SYBASE®

Installation Guide

PowerDesigner® 15.1

Windows

DOCUMENT ID: DC38092-01-1510-01
LAST REVISED: June 2009
Copyright © 2009 by Sybase, Inc. All rights reserved.
This publication pertains to Sybase software and to any subsequent release until otherwise indicated in new editions or technical notes. Information in this document is subject to change without notice. The software described herein is furnished under a license agreement, and it may be used or copied only in accordance with the terms of that agreement.
To order additional documents, U.S. and Canadian customers should call Customer Fulfillment at (800) 685-8225, fax (617) 229-9845.
Customers in other countries with a U.S. license agreement may contact Customer Fulfillment via the above fax number. All other international customers should contact their Sybase subsidiary or local distributor. Upgrades are provided only at regularly scheduled software release dates. No part of this publication may be reproduced, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of Sybase, Inc.
Sybase trademarks can be viewed at the Sybase trademarks page at *http://www.sybase.com/detail?id=1011207*. Sybase and the marks listed are trademarks of Sybase, Inc. A ® indicates registration in the United States of America.
Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.
Unicode and the Unicode Logo are registered trademarks of Unicode, Inc.
All other company and product names used herein may be trademarks or registered trademarks of their respective companies.
Use, duplication, or disclosure by the government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of DFARS 52.227-7013 for the DOD and as set forth in FAR 52.227-19(a)-(d) for civilian agencies.
Sybase, Inc., One Sybase Drive, Dublin, CA 94568

Contents

Installing PowerDesigner® 1

Installing PowerDesigner in Standalone Mode 1

Obtaining a license key file 9

Manual fonts installation 9

Uninstalling PowerDesigner and Installation Maintenance 10

Setting up a License Server 10

Installing a license server 11

Adding additional licenses with lmtools 14

Troubleshooting with lmutil 15

Generating licensing reports with SAMreport 15

Installing PowerDesigner in Administrative Mode 16

Creating the administrative install on the server 16

Installing client machines 16

Upgrading an administrative install 17

Installing PowerDesigner in Silent Mode 17

Uninstalling PowerDesigner in Silent mode 17

Installing the Repository 19

Setting up the repository database server 20

Troubleshooting the Repository Installed on ASE 21

Installing SQL Anywhere 21

Authenticating databases 22

Creating a database 22

Installing the SQL Anywhere client on client machines 23

Installing the Repository Proxy 23

Creating an ODBC system data source on the proxy server 24

Installing the repository proxy on the proxy server 24

Configuring the repository proxy 25

Installing the Repository Web Browser 26

Installing the repository web browser software 26

Accessing the repository web browser web site 33

Repository web browser security 34

Installing PowerDesigner®

This section explains the system requirements and various install options of PowerDesigner®.

PowerDesigner has the following minimum system requirements:

- Microsoft Windows XP, Microsoft Windows Server 2003, or Microsoft Windows Vista
- 1.5 GHz processor
- 1 GB RAM
- SVGA or higher-resolution graphics adapter and compatible color monitor (800x600)
- CD-ROM drive
- Up to 500MB for installation of all the core modules that make up the Studio Enterprise Edition.

You can choose among the following installation modes:

- *Standalone* mode - is the typical install scenario, where PowerDesigner is installed directly on each client machine (see *Installing PowerDesigner in Standalone Mode* on page 1).
- *Administrative* mode - installs PowerDesigner for use from a network machine (see *Installing PowerDesigner in Administrative Mode* on page 16).
- *Silent* mode – allows you to deploy PowerDesigner on a large number of machines, using exactly the same setup options (see *Installing PowerDesigner in Silent Mode* on page 17).

Depending on which version of PowerDesigner you have purchased, you will be able to install one or more of the following modules:

- Projects and Frameworks
- Requirements Model (RQM)
- Enterprise Architecture Model (EAM)
- Business Process Model (BPM)
- Conceptual Data Model (CDM)
- Logical Data Model (LDM)
- Physical Data Model (PDM)
- Information Liquidity Model (ILM)
- Object-Oriented Model (OOM)
- XML Model (XSM)
- Repository
- Impact Analysis (IAM)
- Free Model (provided with all PowerDesigner configurations)
- Reports (provided with all PowerDesigner configurations)

In addition to the standalone version, you can also install PowerDesigner plug-ins for use in the Eclipse and Visual Studio IDEs.

Installing PowerDesigner in Standalone Mode

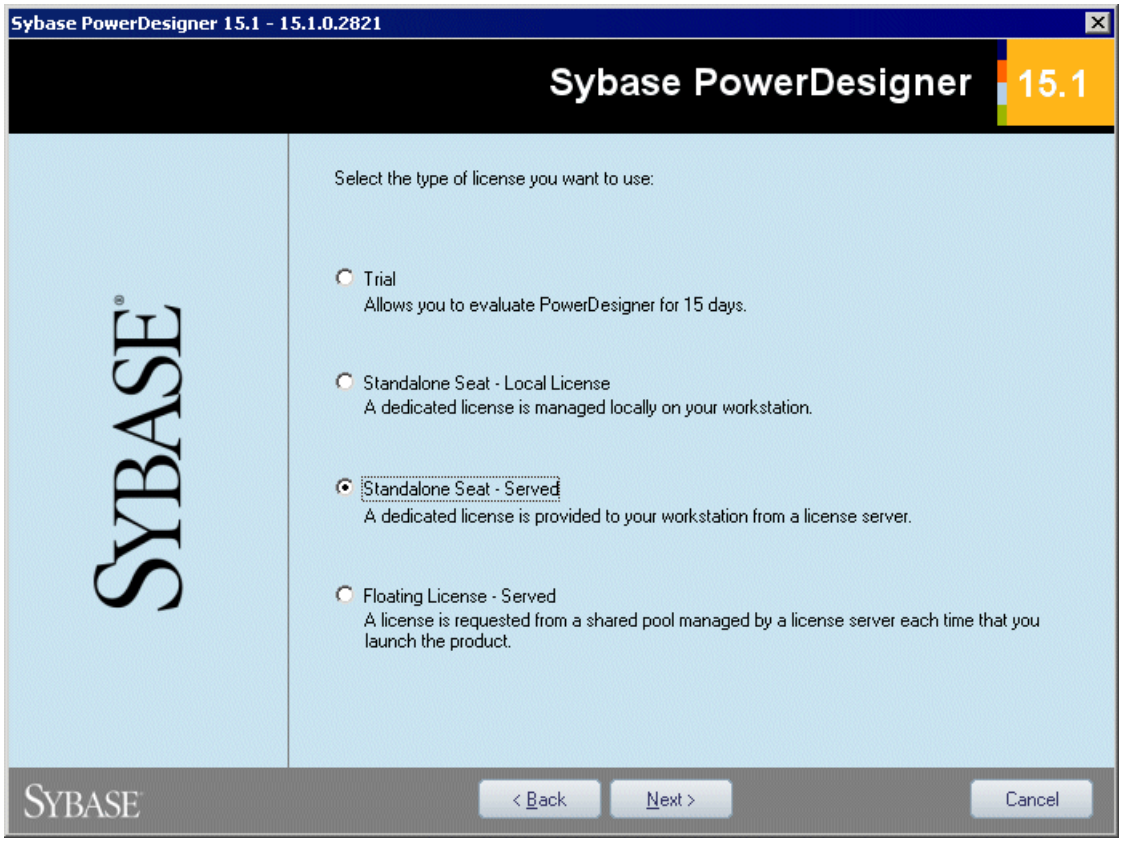
Standalone mode is the standard method for installing PowerDesigner on one or more individual workstations.

For mass installations and network installation, see *Installing PowerDesigner in Silent Mode* on page 17 and *Installing PowerDesigner in Administrative Mode* on page 16.

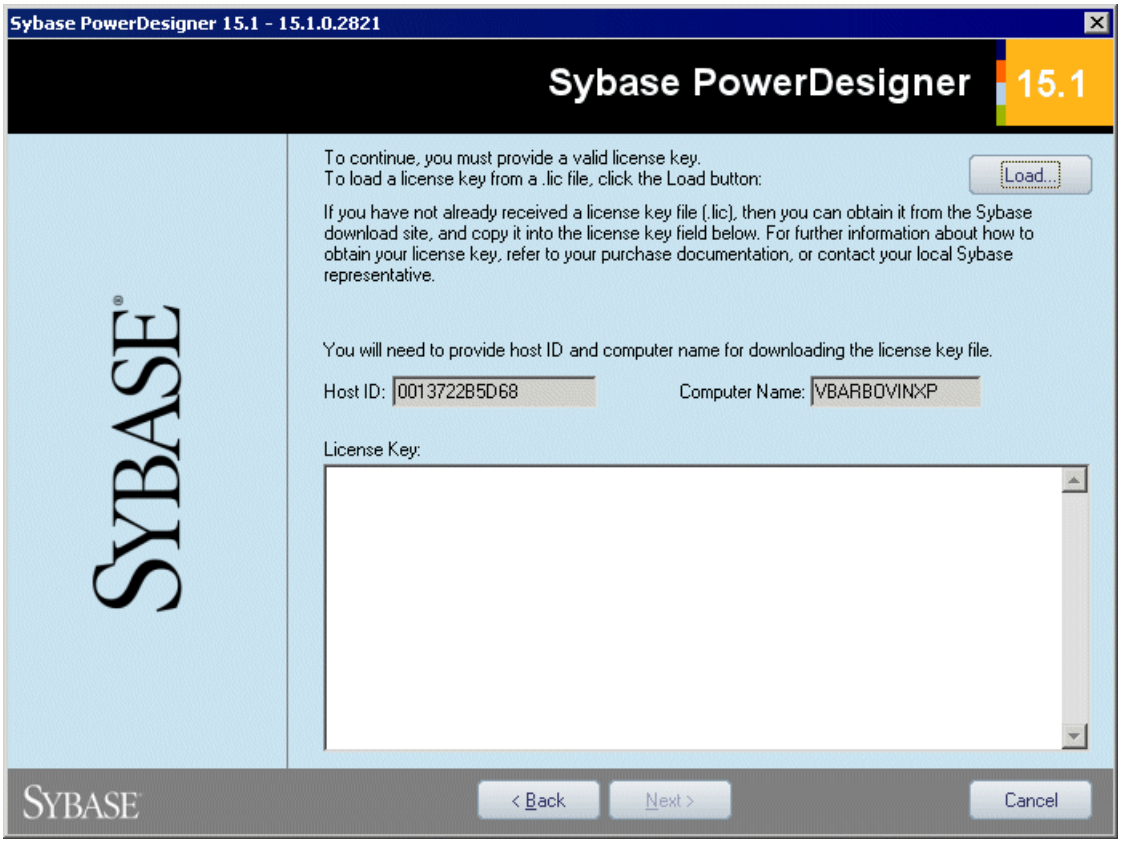
Note: Non-Administrator users may receive a warning message during installation as setup requires write access on certain directories and on the registry that they may not have. Setup can go on despite this message.

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

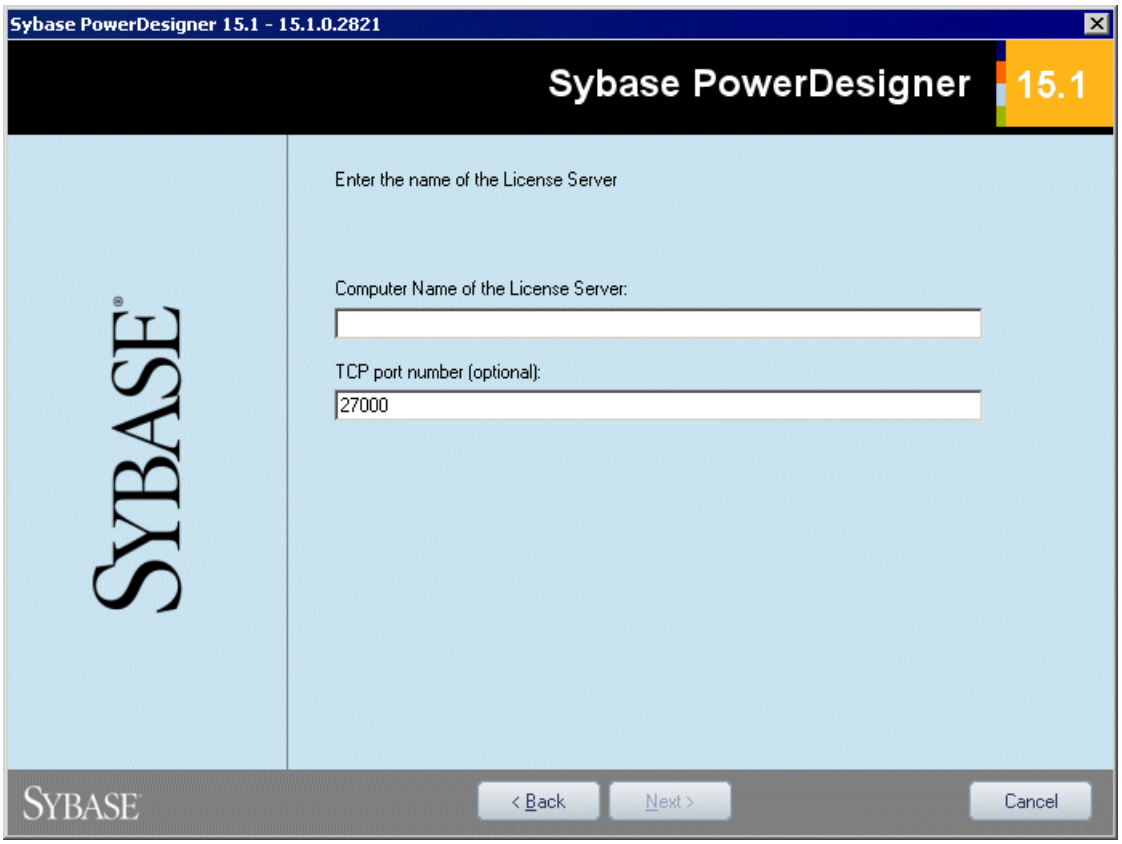
   If setup does not automatically start, then double-click the SETUP.EXE file in the setup directory of the CD-ROM.
2. Click the **Install PowerDesigner 15.1** button to open the welcome page, and then click **Next** to go to the license selection page:



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 9).



