Appeon Web Installation Guide for .NET

Appeon Web® 2013 R2 (on .NET) FOR WINDOWS

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1 About This Book

1.1 Audience

This book is for a PowerBuilder programmer to set up the Web and/or mobile development and runtime environment by installing the different components of Appeon for PowerBuilder.

1.2 How to use this book

There are seven chapters in this book.

Chapter 1: About This Book

A general description of this book.

Chapter 2: Introduction

An overview of Appeon Web 2013 R2 for .NET and its system architecture.

Chapter 3: Installation Requirements

The system requirements for installing Appeon Web 2013 R2 for .NET.

Chapter 4: Installing Appeon Web 2013 R2

Instructions for installing and upgrading Appeon Server, Appeon Developer, and Appeon Server Web Component.

Chapter 5: Configuring Appeon Server Cluster

Instructions for configuring an Appeon Server cluster.

Chapter 6: Post-Installation Configuration Tasks

Instructions on configurations required for Appeon system architecture that affect the running of all applications.

Chapter 7: Uninstalling Appeon Web 2013 R2

Instructions for uninstalling Appeon Web 2013 R2 for .NET.

1.3 Related documents

Appeon provides the following user documents to assist you in understanding Appeon for PowerBuilder and its capabilities:

• Introduction to Appeon:

Gives general introduction to Appeon for PowerBuilder and its editions.

• Getting Started (for Appeon Mobile):

Guides you though installing PowerBuilder and Appeon for PowerBuilder, and developing and deploying a mobile application.

• New Features Guide:

Introduces new features and changes in Appeon for PowerBuilder.

• Appeon Mobile Tutorials:

Gives instructions on deploying, running, and debugging the mobile application, distributing native mobile apps, and configuring the Appeon Server cluster.

• Appeon Mobile (Offline) Tutorials:

Gives instructions on setting up the Appeon Mobile (Offline) environment, and configuring, deploying, running, updating, and debugging the offline application.

• Appeon Installation Guide:

Provides instructions on how to install Appeon for PowerBuilder successfully.

• Installation Guide on Cloud Platform:

Provides instructions on how to install Appeon for PowerBuilder on the cloud-based platform such as Windows Azure and AWS EC2 and S3.

• Mobile UI Design & Development Guide:

Introduces general guidelines on designing and developing the mobile app and UI.

• Migration Guidelines for Appeon Web:

A process-oriented guide that illustrates the complete diagram of the Appeon Web migration procedure and various topics related to steps in the procedure, and includes a tutorial that walks you through the entire process of deploying a small PowerBuilder application to the Web.

• Supported PB Features:

Provides a detailed list of supported PowerBuilder features which can be converted to the Web/Mobile with Appeon as well as which features are unsupported.

• Appeon Developer User Guide:

Provides instructions on how to use the Appeon Developer toolbar in Appeon for PowerBuilder.

• Workarounds & API Guide:

Provides resolutions for unsupported features and various APIs to facilitate you to implement the features (including Web and mobile) that are not easy or impossible to implement in the PowerBuilder IDE.

• Appeon Workspace User Guide:

Gives a general introduction on Appeon Workspace and provides detailed instructions on how to use it.

• Appeon Server Configuration Guide:

Provides instructions on how to configure Appeon Server Monitor, establish connections between Appeon Servers and database servers, and configure AEM for maintaining Appeon Server and the deployed applications. • Web Server Configuration Guide:

Describes configuration instructions for different types of Web servers to work with the Appeon Server.

• Troubleshooting Guide:

Provides information on troubleshooting issues; covering topics, such as product installation, application deployment, AEM, and Appeon application runtime issues.

• Appeon Performance Tuning Guide:

Provides instructions on how to modify a PowerBuilder application to achieve better performance from its corresponding Web/mobile application.

• Testing Appeon Web Applications with QTP:

Provides instructions on how to test Appeon Web applications with QTP.

1.4 If you need help

If you have any questions about this product or need assistance during the installation process, access the Technical Support Web site at <u>http://www.appeon.com/support</u>.

2 Introduction

2.1 Overview

Appeon for PowerBuilder deploys entire PowerBuilder applications to the Web automatically.

From the native source code of PowerBuilder applications, Appeon for PowerBuilder can generate **bona fide** n-Tier Web applications that precisely replicate the Client/Server user interface with HTML running in standard Microsoft Web browsers. These Web applications offer the rich user experience of the original PowerBuilder applications and deliver the superior Quality Of Service (QOS) of the n-Tier Web architecture and .NET platform, as well as greater availability, scalability, security and reliability.

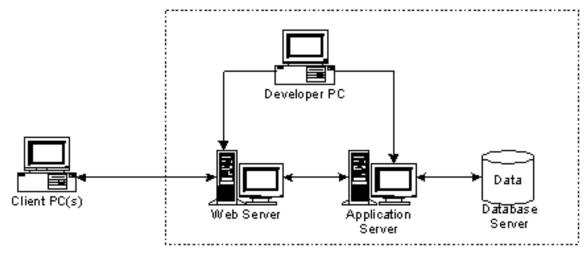
Appeon for PowerBuilder allows the entire Web application conversion process to be executed within the PowerBuilder IDE. It does not require the developer to write a single line of HTML, Java, .NET or JavaScript code. Only standard PowerBuilder programming skills are required.

With Appeon for PowerBuilder, enterprises can continue to use PowerBuilder to build Client/ Server applications. At the click of a button, the applications can be deployed to the Web. Enterprises can also transform existing Client/Server applications into Web applications. It is no longer a daunting task to develop Web applications. The task can become a familiar and easy routine for optimizing existing PowerBuilder applications or building new PowerBuilder applications.

2.2 System architecture

Appeon for PowerBuilder works with standard n-Tier Web architecture. Each tier serves a specific purpose in the architecture, though it may not necessarily reside in the same physical machine. For example, the Web server, application server and database server can reside in one machine or in different machines. A single tier may also be spread across multiple physical machines. For example, the application server can consist of a cluster of Appeon Server computers to provide load balancing and failover.





Each tier should have appropriate Appeon components and/or third-party software installed according to its role within the architecture. The following table briefly lists the tiers, their purposes and the required Appeon/third-party software.

Tier	Purpose	Appeon Component	Third-party Software
Client	Runs Appeon Web applications	None	The default Microsoft Internet Explorer Web browser
Developer PC	Deploys your PowerBuilder application to the testing and production Web environments with the n-Tier architecture.	Appeon Developer	PowerBuilder Microsoft Internet Explorer
Web Server	Hosts the presentation layer of Appeon deployed applications, responds to incoming requests from Client PC and dispatches requests to the application server.	Appeon Server Web Component	IIS
Application Server	Hosts the DataWindows and INI files of Appeon deployed applications, provides necessary runtime services to the deployed application, such as DataWindow retrieval and update, execution of business logic, and security authentication.	Appeon Server	.NET IIS
Database Server	Hosts the application database.	None	Oracle, SAP Sybase ASA/SQL Anywhere, SAP Sybase ASE, SAP HANA, Microsoft SQL Server, MySQL, Informix, or Teradata. Please see <u>Database</u> <u>server requirements</u> for more information.

Table 2.1: Tiers in the Appeon	Web architecture
--------------------------------	------------------

2.3 Appeon editions

Appeon Web 2013 R2 contains the following editions.

 Table 2.2: Appeon editions

Edition	Component	Description
Enterprise Edition	Appeon Server	1) Appeon Developer is not provided.

Edition	Component	Description
	 Appeon Server Web Component Appeon Help	2) The Appeon Server clustering service is provided in Enterprise Edition only.
		3) Product activation is required within 30 days.
Workgroup	Appeon Server	1) Appeon Developer is not provided.
Edition	• Appeon Server Web Component	2) Product activation is required within 30 days.
	• Appeon Help	
Developer Edition	 Appeon Developer Appeon Server	1) The maximum number of online users is 10 (5 for Web, and 5 for Mobile).
	Appeon Server Web Component	2) Product activation is required within 30 days.
	Appeon Help	
Trial Edition	Appeon Developer	1) Trial Edition has a 30-day time bomb.
	 Appeon Server Appeon Server Web Component	2) The Appeon Server clustering service is provided.
	Appeon Help	3) The maximum number of online user is 5.

2.4 Appeon components

2.4.1 Appeon Developer

Appeon Developer is a plug-in to the PowerBuilder IDE installed to the developer's PC. It provides a set of tools that enable the deployed application generation, maintenance, and upgrades within the PowerBuilder IDE. These tools are accessed via a toolbar in the PowerBuilder IDE, which automatically loads each time PowerBuilder is started.

2.4.2 Appeon Server

Appeon Server is a set of server components that is deployed to the application server. It provides the deployed applications with necessary run-time services such as data connectivity, DataWindows support, transaction management, and security.

Appeon Server also includes Appeon Enterprise Manager (AEM) and Appeon Server Web Component.

AEM is the management console for Appeon Server and the deployed applications. When you install Appeon Server, AEM is automatically installed.

During the Appeon Server installation, the Appeon Server Web Component is automatically installed, therefore, if you are using one IIS as both the Web server and the application server, you will NOT need to run the Appeon Server Web Component installation.

2.4.3 Appeon Server Web Component

Appeon Server Web Component resides in the Web server as the runtime environment supporting a PowerBuilder-style Web graphical user interface within standard Microsoft Web browsers. Appeon Server Web Component is a set of JavaScript, HTML and XML files that enable the rich PowerBuilder-style UI in standard Microsoft Web browsers.

If you physically separate the Web server and the Appeon Server, for example, for load balancing purpose, you will need to install Appeon Server Web Component to the Web server and configure the Web server with the Appeon plug-in. For detailed instructions on configuring the Web server, refer to *Web Server Configuration Guide*.

2.4.4 Appeon Help

Appeon Help provides easy access to all user documents. It saves time and conveniently places the help information, such as, the Appeon supported features, at your fingertips.

3 Installation Requirements

3.1 Client requirements

3.1.1 Software requirements

- Microsoft Internet Explorer 6.0 SP2, 7.0, 8.0, 9.0, 10.0, or 11.0
- Microsoft Windows 2000 SP4, Windows Server 2003 SP2, Windows XP SP3, Windows Vista SP2, Windows Server 2008 SP2, Windows Server 2012, Windows 7, or Windows 8/8.1
- (Optional) Adobe Acrobat Reader 6.0 or above (for viewing printed PDF DataWindows or reports)

3.1.2 Hardware requirements

- Intel processor running at 1.8 GHz or faster
- At least 2 GB Free RAM

3.2 Appeon Server requirements

3.2.1 Software requirements

• (Recommended) Windows Server 2003 SP2, Windows Server 2008 SP2 or Windows Server 2012

(Optional) Windows Vista SP2, Windows 7 or Windows 8/8.1

- Microsoft .NET Framework 4.x
- Microsoft IIS 6.0, 7.0, 7.5 or 8.0

3.2.2 Hardware requirements

- Intel processor(s) running at 1.8 GHz or faster
- At least 2 GB Free RAM (4 GB Free RAM recommended)
- 500 MB hard drive space (for Appeon Server installation)

3.2.3 (Optional) Web Server requirements

- Windows Server 2003 Server SP2, Windows Server 2008 SP2, Windows Server 2012, Windows Vista SP2, Windows 7 or Windows 8/8.1
- Microsoft IIS 6.0, 7.0, 7.5 or 8.0

• 50 MB hard drive space (for Appeon Server Web Component installation)

If you physically separate the Web server and the Appeon Server, you will need to make the Web server work with the Appeon Server by installing and configuring the Appeon plug-in. For detailed instructions, refer to the **Web Server Configuration Guide** in Appeon Help.

3.3 Appeon Developer requirements

3.3.1 Software requirements

- Microsoft Internet Explorer 6.0 SP2, 7.0, 8.0, 9.0, 10.0 or 11.0
- Microsoft Windows 2000 SP4, Windows Server 2003 SP2, Windows Server 2008 SP2, Windows Server 2012, Windows XP SP3, Windows Vista SP2, Windows 7 or Windows 8/8.1
- SAP Sybase PowerBuilder 9.0.3 (build 8784), 10.2.1 (build 9914), 10.5.2 (build 7826), 11.2 (build 8669), 11.5 (build 3127), 12.0 (build 3517), 12.5 (build 2511), 12.5.2 (build 5006), or 15

If you do not have the required build, update it by running the PowerBuilder EBF program provided on the Appeon Installation program or downloaded from the Sybase Downloads website.

- ODBC database driver or a native database driver for the database server used by your application. Note that you cannot use a native database driver for SAP Sybase ASA/SQL Anywhere or IBM DB2 database..
- (Optional) SAP Sybase ASA/SQL Anywhere 8.0.2, 9.0, 10.0.1, 11.0, 12.0 or 16.0 (for running the PowerBuilder demos included in Appeon installation).

3.3.2 Hardware requirements

- Intel processor running at 1.8 GHz or faster
- At least 2 GB Free RAM
- 2 GB hard drive space (for Appeon Developer installation only)

Each PowerBuilder application conversion project will require additional hard drive space based on the size of the PowerBuilder application.

