What's New

Appeon PowerBuilder®

2017

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About This Book

Audience

This book is for those what are interested at the new features of PowerBuilder 2017.

How to use this book

This book gives you a general introduction of what new features or enhancements have been made to PowerBuilder 2017, and links you to the corresponding sections that talk about the feature in details.

Related documents

For a description of all the books in the PowerBuilder documentation set, see the preface of *PowerBuilder Getting Started*.

Other sources of information

Use the Appeon Product Manuals web site to learn more about your product. The Appeon Product Manuals web site is accessible using a standard Web browser.

To access the Appeon Product Manuals web site, go to Product Manuals at https://www.appeon.com/developers/library/product-manuals-for-pb.

Conventions

The formatting conventions used in this manual are:

Formatting example	Indicates
Retrieve and Update	When used in descriptive text, this font indicates: • Command, function, and method names • Keywords such as true, false, and null • Datatypes such as integer and char • Database column names such as emp_id and f_name • User-defined objects such as dw_emp or w_main
variable or *file name*	When used in descriptive text and syntax descriptions, oblique font indicates: • Variables, such as *myCounter* • Parts of input text requiring substitution, such as *pblname*.**pbd** • File and path names

Formatting example	Indicates
File>Save	Menu names and menu items are displayed in plain text. The greater than symbol (>) shows you how to navigate menu selections. For example, File>Save indicates "select Save from the File menu."
dw_1.Update()	Monospace font indicates: • Information that you enter in a dialog box or on a command line • Sample script fragments • Sample output fragments

If you need help

All customers are entitled to standard technical support for reproducible software defects. You can open a standard support ticket at the Appeon support site: https://www.appeon.com/standardsupport/ (login required).

If your organization has purchased a premium support contract for this product, then the designated authorized support contact(s) may seek assistance with your technical issue or question at the Appeon support site: https://support.appeon.com (login required).

CHAPTER 1

New Features in PowerBuilder 2017

About this chapter

Contents

This chapter introduces the new features in PowerBuilder 2017.

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Updated software requirements

PowerBuilder 2017 can be installed to the following Windows operating system (Windows XP and Vista are no longer supported):

- Windows 7 32- or 64-bit with SP1
- Windows 8.1
- Windows Server 2008 32- or 64-bit with SP2 (Run-time only, not development)
- Windows Server 2012 R2 (Run-time only, not development)
- Windows Server 2016 (Run-time only, not development)
- Windows 10 (**newly supported** in 2017)

The following database versions are **newly supported** in PowerBuilder 2017 compared to PowerBuilder 12.6:

- SQL Server 2016, 2014, 2012, and 2008 R2
- Oracle 12c

- SQL Anywhere 17, 16, and 12
- ASE 16
- Informix 12.x

For the other supported database types and versions, refer to Working with Standard Database Interfaces in *Connecting to Your Database*.

Save as PDF using PDFlib

In PowerBuilder 2017, an alternative method is provided to directly print data to PDF without needing to install any third-party tool or driver or make any configuration. This method relies on a light-weight software called PDFlib which is automatically installed with PowerBuilder and distributed with the PowerBuilder application, at no additional cost by developer. And PDFlib is automatically packaged into the PowerBuilder application executable without requiring the developer to make any configuration or selection during the building process.

For how to use this method, refer to Export.PDF.Method in *DataWindow Reference* and Saving as PDF using PDFlib in *User's Guide*.

For more about the deployment notes on PDFLib, refer to Using the PDFlib generator in *Application Techniques*.

Enhanced OrcaScript

The OrcaScript tool is greatly enhanced from the following aspects:

- OrcaScript can call DOS commands and the batch file.

  For more information, see About OrcaScript in *Users Guide*.
- "set appendlib" function is provided to set one library file and one PBD flag at a time, hence reduces the likelihood of messing up the PBD flags for a long library list.

  For more information, see OrcaScript Commands in *Users Guide*.
- OrcaScript and Orca APIs supports compiling 64-bit executables.

For more information, see OrcaScript Commands in *Users Guide*, and PBORCA_ExecutableCreate in *ORCA Guide*.

- PBORCA_ApplicationRebuild eRebldType argument supports a new PBORCA_REBLD_TYPE enumerated data type -- PBORCA_3PASS.

  For more information, see PBORCA_ApplicationRebuild in *ORCA Guide*.

- OrcaScript generates more detailed logs to help debugging.
- OrcaScript gets rid of the license control so it can be used freely outside PowerBuilder.

Standalone PowerBuilder Compiler

A standalone tool -- PowerBuilder Compiler (pbc.exe including OrcaScript) is provided to greatly simplify the build scripts, and makes it possible to automate the entire build and deployment process outside PowerBuilder. You can install this standalone tool by running the AutoCompile\AutoCompile.exe setup program under the PowerBuilder 2017 installation directory, for example, C:\Program Files\Appeon\PowerBuilder 17.0\AutoCompile\AutoCompile.exe.

For more information, see About OrcaScript in Users Guide, and the standalone PBC user guide (pbc.pdf) and OrcaScript user guide (orca.pdf) in the installation folder.

New RichTextEdit control

In PowerBuilder 2017, a new RichTextEdit control is added for free use by the PowerBuilder developer and the InfoMaker developer.

