

Appeon Installation Guide for WebSphere

Appeon[®] 6.0 for PowerBuilder[®]
WINDOWS

DOCUMENT ID: DC00809-01-0600-02

LAST REVISED: July 2008

Copyright © 2008 by Appeon Corporation. All rights reserved.

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

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

Appeon, the Appeon logo, Appeon Developer, Appeon Enterprise Manager, AEM, Appeon Server and Appeon Server Web Component are trademarks of Appeon Corporation.

Sybase, Adaptive Server Anywhere, Adaptive Server Enterprise, iAnywhere, PowerBuilder, Sybase Central and jConnect for JDBC are trademarks or registered trademarks of Sybase, Inc.

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

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

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

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

Contents

| | |
|---|-----------|
| 1 About This Book | 1 |
| 1.1 Audience | 1 |
| 1.2 How to use this book | 1 |
| 1.3 Related documents | 1 |
| 1.4 If you need help | 2 |
| 2 Introduction | 3 |
| 2.1 Overview | 3 |
| 2.2 Section 508 compliance | 3 |
| 2.3 System architecture..... | 3 |
| 2.4 Appeon editions..... | 4 |
| 2.5 Appeon components | 5 |
| 2.5.1 Appeon Developer | 5 |
| 2.5.2 Appeon Server | 5 |
| 2.5.3 Appeon Server Web Component (for third-party Web servers)..... | 5 |
| 2.5.4 Appeon Help | 6 |
| 3 Installation Requirements | 7 |
| 3.1 Client requirements | 7 |
| 3.1.1 Software requirements..... | 7 |
| 3.1.2 Hardware requirements | 7 |
| 3.2 Appeon Server requirements | 7 |
| 3.2.1 Software requirements..... | 7 |
| 3.2.2 Hardware requirements | 7 |
| 3.2.3 (Optional) Third-party Web server..... | 7 |
| 3.3 Appeon Developer requirements..... | 8 |
| 3.3.1 Software requirements..... | 8 |
| 3.3.2 Hardware requirements | 8 |
| 3.4 Database server requirements | 8 |
| 4 Installing Appeon 6.0 | 10 |
| 4.1 Overview | 10 |
| 4.2 Installation scenarios..... | 10 |
| 4.2.1 Overview | 10 |
| 4.2.2 Developer PC..... | 11 |
| 4.2.3 Remote Appeon Server using WebSphere HTTP server..... | 11 |
| 4.2.4 Remote Appeon Server using a third-party Web server..... | 11 |
| 4.2.5 Appeon Server Cluster..... | 12 |
| 4.3 Appeon 6.0 installation | 12 |
| 4.3.1 Starting the installation..... | 13 |
| 4.3.2 Appeon Server installation | 15 |
| 4.3.3 Appeon Developer installation | 23 |
| 4.3.4 Appeon Server Web Component installation (for third-party Web servers only) | 27 |
| 4.3.5 Appeon Help installation | 29 |
| 4.3.6 Product Activation | 31 |

| | |
|---|-----------|
| 4.4 Starting/Stopping Appeon Server | 33 |
| 4.4.1 Starting Appeon Server..... | 33 |
| 4.4.2 Logging in to WebSphere Server Administrative Console | 33 |
| 4.4.3 Stopping Appeon Server | 34 |
| 5 Configuring Appeon Server Cluster | 35 |
| 5.1 Overview | 35 |
| 5.2 Configuration instructions..... | 35 |
| 6 Post-Installation Configuration Tasks | 36 |
| 6.1 Windows account with administrator privileges | 37 |
| 6.2 Internet Explorer configuration | 37 |
| 6.2.1 Overview | 37 |
| 6.2.2 Verifying Internet Explorer settings are correct | 37 |
| 6.2.3 Security settings..... | 37 |
| 6.2.4 Add-on settings (for Internet Explorer 7) | 38 |
| 6.2.5 Internet Explorer files caching..... | 39 |
| 6.2.6 Internet Explorer advanced settings..... | 40 |
| 6.2.7 Additional configurations of IE 7 under Windows Vista | 40 |
| 6.3 System language settings | 44 |
| 6.4 Checking the version of JScript.dll | 45 |
| 6.5 Configuration for supporting dynamic DataWindows..... | 45 |
| 6.6 Configuration for ASE Chained mode issue | 45 |
| 6.6.1 Known issue with ASE Chained Mode..... | 45 |
| 6.6.2 Stored procedures provided for solving the issue | 46 |
| 7 Uninstalling Appeon 6.0 | 47 |
| 7.1 Overview | 47 |
| 7.2 Uninstalling Appeon Developer | 47 |
| 7.3 Uninstalling Appeon Server..... | 50 |
| 7.4 Uninstalling Appeon Server Web Component (for third-party Web servers only)51 | |
| 7.4.1 Web Component uninstall if multiple third-party Web servers are involved54 | |
| 7.5 Uninstalling Appeon Help | 54 |
| 8 Technical Support..... | 56 |
| Index..... | 58 |

1 About This Book

1.1 Audience

This book is for users who want to install Apeon[®] 6.0 for PowerBuilder[®] for WebSphere Windows.

