Installation Workflow

This workflow defines a path for planning and installing PowerBuilder®.

Installing the product

1. Planning Your Installation on page 3
2. Preinstallation Tasks on page 11
3. Choose one of these install methods:
   - Installing with the Common Setup Program on page 13
   - Installing in Silent (Unattended) Mode on page 29
4. Postinstallation Tasks on page 33

Uninstalling

Uninstalling a PowerBuilder Product on page 37
Planning Your Installation

Before you install or upgrade, prepare your environment.

- Identify the components and options to install or upgrade.
- Make sure your system meets installation requirements.
- Obtain a license.
- Identify software required.

Installation Media Contents

This topic describes the contents of the PowerBuilder installation kit.

<table>
<thead>
<tr>
<th>CD or DVD</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerBuilder DVD</td>
<td>Common setup program for PowerBuilder 12.5 (PowerBuilder .NET and PowerBuilder Classic), InfoMaker 12.5, and SQL Anywhere® 12.0.1, and a support folder that contains files that can be used to rebuild the PowerBuilder extensions for Web services clients and other supporting files.</td>
</tr>
</tbody>
</table>
System Requirements

Make sure your system meets all requirements before you install PowerBuilder. See the release bulletin for the most current information about required service packs.

Table 2. System Requirements for PowerBuilder

<table>
<thead>
<tr>
<th>Product</th>
<th>Computer</th>
<th>Minimum memory</th>
<th>Hard disk space</th>
<th>Operating system</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerBuilder</td>
<td>Pentium 4 or higher</td>
<td>512MB</td>
<td>656MB for all components</td>
<td>Windows XP Professional with SP 3, Windows Vista 32- or 64-bit Business with SP2, Windows 7 32- or 64-bit with SP1, or Windows Server 2008 32- or 64-bit with SP2.¹</td>
</tr>
<tr>
<td>InfoMaker</td>
<td>Pentium 4 or higher</td>
<td>256MB</td>
<td>332MB for all components²</td>
<td>Windows XP Professional with SP 3, Windows Vista 32- or 64-bit Business with SP2, Windows 7 32- or 64-bit with SP1, or Windows Server 2008 32- or 64-bit with SP2¹.</td>
</tr>
<tr>
<td>SQL Anywhere</td>
<td>400 MHz or higher Pentium-compatible</td>
<td>48MB in addition to memory required by the operating system</td>
<td>337MB for all components not including Ultra-Lite and Windows Mobile</td>
<td>Windows XP, Windows XP Tablet PC Edition, Windows Server 2003, and Windows Vista, Windows 7, and Windows Server 2008 (x86, x64, IA64)¹.</td>
</tr>
</tbody>
</table>

¹ Supports Windows Server 2008 runtime only, not development.
² Less disk space is required if PowerBuilder is installed on the same computer.
Obtaining a License

Before installing your product, choose a SySAM license model, gather information about the license server, and obtain license files.

These steps summarize how to install a Sybase® Software Asset Management (SySAM) license. For details, see the Sybase Product Documents Web site at http://sybooks.sybase.com.

1. Choose a SySAM license model.

<table>
<thead>
<tr>
<th>License model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unserved license model</td>
<td>Licenses are obtained directly from a license file. If you are using an unserved license, save the license file to the machine on which you install the product.</td>
</tr>
<tr>
<td>Served license model</td>
<td>A license server manages the allocation of licenses among multiple machines.</td>
</tr>
</tbody>
</table>

2. For the served license model, decide whether to use an existing or new license server.

The license server and your product installation do not need to share the same machine, operating system, or architecture.

3. For the served license model, determine the type of server system:
   - Install the new license server on a machine that does not have an existing license server.
   - To install on a machine that is running a SySAM 2.2 license server, follow migration instructions in the Sybase Software Asset Management User's Guide to migrate to the newer SySAM version.

4. Before installing your product, get license files from the Sybase Product Download Center (SPDC) at https://sybase.subscribenet.com using SPDC access information you receive from Sybase or your Sybase reseller.

SySAM Troubleshooting

This topic describes possible problems with SySAM licenses.

Read this topic if you experience problems with SySAM licensing. The information might help you resolve the issues, or to collect information that Technical Support can use to diagnose them. You can find more information about SySAM licensing on the SySAM Web site at http://www.sybase.com/sysam and in the SySAM Infocenter at http://infocenter.sybase.com/help/topic/com.sybase.infocenter.help.sysam/title.htm.

Logging SySAM information
To enable logging, add an entry to the PB.INI file with the following format:
LogSySAM = \( N \)

\( N \) can be any of these values:

- 0 – No logging (default)
- 1 – Basic logging information
- 2 – Full information

The SySAM log file, PB125_sysam.log, contains status information from the development environment, the details of the current license, and information from the SySAM API, if you set the SySAMTrace value in PB.INI. Technical Support might ask you to set these values if you experience license problems.

The SySAM log file is saved in the same directory as other writeable files for individual users, such as initialization files. See What the Setup Program Does on page 25 for the location of this directory on various Windows systems.

Two additional files, pb125_sysam.properties and PB125.lic, are installed in the directory for individual users. These files contain information that might be useful to Technical Support. Do not edit these files unless directed to do so by Technical Support.

**Served license issue**

If you enter an unqualified server name, such as myserver, as the license server name, the server name might not be found. Try a fully qualified name, such as myserver.mydomain.com.

