SYBASE®

Installation Guide

PowerBuilder®
Desktop/Professional

11.0

Contents

About This Book

Audience
This book is for anyone installing the Desktop or Professional edition of Sybase® PowerBuilder®.

How to use this book
Read this book before you run the setup program to install PowerBuilder. You can also install SQL Anywhere™ from the setup program.

Related manuals
For a complete list of manuals in the Desktop and Professional edition sets, see "PowerBuilder SyBooks CD" on page 2.

Other sources of information
Use the Sybase Getting Started CD, the SyBooks CD, and the Sybase Product Manuals Web site to learn more about your product:

*   The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the SyBooks CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.

*   The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

    Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

    Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

*   The Sybase Product Manuals Web site is an online version of the SyBooks CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

    To access the Sybase Product Manuals Web site, go to Product Manuals at http://www.sybase.com/support/manuals/.

Sybase certifications on the Web   Technical documentation at the Sybase Web site is updated frequently.

❖ **Finding the latest information on product certifications**

1 Point your Web browser to Technical Documents at http://www.sybase.com/support/techdocs/.

2 Click Certification Report.

3 In the Certification Report filter select a product, platform, and timeframe and then click Go.

4 Click a Certification Report title to display the report.

❖ **Finding the latest information on component certifications**

1 Point your Web browser to Availability and Certification Reports at http://certification.sybase.com/.

2 Either select the product family and product under Search by Base Product; or select the platform and product under Search by Platform.

3 Select Search to display the availability and certification report for the selection.

❖ **Creating a personalized view of the Sybase Web site (including support pages)**

Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

1 Point your Web browser to Technical Documents at http://www.sybase.com/support/techdocs/.

2 Click MySybase and create a MySybase profile.

Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

1 Point your Web browser to the Sybase Support Page at http://www.sybase.com/support.

2 Select EBFs/Maintenance. If prompted, enter your MySybase user name and password.

3 Select a product.

4   Specify a time frame and click Go. A list of EBF/Maintenance releases is displayed.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as a Technical Support Contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click Edit Roles to add the "Technical Support Contact" role to your MySybase profile.

5   Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

Accessibility features

This document is available in an HTML version that is specialized for accessibility. You can navigate the HTML with an adaptive technology such as a screen reader, or view it with a screen enlarger.

PowerBuilder 11.0 and the HTML documentation have been tested for compliance with U.S. government Section 508 Accessibility requirements. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

Note You might need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions. Consult the documentation for your tool.

For information about how Sybase supports accessibility, see Sybase Accessibility at http://www.sybase.com/accessibility. The Sybase Accessibility site includes links to information on Section 508 and W3C standards.

For more information about accessibility features of PowerBuilder, see the chapter on building accessible applications in *Application Techniques*.

For a Section 508 compliance statement for PowerBuilder, go to the Voluntary Product Assessment Templates page at http://www.sybase.com/detail_list?id=52484.

If you need help

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you cannot resolve a problem using the manuals or online help, please have the designated person contact Sybase Technical Support or the Sybase subsidiary in your area.

Installing PowerBuilder

About this book

This book explains how to install the PowerBuilder 11.0 Desktop edition or the PowerBuilder 11.0 Professional edition on Windows XP or Windows Server 2003.

Contents

PowerBuilder contents

PowerBuilder includes the CDs or DVDs listed in Table 1-1. The setup program on the PowerBuilder DVD can be used to install all editions of PowerBuilder (Enterprise, Professional, and Desktop). The editions available to you depend on the license you supply. For more information, see "Product licensing with SySAM 2.0" on page 3.

Table 1-1: PowerBuilder 11.0 contents

CD or DVD	Contents
Getting Started CD	*Customer Service Reference Guide*, *SyBooks Installation Guide*, PowerBuilder *Release Bulletin*, order card for printed documentation, and this *Installation Guide*.
PowerBuilder DVD	Common setup program for PowerBuilder 11.0 (all editions) and SQL Anywhere 10.0. This book describes how to run the common setup program.
PowerBuilder SyBooks CD	Documentation for PowerBuilder in HTML-based and PDF formats. For more information, see "Other sources of information" on page v.