This new control is applicable to the RichTextEdit control, RichText DataWindow Object, and the RichText edit style column.

For the PowerBuilder developer, they have the option to use the new control for free, or to continue using the old control (the old control will need to be purchased separately). For the InfoMaker developer, they can only use the new control; they cannot use the old control any more.

The new control has the same functions/events/properties as the old control, except for the following differences and issues (due to the different ways they are designed):

Affected area	Type	Description
Double-byte languages	Unsupported	Double-byte languages such as Korean, Japanese are not supported well in the new control.
InputFieldBackColor property	Limitation	For the new control, this property will not take effect until you save the data into a PDF file or print the data; which means, when you preview the UI in the design view or when you run the UI, you will always see the background color is gray, only when you save the data to a PDF file or print the data, you will see the background color is changed to what you set.
Wordwrap property	Limitation	For the new control, this property is always true (it cannot be set to false).
BackColor property	Difference	For the new control, if you set a negative value for the BackColor property, the returned value will be 0 and the color will be black. For the old control, if you set a negative value for the BackColor property, the returned value will be 16777215 and the color will be white.
BottomMargin/RightMargin/LeftMargin/TopMargin properties	Difference	For the new control, if you set a negative value, the returned value will be 0. For the old control, if you set a negative value, the returned value will be the negative value.
Find function	Enhancement	For the new control, the Find function can not only find the text string, but also can find the carriage return characters and some special characters.
GetTextColor/GetTextStyle functions and font settings	Difference	For the new control, this function will return the settings (text color, font name, text style etc.) of the first character of the selected text if the selected text contains more than one type of settings. For the old control, this property will return empty if the selected text contains more than one type of settings.
GetAlignment/GetSpacing/GetParagraphSetting functions	Difference	For the new control, this function will return the alignment (or spacing or paragraph settings) of the paragraph where the insertion point is located if more than one paragraph are selected. For the old control, this property will return null if more than one paragraph with different alignments (or spacing or paragraph settings) are selected.
GetParagraphSetting function	Difference	The returned value is different between the new control and the old control due to the different units used.
Visio drawings	New feature	Visio drawings can be pasted or inserted into the new control.
Preview	New feature	All pages can be previewed (by scrolling) in the new control; while only the first page can be previewed in the old control.

Affected area	Type	Description
SelectedPage function	Limitation	For the new control, the SelectedPage function returns the number of the page which is being viewed (rather than where the insertion point is placed).
ShowHeadFoot function	Difference	When the document is in preview mode, the old control returns 1; while the new control returns 1 and closes the preview mode, and when the parameter is true, the insertion point is placed to the header band; when the parameter is false, the insertion point is placed to the detail band.
ReplaceText function	Limitation	In the new control, the text after replaced will take over the settings (such as font name, font size etc.) carried over by the given string.
SaveDocument function	Limitation	In the new control, when saving to HTML, the image will lose some quality and will be saved as individual files separately from the document and the reference to the image file uses the absolute path,.
CopyRTF function	Difference	The new control will return a longer string which contains more types of information.
Insertion point	Difference	When the user switches the editor band (e.g. from the header/footer band to the detail band), the insertion point is placed to the last column and last row in the new control, while the insertion point's last position will be remembered and restored in the old control, if it is the firs time, the insertion point is placed to the first column and first row.
Input field	Difference	The new control limits the length of the input field data to no more than 2000 characters while the old control has no such limitation.
Font	Difference	In the new control, if the user uses a non-English input method to input the English characters, the inserted characters appear like using a different font than the other characters, although they actually use the same font.
Image	Difference	In the new control, when the user tries to manually select an image (only image, no text), the user can only select it by dragging from end to beginning, but cannot select by dragging from beginning to end.
Bullet list alignment	Issue	In the new control, the bullet symbol is cut off in a rich-text edit style column under the preview mode or print mode because the bullet list is not perfectly aligned with the body text.

Built-in PowerServer Mobile

PowerServer Mobile (formerly Appeon Mobile) is built into PowerBuilder 2017 Universal edition by default, which enables PowerBuilder developers to deploy their client/server apps to the mobile device.

This built-in PowerServer Mobile edition is called PowerServer Mobile (PB Edition) which includes the following components:

- PowerServer Toolkit

  A set of tools that enable the mobile application generation, maintenance, and upgrades within the PowerBuilder IDE.

- PowerServer Mobile (.NET platform)

  A set of server components that are deployed to the .NET IIS application server and that provide the mobile apps with run-time services such as data connectivity, DataWindow support, transaction management, and security.

- PowerServer Help

  A set of user documents that help PowerBuilder developers use PowerServer.

Note that PowerServer Mobile needs to be activated with an online or offline license first before it can be used. For detailed instructions, please refer to *PowerServer Configuration Guide for .NET* in PowerServer Help.

New license mechanism

PowerBuilder 2017 licenses are activated and managed in a totally different way than PowerBuilder 12.6 and earlier versions.

In PowerBuilder 2017, the developer is required to activate PowerBuilder with a valid online or offline license. For how to activate, refer to the "Activating PowerBuilder" section in the PowerBuilder *Installation Guide*. For more about the rules for the account and license, check with your license administrator or the articles on the Appeon Support Center (https://support.appeon.com).