3.4 Database server requirements

Appeon Web 2013 R2 can run with any of the following database servers:

- SAP Sybase ASA/SQL Anywhere 8.0.2, 9.0, or 10.0.1 with ODBC Driver
- SAP Sybase SQL Anywhere 11.0, 12.0 or 16.0 with SQL Anywhere .NET Data Provider driver

- SAP Sybase Adaptive Server Enterprise (ASE) 12.5.x or 15.x with ASE Native Driver
- SAP HANA 1.00.36 with ODBC Driver
- Informix 7.x, 8.x, 9.x, 10.x or 11.x with IBM Informix .NET Provider
- Microsoft SQL Server 2000 SP4, 2005 SP1, 2008 or 2012 with MS SQL Server Native Driver
- MySQL 5.5.x or 5.6.x with ADO.NET Data Provider driver
- Oracle 8i, 9i, 10g, 11g or 12c with Oracle Native Driver
- Teradata 13.1.0.0 or later with Teradata .NET Data Provider driver

Note: Usually, whether the database can be connected via a 32-bit driver and/or a 64-bit driver is determined by the database itself, so we recommend you make sure of this by checking the documents provided by the corresponding database vendor. If the database can be connected by both drivers, then you can decide which driver to install and use according to the Appeon Server version: if you have installed a 32-bit Appeon Server, then you should install and use the 32-bit driver, otherwise, install and use the 64-bit driver.

4 Installing Appeon Web 2013 R2

4.1 Overview

Appeon Web 2013 R2 consists of the following components:

 Table 4.1: Appeon components

Component	Description	Installed on
Appeon Developer	A plug-in to the PowerBuilder IDE installed to the developer's PC.	PowerBuilder on Windows operating system.
Appeon Server	A set of Microsoft .NET components that provide runtime services for the Appeon Web applications, such as data connectivity, DataWindows support, transaction management, and security. Appeon Server also includes Appeon Enterprise Manager (AEM) and Appeon Server Web Component.	IIS on Windows operating system.
Appeon Server Web Component	The runtime environment that supports a PowerBuilder-style Web graphical user interface within standard Microsoft Web browsers. Appeon Server Web Component is a library of JavaScript, HTML and XML files that form the foundation of the/an Appeon Web application.	IIS on Windows operating system.
Appeon Help	The online help of all Appeon user documents which saves time and conveniently places the help information at your fingertips.	Windows operating system.

4.2 Installation scenarios

4.2.1 Overview

Appeon Web 2013 R2 works in network architecture: different Appeon components should be installed to the computer(s) according to their roles in the network. In this section, some practical scenarios are described to demonstrate how Appeon should be installed according to network architecture.

4.2.2 Developer PC

Table 4.2: Developer PC installation

Scenarios		Appeon Components
One physical machine,	Computer 1:	Computer 1:

Scenarios	Requirements	Appeon Components
Computer 1, serves	Microsoft Windows Server 2003, 2008, or 2012	Appeon Developer
as Developer PC, Web server,	Microsoft .NET Framework	Appeon Server
application server	Microsoft IIS	
and database server	Microsoft Internet Explorer	
	SAP Sybase PowerBuilder	
	SAP Sybase ASA/SQL Anywhere	
	(Optional) SAP Sybase ASE, Oracle, Microsoft SQL Server, Informix, Teradata, MySQL, or SAP HANA depending on the application database	

4.2.3 Remote Appeon Server and Web server

Scenarios	Requirements	Appeon Components
In this example,	Computer 1:	Computer 1:
2 computers are used:	Microsoft Windows 2000, 2003, 2008, 2012, 7, 8/8.1, XP, or Vista	Appeon Developer
Computer 1 serves as Developer PC.	Microsoft Internet Explorer	
as Developer I C.	SAP Sybase PowerBuilder	
	SAP Sybase ASA/SQL Anywhere	
Computer 2 serves	Computer 2:	Computer 2:
as Web server, application server	Microsoft Windows Server 2003, 2008, or 2012	Appeon Server
and database	Microsoft .NET Framework	
server.	Microsoft IIS	
	SAP Sybase ASA/SQL Anywhere, SAP Sybase ASE, Oracle, Microsoft SQL Server, Informix, Teradata, MySQL, or SAP HANA depending on the application database	

Table 4.3: Remote Appeon Server and	d Web server installation
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4.2.4 Appeon Server Cluster

Table 4.4: Appeon Server cluster installation

Scenarios	Requirements	Appeon Components
In this example, N	Computer 1:	Computer 1:
(N>=4) computers are used:	Microsoft Windows 2000, 2003, 2008, 2012, 7, 8/8.1, XP, or Vista	Appeon Developer

Scenarios	Requirements	Appeon Components
Computer 1 is used	Microsoft Internet Explorer	
for Developer PC.	SAP Sybase PowerBuilder	
	SAP Sybase ASA/SQL Anywhere	
Computer 2 is the	Computer 2:	Computer 2:
database server.	SAP Sybase ASA/SQL Anywhere, SAP Sybase ASE, Oracle, Microsoft SQL Server, Informix, Teradata, MySQL, or SAP HANA depending on the application database	None
Computer 3 is the	Computer 3:	Computer 3:
Web server.	Microsoft IIS	Appeon Server Web Component
Computers 4 to n are	Computers 4 to n:	Computers 4 to n:
a group of Appeon	Microsoft Windows Server 2003, 2008, or	Appeon Server
Servers.	2012	(After installing
	Microsoft .NET Framework	Appeon Server to
	Microsoft IIS	each IIS, configure
		the Appeon Servers as a cluster. Refer to
		<u>Configuring Appeon</u>
		Server Cluster for
		details)

4.3 Two installation methods

Appeon Web 2013 R2 for .NET provides two installation methods: "new installation" and "upgrade installation".

- If your computer has not installed any version of Appeon for PowerBuilder, the installation program automatically takes the new installation method.
- If your computer has Appeon 6.2 or an earlier version installed, you must uninstall the version, prepare the environment for Appeon Web installation, and then use the setup program to install. The setup program takes the new installation method.
- If your computer has Appeon 6.5 or a later version installed, the setup program automatically takes the upgrade installation method.

4.4 Appeon Web 2013 R2 new installation

4.4.1 Starting the installation

Step 1: Double click the **Setup.exe** file in the installation package. The **Appeon for PowerBuilder 2013 R2 Setup** program starts. The entry page has several options to guide you through the various installation tasks.

- Install: Click this button to start installing the product.
- View Server Settings: Click this button to ensure that the application server settings are appropriate for the Appeon Server installation.
- View Training Video: Click this button to watch the video to learn how to install the product.
- View Product Manuals: Click this button to read the user manuals for the product.
- View Readme: Click this button to read the key system requirements and installation information for the product.
- Visit Our Web Site: Click this button to visit the Appeon web site.
- **Exit**: Click this button to exit the setup program.

Note: Make sure there is enough space on the C: drive for storing temporary files for installation. Otherwise an error message will pop up, saying "1607: Unable to install InstallShield Scripting Runtime".

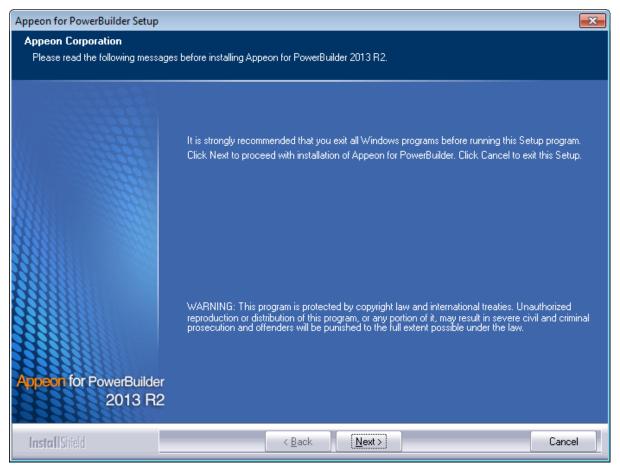
Step 2: Click Install.

Figure 4.1: Install Appeon for PowerBuilder

Appeon for PowerBuilder 2013 R2 Setup	— ×
	APP <u>=</u> ON [®]
Appeon for	PowerBuilder 2013 R2
	(for 32-bit Windows)
	Install
	View Server Settings
	View Training Video
	View Product Manuals
	View Readme
	Visit Our Web Site
	Exit

Step 3: Click **Next** on the introduction screen.

Figure 4.2: Introduction page



Step 4: Accept the terms in the license agreement page and click Next.

Figure 4.3: License Agreement page

Appeon for PowerBuilder Setup		×
License Agreement You must agree to the Appeon End I	User License Agreement before installing or using the Appeon software.	
	Press the PAGE DOWN key to see the rest of the agreement.	
	APPEON END USER LICENSE AGREEMENT (EULA) IMPORTANT NOTICE: Read this License Agreement ("Agreement") carefully before using the enclosed Program(s). You may Use the Program(s) in accordance with the following terms and conditions. IF YOU DO NOT AGREE TO BE BOUND BY THESE TERMS, YOU MAY NOT USE THE PROGRAM(S). By opening the package containing the media, or by using the Program(s) in any way, you acknowledge that you have read, understood and agreed to the terms of this Agreement. If you do not agree with these terms, promptly return the unopened package (and all other product contents, including Documentation) to the entity from which you obtained this product within 30 days. NOTWITHSTANDING THE ABOVE, THIS LICENSE DOES NOT APPLY TO ANY THIRD PARTY SOFTWARE. USE OF ANY THIRD PARTY SOFTWARE IS GOVERNED BY THE LICENSE AGREEMENT INCLUDED IN THE MEDIA FOR SUCH SOFTWARE. THIS IS A LICENSE AND NOT A SALE. 1. ABBREVIATIONS AND DEFINITIONS. Abbreviations and definitions appear at the end of this Agreement. 2. LICENSE. 2.1 Appeon grants to You a nonexclusive, nontransferable, perpetual license to Use the	
Appeon for PowerBuilder 2013 R2	 I accept the terms in the license agreement I do not accept the terms in the license agreement 	
InstallShield	< <u>B</u> ack <u>N</u> ext Cancel	

Step 5: According to the license you purchase, select the product edition and the product type: **Appeon Web** or **Appeon Universal**, and then enter the product key which is shipped with the Appeon product. Click **Next**.

If you select the **Trial** or **Developer** edition, **Appeon Universal** will be automatically selected so you can experience both the Web and Mobile deployments at no additional charge.

Figure 4.4: Product key page

Appeon for PowerBuilder Setup		×
Product Information Please specify the product edition, p	roduct type, and product key(s).	
	Product Edition: Developer Edition Product Type Appeon Web Appeon Mobile Appeon Universal	1
	Product Key- Please specify the product key(s) for your installation.	
Appeon for PowerBuilder	Appeon Web:	
InstallShield	Appeon Universal: APFA-DEWN-EAEN-UNAP-GGEE-EEEE-FQHS < Back Next >	el

Step 6: Select the component(s) you want to install and click **Next**. The Setup program will install the selected component(s) in the order listed.

For the .NET IIS server, be sure to select **Appeon Server for .NET**, as shown in the following figure.

For Developer Edition and Trial Edition, if more than one application servers such as .NET IIS, WebLogic etc. are installed on the same computer, you can repeatedly run the setup program to install Appeon Server to these application servers, for example, you can first run the setup program and select "Appeon Server for .NET" to install Appeon Server to the .NET IIS server, you can then run the setup program again and select "Appeon Server for WebLogic" to install Appeon Server to the WebLogic application server.

Figure 4.5: Select components

Appeon for PowerBuilder Setup		×
Select Components Choose the components this setu	o will install. Clear the components you do not want to install.	
	Choose Setup Components Appeon Server Appeon Server for NET Appeon Server for WebLogic Appeon Server for WebSphere Appeon Server for JBoss Appeon Server for Cloud Appeon Server for Cloud Appeon Developer Appeon Server Web Component	
Appeon for PowerBuilder 2013 R2	Description Appeon Server for .NET is a set of Microsoft .NET components that provide runtime services to the deployed application.	
InstallShield	< <u>B</u> ack <u>N</u> ext > Cance	e l

Refer to the following sections to complete the installation of each component.

- For Appeon Server installation instructions, refer to <u>Appeon Server installation</u>.
- For Appeon Developer installation instructions, refer to <u>Appeon Developer installation</u>.
- For Appeon Help installation instructions, refer to <u>Appeon Help installation</u>.
- For Appeon Server Web Component installation instructions, refer to <u>Appeon Server Web</u> <u>Component installation</u>.

If you are using one IIS as both the Appeon Server and the Web server, then you will not need to install Appeon Server Web Component, because it is included in Appeon Server and will be installed automatically during Appeon Server installation.

4.4.2 Appeon Server installation

4.4.2.1 Prerequisites

Before you install Appeon Server make sure

- 1. .NET Framework 4.x is successfully installed.
- 2. IIS 6.0, 7.0, 7.5 or 8.0 is correctly installed with necessary components.

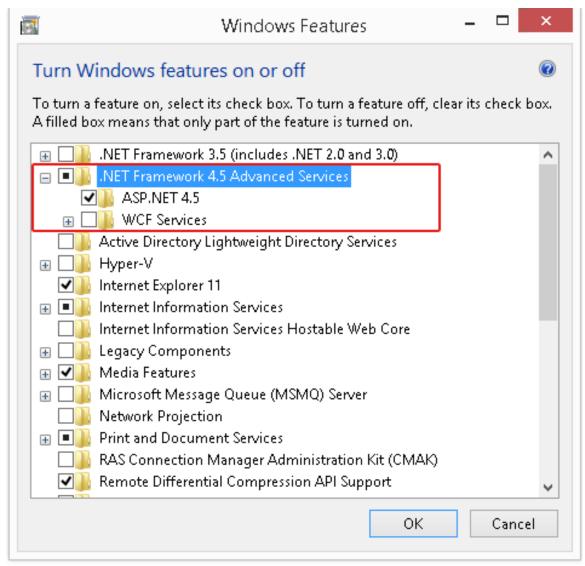
If you want to install **Appeon File Server** later, you will also need to install the components listed under **IIS 6 Management Compatibility**.