SQL Anywhere

When you install PowerBuilder, you can also install Sybase SQL Anywhere, a fully-featured relational database and data management tool.

PowerBuilder
SyBooks CD

The SyBooks CD contains all the manuals in the PowerBuilder Enterprise and InfoMaker® documentation sets. Some of the books in the PowerBuilder Enterprise documentation set do not apply to your product.

The PowerBuilder Desktop and Professional documentation sets include the following books:

> *Application Techniques*
> *Connecting to Your Database*
> *Connection Reference* (online only)
> *DataWindow Programmer's Guide*
> *DataWindow Reference*
> *Deploying Applications and Components to .NET*
> *Getting Started*
> *Objects and Controls*
> *PowerScript Reference*
> *User's Guide*

Some features described in these books are not available in the Professional or Desktop editions of PowerBuilder. For more information about features supported in your edition of PowerBuilder, look for the name of your edition in the PowerBuilder Help index.

For more information about the SyBooks CD, see "Other sources of information" on page v.

System requirements

This section provides system requirements for PowerBuilder and SQL Anywhere. Both tools require a DVD-ROM drive. The disk space requirements provided are approximate. The actual disk space you need for each tool 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.

PowerBuilder system requirements

Table 1-2 shows system requirements for PowerBuilder Desktop and Professional.

Table 1-2: System requirements for PowerBuilder

System component	Development environment
Operating system	Windows XP Professional with SP 2, Windows XP Tablet PC Edition with SP 2, or Windows Server 2003 with SP 1
CPU	600 MHz Pentium III class processor
Minimum memory	128MB
Disk space	442MB for all components

SQL Anywhere system requirements

Table 1-3 shows system requirements for SQL Anywhere.

Table 1-3: System requirements for SQL Anywhere

System component	Development environment
Operating system	Windows 2000, Windows XP, Windows XP Tablet PC Edition, or Windows Server 2003
CPU	400 MHz or higher Pentium-compatible
Minimum memory	48MB in addition to memory required by the operating system
Disk space	242MB for all components

Product licensing with SySAM 2.0

Starting with PowerBuilder 11.0, PowerBuilder uses the Sybase Software Asset Management System (SySAM) for product licensing.

If you have purchased PowerBuilder, you have either a standalone local license or a served license.

For more information about licensing, see the SySAM Documentation at http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.help.sysam/title.htm.

For troubleshooting help, see "Troubleshooting SySAM issues" on page 21.

Installing a standalone local license

Typically, you must have a license file to install PowerBuilder on your computer. You can download a license file from the Sybase Product Download Center (SPDC) at https://sybase.subscribenet.com/.

If you purchase PowerBuilder from Sybase, you receive an email with a URL, your login, and your password for the SPDC. If you purchase PowerBuilder from a Sybase reseller, you receive a certificate with a Web key registration number and a download URL.

You must provide the host ID and computer name of the computer where you want to install a local license when you contact the SPDC. If you have not obtained your license information before you run the setup program, you can find them on the License Key page in the setup program.

Upgrading a local license

After you install PowerBuilder, you may want to upgrade your Desktop license to Professional or Enterprise, or your Professional license to Enterprise. You can obtain an upgrade license in the same way you obtained your original license.

When you have received your new license, open PowerBuilder and select the Tools>Update License menu item. In the wizard, select the Standalone Seat - Local License radio button, click Next, click the Load button to navigate to the location of your new license file, and complete the wizard. When you restart PowerBuilder, the features enabled by your upgrade will be available.

If you did not install all features
When you install PowerBuilder, you can select all the features available in the Enterprise edition. If you chose not to install some features that you want to use with your new license, you need to run the setup program again. For more information, see "What to install" on page 13 and "Adding tools and components later" on page 21.

Installing a served license

If you are installing a served license, your organization needs a license server. The license server allows you to share and control licenses within a pool of users. It controls license availability and allows you to use licenses as needed. The license server also blocks use when all licenses are being used.

To install a served license, you must know the server name. You may also need the TCP port number if the administrator who installed the license server defined a TCP port number that is different from the default. In this case, you must specify this user-defined TCP port number.