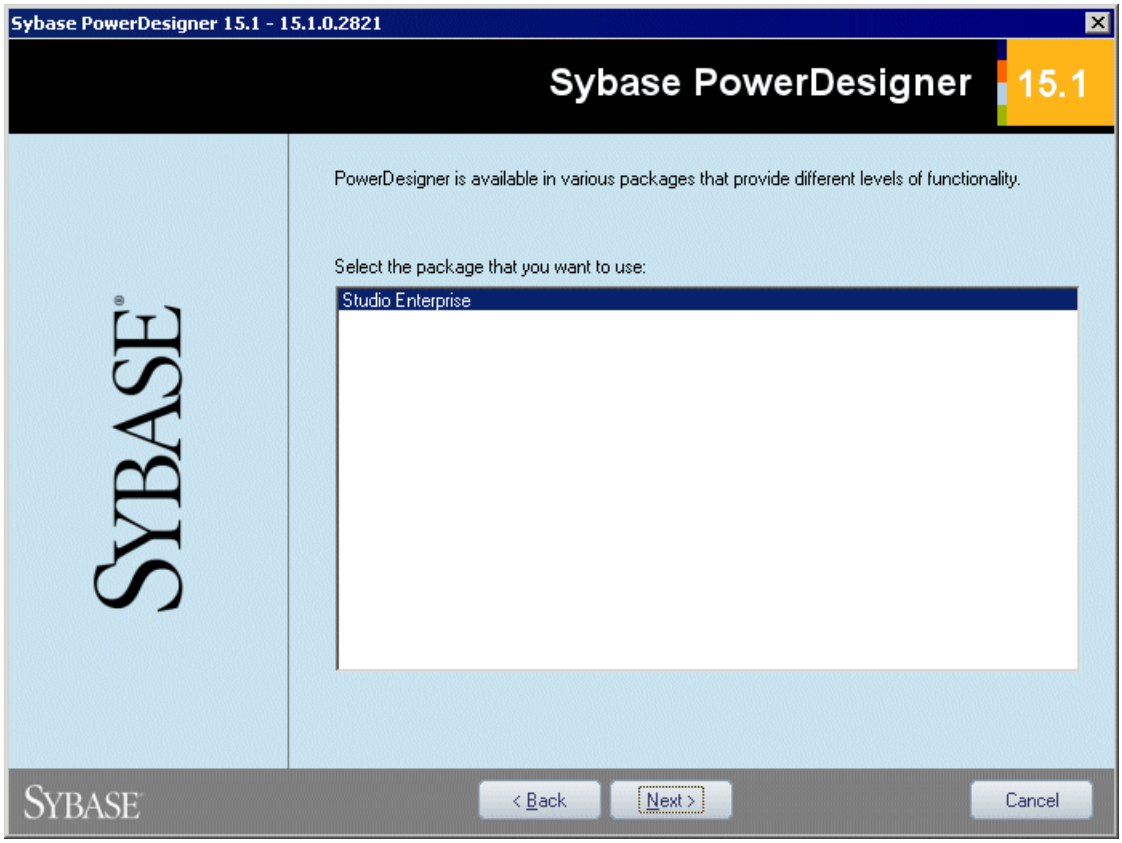
- *Served standalone license* – is provided by one or more SySAM license servers, and is locked to a particular machine. Click **Next** to go to the license server page, where you must enter the name of your license server.



- *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 the Getting Started with PowerDesigner chapter in the *Core Features Guide*.

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:

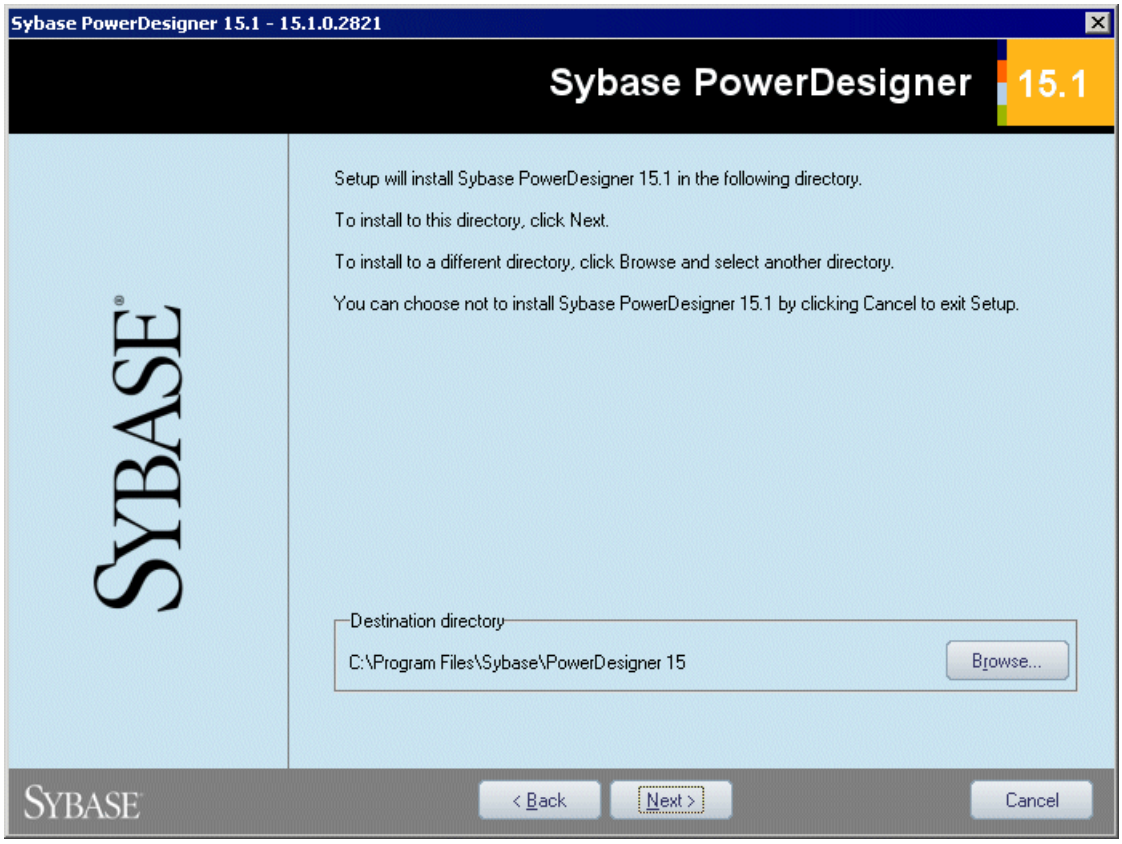


5. Click **Next** to go to the license agreement page. Select the location where you are installing the software, read the License Agreement, and then click the **I Agree** radio button to accept the terms of the agreement. If you click **I Do Not Agree**, you cannot proceed with the Setup program and you have to cancel install.

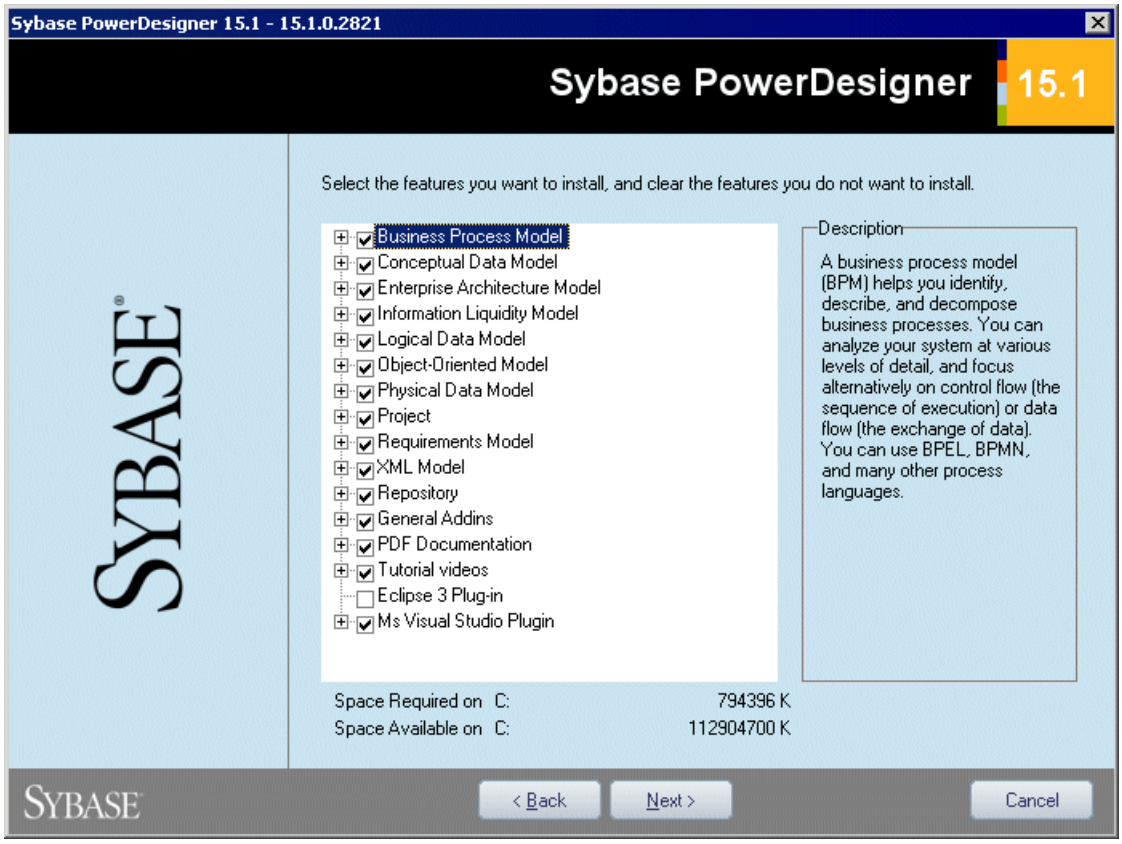
   Note: You can print the License Agreement from the Setup\Licenses directory on the product CD.

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.

   For major versions, this directory is different from the directories for previous major versions of PowerDesigner. 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 by selecting or clearing the appropriate check box:



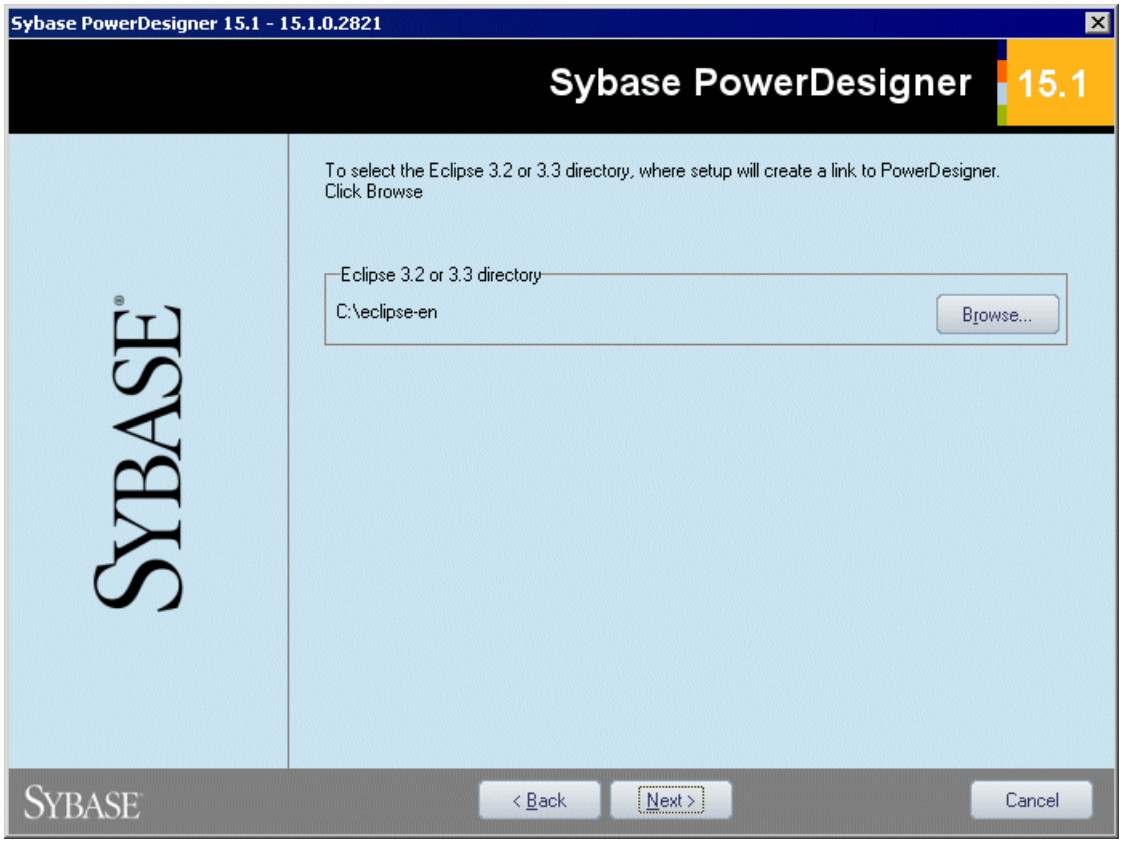
Note:

- When modifying an install, if you deselect a check box, the feature will be removed (see *Uninstalling PowerDesigner and Installation Maintenance* on page 10).
- The PowerDesigner plugin for Eclipse is available for Eclipse v3.1 to v3.4.
- The PowerDesigner plugin for Microsoft Visual Studio and Team Foundation is available for Visual Studio 2005 to 2008.
- 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 to add or remove products or features and click **Next.**

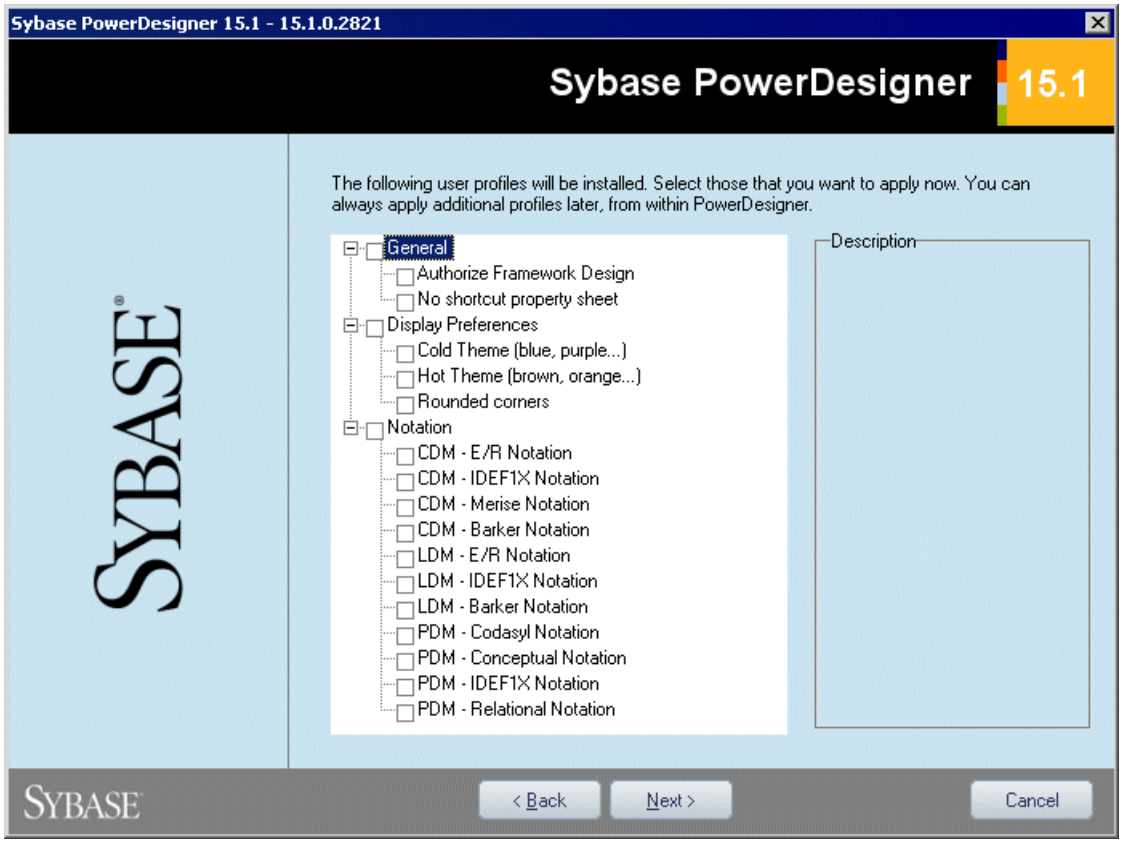
8. If you selected the Eclipse 3 plug-in in the list of components, the Eclipse directory selection page is displayed. Click the **Browse** button to specify a directory containing a valid Eclipse installation.