4.4.2.1.1 Installing .NET Framework 4.x

If you are using one of the latest versions of the Windows or Windows Server operating system, the .NET Framework might already be installed on your computer. Specifically, the .NET Framework 3.5.1 is included with Windows 7, the .NET Framework 4.5 is included with Windows 8/8.1 and Windows Server 2012. Appeon for PowerBuilder 2013 R2 requires **.NET Framework 4.x** to be installed.

- If you are using Windows 7 or earlier version, you need to manually install .NET Framework 4.x. You can download and install .NET Framework 4.x from <u>http://</u> www.microsoft.com/en-us/download/details.aspx?id=17851.
- If you are using Windows 8 or 8.1, you need to enable the **.NET Framework 4.5** through Control Panel.
 - 1. In Control Panel, click **Programs** > **Turn on or off Windows features**.
 - 2. In the **Windows Features** dialog box, select the **.NET Framework 4.5 Advanced Services** checkbox, and then expand the list and select the item **ASP.NET 4.5**.





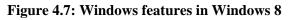
3. Click **OK** to let Windows finish the installation and reboot the system.

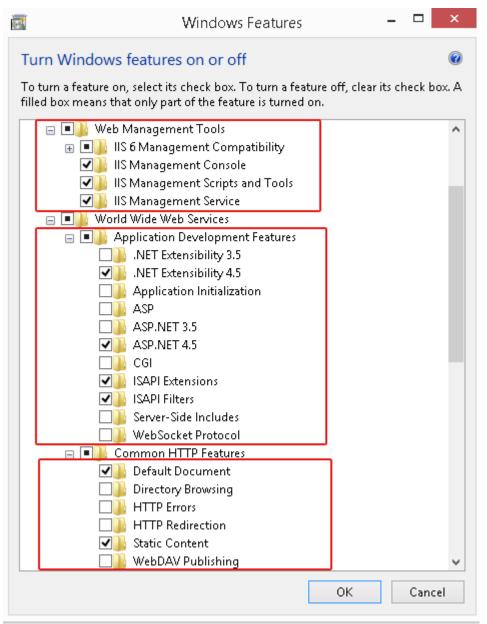
4.4.2.1.2 Installing IIS 8.0 on Windows 8

IIS 8.0 is included with Windows 8/8.1, but it is not installed on Windows 8/8.1 by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

- 1. In Control Panel, click **Programs > Turn on or off Windows features**.
- In the Windows Features dialog box, select the check box of Internet Information Services, then expand the list and select the items listed under Application Development Features and under Common HTTP Features. Click OK. These features of IIS provide runtime support for Appeon Server.

Note: The features checked above are the necessary features for Appeon Server. If you want to better manage your IIS or to install Appeon File Server, you can select the items listed under **IIS 6 Management Compatibility**.





3. Click **OK** to let Windows finish the installation and reboot the system.

4.4.2.1.3 Installing IIS 8.0 on Windows Server 2012

IIS 8.0 is included with Windows Server 2012, but it is not installed on Windows Server 2012 by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

- 1. In Control Panel, click **Turn on or off Windows features** to enter **Add Roles and Features Wizard**. Click **Next** until you enter the **Server Roles** page.
- In the Server Roles page, select the check box of Web Server (IIS) -> Web Server, then expand the list and select the items under the Application Development Features and under Common HTTP Features (as shown in the red boxes in the figure below). Click OK. These features of IIS provide runtime support for Appeon Server.

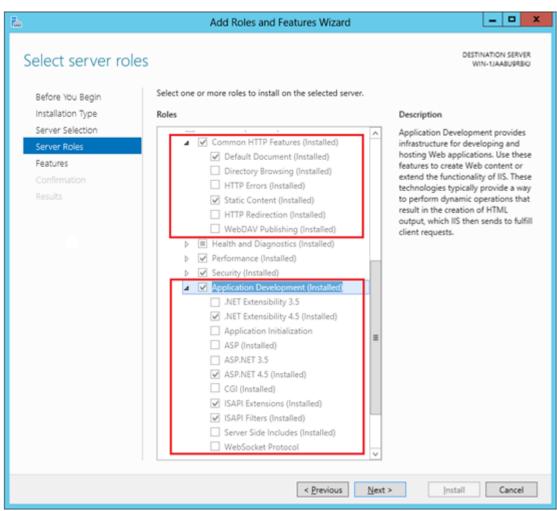


Figure 4.8: Windows features in Windows 2012

3. Click **OK** to let Windows finish the installation and reboot the system.

4.4.2.1.4 Installing IIS 7.5 on Windows Server 2008 R2

IIS 7.5 is included with Windows Server 2008 R2, but it is not installed on Windows Server 2008 R2 by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

1. Click **Start**, point to **Administrative Tools** and then click **Server Manager**. Click **Roles** under **Server Manager**, and the **Roles Summary** view is displayed.

Figure 4.9: Server manager

🛼 Server Manager			_ 🗆 🗡
Eile Action View Help			
🗢 🔿 🙍 📰 🛛			
Server Manager (WIN-U3E109VYM:	Roles		
Belver Hangel (WIV Collocation Hangel WIV Collocation Hangel W			
Diagnostics	View the health of the roles installed on your server and add or remove roles and features.		
	💿 Roles Summary	Roles Summary Help	
	Roles: 0 of 16 installed	Add Roles	
		Paremove Roles	
	🕄 Last Refresh: 6/12/2010 6:12:22 PM Configure refresh		
	,		

- 2. In **Roles Summary**, click **Add Roles**, and follow the instructions of the **Add Roles Wizard**.
- 3. Select Web Server (IIS) in Select Server Roles, and click Next.

Figure 4.10: Select Web Server (IIS)

Add Roles Wizard		×
Select Server Rol	es	
Before You Begin Server Roles Web Server (IIS) Role Services Confirmation Progress Results	Select one or more roles to install on this server. Roles: Active Directory Certificate Services Active Directory Pederation Services Active Directory Rights Management Services Active Directory Rights Management Services Active Directory Rights Management Services DHCP Server DNS Server File Services Print Services UDDI Services Web Server (IIS) Windows Deployment Services	Description: Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure. application infrastructure.

4. In the **Select Role Services** page, select the items listed under **Common HTTP Features** and **Application Development** (as shown in the red boxes in the figure below).



Sect Role Services Before You Begin Server Roles Web Server (IIS) Role Services Confirmation Progress Results Services Or HTTP Fedres Di Diefault Document	Add Roles Wizard		×
Server Roles Bole services: Description: Role Services Image: Confirmation Progress Results Results Asplication Development Asplications that require ASP support. For new development Image: Application Development Image: Application Services Image: Application Services Asplications that require ASP support. For new development, consider using ASP. NET. Image: Application Development Image: Application Services Image: Application Services Asplication Services Image: Application Development Image: Application Services Image: Application Services Image: Application Services Image: Application Development Image: Application Services Image: Application Services Asplication Services Image: Application Development Image: Application Services Image: Application Services Asplication Services Image: Application Development Image: Application Services Image: Application Services Image: Application Services Image: Application Development Image: Application Services Image: Application Services Image: Application Services Image: Application Development Image: Application Services Image: Application Services Image: Application Services Image: Applicating Applicating Applicating Applicating Applications <th>Select Role Servi</th> <th>ces</th> <th></th>	Select Role Servi	ces	
<u>Previous</u> <u>Next</u> <u>Install</u> Cancel	Server Roles Web Server (IIS) Role Services Confirmation Progress	Role services: Web Server Static Content Default Document Directory Browsing HTTP Errors HTTP Redirection Application Development ASP.NET NET Extensibility Server Side Includes HABIN and Diagnostics HTTP Logging Logging Tools Request Monitor Tracing Custom Logging ODEC Logging	Active Server Pages (ASP) provides a server side scripting environment for building Web sites and Web applications. Offering improved performance over CGI scripts, ASP provides IIS with native support for both VBScript and JScript. Use ASP if you have existing applications that require ASP support. For new development, consider using ASP.NET.

5. Since IIS depends on the **Windows Process Activation Service** (WAS) feature, the following informational dialog displays. Click **Add Required Features** to continue when the **Add Roles Wizard** notifies you on any required dependencies.

Figure 4.12: Add Required Features

Add Roles	Wizard	X
0a	Add features required for Web Server (I	IS)?
	You cannot install Web Server (IIS) unless the required feature	es are also installed.
Eeatures: Description:		
	 Windows Process Activation Service Process Model Configuration APIs 	<u>Windows Process Activation Service</u> generalizes the IIS process model, removing the dependency on HTTP. All the features
		Add Required Features Cancel
(i) Why	are these features required?	//

6. Go through the installation with the wizard and reboot the system.

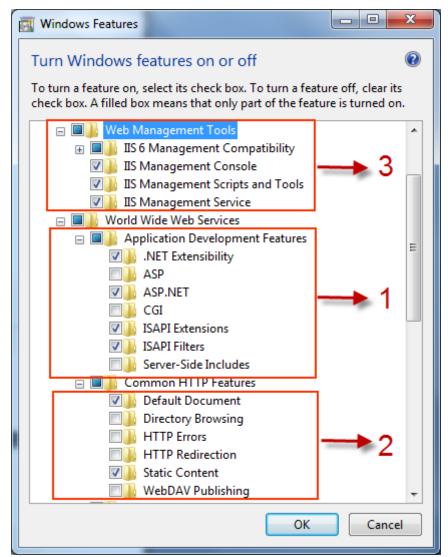
4.4.2.1.5 Installing IIS 7.5 on Windows 7

IIS 7.5 is included with Windows 7, but it is not installed on Windows 7 by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

- 1. Click Start > Control Panel> Programs > Turn on or off Windows features.
- 2. In the Windows Features dialog box, select the check box of Internet Information Services, then expand the list and select the items listed under Application Development Features and under Common HTTP Features (as shown in the red boxes marked with "1" and "2" in the figure below). Click OK. These features of IIS provide runtime support for Appeon Server.

Note: The features checked above are the necessary features for Appeon Server. If you want to better manage your IIS or to install Appeon File Server, you can select the items listed under **IIS 6 Management Compatibility** (as shown in the red box marked with "3" in the figure below).

Figure 4.13: Windows features



3. Click **OK** to let Windows finish the installation and reboot the system.

4.4.2.1.6 Installing IIS 7.0 on Windows Server 2008

IIS 7.0 is included with Windows Server 2008, but it is not installed on Windows Server 2008 by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

1. Click **Start**, point to **Administrative Tools** and then click **Server Manager**. Click **Roles** under **Server Manager**, and the **Roles Summary** view is displayed.

Server Manager			
Eile Action View Help			
(=			
	Delec		
	Roles		
Server Manager (WIN-U3E109VYM) Color	View the health of the roles installed on your server and add or remove roles and features.		
	🔿 Roles Summary	Roles Summary Help	
	Roles: 0 of 16 installed	Add Roles	
∢ ►	Configure refresh: 6/12/2010 6:12:22 PM Configure refresh		
	,		

Figure 4.14: Server manager

- 2. In **Roles Summary**, click **Add Roles**, and follow the instructions of the **Add Roles Wizard**.
- 3. Select Web Server (IIS) in Select Server Roles, and click Next.

Figure 4.15: Select Web Server (IIS)

Add Roles Wizard		×
Select Server Rol	es	
Before You Begin Server Roles Web Server (IIS) Role Services Confirmation Progress Results	Select one or more roles to install on this server. Roles: Active Directory Certificate Services Active Directory Pederation Services Active Directory Rights Management Services Active Directory Rights Management Services Active Directory Rights Management Services DHCP Server DNS Server File Services Print Services UDDI Services Web Server (IIS) Windows Deployment Services	Description: Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure. application infrastructure.

4. In the **Select Role Services** page, select the items listed under **Common HTTP Features** and **Application Development** (as shown in the red boxes in the figure below).



Add Roles Wizard		×
Select Role Servi	ces	
Before You Begin Server Roles Web Server (IIS) Role Services Confirmation Progress Results	Select the role services to install for Web Server (IIS): Role services: Web Server Static Content Default Document Directory Browsing HTTP Errors HTTP Errors HTTP Extensibility Application Development ASP.NET NET Extensibility Server Side Includes ISAPI Filters Server Side Includes Health and Diagnostics HTTP Logging Logging Tools Request Monitor Tracing ONEC Logging ONEC Logging More about role services	building Web sites and Web applications. Offering improved performance over CGI scripts, ASP provides IIS with native support for both VBScript and JScript. Use ASP if you have existing applications that require ASP support. For new development, consider using ASP.NET.

5. Since IIS depends on the **Windows Process Activation Service** (WAS) feature, the following informational dialog displays. Click **Add Required Features** to continue when the **Add Roles Wizard** notifies you on any required dependencies.

Figure 4.17: Add Required Features

Add Roles	Wizard	×	
02	Add features required for Web Server (IIS)?		
	You cannot install Web Server (IIS) unless the required features are also installed.		
	<u>F</u> eatures:	Description:	
	 Windows Process Activation Service Process Model Configuration APIs 	<u>Windows Process Activation Service</u> generalizes the IIS process model, removing the dependency on HTTP. All the features	
		Add Required Features Cancel	
Why are these features required?			

6. Go through the installation with the wizard and reboot the system.

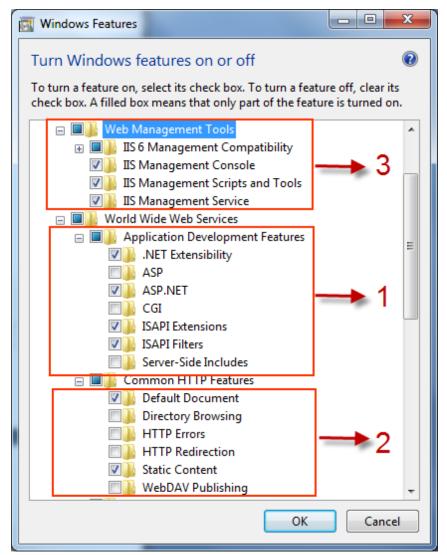
4.4.2.1.7 Installing IIS 7.0 on Windows Vista

IIS 7.0 is included with Windows Vista, but it is not installed on Windows Vista by default. You need to manually install it. Follow the instructions below and make sure that the following highlighted features are installed; these features are not selected to install by default, you will need to manually select them during the IIS installation.

