmr.war. For the remainder of this procedure, the file must be unzipped, as it will be if Tomcat is running.
- 5. Copy the folders config, log, keystore, and license from C:\Portal to C: \Portal2.
- 6. Edit C:\Portal2\Tomcat\webapps\cmr\WEB-INF\cmrhome.xml to specify your new folder:

```
<entry key="Path">C:\Portal2</entry>
```

7. Clear C:\Portal2\Tomcat\work and restart Tomcat.

The URL for accessing the first PowerDesigner Portal is http://myserver:3030/ cmr/ and the URL for the second is http://myserver:9090/cmr/.

The new instance will initially point to the original database. You can change the database:

- By clicking the **Advanced options** link on the login page.
- By editing C:\Portal2\config\repository.xml

#### **Changing the Repository DBMS**

If you decide to change the DBMS on which the repository database is stored, then you must copy an appropriate JDBC driver to the PowerDesigner Portal 16\Tomcat \webapps\cmr\WEB-INF\lib directory to allow the PowerDesigner Portal to connect to the new database.

We recommend that you keep your original database running initially and that you change the parameters on the PowerDesigner Portal Server Settings page, and use the **Test Connection** button to confirm that you can connect to the new database.

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