   Note: If you had manually installed the Eclipse plug-in in PowerDesigner version 10 or 11 and want to upgrade to version 15.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.



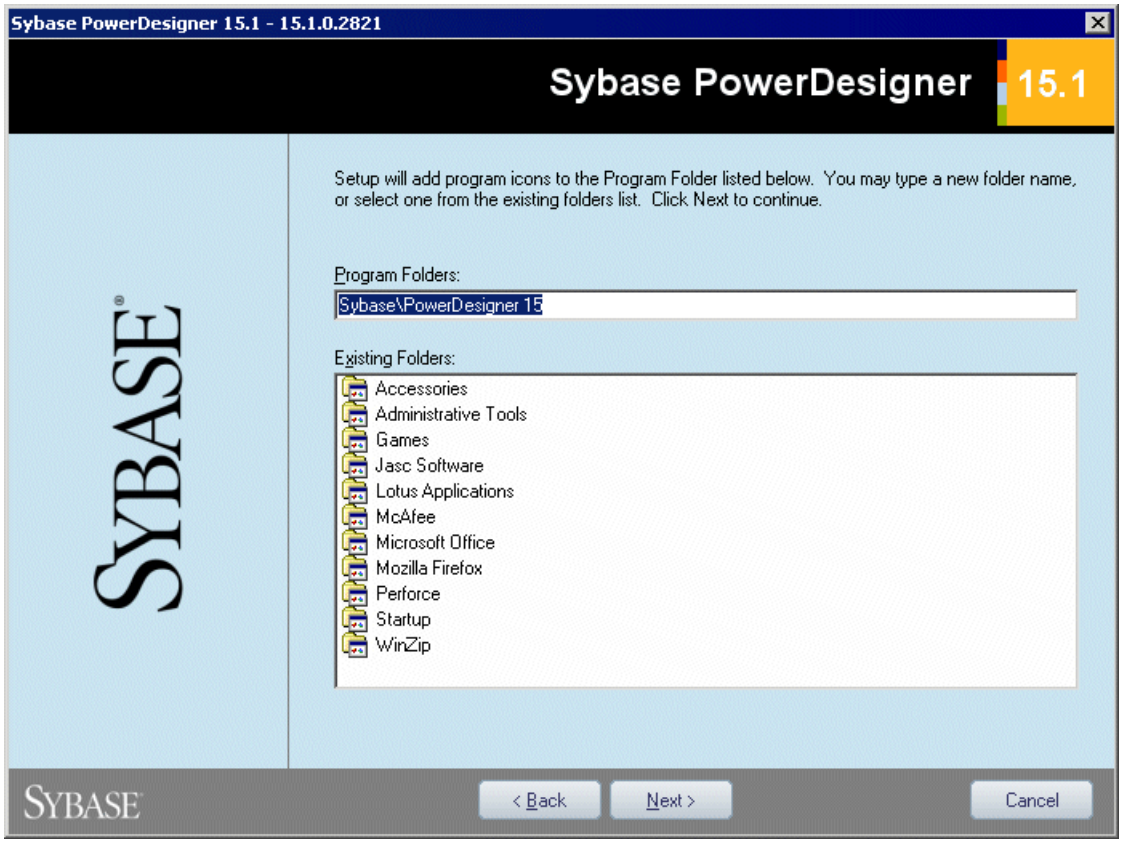
9. Click **Next** to go to the user profiles page. Select the user profiles that you want to apply to your installation. All the profiles will be installed and you can change or apply new profiles at any time.

   Note that 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:

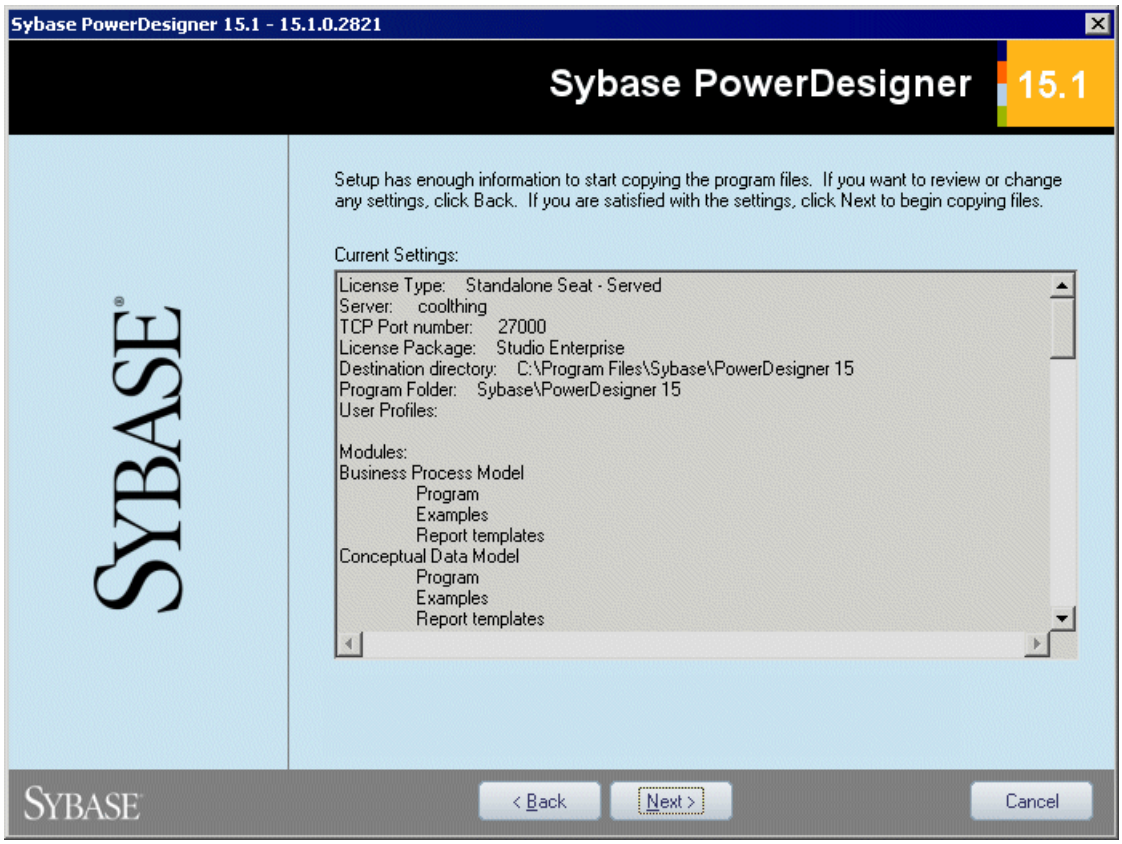


For more information about user profiles, including how to make your own profiles available to the installer, see "User Profiles" in the Customizing Your Modeling Environment chapter of the *Core Features Guide*.

10. Click **Next** to go to the program folders page. You can select 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.



12. Click **Next** to begin the install. Setup begins copying files to the destination directory.

13. Wait for the setup complete page to appear and click **Finish** to exit the wizard.

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

    Note: The Readme.html file contains important release information. You can open it using a text editor from the /PowerDesigner directory by default.

Obtaining a license key file

You must have a *license key file* to install PowerDesigner. License files can be downloaded on the Sybase 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

Manual fonts installation

If setup fails to define default fonts, you can do it manually. You should perform the following modifications:

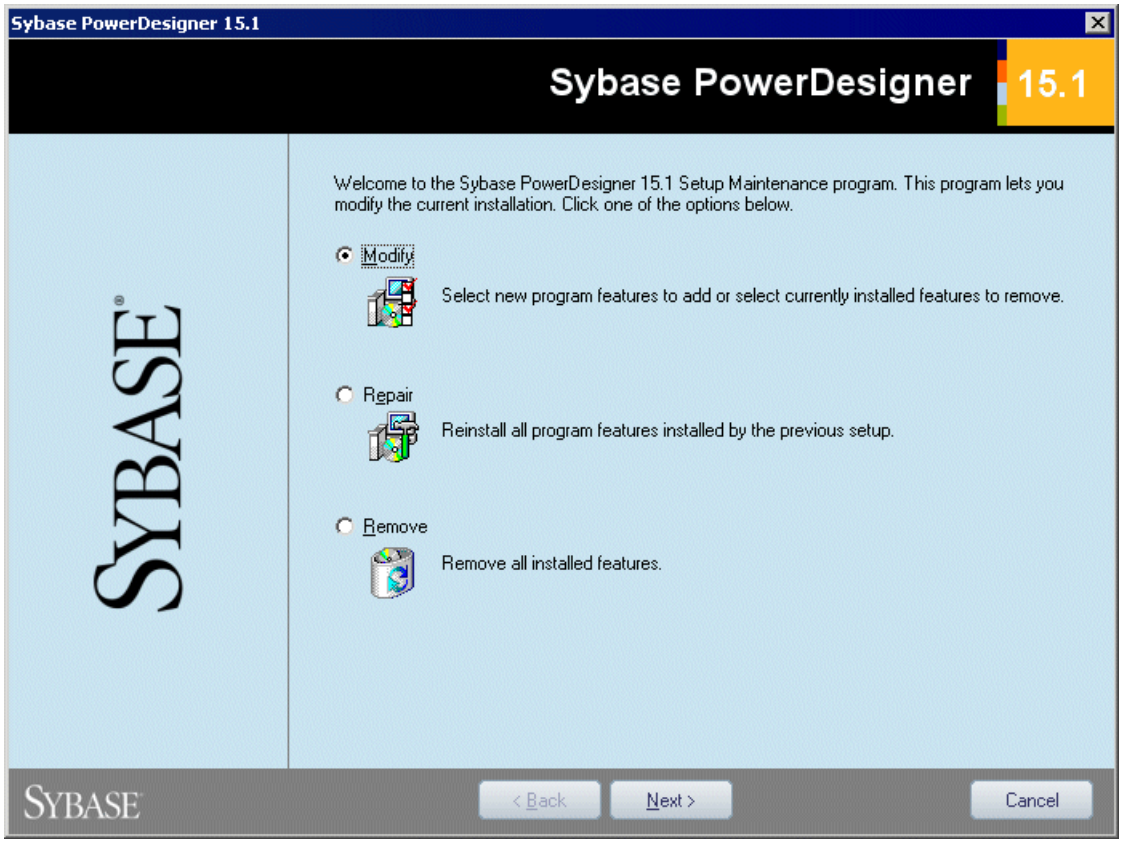
1. Select the Fonts page in the General Options dialog box and define fonts for UI, Code and RTF Editor.
2. Create a new report, select **Report** > **Change Font** and define new fonts.
3. Verify that the following registry key does not exist: HKEY_CURRENT_USER\Software\Sybase\PowerDesigner 15\DisplayPreferences\Font 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 15\DisplayPreferences\Font Name.

Uninstalling PowerDesigner and Installation Maintenance

After installing PowerDesigner on your machine, you access installation maintenance when you select **Control Panel > Add/Remove Programs** or when you restart installation.

The maintenance dialog box does not let you modify the type of license installed on your machine, you can only use it to add or remove components in the current PowerDesigner installation.



This mode allows you to perform the following operations:

- *Modify* - the current installation in order to remove or add program features on your current install. Select or clear components in the components page.
- *Repair* - the current installation. This option allows you to reinstall the same PowerDesigner configuration as previously installed on your machine. You need to have the software CD or access to the network drive where installation files are copied to repair your current installation.
- *Remove* - the current installation and clean up your registry. You do not need the software CD or access to the network drive in this case.

  Note that user files are not removed.

Setting up a License Server

If you want to use a standalone served or a floating served license, you must have access to a license server. Licenses for all Sybase products can be managed by a SySAM license server, which is powered by Flexlm technology, and is available on the PowerDesigner CD-ROM.

Note: 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.

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.

Served licenses limitation

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.

