New Features Guide

Appeon PowerServer® 2020

FOR WINDOWS & UNIX & LINUX

DOCUMENT ID: ADC50008-01-2020-01

LAST REVISED: March 25, 2020

Copyright © 2020 Appeon. All rights reserved.

This publication pertains to Appeon software and to any subsequent release until otherwise indicated in new editions or technical notes. Information in this document is subject to change without notice. The software described herein is furnished under a license agreement, and it may be used or copied only in accordance with the terms of that agreement.

No part of this publication may be reproduced, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of Appeon Inc.

Appeon, the Appeon logo, Appeon PowerBuilder, Appeon PowerServer, PowerServer, PowerServer Toolkit, AEM, and PowerServer Web Component are trademarks of Appeon Inc.

SAP, Sybase, Adaptive Server Anywhere, SQL Anywhere, Adaptive Server Enterprise, iAnywhere, Sybase Central, and Sybase jConnect for JDBC are trademarks or registered trademarks of SAP and SAP affiliate company.

Java and JDBC are trademarks or registered trademarks of Sun Microsystems, Inc.

All other company and product names used herein may be trademarks or registered trademarks of their respective companies.

Use, duplication, or disclosure by the government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of DFARS 52.227-7013 for the DOD and as set forth in FAR 52.227-19(a)-(d) for civilian agencies.

Appeon Inc., 1/F, Shell Industrial Building, 12 Lee Chung Street, Chai Wan District, Hong Kong.

Contents

1 New features added in PowerServer 2020 1
1.1 Updated system environment 1
1.2 Supported PowerBuilder features 1
1.3 Unsupported PowerBuilder 2019 R2 features 2
1.4 NativePDF enhancements 3
1.5 PowerServer Packaging Tool changes 3
1.6 Appeon Workspace not publishable in app stores 3
1.7 Testing Web apps with AscentialTest 4
1.8 Other features 4

1 New features added in PowerServer 2020

PowerServer 2020 contains the following new features or enhancements.

1.1 Updated system environment

The following latest software are supported:

- Windows Server 2019
- Android 10, iOS 13
- JBoss EAP 7.2, WildFly 18
- Microsoft SQL Server 2019
- Oracle 18c and 19c
- PostgreSQL 12.x

1.2 Supported PowerBuilder features

The following PowerBuilder objects which are added in PowerBuilder 2019 are supported by PowerServer 2020 (Web only, no Mobile):

- JSONPackage object
- TokenRequest, TokenResponse, OauthClient, OAuthRequest, and ResourceResponse objects (for supporting OAuth 2.0)
- CompressorObject and ExtractorObject (except for GetFileCount, GetFileList, and the two new Extract overloading functions)
- CrypterObject and CoderObject (except for Base32Decode, Base32Encode, Base64UrlDecode, Base64UrlEncode, and SymmetricGenerateKey functions)

The following functions which are added or enhanced in PowerBuilder 2019 are supported by PowerServer 2020 (Web only, no Mobile, except specified otherwise):

- HTTPClient object has the following **enhanced** functions (supported by both Web and Mobile):
  - SetRequestHeader
  - SendRequest
  - GetResponseBody
- RESTClient object has the following **new** and **enhanced** functions:

  New functions:
  - Submit

  - SendDeleteRequest, SendGetRequest, SendPatchRequest, SendPostRequest, SendPutRequest
  - GetJWTToken, SetJWTToken
  - GetOAuthToken, SetOAuthToken
  - RetrieveOne

  Enhanced functions:

  - Retrieve
  - SetRequestHeader
- JSONGenerator object has the following **enhanced** functions:
  - SaveToFile
  - GetJsonBlob
- JSONParser object has the following **new** and **enhanced** functions:

  New functions/properties:

  - ContainsKey
  - ReturnsNullWhenError property

  Enhanced functions:

  - GetItemType
- DataWindow, DataWindowChild, and DataStore has the following **new** functions:
  - ExportJson
  - ExportRowAsJson
  - ImportJson
  - ImportJsonByKey
  - ImportRowFromJson

1.3 Unsupported PowerBuilder 2019 R2 features

The following PowerBuilder controls or enhancements which are added in PowerBuilder 2019 R2 are currently unavailable in PowerServer 2020:

- UI theme
- RibbonBar control and WebBrowser control

- Base32Decode, Base32Encode, Base64UrlDecode, and Base64UrlEncode functions for CoderObject
- SymmetricGenerateKey function for CrypterObject
- GetFileCount, GetFileList, and two new Extract overloading functions for ExtractorObject
- PlaceHolder property for SingleLineEdit control

1.4 NativePDF enhancements

Two additional properties are added to the Application object to help PowerServer Web set NativePDF as the default printing method for PDF.

- nativepdfvalid - When it is set to TRUE, use NativePDF! as the default PDF method for all DataWindows in the current application. If it is set to FALSE, the setting in the scripts or in the DataWindow painter will be used as the PDF method. This property can be used to change the default method for all existing DataWindows which use the Distill! method by default. New DataWindows will automatically use the NativePDF! method by default starting from PowerBuilder 2019 R2.
- nativepdfincludecustomfont - When it is set to TRUE, package the custom fonts with your application if your DataWindows use many custom fonts, and these custom fonts are not supported well by the operating system and Adobe Reader. Note that using custom fonts will increase the generated PDF file size.

Note that NativePDF is unsupported in Mobile apps and IWA apps.

1.5 PowerServer Packaging Tool changes

PowerServer Packaging Tool has been changed in the following aspects:

- All mobile templates which will be used to create the mobile app package are available for downloading and installing from Internet. This enables the package tool to always generate app packages that support the most current mobile environment, while without needing to upgrade the package tool frequently. You can install the mobile templates from the PowerBuilder Installer or from the Appeon web site.
- The packaging tool is re-designed so that the package profile configuration process and the packaging process are logically separated.
- The packaging tool will no longer generate the Android APK file, instead, it will generate the Android project files which developer can compile as an APK file by themselves, because Android Studio is not allowed to be built into the package tool any more.

For more information, refer to Section 9.2, “Packaging a stand-alone mobile project” in *PowerServer Toolkit User Guide*.

1.6 Appeon Workspace not publishable in app stores

Due to the restrictions of the app stores (Apple App Store and Google Play), publishing Appeon Workspace to app stores is not supported any more. We recommend that you create a

customized version of Appeon Workspace and distribute it on PowerServer or your own Web site.

If you want to get a sense of how Appeon Workspace works before distributing it on your own serer/website, or perform a quick test of your mobile apps in Appeon Workspace, follow the instructions at https://demo.appeon.com/powerserver/test_appeonworkspace to try out the demo version of Appeon Workspace.

1.7 Testing Web apps with AscentialTest

You can automate the testing of PowerServer Web applications by using AscentialTest 9.5.2 or above. For more information, refer to Chapter 2, *Testing with AscentialTest* in *Testing PowerServer Web applications*.

1.8 Other features

PowerServer Toolkit supports transferring the application files to the remote Web server via SFTP.

Appeon multi-browser plug-in supports working with HTTPS protocol over TLS 1.2.