

# PowerBuilder® Desktop/Professional 10.2.1

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## 1. Accessing current release bulletin information

A more recent version of this release bulletin may be available on the Web. To check for critical product or document information added after the release of the product CD, use the Sybase® Technical Library Product Manuals Web site.

### ❖ Accessing release bulletins at the Technical Library Product Manuals Web site

- 1 Go to Product Manuals at <http://www.sybase.com/support/manuals/>.
- 2 Follow the links to the appropriate Sybase product.
- 3 Select the Release Bulletins link.
- 4 Select the Sybase product version from the Release Bulletins list.
- 5 From the list of individual documents, select the link to the release bulletin for your platform. You can either download the PDF version or browse the document online.

## 2. Product summary

This product is Sybase PowerBuilder® Professional or Sybase PowerBuilder Desktop version 10.2.1, which is compatible with the following platform and operating system configurations:

- Microsoft Windows 2000 with Service Pack 4
- Microsoft Windows XP with Service Pack 2
- Microsoft Windows XP Tablet PC Edition with Service Pack 2
- Microsoft Windows Server 2003

## 3. Special installation instructions

This section describes special installation instructions for PowerBuilder.

### 3.1 Before you install

Before you install this release, shut down any applications running on your system. Restart your system after all the installations are complete.

The executable files in this release extract setup files to the folder specified by your TMP environment variable, or the folder specified by your TEMP environment variable if TMP is not defined or specifies a directory that does not exist. Make sure you have enough disk space on the drive containing this folder before beginning the installation.

To specify an alternative location, open the System Properties dialog box from the Windows Control Panel, select the TMP user variable (or TEMP if TMP does not exist) on the Environment or Advanced tab page, and specify a location that has sufficient space.

### 3.2 Installing PowerBuilder

You can download PowerBuilder 10.2.1 Desktop and Professional editions from the PowerBuilder page of the Sybase EBFs/Maintenance site at <http://downloads.sybase.com>. Download the files you require and extract the contents of the zip files following the instructions in the download notes that accompany the release.

To install either of these products, you must have already installed version 10.0 of that product on your computer.

#### ❖ Updating PowerBuilder Desktop or Professional:

- 1 Create a backup by copying the contents of your *Sybase\Shared\PowerBuilder* directory to another directory.
- 2 If you use the PowerBuilder Foundation Classes (PFC) (Professional only), or the Internet plug-ins, back up the directories where they are installed.
- 3 Run the *setup.exe* file in the *PowerBuilder* directory extracted from the *PowerBuilder.zip* file.
- 4 Perform a full rebuild of your PowerBuilder application in the System Tree or Library painter to ensure that all descendent objects are synchronized with their ancestors and to incorporate any compiler fixes in your code.

## 4. Changed functionality in this version

This section summarizes changed functionality in PowerBuilder 10.2.1. For a description of changes in the earlier versions of PowerBuilder 10.x, see the release bulletins at <http://sybooks.sybase.com/pb.html#RB> or the New Features section of the PowerBuilder online Help file. To view the Help file, select Help>Welcome to PowerBuilder 10.0 from the PowerBuilder menu.

### 4.1 PasteLowercase PB.INI option

When you paste PowerScript® statements such as FOR...NEXT and CHOOSE CASE into a script, the statements are pasted in lowercase. To paste statements in uppercase, add the following line to the [PB] section of the *PB.INI* file:

```
PasteLowercase=0
```

### 4.2 Configuring Java VM initialization

When you connect to a source control system, PowerBuilder instantiates a Java VM by default. For certain source code control (SCC) programs, such as Borland's StarTeam or Serena's TrackerLink, the Java VM instantiated by PowerBuilder conflicts with the Java VM instantiated by the SCC program. To prevent Java VM conflicts, add the following section and parameter setting to the *PB.INI* file:

```
[JavaVM]  
CreateJavaVM=0
```

This prevents PowerBuilder from instantiating a Java VM when it connects to a source control system.

## 5. Known problems

This section describes known problems in PowerBuilder version 10.2.1.

### 5.1 Database connectivity issues

This section describes known database connectivity issues.

### 5.1.1 Window is a reserved word in ASA

In Adaptive Server Anywhere (ASA) 9, the word “window” is a reserved word. As a result, SELECT statements on a column with the name window do not work correctly. There are several ways to work around this issue:

- Set the DelimitIdentifier database parameter to “Yes” in the ConnectString.
- Set the NON\_KEYWORDS ASA database option:  

```
SET OPTION NON_KEYWORDS = 'WINDOW'
```
- Enclose the column name in quotation marks in SQL statements.

[CR 334166]

### 5.1.2 Issues with traditional Chinese data and Adaptive Server ODBC drivers

Traditional Chinese data cannot be manipulated correctly in the Database painter using the big5 character set with the Sybase ASE ODBC driver or the DataDirect 4.2 ASE ODBC driver. [CR 342722]

### 5.1.3 DataDirect ODBC XML driver issue

You cannot use a SQL statement to update date, time, timeStamp, and boolean datatypes in the ISQL view of the Database painter with a connection that uses the PB DataDirect ODBC driver for XML. [CR 352252]

### 5.1.4 PB DataDirect Oracle driver issues

If you create a table in the Database painter using the PB DataDirect 4.2 Oracle driver and assign it a name that uses all lowercase characters, the table columns are not visible in the Layout view. They display correctly after you select Tables>Refresh. [CR 348038]

### 5.1.5 Oracle stored procedures without parameters

An Oracle stored procedure without parameters produces an ORA-01036 error at runtime if you connect using ODBC. [CR 343297]

### 5.1.6 Microsecond portion of Adaptive Server times not retrieved

When you use the ODBC interfaces, the microsecond portion of a DateTime column value is retrieved correctly, but the microsecond portion of a Time column value is not. [CR 399257]

## 5.2 DataWindow issues

This section describes known DataWindow issues.

### 5.2.1 Save As PDF fails on Windows 2003 Server

Saving as PDF using the Distill method fails at runtime on Windows 2003 Server. This is caused by a Group Policy that by default disallows installation of printers that use kernel-mode drivers. Kernel-mode drivers have access to system-wide memory, and poorly written drivers can cause system failures. To allow installation of kernel-mode drivers, follow these steps:

- 1 Select Run from the Windows Start menu.
- 2 In the Open box, type gpedit.msc and click OK.
- 3 In the Group Policy console, expand Computer Configuration, Administrative Templates, and Printers.
- 4 Disable “Disallow Installation of Printers Using Kernel-Mode Drivers.”

[CR 349868]

### 5.2.2 XSL-FOP save as PDF does not support graphic controls

Use the distill method to export the data in DataWindow objects that contain graphic controls, such as lines and rectangles, to PDF. The XSL-FOP method does not work correctly for graphic controls. [CR 303829]

### 5.2.3 Limitations in default PostScript drivers

The PostScript drivers installed with PowerBuilder do not support searching the generated PDF file. Also when a DataWindow object has more columns than fit on a single page, so that data is wrapped to a new page in the PDF file, sometimes the last column on each page is clipped. The workaround for this issue is to use an alternative driver. See the PowerBuilder 10 Installation Guide at <http://sybooks.sybase.com/pb.html#Install> for instructions on installing and using an alternative driver. [CR 324579, CR 332365]

### 5.2.4 Printing a large composite report with graphical objects fails

When you attempt to print a large composite report with multiple graphical objects, some pages or objects in the report, or both, fail to print. [CR 405698]

### 5.2.5 Modify method causes unexpected changes in EditMask column

At runtime, using Modify to change a property of a DataWindow column with the EditMask edit style causes a spin control to display in the column when the column has focus. [CR 404242]

### 5.2.6 Print preview mode disabled with ShowPrintDialog

When a DataWindow is in print preview mode, calling the Print method with the ShowPrintDialog argument set to true causes the DataWindow to display in normal mode. [CR 401182]

## 5.3 Installation issues

This section describes known installation issues.

### 5.3.1 Uninstalling removes database profiles and recent workspace list from registry

Uninstalling PowerBuilder 8 or 9 removes PowerBuilder 10 database profiles and the recent workspace list from the *HKEY\_CURRENT\_USER\Software\Sybase\PowerBuilder\10.0* key in the registry. To work around this issue, export this registry key to a file before you uninstall PowerBuilder 8 or 9. [CR 360544]

## 5.4 SCC issues

This section describes known SCC issues.