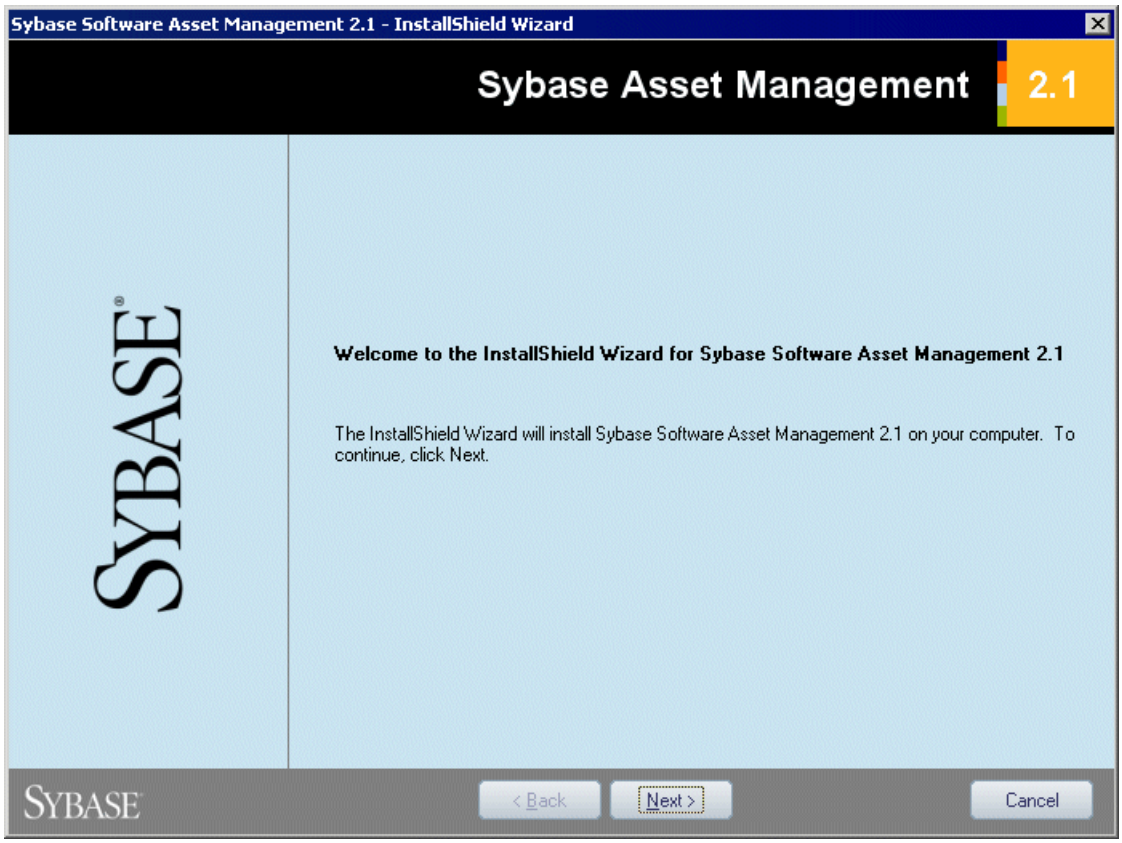
Installing a license server

If a SySAM license server is already available on your network, your PowerDesigner licenses can be assigned to it.

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.

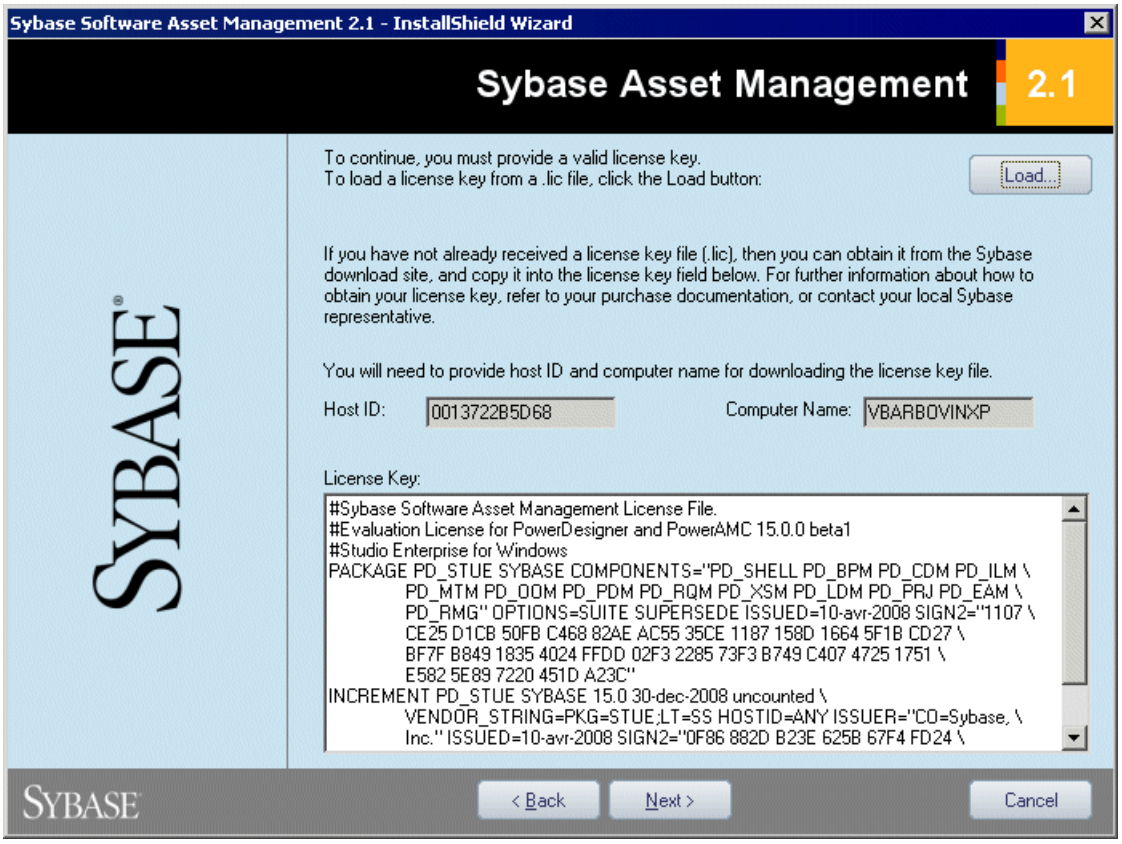
You need a license file to install the license server (see *Obtaining a license key file* on page 9).

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 for PowerDesigner wizard:



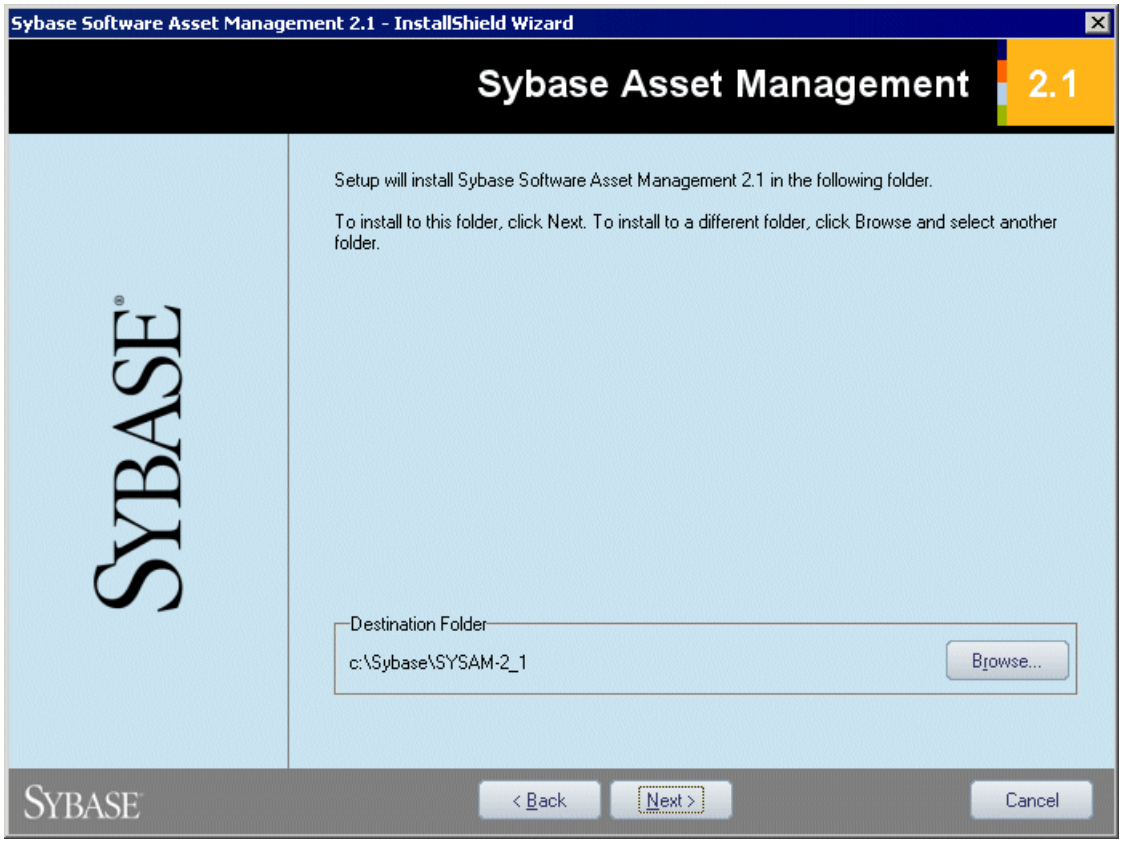
3. Click **Next** to display the license agreement page. Read the License Agreement and click the **I Agree radi**o button to accept the terms of the agreement. If you click **I Do Not Agree**, the installation will be cancelled.
4. Click **Next** to display the license file definition page and perform 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.



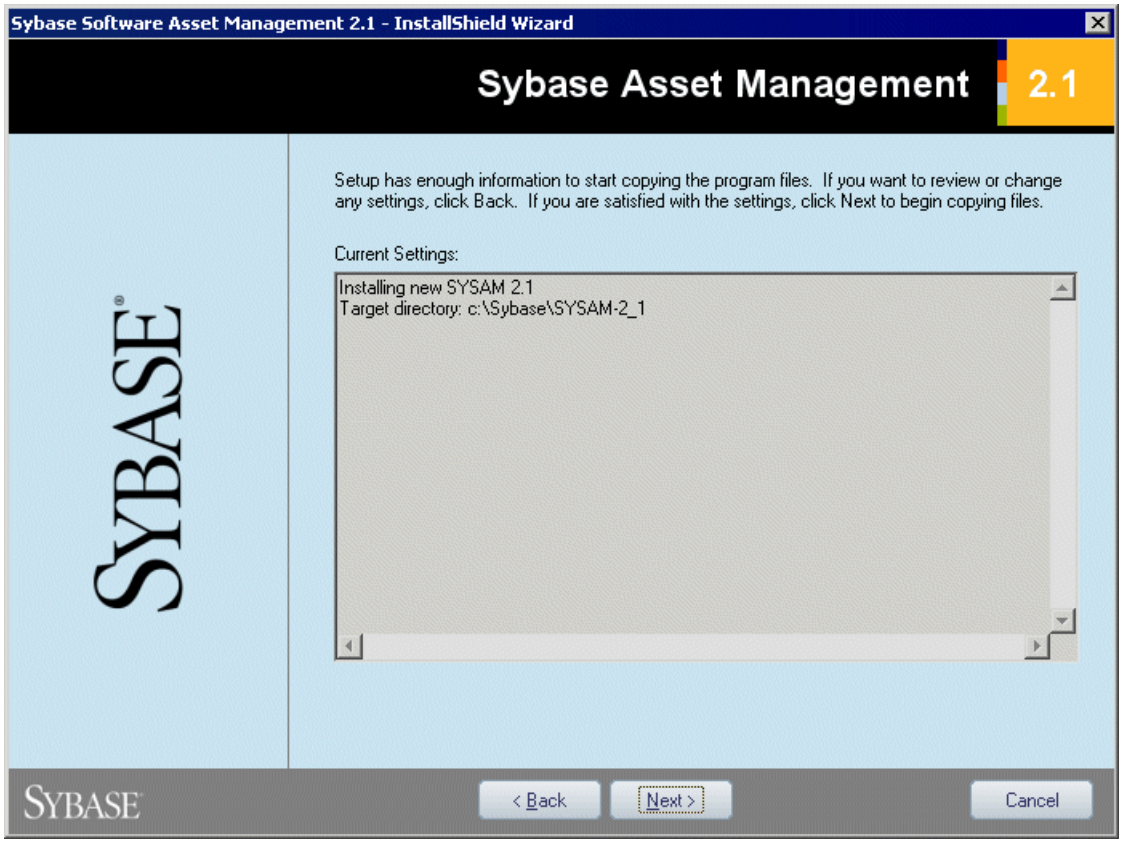
5. Click **Next**.

   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**.

   The start copying files page is displayed:

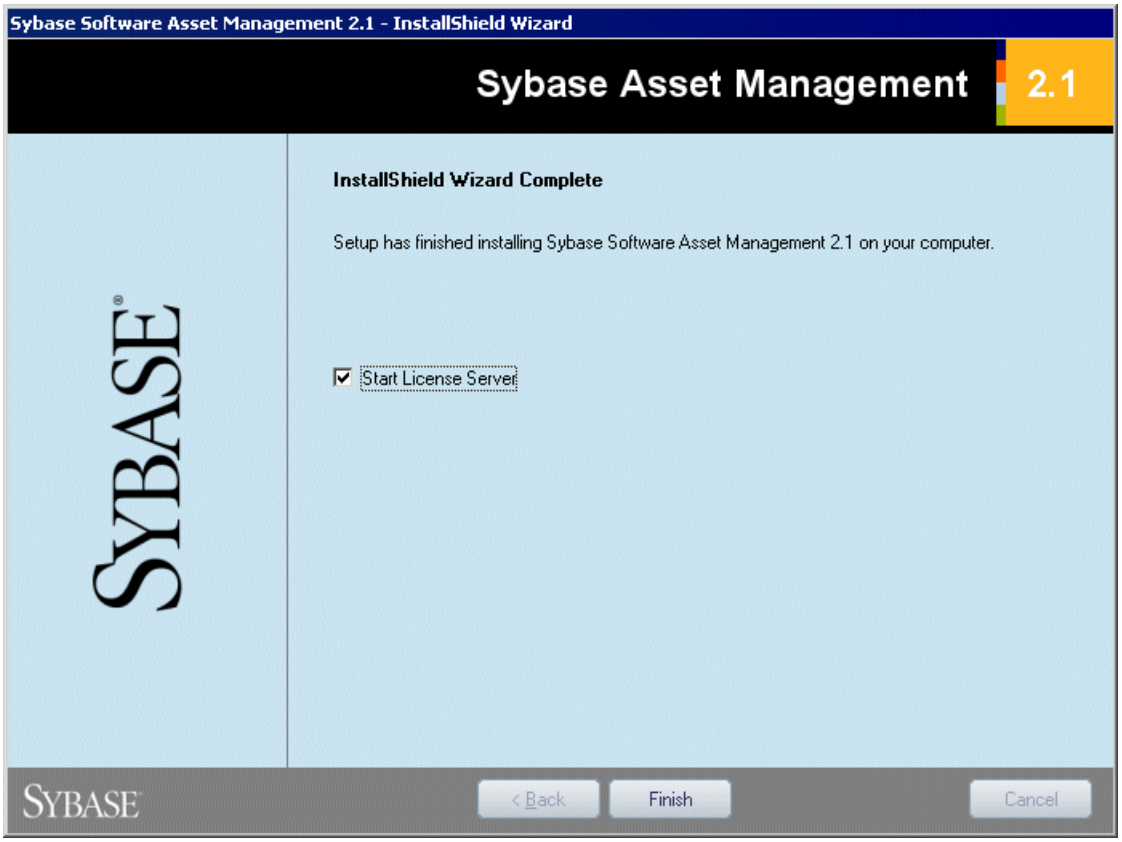


7. Click **Next** to accept the current settings and start copying files.

   The copy starts. A progress box is displayed and Setup copies files to the destination directory.