**Problem starting SySAM license server**

When starting the SySAM license server, you may see this error:

lmgrd is not running: Cannot connect to license server system. (-15,570:10035 "WinSock: Operation would block")

This version of Sybase IQ includes Internet Protocol Version 4 (IPv4) and Internet Protocol Version 6 (IPv6) versions of the SySAM license server software. You can choose the version of the license server based on your environment using the sysam configure command. By default the IPv4 version of the license server is configured for use.

The IPv4 version of the license server cannot be used properly, if you have enabled IPv6 on the license server host. If this is the case, you can:

- Disable IPv6 TCP/IP protocol on the license server host.
- Use another Windows host that does not have IPv6 enabled.
- Use a UNIX host for the license server. You can use the IPv4 version of the license, even if both IPv4 and IPv6 are enabled on UNIX.

If you are using the IPv6 version of the license server on a Windows host, then this license server can be accessed only through IPv6 protocol. Any host with an IPv4 only network stack will not be able to obtain licenses from this IPv6 license server. You can do one of the following to work around this issue:
• Use a UNIX host for the license server. License Servers on UNIX are able to serve licenses to both IPv4 and IPv6 client hosts.
• If you need to use a Windows host for the License Server and have both IPv4 and IPv6 clients to the license server, set up two License Servers, one serving the IPv4 network and the other serving the IPv6 network.


Software Requirements

Identify the software requirements for PowerBuilder.

Table 3. Required Software for PowerBuilder features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Required Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following table lists the software required for PowerBuilder features. Install any required framework packages and SDKs before you install PowerBuilder. Microsoft developer software is available from the Microsoft Download Center. Read this table carefully to determine whether you need to install any software before you run the setup program, and whether you need to install SQL Anywhere before installing PowerBuilder. If you select a feature with a prerequisite that is not yet installed, the setup program displays a warning message.</td>
<td></td>
</tr>
<tr>
<td>.NET target development and deployment</td>
<td>Microsoft .NET Framework Version 4.0, Visual Studio 2010 SP1. This required software can be automatically installed for you during PowerBuilder installation. See Starting the Common Setup Program on page 13.</td>
</tr>
<tr>
<td>.NET Windows Forms smart client deployment and update and support for OLE controls in Windows Forms</td>
<td>Microsoft .NET Framework Version 4.0. For design time only, Microsoft .NET Framework 4.0 Software Development Toolkit (SDK).</td>
</tr>
<tr>
<td>WCF Client, REST Client, and Web Service DataWindow in PowerBuilder .NET</td>
<td>Microsoft .NET Framework Version 4.0. For design time only, Microsoft Windows SDK for Windows 7 and .NET Framework 4.0, referred to elsewhere in this document as .NET Framework 4.0 SDK.</td>
</tr>
<tr>
<td>WPF smart client development and update</td>
<td>Microsoft .NET Framework Version 4.0. For design time only, .NET Framework 4.0 SDK.</td>
</tr>
</tbody>
</table>
### Feature | Required Software
--- | ---
.NET Web Forms development and deployment and .NET Web services local host deployment | Microsoft Internet Information Services (IIS) 5.0 or higher. **Note:** On the development computer, IIS is not required for PowerBuilder applications or components unless the same computer is used a server for Web Forms or smart client applications, or for Web service components. IIS is also not required on end users’ computers. For information about configuring IIS, see Deploying Applications and Components to .NET in the help.

.NET Web Forms development and deployment | Telerik RadControls. .NET Web Forms use RadControls to display and provide functionality for the Tab, TreeView, and Toolbar controls. If you choose to install the .NET Web Forms feature, this software is installed automatically. RadControls are automatically deployed with your Web Forms applications to deployment computers or servers.

PowerBuilder and InfoMaker tutorials, demo databases, and sample applications | SQL Anywhere 12 or later. SQL Anywhere is available on the DVD. If the setup program does not detect SQL Anywhere 12 or later on your computer, it displays a warning. If you choose to continue, the setup program does not install the tutorials or register the demo databases. To use these features later, install SQL Anywhere first, then reinstall PowerBuilder, InfoMaker, or both.

MobiLink™ synchronization | Adaptive Server® Anywhere 9.0.2 to SQL Anywhere 12. MobiLink is a component of Adaptive Server Anywhere and SQL Anywhere. In the SQL Anywhere setup program, select Synchronization and Messaging, and then MobiLink.

EAServer component and Web DataWindow development and deployment | EAServer 6.3.1. Run the setup program in the PBVM directory on the DVD to install runtime files and the Web DataWindow server component in EAServer. See Installing the PBVM in EAServer on page 34.

EJB client development | EAServer 6.3.1, or another J2EE-compliant application server such as BEA WebLogic 8.1 and later, or IBM WebSphere 6.x. Sun JDK 1.6 or later. The Sun JDK 1.6 is installed in the Sybase\Shared\PowerBuilder\jdk1.6.0_24 directory when you install PowerBuilder.