1.2 How to use this book

There are eight chapters in this book.

Chapter 1: About This Book

A general description of this book

Chapter 2: Introduction

An overview of Apeon for PowerBuilder for WebSphere Windows and its system architecture

Chapter 3: Installation Requirements

The system requirements for installing Apeon for PowerBuilder for WebSphere Windows

Chapter 4: Installing Apeon 6.0

Instructions for installing Apeon Server, Apeon Developer and Apeon Server Web Component

Chapter 5: Configuring Apeon Server Cluster

Instructions for configuring an Apeon Server cluster

Chapter 6: Post-Installation Configuration Tasks

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

Chapter 7: Uninstalling Apeon 6.0

Instructions for uninstalling Apeon for PowerBuilder for WebSphere Windows

Chapter 8: Technical Support

Important information for technical support

1.3 Related documents

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

- **Apeon Demo Applications Tutorial:**
Introduces Apeon's demo applications, including the Apeon Sales Application Demo, Apeon Code Examples, Apeon ACF Demo, and Apeon Pet World, which show Apeon's capability in converting PowerBuilder applications to the Web.
- **Apeon Developer User Guide (or Working with Apeon Developer Toolbar)**

Provides instructions on how to use the Appeon Developer toolbar in Appeon 6.0.

Working with Appeon Developer Toolbar is an HTML version of the Appeon Developer User Guide.

- **Appeon Server Configuration Guide**

Provides instructions on how to configure Appeon Server Status Monitor, establish connections between Appeon Server and database server and configure AEM for maintaining Appeon Server and Appeon deployed Web applications.

- **Appeon Supported Features Guide (or Appeon Features Help):**

Provides a detailed list of supported PowerBuilder features which can be converted to the Web with Appeon 6.0 as well as which features are unsupported.

Appeon Features Help is an HTML version of the *Appeon Supported Features Guide*.

- **Appeon Installation Guide:**

Provides instructions on how to install *Appeon for PowerBuilder* successfully.

- **Appeon Migration Guide:**

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.

- **Appeon Performance Tuning Guide:**

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

- **Appeon Troubleshooting Guide:**

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

- **Introduction to Appeon:**

Guides you through all the documents included in Appeon 6.0 for PowerBuilder.

- **New Features Guide (or What's New in Appeon):**

Introduces new features and changes in Appeon 6.0 for PowerBuilder.

What's New in Appeon is an HTML version of the New Features Guide.

1.4 If you need help

Each Sybase installation that includes a support contract has one or more designated people who are authorized to contact Sybase Technical Support or an Authorized Sybase Support Partner. If you have any questions about this product or need assistance during the installation process, ask a designated person to contact Sybase Technical Support or an Authorized Sybase Support Partner listed in your support contract. You may access the Technical Support Web site at <http://www.sybase.com/support>.

2 Introduction

2.1 Overview

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

From the native source code of PowerBuilder applications, Apeon 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, scalability, security and reliability.

Apeon 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 Apeon 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.

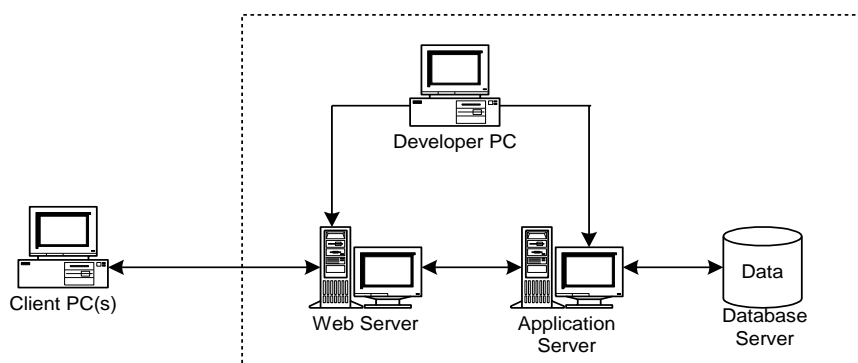
2.2 Section 508 compliance

The Apeon installation program conforms to the US Government Section 508 Accessibility Guidelines.

2.3 System architecture

Apeon for PowerBuilder works with standard n-Tier Web architecture (see Figure 2-1). 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 an Apeon Server cluster involving multiple computers to provide load balancing and failover.

Figure 2-1: Apeon for PowerBuilder system architecture



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.