   The InstallShield Wizard Complete page is displayed.

   - If SySAM had to be installed, you can choose to start the license server as a service.



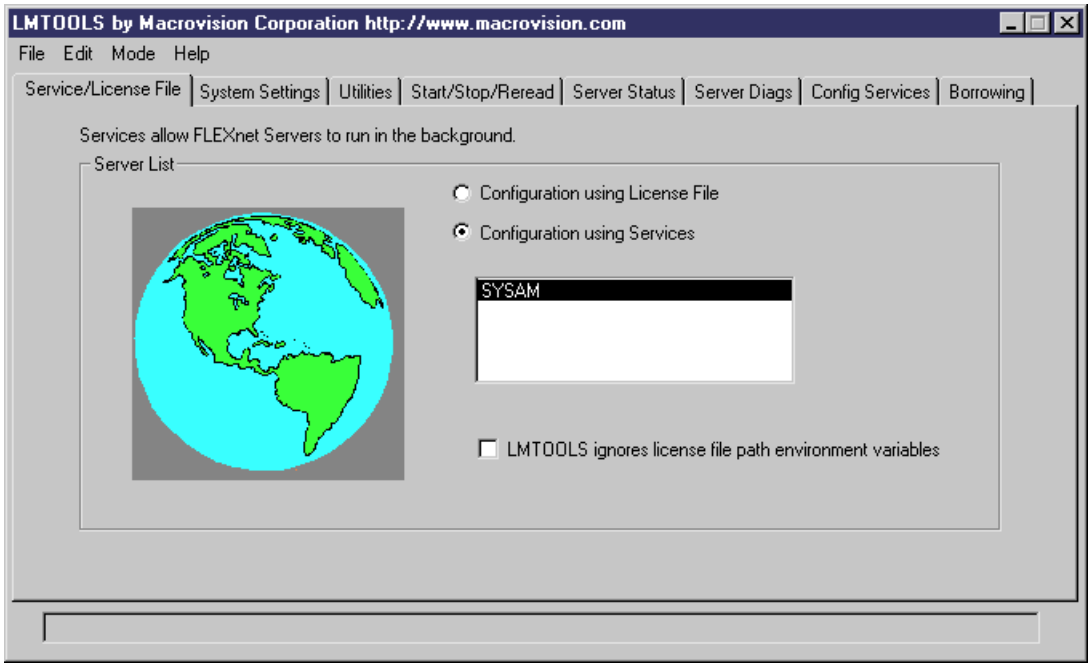
   - If the PowerDesigner licenses were assigned to an existing license server, you can choose to reread the licenses to refresh the server license file.

8. Click **Finish** to exit the wizard.

Adding additional licenses with lmtools

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\lmtools.exe** to open the LMTOOLS dialog.
2. On the Service/License File tab, select **SYSAM** in the list of servers:



3. Click the **Start/Stop/Reread** tab and click the **Reread License File** button to force the server to read again the file 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 lmutil

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):

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

Generating licensing reports with SAMreport

SAMreport is a report generator that helps you report the usage of licenses on the server. SAMreport produces license usage reports based on license usage activity recorded in the FLEXnet report logs and on selected criteria including product and feature name, user, date and time, display or host.

The SAMreport install program and the *Flexnet Licensing End User Guide* documentation are provided on the PowerDesigner CD under the \samreport folder.

Sybase.opt

To use SAMreport, make sure you create a file sybase.opt in the server license file folder. This file should contain a line for accessing the report log:

```
REPORTLOG [+] report_log_path
```

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.

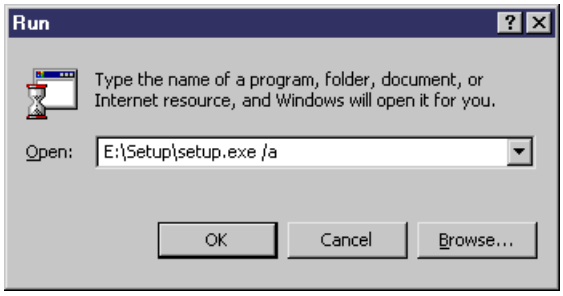
Creating the administrative install on the server

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**.

   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

If you want to pass the administrative install command to an upgrade package downloaded from the web, you have to use the following syntax:

```
<name of the executable file.exe> -a <argument>
pdupgrade.exe -a /a
```

Where -a is used to specify that command is targeted to the executable file within the downloaded package pdupgrade.exe.

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 file called ResponseResult contains a line ResultCode=X, which indicates whether the installation is successful. 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.