### 5.4.1 Adding an object to SCC whose name contains non-English characters fails

When you put a workspace that supports multiple languages under source control and attempt to add all files to SCC, PowerBuilder crashes if one or more of the object names contain non-English characters. [CR 342590]

## 5.5 Other issues

This section describes other known issues.

### 5.5.1 UpdateBlob SQL statement supports only UTF-16LE

The UpdateBlob SQL statement updates garbage characters to the database if the encoding of the blob variant is not UTF-16LE. For Adaptive Server Enterprise, PowerBuilder crashes if the encoding of the blob is ANSI or UTF-8 and contains fewer than 10 characters. [CR 353231]

### 5.5.2 Truncated string in saved EMF file

If a string in a text control in a DataWindow object is longer than can be displayed in the control in the Design view in the DataWindow painter, an enhanced metafile (EMF) file saved in the painter or at runtime displays with the string truncated. [CR 342797]

### 5.5.3 Throws clause removed from menu events when menu item is moved

If you add a user-defined event to a menu item and specify in the Prototype window that the event throws an exception, and then move the menu item to another location, the Throws box in the Prototype window is cleared. [CR 290236]

### 5.5.4 DirSelect function can throw exception on Windows XP

On Windows XP, the DirSelect function of a DropDownListBox or DropDownPictureListBox control works incorrectly because of a bug in the operating system. [CR 335402]

### 5.5.5 String formatting function not Unicode enabled

The String function used to format a string does not have an encoding argument to specify the encoding of the resulting string. As a result, the string returned may contain garbage characters.



To work around this issue, convert the string to a blob and then back to a string using the encoding parameters provided in the Blob and String conversion functions:

```
ls_temp = String(long, "address" ) // format string
lb_blob = blob(ls_temp, EncodingUTF16LE!)
ls_result = string(lb_blob, EncodingANSI!) // convert
// to string
```

[CR 361568]

### 5.5.6 Failing to rebuild may cause runtime errors

If you distribute an application with PBDs that were generated using different builds of PowerBuilder, such as PowerBuilder 10.0 and PowerBuilder 10.2.1, or if you run an application that was built using an earlier build in the development environment, a runtime error may result. This issue occurs when your application contains either a ListView or TreeView object in one PBL and one or more functions that act on that object in a separate PBL.

To prevent this issue from occurring, perform a full rebuild of your application in the System Tree or Library painter to ensure that all descendent objects are synchronized with their ancestors and to incorporate any compiler fixes in your code. The executable files and dynamic libraries you distribute must be built using the same PowerBuilder build.

### 5.5.7 ActiveX control compiled in Visual C++ .NET causes crash

If an ActiveX control placed on a window was compiled using Visual C++ .NET 2003 (version 7.1), PowerBuilder might crash when you attempt to save the window. The problem is caused by a known bug in the Microsoft Foundation Classes. According to Microsoft, "In a Microsoft Visual C++ .NET 2003 Microsoft Foundation Classes (MFC) application, the creation of ActiveX controls during application run time may fail if the values that are passed to create the control are of the ULONG data type." A patch is available from Microsoft. [CR 350660]

### 5.5.8 Web ActiveX download fails on Window XP

The DataWindow Web Control for ActiveX does not download its CAB file to a client browser running on Windows XP if the Microsoft Active Template Library (ATL) module, *atl71.dll*, is not present in the *Windows\System32* directory. The CAB file downloads successfully if the ATL DLL is present.

### 5.5.9 PosA function returns unexpected results with mixed DBCS string

The PosA function sometimes returns an incorrect result when the string being searched contains characters from both the Single Byte Character Set (SBCS) and Double Byte Character Set (DBCS). This occurs because the length of the string is incorrectly evaluated.

Suppose the length of the string in characters before conversion to DBCS is M and the length of the string in bytes after conversion to DBCS is N. If the value of the start argument is greater than M but less than N, PosA incorrectly returns 0. If the search string is present in the string being searched but occurs after the first M bytes, PosA fails to find it. [CR 405127]

## 6. Product compatibilities

This section contains information about products that are compatible with this version of PowerBuilder.