You can use the Tools>Update License menu item in PowerBuilder to update a served license. Contact your system administrator to find out about upgrades available at your site.

Setting up a license server

If you are responsible for setting up a license server, you can install a license server using the *Standalone SySAM Installer.zip* file in the *Support* directory on the DVD. For more information, see the chapter on license server administration in the Sybase Software Asset Management User's Guide at http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc00530_0200/html/sysamug/title.htm.

Pre-installation tasks

Before you install PowerBuilder, you need to perform the following tasks:

- Read the release bulletin for the latest information on the products you are installing. Pay close attention to the "Special Installation Instructions" section.

  The release bulletin is available in the product package on the Getting Started CD.

  Release bulletins are also available at the Product Manuals Web site at http://www.sybase.com/support/manuals/. The release bulletin at this site sometimes contains more recent information than the bulletin on the Getting Started CD.

  A *readme.txt* file for SQL Anywhere is available in the *SQLAnywhere10* directory on the DVD.

- Make sure the drive where 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 free the space after the installation is complete.

- Close any open PowerBuilder applications.

• Back up your files. See "Backing up your files" next.

• Read "Required software for PowerBuilder features" on page 6 to determine whether you need to install any software before installing PowerBuilder 11.0.

• If you already have PowerBuilder installed on your computer, follow the instructions in "Updating PowerBuilder" on page 10.

Backing up your files

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

Besides backing up your PBLs, you need to 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 additional information about backing up and migrating existing applications, see "Before using PowerBuilder" on page 19.

Required software for PowerBuilder features

Table 1-4 lists the software required for all PowerBuilder features.

All features are available in the setup program
When you install the PowerBuilder Professional or Desktop edition, all the features available in the Enterprise edition are included in the list of components you can select. This enables you to upgrade your license without reinstalling the product. The table indicates which features are available in Professional or Enterprise editions only.

You can choose to clear the check box for features you do not want to install, or leave all components selected. Some Enterprise features have additional software requirements and may not be installed if the required software is not available on your computer before you run the setup program.

Table 1-4: Required software for PowerBuilder features

Feature	Required software	Notes
Tutorial Demo database Code Examples sample application	SQL Anywhere 10.0 or later	**Note** This product must be installed on your computer before you install PowerBuilder. SQL Anywhere 10.0 is available on the DVD. If the PowerBuilder setup program cannot detect SQL Anywhere 10.0 or later on your computer, you receive a warning. If you choose to continue, the setup program does not install the tutorial or create registry entries for the demo database. If you want to use these features later, you must reinstall PowerBuilder.
Saving DataWindows as PDF using XSL Formatting Objects (FO) and Java printing	Sun JDK 1.3 or later *and* Apache FO processor	The Sun JDK 1.5 is installed in the *Sybase\Shared\PowerBuilder\jdk1.5.0_06* directory when you install PowerBuilder. The Apache FO processor is installed in the *Sybase\Shared\PowerBuilder\fop-0.20.4* directory when you install PowerBuilder.
Saving DataWindows as PDF using the Ghostscript distiller and PostScript printing	Ghostscript *and* PostScript printer driver	See "Installing Ghostscript" on page 20 for information about obtaining and installing Ghostscript files. See "Installing PostScript drivers" on page 20for information about installing PostScript drivers.
PowerBuilder Runtime Packager	Microsoft Windows Installer	Microsoft Windows Installer is installed on all Windows XP and Windows 2003 systems.
.NET Windows Forms development and deployment (Professional and Enterprise) .NET Web Forms, .NET Web services, and .NET assembly deployment (Enterprise only)	Microsoft .NET Framework Version 2.0 Redistributable Package	**Note** This package must be installed on your computer before you install PowerBuilder. The package is available from the Microsoft Download Center at http://www.microsoft.com/downloads/details.aspx?familyid=0856EACB-4362-4B0D-8EDD-AAB15C5E04F5&displaylang=en.
.NET Windows Forms support for OLE controls in Windows Forms (Professional and Enterprise) Smart client deployment (Enterprise only)	Microsoft .NET Software Development Toolkit 2.0	**Note** This SDK must be installed on your computer before you install PowerBuilder. The SDK is available from the Microsoft .NET Framework Developer Center at http://msdn2.microsoft.com/en-us/netframework/aa731542.aspx.