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 /f1"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 v15.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"
   ```

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. The repository can be created with the authenticated copy of the Sybase SQL Anywhere DBMS delivered with PowerDesigner or with one of the following DBMSs:

- Oracle 8 and higher
- IBM DB2 Common Server and DB2 for OS/390
- Sybase Adaptive Server Enterprise
- Sybase SQL Anywhere
- Informix 2000
- Microsoft SQL Server 2000 and higher

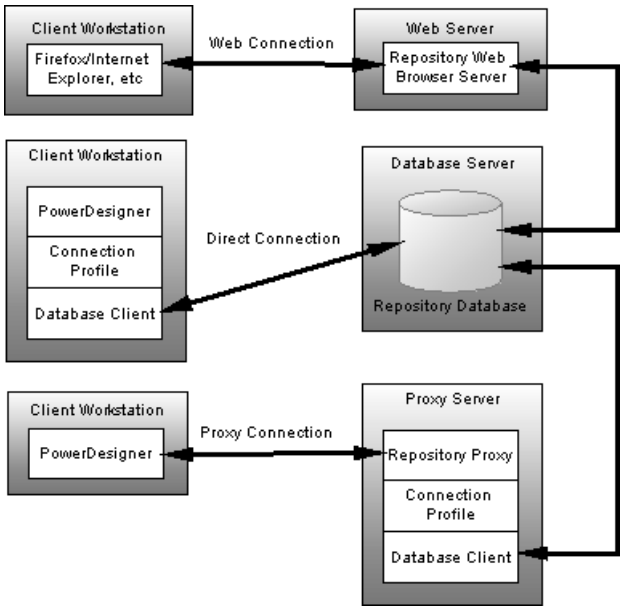
In addition, the following databases are supported via a native connection:

- Oracle 8 and higher
- Microsoft SQL Server 2000 and higher

The following repository components can be installed:

- *Database server* – [required] Select a server to host the repository database and create a database on it. The server need not necessarily be reserved exclusively for hosting the repository, but performance will be improved if this is the case. See *Setting up the repository database server* on page 20.
- *Repository proxy* – [optional] The proxy acts as a bridge between client machines and the repository database, and can provide considerable performance improvements (particularly over a WAN). See *Installing the Repository Proxy* on page 23.
- *Repository web browser* – [optional] The repository web browser allows users to connect to and browse the repository in their standard web browser. See *Installing the Repository Web Browser* on page 26.
- *Client machines* – Can connect either directly to the repository or via the proxy, from PowerDesigner, or from a web browser via the web browser server.

The following diagram shows the various ways of connecting to the repository:



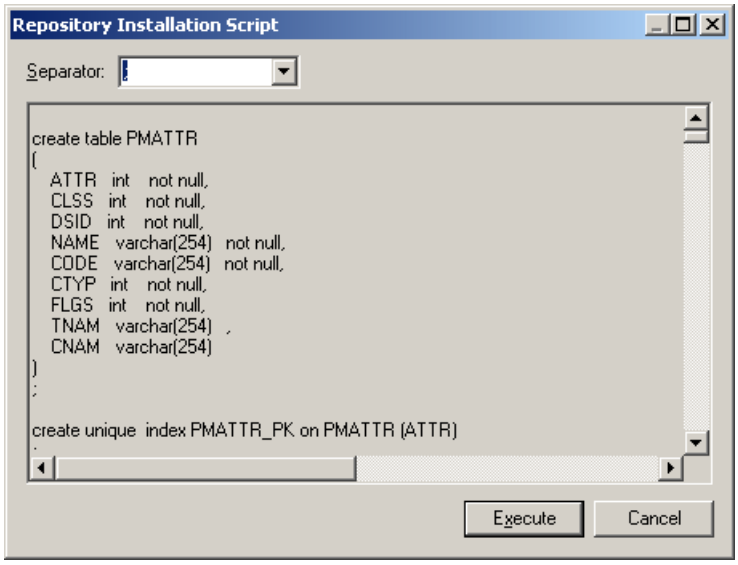
Setting up the repository database server

The repository administrator must set up the repository on a database server.

1. Choose a server on which to install the repository. The server must be accessible to all those who will need to work with the repository.
2. Install or obtain access to a DBMS suitable to store the repository tables. For this step, you have two options:
   - Install the authenticated version of Sybase SQL Anywhere 10 provided with PowerDesigner. For detailed instructions, see *Installing SQL Anywhere* on page 21.
   - Use your own DBMS
3. Create an empty database to host the repository, with an administrator user who has full rights on all the tables. For instructions on performing this step with SQL Anywhere, see *Installing SQL Anywhere* on page 21.
4. On a client machine, with PowerDesigner installed, create a direct repository definition to connect to the new database by selecting **Repository** > **Repository Definitions** .

   For detailed information about creating repository definitions, see the *Working with the Repository* book.
5. Enter an appropriate name to identify the repository, the user name ADMIN, and then press F4 to open the Select a Data Source window. Select the type of data source that you want to use to connect to the repository database. If it already exists, select it in the list; otherwise, click the Configure button and configure it as necessary.

   For detailed information about creating, configuring, and using connection profiles, see "Connecting to a Database" in the Models chapter of the *Core Features Guide*.
6. 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. Click Yes to continue.
7. The read-only Repository Installation Script window opens. Click Execute to run the script and create the repository tables:



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

Notes:

- By default, database tables are owned by the user who creates them. Each repository user should either use the same database user name and password to access the repository, or have an account that gives them full rights over all the tables
- Although you cannot edit the script in the Repository Installation Script dialog, you can, nonetheless, modify the statements (for example, to add physical options). To do this, you would need to copy the script to an external SQL editor, make the appropriate edits, and then connect 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.
- Rarely, repository installation may fail due to network problems, insufficient disk space, or permission problems. In this situation, you can choose whether to ignore the errors or abort the installation. We recommend that, if you are unsure, you abort the installation, and recommence.
- Repository models are stored as efficiently as possible, with only changed objects being re-saved. If a design team works on a 5-MB model for one year with, on average, eight check ins per week, there are around 400 versions in the repository. The size of the original baseline version will be around 10 MB. Each version will be about 5% of the total size of the model, so that total volume of versions is around 200 MB, and you will need around 210 MB of space in total.

Troubleshooting the Repository Installed on ASE

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

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.

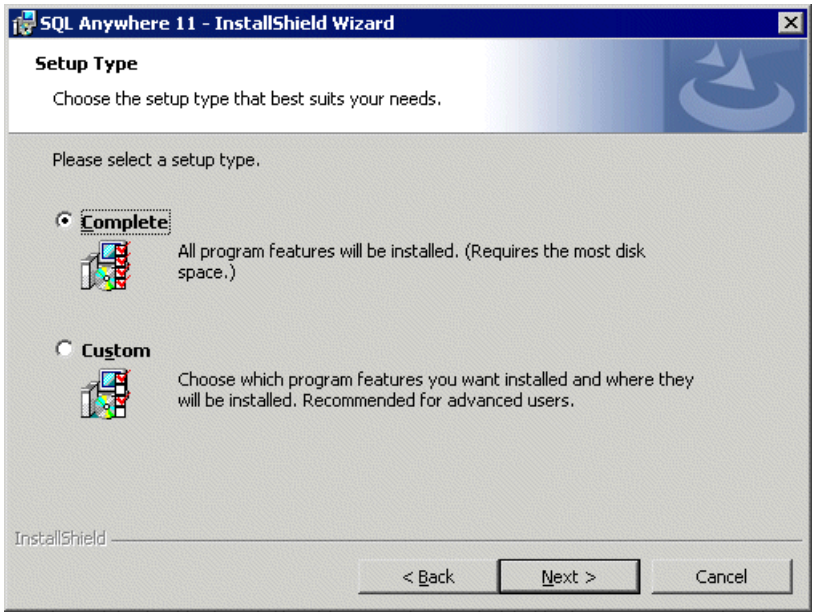
Truncated data on extraction

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 select the "Text size" field on the Advanced tab.

Installing 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 setup type page.
3. Choose the **Complete** setup type to install all program features in your default Program Files folder. The Custom setup type is recommended for advanced users. Click **Next** and then click **Install** to start the installation. A status bar is displayed showing progress.



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

For information about setting up a repository, see the Getting Started with the Repository chapter in *Working with the Repository*.

Authenticating databases

You must create a database to store the repository tables in the server. Only authenticated databases can be used with the authenticated version of SQL Anywhere supplied with PowerDesigner.

You can:

- Authenticate new databases – by copying the contents of the script `authdb.sql` delivered with the repository under \Tools, into the file `saopts.sql` under \Script in the SQL Anywhere directory, on the server machine. The authentication string included in this file will automatically authenticate any new database for use with the repository as soon as you create it.
- Authenticate existing databases - by executing the script `authdb.sql` delivered with the repository under \Tools.

1. Start Interactive SQL (dbisql.exe), and enter dba in the User ID and sql in the Password fields.
2. Enter the data source name in the ODBC Data Source Name box.
3. Select the Database tab and click the Browse button.
4. Double-click the existing database in the file selection window to display the file path in the Database File box, and click OK.

   The Interactive SQL window is displayed.
5. Open the script authdb.sql and execute it.
6. Close Interactive SQL and restart the server.

   Your database is now authenticated and you can use it with the repository.

Creating a database

The following procedure explains how to create a database for the repository on your repository server.

1. Navigate to the **SQL Anywhere 11** program group and open **Sybase Central** or run the **SCJVIEW.EXE** executable in the Sybase Central directory.

2. In the Sybase Central window right-hand Plug-ins tab, double-click the **SQL Anywhere 11** item to access its tools and features.
3. Click the **Tools** button, and select **Create Database** from the list to open the Create Database Wizard.
4. 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.
5. Click **Next** to go to the Specify the Transaction Log File page.
6. 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**.
7. Continue clicking **Next** and accepting the default settings until you arrive at the Specify DBA User and Password page.
8. 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 (being sure to remember them for later), and then click **Next** to go to the Connect to the Database page.
9. Click **Finish** to create the database. A message box displays the progress and informs you when the creation is complete.

Installing the SQL Anywhere client on client machines

If you host your repository database in SQL Anywhere and plan to have client machines connect to it directly (and not via the repository proxy) you must intall the SQL Anywhere client on each client machine.

You can install the SQL Anywhere client using the same installer as for the server (see *Installing SQL Anywhere* on page 21). Deselect all components except Network Database Client (inside SQL Anywhere).

For information about connecting to a repository, see the Getting Started with the Repository chapter in *Working with the Repository*.

Installing the Repository Proxy

The Repository is a client-server application, in which the Client issues SQL statements via an ODBC connection to be executed on the database server. While such a system provides acceptable performance on a Local Area Network (LAN), it may be less effective on a Wide Area Network (WAN).

SQL statements require several network packets, each of which must go back and forth before the next one is issued. While a LAN connection typically has a ping time of less than 10ms; a WAN connection (passing through the Internet via a Virtual Private Network (VPN) connection) has a typical ping of over 100ms.

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. With client request pooling and sophisticated caching, the proxy can considerably improve performance, particularly if clients will be connecting over a WAN.

Warning! Ideally, if your repository server is a fast, modern machine, you should install the proxy directly on the same machine. Otherwise, you should install the proxy on another server on the same LAN.

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 24).
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 24).
4. Launch the configuration tool to configure the proxy (see *Configuring the repository proxy* on page 25).

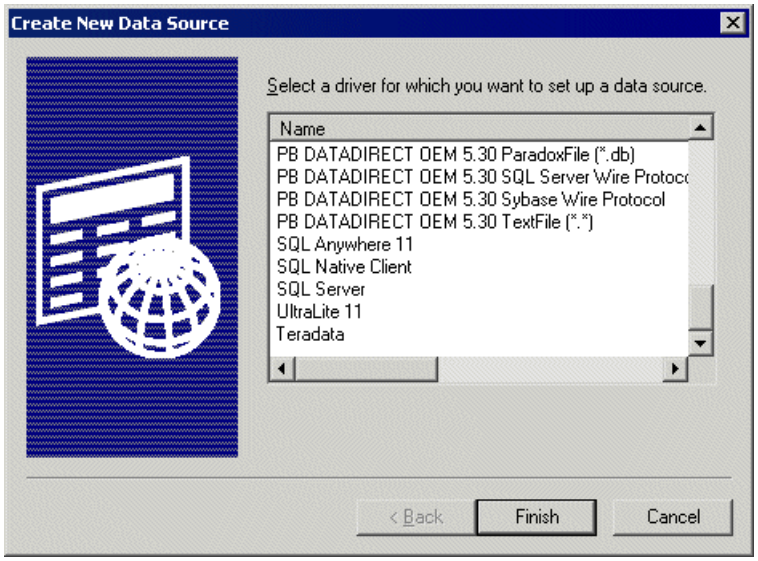
The repository proxy is now ready for use.

After installation is complete, you can set up client machines to connect to the repository via the proxy. See the Getting Started with the Repository chapter in *Working with the Repository*.

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.



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.

We recommend that you install the repository proxy on the same computer as the database or at least on the same LAN.

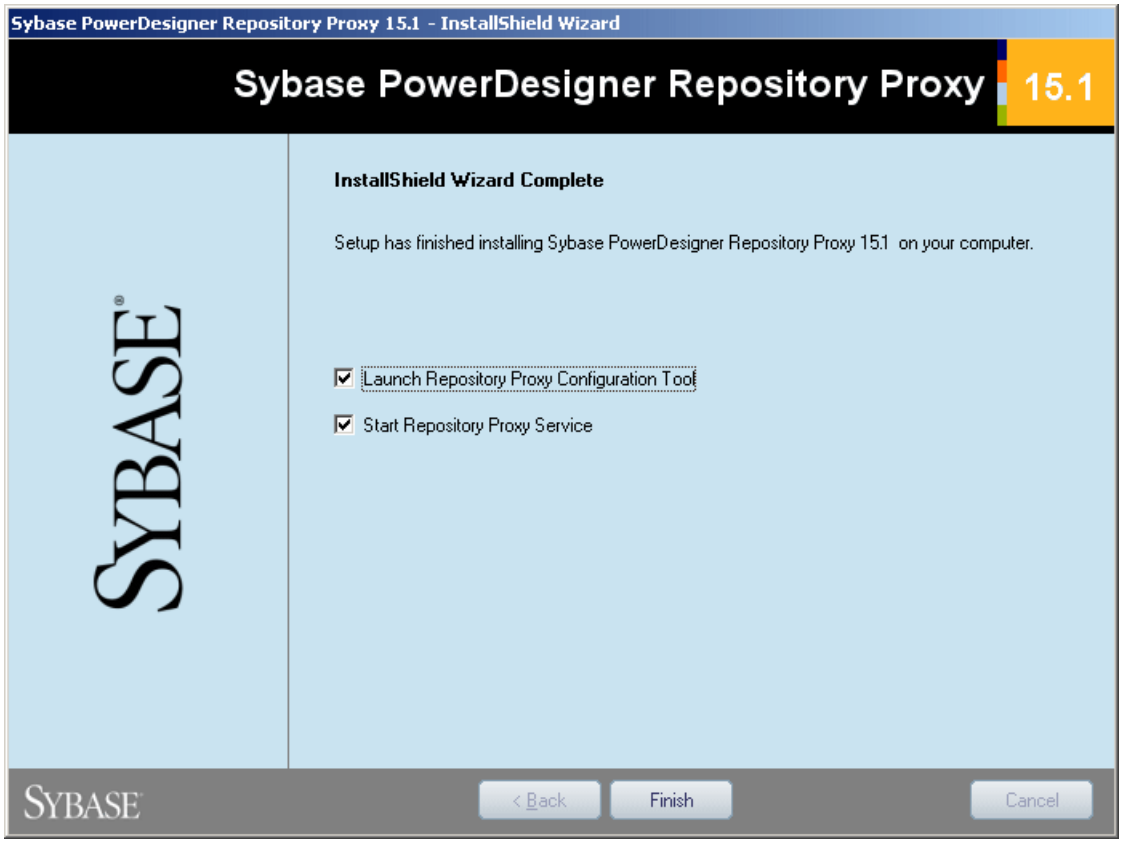
1. Insert the PowerDesigner software CD-ROM in the drive, and then click the **Install PowerDesigner Repository Proxy** button.

   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, the following page appears 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 box opens to let you configure the repository proxy (see *Configuring the repository proxy* on page 25).

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.

The Repository Proxy Configuration dialog box is divided into two main areas:

- The Instances group box (on the left part), in which you enter all the parameters to create a new instance. You can also delete instances.
- All other group boxes (on the right part), such as Connection, Log file or Cache allow you to parameter the Proxy itself. These group boxes are generally defined once for all instances

The following parameters are available:

Parameter	Description
Instances	An instance gathers the connection information between the proxy and the database server. Click the New 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.
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 the Getting Started with the Repository chapter in *Working with the Repository*.

Installing the Repository Web Browser

The Repository Web Browser 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. 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 repository web server database access layer can only communicate with a single repository database, a single web application instance can communicate with multiple repository web servers and provide a single point of access for users browsing multiple repositories.

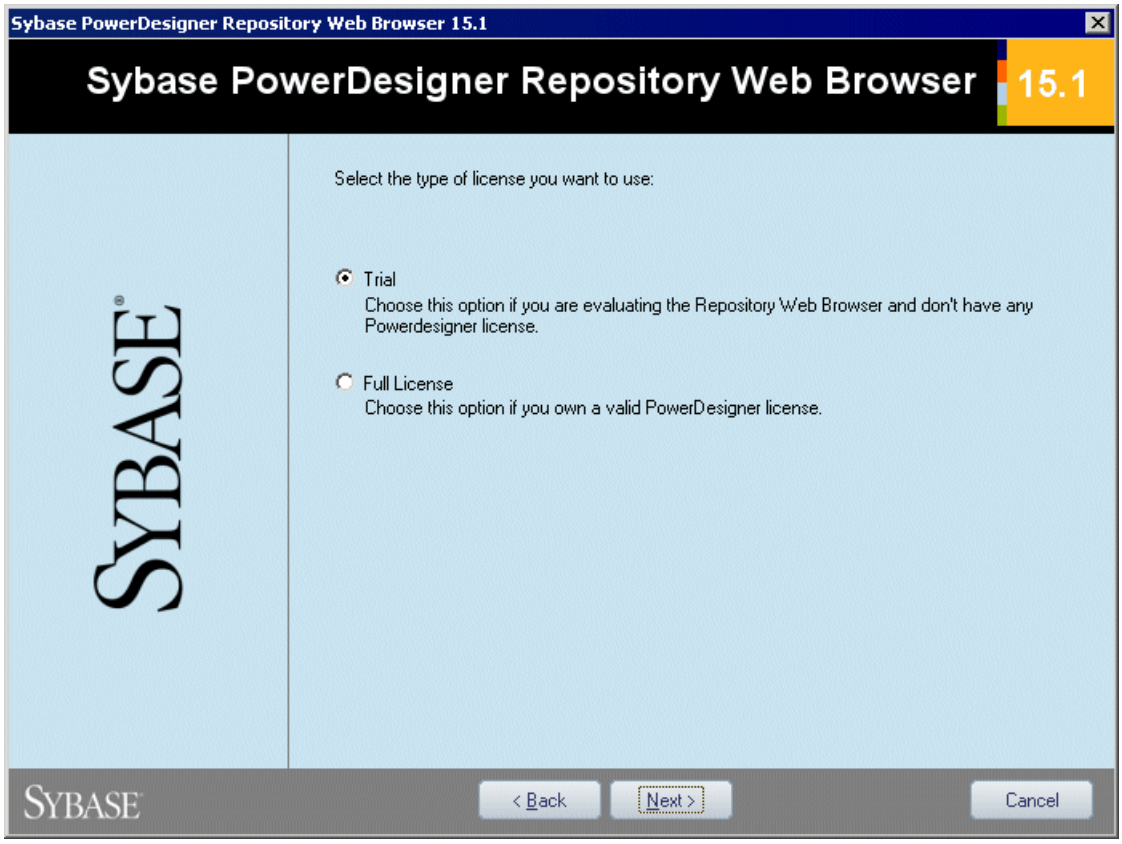
For information about using the Repository Web Browser, see the Browsing the Repository via the Web chapter in the *Working with the Repository* book.

Installing the repository web browser software

The PowerDesigner installation CD contains everything you need to install the Repository Web Browser. Before beginning the installation, you should already have created your repository database and have the DBMS user name and password to hand.

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

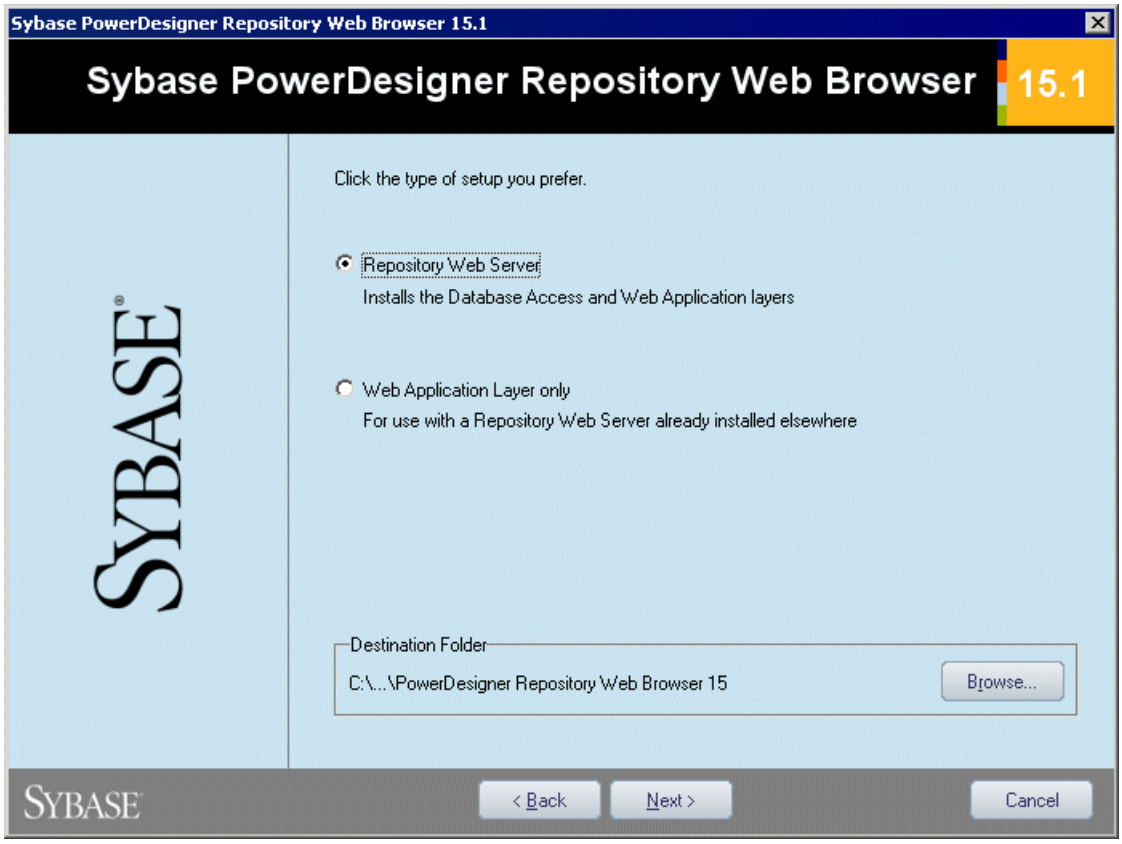
   The Repository Web Browser installation program opens to the welcome page.
2. Click **Next** to go to the license page, and select the type of license that you want to use.



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.

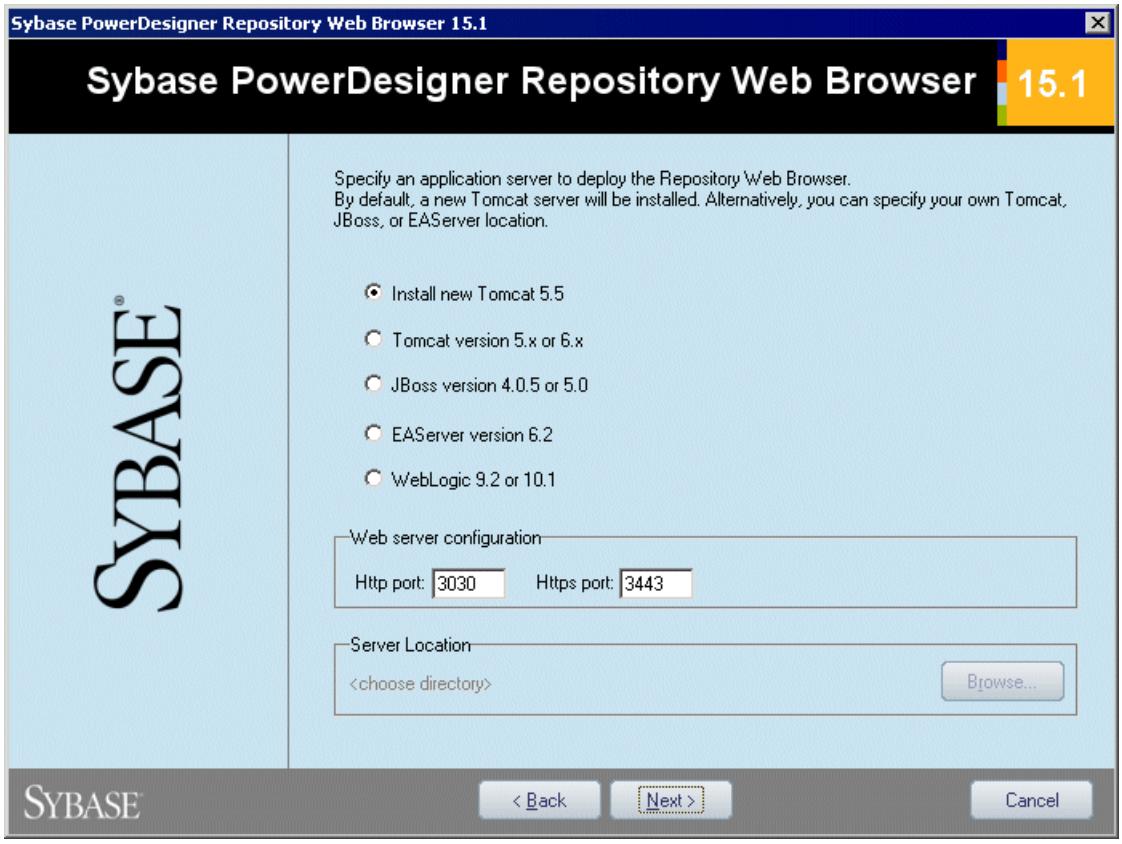
   Note: You can print the License Agreement from the Setup\Licenses directory on the product CD.

4. Click **Next** to go to the web server page. If you have already installed one or more repository web 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 repository web server to which it will connect. Setup suggests a location in which to install the Web Browser, which you can change by clicking the **Browse** button.

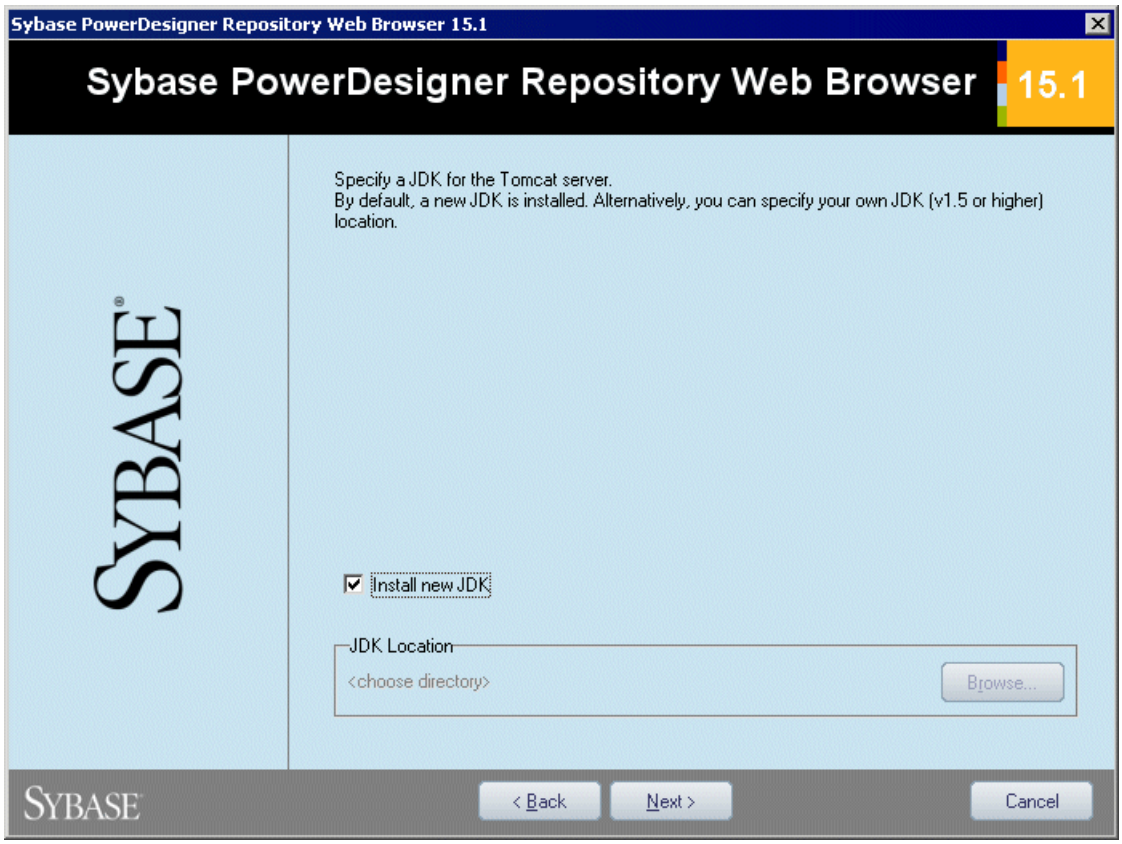


5. Click **Next** to go to the application server page. By default, the installer will install a new Tomcat Server. If you want to use one of the other supported servers, select it and specify its location. Default sever ports may be provided that you must verify. At least one port is required in order 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 Repository Web Server installation directory) from your WebLogic Administrative Console once the setup has completed.

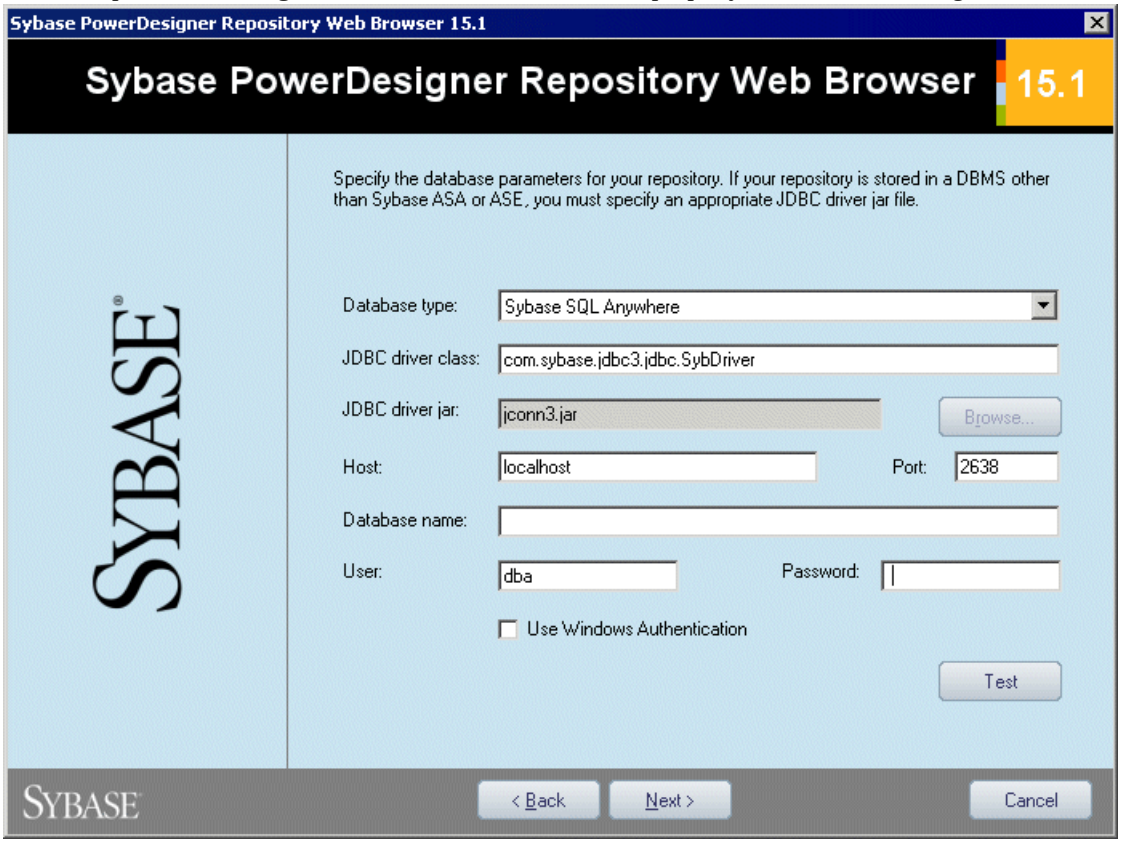


6. Click **Next** to go to the JDK page. By default, a new JDK is installed. If you want to use an existing JDK, deselect the check box and specify its location:

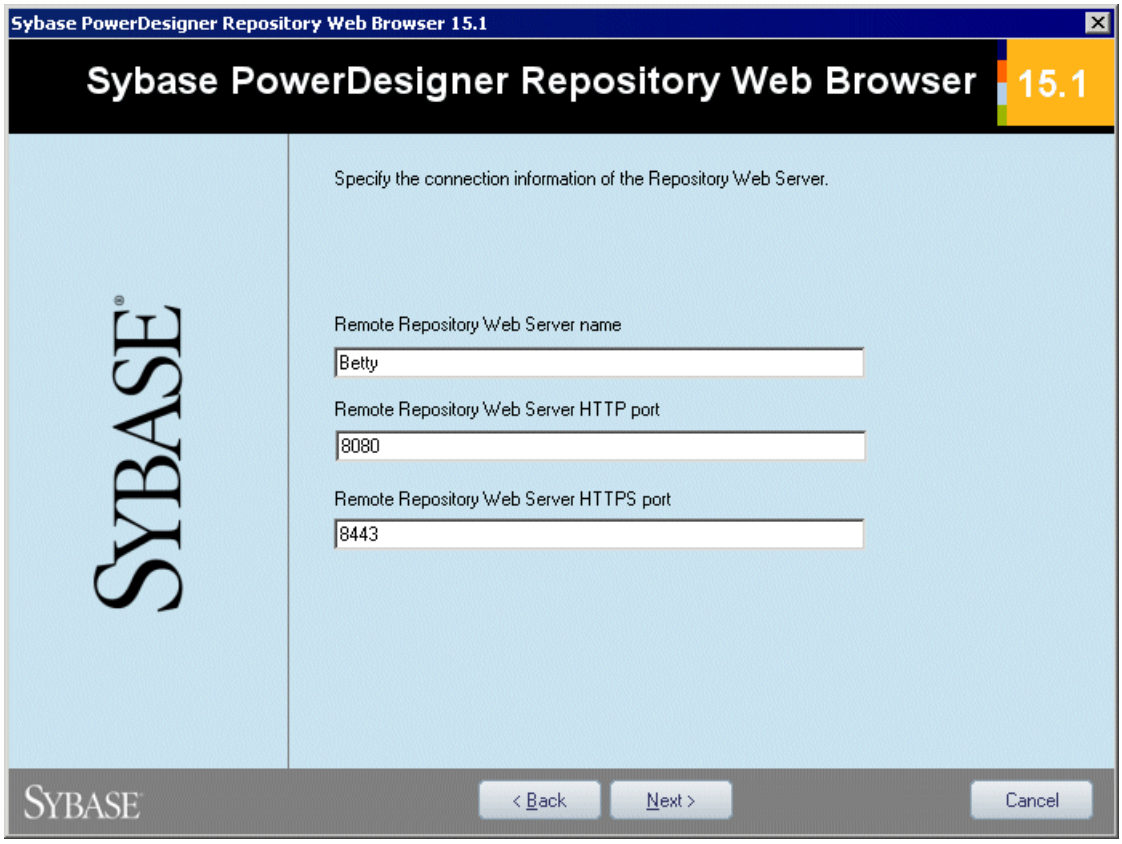


7. Click **Next** to go to:

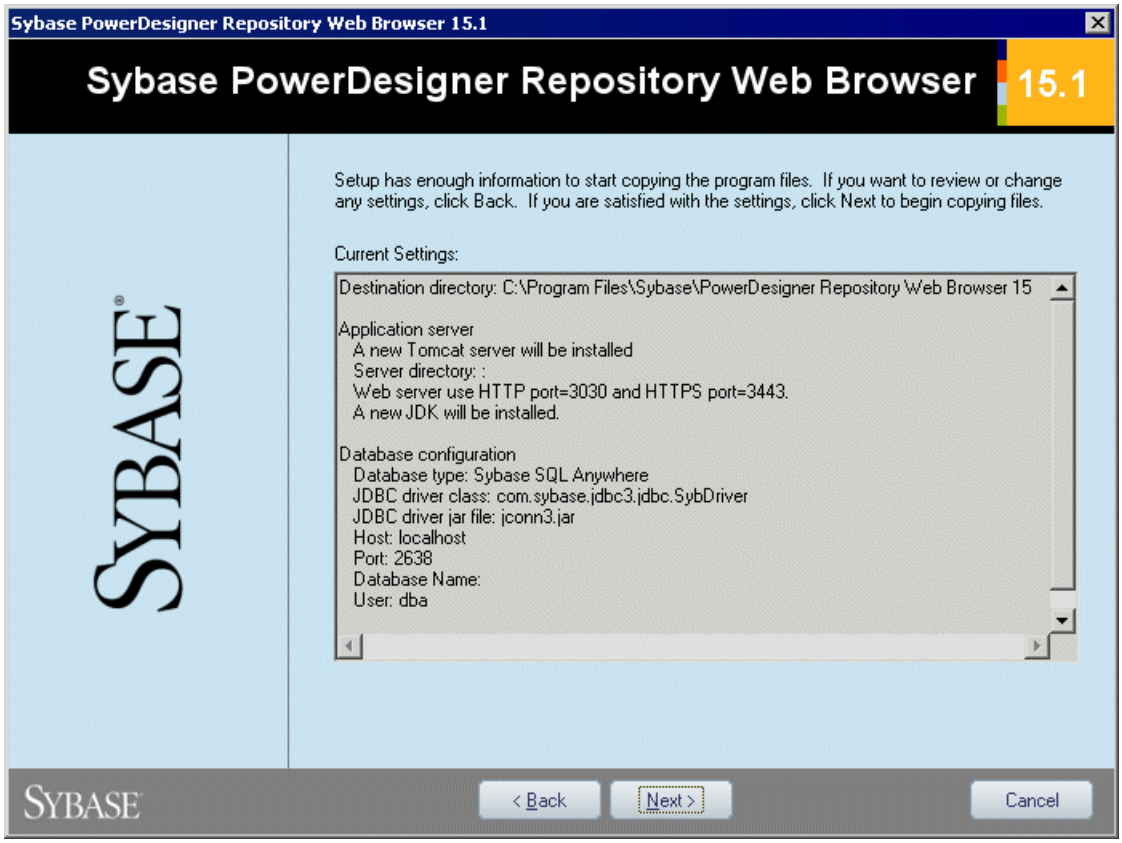
- [for a full Repository web server install] The database parameters page lets you enter the appropriate parameters for your database. If you select the **Use Windows Authentication** checkbox, you will need to select the **This account** option on the **Log On** tab of the web server service property sheet before starting the service.



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



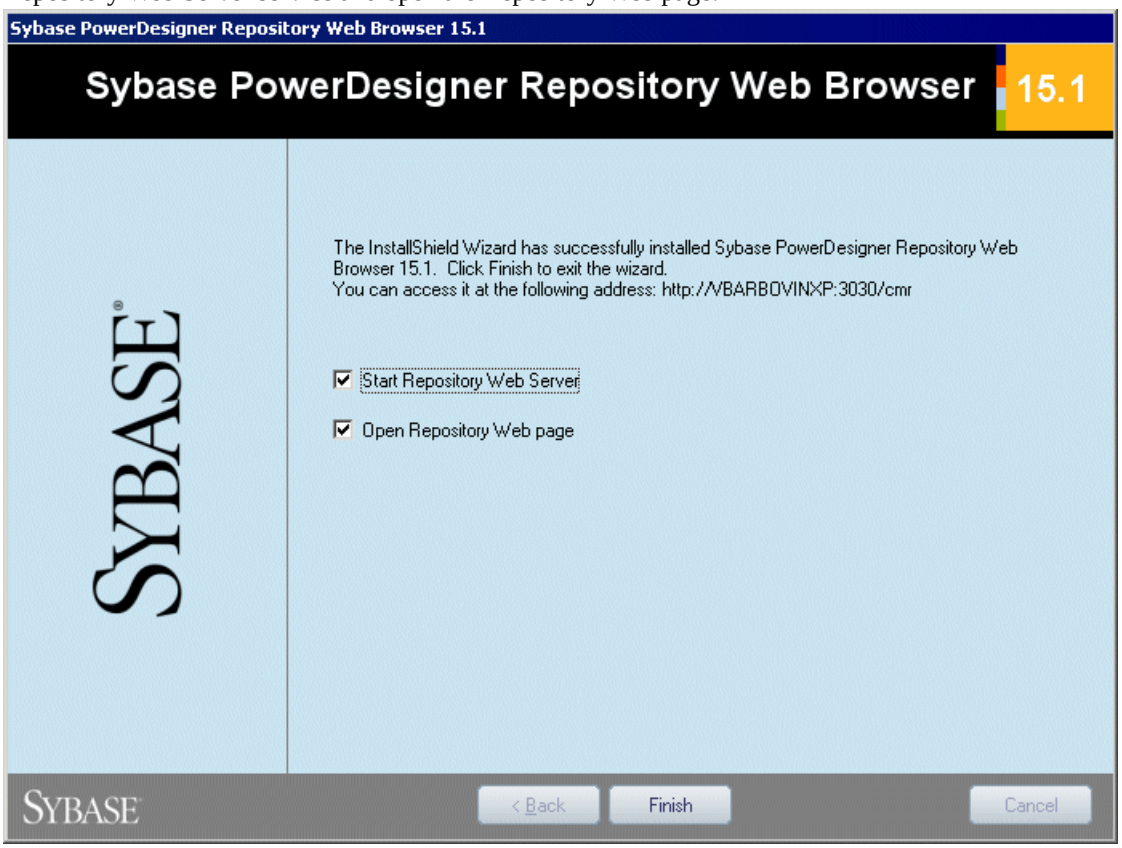
8. Click **Next** to go to the information page which summarizes your choices:



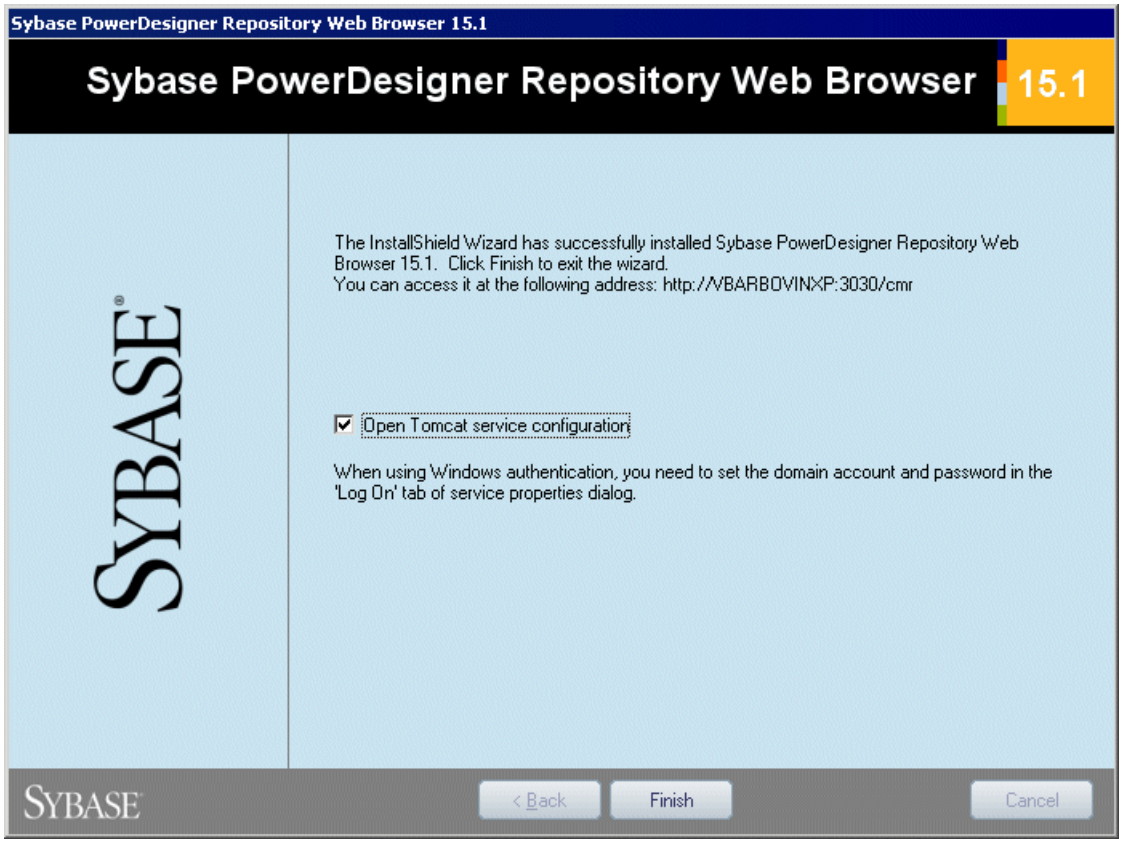
9. Click **Next** to accept the current settings and start copying files.

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:

- [Repository web server] The complete page opens with two check boxes selected by default to let you start the Repository Web Server service and open the Repository Web page:



- [Web application layer] The complete page opens with a check box selected by default to let you display the service property sheet and enter its account name and password. Then you will have to start the service.



10. Click **Finish** to exit the wizard.

Accessing the repository web browser web site

You can start and stop the repository web server and the associated service by navigating to the server from your Start menu (by default, at **Programs** > **Sybase** > **PowerDesigner Repository Web Server** , and selecting the appropriate sub-item:

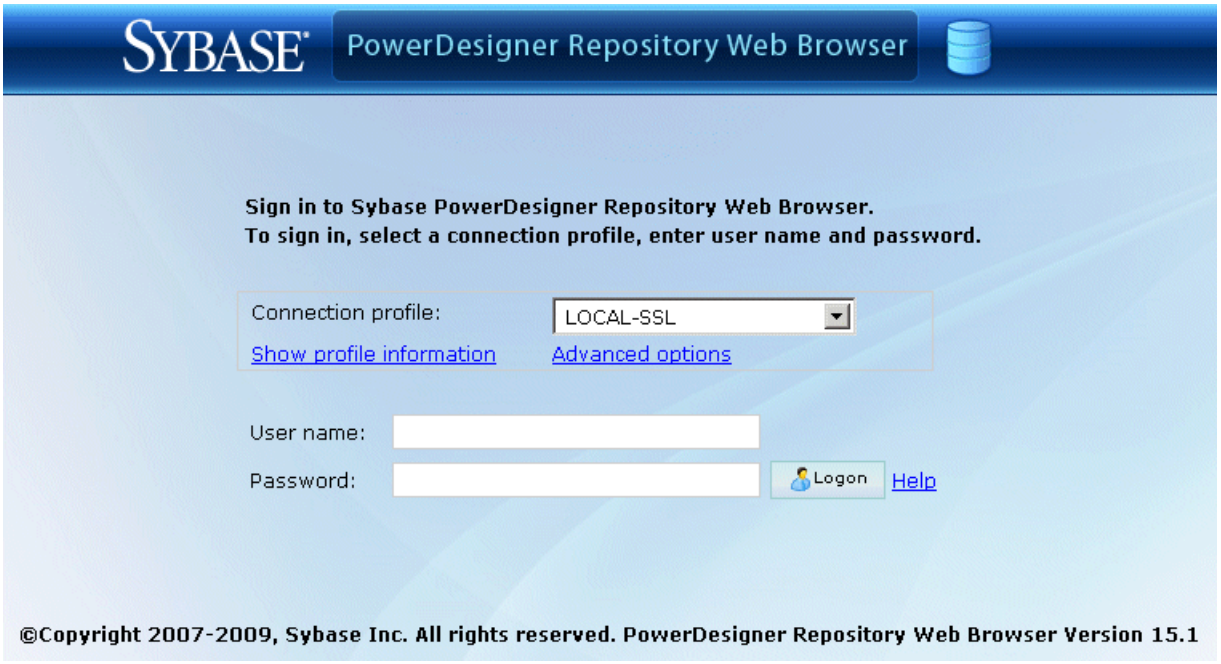
- Start the Repository Web Server
- Start the Repository Web Server Service
- Stop the Repository Web Server
- Stop the Repository Web Server Service

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 repository web browser software, and *port-number* is the port specified during installation. Note that cmr is the name of the web browser program and is a required part of the address.

The following screen will appear:



For information about using the Repository Web Browser, see the Browsing the Repository via the Web chapter in the *Working with the Repository* book.

Repository web browser 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:

```
<cmrcommon>
    <!-- Keystore Configuration -->
    <bean class="java.lang.Object" id="cmr.common.config.keystore">
        <!-- if value is empty, default to cmr home\keystore folder -->
        <param name="keyStoreFilePath" value=""/>
        <param name="keyStoreFileName" value="common.keystore"/>
        <param name="keyStoreAlias" value="cmrenkey"/>
        <param name="keyStorePassword" value="changeit"/>
    </bean>
</cmrcommon>
```

You can edit the following nodes:

- keyStoreFilePath – Specifies the path to the keystore file. Default value: *install_dir*/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 Repository Web Browser web application layer installations that need to connect to an Repository Web Browser 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. CMR 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.DBCPConnectionPro
vider"
        id="cmr.connection.provider">
        <param name="databaseProfile" value="asa90.xml" />
        <param name="dbtype" value="Sybase ASA 10.x" />
        <param 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="2638" />
        <param name="dbname" value="" />
        <param name="user" value="dba" />
        <param name="password" value="sql" />
        <param name="initialPoolSize" value="1" />
        <param name="minIdle" value="1" />
        <param name="maxIdle" value="3" />
        <param name="maxWait" value="2" />
        <param name="maxActive" value="10" />
        <param name="isolationLevel" value="1" />
    </bean>
```

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="default_sender_email" value="" />
        <param name="smtp_ssl" 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" />
        <param name="mail_template_name" value="mail.template.xml" />
    </bean>
```

Index

A

Adaptive Server Enterprise
    troubleshooting 21
administrative install 16
    install client machines 16
authdb.sql 22
authenticate
    existing database 22
    new database 22

C

client
    install 16
    SQL Anywhere 23
client/server environment 19
computer name 9
create database 22

D

database
    create 19, 22
    repository 19
    size 20
diagnostic program 11
disk space 16

E

Eclipse plug-in 1

F

floating served license
    impossible to return 10
    limitation 10
font
    general options 9
    report 9
    symbol 9

G

general options font 9

H

hard disk space 1
host ID 9

I

install
    administrative mode 16
    authenticated server 21
    copy files on server 16
    Eclipse plug-in 1
    font problem 9
    license server 10, 11
    maintenance 10
    modes 1
    network location 16
    non-administrator user 1
    PowerDesigner 1
    repository proxy 23, 24
    repository web browser 26
    SAMreport 15
    silent 17
    SQL Anywhere 21
    upgrade administrative version 17
    Visual Studio plug-in 1

L

license file 9
license server
    install 11
    installation 10
    license file 11
    manage licenses on server 14
    reread 11
    SAMreport 15
    start 11
LMTOOLS 11, 14
LMUTIL 11, 14

M

maintenance
    modify 10
    remove 10
    repair 10
modify install 10

N

network location 16

O

ODBC 24
    SQL Anywhere 23

P

PowerDesigner
    administrative install 16
    current setting 1
    install 1
    module 1
    README 1

what to install 1
proxy
configure 25
install 23
repository 19

R

RAM 1
readme.html 1
remove install 10
repair install 10
report log 15
repository
Adaptive Server Enterprise 21
create database 19
create ODBC system data source 24
database size 20
install 21, 23
repository proxy 19
configure 25
install 24
repository web browser
accessing 33
install 26
keystore 34
security 34
reread license file 14
reread license server 11
response file 17
return
floating served license 10
standalone served license 10

S

SAMreport 15
report log 15
sybase.opt 15
saopts.sql 22
SCVIEW.EXE 22
server
check disk space 16
copy files 16
database 19
install 21
install license server 10, 11
manage licenses 14
SQL Anywhere 21
settings
PowerDesigner 1
setup.iss 17
setup.log 17
silent install 17
response file 17
SPDC 9
SQL Anywhere
authenticated server 21
client 23
create database 22
install 21
network authenticated server 21
ODBC 23
repository 21
standalone local license 9
standalone served license
impossible to return 10
limitation 10
start license server 11
Sybase Central 22
Sybase Product Download Center 9
sybase.opt 15
system data source 24

U

upgrade
administrative install 17

V

Visual Studio plug-in 1

W

web browser
install 26
keystore 34
security 34