### 6.1 Adaptive Server Anywhere

PowerBuilder 10.2.1 has been tested with Adaptive Server Anywhere (ASA) 9.0.2 (Build 3044) and ASA 9.0.2 Runtime Edition (Build 3044).

## 7. Documentation updates and clarifications

This section contains updates and clarifications to the PowerBuilder documentation.

### 7.1 Revisions in books and online Help

There are no changes in the documentation on the Sybase Technical Library Product Manuals Web site for this version. Revisions have been made to the online Help installed with this maintenance release to address changes in functionality described in “Changed functionality in this version” on page 4.

### 7.2 Changes in documentation

This section describes changes to the online documentation that are not related to the new features.

### 7.2.1 Accessing Unicode data with Oracle

NChar and NVarchar2 columns in an Oracle database that uses an ANSI or DBCS character set can store only Unicode data. To manipulate Unicode data in such columns, set both StaticBind and DisableBind to 0. For more information, see the Oracle section in *Connecting to Your Database* in the compiled HTML Help.

## 7.3 Additions to documentation

This section provides information not present in the online Help or books.

### 7.3.1 Microsoft files required for deployment

Table 1 on page 11 lists Microsoft files required for deployment.

**Table 1: Microsoft runtime files**

| File name                                   | When required  |
|---|--|
| <i>msvcr71.dll</i> ,<br><i>msvcpx71.dll</i> | With all applications. The <i>pbshr100.dll</i> required file has dependencies on these Microsoft Visual C++ runtime libraries.   |
| <i>atl71.dll</i>                            | With all applications. The <i>pbdwe100.dll</i> file has dependencies on this file, which is the Microsoft .NET Active Template Library module.   |
| <i>gdiplus.dll</i>                          | If you deploy your application to the Windows 2000 platform. This file is installed as part of the operating system for Windows XP and Windows Server 2003 and is part of the Microsoft GDI+ subsystem that implements enhanced graphics capabilities. |

You can download the Microsoft GDI+ module from the Microsoft Downloads Web site. You can deploy the *msvcr71.dll*, *msvcpx71.dll*, and *atl71.dll* from your *Shared\PowerBuilder* directory to target systems.

For information about restrictions on redistributing Microsoft DLLs, see the third party terms for PowerBuilder at [http://www.sybase.com/softwarelicenses/third\\_party\\_legal/termsbyproduct](http://www.sybase.com/softwarelicenses/third_party_legal/termsbyproduct).

### 7.3.2 Xerces files required for deployment

When you deploy applications that use the ability to save or import data as XML, you now need to deploy three files: *PBXerces100.dll*, *xerces-c\_2\_6.dll*, and *xerces-depdom\_2\_6.dll*. The *xerces-c\_2\_1\_0.dll* file listed in Chapter 41 in *Application Techniques* is no longer required. The new files provide enhanced support for rendering special characters.

## 8. Migration information

You can migrate a PowerBuilder application from any version of PowerBuilder directly to any later version. Before you migrate to a later version, read the following Technical Document to learn about changes in PowerBuilder that might affect your application: Migrating PowerBuilder Applications at <http://www.sybase.com/detail/1,6904,1032777,00.html>.

Back up your files and use the Migration Assistant to identify obsolete code before you migrate.

## 9. Technical support

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 have any questions about this installation or if you need assistance during the installation process, ask the designated person to contact Sybase Technical Support or the Sybase subsidiary in your area.

## 10. Other sources of information

Use the Sybase Getting Started CD, the Sybase Technical Library CD and the Technical Library 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 Technical Library CD. It was included with your PowerBuilder 10.0 software. To read or print documents on the Getting Started CD you need Adobe Acrobat Reader (downloadable at no charge from the Adobe Web site, using a link provided on the CD).
- The Technical Library CD contains product manuals and was included with your PowerBuilder 10.0 software. The DynaText reader (included on the Technical Library CD) allows you to access technical information about your product in an easy-to-use format.

Refer to the *Technical Library Installation Guide* in your documentation package for instructions on installing and starting the Technical Library.

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

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

## 10.1 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 Select Products from the navigation bar on the left.
- 3 Select a product name from the product list and click Go.
- 4 Select the Certification Report filter, specify a time frame, and click Go.
- 5 Click a Certification Report title to display the report.

### ❖ 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.

## 10.2 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.