Table 2-1: Tiers in the Appeon Web architecture

| 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 Appeon Web applications, responds to incoming requests from Client PC's and dispatches requests to the application server. | Appeon Server Web Component | WebSphere HTTP Server or any WebSphere-compatible Web server, such as Apache or IIS. |
| Application Server | Hosts the DataWindows and n-Tier components of Appeon Web applications, provides necessary runtime services to the Web application, such as DataWindow retrieval and update, execution of business logic, security authentication and printing. | Appeon Server | IBM WebSphere |
| Database Server | Hosts the application database. | None | JDBC-compliant RDBMS supported by Appeon. Please see Section 3.4: Database server requirements for more information. |

2.4 Appeon editions

Appeon 6.0 for PowerBuilder for WebSphere contains the following editions. The Appeon Server clustering service is provided in the Enterprise Edition only.

Table 2-2: Appeon editions

| Edition | Platform | Component |
|--------------------|----------|---|
| Enterprise Edition | Windows | <ul style="list-style-type: none"> • Appeon Server • Appeon Server Web Component • Appeon Help |
| Workgroup Edition | Windows | <ul style="list-style-type: none"> • Appeon Server • Appeon Server Web Component • Appeon Help |

| | | |
|-------------------|---------|---|
| Developer Edition | Windows | <ul style="list-style-type: none"> • Appeon Developer • Appeon Server • Appeon Server Web Component • Appeon Help |
| Trial Edition | Windows | <ul style="list-style-type: none"> • Appeon Developer • Appeon Server • Appeon Server Web Component • Appeon Help |

2.5 Appeon components

2.5.1 Appeon Developer

Appeon Developer is an add-on to PowerBuilder that allows applications to be deployed to the Web with Appeon Server.

When Appeon Developer is installed, it provides a set of tools that enable the entire PowerBuilder-to-Web conversion process to take place within the PowerBuilder IDE. These tools are accessed via a toolbar in the PowerBuilder IDE which automatically loads each time PowerBuilder is opened.

2.5.2 Appeon Server

Appeon Server is a set of J2EE, CORBA and PowerBuilder server components that provide runtime services such as data connectivity, DataWindows support, n-Tier component support, transaction management, printing and security for Appeon Web applications.

Appeon Server also includes Appeon Enterprise Manager (AEM) and the 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 to WebSphere.

Appeon Server Status Monitor backs up Appeon Server session information, monitors whether Appeon Server is in “started” status, and automatically restarts Appeon Server and recovers the runtime information when it detects Appeon Server has shut down.

During the Appeon Server installation, the Appeon Server Web Component is copied to the WebSphere HTTP server. If you are using one WebSphere server as both the Web server and the application server, you will NOT need to run the Appeon Server Web Component installation.

2.5.3 Appeon Server Web Component (for third-party Web servers)

Appeon Server Web Component resides in a Web server as the runtime environment supporting a PowerBuilder-style Web graphical user interface within standard Microsoft Web browsers. The 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, physically separate the Web server and the application server and install the Appeon Server Web Component to the third-party Web server. The

Appeon Server Web Component will be installed to the Web root of the Web server. You are also required to configure the Web server with the WebSphere redirector plug-in. For detailed instructions, refer to the *Web Server Configuration Guide* in Appeon Help.

2.5.4 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 SP1 running on Windows 2000 SP4 (Professional and Server) or Windows 2003 Server SP1 (Professional and Server)
- Microsoft Internet Explorer 6.0 SP2 running on Windows XP SP2 (Professional)
- Microsoft Internet Explorer 7.0 browsers running on Windows 2003 Server SP1 (Enterprise and Standard), Windows XP SP2 (Professional and Home), or Windows Vista.

To run Apeon Web Application under Windows Vista, you need to previously configure the Internet Explorer security setting properly. Refer to [Additional Configuration of IE 7 under Windows Vista](#) for more information.

3.1.2 Hardware requirements

- A Pentium-class processor running at 1 GHz or faster
- At least 512 MB RAM

3.2 Apeon Server requirements

3.2.1 Software requirements

- Windows OS that is supported by IBM® WebSphere
- IBM WebSphere Server 5.1 or 6.0

3.2.2 Hardware requirements

- Pentium-class processor(s) running at 2 GHz or faster
- 1 GB RAM
- 370 MB hard drive space (for WebSphere installation) plus 250 MB hard drive space (for Apeon Server installation)
- DVD-ROM drive (for Apeon installation from DVD)

3.2.3 (Optional) Third-party Web server

- Apache 1.3 or 2.0, or Microsoft IIS 5.0 or 6.0

If you use IIS 6.0 as the Web server, the only compatible operating system is Windows Server 2003. IIS 6.0 does not work in other operating systems.

- 5 MB available hard drive space (for Apeon Server Web Component installation)

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

3.3 Apeon Developer requirements

3.3.1 Software requirements

- Microsoft Windows 2000 SP4 (Professional and Server), Windows XP SP2 (Professional) and Windows 2003 Server SP1 (Server and Enterprise), Windows Vista, or Windows 2008.
- Sybase PowerBuilder® 9.0.3 Build 8614, PowerBuilder 10.2.1 Build 9537, PowerBuilder 10.5.2 Build 15347, or PowerBuilder 11.1 Build 8123.

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

- Microsoft Internet Explorer 6.0 SP1, 6.0 SP2, or 7.0.
- 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 Sybase ASA 7/8/9/10 or an IBM DB2 database.
- (Optional) Sybase Adaptive Server® Anywhere 7.0.4, 8.0.2, 9.0, or 10.0 (for running the PowerBuilder demos included in Apeon installation)

3.3.2 Hardware requirements

- A Pentium-class processor running at 1.8 GHz or faster
- At least 512 MB RAM (1 GB RAM recommended)
- 250 MB available hard drive space (for Apeon Developer installation only).

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

- DVD-ROM drive (for Apeon installation from DVD)

3.4 Database server requirements

Apeon 6.0 for PowerBuilder can run with any of the following database servers and their drivers:

- Sybase Adaptive Server Anywhere 7.0.4, 8.0.2, 9.0, or 10.0 with Sybase iAnywhere or jConnect JDBC driver
- Sybase Adaptive Server Enterprise (ASE) 12.5.x or 15.x with Sybase jConnect or iAnywhere JDBC driver
- Sybase IQ 12.7.x with jConnect JDBC driver
- Oracle 8i, 9i or 10g with Oracle JDBC driver

Download the Oracle JDBC driver from the Oracle Web site (http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html).

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

- Microsoft SQL Server 2000 SP4 or 2005 SP1 with MSFT JDBC driver or JTDS driver

Download the latest version of the Microsoft SQL Server JDBC driver from the Microsoft Web site (<http://www.microsoft.com/sql/downloads>).

- IBM DB2 UDB 8.1 with IBM JDBC driver
- Informix 7.x, 8.x, 9.x, or 10.x with IBM JDBC driver

Copy the corresponding driver files for the database server in use to the %WAS_HOME%\lib folder on the machine hosting Apeon Server. %WAS_HOME% indicates the WebSphere installation path. Refer to the *JDBC driver preparation* section in the *Apeon Server Configuration Guide* for more information.

4 Installing Appeon 6.0

4.1 Overview

Appeon for PowerBuilder for WebSphere Windows consists of the following four components.

Table 4-1: Appeon components

| Component | Description | Installed on |
|-----------------------------|---|--|
| Appeon Developer | An add-in that provides the Web deployment option to PowerBuilder. | PowerBuilder running on Windows 2000, XP or 2003. |
| Appeon Server | A set of PowerBuilder server components that provide runtime services for the Appeon Web applications, such as data connectivity, DataWindows support, transaction management, printing and security. Appeon Server also includes Appeon Enterprise Manager (AEM) and Appeon Server Web Component. | WebSphere running on Windows 2000, XP or 2003. |
| 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 WebSphere 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 2000, XP or 2003. |

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.

4.2.2 Developer PC

Table 4-2: Developer PC installation

| Scenarios | Requirements | Appeon Components |
|---|---|--|
| One physical machine, Computer 1, serves as IDE, Web server, application server and database server | Computer 1: Microsoft Windows 2000, XP or 2003 Microsoft Internet Explorer Sybase PowerBuilder IBM WebSphere Sybase ASA (Optional) Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database | Computer 1: Appeon Developer Appeon Server |

4.2.3 Remote Appeon Server using WebSphere HTTP server

Table 4-3: Remote Appeon Server installation

| Scenarios | Requirements | Appeon Components |
|--|--|---------------------------------|
| In this example, 2 computers are used: Computer 1 serves as Developer PC; | Computer 1: Microsoft Windows 2000, XP or 2003 Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA | Computer 1: Appeon Developer |
| Computer 2 serves as Web server, application server and database server. | Computer 2: Microsoft Windows 2000, XP or 2003 IBM WebSphere Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database | Computer 2: Appeon Server |

4.2.4 Remote Appeon Server using a third-party Web server

Table 4-4: Remote Appeon Server installation

| Scenarios | Requirements | Appeon Components |
|--|---|--|
| In this example, 3 computers are used: Computer 1 serves as Developer PC; | Computer 1: Microsoft Windows 2000, XP or 2003 Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA | Computer 1: Appeon Developer |
| Computer 2 serves as Web server; | Computer 2: Microsoft IIS or Apache | Computer 2: Appeon Server Web Component |

| | | |
|--|---|------------------------------|
| Computer 3 serves as application server and database server. | Computer 3: Microsoft Windows 2000, 2003 or XP IBM WebSphere Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database | