Release Bulletin for PowerBuilder 2019 R3

PowerBuilder® 2019 R3

FOR WINDOWS

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1 Build 2670 (GA)

1.1 System Requirements

1.1.1 PowerBuilder

Make sure your system meets all requirements before you install PowerBuilder 2019 R3.

Note

If you want to install PowerBuilder from the PowerBuilder Installer (an online installation program), make sure you have Universal C Runtime (CRT) and Microsoft .NET Framework 4.6.1 SDK or later installed before running the PowerBuilder Installer.

Table 1.1: System Requirements for PowerBuilder

Product	Computer	Minimum memory	Hard disk space	Operating system
This table provides system requirements for PowerBuilder. 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.				
PowerBuilder	Intel Core i3 or higher	4 GB	4 GB for all components	**Supported by PowerBuilder IDE and Runtime:** Windows 8.1 32-bit or 64-bit Windows 10 32-bit or 64-bit (excluding Windows IoT and Windows Embedded Compact) **Supported by PowerBuilder Runtime only:** Windows Server 2019 Windows Server 2016 Windows Server 2012 R2

1.1.2 SnapDevelop

Make sure your system meets all requirements before you install SnapDevelop 2019 R3.

- Windows 10 version 1607 (OS Build 14393.3930) or higher, or Windows 8.1

  Note that Windows 10 versions earlier than 1607 are not compatible with Microsoft .NET Framework 4.8 SDK.

  If your current machine runs on Windows 8.1, make sure that KB 2919355 has already been installed; if your current machine runs on Windows 10, make sure Windows 10 version 1607 (OS Build 14393.3930) or higher is installed.

- Universal C Runtime

  The setup program will check if Universal C Runtime is installed; if it is not installed, the setup program will provide the package list, and you will need to manually download and install the package. Or you can follow the instructions in Installation Guide for SnapDevelop.

- Microsoft .NET Framework 4.8 SDK, Microsoft .NET Core SDK 2.1.500 and 3.1.302, and TypeScript SDK 3.1

  These prerequisites will be automatically installed if the installer detects that they are not installed on the current machine.

  If Microsoft .NET Framework 4.8 SDK failed to be installed during the SnapDevelop installation progress, you can try to install it again after the other programs are installed and the computer is restarted.

Database Server Requirements

SnapDevelop IDE, .NET DataStore, and SnapObjects support the following database types and versions:

Table 1.2:

DB Type	DB Version
MySQL	5.6, 5.7, or 8.0
Amazon RDS for MySQL	8.0.20
Amazon Aurora for MySQL	5.6.10a
Azure Database for MySQL	5.6
PostgreSQL	9.6, 10.1, 11.3, or 12
Amazon RDS for PostgreSQL	12.3-R
Amazon Aurora for PostgreSQL	11.6
Azure Database for PostgreSQL	11
Oracle	12c, 18c, or 19c
Amazon RDS for Oracle	12.1.0.1
SQL Server	2016, 2017, or 2019
Amazon RDS for SQL Server	2017 14.00.3281.6.v1
Azure SQL Database	Latest SQL Server engine (as at September, 2020)

DB Type	DB Version
SQLite	3
Adaptive Server Enterprise (ODBC)	15.0, 15.7, or 16.0
SQL Anywhere (ODBC)	16 (16.0.0.2043 or later) or 17
HANA (ODBC)	2.0

SQL Anywhere, Adaptive Server Enterprise, and HANA can be connected via ODBC.

1.2 Known Issues

1.2.1 PowerBuilder

The following known issues (or regression bugs) can be fixed if you replace the DLLs with the ones on this website: https://docs.appeon.com/pb2019r3/release_bulletin_for_pb/19.2.0.2670_DLL.zip. Please download the package and unzip it to the Appeon installation path (by default C:\Program Files (x86)\Appeon) to update the DLL files.

- (BugZilla ID: 5947) (UI Theme) Failed to trigger the Activate event for the sheet window when a theme is applied.
- (BugZilla ID: 5834) (UI Theme) The window border gets thicker, when the focus is moved away from the window.
- (BugZilla ID: 5959) (SVN/Git) No Refresh or Commit will be executed if the object comment or property was modified.
- (BugZilla ID: 5976) (Window) Response windows are always centered to the computer screen instead of the specified position.
- (BugZilla ID: 5979) (Web Service) Error occurs when calling the .NET Web Service Target using the DataStore object.

PowerClient deployment has the following known issues:

- When configuring a PowerClient project, if you add an image file from a folder to the **Images/videos dynamically created** section, the folder is added first, and then the image is added into the folder, this is to make sure the project remembers the image path.
- When configuring a PowerClient project, if you have already added a folder to the other sections (**Files preloaded as compressed packages** or **Files preloaded in uncompressed format**), you will not be able to add the same folder to the **Images/videos dynamically created** section.
- When you switch to the PowerClient project painter from another painter, the text fields in the PowerClient project painter cannot get focus, unless you click the title or blank area of PowerClient project painter first.

