



Installation Guide

PowerBuilder® 12.5.2

DOCUMENT ID: DC37771-01-1252-01

LAST REVISED: March 2013

Copyright © 2013 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.

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.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world.

Java and all Java-based marks are trademarks or registered trademarks of Oracle and/or its affiliates 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 the respective companies with which they are associated.

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

Installation Workflow	1
Planning Your Installation	3
Installation Media Contents	3
System Requirements	4
Obtaining a License	5
SySAM Troubleshooting	5
Software Requirements	7
Preinstallation Tasks	11
Starting the Common Setup Program	13
Providing Basic Information	15
Installing SQL Anywhere	17
About SQL Anywhere	17
Installing InfoMaker	19
InfoMaker Components	20
Installing PowerBuilder	21
PowerBuilder Components	22
Completing the Setup Program	25
What the Setup Program Does	25
Installing in Silent (Unattended) Mode	29
Accepting the License Agreement	29
Silent Install and Uninstall for PowerBuilder Products	30
Silent Install and Uninstall for the PBVM	32
Postinstallation Tasks	33
Upgrading Databases for jConnect for JDBC	33
Installing the PBVM in EAServer	34
Installing Ghostscript	34
Installing PostScript Drivers	34
Uninstalling a PowerBuilder Product	37
Obtaining Help and Additional Information	39
Index	41

Contents

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 x86 32-bit installation kit.

Table 1. Installation Media Contents

CD or DVD	Contents
The PowerBuilder installation media includes the CDs or DVDs listed in this table. The setup program on the DVD requires you to supply a license, as described in <i>Obtaining a License</i> on page 5.	
Getting Started CD	<i>Customer Service Reference Guide</i> , PowerBuilder and InfoMaker® Release Bulletins, order card for printed documentation, and this Installation Guide.
PowerBuilder DVD	Common setup program for PowerBuilder 12.5.2 (PowerBuilder .NET and PowerBuilder Classic), InfoMaker 12.5.2, 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.

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

Product	Computer	Minimum memory	Hard disk space	Operating system
<p>This table provides system requirements for each product in PowerBuilder. All products require a DVD-ROM drive. The disk space requirements provided are approximate. The actual disk space you need for each product might vary depending on hard disk size, partitioning, and the features you choose to install. Additional temporary space is required on the hard disk during installation for uncompressing install files.</p>				
Power-Builder	Pentium 4 or higher	512MB	656MB for all components	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
InfoMaker	Pentium 4 or higher	256MB	332MB for all components ²	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
SQL Anywhere	400 MHz or higher Pentium-compatible	48MB in addition to memory required by the operating system	337MB for all components not including Ultra-Lite and Windows Mobile	Windows XP, Windows XP Tablet PC Edition, Windows Server 2003, and Windows Vista, Windows 7, and Windows Server 2008 (x86, x64, IA64) ¹ .

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.

License model	Description
Unserviced license model	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.
Served license model	A license server manages the allocation of licenses among multiple machines.

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/index.jsp?topic=/com.sybase.infocenter.help.sysam.22/title.htm>.

Logging SySAM information

To enable logging, add an entry to the `PB.INI` file with the following format:

```
[pb]  
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 PowerBuilder 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.

Note: Support for IPv6 is built into the latest versions of Microsoft Windows, and is available as part of service pack updates for earlier Windows releases. See <http://technet.microsoft.com/en-us/network/bb530961.aspx>.

Software Requirements

Identify the software requirements for PowerBuilder.

Table 3. Required Software for PowerBuilder features

Feature	Required Software
<p>The following table lists the software required for PowerBuilder features.</p> <p>Install any required framework packages and SDKs before you install PowerBuilder. Microsoft developer software is available from the <i>Microsoft Download Center</i>.</p> <p>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.</p>	
<p>.NET target development and deployment</p>	<p>Microsoft .NET Framework Version 4.0, Visual Studio 2010 SP1.</p> <p>This required software can be automatically installed for you during PowerBuilder installation, requiring an internet connection. See <i>Starting the Common Setup Program</i> on page 13.</p>
<p>.NET Windows Forms smart client deployment and update and support for OLE controls in Windows Forms</p>	<p>Microsoft .NET Framework Version 4.0.</p> <p>For design time only, Microsoft .NET Framework 4.0 Software Development Toolkit (SDK).</p>
<p>WCF Client, REST Client, and Web Service DataWindow in PowerBuilder .NET</p>	<p>Microsoft .NET Framework Version 4.0.</p> <p>For design time only, Microsoft Windows SDK for Windows 7 and .NET Framework 4.0, referred to elsewhere in this document as <i>.NET Framework 4.0 SDK</i>.</p>
<p>WPF smart client development and update</p>	<p>Microsoft .NET Framework Version 4.0.</p> <p>For design time only, .NET Framework 4.0 SDK.</p>

Feature	Required Software
<p>.NET Web services local host deployment</p>	<p>Microsoft Internet Information Services (IIS) 5.0 or higher.</p> <hr/> <p>Note: On the development computer, IIS is not required for PowerBuilder applications or components unless the same computer is used a server for smart client applications, or for Web service components. IIS is also not required on end users' computers.</p> <hr/> <p>For information about configuring IIS, see <i>Deploying Applications and Components to .NET</i> in the help.</p>
<p>PowerBuilder and InfoMaker tutorials, demo databases, and sample applications</p>	<p>SQL Anywhere 12 or later.</p> <p>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.</p> <p>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.</p>
<p>MobiLink™ synchronization</p>	<p>Adaptive Server® Anywhere 9.0.2 to SQL Anywhere 12.</p> <p>MobiLink is a component of Adaptive Server Anywhere and SQL Anywhere. In the SQL Anywhere setup program, select Synchronization and Messaging, and then MobiLink.</p>
<p>EAServer component and Web DataWindow development and deployment</p>	<p>EAServer 6.3.1.</p> <p>Run the setup program in the PBVM directory on the DVD to install runtime files and the Web DataWindow server component in EAServer. See <i>Installing the PBVM in EA.Server</i> on page 34.</p>
<p>EJB client development</p>	<p>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.</p> <p>The Sun JDK 1.6 is installed in the Sybase\Shared\PowerBuilder\jdk1.6.0_24 directory when you install PowerBuilder.</p>
<p>Web service clients and Web Service DataWindow in PowerBuilder Classic</p>	<p>Microsoft .NET Framework Version 4.0.</p> <p>For design time only, Microsoft .NET Framework 4.0 SDK.</p>
<p>Saving DataWindows as PDF using the Ghostscript distiller and PostScript printing</p>	<p>Ghostscript and PostScript printer driver.</p> <p>See <i>Installing Ghostscript</i> on page 34 and <i>Installing PostScript Drivers</i> on page 34.</p>

Feature	Required Software
Saving DataWindows as PDF using XSL Formatting Objects (FO) and Java printing	<p>Sun JDK 1.6 or later and Apache FO processor.</p> <p>The Sun JDK 1.6 is installed in the Sybase\Shared\PowerBuilder\jdk1.6.0_24 directory when you install PowerBuilder.</p> <p>The Apache FO processor is installed in the Sybase\Shared\PowerBuilder\fop-0.20.5 directory when you install PowerBuilder.</p>
PowerDesigner® plug-in	<p>PowerDesigner 15.3 ESD #9.</p> <p>An evaluation version is available on the PowerDesigner page of the Sybase Web site.</p>
Data access using the ADO.NET interface	<p>Microsoft .NET Framework Version 4.0 Redistributable Package or later.</p>
JDBC connectivity	<p>Sun JDK 1.6 or later.</p> <p>Sun JDK 1.6 is installed in the Sybase\Shared\PowerBuilder\jdk1.6.0_24 directory when you install PowerBuilder.</p>
Runtime Packager	<p>Microsoft Windows Installer.</p> <p>Microsoft Windows Installer is installed by default on all supported Windows platforms.</p>

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/>. 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 12.5.2.
- Connect to the internet if you want the installer to download and install .NET Framework 4.0 and Visual Studio 2010 SP1. If you do not want the installer to do this, install .NET Framework 4.0 and Visual Studio 2010 SP1 before running the installation.

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.

Note: You need to be connected to the internet if you are installing PowerBuilder .NET IDE and you do not have either of these installed:

- Visual Studio 2010 Isolated Shell and Visual Studio 2010 SP1
- Visual Studio 2010 and Visual Studio 2010 SP1

Visual Studio 2010 Isolated Shell or Visual Studio 2010 installs .NET Framework 4.0.

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 Visual Studio 2010 Isolated Shell and Visual Studio 2010 SP1. If the target machine does not have .NET Framework 4.0 installed, it also installs during the Visual Studio 2010 Isolated Shell installation.

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**.

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.

Providing Basic Information

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 12.5.2 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.

Installing SQL Anywhere

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

Component	Description
InfoMaker Base Components	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.
InfoMaker Database Write Option	Adds three additional painters so that you can work with data more fully: <ul style="list-style-type: none"> • 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 5. Components

Component	Description
PowerBuilder Base Components	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.
.NET Targets	Available under PowerBuilder Base Components, deploys Windows Forms and smart client applications to .NET, and deploys NVOs as .NET assemblies and Web services.
PowerBuilder .NET	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.
Native Database Interfaces	Interfaces that enable you to interact with server databases natively. Expand the tree view to select interfaces to install.
ADO.NET Driver	Interface to connect to databases using an ADO.NET data provider.
OLE DB Driver	Interface to connect to databases using an OLE DB data provider.
JDBC Driver	Interface to connect to databases using JDBC.
SCC Interface	Interface for connecting to any source code control system that supports the Microsoft SCC interface.
DataWindow Web Control for ActiveX	The DataWindow Web Control for ActiveX is a fully interactive DataWindow control. It requires a browser that supports ActiveX.
PB Native Interface	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.
EJB Client	The EJB Client PBNI extension, which enables you to develop clients for EJBs running on J2EE-compliant servers.
Web Services	The extensions and other files that enable you to create clients for Web services using the .NET or EasySoap Web service engines.
PowerDesigner Plug-in	A plug-in that provides the class diagram functionality of the OOM inside the PowerBuilder development environment.

Component	Description
Tutorial	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.
Demo Database	A SQL Anywhere database used in the tutorial, the Code Examples sample application, and examples in the documentation.
Code Examples	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.
Translation Toolkit	Tools to help you translate applications into other languages.
PowerBuilder Resource Monitor	A utility to help determine whether there are sufficient USER/GDI resources available in the operating system to open a painter.
PowerBuilder Runtime Packager	A tool that packages files required for deployment into an MSI file.
Online Help Files	Help files for 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.

In C:\...\ <i>UserName</i> \ subdirectory	Files copied or updated
<p>On Windows XP:</p> <p>Local Settings\Application Data\Sybase\PowerBuilder 12.5</p> <p>On Windows Vista, Windows 2008, and Windows 7:</p> <p>AppData\Local\Sybase\PowerBuilder 12.5</p>	<ul style="list-style-type: none"> • Initialization files (PB.INI, PBLAB125.INI, PBODB125.INI) • License files (PB125.LIC, pb125_sy-sam.properties)
<p>On Windows XP:</p> <p>My Documents\Sybase\PowerBuilder 12.5\Tutorial</p> <p>On Windows Vista and 2008:</p> <p>Documents\Sybase\PowerBuilder 12.5\Tutorial</p> <p>On Windows 7:</p> <p>My Documents\Sybase\PowerBuilder 12.5\Tutorial</p>	<ul style="list-style-type: none"> • Files for the PowerBuilder Getting Started tutorial

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

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.

Silent installation parameter	Description
<i>licPathNameOrServerName</i>	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: <code>silentinstall.bat "lic=myServer:1688"</code>
<i>product</i>	Names the product or products to install. Values are: <ul style="list-style-type: none"> 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
<i>directoryName</i>	Indicates the main installation directory. If you omit this parameter, the main product components install to the <i>sysDriver</i> \Program Files\Sybase\ <i>productName</i> directory, where <i>sysDriver</i> is the main computer drive, and <i>productName</i> is either PowerBuilder 12.5 or InfoMaker 12.5.
<i>sharedDirectoryName</i>	Indicates the shared directory for PowerBuilder or InfoMaker. If you omit this parameter, this directory installs to <i>sysDriver</i> \Program Files\Sybase\Shared.
<i>logFileName</i>	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> .
help or /?	Displays command syntax and parameters instead of running the command.

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