Web service clients and Web Service DataWindow in PowerBuilder Classic | Microsoft .NET Framework Version 4.0. For design time only, Microsoft .NET Framework 4.0 SDK.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Required Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving DataWindows as PDF using the Ghostscript distiller and PostScript printing</td>
<td>Ghostscript and PostScript printer driver. See <em>Installing Ghostscript</em> on page 34 and <em>Installing PostScript Drivers</em> on page 34.</td>
</tr>
<tr>
<td>Saving DataWindows as PDF using XSL Formatting Objects (FO) and Java printing</td>
<td>Sun JDK 1.6 or later and Apache FO processor. The Sun JDK 1.6 is installed in the <code>Sybase\Shared\PowerBuilder\jdk1.6.0_24</code> directory when you install PowerBuilder. The Apache FO processor is installed in the <code>Sybase\Shared\PowerBuilder\fop-0.20.5</code> directory when you install PowerBuilder.</td>
</tr>
<tr>
<td>Data access using the ADO.NET interface</td>
<td>Microsoft .NET Framework Version 4.0 Redistributable Package or later.</td>
</tr>
<tr>
<td>JDBC connectivity</td>
<td>Sun JDK 1.6 or later. Sun JDK 1.6 is installed in the <code>Sybase\Shared\PowerBuilder\jdk1.6.0_24</code> directory when you install PowerBuilder.</td>
</tr>
<tr>
<td>Runtime Packager</td>
<td>Microsoft Windows Installer. Microsoft Windows Installer is installed by default on all supported Windows platforms.</td>
</tr>
</tbody>
</table>
Planning Your Installation
Preinstallation Tasks

This topic describes tasks to perform before installation.

- Read the release bulletins for the latest information on the products that you are installing. Pay close attention to the *Special Installation Instructions* section. Release bulletins for PowerBuilder and InfoMaker are available in the product package on the Getting Started CD. Release bulletins for PowerBuilder and InfoMaker are also available on the Product Documents Web site at [http://www.sybase.com/support/manuals/](http://www.sybase.com/support/manuals/). The release bulletins at this site sometimes contain more recent information than the bulletins on the Getting Started CD. A `readme.txt` file for SQL Anywhere is available in the SQLAnywhere12 directory on the DVD.

- Make sure the drive on which you install PowerBuilder is not compressed. If compression is enabled on the installation drive, the setup program fails.

- Make sure you have a TEMP environment variable that points to an existing directory location with at least 300MB free space. The setup programs write files to this directory during the installation and frees the space after the installation is complete.

- Close any open applications.

- Back up any files created with earlier versions of Sybase tools. Make sure that any PowerBuilder PBLs you plan to migrate have been regenerated without error in your current version of PowerBuilder before you back them up.

  In addition to backing up your PBLs, back up any files that contain information you do not want to lose, such as database files, INI files, preference information, and modified database definition files. For more information about backing up and migrating existing applications, see *Postinstallation Tasks* on page 33.

- Read *Software Requirements* on page 7 to determine whether you need to install any software before installing PowerBuilder 12.5.
Preinstallation Tasks
Starting the Common Setup Program

Use the DVD or downloaded image to start the PowerBuilder setup program.

The PowerBuilder setup program installs both the PowerBuilder Classic and PowerBuilder .NET IDEs.

This procedure describes how to begin a local installation from a DVD or downloaded image. If you are a system administrator and want to allow users to install from a network drive instead, copy the files from the DVD into a directory on a network drive. Users can then install PowerBuilder by running the setup program from the network.

1. Exit any programs that are running.
2. Launch the PowerBuilder setup program.
   - To install from an image that you have downloaded from the Sybase Web site, run the autorun.exe file.
     
     **Note:** If you run setup.exe, the setup program does not enable you to install the SQL Anywhere program.
   - To install from the PowerBuilder DVD, insert the disk into your DVD-ROM drive. The setup program starts automatically.
   - To install from a local network drive, follow your administrator's instructions for accessing and running the setup program there.

3. In the DVD window, click **Install PowerBuilder .NET Prerequisites**.
   This installs .NET Framework and the Visual Studio Isolated Shell.
   
   Do not skip this step unless you are sure that the prerequisite software is already installed on your system.

4. Click **Install Powerbuilder version** to start the common setup program.
   The setup program collects basic and licensing information before launching the individual setup programs for PowerBuilder, InfoMaker, and SQL Anywhere.
Starting the Common Setup Program
Providing Basic Information

The common setup wizard collects basic information before beginning the PowerBuilder and InfoMaker installations.

**Tip:** Click **Cancel** to interrupt the installation at any point during this procedure. You can then either exit or resume the common setup. If you choose to exit, you can stop the current installation and continue with your other selections, or end the setup completely.

To provide basic information before installing PowerBuilder and InfoMaker:

1. On the start page of the setup program, select **PowerBuilder 12.5**.
2. On the Welcome page, click **Next**.
   If you have not installed prerequisites for the current feature, the next page in the wizard informs you what needs to be installed. Click **Cancel** to exit the wizard, or **Next** to continue without installing the prerequisites.
3. On the License Type page, select one of these license types and click **Next**:
   - **Evaluation**
     The Evaluation license allows you to install PowerBuilder for 30 days, for evaluation purposes only.
     Go to Step 5 on page 16 to complete the License Agreement page and continue this procedure from that point.
   - **Standalone Seat - Local License**
   - **Standalone Seat - Served**
     In the Server Information page, enter the name of the license server provided by your system administrator. If the administrator who installed the license server defined a non-default TCP port number, you might also need to provide the TCP port number. Click **Next** and wait for a few seconds until the setup program validates the license.

**Proceeding Without a Valid License:** You can select the local license or served license option without loading a license file or specifying a server location. When you click **Next**, the setup program displays an error message box. After you close the error message, the setup prompts you to confirm that you will obtain a valid license key within 30 days. Click **Yes** to proceed with the installation. Note that the installed products stop functioning after 30 days unless you install a valid license file or license server first.

4. In the License Key page:
   a) Click **Load**.
   b) Navigate to and select your license file, and click **Open**.
   c) Click **Next**. Wait for a few seconds until the setup program validates the license.
5. On the License Agreement page, select your location from the drop-down list, read the license agreement, select the I AGREE radio button, and click Next to continue.

6. On the Customer Information page, enter your name and your company’s name.

7. On the Choose Destination Location page, click Next to accept the destination path shown, or click Browse and select a different path, click OK, and click Next.

8. On the Choose Destination Location For Shared Files page, click Next to accept the destination path shown, or click Browse and select a different path, click OK, and click Next. Use the same folder for shared files for all products in this set.

9. On the Select Components page, select the products you want to install and click Next to continue.

10. Complete the setup program for each product you selected.
Installing SQL Anywhere

Install SQL Anywhere to support database features during application development.

You can start the SQL Anywhere installation using either of these methods:

- The common setup program, described in this topic.
- The `silentinstall` command-line program.

**Note:** On 64-bit platforms, you must select the 32-bit driver manually when installing SQL Anywhere 12.0.1. PowerBuilder 12.5 does not connect SQL Anywhere 12.0.1 with the 64-bit driver.

1. In the Choose Setup Language dialog box, select the language you want to use in the Installation wizard and click **OK**.
2. On the Welcome page, click **Next**.
3. On the License Agreement page, select your location from the drop-down list, read the license agreement, select the **I accept the terms of this agreement** option, and click **Next** to continue.
4. On the Setup Type page, select **Complete** if you want to install all components, or select **Custom** and click **Next**.
5. If you selected **Custom** in the previous step, click the down arrow next to any feature you do not want to install, select **This feature will not be available** from the cascading menu, and click **Next**.
6. On the Ready to Install the Program page, click **Install** to begin the installation.
7. Optionally select the check boxes in the InstallShield Wizard Completed page to view the **ReadMe** file or the iAnywhere Online Resources page.
8. Click **Finish** to close the SQL Anywhere installation wizard.

**Note:** Sometimes, a dialog opens with this erroneous message:

Invalid license data. Reinstall is required.

Click **OK** to dismiss the dialog; the SQL Anywhere installation completes normally.

About SQL Anywhere

Sybase SQL Anywhere is a fully-featured relational database and data management tool.

The SQL Anywhere installation is restricted to development use only. The SQL Anywhere installation includes MobiLink, a session-based synchronization system that allows two-way synchronization between a main database and many remote databases, and the Sybase Central database management tool.
The SQL Anywhere setup program installs the SQL Anywhere developer edition in default drives and directories unless you specify otherwise. If a directory you specify does not exist, the setup program creates it.
Installing InfoMaker

This topic describes how to install InfoMaker, an easy-to-use tool for creating applications that query and report on databases.

The common setup program installs InfoMaker in default drives and directories unless you specify otherwise. If a directory you specify does not exist, setup creates it.

1. On the Choose Destination Location page, click **Next** to accept the destination folder path shown, or click **Browse** and select a different path, click **OK**, then click **Next**.

2. On the Choose Destination Location For Shared Files page, click **Next** to accept the destination folder path shown, or browse to select the `Sybase\Shared` directory.

3. On the Select Components page, unselect the check box next to any components you do not want to install, and click **Next**.
   You can expand the tree view to select or unselect subcomponents of top-level components, and click **Select All** or **Unselect All** to select or unselect all the check boxes.

   You cannot unselect the **InfoMaker Base Components** option. See *InfoMaker Components* on page 20. To install optional painters, select the **Database Write** option.

   The Demo Database is selected by default if you select the **Tutorial** component.

4. On the Select Program Folder page, select the program folder to which program icons will be added or specify a new one, and click **Next**.

5. On the Start Copying Files page, review your settings, then click **Next** to begin installing files or **Back** to change your selections.

6. On the InstallShield Wizard Complete page, select the check box if you want to read the Readme file, and click **Finish** to return to the common setup program.

   Close the Readme file to continue.
InfoMaker Components

The setup program lets you install the base InfoMaker software and additional, optional components.

Table 4. InfoMaker Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoMaker Base Components</td>
<td>The base components are required. If you select no other other components, this option installs InfoMaker as a reporting and query tool only. No optional painters are installed. You cannot open forms in the InfoMaker tutorial library; those forms require use of the optional painters that are installed with the database write option. This option installs the ODBC driver.</td>
</tr>
</tbody>
</table>
| InfoMaker Database Write Option  | Adds three additional painters so that you can work with data more fully:  
• Database painter for creating and modifying tables  
• Form painter for creating and modifying data in a database  
• Data Pipeline painter for copying data from one database to another |
| Native Database Interfaces       | Interfaces that enable you to interact with server databases natively. Expand the tree view to select which interfaces to install.               |
| OLE DB Driver                    | Interface to connect to databases using an OLE DB data provider.                                                                                |
| JDBC Driver                      | Interface to connect to databases using JDBC.                                                                                                 |
| Internet Tools                   | The DataWindow Web Control for ActiveX is a fully interactive DataWindow control. It requires a browser that supports ActiveX.                 |
| InfoMaker Tutorial               | Source files for the tutorial in the Getting Started book. If you want to do the InfoMaker tutorial or use the sample library, install SQL Anywhere 12.0 or later if it is not already installed on your computer. When you install InfoMaker, the setup program creates an ODBC data source for the demo database. If SQL Anywhere is not installed on your system when you install InfoMaker, setup does not install the demo database, sample library, or tutorial files. |
| Demo Database                    | A SQL Anywhere database used in the tutorial, the sample library, and examples in the documentation.                                              |
| Online Help Files                | Help files for InfoMaker.                                                                                                                       |
Installing PowerBuilder

Run the PowerBuilder setup program to install PowerBuilder .NET and PowerBuilder Classic.

Prerequisites
You must have Administrator privileges to fully install this product.

Task
1. On the Choose Destination Location page, click Next to accept the destination folder path shown, or click Browse and select a different path, click OK, then click Next.
2. On the Choose Destination Location For Shared Files page, click Next to accept the destination folder path shown, or browse to select the Sybase\Shared directory.
3. On the Select Components page, unselect any components you do not want to install, and click Next.
   You cannot unselect the PowerBuilder Base Components option.
   Select or select the check boxes of individual components, or click Select All or Unselect All to change all the check boxes.
   The Demo Database is selected by default if you select the Tutorial component.
4. On the Select Program Folder page, select the program folder to which program icons will be added, or specify a new one; then click Next.
5. On the Start Copying Files page, review your settings, then click Next to begin installing files, or Back to change your selections.
6. Install help:
   a) In the Help Library Manager, click Add next to PowerBuilder .NET, and then click Update.
      If you click Cancel, PowerBuilder .NET topics are not available in the IDE help.
   b) When prompted to confirm that you want to proceed, click Yes.
   c) When the Local Library completes the update, click Finish.
   d) Click Exit to close the Help Library Manager.
7. On the InstallShield Wizard Complete page, click Finish to return to the common setup program.

Next
After installing, make sure users have write permission for their user profile directories (for example, My Documents in Windows XP and Documents in Windows Vista), and for HKEY_CURRENT_USER in the Windows registry.
PowerBuilder Components

The setup program lets you choose which PowerBuilder components to install.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerBuilder Base Components</td>
<td>Installs the ODBC driver, ORCA Software Development Kit (SDK), the PowerBuilder Document Object Model extension, the ability to save DataWindow objects as PDF using the distill or XSL-FO methods, support for rich text, support for EAServer, and JDK 1.6. You must install the base components: you cannot unselect this option.</td>
</tr>
<tr>
<td>.NET Targets</td>
<td>Available under PowerBuilder Base Components, deploys Windows Forms, smart client, and Web Forms applications to .NET, and deploys NVOs as .NET assemblies and Web services.</td>
</tr>
<tr>
<td>PowerBuilder .NET</td>
<td>The PowerBuilder .NET IDE hosts the Visual Studio isolated shell and is designed for full compliance with the common language specifications for .NET. Used for deploying WPF Windows applications, .NET assemblies, PB assemblies, WCF services, and WCF clients to .NET.</td>
</tr>
<tr>
<td>Native Database Interfaces</td>
<td>Interfaces that enable you to interact with server databases natively. Expand the tree view to select interfaces to install.</td>
</tr>
<tr>
<td>ADO.NET Driver</td>
<td>Interface to connect to databases using an ADO.NET data provider.</td>
</tr>
<tr>
<td>OLE DB Driver</td>
<td>Interface to connect to databases using an OLE DB data provider.</td>
</tr>
<tr>
<td>JDBC Driver</td>
<td>Interface to connect to databases using JDBC.</td>
</tr>
<tr>
<td>SCC Interface</td>
<td>Interface for connecting to any source code control system that supports the Microsoft SCC interface.</td>
</tr>
<tr>
<td>DataWindow Web Control for ActiveX</td>
<td>The DataWindow Web Control for ActiveX is a fully interactive DataWindow control. It requires a browser that supports ActiveX.</td>
</tr>
<tr>
<td>PB Native Interface</td>
<td>An SDK for developing extensions to PowerBuilder in C++. Optional wizards are installed in Visual Studio 2005 and Visual Studio .NET 2002 and 2003 if they are available on your system.</td>
</tr>
<tr>
<td>EJB Client</td>
<td>The EJB Client PBNI extension, which enables you to develop clients for EJBs running on J2EE-compliant servers.</td>
</tr>
<tr>
<td>Web Services</td>
<td>The extensions and other files that enable you to create clients for Web services using the .NET or EasySoap Web service engines.</td>
</tr>
<tr>
<td>PowerDesigner Plugin</td>
<td>A plug-in that provides the class diagram functionality of the OOM inside the PowerBuilder development environment.</td>
</tr>
<tr>
<td>Component</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tutorial</td>
<td>Source files for the tutorial in the Getting Started book. If you want to do the PowerBuilder tutorial or use the code examples, install SQL Anywhere 12.0 or later if it is not already installed on your computer. When you install PowerBuilder, the setup program creates an ODBC data source for the demo database. If SQL Anywhere is not installed on your system when you install PowerBuilder, setup does not install the demo database, code examples, or tutorial files.</td>
</tr>
<tr>
<td>Demo Database</td>
<td>A SQL Anywhere database used in the tutorial, the Code Examples sample application, and examples in the documentation.</td>
</tr>
<tr>
<td>Code Examples</td>
<td>The Code Examples application, which demonstrates many coding techniques, and the Web DataWindow PBL, which can be used as a model for a custom Web DataWindow server component.</td>
</tr>
<tr>
<td>Translation Toolkit</td>
<td>Tools to help you translate applications into other languages.</td>
</tr>
<tr>
<td>PowerBuilder Resource Monitor</td>
<td>A utility to help determine whether there are sufficient USER/GDI resources available in the operating system to open a painter.</td>
</tr>
<tr>
<td>PowerBuilder Runtime Packager</td>
<td>A tool that packages files required for deployment into an MSI file.</td>
</tr>
<tr>
<td>Online Help Files</td>
<td>Help files for PowerBuilder.</td>
</tr>
</tbody>
</table>
Installing PowerBuilder
Completing the Setup Program

After all the products you selected have been installed, you return to the common setup program.