- When running the application deployed with PowerClient, if any registration fails, the error message will display below the upgrade window, and it will terminate the upgrade process until the OK button on the error message is clicked. Therefore, if the upgrade process seems never ends, please check if any error message is displayed below the upgrade window.

- If you create a package in the External Files tab for a PowerClient project, and if the package contains a multiple-level folder structure, the package may be missing after you save and close the project. This issue will be fixed in the next release.

- We have incorrectly classified PB DOM as obsolete in the Runtime Packager and PowerClient project configuration.

- If the end user computer has enabled proxy server, the “Bypass proxy server for local addresses” option must be selected. Otherwise, applications deployed with PowerClient would fail to run.

- The virus-detection software such as Avira, McAfee WebAdvisor, BullGuard etc. may block the PowerBuilderRuntime.exe file or CloudAppLauncher.exe during the installation process of the program.

  - Avira: An unsigned Cloud App will be blocked. You may add it to exceptions list and restart your machine to run it successfully. To prevent future false-positive file quarantine, we recommend that you sign your Cloud App first.

  - For resolutions with the other virus-detection software, refer to this article.

WebBrowser has the following known issues:

- When an MDI child window which contains the WebBrowser control is opened, and then deactivated and activated, the WebBrowser control may display blank.

- When the WebBrowser control is opened as an instance of visual user object in a window via OpenUserObject, and then closed via CloseUserObject; and when these steps are repeated for several times, PowerBuilder may crash.

Other known issues:

- In order to run Web service successfully in 2019 R3, you must add the path of PowerBuilder IDE and PowerBuilder Runtime to the system PATH environment variable, so that the dependent DLL files can be found.

- Windows 10 version 1607 or later is required if installing SnapDeveloper and its components (.NET DataStore and PowerScript Migrator) using the offline installer, as Microsoft .NET Framework 4.8 supports Windows 10 version 1607 or later.

- SQL Anywhere 17.0.2053 (which is available as the free trial version on the SAP website at the time of writing this document) should not be used if SQL Anywhere stored procedure is used, otherwise the error such as "[Anywhere]syntax near'procedure ?'line 1" may occur. Use a different build (such as 17.0.4.2000 or earlier, or 17.0.4.2088 or later) if SQL Anywhere stored procedure is used.

- When using regasm.exe (the assembly registration tool provided by Microsoft) to register the DLL file, if the registration failed, there will be no message indicating that.

1.2.2 SnapDevelop

Please view here.

1.3 Bug Fixes

1.3.1 PowerBuilder

The following bugs are fixed in PowerBuilder 2019 R3 GA 2670 (compared to 2019 R2 MR 2353):

- (Bug ID: 2885) 1) Runtime Packager installs 64-bit components into the "Program Files (x86)" folder instead of the "Program Files" folder. 2) PowerBuilder Runtime Packager start menu shortcuts are added with version numbers to help differentiate from multiple versions installed on the same machine.
- (Bug ID: 5615) PowerBuilder app randomly crashes on right-mouse clicks when theme is used.
- (Bug ID: 5553) PrintGetPrinter crashes when no printer is installed.
- (Bug ID: 5501) ExportJSON crashes after destroying a column.
- (Bug ID: 5587) Unable to switch menu and toolbar icons of PNG format during runtime.
- (Bug ID: 5528) When connecting to ASE in the PB IDE, IDE crashes.
- (Bug ID: 5551) When executing CloseUserObject to close a user object that contains an OLE, IDE as well as the PB application both will crash.
- (Bug ID: 5520) PB application crashes when using MSOLEDBSQL SQL Server with StaticBind=1.
- (Bug ID: 5531) Redundant comma in the RuntimeVersion key value under HKEY_LOCAL_MACHINE\SOFTWARE\Sybase\PowerBuilder Runtime.
- (Bug ID: 4884) When using NativePDF to export images, images are overlapped in the PDF file.
- (Bug ID: 1952) When using NativePDF to export a radio button, the radio button looks different in the PDF file.
- (Bug ID: 4484) When using NativePDF to export a barcode, the barcode looks different in the PDF file and the barcode in the PDF file cannot be scanned.
- (Bug ID: 3611) The page margin looks different in the PDF files generated with NativePDF by a virtual printer and a physical printer.