```
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 Anywhere. 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.

```
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:

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

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

Silent installation parameter	Description
<i>aspPathName</i>	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
<i>sharedDirectoryName</i>	Indicates the shared directory for PowerBuilder or InfoMaker. If you omit this parameter, the installed directory is %SystemDrive%\Program Files\Sybase\Shared.
<i>logFileName</i>	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> .

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

```
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 12.5.2

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 12.5.2. Before you do, make sure your PBLs can be successfully regenerated under the earlier version, and make backup copies.

PowerBuilder and InfoMaker 12.5.2 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 12.5.2 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 12.5.2 components to EAServer requires a set of PowerBuilder 12.5.2 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 12.5.2 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:

```
dw_1.Object.DataWindow.Export.PDF.Distill.CustomPostScript=1  
dw_1.Object.DataWindow.Printer="HP LaserJet Series 4050 PS"
```


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 PB VM* 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.

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.

Obtaining Help and Additional Information

Index

- .NET target
 - PowerBuilder component 22
 - software requirements 7
- .NET Windows Forms
 - smart client deployment, software requirements 7
- A**
- ActiveX
 - InfoMaker component 20
 - PowerBuilder component 22
- ADO.NET
 - data access, software requirements 7
 - driver for PowerBuilder 22
- ASA
 - See SQL Anywhere
- autorun.exe 13
- B**
- backup requirements 11
- before you install 11
- C**
- CDs and DVDs in package 3
- common setup program
 - completing 25
 - providing basic information 15
 - results 25
 - starting 13
- D**
- data pipeline painter, InfoMaker component 20
- database painter, InfoMaker component 20
- demo database
 - InfoMaker 20
 - PowerBuilder component 22
 - SQL Anywhere required for 7
- disk space requirements 4, 11
- download image, installing from 13
- E**
- EAServer
 - installing the PBVM in 34
 - software requirements 7
- EJB client
 - PowerBuilder component 22
 - software requirements 7
- F**
- FDCC
 - See Federal Desktop Core Configuration
- features, PowerBuilder 7
- Federal Desktop Core Configuration 25
- files, shareable and user-specific installed 25
- FO processor, for saving DataWindows as PDF 7
- form painter, InfoMaker component 20
- G**
- Getting Started CD 3
- Ghostscript, for saving DataWindows as PDF 7, 34
- H**
- hardware requirements 4
- help files
 - InfoMaker 20
 - PowerBuilder 22
- I**
- IM.INI file 25
- image, installing from 13
- InfoMaker
 - components 20
 - installing in silent mode 29
 - installing interactively 19
 - system requirements 4
 - uninstalling in silent mode 30
 - uninstalling interactively 37
 - write option 20
- installation 3
 - InfoMaker 19
 - media contents 3
 - PowerBuilder 21
 - silent 29
 - SQL Anywhere 17

Index

starting the common setup 13

J

J2EE server, required for EJB client development
7

jConnect for JDBC, upgrading database 33

JDBC

connectivity, software requirements 7

InfoMaker component 20

PowerBuilder component 22

upgrading database for jConnect 33

JDK, required software 7

L

license, SySAM

accepting in a silent installation 29

choosing a model and obtaining a license 5

files 5

providing information during interactive
installation 15

troubleshooting 5

logging, license information 5

M

memory requirements 4

Microsoft .NET Framework, required software 7

Microsoft .NET Visual Studio, required software 7

migrating applications to PowerBuilder or
InfoMaker 33

MobiLink synchronization, software requirements
7

N

native database interface

InfoMaker component 20

PowerBuilder component 22

O

OLE

controls, software requirements 7

DB driver, InfoMaker component 20

DB driver, PowerBuilder component 22

OOM, PowerBuilder support 22

operating systems supported 4

P

PB Native Interface, PowerBuilder component 22

PB.INI file 5, 25

PBVM

directory 7

installing from DVD 29

installing in EAServer 34

installing in silent mode 29, 32

removing 32

PDF, saving DataWindows as 7

permissions, required for users 21

PostScript driver, required for distill save PDF
method 34

PowerBuilder

before installing 11

before using 33

common setup program 13

components 22

installation media contents 3

installing in silent mode 29

installing interactively 13, 21

Resource Monitor 22

Runtime Packager 22

Runtime Packager, software requirements 7

system requirements 4

uninstalling in silent mode 30

uninstalling interactively 37

PowerBuilder .NET

PowerBuilder component 22

software requirements 7

PowerBuilder Classic

PowerBuilder component 22

software requirements 7

PowerDesigner plug-in

PowerBuilder component 22

software requirements 7

R

release bulletins 11

required software, automatically installed 13

requirements

software 7

system, disk space, hardware, and memory 4

S

- sample applications
 - PowerBuilder component 22
 - software requirements 7
- SCC interface, PowerBuilder component 22
- served license model 5
- setup program
 - See common setup program
- setup.exe file, starting 13
- silentinstall command 29
 - for PBVM 32
 - for PowerBuilder, InfoMaker, and SQL Anywhere 30
- silentuninstall command 29
 - for PBVM 32
 - for PowerBuilder, InfoMaker, and SQL Anywhere 30
- SQL Anywhere
 - installing 17
 - installing before PowerBuilder 7
 - preparing for jConnect 33
 - required for JSP, Mobilink, tutorials, and samples 7
 - Runtime Edition installed 17
 - system requirements 4
 - uninstalling in silent mode 30
 - uninstalling interactively 37
- starting setup program 13
- Sybase Software Asset Management
 - See SySAM
- SySAM 5

- system requirements 4

T

- TEMP environment variable 11
- translation toolkit, PowerBuilder component 22
- tutorials and examples
 - InfoMaker component 20
 - PowerBuilder component 22
 - software requirements 7

U

- unattended installation
 - See silentinstall command
- unattended uninstall
 - See silentuninstall command
- uninstalling PowerBuilder products 37
- unserved license model 5

W

- Web DataWindow
 - software requirements 7
- Web services client
 - PowerBuilder component 22
 - software requirements 7
- Windows registry
 - changes made by installation 25
 - write permissions required 21
- workflow, installation 1