Feature	Required software	Notes
.NET Web Forms development and deployment and .NET Web services local host deployment (Enterprise only)	Microsoft Internet Information Services (IIS) 5.0 or higher	**Note** This feature must be installed on your computer before you install PowerBuilder. For how to configure IIS, see *Deploying Applications and Components to .NET*.
.NET Web Forms runtime (Enterprise only)	IE Web Controls	Web Forms use these controls to display correctly and to provide functionality for the Tab, TreeView, and Toolbar controls. If you choose to install the .NET Web Forms feature, this software is installed automatically.
MobiLink synchronization (Enterprise only)	Adaptive Server® Anywhere 9.0.2 or SQL Anywhere 10.0 or later	MobiLink is a component of Adaptive Server Anywhere 9.0.2 and SQL Anywhere 10.0. In the SQL Anywhere 10.0 setup program, select Synchronization and Messaging and then MobiLink.
EAServer component and Web DataWindow development and deployment (Enterprise only)	EAServer 5.5 with EBF 13993, EAServer 6.0.1 with EBF 14587, or later	Run the setup program in the *PBVM* directory on the PowerBuilder DVD to install PowerBuilder 11.0 runtime files and the Web DataWindow server component in EAServer.
Application server component development and deployment (Enterprise only)	PowerBuilder Application Server Plug-in Version 1.0 with EBF 14675 or later JBoss 4.0.4, BEA WebLogic 9.2, or IBM WebSphere 6.1 Sun JDK 1.4 or IBM JDK 1.4 or later	Run the setup program in the *PBVM* directory on the PowerBuilder DVD to install PowerBuilder 11.0 runtime files in the server plug-in. For more information about the server plug-in, see the Sybase Product Manuals Web site at http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.help.pbasp_1.0/title.htm.
EJB client development (Enterprise only)	EAServer 5.5 with EBF 13993, EAServer 6.0.1 with EBF 14587, or another J2EE-compliant application server such as WebLogic 8.1, Oracle 9*i* AS, Oracle Application Server 10*g*, or WebSphere 5.0 Sun JDK 1.5 or IBM JDK 1.4 or later	The Sun JDK 1.5 is installed in the *Sybase\Shared\PowerBuilder\jdk1.5.0_06* directory when you install PowerBuilder.

Feature	Required software	Notes
Web service clients (Enterprise only)	Microsoft .NET Framework Version 2.0 Redistributable Package Microsoft .NET Software Development Toolkit 2.0	See ".NET Windows Forms development and deployment" and ".NET Windows Forms support for OLE controls in Windows Forms" above.
JSP target deployment (Enterprise only)	Access to a server running EAServer 6.0 or later or Apache Tomcat 4.0 or later Sun JDK 1.3 or later	Apache Tomcat can be downloaded from the Apache Jakarta Project Web site at http://jakarta.apache.org/tomcat/index.html. No Tomcat files are required on the development computer. Sun JDK 1.5 is installed in the *Sybase\Shared\PowerBuilder\jdk1.5.0_06* directory when you install PowerBuilder.
JSP target development (Enterprise only)	Microsoft Internet Explorer (IE) 6 or later	**Note** This software must be installed on your computer before you install PowerBuilder. You can download Microsoft Internet Explorer from the Microsoft Downloads page at http://www.microsoft.com/downloads/ If the setup program cannot detect Internet Explorer 6 or later on your system, you will receive a warning. If you choose to continue, the setup program disables JSP targets functionality. If you want to use JSP targets at a later date, you must reinstall PowerBuilder 11.0. You do *not* need to install the Microsoft VM. JSP targets in PowerBuilder 11.0 use the Sun Java VM.
PowerDesigner plug-in (Enterprise only)	PowerDesigner 12.1	An evaluation version of PowerDesigner is available on the PowerDesigner page of the Sybase Web site.
Data access using the PowerBuilder ADO.NET interface (Enterprise only)	Microsoft .NET Framework Version 2.0 Redistributable Package	See ".NET target development and deployment" above.
JDBC connectivity (Enterprise only)	Sun JDK 1.3 or later	Sun JDK 1.5 is installed in the *Sybase\Shared\PowerBuilder\jdk1.5.0_06* directory when you install PowerBuilder.