To complete the common setup program:

1. On the InstallShield Wizard Complete page, click Finish to complete the installation. If you do not unselect the check boxes on this page, setup displays the readme file and launches a browser so that you can complete online registration.

2. On the System Reboot Required page, click Finish to reboot your computer, or choose to reboot your computer later.

After installing any of the PowerBuilder products, always shut down and restart your computer before using it.

What the Setup Program Does

This topic describes changes that the setup program makes to your system.

The setup program:

- Installs Sybase files in a Sybase directory
- Installs writable Sybase files to directories that are shared by all users
- Installs system files in the Windows operating system path
- Creates a program group and icons for each product installed
- Creates uninstall files to identify what needs to be removed if you uninstall a product
- Makes changes to the Windows registry
- Creates or updates INI files including PB.INI (for PowerBuilder) and IM.INI (for InfoMaker)

Writable files shared by all users

As part of its Federal Desktop Core Configuration (FDCC) compliance configuration, PowerBuilder installs writable files that are shared by all users. On Windows XP, the shared directory is C:\Documents and Settings\All Users\Documents\Sybase\PowerBuilder 12.5. On Windows Vista and Windows 2008, the shared directory is C:\Users\Public\Documents\Sybase\PowerBuilder 12.5, and on Windows 7, it is C:\Users\Public\Public Documents\Sybase\PowerBuilder 12.5.

The shared files include:

- The EASDemo databases (easdemo125.db and easdemo125u.db)
Completing the Setup Program

- All Code Examples directories and files
- The PowerBuilder compiled HTML Help files
- The Translation Toolkit directories and files

**Files reserved for individual users**
Other writable files are installed in the default Program Files\Sybase subdirectories, but are copied to different locations the first time a user starts PowerBuilder. In this way, each user gets a private copy of these files.

The following table lists the files that are copied and updated in the directories of users. In the table header, *UserName* is a variable that can be replaced by the user name of a PowerBuilder user. For Windows XP, the *UserName* directory is under the C:\Documents and Settings directory. For Windows Vista and 2008, it is under the C:\Users directory.

<table>
<thead>
<tr>
<th>In C:...*UserName*\ subdirectory</th>
<th>Files copied or updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Windows XP:</td>
<td>• Initialization files</td>
</tr>
<tr>
<td></td>
<td>(PB.INI,</td>
</tr>
<tr>
<td></td>
<td>PBLAB125.INI,</td>
</tr>
<tr>
<td></td>
<td>PBODB125.INI)</td>
</tr>
<tr>
<td>On Windows Vista, Windows 2008, and</td>
<td>• License files</td>
</tr>
<tr>
<td>Windows 7:</td>
<td>(PB125.LIC,</td>
</tr>
<tr>
<td></td>
<td>pb125_sasmus.properties)</td>
</tr>
<tr>
<td>On Windows XP:</td>
<td>• Files for the PowerBuilder</td>
</tr>
<tr>
<td></td>
<td>Getting Started tutorial</td>
</tr>
<tr>
<td>On Windows Vista and 2008:</td>
<td></td>
</tr>
<tr>
<td>On Windows 7:</td>
<td></td>
</tr>
<tr>
<td>The locations of writable PowerBuilder files reserved for individual use are set in HKEY_CURRENT_USER registry entries for each PowerBuilder user. For example, the location of the PB.INI file that is copied to each user's local application data directory is registered under the registry key HKEY_CURRENT_USER\Sybase\PowerBuilder \12.5\InitPath</td>
<td></td>
</tr>
</tbody>
</table>
Registry changes
The setup program makes the following changes to the Windows registry:

- Creates or updates the Sybase key in HKEY_CURRENT_USER\Software and HKEY_LOCAL_MACHINE\Software
- Updates system and user paths in HKEY_CURRENT_USER\Environment
- Adds the appropriate paths to the registry path HKEY_LOCAL_MACHINE\Software \Microsoft\Windows\CurrentVersion\App Paths
- Adds the paths of compiled HTMLHelp files to the registry path HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\HTMLHelp
Completing the Setup Program
Installing in Silent (Unattended) Mode

Install or uninstall PowerBuilder products from a Command Prompt window or script, without displaying messages or windows during the setup or removal process.

Prerequisites
Complete installation planning.

Task
1. Accept the license agreement.
2. Locate the silentinstall.bat file, either in the main installation directory on the DVD, or in the PBVM directory.
3. Run silentinstall.bat to install one or all of these PowerBuilder products:
   • PowerBuilder
   • InfoMaker
   • SQL Anywhere
   • PBVM

Accepting the License Agreement
Accept the Sybase license agreement before running the silent installation.

You can accept the Sybase license agreement first using either of these methods:

- Enter the following line in a DOS command box:
  SET AgreeToSybaseLicense=true
  If the DOS prompt does not display the installation directory, change to that directory.
- Use the main installation directory to install PowerBuilder and InfoMaker
- Use the PBVM directory to install the virtual machine
- Edit the silentinstall.bat file and change the value of set AgreeToSybaseLicense from false to true. This configuration enables you to double-click the silentinstall.bat file instead of running it from a Command Prompt window.
Silent Install and Uninstall for PowerBuilder Products

This topic describes the silentinstall and silentuninstall command syntax for PowerBuilder, InfoMaker, and SQL Anywhere.

To run the silent installation from a Windows Command Prompt, run this command in the install directory:

```
silentinstall.bat
[ "lic=licPathNameOrServerName" "opt=product" "dir=directoryName" "shr=sharedDirectoryName" "log=logFileName"
][{ help | /? }]
```

All of the parameters for the silent installation are optional. If you do not provide a value for the lic parameter, the installer searches the files in the installer directory in ascending alphabetic order for a valid license file. It uses the first valid license file it finds to install PowerBuilder and InfoMaker. If you do not provide the lic parameter and there is no license file in the installer search path, an evaluation version of PowerBuilder is installed.

The parameters can be listed in any order and are not case sensitive. Parameter values are also not case sensitive.

<table>
<thead>
<tr>
<th>Silent installation parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>licPathNameOrServerName</td>
<td>The full path to a valid license file with an LIC extension, or the name of a server hosting a served license. If a license server requires a port number, you can include the port number after the server name, separated by a colon. For example: silentinstall.bat “lic=myServer:1688”</td>
</tr>
</tbody>
</table>
| product                      | Names the product or products to install. Values are:  
|                              | • All – Installs PowerBuilder, InfoMaker, and SQL Anywhere (default)  
|                              | • PB – Installs only PowerBuilder  
|                              | • IM – Installs only InfoMaker  
|                              | • SA – Installs only SQL Anywhere |
Silent installation parameter | Description
--- | ---
*directoryName* | Indicates the main installation directory. If you omit this parameter, the main product components install to the `sysDriver\Program Files\Sybase\productName` directory, where `sysDriver` is the main computer drive, and `productName` is either PowerBuilder 12.5 or InfoMaker 12.5.

*sharedDirectoryName* | Indicates the shared directory for PowerBuilder or InfoMaker. If you omit this parameter, this directory installs to `sysDriver\Program Files\Sybase\Shared`.

*logFileName* | Names the log file for the installation. If you omit this parameter, the log file is written to the system Temp directory with the file name, `silentinstall.log`.

*help or /?* | Displays command syntax and parameters instead of running the command.

The following example uses all five parameters for the silent installation command:

```bat
silentinstall.bat "lic=D:\pb125\pb125.lic" "opt=pb" "dir=D:\pb125" "shr=D:\shared" "log=D:\install.log"
```

When installing PowerBuilder, the silent installation writes warnings to its log file if the setup computer does not have the correct version any of these items:

- SQL Anywhere
- Microsoft .NET Framework
- Microsoft .NET Framework SDK
- Microsoft IIS

When installing InfoMaker, the log file includes a warning if the setup computer does not have a working copy of SQL Anywere. If SQL Anywhere is not found, the demonstration databases and code examples are not installed for PowerBuilder or InfoMaker.

To start the standard silent uninstallation, run the `silentuninstall.bat` command in the main installation directory.

```bat
silentuninstall.bat
[ "all" ]
[ [ help | /? ] ]
```

By default (with no arguments), `silentuninstall` uninstalls only PowerBuilder and InfoMaker. To uninstall SQL Anywhere, specify the `all` argument.
**Note:** Uninstalling SQL Anywhere on 64-bit editions of Windows Vista requires elevated privileges.

## Silent Install and Uninstall for the PBVM

This topic describes the `silentinstall.bat` command syntax for the PowerBuilder VM.

If you are running the PBVM installation from the DOS command prompt, you can run the silent installation using the following syntax:

```bat
silentinstall.bat
[ "asp=aspPathName" "shr=sharedDirectoryName" "log=logFileName"
]
```

You can list the parameters in any order. Parameters and their values are not case sensitive.

<table>
<thead>
<tr>
<th>Silent installation parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>aspPathName</code></td>
<td>Names the full path where the EAServer support files are to be installed. If you omit this parameter, the default value is the EAServer folder. For example: %SystemDrive%\Program Files\Sybase\EAServer</td>
</tr>
<tr>
<td><code>sharedDirectoryName</code></td>
<td>Indicates the shared directory for PowerBuilder or InfoMaker. If you omit this parameter, the installed directory is %SystemDrive%\Program Files\Sybase\Shared.</td>
</tr>
<tr>
<td><code>logFileName</code></td>
<td>Names the log file for the installation. If you omit this parameter, the log file is written to the system Temp directory with the file name, <code>silentinstall.log</code>.</td>
</tr>
</tbody>
</table>

The following example uses all three parameters to silently install the PBVM:

```bat
silentinstall.bat "asp=D:\EAServer" "shr=D:\shared" "log=D:\install.log"
```

To uninstall the PBVM in silent mode, run the `silentuninstall.bat` script in the PBVM directory.
Postinstallation Tasks

Before using PowerBuilder after installation, you might need to perform some migration or configuration tasks.

- **Migrating applications to the current version of PowerBuilder or InfoMaker 12.5**
  If you have applications and PowerBuilder library files (PBLs) that you created in an earlier version of PowerBuilder or InfoMaker, you can migrate them to version 12.5. Before you do, make sure your PBLs can be successfully regenerated under the earlier version, and make backup copies.

  PowerBuilder and InfoMaker 12.5 are Unicode enabled, and some changes are made to your code when you migrate an application from PowerBuilder 9.x or earlier. For details, see the section on migrating targets in the *PowerBuilder Users Guide*.

  Also read the migration issues section in the PowerBuilder release bulletin.

- **Setting up your DBMS**
  Your DBMS might require additional setup procedures for use with PowerBuilder or InfoMaker. For details, see *Connecting to Your Database* in the *help*.

- **Upgrading databases for jConnect for JDBC**
  Might be required to prepare SQL Anywhere or Adaptive Server® Enterprise databases for jConnect 5.5.

- **Installing the PBVM in EAServer**
  Required if you plan to deploy PowerBuilder 12.5 components to EAServer.

- **Installing Ghostscript**
  Required if you want to use the distill method for saving DataWindows as PDF.

- **Installing PostScript drivers**
  Required if you want to use the distill method for saving DataWindows as PDF.

### Upgrading Databases for jConnect for JDBC

Prepare SQL Anywhere or Adaptive Server Enterprise databases for jConnect by installing additional tables and stored procedures.

jConnect provides these scripts to install the required stored procedures and tables. Refer to the installation guide for jConnect for detailed information.
Installing the PBVM in EAServer

This topic describes how to install the PBVM on EAServer.

Deploying PowerBuilder 12.5 components to EAServer requires a set of PowerBuilder 12.5 runtime files called the PowerBuilder virtual machine (PBVM), which must be installed on the same computer as EAServer. The PBVM setup program, available in the PBVM directory on the DVD, installs the required files.

To install the PBVM on EAServer:

1. Run the `setup.exe` program in the PBVM directory on the PowerBuilder 12.5 DVD.
   
2. On the Choose Destination Location page, click Next if the default destination location is correct, or click Browse to navigate to the directory where EAServer is installed; then click Next.
   
3. On the Choose Destination Location for Shared Files page, click Next if the default destination location is correct, or click Browse to navigate to the directory you specified in Step 2 or to the Sybase\Shared directory; then click Next.

   The setup program installs the PBVM in a PowerBuilder subdirectory of the directory you select, installs the Web DataWindow and debugger components in the Repository directory, and exits.

Installing Ghostscript

Install Ghostscript if you plan to use the distill method for saving DataWindows as PDF.

To install Ghostscript:

1. Into a temporary directory on your computer, download the self-extracting executable file for the version of Ghostscript you want from one of the sites listed on the Ghostscript Web site at http://ghostscript.com.
   
   See the PowerBuilder release bulletin for the version of Ghostscript that was used for testing.

2. Run the executable file to install Ghostscript on your system.
   
   The default installation directory is C:\Program Files\gs.

Installing PostScript Drivers

This topic describes how to install and use PostScript drivers for saving DataWindows as PDF.

Using the distill method for saving DataWindows as PDF requires a PostScript printer or printer driver installed on your system. Use the Windows Add Printer wizard to install a
PostScript printer. If a PostScript printer was never installed on your computer or the required Microsoft pscript5.dll file is not available, the wizard might prompt you to insert a Windows operating system installation CD.

- To add a PostScript printer to your system:
  a) Select **Settings > Printers** from the Windows **Start** menu.
  b) Double-click **Add Printer**.
  c) Specify a local printer.
  d) Specify **FILE:** as the port.
  e) Select a manufacturer (for example, HP) and a printer with the designation **PS** (such as HP LaserJet Series 4050 PS).

  **Note:** Some printers do not handle images correctly. For example, the HP Color LaserJet PS does not display images in the PDF output, and the HP LaserJet 4/4M Plus PS 600 displays color images using greyscale.

  f) Accept the default name or enter a shorter name for the printer.
  g) Complete the wizard.

- To use the print driver in the DataWindow painter:
  a) Select the **Distill Custom PostScript** check box on the Data Export property page for PDF export.
  b) On the Print Specifications page, specify the printer name (added to the Printer Settings dialog in Step 1.f on page 35 in the previous procedure).

- To use the print driver in a script, set the **Distill.CustomPostScript** and **Printer** properties.
  For example:

  ```plaintext
dw_1.Object.DataWindow.Export.PDF.Distill.CustomPostScript=1
dw_1.Object.DataWindow.Printer="HP LaserJet Series 4050 PS"
```
Postinstallation Tasks
Uninstalling a PowerBuilder Product

This topic describes how to uninstall PowerBuilder products.

Use one of these methods to run the PowerBuilder setup maintenance program for each product that you want to uninstall:

- **Add or Remove Programs dialog box**
  a) Make a backup copy of any files you might want to reuse (such as DB, INI, and PBL files) if you plan to reinstall.
  b) Open the Control Panel from the Start menu and double-click the **Add/Remove Programs** button.
  c) On the Install/Uninstall tab page, select the product to uninstall, click **Add/Remove**, and click **Yes** when prompted to confirm that you want to uninstall the tool.
  d) If you are prompted to delete a shared file, click the appropriate response.

  If the usage count for a system file in the registry indicates that the file is no longer being used, the setup maintenance program asks if you want to delete the file. Some applications do not increment the usage count; therefore, **do not delete a file unless you are sure it is not being used by another application.**

- **Silent uninstallation**
  See *Silent Install and Uninstall for PowerBuilder Products* on page 30 or *Silent Install and Uninstall for the PBVM* on page 32.

The PowerBuilder setup maintenance program removes:

- Shared and standard program files
- Folder items
- Program folders
- Program directories
- Program registry entries

The setup maintenance program deletes file and icon groups, as well as system and user path settings in the registry and INI files. Simply deleting directories does not fully uninstall these products.

**Removing Shared DLLs:** The setup program increments the usage count in the registry for each shared Sybase DLL and each shared system DLL. The setup maintenance program decrements that count. The setup maintenance program does not try to delete a shared DLL until the usage count reaches zero.
Uninstalling a PowerBuilder Product

**Stopping the Setup Maintenance Program:** Unlike the setup program, the setup maintenance program has no **Back** or **Cancel** button. Once you click **Yes** in the procedure below, the program cannot be stopped.
Obtaining Help and Additional Information

Use the Sybase Getting Started CD, Product Documentation site, and online help to learn more about this product release.

- The Getting Started CD (or download) – contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Documentation at http://sybooks.sybase.com/ – is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the Adobe Web site.

Note: A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.
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