- 1. Click Start > Control Panel> Programs > Turn on or off Windows features.
- 2. In the Windows Features dialog box, select the check box of Internet Information Services, then expand the list and select the items listed under Application Development Features and under Common HTTP Features (as shown in the red boxes marked with "1" and "2" in the figure below). Click OK. These features of IIS provide runtime support for Appeon Server.

Note: The features checked above are the necessary features for Appeon Server. If you want to better manage your IIS or install Appeon File Server, you can select the items listed under **IIS 6 Management Compatibility** (as shown in the red box marked with "3" in the figure below).

Figure 4.18: Windows features



3. Click **OK** to let Windows finish the installation and reboot the system.

4.4.2.1.8 Installing IIS 6.0 on Windows Server 2003

IIS 6.0 is included with Windows Server 2003, but it is not installed on Windows Server 2003 by default. You need to manually install it. Following are the key steps to complete the IIS install.

- 1. Go to Control Panel | Add/Remove Programs.
- 2. Click Add/Remove Windows Components .
- 3. In the **Components** list box, click **Application Server** (as shown in the figure below), then click **Next**.

Figure 4.19: Select "Application Server"

Windows Components Wizard			
Windows Components You can add or remove components of Windows.			
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.			
<u>C</u> omponents:			
Accessories and Utilities	27.5 MB 🔺		
🗹 📑 Application Server	15.4 MB		
🔲 🝺 Certificate Services	1.4 MB		
🗖 🛄 E-mail Services	1.0 MB		
Eax Services	88MB 🗾		
Description: Includes Internet Information Services (IIS) and the Application Server Console.			
Total disk space required: 6.9 MB	Details		
Space available on disk: 42162.6 MB			
< <u>B</u> ack <u>N</u> ext> (Cancel Help		

4. Select Internet Information Services (IIS) (as shown in the figure below).

Figure 4.20: Select "Internet Information Services (IIS)"

Application Server	×
To add or remove a component, click the check box. A shaded box mean of the component will be installed. To see what's included in a component	
Subcomponents of Application Server:	
🗹 🗹 📸 Application Server Console	0.0 MB 🔄
🗹 👰 Enable network COM+ access	0.0 MB
🗆 🔂 Enable network DTC access	0.0 MB
🗹 💐 Internet Information Services (IIS)	8.9 MB
🗌 🖂 🚅 Message Queuing	6.5 MB
	T
Description: IIS includes HTTP, FTP, SMTP, and NNTP support, along for Active Server Pages (ASP).	g with support
Total disk space required: 6.9 MB	Details
Space available on disk: 42162.6 MB	
OK	Cancel

- 5. Click **Details** and select the following components:
 - Common Files
 - Internet Information Services Manager
 - World Wide Web Service

Figure 4.21: Select components under Internet Information Services

nternet Information Services (IIS)	×		
To add or remove a component, click the check box. A shaded box n of the component will be installed. To see what's included in a compo			
Sub <u>c</u> omponents of Internet Information Services (IIS):			
🗹 🧼 Common Files	1.0 MB 🔺		
🔲 💭 File Transfer Protocol (FTP) Service	0.1 MB		
🗹 🚡 Internet Information Services Manager	1.3 MB		
🔲 🎯 Internet Printing	0.0 MB		
🗆 🍥 NNTP Service	1.9 MB		
SMTP Service	1.9 MB		
🗹 🚕 World Wide Web Service	2.3 MB 💌		
Description: Includes support for throttling and restarting data transfers, and a BITS management console extension. Total disk space required: 6.9 MB			
Space available on disk: 42162.6 MB	Cancel		

- 6. Select **World Wide Web Service** and click **Details** to select the following components (as shown in the following figure):
 - Active Server Pages
 - WebDAV Publishing
 - World Wide Web Service

Figure 4.22: Select components under World Wide Web Service

World Wide Web Service	×
To add or remove a component, click the check box. A shaded box means of the component will be installed. To see what's included in a component,	
Sub <u>c</u> omponents of World Wide Web Service:	
Active Server Pages	0.0 MB 🔄
🔲 🔲 🔊 Internet Data Connector	0.0 MB
🗆 💿 🔷 Remote Desktop Web Connection	0.4 MB
🔲 🔄 🔊 Server Side Includes	0.0 MB
🗹 🔊 WebDAV Publishing	0.0 MB
🗹 🜏 World Wide Web Service	1.9 MB
Description: Allow WebDAV Publishing. WebDAV Publishing is always in	nstalled.
Total disk space required: 6.9 MB Space available on disk: 42162.6 MB	<u>D</u> etails
OK	Cancel

7. Click **OK** to install IIS 6.0 and reboot the system.

4.4.2.2 Installation instructions

During the Appeon Server installation, the setup program will automatically configure the .NET IIS server so Appeon Server and IIS can work with each other. In very few cases, the automatic configuration may fail due to reasons such as environmental issues, user privileges, configuration changes etc., and Appeon Server is not working as expected. When this happens, you can go through the configurations in the **Install Appeon Server to .NET IIS** section of *Appeon Troubleshooting Guide* to fix the problem.

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Server for .NET** (see <u>Starting the installation</u>). Wait until Appeon Server completes the preparation.

Step 2: Specify the IIS Web site where Appeon Server will be installed and click Next.

Appeon Server will be installed to an existing Web site or a new Web site. If you want to install Appeon Server to a new Web site, create one by selecting the "Create a new Web Site" option and inputting the Web site description, TCP port, and home directory. The Description, TCP Port, and Home Directory of the new Web site cannot be the same as the existing Web site.

Table 4.5: New IIS Web site

Setting	Instructions
Description	Type a name to be used as the new Web site name.
TCP Port	Type a port number to be used as the new Web site port.
Home Directory	Click Browse to specify a root path of the new Web site.

Figure 4.23: Web site location

Appeon for PowerBuilder Setup	
Choose Web Site Choose a Web Site to install Ap	peon Server.
	Appeon Server will be installed to the specified IIS Web Site. Please select an existing Web Site from the following list or create a new Web Site. Select an existing Web Site Default Web Site
	website1 test1 Home Directory: C:\inetpub\wwwroot
	Create a new Web Site Description: TCP Port:
	Home Directory:
Appeon Server for .NET	
InstallShield	< Back Next > Cancel

Step 3: Select whether to install the Web version of Appeon Demo and click Next.

Figure 4.24: Custom Setup



Step 4: If you selected to install the demo application, specify the path for the Sybase ASA/ SQL Anywhere engine and click **Next**. Appeon Demo requires ASA/SQL Anywhere to run.

Depending on the version of Appeon Server (32-bit or 64-bit), Setup lists all copies of ASA/ SQL Anywhere engines of the corresponding version (32-bit or 64-bit) detected in your machine.

Figure 4.25: ASA/SQL Anywhere location

Appeon for PowerBuilder Setup		×
Specify the Location of Syb Specify the ASA engine locatio	base ASA Engine (32-bit) n to configure Appeon database service.	
	Setup detected the following Sybase ASA engines (32-bit) on this machine. You or type the correct location of ASA engine (32-bit) below to make sure Appeon D correctly.	should select Jemo work
	C:\Program Files\SQL Anywhere 11\bin32 C:\Program Files\SQL Anywhere 11\bin32 C:\Program Files\SQL Anywhere 12\bin32	B <u>r</u> owse
Appeon Server		
for .NET	c Back Neutra	Cancel
InstallShield	< <u>B</u> ack <u>N</u> ext >	Cancer

If you encounter the following message, Appeon recommends you click **Yes** to allow the setup program to enable the connection pooling in ODBC Data Source Administrator, this eliminates the likelihood of having any performance issues at runtime.

Figure 4.26: Detect connection pooling

Confirm C	Continue		23
?	The setup has detected that the Connection Pooling Data Source Administrator is disabled. Without enabl you will encounter performance issue on the Web. Cl continue the setup with automatically enabling the C Pooling. Click "No" to continue the setup with currer	ing this feature, ick "Yes" to onnection	
	<u> </u>	<u>N</u> o	

Step 5: Specify the AEM login user name and password.

Figure 4.27: AEM login username and password

Appeon for PowerBuilder Setup			
Specify the AEM login Username and Password Enter the username and password for Appeon Enterprise Manager.			
	The default username and passwo change the default values.	ord for AEM are ''admin''. Appeon recomm	iends you to
	Username:	Jadmin	
	Password:	*****	
	Confirm Password:	MXXXXX	l
Appeon Server			
10000000000000	< Bank	Next >	Cancel
InstallShield	< <u>B</u> ack	<u>N</u> ext >	Cancel

Step 6: Modify the settings for ASP.NET when necessary.

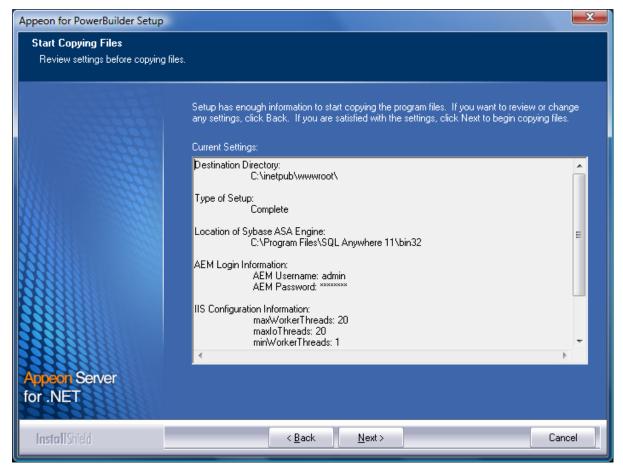
Select the "Modify current ASP.NET settings" checkbox and then modify the attribute values; or click **Reset** to restore the default values. These values are used to determine the maximum number of concurrent users that Appeon Server can support, therefore, setting proper values can help improve the Appeon Server performance. For detailed instructions, refer to the **Microsoft IIS Server** section in **Appeon Performance Tuning Guide**.

Figure 4.28: ASP .NET settings

Appeon for PowerBuilder Setup		X
ASP.NET Settings Choose to modify current AS	GP.NET settings.	
	increase the number of concurrent re same time. maxWorkerThreads: minWorkerThreads: minFreeThreads: minLocalRequestFreeThreads: executionTimeout: maxRequestLength:	wing attributes in Machine.config file to equests that ASP.NET could handle at the 20 20 1 8 4 110 4096 <u>R</u> eset
Appeon Server for .NET	Notes: 1. Numbers of concurrent requests = ma 2. The maxRequestLength is an attribute C:\inetpub\www.root\Appeon\AEM\w	
InstallShield	< <u>B</u> ack Nex	t> Cancel

Step 7: Check the summary of settings. Click **Back** to change any unwanted settings or click **Next** to have Setup begin copying files.

Figure 4.29: Summary of settings



At the click of the **Next** button, the installation program begins copying files to your computer, as shown in the figure below.

Figure 4.30: Appeon Server installation process



Step 8: Click **Finish** to complete the installation of Appeon Server.

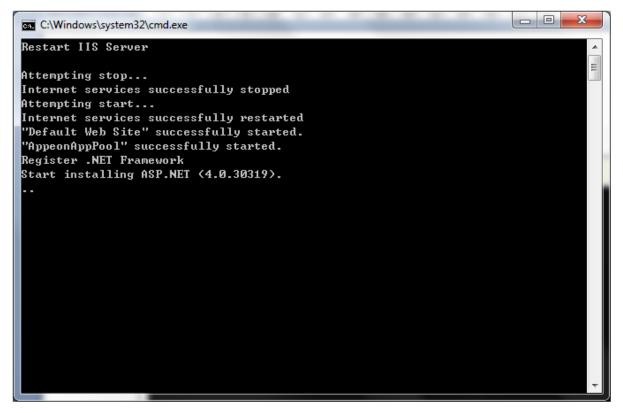
It is recommended that you keep **Restart IIS Server** and **Register .NET Framework 4.0** selected when clicking **Finish**.

Figure 4.31: Setup complete

Appeon for PowerBuilder Setup		×
	Appeon for PowerBuilder Setup Complete	
	Setup has successfully installed Appeon for PowerBuilder. Click Finish to exit the wizard.	
	Restart IIS Server	
	✓ Register .NET Framework 4.0	
Appeon for PowerBuilder 2013 R2		
Install Shield	< <u>B</u> ack <u>F</u> inish Canc	el 📄

The setup program will restart the IIS server and then register .NET Framework, as shown in the following figure.

Figure 4.32: Register .NET Framework



During the Appeon Server installation, the Appeon Enterprise Manager Web application (installed to %appeonserver%\AEM) and the Appeon Server Web Component (installed to %appeonserver%\weblibrary_ax) are automatically installed. %appeonserver% indicates the Appeon Server installation directory, for example, C:\Inetpub\wwwroot\appeon.

4.4.2.3 Appeon Server Instance Configuration

4.4.2.3.1 Overview

During the Appeon Server installation, you can select to install Appeon Server to an IIS Web site, but you may want to create the Appeon Server instances on the other IIS Web sites on that machine, so that the machine hardware resources can be better utilized, and the application on different Web sites can run more stably and independently, as the Appeon Server instances work independently from each other, and use different Application Pool and work process, like they are installed on different machines.

The following sections will talk about how to use the Appeon Server Instance Configuration Wizard to create the Appeon Server instance on IIS Web site(s) on the same machine.

Before creating the Appeon Server instance, you must have already installed Appeon Server to an IIS Web site which will be used later by the Appeon Server Instance Configuration Wizard as the template to create the instance.

To create an Appeon Server instance by the Appeon Server Instance Configuration Wizard, you can directly create an instance on the existing IIS Web site(s) or create a new IIS Web site and then create an instance on it. See the following sections for detailed instructions.

4.4.2.3.2 Creating an Appeon Server instance on an existing Web site

To create an Appeon Server instance on an existing IIS Web site, follow the steps below:

Step 1: Run the Instance Configuration Wizard from **Start | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Server for .NET | Instance Configuration Wizard**.

Figure 4.33: Run instance configuration wizard

Appeon for PowerBuilder 2013 R2
🍌 Appeon Developer
🌗 Appeon Help
Appeon Server for .NET
👹 Appeon Enterprise Manager
all Instance Configuration Wizard
Internet Information Services (IIS)
🎲 Status Monitor
Uninstall Appeon Server for .NET
鷆 Appeon Server Web Component

Step 2: In the **Appeon Server Instance Configuration Wizard** (referred as "Wizard" later in this section), select **Create an Appeon Server instance on an existing Web site** and click **Next**.

Figure 4.34: Create an Appeon Server instance on an existing Web site

🕡 Appeon Server Instance Configuration Wizard	x
Welcome to Appeon Server Instance Configuration Wizard	
Select an option to continue.	
Oreate an Appeon Server instance on an existing Web site	
Select this option to create an Appeon Server instance on an existing Web site.	
Create an Appeon Server instance on a new Web site	
Select this option to create a new Web site and an Appeon Server instance.	
Remove an Appeon Server instance	
Select this option to remove an Appeon Server instance from an existing Web site.	
< <u>B</u> ack <u>N</u> ext> <u>Cancel</u>	

Step 3: From the Existing Web Site list, select a Web site where you want to create the Appeon Server instance and click **Next**.

The Wizard automatically detects and lists all existing Web sites where no Appeon Server instance is installed.

Note: More than one IIS Web sites are allowed to share the same home directory; but if one of these Web sites already has an Appeon Server instance installed, then the other Web sites (that use the same home directory) cannot have the Appeon Server instance installed.

Figure 4.35: Select a Web site

Appeon Server Instance Configuration Wizard
Create an Appeon Server instance on an existing Web site
Select the Web site where you want to create the Appeon Server instance.
Existing Web Site
Sites test04[TCP Port=84;Home Directory=C:\website\test04] test01[TCP Port=81;Home Directory=C:\website\test02] test02[TCP Port=82;Home Directory=C:\website\test03] test03[TCP Port=83;Home Directory=C:\website\test03] test06[TCP Port=86;Home Directory=C:\website\test06] test87[TCP Port=87;Home Directory=C:\website\test07] test91[TCP Port=91;Home Directory=C:\website\test91] test92[TCP Port=92;Home Directory=C:\website\test92] test93[TCP Port=93;Home Directory=C:\website\test93] test93[TCP Port=93;Home Directory=C:\website\test93] test94[TCP Port=94;Home Directory=C:\website\test94] test95[TCP Port=95;Home Directory=C:\website\test95]
< <u>B</u> ack <u>N</u> ext> <u>C</u> ancel

Step 4: Select to create the Appeon Server instance based on the default configurations or on the existing configurations and then click **Next**.

- Create a new Appeon Server instance with default configurations indicates the Appeon Server instance to be created will have the default configurations of Appeon Server.
- Create a new Appeon Server instance with configurations in the main server indicates the Appeon Server instance to be created will have all of the existing configurations, including the default configurations and the configurations made later, such as AEM configurations.

Figure 4.36: Select the configuration template

Appeon Server Instance Configuration Wizard
Create an Appeon Server instance on an existing Web site
Select Appeon Server instance configurations.
Or Create a new Appeon Server instance with default configurations
The wizard will create the Appeon Server instance with default configurations which only includes default server configurations.
Create a new Appeon Server instance with configurations in the main server
The wizard will create the Appeon Server instance by automatically coping all the server and application configurations from the main server to the new server instance.
< <u>B</u> ack <u>N</u> ext> <u>C</u> ancel

The Wizard is now creating a new Appeon Server instance on the selected Web site with the selected configurations.

If you are on Windows Vista and if you receive error messages such as "Failed to create the Appeon folder", please resolve the error by applying SP1 or above.

Figure 4.37: Creating the Appeon Server instance

Appeon Server Instance Configuration Wizard	×
Create an Appeon Server instance on an existing Web site	
Create the Appeon Server instance on the Web site test01.	
Waiting for creating the Appeon Server instance on the Web site test01	
<back next=""></back>	Finish
	<u> </u>

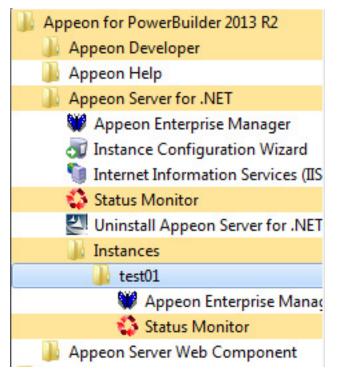
Step 5: Click **Finish** to exit the program.

Figure 4.38: Creation complete

Appeon Server Instance Configuration Wizard	X
Create an Appeon Server instance on an existing Web site	
Create the Appeon Server instance on the Web site test01.	
Created the Appeon Server instance on the Web site test01 successfully.	
<back next=""></back>	Finish

If the Appeon Server instance is created successfully, a shortcut for the new instance will be added to the Start menu, as shown in the following figure.

Figure 4.39	Shortcut fo	r new instance
-------------	-------------	----------------



4.4.2.3.3 Creating an Appeon Server Instance on a new Web site

To create an Appeon Server instance on a new IIS Web site, follow the steps below:

Step 1: Run the Instance Configuration Wizard from **Start | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Server for .NET | Instance Configuration Wizard**.

Figure 4.40: Run instance configuration wizard

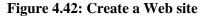
Appeon for PowerBuilder 2013 R2
🍌 Appeon Developer
🌗 Appeon Help
Appeon Server for .NET
👹 Appeon Enterprise Manager
🚽 Instance Configuration Wizard
🐚 Internet Information Services (IIS
🛟 Status Monitor
Uninstall Appeon Server for .NET
Appeon Server Web Component

Step 2: In the **Appeon Server Instance Configuration Wizard** (referred as "Wizard" later in this section), select **Create an Appeon Server instance on a new Web site** and click **Next**.

🕡 Appeon Server Instance Configuration Wizard	x
Welcome to Appeon Server Instance Configuration Wizard	
Select an option to continue.	
Create an Appeon Server instance on an existing Web site	
Create an Appeon Server instance on an existing web site	
Select this option to create an Appeon Server instance on an existing Web site.	
Oreate an Appeon Server instance on a new Web site	
Select this option to create a new Web site and an Appeon Server instance.	
Remove an Appeon Server instance	
Select this option to remove an Appeon Server instance from an existing Web site.	
< <u>B</u> ack <u>N</u> ext> <u>C</u> ancel	

Figure 4.41: Create an Appeon Server instance on a new Web site

Step 3: Specify the information needed for creating a new Web site and click **Next** to proceed.



Appeon Server Insta	ance Configuration Wizard	X	1
	Server instance on a new Web site on below to create the new Web site and the new A	ppeon Server instance.	
New Web Site			
Description:	website		
TCP Port:	99		
Home Directory:	C:\inetpub\wwwroot\test	Browser	
Existing Web Site		Browse For Folder	×
	Web Site[TCP Port=80;Home Directory=C:\inetpub Cluster[TCP Port=83;Home Directory=C:\inetpub\tr		•

To create a new Web site, specify the description, TCP Port, and Home Directory.

Setting	Instructions
Description	Type in a name to be used as the new Web site name.
TCP Port	Type in a port number to be used as the new Web site port.
Home Directory	Click Browse to specify a root path of the new Web site.

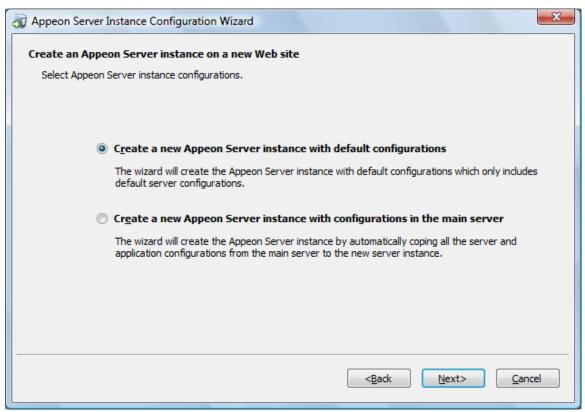
Table 4.6: New IIS Web site settings

Notes: The Description and TCP Port of the new Web site cannot be the same as the existing Web site, and the Home Directory cannot be the same as the existing Web site where an Appeon Server instance has already been installed. You can see the Description, TCP Port and Home Directory of the existing Web sites in the Existing Web Site group box.

Step 4: Select to create the Appeon Server instance based on the default configurations or on the existing configurations and then click **Next**.

- Create a new Appeon Server instance with default configurations indicates the Appeon Server instance to be created will have the default configurations of Appeon Server.
- Create a new Appeon Server instance with configurations in the main server indicates the Appeon Server instance to be created will have all of the existing configurations, including the default configurations and the configurations made later, such as AEM configurations.

Figure 4.43: Select the configuration template



The Wizard will be creating a new Web site and then creating an Appeon Server instance on this new Web site.

Step 5: Click Finish.

Figure 4.44: Creation complete

Appeon Server Instance Configuration Wizard
Create an Appeon Server on a new Web site
Create the Web site mytestsite and Appeon Server instance.
Created the Appeon Server instance on the Web site mytestsite successfully.
<back next=""> Finish</back>

4.4.2.3.4 Removing an Appeon Server Instance

To remove an Appeon Server instance from the IIS Web site, follow the steps below:

Step 1: Run the Instance Configuration Wizard from **Start | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Server for .NET | Instance Configuration Wizard**.

Step 2: In the **Appeon Server Instance Configuration Wizard** (referred as "Wizard" later in this section), select **Remove an Appeon Server instance** and click **Next**.

Figure 4.45: Remove an Appeon Server instance

appeon Server Instance Configuration Wizard	x
Welcome to Appeon Server Instance Configuration Wizard Select an option to continue.	
Create an Appeon Server instance on an existing Web site	
Select this option to create an Appeon Server instance on an existing Web site.	
Create an Appeon Server instance on a new Web site	
Select this option to create a new Web site and an Appeon Server instance.	
Remain Annual Commingly Indexes	
Remove an Appeon Server instance	
Select this option to remove an Appeon Server instance from an existing Web site.	
< <u>B</u> ack <u>N</u> ext> <u>C</u> ance	2

Step 3: Select the Web site where you want to remove the Appeon Server instance and click **Next**.

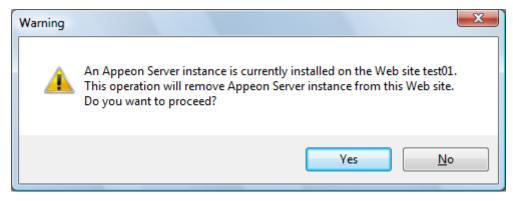
The Wizard automatically detects and lists all of the Web sites where an Appeon Server instance has been created.

Figure 4.46: Select a Web site

appeon Server Instance Configuration Wizard	x
Remove an Appeon Server instance	
Select the Web site where you want to remove the Appeon Server instance.	
Existing Web Site	
Sites	
test01[TCP Port=81;Home Directory=C: \website \testsite01]	
mytestsite[TCP Port=99;Home Directory=C:\website\mytestsite]	
< <u>B</u> ack <u>N</u> ext> <u>C</u> ance	2

Step 4: In the popup Warning window, click **Yes** to confirm the deletion (or click **No** to cancel the deletion).

Figure 4.47: Confirm deletion



The Wizard will be removing the Appeon Server instance from the selected Web site. Step 5: Click **Finish** to exit.

Figure 4.48: Deletion complete

a Appeon Server Instance Configuration Wizard	x
Remove an Appeon Server instance	
Remove the Appeon Server instance from the Web site test01.	
Removed the Appeon Server instance from the Web site test01 successfully.	
	_
< <u>B</u> ack <u>N</u> ext> <u>Finish</u>	ן ר

4.4.3 Appeon Developer installation

4.4.3.1 Prerequisites

- The Developer PC meets the system requirements in <u>Appeon Developer requirements</u>. Verify that PowerBuilder 9.0.3, 10.2.1, 10.5.2, 11.2, 11.5, 12.0, 12.5, 12.5.2, or 15 is installed or updated by running the PowerBuilder Setup program. You cannot install or update the software by copying files and folders from another source.
- Verify that PowerBuilder has been upgraded to the latest available build.
- Shut down Sybase PowerBuilder, ASA/SQL Anywhere, and any other Windows programs before beginning the installation process.
- Verify in Windows Task Manager that the following processes are not running under the Process tab: **EonADTxx.exe**, and **pbxxx.exe**. If these processes are running, be sure to end them.

4.4.3.2 Installation instructions

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Developer** (see <u>Starting the installation</u>).

Step 2: Click **Next** to install Appeon Developer to the default location, or click **Browse** to select another location.

Figure 4.49: Appeon Developer location

Appeon for PowerBuilder Setup			
Choose Destination Location Select a folder where setup will install files.			
	Setup will install Appeon Developer in the following folder. To install to this folder, click Next. To install to a different location, click Browse and select another folder.		
	Destination Folder C:\Program Files\Appeon\Developer2013R2		
Appeon Developer	Space Required on C: 1915 MB Space Available on C: 198389 MB		
InstallShield	< <u>B</u> ack <u>N</u> ext > Cancel		

Step 3: If you have more than one PowerBuilder installed, you will be given a choice of which version(s) to integrate into Appeon Developer.

Figure 4.50: PowerBuilder IDE

Appeon for PowerBuilder Setup			
Setup Type Specify the PowerBuilder IDE that Appeon Developer will use.			
	Setup detected multiple PowerBuilder versions. Select the PowerBuilder version(s) that Appeon will use. Appeon Demo for the highest PowerBuilder version that you choose will be installed by default.		
199899999	☑ PowerBuilder 8 IDE		
1326676	PowerBuilder 9 IDE		
1999	PowerBuilder 10 IDE		
Saassa	🗹 PowerBuilder 10.5 IDE		
100000000	☑ PowerBuilder 11 IDE		
	☑ PowerBuilder 11.5 IDE		
	PowerBuilder 12.0 IDE		
	PowerBuilder 12.5 IDE		
Appeon Developer			
InstallShield	< Back Next > Cancel		

Step 4: Specify the server name and port number for Appeon Server and Web server used in Appeon Developer. Click **Next**.

If you want to use an Appeon Server that has been already installed to the same machine where Appeon Developer is being installed, use the default values. If you want to use a remote Appeon Server, specify the server name and port number of the remote server. The setup program can automatically configure the Server Profile and Deployment Profile in the Appeon Developer Configuration window for the specified servers.

Yon can change these settings in the **Configure** tool of Appeon Developer after the installation when necessary.

Figure 4.51: Configure Appeon Developer

Appeon for PowerBuilder Setup	
Configure Appeon Developer Specify the following settings.	
	You have the option to specify the settings for Appeon Server and Web Server used in Appeon Developer. Click Next to proceed, and the default values will be used. Appeon Server Server Name: localhost Port Number: 80 Server Type: J2EE INET Web Server Server Name: localhost Port Number: 80 Server Type: Microsoft IIS
Appeon Developer	
InstallShield	< <u>B</u> ack <u>N</u> ext > Cancel

Step 5: Select the Sybase ASA/SQL Anywhere engine location for running Appeon Demos.

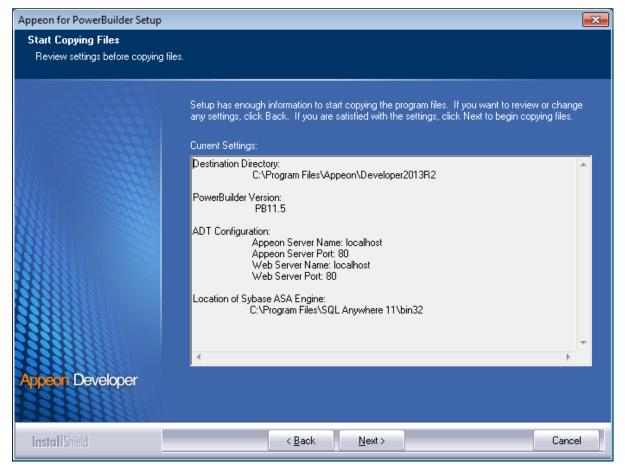
Depending on the version of Appeon Server (32-bit or 64-bit), Setup lists all copies of ASA/ SQL Anywhere engines (32-bit or 64-bit) detected in your machine.

Figure 4.52: ASA/SQL Anywhere for Appeon Demo

Appeon for PowerBuilder Setup			
Specify the Location of Sybase ASA Engine (32-bit) Specify the ASA engine location to configure Appeon database service.			
	Setup detected the following Sybase ASA engines (32-bit) on this machine. You sho the correct location of ASA engine (32-bit) below to make sure Appeon Demo work (ould select or type correctly.	
Appeor Developer	C:\Program Files\SQL Anywhere 11\bin32 C:\Program Files\SQL Anywhere 11\bin32 C:\Program Files\SQL Anywhere 12\bin32	B <u>r</u> owse	
InstallShield	< <u>B</u> ack <u>N</u> ext >	Cancel	

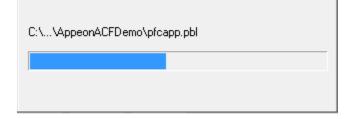
Step 6: Check the summary of settings.

Figure 4.53: Summary of settings



Click **Back** to change any unwanted settings or click **Next** and Setup will begin copying files.

Figure 4.54: Appeon Developer installation progress



Step 7: Wait until the installation is complete.

Step 8: Click **Finish** to exit.

Figure 4.55: Setup Complete



4.4.4 Appeon Server Web Component installation (for remote Web servers only)

If you set up an individual machine (separate from the application server) as the remote Web server, you will need to install the Appeon Server Web Component. If not, you do not need to run the installation of the Appeon Server Web Component separately since it is included in Appeon Server.

4.4.4.1 Prerequisites

- Install IIS 6.0, 7.0, 7.5 or 8.0 on Windows Server 2003, 2008, 2012, Vista, or Windows 7, 8/8.1.
- Shut down the IIS service and any other Windows programs before beginning the installation process.

4.4.4.1.1 Prerequisites if Web Component installed to multiple remote Web servers

Appeon Server Web Component can be installed to multiple remote Web servers. Make sure all remote Web servers meet the above requirements and repeat the installation steps for the Appeon Server Web Component on each Web server.

4.4.4.2 Installation instructions

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Server Web Component** (see <u>Starting the installation</u>).

Step 2: Click **Browse** to select the Web root for the IIS Web server (for example, "C:\Inetpub \wwwroot").

If Appeon Server Web Component is installed to the default path: "C:\Program Files\Appeon \WebComponent2013R2", rather than the Web root of the Web server, you would need to manually copy it to the Web server Web root later in order to run Appeon application.

Figure 4.56: Appeon Server Web Component location

Appeon for PowerBuilder Setup			
Choose Destination Location Select the Web root directory where Setup will install files.			
	Click Browse and select the Web root directory of the Web server where Setup will install Appeon Server Web Component. Appeon Server Web Component must be installed to the Web root in order to function properly.		
	Destination Folder C:\Program Files\Appeon\WebComponent2013R2		
Appeon Server Web Component	Space Required on C: 71 MB Space Available on C: 194993 MB		
InstallShield	< Back Next > Cancel		

Step 3: Check the summary of settings.

Figure 4.57: Summary of settings

Appeon for PowerBuilder Setup		×
Start Copying Files Review all the settings before c	copying files.	
	Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files. Current Settings:	e
Appeon Server Web Component	Web Server Root Directory: C:\inetpub\wwwroot\	*
InstallShield	< <u>B</u> ack <u>N</u> ext > Cance	4

Click **Back** to change any unwanted settings or click **Next** and Setup will begin copying files.

Figure 4.58: Appeon Server Web Component installation progress



Step 4: Wait until the installation is complete.

Step 5: Click **Finish** to exit.

Figure 4.59: Setup Complete



4.4.4.2.1 Installing and configuring Appeon plug-in

To ensure the remote Web server works with Appeon Server, install and configure the Appeon plug-in for the Web server. Instructions for installing and configuring the Appeon plug-in are provided in the *Web Server Configuration Guide*.

4.4.5 Appeon Help installation

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Help** (see <u>Starting the installation</u>).

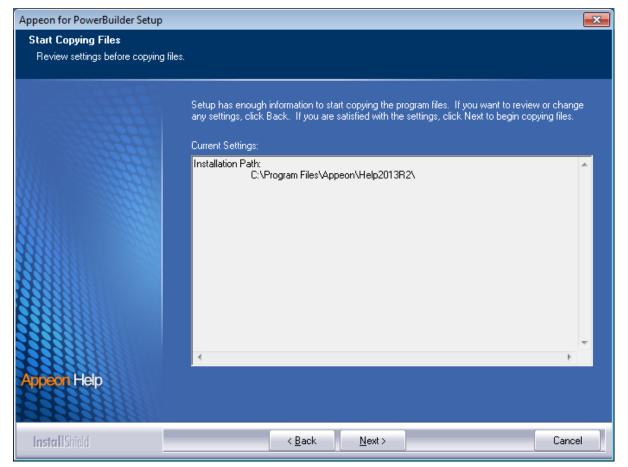
Step 2: Click **Next** to install Appeon Help to the default location, or click **Browse** to select another location.

Figure 4.60: Help location

Appeon for PowerBuilder Setup		— ×
Choose Destination Location Select a directory where Setup w		
	Click Browse and select the directory where Setup will install Appeon Help.	
	Destination Folder C:\Program Files\Appeon\Help2013R2	Browse
Appeon Help	Space Required on C: 62 MB Space Available on C: 195152 MB	
InstallShield	< <u>B</u> ack Next >	Cancel

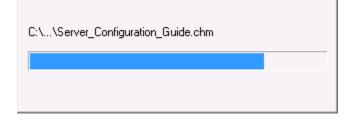
Step 3: Check the summary of settings.

Figure 4.61: Summary of settings



Click **Back** to change any unwanted settings or click **Next** and Setup will begin copying files.

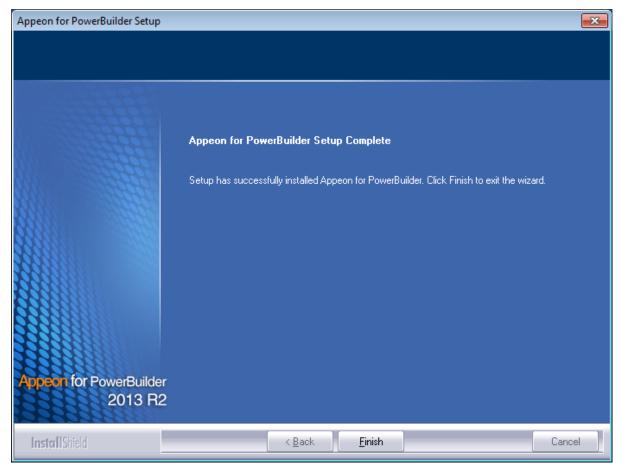
Figure 4.62: Appeon Help installation process



Step 4: Wait until the installation is complete.

Step 5: Click **Finish** to exit.

Figure 4.63: Setup complete



4.5 Appeon Web 2013 R2 upgrade installation

4.5.1 Overview

If you have installed Appeon 6.5 or a later version, you can upgrade to Appeon Web 2013 R2, but you cannot upgrade from Appeon 6.2 or an earlier version. If you are using Appeon 6.2 or an earlier version, uninstall it and then install Appeon Web 2013 R2.

Note that applications deployed with the old version and the demo applications must be redeployed with Appeon Web 2013 R2 after the upgrade.

4.5.2 Before you upgrade

Before upgrading to Appeon Web 2013 R2, upgrade the system environment as required in <u>Installation requirements</u>. The following highlights key installation requirements added in Appeon Web 2013 R2.

- Upgrade the PowerBuilder version to 9.0.3, 10.2.1, 10.5.2, 11.2, 11.5, 12.0, 12.5, 12.5.2, or 15.
- If using Windows XP as the operating system for Appeon Developer, upgrade to Windows XP SP3.

In addition to the system environment requirements, you should meet the installation prerequisites listed in <u>Appeon Web 2013 R2 new installation</u> before upgrading each of the Appeon components.

4.5.3 Upgrading to Appeon Web 2013 R2

4.5.3.1 Upgrading Appeon Server

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Server for .NET** (see <u>Starting the installation</u>).

Step 2: Click the **OK** button in the **Confirm Upgrade** message box.

Figure 4.64: Confirm upgrade

Confirm U	lpgrade		×
?	Setup detected an old version of Appeon computer. Do you want to upgrade now Cancel to exit.		
		OK	2

Step 3: Specify the settings for ASP.NET when necessary, and then click Next.

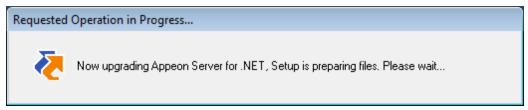
Select the **Modify current ASP.NET settings** checkbox and then modify the attribute values; or click **Reset** to restore the default values. These values are used to determine the maximum number of concurrent users that Appeon Server can support, therefore, setting proper values can help improve the Appeon Server performance. For detailed instructions, refer to the **Microsoft IIS Server** section in **Appeon Performance Tuning Guide**.

Figure 4.65: ASP .NET settings

Appeon for PowerBuilder Setup			
ASP.NET Settings Choose to modify current ASP.NET settings.			
	increase the number of concurrent r same time. maxWorkerThreads: maxIoThreads: minWorkerThreads: minFreeThreads: minLocalRequestFreeThreads: executionTimeout: maxRequestLength:	owing attributes in Machine.config file to equests that ASP.NET could handle at the 20 20 1 8 4 4 110 4096 <u>Reset</u>	
Appeon Server for .NET	1. Numbers of concurrent requests = m 2. The maxRequestLength is an attribut C:\inetpub\www.root\Appeon\AEM\r	axworkthreads * number of logic CPUs - minFreeThreads te which is stored in web.config.	
InstallShield	< <u>B</u> ack <u>N</u> e:	xt > Cancel	

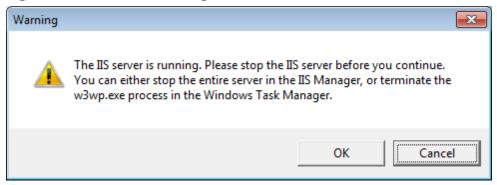
When the **Next** button is clicked, a message box opens indicating that the upgrade is preparing files.

Figure 4.66: Setup is preparing files



Before the upgrade process starts, if the setup program detects that IIS server is running, a warning message will pop up reminding you to stop it, as shown in the following figure.

Figure 4.67: Check Task Manager



The upgrade process uninstalls the old version of Appeon Server (including Appeon Server instances if any), backs up configurations and begins the installation of **Appeon Server** (including Appeon Server instances if any) based on the backup information. This will take several minutes.

Step 4: When setup is complete, Click Finish to complete the installation of Appeon Server.

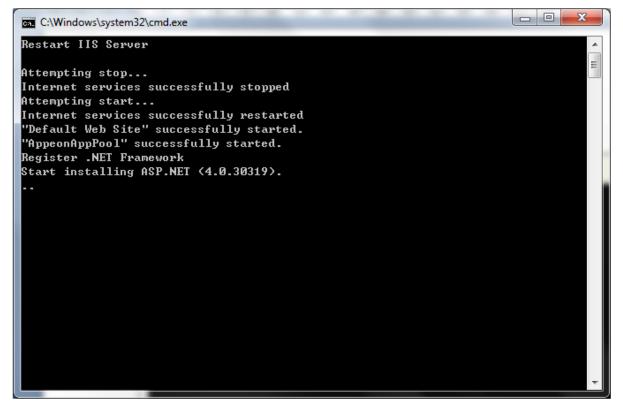
It is recommended that you keep **Restart IIS Server** and **Register .NET Framework 4.0** selected when clicking **Finish**.

Appeon for PowerBuilder Setup		×
	Appeon for PowerBuilder Setup Complete	
	Setup has successfully installed Appeon for PowerBuilder. Click Finish to exit the wizard.	
	✓ Restart IIS Server	
	✓ Register .NET Framework 4.0	
Appeon for PowerBuilde		
2013 R2		
InstallShield	< <u>B</u> ack <u>F</u>inish Canc	el

Figure 4.68: Setup is complete

The setup program will restart the IIS server and then register .NET Framework, as shown in the following figure.

Figure 4.69: Register .NET Framework

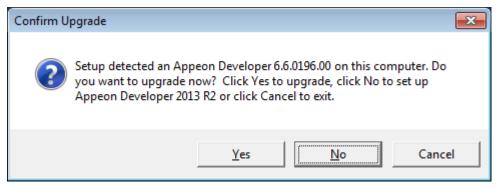


4.5.3.2 Upgrading Appeon Developer

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Developer** (see <u>Starting the installation</u>).

Step 2: Click the Yes button in the Confirm Upgrade message box.

Figure 4.70: Confirm upgrade



Once you click the Yes button, a message box opens indicating that Setup is preparing files.

Figure 4.71: Setup is preparing files



The upgrade process uninstalls the old version of Appeon Developer, backs up configurations then begins the installation of **Appeon Developer** based on the backup information. This will take several minutes.

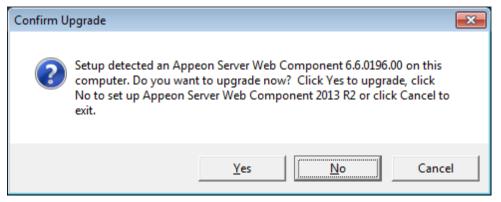
Step 3: Click the **Finish** button when the upgrade is complete.

4.5.3.3 Upgrading Appeon Server Web Component

Step 1: Launch the **Appeon for PowerBuilder 2013 R2 Setup** program and select to install **Appeon Server Web Component** (see <u>Starting the installation</u>).

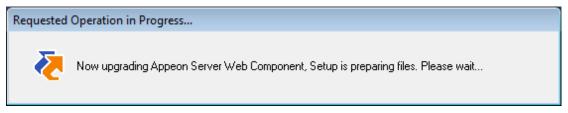
Step 2: Click the Yes button in the Confirm Upgrade message box.

Figure 4.72: Confirm upgrade



Once you click the **Yes** button, a message box opens indicating that Setup is preparing files.

Figure 4.73: Setup is preparing files



The upgrade process uninstalls the old version of Appeon Server Web Component then begins the installation of **Appeon Server Web Component**. This will take several minutes.

Step 3: Click the **Finish** button when the upgrade is complete.

4.5.4 Upgrade configuration settings manually

After the product upgrade, most configurations made in the old version are retained and will continue to work in Appeon Web 2013 R2. However, because the configuration settings of Appeon Web have been adjusted, it is recommended that you review the configuration settings in Appeon Developer and Appeon Server AEM to become familiar with the new settings and make sure the old ones are not lost or mis-configured.

After verifying all settings, Appeon applications deployed with the old version and Appeon Demos must be redeployed in Appeon Web 2013 R2.

Note: If the application uses Appeon Workarounds PBL, you must use the new Appeon Workarounds PBL to replace those of the old version.

4.5.4.1 Settings lost in upgrade (for Appeon Demos)

• The data source settings in AEM.

You need to manually create the following data sources: appeonsample and appeonsample2. The "appeonsample" data source connects to appeonsampleforserver SQL Anywhere ODBC data source, and the "appeonsample2" data source connects to appeonsample2 forserver SQL Anywhere ODBC data source.

• The transaction object settings in AEM.

You need to manually map transaction object(s) to data source, mainly, map sqlca to appeonsample. For appeon_code_examples, you also need to map its_sql to appeonsample and its_sqt to appeonsample2.

5 Configuring Appeon Server Cluster

Appeon provides its own tools and plug-ins to configure an Appeon Server cluster and implement the load balancing and failover functionalities. An Appeon Server cluster is essentially a group of IIS servers, each with Appeon Server and Appeon plug-in installed.

Following are high level steps for configuring an Appeon Server cluster. For detailed instructions, please refer to **Tutorial 5: Configure Appeon Server Cluster** in *Appeon Mobile Tutorials*.

- 1. Install Appeon Server to multiple IIS servers.
- 2. Create Appeon Server cluster in AEM.
- 3. Configure the **Web server** for the Appeon Server cluster.
- 4. Deploy the application to the Appeon Server cluster and Web server(s).

6 Post-Installation Configuration Tasks

6.1 Overview

The previous chapters provide instructions on how to set up Appeon system architecture, including installing Appeon for PowerBuilder components, as well as configuring Appeon Server cluster. Once the Appeon system is set up and before you start deploying applications, the post-installation configuration tasks listed in the following table will help ensure that the deployed applications run as desired. Post-installation configuration tasks refer to configurations required for Appeon system architecture that affect the running of all applications but do not include configuration tasks performed in Appeon Developer and Appeon Enterprise Manager for specific applications.

Task	Description	Detailed Instructions Given in
Configuration for the client machine	The IE security settings and Windows login user privileges may prevent downloading the Appeon Xcelerator plug-in.	Configuration for client machine
System language setting	Configuration required for the client, Appeon Server and database server. The operating system language settings can affect	System language settings
	the characters that are displayed in the Appeon Web application.	
Configuration for supporting dynamic DataWindows	Configuration required for database server. Configuration at the database server is required for support of dynamic DataWindows.	Dynamic DataWindow in the Supported PB Features for Appeon Web
Configuration for fixing an ASE issue	Appeon provides several SQL files for you modifying the chain modes of stored procedures in ASE database to avoid the following error: "Select error: Stored procedure may be run only in unchained transaction mode"	ASE Chained mode issue in the Appeon Troubleshooting Guide

Table 6.1: Post-installation tasks

6.2 Configuration for client machine

Running Appeon Web application on the client machine is dependent on the Appeon Xcelerator plug-in (ActiveX controls). To ensure (only for the first time) the Appeon ActiveX controls can be downloaded and installed automatically when the application is run, the following configuration on the client machine is required.

For more information about the Appeon ActiveX file and the manual installation method, refer to the "Installing Appeon ActiveX Control" section in Supported PB Features for Appeon Web.

6.2.1 Configuring IE security settings

We recommend you add the URL of the deployed application to the **Trusted Sites** zone in Internet Explorer, because the default security settings of this zone are appropriate for downloading and installing the Appeon ActiveX controls. However, if you do not want to add the URL to the Trusted Sites zone, you will need to make sure the security settings (listed in Step 4 below) are enabled for the appropriate zone. The following are detailed steps to add the URL to the Trusted Sites zone.

Step 1: In Internet Explorer, on the Tools menu, click Internet Options.

Step 2: In the Internet Options window, select the **Security** tab. Then select the **Trusted sites** Web content zone, and click the **Sites** button.

Internet Options				
General Security Privacy Content Connections Programs Advanced				
Select a zone to view or change security settings.				
Trusted sites				
This zone contains websites that you trust not to damage your computer or your files.				
Security level for this zone				
Allowed levels for this zone: All				
Medium Prompts before downloading potentially unsafe content Unsigned ActiveX controls will not be downloaded				
Enable Protected Mode (requires restarting Internet Explorer)				
<u>Custom level</u> <u>D</u> efault level				
Reset all zones to default level				
OK Cancel Apply				

Step 3: In the Trusted sites window, input the URL of the deployed application to the "Add this website to the zone" box. Uncheck the checkbox of "Require server verification (https:) for all sites in this zone". Click **Add** then click **Close** to return to the Internet Options window.

Figure 6.1: IE security settings

Figure 6.2: Trusted sites

Trusted sites		
You can add and remove websites from this zone. All websites in this zone will use the zone's security settings.		
Add this website to the zone:		
http://goabc.com		
Websites:		
Remove		
Require server verification (https:) for all sites in this zone		
⊆lose		

Step 4: If you do not want to add the URL to the trusted sites (in Step 3), you will need to select the appropriate zone, then click the **Custom Level** button, and enable the following settings (they are enabled for the trusted sites by default):

- Download signed ActiveX controls
- Run ActiveX controls and plug-Ins
- Script ActiveX controls marked safe for scripting
- Active scripting

Step 5: Click **OK** to save the settings and close IE.

6.2.2 Logging in as administrator or normal user

Different Internet Explorer versions require different user privileges for installing the ActiveX control.

- If using IE 8.0, 9.0 or 10.0 on Windows Vista/7/2008/2012, you do not need administrative privileges to download and register the ActiveX control; you can log into the machine as a normal user.
- If using IE 8.0, 9.0 or 10.0 on Windows XP/2003, or if using IE 7.0 or earlier, you must log in as a member of the Administrator group so you have the permissions to download and register the ActiveX control successfully.

Please read the appropriate section for the IE version you are using.

A useful tip: In very rare cases, even after making the required configurations, you still get errors such as "Appeon Xcelerator plug-in cannot be loaded" or "Internet Explorer cannot open the Internet site http://<Web site>. Operation aborted.", you can try this to resolve the error: right click the Internet Explorer icon on desktop, choose Run as administrator; after the deployed application runs successfully, restart IE in the normal way.

6.2.2.1 Using IE 8.0, 9.0 or 10.0

- If you are using IE 8.0, 9.0 or 10.0 on Windows Vista/7/2008/2012, follow the prompts in IE information bar to install the ActiveX control, no matter which user account (administrator or normal user) you use.
- If you are using IE 8.0, 9.0 or 10.0 on Windows XP/2003, first log in as an Administrator group member, then follow the prompts in IE information bar to install the ActiveX control, then log off and log in again as a normal user.

The following are detailed steps to install the ActiveX control from the IE information bar:

Step 1: Click the IE information bar, the yellow message bar at the top, that says, "This website wants to install the following add-on: 'Appeon Web Library' from 'Appeon Corporation'. If you trust the website and the add-on and want to install it, click here...".

Step 2: Select "Install This Add-on for All Users on This Computer...". This will complete the installation of the first Appeon ActiveX control. (Note: you will need to do this step one more time, as there are two Appeon ActiveX controls to install.)

→ Page ▼ Safety	Tools ▼ ② ▼ ♣ [≫]
	Install This Add-on Install This Add-on for All Users on This Computer What's the Risk?
	Information Bar Help
_	

Figure 6.3: IE information bar

Step 3: Click **Yes** if Windows display the following "User Account Control" screen confirming that you want to install the component.

Figure 6.4: UAC window

😗 User Account	Control	×		
Do you want to allow the following program to make changes to this computer?				
	Verified publisher: Appeon (Veb Library C orporation ded from the Internet		
Show detai	ls	Yes No		
	<u>Cha</u>	nge when these notifications appear		

The installation will proceed and when it is successful, the following web page will be displayed.

Figure 6.5: Appeon download center

RPS	6		
	_ Mode		
	Run Now	For high speed network. The application runs immediately and files are downloaded only when needed. Recommended for broadband connection, such as xDSL.	
	C Run After Download	For low speed network. All files will be downloaded before the application runs. Recommended for narrowband connection, such as modem or ISDN.	
		ОК	

Step 4: Click the **OK** button and the system will begin the download process.

Figure 6.6: Download file

[- Download Info			
	_	Downloading sys	tem files. Please wait	
	Appeon System Files			
		Time Left:	0h:0m:3s (2,218KB/2,4	37KB)
		Transfer Speed:	59.58 KB/s	
				Cancel

Step 5: After this process is complete, you will see the "Appeon Xcelerator plug-in cannot be loaded" screen again. Click the IE information bar and select "Install This Add-on for All Users on This Computer..." one more time (this will install the second plug-in). This time you will see a spiraling wait icon and at the bottom left side on the status bar, you will see several program files being loaded. Once this process is completed, the application is ready to be used.

6.2.2.2 Using IE 7.0 (or earlier)

If you are using IE 7.0 or earlier, you need to first log in as an Administrator group member, then follow the prompts in IE information bar to install the ActiveX control, then log off and log in again as a normal user.

For Windows Vista, 2008, or 7, if UAC is on, when you follow the prompts in the IE information bar to install the ActiveX control, a window as below may appear, you need to input the administrator password and click **OK**; then the ActiveX control will be installed successfully.

Figure 6.7: User Account Control

User Account C	Control 💽
💎 Wind	ows needs your permission to continue
If you started	this action, continue.
6	Internet Explorer Add-on Installer Microsoft Windows
To continue,	type an administrator password, and then click OK.
	Administrator Password appeon
Details	OK Cancel
User Account	Control helps stop unauthorized changes to your computer.

If you are using IE 7, make sure IE is not started in "No-Add-ons" mode, as IE browser started in this mode will not be able to run the Appeon ActiveX control. In this case, exit IE and restart it in normal mode.

6.2.3 Verifying Appeon ActiveX control installation

We recommend you verify the installation of Appeon ActiveX controls, especially after you upgrade Internet Explorer or Appeon for PowerBuilder. The following are detailed steps.

Step 1: In Internet Explorer, on the Tools menu, click Manage Add-ons.

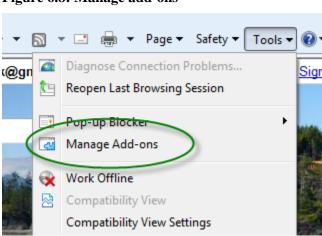


Figure 6.8: Manage add-ons

Step 2: From the list of add-ons, there are two listed for Appeon Corporation: EonDownloadCenter Class and EonUISpace Class. Make sure their status are Enabled.

Name	Publisher	Status	File date	Version	Load
Adobe PDF Link Helper	Adobe Systems, Incorpo	Enabled	02/27/2009 12:07 P	9.1.0.163	0.03 s
Adobe PDF Reader	Adobe Systems, Incorpo	Enabled	02/27/2009 12:07 P		
Appeon Corporation			7		
EonDownloadCenter Class	Appeon Corporation	Enabled	07/01/2010 9:16 PM	6.5.106.0	
EonUISpace Class	Appeon Corporation	Enabled	07/01/2010 9:17 PM	6.5.0106.0	
Apple Inc.					
QuickTime Object	Apple Inc.	Enabled	09/09/2010 4:01 PM	QuickTime	
Control name is not available —					
Web Test Recorder	Control name is not avai	Enabled		4.0.31106.0	
•	1	11			

6.3 System language settings

Sometimes the Windows language settings can affect the characters displayed in the Appeon Web application. To avoid any such display issues, verify that:

- The language of the data in the database used by the application matches the Windows language settings on the machine where Appeon Server is installed.
- The language of the data in the database used by the application matches the Windows language settings on each Client machine where the Web application will be viewed.
- The language of the data in the database used by the Appeon-deployed Web application matches Windows language settings on the machine where Appeon Developer is installed.

To set the language settings in Windows:

Step 1: Open Windows Start Menu and select Settings | Control Panel.

Step 2: Double-click Regional Options.

Step 3: Select the appropriate language from the **Your locale** DropDownListBox.

Step 4: Click the **Set Default** button. The Select System Local window displays.

Step 5: Select the appropriate locale. Verify that it is the same as that selected in the **Your locale** list box in Regional Options.

Step 6: Click **OK** to return to the Regional Options window.

Step 7: Verify that the language selected in the **Your locale** list box and the language checked as default in **Language settings for the system** settings are the same. The language can be from different regions as long as it is the same language.

Step 8: Click Apply and OK in the Regional Options window to accept the settings.

7 Uninstalling Appeon Web 2013 R2

7.1 Overview

To uninstall Appeon Web 2013 R2, uninstall each of its components separately. The uninstall process reverses the actions performed by the Appeon installation program. Uninstallation does not delete any user created files in Appeon, such as Web files generated while deploying the demo applications or your own application to Appeon Server. Delete these files manually from the Web root.

Do not try to reverse installation steps or uninstall Appeon by deleting files manually or changing your Registry. This can create serious problems with your system in general and new Appeon releases in particular.

There are two ways to uninstall Appeon components:

- Launch the Appeon uninstall program from Windows Start menu | Programs | Appeon for PowerBuilder 2013 R2.
- Launch Add/Remove Programs from the Windows Control Panel. Select the Appeon component and click **Change/Remove** to begin the uninstall process.

7.2 Uninstalling Appeon Developer

Step 1: Shut down all Windows programs, including all Sybase softwares:

- Shut down PowerBuilder
- Stop the EP Management Service.

Step 2: Verify that Appeon Developer and all Sybase softwares have been shut down.

Open Windows Task Manager, switch to the Process tab and verify that the following processes are not running. If they are running, end them:

- EonADTxx.exe
- pbxxx.exe

If EonADT**xx**.exe is running when attempting to uninstall Appeon Developer, Appeon Setup will detect that the processes are running and an error message will appear.

End the processes in the **Processes** tab of **Windows Task Manager** before clicking the **OK** button on the message box. If you click **OK** before ending the process, the message box will continue to display and will not allow you to continue until the processes are ended. In this case, click **Cancel** in the message box, end the process and begin the uninstall process again.

Step 3: Select Windows Start menu | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Developer | Uninstall Appeon Developer to begin the uninstall process.

Step 4: Choose **Remove** to delete all installed features. Click **Next**.

Figure 7.1: Repair or remove Appeon Developer

Appeon for PowerBuilder Setup		×
Welcome Repair or remove the program.		
	Welcome to the Appeon Developer 2013 R2 Setup Maintenance program. This program allows you to modify the current installation. Click one of the options below. • Repair • Repair installation errors in the program. This option repairs missing or corrupt files, shortcuts and registry entries. • Remove • Remove • Remove all installed features.	
Appeon Developer	< Back Next > Cancel	

Step 5: Click **OK** to confirm the removal of Appeon Developer.

Figure 7.2: Confirm uninstall

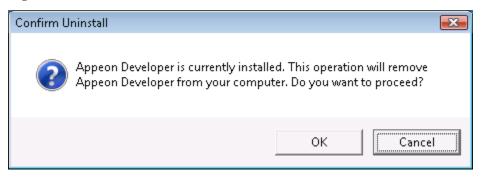
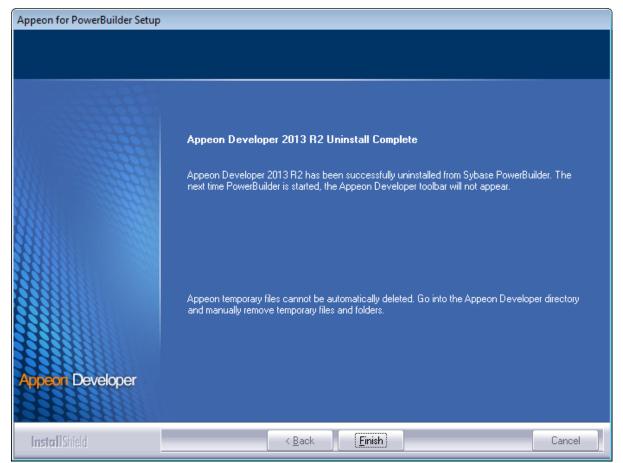


Figure 7.3: Perform Appeon Developer uninstall

Appeon for PowerBuilder Setup		×
Performing Uninstall Operation Appeon Developer Uninstall is per		
	Please wait while Uninstall performs the requested operations. This may take several minu	tes.
	Removing applications	
Appeon Developer		
InstallShield		Cancel

Step 6: Click **Finish** to exit.

Figure 7.4: Appeon Developer uninstall complete



Step 7: Use Windows Explorer to manually delete the folder where Appeon Developer was installed. This will remove all Appeon Developer files that are not automatically uninstalled.

7.3 Uninstalling Appeon Server

Step 1: Shut down all Windows programs.

Step 2: Stop IIS server.

To stop the server in the IIS Manager, right click the **top** node (not the website node) in the left tree and select **Stop** from the popup menu. This will stop the entire IIS server, as shown in the following figure.

🚟 iis - [Internet Information Services (IIS) Manager]					
File Help					
Connections	APPEON2120 5-PC Home Refresh Add Web Site Start Stop Rename Switch to Content View 404 .NET Error .NET Pages Globalization .NET Truck Application	Actions Manage Server Restart Start Stop View Application Pools View Sites Change .NET Framework Version Help Online Help			
∢ ► Ready	Features View	9 .:			

Figure 7.5: Stop the server in IIS Manager

Step 3: Select Windows Start menu | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Server for .NET | Uninstall Appeon Server to begin the uninstall process.

Before uninstall process starts, if the setup program detects that the IIS server is running, a warning message will pop up reminding you to terminate it, as shown in the following figure.

Figure 7.6: Stop IIS server

Warning	
Â	The IIS server is running. Please stop the IIS server before you continue. You can either stop the entire server in the IIS Manager, or terminate the w3wp.exe process in the Windows Task Manager.
	OK Cancel

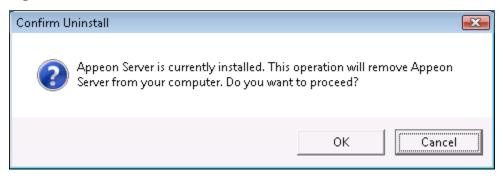
Step 4: Choose **Remove** to delete all installed features. Click **Next**.

Figure 7.7: Repair or remove Appeon Server



Step 5: Click **OK** to confirm the removal of Appeon Server.

Figure 7.8: Confirm uninstall



Step 6: Wait until the uninstallation is complete.

Figure 7.9: Perform Appeon Server uninstall

Appeon for PowerBuilder Setup		x
Performing Uninstall Operation Appeon Server Uninstall is perform		
	Please wait while Uninstall performs the requested operations. This may take several minu	100
	Removing applications	
Appeon Server		
for .NET		
InstallShield		Cancel

Step 7: Click **Finish** to exit.

Figure 7.10: Appeon Server uninstall complete



7.4 Uninstalling Appeon Server Web Component (for remote Web servers only)

Step 1: Shut down all Windows programs as well as the IIS service.

Step 2: Select Windows Start menu | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Server Web Component | Uninstall Appeon Server Web Component to begin the uninstall process.

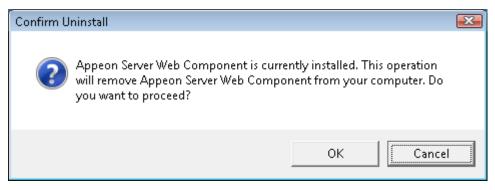
Step 3: Choose **Remove** to delete all installed features. Click **Next**.



Figure 7.11: Repair or remove Appeon Server Web Component

Step 4: Click **OK** to confirm the removal of Appeon Server Web Component.

Figure 7.12: Confirm uninstall



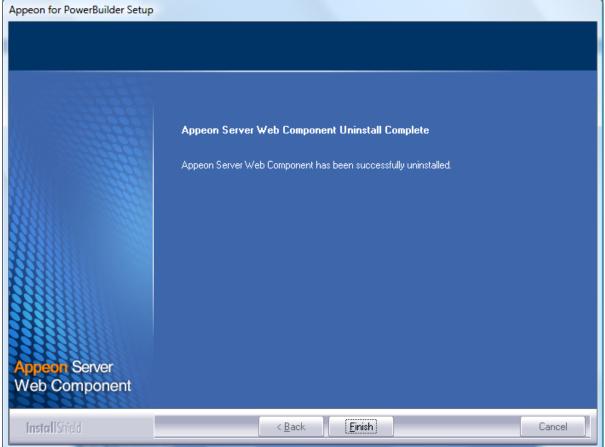
Step 5: Wait until the uninstallation is complete.

Figure 7.13: Perform Appeon Server Web Component uninstall

Appeon for PowerBuilder Setup		×
Performing Uninstall Operation Appeon Server Web Component I	n Jninstall is performing the requested operation.	
	Please wait while Uninstall performs the requested operation. This may take several minutes	
	Patching files	
Appeon Server Web Component		
InstallShield	Car	ncel

Step 6: Click **Finish** to exit.





7.4.1 Uninstalling Web Component if multiple remote Web servers are involved

Repeat the Web Component uninstall steps for each remote Web server.

7.5 Uninstalling Appeon Help

Step 1: Select Windows Start menu | Programs | Appeon for PowerBuilder 2013 R2 | Appeon Help | Uninstall Appeon Help to begin the uninstall process.

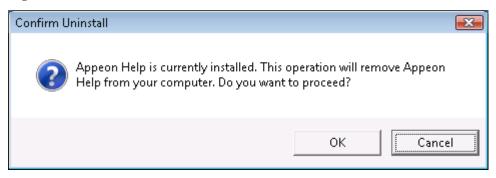
Step 2: Choose Remove to delete all installed features. Click Next.

Figure 7.15: Repair or remove Appeon Help



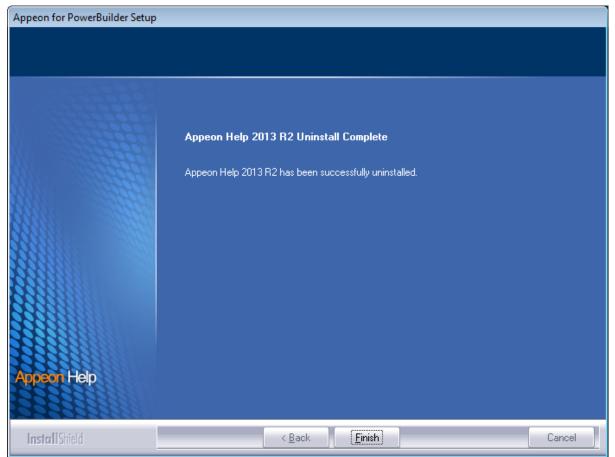
Step 3: Click **OK** to confirm the removal of the Appeon Help.

Figure 7.16: Confirm uninstall



Step 4: Click **Finish** to exit.

Figure 7.17: Appeon Help uninstall complete



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