Updating PowerBuilder

If you are updating from a previous version of PowerBuilder, you must have PowerBuilder Desktop 10.0.x, 10.2.x, or 10.5.x installed on your computer if you have purchased the PowerBuilder Desktop Update license, or PowerBuilder Professional 10.0.x, 10.2.x, or 10.5.x if you have purchased the PowerBuilder Professional Update license.

If none of these products is installed on your computer, the setup program prompts you to insert the CD for one of the older versions for which your update is licensed into your DVD-ROM drive for validation before proceeding with the installation.

After validating the CD, the setup program prompts you to reinsert the PowerBuilder 11.0 DVD into your DVD-ROM drive.

In general, you can run the setup program to install the products in this set over existing versions of those products, or you can make disk space available by uninstalling older versions before running the setup program.

Starting the PowerBuilder setup program

To install PowerBuilder, insert the PowerBuilder DVD into your DVD drive. The setup program starts automatically.

Installing from a downloaded image
If you have downloaded an installable image from the Sybase Web site, run the *autorun.exe* file. If you run *setup.exe*, the procedure described in "Installing PowerBuilder" on page 13 starts and you will not be able to install SQL Anywhere.

❖ **To start the setup program:**

1 Exit any programs that are running.

2 Insert the PowerBuilder 11.0 DVD into your DVD-ROM drive.

   On the start page of the setup wizard, you can choose to install PowerBuilder 11.0 and SQL Anywhere 10.0.

3   Select SQL Anywhere 10.0 first if it is not already installed.

For how to install SQL Anywhere, see "Installing SQL Anywhere" on page 11.

SQL Anywhere required

If you select PowerBuilder and the setup program detects that SQL Anywhere is not installed on your system, it displays a warning message that allows you to exit the PowerBuilder setup program and return to the start page and select SQL Anywhere. If you choose not to install SQL Anywhere, the features that depend on it, listed in Table 1-4 on page 7, are not installed.

---

4   Select PowerBuilder 11.0.

Selecting PowerBuilder 11.0 starts a wizard that collects basic information before installing PowerBuilder. You will need to provide license information. For more information, see "Installing PowerBuilder" on page 13.

Installing 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. Deployed systems require a separate SQL Anywhere license or the SQL Anywhere Runtime Edition (see "SQL Anywhere Runtime Edition" next).

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.

SQL Anywhere Runtime Edition

PowerBuilder also includes the SQL Anywhere for Windows royalty-free runtime edition (the "SQL Anywhere Runtime Edition"). The SQL Anywhere Runtime Edition is a restricted-functionality version of the standalone version of SQL Anywhere. For example, the SQL Anywhere Runtime Edition does not support stored procedures and triggers, transaction logs, and synchronization.

The SQL Anywhere Runtime Edition is available in the *Support\SA100runtime* directory on the DVD. For more information, including the list of Redistributable Components of the SQL Anywhere Runtime Edition, see the *Read Me First* document in that directory.

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, setup creates it.

❖ **To install SQL Anywhere:**

1 On the Welcome page, click Next.

2 On the Choose Location page, click Next to accept the destination folder path shown, or click Browse and select a different path for all the modules, click OK, and click Next.

3 On the Choose Samples Location page, click Next to accept the destination folder path shown, or click Browse and select a different path for samples, click OK, and click Next.

4 On the Select Components page, select the components you want to install, and click Next.

5 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.

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

If you selected Documentation in step 3, the SQL Anywhere 10 Documentation Setup Select Components page displays.

7 Select Next to install the documentation or Cancel to continue without installing it. If you select Next, select Next again on the Start Copying Files page.

8 On the Setup Complete page, select the check box if you want to view iAnywhere Online Resources, and click Finish to return to the start page of the PowerBuilder setup program.

Installing PowerBuilder

What to install

The PowerBuilder setup program lets you choose which components to install. You must install the base components. Table 1-5 lists all the components and lists the features that will be available to you when you start your edition of PowerBuilder. If you want to be able to upgrade to another edition later without running the setup program again, leave all the features you might want to use selected. If you do not plan to upgrade and want to conserve disk space, use the table to determine which features you need not install.

