Appeon Web 6.6 Installation Guide for EAServer Unix \Linux

Appeon for PowerBuilder 2013 (on EAServer) FOR UNIX\LINUX

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1 About This Book

1.1 Audience

This book is for users who want to install Appeon® for PowerBuilder® 2013 for EAServer.

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 6.6 for EAServer Unix\Linux and its system architecture.

Chapter 3: Installation Requirements

The system requirements for installing Appeon Web 6.6 for EAServer Unix\Linux.

Chapter 4: Installing Appeon Web 6.6

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 6.6

Instructions for uninstalling Appeon Web 6.6 for EAServer Unix\Linux.

1.3 Related documents

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

• Introduction to Appeon:

Guides you through all the documents included in Appeon for PowerBuilder.

• New Features Guide:

Introduces new features and changes in Appeon for PowerBuilder.

• Appeon Mobile Tutorials:

Gives instructions on deploying, running, and debugging Appeon applications, distributing native mobile apps, and configuring Appeon server clusters.

• Appeon Installation Guide:

Provides instructions on how to install Appeon for PowerBuilder successfully.

• Development Guidelines for Appeon Mobile:

Introduces general guidelines on developing apps with Appeon Mobile.

• 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 the user through the entire process of deploying a small PowerBuilder application to the Web.

• Features Help for Appeon:

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 issues, such as unsupported features, etc,. encountered when using Appeon for PowerBuilder.

• Appeon Workspace User Guide:

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

• 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 Appeon deployed applications.

• Web Server Configuration Guide:

Describes configuration instructions for Web Servers to work with a single Appeon Server or an Appeon Server cluster.

• Troubleshooting:

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 J2EE platform, as well as greater availability, security and reliability.

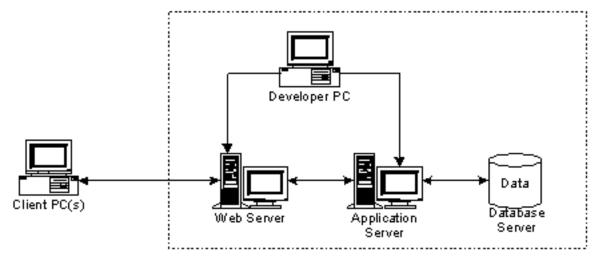
Appeon for PowerBuilder allows the entire Web application conversion process to be executed within the PowerBuilder IDE. It does not require the developer to write a single line of HTML, Java, .NET or JavaScript code. Only standard PowerBuilder programming skills are required.

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 Internet Explorer
Web Server	Hosts the presentation layer of the deployed applications, responds to incoming requests from Client PC and dispatches requests to the application server.	Appeon Server Web Component	EAServer HTTP Server or any EAServer-compatible Web server, such as Apache or IIS.
Application Server	Hosts the DataWindows and n-Tier NVOs of the 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	EAServer
Database Server	Hosts the application database.	None	JDBC-compliant RDBMS supported by Appeon. Please see <u>Database server</u> <u>requirements</u> for more information.

Table 2.1: Tiers in the Appeon Web architecture

2.3 Appeon editions

Appeon Web 6.6 (on EAServer UNIX\LINUX) contains the following editions.

Table 2.2: Ap	peon editions		
Edition	Platform	Component	Description
Enterprise Edition	IBM AIX, Sun Solaris, HP Unix, RedHat Linux	 Appeon Server Appeon Server Web Component EAServer 	 Appeon Developer and Appeon Help are not provided. The Appeon Server clustering service is provided in Enterprise Edition only.

Table 2.2: Appeon editions

Edition	Platform	Component	Description
Workgroup Edition	IBM AIX, Sun Solaris, HP Unix, RedHat Linux	 Appeon Server Appeon Server Web Component EAServer 	Appeon Developer and Appeon Help are not provided.

2.4 Appeon components

2.4.1 Appeon Developer (Windows only)

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 (J2EE or .NET) 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 a Web application used to manage Appeon Server and deployed Web applications over the Internet or intranet. When you install Appeon Server, AEM is automatically installed.

During the Appeon Server installation, the Appeon Server Web Component is automatically installed to the EAServer HTTP server, 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 (for third-party Web servers)

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 use a third-party Web server or 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 redirector plug-in. For detailed instructions on configuring the Web server, refer to **Web Server Configuration Guide** in Appeon Help.

2.4.4 Appeon Help (Windows only)

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 or 10.0
- Microsoft Windows 2000 SP4, Windows Server 2003 SP2, Windows XP SP3, Windows Vista SP2, Windows Server 2008 SP2, or Windows 7
- (Optional) Adobe Acrobat Reader 6.0 or above (for viewing printed PDF DataWindows or reports)

3.1.2 Hardware requirements

- Intel processor(s) running at 1.8. GHz or faster
- At least 2 GB RAM

3.2 Appeon Server requirements

3.2.1 Software requirements

- Unix OS (such as IBM AIX, Sun Solaris, or HP Unix), or Linux (such as RedHat Linux) that is supported by Sybase EAServer
- SAP Sybase EAServer 6.3.1.04

Please make sure that EAServer is started by JDK 1.6 or above (not requiring Java Applets or JVM at the client browser).

• SAP Sybase PowerBuilder® Virtual Machine (PBVM) 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), or 12.5.2 (build 5006)

If you do not have the required build, update it by running the PowerBuilder EBF setup program, which is available on the Sybase Downloads website.

3.2.2 Hardware requirements

• Processor(s)

Linux: 86 Pentium IV above, X86 AMD above IBM AIX: IBM Power4 Solaris: UltraSparcIII, Solaris X86 Pentium HP-Unix: HP Itanium, HP PA-Risc

• At least 2 GB RAM (4 GB RAM recommended)

- 900 MB hard drive space (for EAServer installation) plus 250 MB hard drive space (for Appeon Server installation)
- DVD-ROM drive (for Appeon installation from DVD)

3.2.3 (Optional) Third-party Web Server requirements

- Apache 1.3, 2.0, or 2.2 on Windows or Unix\Linux, or Microsoft IIS 5.0, 6.0, 7.0, 7.5 or 8.0
- 50 MB available hard drive space (for Appeon Server Web Component installation)

To make the third-party Web server work with Appeon Server, you must have the Web server redirector plug-in installed and configured. For detailed instructions, refer to the **Web Server Configuration Guide** in Appeon Help.

3.3 Database server requirements

Appeon Web 6.6 can run with any of the following database servers and drivers:

- SAP Sybase SQL Anywhere 8.0.2, 9.0, 10.0.1, 11.0, or 12.0 with Sybase iAnywhere or jConnect JDBC driver
- SAP Sybase Adaptive Server Enterprise (ASE) 12.5.x or 15.x with Sybase jConnect or iAnywhere JDBC Driver
- SAP Sybase Adaptive Server Anywhere WEB Edition with Sybase jConnect or iAnywhere JDBC driver
- SAP Sybase IQ 12.6.x, 12.7.x or 15 with jConnect JDBC driver
- SAP HANA 1.00.36 with JDBC Driver
- IBM DB2 UDB 8.1, 8.2, 9.5 or 10 with IBM JDBC driver
- Informix 9.x, 10.x or 11 with IBM JDBC driver
- Microsoft SQL Server 2000 SP4, 2005 SP1, 2008 or 2012 with MSFT JDBC driver or JTDS driver
- MySQL 5.5.x with Connector/J driver
- Oracle 8i, 9i, 10g, or 11g with Oracle JDBC Driver

Note: Verify that the version of the downloaded driver is compatible with the Oracle database in use.

• Teradata 13.00.00.27 or later with Teradata JDBC driver

For instructions on downloading and installing the driver files, refer to the *JDBC driver preparation* section in the *Appeon Server Configuration Guide*.

4 Installing Appeon Web 6.6

4.1 Overview

Appeon Web 6.6 (on EAServer UNIX\LINUX) consists of two components: Appeon Server and Appeon Server Web Component. To deploy the application to Appeon Servers and Web servers running on Unix\Linux, you can use an Appeon Developer installed from an Appeon for PowerBuilder **for Windows** edition.

Component	Description	Installed on
Appeon Developer	An add-in that provides the Web deployment option to PowerBuilder.	PowerBuilder on Windows operating system.
Appeon Server	A set of EAServer 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.	EAServer on Unix\Linux operating system. EAServer can be silently installed with Appeon Server or installed separately before the Appeon Server installation.
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.	Third-party Web server. For EAServer HTTP server, this installation is unnecessary since the Web Component is included in Appeon Server.
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.

Table 4.1: Appeon components

4.2 Installation scenarios

4.2.1 Overview

Appeon for PowerBuilder 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.

4.2.1 Remote Appeon Server using EAServer HTTP server

Scenarios	Requirements	Appeon Components
In this example,	Computer 1:	Computer 1:
2 computers are used:	Microsoft Windows 2000, 2003, 2008, 7, XP, or Vista	Appeon Developer
Computer 1 serves as Developer PC.	Microsoft Internet Explorer	
	SAP Sybase PowerBuilder	
	SAP Sybase ASA	
Computer 2 serves	Computer 2:	Computer 2:
as Web server, application server	Unix\Linux	Appeon Server
and database	SAP Sybase ASA, SAP Sybase ASE, SAP	
server.	Sybase IQ, Oracle, Microsoft SQL Server,	
	Informix, IBM DB2, Teradata, MySQL, or	
	SAP HANA depending on the application	
	database	

 Table 4.2: Remote Appeon Server installation

4.2.2 Remote Appeon Server using a third-party Web server

Scenarios	Requirements	Appeon Components
In this example,	Computer 1:	Computer 1:
3 computers are used:	Microsoft Windows 2000, 2003, 2008, 7, XP, or Vista	Appeon Developer
Computer 1 serves as Developer PC.	Microsoft Internet Explorer	
	SAP Sybase PowerBuilder	
	SAP Sybase ASA	
Computer 2 serves	Computer 2:	Computer 2:
as Web server	Microsoft IIS or Apache	Appeon Server Web Component
Computer 3 serves	Computer 2:	Computer 2:
as application server and database	Unix\Linux	Appeon Server
server.	SAP Sybase ASA, SAP Sybase ASE, SAP	
	Sybase IQ, Oracle, Microsoft SQL Server,	
	Informix, IBM DB2, Teradata, MySQL, or	
	SAP HANA depending on the application database	

4.2.3 Appeon Server Cluster

Scenarios	Requirements	Appeon Components
In this example, N (N>=4)	Computer 1:	Computer 1:
computers are used:	Microsoft Windows 2000,	Appeon Developer
Computer 1 is used for Developer PC.	2003, 2008, 7, XP, or Vista	
Developer I C.	Microsoft Internet Explorer	
	SAP Sybase PowerBuilder	
	SAP Sybase ASA	
Computer 2 is the database	Computer 2:	Computer 2:
server.	SAP Sybase ASA, SAP Sybase ASE, SAP Sybase IQ, Oracle, Microsoft SQL Server, Informix, IBM DB2, Teradata, MySQL, or SAP HANA depending on application database	None
Computer 3 is the Web	Computer 3:	Computer 3:
server.	Microsoft IIS or Apache	Appeon Server Web Component
Computers 4 to n are a group	Computers 4 to n:	Computers 4 to n:
of EAServers.	Unix\Linux	Appeon Server
		(After installing Appeon Server to each EAServer, configure the Appeon Servers as a cluster. Refer to <u>Configuring Appeon Server</u> <u>Cluster</u> for details).

4.3 Two installation methods

Appeon Web 6.6 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 5.x or an earlier version installed, you must uninstall the version, prepare the environment for Appeon Web 6.6 installation, and then use the installation program to install. The installation program takes the new installation method.
- If your computer has Appeon 6.0, 6.1, 6.2 or 6.5 installed, the installation program automatically takes the upgrade installation method.

4.4 Appeon Web 6.6 new installation

4.4.1 Appeon Server installation

4.4.1.1 Prerequisites

- Verify that PBVM 9, 10, 11, 11.5, 12.0, or 12.5 is installed before installing Appeon Server. Make sure the libpbvm90x.so, libpbvm100x.so, libpbvm110x.so, libpbvm115x.so, or libpbvm120x.so file is in the \$JAGUAR/lib folder. If it is not available or libpbvm80x.so appears instead, upgrade by running PowerBuilder EBF, available from the Sybase Downloads website (http://downloads.sybase.com/swd/summary.do).
- Verify that the Sybase license server (SYSAM) that you intend to use with the Appeon Server does not include the EJB (Enterprise Java Beans) option. If ASE EJB license is present, EAServer will start as "Sybase Enterprise Application Server (ASE Edition)" which only supports EJB components. Other component types, including PowerBuilder, are not supported. PowerBuilder support is required for the Appeon Server to function properly. For instructions on how to check and remove the ASE EJB option, refer to the **Appeon Troubleshooting Guide.**
- Before beginning the installation process, make sure that you shut down Sybase EAServer, Sybase ASA, Sybase EP Management Agent service and any other programs that are running.
- If you do not have EAServer 6.3 installed on your computer and plan to install it by Appeon installation program, copy the Appeon installation program to the computer where EAServer and Appeon Server will be installed, because the network installation is not allowed.
- When you copy the Appeon installation program to the computer, make sure that the directory does not contain special characters or spaces.

4.4.1.2 Installation instructions

To install Appeon Server on the Unix\Linux platform, you will go through the same installation process as that used for the Windows platform. The only difference is, with the Unix\Linux platform, you will complete the installation process in command line mode, instead of using graphical user interfaces.

Step 1: Open the Appeon4EAS folder from the Appeon installation program.

Step 2: Run the **install.sh** file using the command below:

```
./install.sh
```

Note: File names and directory names are case sensitive.

Step 3: Specify the temporary folder for the installation files extracted by the install.sh file. Press Enter or input "Next" to proceed.

```
Please input the directory where you want to extract the temporary install files. if the directory does not exist, it will be created for you.
```

```
Please input the directory OR [Exit]>
```

Notes:

- 1. You must have Write permission to the input directory.
- 2. The hard drive must have at least 200 MB space for installing Appeon Server, and 1 GB space for installing Appeon Server and EAServer.

The welcome message is displayed, which indicates that the installation process has started. Follow the step-by-step prompts to install Appeon Server.

Step 4: Press Enter or input "Next" to proceed.

You can also input "n", "N", "next" or "Next" to indicate "Next", "p", "P", "previous", or "Previous" to indicate "Previous", and "e", "E", "exit" or "Exit" to indicate "Exit". Notice that the input is case sensitive.

Step 5: Enter the Product Key that is shipped with the product.

Step 6: Specify an existing EAServer where Appeon Server will be installed.

• You cannot input "1" and press Enter to install EAServer 6.3 now on the local machine, as the EAServer installation program was not packaged in this setup program.

• Input "2" and press Enter to use an existing EAServer which has been installed on the computer.

Step 7: If you input "2" in Step 6, the installation program will prompt you to specify the full path of an existing EAServer 6.x where Appeon Server will be installed.

- Input "1" to use the directory (/opt/Sybase/EAServer6) where by default EAServer is normally installed.
- Input "2" to manually specify the directory if EAServer is installed to a directory different from the default directory, for example, /export/home/appeon/Sybase/EAServer.

The Setup program will check whether EAServer has been correctly installed to the specified directory and whether you have "Write" privileges.

Step 8: Specify the logon user name and password for Appeon Enterprise Manager (AEM).

- Press Enter if you want to use the default user name and password "admin" for AEM, or
- Input "1" to modify the default user name and input "2" to modify the default password.

Step 9: Confirm the setup settings.

Press Enter to begin copying the required files or input "p" or "Previous" to modify the setup settings.

If you have selected to install EAServer, the setup program will first install EAServer to the specified location then install Appeon Server. The whole EAServer installation process may take up to twenty minutes.

During the Appeon Server installation, the Appeon Server Web Component is automatically installed to the EAServer HTTP server, the Appeon Enterprise Manager (AEM) is installed as a Web application to EAServer, and the Appeon Server Status Monitor is installed to the \$JAGUAR/appeon/bin folder. Note that the Status Monitor will become effective only after it is configured properly. For detailed instructions on using and configuring the Status Monitor, refer to the Appeon Server Status Monitor section in the Appeon Server Configuration Guide.

Step 10: Once the installation is complete, choose whether to start Appeon Server.

To start Appeon Server immediately input "y". To start it later input "n". If EAServer is just installed with Appeon Server, you might want to replace the EAServer license file first before starting and using Appeon Server. In this case, you can input "n", and then manually start Appeon Server later. Refer to <u>Starting/Stopping Appeon Server</u> for how to manually start Appeon Server using commands.

4.4.1.3 Installing EAServer license

Copy the EAServer license file and replace the one under the \$JAGUAR/licenses folder. EAServer license file is provided by Sybase Inc. after you purchase Appeon Server and EAServer. For detailed instructions, please refer to the EAServer installation guide in the EAServer 6.3 Sybooks CD or <u>http://sybooks.sybase.com/nav/base.do</u>.

4.4.2 Appeon Server Web Component installation (for third-party Web servers only)

If you use a third-party Web server or set up an individual machine (separate from the application server) as the 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.

4.4.2.1 Prerequisites

- Install a third-party Web server that is compatible with the Sybase redirector plug-in. For a list of compatible third-party Web servers, refer to <u>(Optional) Third-party Web server</u> requirements.
- Stop the Web server, the Sybase EP Management Agent service, and any other Windows programs before beginning the installation process.

4.4.2.1.1 Prerequisites if Web Component installed to multiple third-party Web servers

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

4.4.2.2 Installation instructions

There is no Setup program for installing Appeon Server Web Component on Unix\Linux. You can directly copy the Appeon Server Web Component source files to the Web server Web root on Unix\Linux.

Step 1: Locate the **AppeonWebComponent.tar** file in the **AppeonWebComponent** folder on the Appeon installation program.

Step 2: Uncompress the **AppeonWebComponent.tar** file into the Web root of the Web server. For example, the Web root of Apache 1.3 is \$Apache/htdocs.

4.4.2.2.1 Installing and configuring the Web server redirector plug-in

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

4.5 Appeon Web 6.6 upgrade installation

4.5.1 Overview

You can upgrade to Appeon Web 6.6 from Appeon 6.0, 6.1, 6.2 or 6.5, but you cannot upgrade from Appeon 5.x or an earlier version. If you are using Appeon 5.x or an earlier version, uninstall it and then install Appeon Web 6.6.

Note that Web applications deployed with Appeon 6.0, 6.1, 6.2 or 6.5 and the demo applications must be redeployed with Appeon Web 6.6 after the upgrade.

4.5.1 Upgrading Appeon Server

4.5.1.1 Prerequisites

- Before beginning the upgrade process, make sure that you shut down Sybase EAServer, Sybase ASA, Sybase EP Management Agent service and any other programs that are running.
- If you do not have EAServer 6.3 installed on your computer and plan to install it by Appeon installation program, copy the Appeon installation program to the computer where EAServer and Appeon Server will be installed, because the network installation is not allowed.
- When you copy the Appeon installation program to the computer, make sure that the directory does not contain special characters or spaces.

4.5.1.2 Upgrade instructions

To upgrade Appeon Server on the Unix\Linux platform, you will go through the same upgrade installation process as that used for the Windows platform. The only difference is, with the Unix\Linux platform, you will complete the installation process in command line mode, instead of using graphical user interfaces.

Step 1: Open the Appeon4EAS folder from the Appeon installation program.

Step 2: Run the **upgrade.sh** file using the command below:

./upgrade.sh

Note: File names and directory names are case sensitive.

Step 3: Specify the temporary folder for the installation files extracted by the upgrade.sh file. Press **Enter** or input **Next** to proceed.

```
Please input the directory where you want to extract the temporary install files. if the directory does not exist, it will be created for you.
```

Please input the directory OR [Exit]>

Notes:

- 1. You must have Write permission to the input directory.
- 2. The hard drive must have at least 200 MB space for installing Appeon Server, and 1 GB space for installing Appeon Server and EAServer.

The welcome message is displayed, which indicates that the upgrade installation process has started. Follow the step-by-step prompts to install Appeon Server.

Step 4: Press Enter or input Next to proceed.

You can also input **n**, **N**, **next** or **Next**to indicate **Next**, **p**, **P**, **previous**, or **Previous** to indicate **Previous**, and **e**, **E**, **exit** or **Exit** to indicate **Exit**. Notice that the input is case sensitive.

Step 5: Input the location of JDK 1.6 or above if the upgrade installation procedure detects that the JAVA_HOME variable does not exist.

```
Step 2. Check JAVA_HOME
```

System cannot find variable JAVA_HOME, which is necessary for this upgrade.

Please input the directory where the JDK 1.6 or above is located or [Exit]>

Step 6: Enter the Product Key that is shipped with the product.

Step 7: Input the path of Appeon Server which you want to upgrade, for example, /home/ export/sybase/EAServer5 or /home/export/Sybase/EAServer63. Press Enter. The upgrade installation procedure will automatically check whether the path you input is valid.

Step 8: Confirm the setup settings.

Please select an option to continue[Exit][Previous][Next]>

Press Enter to begin copying the required files or input "p" or "Previous" to modify the setup settings.

Step 9: Once the upgrade installation is complete, choose whether to start Appeon Server.

To start Appeon Server immediately input **y**. To start it later input **n**. If EAServer is just installed with Appeon Server, you might want to replace the EAServer license file first before starting and using Appeon Server. In this case, you can input "n", and then manually start Appeon Server later. Refer to <u>Starting/Stopping Appeon Server</u> for how to manually start Appeon Server using commands.

Note that the configuration files of the Appeon Server that you want to upgrade are backed up in the $JAGUAR/appeon_backup directory, you can check or store them on the server.$

4.5.2 Upgrading Appeon Server Web Component

4.5.2.1 Prerequisites

- Stop the Web server, the Sybase EP Management Agent service, and any other Windows programs before beginning the installation process.
- If Appeon Server Web Component is installed to multiple third-party Web servers, repeat the upgrade steps for the Appeon Server Web Component on each Web server.

4.5.2.2 Upgrade instructions

There is no Setup program for installing Appeon Server Web Component on Unix\Linux. You can directly copy the Appeon Server Web Component source files to the Web server Web root on Unix\Linux. Step 1: Locate the **AppeonWebComponent.tar** file in the **AppeonWebComponent** folder on the Appeon installation program.

Step 2: Uncompress the **AppeonWebComponent.tar** file into the Web root of the Web server. For example, the Web root of Apache 1.3 is \$Apache/htdocs.

4.6 Starting/Stopping Appeon Server

• Starting Appeon Server:

Navigate to the \$JAGUAR/appeon/bin/ folder and run the appeonserverstart.sh file using the following command:

./appeonserverstart.sh

• Stopping Appeon Server:

Shutting down EAServer will also shut down Appeon Server. EAServer can be shut down by using EAServer Web console (after connecting to the server to be shut down), or by killing the process ID that is running the serverstart.sh or java command.

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 EAServers, 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 Tutorial*.

- 1. Install Appeon Server to multiple EAServers.
- 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 the characters that are displayed in the deployed application.	System language settings
Database JDBC driver preparation	Configuration required for Appeon Server. You should copy the corresponding driver files for the database server in use to the EAServer installation folder in the machine hosting Appeon Server.	JDBC driver preparation in the Appeon Server Configuration Guide
Configuration for supporting DataWindow Data Cache feature	Configuration required for database server and Web server. The DataWindow Data Cache feature can cache DataWindow data that are frequently used on the Web server to improve runtime performance, but will not work until you fulfill the configuration requirements for database server(s) and Web server(s). This feature is not available for Web servers running Unix\Linux.	DataWindow Data Cache in the Appeon Server Configuration Guide
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 Appeon Features Help

Table 6.1: Post-installation tasks

Task	Description	Detailed Instructions Given in
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

6.2 Configuration for client machine

Running the deployed 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, the following configuration on the client machine is required.

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.

Figure 6.1: IE security settings

elect a	zone to	view or chang	je security	y settings.		
				1	\bigcirc	
Inte	ernet	Local intranet	Truste	d sites 🛛 F	Restricted sites	
1	This zor trust no your file	d sites ne contains we t to damage es. ve websites in	your comp	outer or		Sites
Secur	ity <u>l</u> evel fi	or this zone				
Allo	wed level	s for this zone	e: All			
		dium Prompts befo ontent Unsigned Act	iveX conti	rols will not	be downlo	oaded
	Chable P	fotected Mod	Conception and	m level	1	ault level
			[[<u>R</u> eset all zo	nes to def	ault level

Step 3: In the Trusted sites window, input the URL of the Web 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 6.2: 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, 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 on Windows Vista/7/2008, 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 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 Web application runs successfully, restart IE in the normal way.

6.2.2.1 Using IE 8.0, 9.0 or 10

- If you are using IE 8.0, 9.0 or 10 on Windows Vista/7/2008, 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 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 ▼ @ ▼ 🍣 ≫						
	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						
2	Do you want to allow the following program to make changes to this computer?					
Program name: Appeon Web Library Verified publisher: Appeon Corporation File origin: Downloaded from the Internet						
💌 Sł	now detail	s	Yes No			
			Change 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

er 🥙	Appeon Download Cen S	. x				ren ► Pa
	Mode					
	Run Now	For high speed network files are downloaded on broadband connection,	ily when needed. Reco	mmediately mmended fi	and or	
	C Run After Download	For low speed network. application runs. Recon such as modem or ISDN	All files will be downloa mended for narrowban			
				OK		

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

Figure 6.6: Download file

	- Download Info					
	_	Downloading system files. Please wait				
	Appeon System Files					
		Time Left:	0h:0m:3s (2,218KB/2,4	137KB)		
		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 (Control	X
💎 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 Canc	el
User Account	Control helps stop unauthorized changes to your compu	ter.

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.

👻 🖃 📥 💌 Page 👻 Safety 👻 Tools -2 Diagnose Connection Problems... (@an Sigr Reopen Last Browsing Session <u>ال</u> Þ Pop-up Blocker Manage Add-ons 20 Work Offline X 줪 **Compatibility View** Compatibility View Settings

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					
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 operating system language settings can affect the characters displayed in the deployed application. To avoid any such display issues, verify that:

- The language of the data in the database used by the application matches the operating system 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 operating system:

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.

To set the language settings in Unix\Linux operating system:

Step 1: Change to the etc/default folder and edit the init file.

Step 2: Set the value of the LANG command to the appropriate language. You can use command "locale -a" to view the locale languages supported by the operating system.

7 Uninstalling Appeon Web 6.6

7.1 Overview

To uninstall Appeon for PowerBuilder, 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.

7.2 Uninstalling Appeon Server

Step 1: Shut down all running programs including Sybase EAServer, Sybase EP Management Service, and Sybase ASA database.

Step 2: Change to \$JAGUAR/appeon/_uninstall folder and run the uninstall program using the following command:

./uninstall.sh

Step 3: Input "y" to confirm the removal of Appeon Server.

Step 4: Choose whether to uninstall EAServer 6.3. This prompt displays only if EAServer 6.3 was installed silently during Appeon Server installation.

Step 5: Confirm the removal of Appeon Server. Click OK to uninstall.

Appeon recommends that you preserve EAServer 6.3 for later Appeon installation. Input "n" to retain EAServer 6.3 and begin uninstalling Appeon Server only. When Appeon Server is uninstalled, the Appeon Server Web Component that was installed during the Appeon Server installation is also uninstalled. However, some files created by Appeon Server after the installation may still exist in the EAServer and sybcent41 folder. You can remove these files manually.

If you selected to uninstall EAServer 6.3, EAServer will be uninstalled after the Appeon Server uninstall process is completed.

7.2.1 Uninstalling EAServer 6.3 that is installed with Appeon Server

EAServer can be silently installed with Appeon Server or installed separately before Appeon Server. If you installed EAServer by running the independent setup program (before the Appeon Server installation), uninstall it by running the EAServer uninstall program. For detailed instructions, refer to the **EAServer Installation Guide**. If you install EAServer silently with Appeon Server, you can do either of the following to uninstall EAServer:

• Uninstall EAServer with the Appeon Server uninstall program.

When uninstalling Appeon Server, you can choose whether to uninstall EAServer 6.3 which is installed with Appeon Server. For detailed instructions, refer to <u>Uninstalling</u> <u>Appeon Server</u>.

• Uninstall EAServer separately, after Appeon Server uninstall.

If you choose not to uninstall EAServer 6.3 with Appeon Server during the Appeon Server uninstall, you can still uninstall it by running the **EASuninstall.sh** file or **SilentUninstall_Unix.sh** file in the \$JAGUAR/_uninstall folder, where \$JAGUAR indicates the EAServer directory.

After EAServer is successfully uninstalled, some user created files might be left in the EAServer folder. You can manually remove these files.

7.3 Uninstalling Appeon Server Web Component (for third-party Web servers only)

To uninstall Appeon Server Web Component on Unix\Linux, you directly go to the Web root of the Web server and remove the entire "appeon" folder.

7.3.1 Uninstalling Web Component if multiple third-party Web servers are involved

Repeat the Web Component uninstall steps for each third-party Web server.

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