- (Bug ID: 4856) The page margin settings have no effect when the PDF file is generated with NativePDF by the default Office printer such as OneNote.
- (Bug ID: 3441) The page count is different between the print preview and the PDF file generated with NativePDF by a physical printer.
- (Bug ID: 2447) Extra spaces are added to the left or above the RichEdit column after saving as NativePDF.
- (Bug ID: N/A) The PDF file generated using NativePDF shows "datawindow" as the default title which is incorrect.
- (Bug ID: 4901) Special characters are replaced incorrectly in the PDF file when exported using NativePDF.
- (Bug ID: 5354) The number of pages of the PDF files for the same DataWindow exported using NativePDF keeps increasing.
- (Bug ID: 5093) The objects beneath band are not shown in the DataWindow, while displayed in PDF.
- (Bug ID: 5359) .NET DLL Importer does not generate source-files inside the ws_objects folder after it successfully imports the .NET class as NVOs.
- (Bug ID: 5419) Fast clicking on different DataWindow rows causes the application to crash.
- (Bug ID: 4126) Images are ignored for DataWindow controls when using a custom theme file.
- (Bug ID: 5304) "Orca error in 'scc set target '. Result Code -13." error occurs when executing ORCA script to compile objects under source control.
- (Bug ID: 1913) Doing a "Git Revert" is resetting the files marked with the command "git update-index --skip-worktree".
- (Bug ID: 5269) RibbonBar Builder crashes in French system when importing an XML file that contains "FontCharSet: ansi!".
- (Bug ID: 5290) Errors occur when running a 64-bit application deployed with Embedded Manifest.
- (Bug ID: 5162) After executing SyntaxFromSQL function (with a failure), the local temporary table disappears.
- (Bug ID: 3731) In dual-monitor environment, the response window always appears in the main monitor, even though its parent window is displayed in the secondary monitor.
- (Bug ID: 2006) The background color of a DataWindow in the PowerBuilder IDE displays incorrectly.

- (Bug ID: 3398) (DW) Saving data as XLSX stops the application if the specified folder does not exist.
- (Bug ID: N/A) PBC imports the source files in the ws_objects folder to the PBL rather than directly compiling the PBL.
- (Bug ID: 4823) The application executable file calls a missing library pbdynamictab190.dll.
- (Bug ID: 4928) When objects are set with the SVN needs-lock property, Deploy Project will get error messages.
- (Bug ID: 4899) Running SVN Diff will cause the Output window to hang.
- (Bug ID: 3736) Runtime DLL which truncates addresses in 64-bit causes crashes if calling Get/SetWindowLong instead of Get/SetWindowLongPtr.

1.3.2 SnapDevelop

N/A

1.3.3 PowerServer

See https://docs.appeon.com/ps2020/release_bulletin_for_ps/Build-2670-MR.html.

1.4 Upgrade Notes

For upgrading from Beta to GA

If you want to upgrade from Beta1 or Beta2 to GA, make sure to upgrade both IDE and runtime and use the runtime installed from GA, as GA has moved the third-party DLL files in "ThirdPartyLegal\MSRedist\" from IDE to Runtime, if you want to continue using the runtime installed from beta, you will need to manually copy the DLL files from ThirdPartyLegal\MSRedist\x86 or ThirdPartyLegal\MSRedist\x64 to the runtime folder %AppeonInstallPath%\Common\PowerBuilder\Runtime [version] or %AppeonInstallPath%\Common\PowerBuilder\Runtime [version]\x64, otherwise the IDE installed from GA will not work with the runtime installed from beta.

If you want to upgrade from Beta1 or Beta2 to GA, please 1) uninstall **PowerClient App Publisher** from the server, and uninstall the launcher and service from the client, including **PowerClient Launcher** (or **Cloud App Launcher**), **PowerClient Service**, and **PowerClient App Shell**, as GA has renamed these programs; 2) undeploy/uninstall the app from the server and the client; 3) configure and deploy a new PowerClient project in GA, as GA has changed the project settings. The app deployed with beta will no longer work with the GA version.

For upgrading PowerBuilder projects

For upgrading PowerBuilder projects from 2019/2019 R2 to 2019 R3, refer to https://docs.appeon.com/pb2019r3/upgrading_pb_apps/ch04.html.

For upgrading SnapDevelop projects

For upgrading SnapDevelop projects from 2019/2019 R2 to 2019 R3, refer to https://docs.appeon.com/snapdevelop2019r3/Upgrade_Guide/index.html.

2 Build 2703 (MR)

2.1 Improvements

2.1.1 PowerBuilder

The following new features or enhancements are added to PowerBuilder 2019 R3 MR 2703:

- The support for Microsoft Active Accessibility (MSAA) and Microsoft UI Automation can be enabled or disabled using the Accessibility option in the PB.INI file:
- Git source control supports to log in with token.
- The runtime packager has been adjusted: 1) The rich text options are re-named and re-grouped in a more reasonable way; 2) Accessibility Support (Section 508) is removed (the corresponding DLLs will be automatically packaged as core components); 3) PB DOM is moved from Obsolete Features to Additional Features.
- orcascr.exe will automatically search for the runtime files according to the registry.

2.1.2 SnapDevelop

N/A

2.1.3 PowerServer

The following new features or enhancements are added to PowerServer 2020 MR 2703:

- A new interface of_ismocklocation is added to the eon_mobile_geolocation object to check if the current location is a mock location.
- Upgrade Cordova plugins to use the WKWebView component.

2.2 Bug Fixes

2.2.1 PowerBuilder

Please view the bug list in https://www.appeon.com/standardsupport/bugfixes?contents=&product=PowerBuilder&category=&version=2019+R3&build=2703.

2.2.2 SnapDevelop

Please view the bug list in https://www.appeon.com/standardsupport/bugfixes?contents=&product=SnapDevelop&category=&version=2019+R3&build=2703.

2.2.3 PowerServer

Please view the bug list in https://www.appeon.com/standardsupport/bugfixes?contents=&product=PowerServer&category=&version=2020&build=2703.