For more information about upgrading, see "Upgrading a local license" on page 4.

Table 1-5: PowerBuilder components

Component	Description	Edition
PowerBuilder Base Components	Includes the PowerBuilder 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, JDK 1.5, and (for Enterprise) support for EAServer and COM/COM+.	All
.NET Targets	Deploying Windows Forms, smart client, and Web Forms applications to .NET and deploying NVOs as .NET assemblies and Web services.	Professional (Windows Forms only) Enterprise
JSP Targets	Building Web sites using JavaServer Pages technology.	Enterprise
Native Database Interfaces	Interfaces that enable you to interact with server databases natively. Expand the tree view to select which interfaces to install.	Enterprise
ADO.NET Driver	Interface to connect to databases using an ADO.NET data provider.	Enterprise
OLE DB Driver	Interface to connect to databases using an OLE DB data provider.	Enterprise
JDBC Driver	Interface to connect to databases using JDBC.	Enterprise
SCC Interface	Interface for connecting to any source code control system that supports the Microsoft SCC interface. (Professional and Enterprise.)	Professional Enterprise

Component	Description	Edition
Web Plug-ins	Tools that enable you to display PowerBuilder windows or DataWindows in a Web browser. The plug-ins require a browser that supports Netscape plug-ins and the ActiveX controls require a browser that supports ActiveX. The DataWindow Plug-in displays a PSR file. The DataWindow Web Control for ActiveX is a fully interactive DataWindow control.	All (DataWindow Web Control for ActiveX Professional and Enterprise only)
PowerBuilder 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.	All
EJB Client	The EJB Client PBNI extension, which enables you to develop clients for EJBs running on J2EE-compliant servers.	Enterprise
Web Services	The PowerBuilder extensions and other files that enable you to create clients for Web services using the .NET or EasySoap Web service engines.	Enterprise
PowerDesigner Plug-in	A plug-in that provides the class diagram functionality of the PowerDesigner OOM inside the PowerBuilder development environment.	Enterprise
PowerBuilder Tutorial	Source files for the tutorial in the Getting Started book. If you want to do the PowerBuilder tutorial or use the code examples, you must install SQL Anywhere 10.0 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.	All
Demo Database	A SQL Anywhere database used in the tutorial, the Code Examples sample application, and examples in the documentation.	All
Code Examples	The Code Examples application, which demonstrates coding techniques, the Web DataWindow PBL, which can be used as a model for a custom Web DataWindow server component, and other examples.	All
Translation Toolkit	Tools to help you translate PowerBuilder applications into other languages.	Enterprise
PowerBuilder Resource Manager	A utility to help PowerBuilder determine whether there are sufficient USER/GDI resources available in the operating system to open a painter.	All

Component	Description	Edition
PowerBuilder Runtime Packager	A tool that packages files required for deployment into an MSI file.	All
Online Help Files	The *pbhlp110.hlp* file, the Getting Started book in PDF format, and the *pbman110.chm* compiled HTML Help file.	All

Installation procedure

You must have Administrator privileges to fully install this product. After installing, make sure users have write permission for the PowerBuilder 11.0 directory and the Windows registry.

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

❖ **To install PowerBuilder:**

1   Select PowerBuilder 11.0.

2   On the Welcome page, click Next.

If you have not installed prerequisites for any feature, the next page in the wizard informs you what needs to be installed. You can click Cancel to exit the wizard or Next to continue without installing the prerequisites. For more information, see Table 1-4 on page 7.

Back and Next
Use the Back and Next buttons to step backward and forward through the wizard to modify specifications as necessary.

---

3   On the License Type page, select the type of license you want to use.

If you select Standalone Seat - Local License and click Next, the License Key page displays. Click the Load button, navigate to the location of your license file, select it and click Open, then click Next. Wait for a few seconds while the setup program validates the license.

If you select Standalone Seat - Served and click Next, the Server Information page displays. Enter the name of the license server provided by your system administrator. You may also need the TCP port number if the administrator who installed the license server defined a non-default TCP port number. Click Next and wait for a few seconds while the setup program validates the license.

For more information, see "Product licensing with SySAM 2.0" on page 3.

4   If the Select Edition page displays, select your edition of PowerBuilder and click Next.

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. You must use the same folder for shared files for all products in this set.

9   On the Select Components page, select PowerBuilder and click Next to continue.

Cancel
To interrupt the installation process, use the Cancel button in the wizard. When you click Cancel, you can choose to exit or resume the installation. If you choose to exit, you can exit the current setup program and continue with your other selections, or exit setup completely.

10 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, and click Next.

11 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.

12 On the Select Components page, clear 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 clear subcomponents of top-level components, and click Select All or Unselect All to select or clear all the check boxes.

You must select the PowerBuilder Base Components option. For information on what to select, see "What to install" on page 13.

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

---

13   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.

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

15   On the InstallShield Wizard Complete page, select the check box if you
want to read the Readme file, and click Finish.

You must close the Readme file to continue. PowerBuilder registers the
components you installed.

16   On the next InstallShield Wizard Complete page, click Finish to complete
the installation.

If you do not clear the check boxes on this page, setup displays the install
readme file and launches a browser so that you can complete online
registration.

17   If the System Reboot Required page displays, click Finish to reboot your
computer, or choose to reboot your computer later.

You should always shut down and restart your computer before using
PowerBuilder.

Completing the setup program

After the products you selected have been installed, return to the setup
program's start page and exit the PowerBuilder setup program.

❖   **To complete the PowerBuilder setup program**

•   On the setup program's start page, choose to view the readme, open the
Product Manuals Web site or Sybase Web site, and click Exit to close the
setup program.

Network install
The installation procedure presented above assumes you are installing from the PowerBuilder DVD. If you are a system administrator and your site has multiple licenses, you might want to allow users to install PowerBuilder from a network drive rather than from the DVD. To do this, 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. Users must have administrative privileges on their computers in order to run PowerBuilder.

What the setup program does

The setup program does the following:

- Installs Sybase files in a *Sybase* directory

- 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*

Directory names

The default installation places all Sybase tools in a directory called *Sybase*. All files shared by more than one Sybase tool are placed in a common subdirectory called *Shared*:

File type	Directory names
Sybase tools	*install_dir*\Sybase
Files associated with each tool	*install_dir*\Sybase*tool-name*
Shared files	*install_dir*\Sybase\Shared*tool-name*

Registry changes

The setup program makes the following changes to the Windows registry:

- Creates or updates registry subkeys, including *ODBC.INI* and *ODBCINST.INI*

- 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 to compiled HTML Help files to the registry path
  HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\HTMLHelp

Before using PowerBuilder

Before you use PowerBuilder, you might need to perform some additional
configuration or migration tasks:

- Migrating applications to PowerBuilder 11.0

- Setting up your DBMS

- Installing Ghostscript

- Installing PostScript drivers

Migrating applications to PowerBuilder 11.0

If you have applications and PBLs that you created in an earlier version of
PowerBuilder, you can migrate them to version 11.0. Before you do, make sure
your PBLs can be successfully regenerated under the earlier version, and make
backup copies.

PowerBuilder 11.0 is 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 *User's Guide*.

You should 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. For details, see *Connecting to Your Database*.

Installing Ghostscript

If you want to use the distill method for saving DataWindows as PDF, you must install Ghostscript.

❖ **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://www.ghostscript.com/awki.

    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*.

After installing Ghostscript, you should read the *readme.htm* file in the *doc* subdirectory in the Ghostscript installation directory to find out more about using Ghostscript and distributing it with your application.

Installing PostScript drivers

If you want to use the distill method for saving DataWindows as PDF, you must have a PostScript printer or printer driver installed on your system. If you do not, use the Windows Add Printer wizard to add a PostScript printer. If you have never installed a PostScript printer, the Microsoft *pscript5.dll* file, which is required to add a PostScript printer, may not be available on your computer. You may be prompted to insert a Windows operating system installation CD.

❖ **To add a PostScript printer to your printer settings:**

1   Select Settings>Printers from the Windows Start menu.

2   Double-click Add Printer.

3   Specify a local printer.

4   Specify FILE: as the port.

5   Select a manufacturer (such as HP) and a printer with the designation PS (such as HP Color LaserJet PS or HP LaserJet 4/4M Plus PS 600).

6   Accept the default name or enter a shorter name for the printer.

7   Complete the wizard.

❖ **To use the print driver in the DataWindow painter:**

1   Select the Distill Custom PostScript check box on the Data Export property page for PDF export.

2   Specify the printer name (from step 6 in the previous procedure) as the Printer Name on the Print Specifications page.

❖ **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 4/4M Plus PS 600"
```

Adding tools and components later

You can install additional tools and components by running the setup program again.

❖ **To add one or more components or tools to your installation:**

1   Repeat the installation procedure that begins in "Starting the PowerBuilder setup program" on page 10.

2   Select SQL Anywhere or PowerBuilder from the start page and select the additional features you require in the individual setup programs.

3   Complete the main setup program.

Troubleshooting SySAM issues

If you experience issues with your SySAM license, read this section to find information that might help you troubleshoot licensing issues, or help you collect information that Technical Support can use to diagnose licensing issues. You can find more information about SySAM licensing on the SySAM Web site at http://www.sybase.com/sysam and in the SySAM Documentation at http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.help.sysam/title.htm.

Logging SySAM information

You can enable logging by adding an entry to the *PB.INI* file with the following format, where N is 0, 1, or 2:

```
[pb]
LogSySAM = N
```

The default value for LogSySAM is 0, which means no logging. Set the value to 1 for basic logging information, or 2 for full information. The log file is saved in the same directory as *PB.INI* and is named *PB110_sysam.log*. The file contains status information from the development environment, the details of the current license, and, if you set the SySAMTrace value in *PB.INI*, information from the SySAM API. Technical Support might ask you to set these values if you experience license problems.

Additional SySAM files

The *pb110_sysam.properties* and *PB110.lic* files are installed in the same directory as *PB.INI*. 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, it might not be found. Try a fully-resolved name, such as "myserver.mydomain.com."

Removing a product

If you want to remove products from your computer, you should use the Windows control panel's Add or Remove Programs dialog box for each product you want to remove. This uses the PowerBuilder setup maintenance program to remove:

- Shared and standard program files

- Folder items

- Program folders

- Program directories

- Program registry entries

The setup maintenance program removes file and icon groups, as well as system and user path settings in the registry and INI files. These changes are not made if you simply delete directories.

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.

❖ **To use the setup maintenance program to remove a product:**

1   Make a backup copy of any files you might want to reuse (such as DB, INI, and PBL files) if you plan to reinstall.

2   Open the Control Panel from the Start menu and double-click the Add/Remove Programs icon.

3   On the Install/Uninstall tab page, select the product to remove, click Add/Remove, and click Yes when prompted to confirm that you want to remove the tool.

4   If you are prompted to remove 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.*

Index

A

Apache FO processor, required for XSL-FO save as PDF method   7
Apache Tomcat, required for JSP target deployment   9
ASA. *See* SQL Anywhere   8
autorun.exe   10

B

backup requirements   6
before you install   5

C

CDs and DVDs in package   1
configuration, DBMS   19
contents of PowerBuilder package   1

D

Desktop edition
   features supported   6, 13
   upgrading   4
disk space requirements   3, 5
downloaded image, installing from   10

E

EAServer
   for EJB client development   8
   required for JSP target deployment   9
   required for Web DataWindow deployment   8
EAServer component development, requirements   8
EJB clients, requirements   8

environment variables, TEMP   5

F

features
   edition support   13
   selecting   13
   software required for   7

G

Getting Started CD   2
Ghostscript, required for distill save as PDF method   7

H

hardware requirements   3

I

image, installing from   10
installation, starting   10
Internet Explorer, required for JSP targets   9

J

J2EE server, required for EJB client development   8
JDBC connectivity, requirements   9
JDK
   required for EJB client development   8
   required for JDBC connectivity   9
   required for JSP target deployment   9
   required for XSL-FO save as PDF method   7
JSP targets, requirements   9

T

U

W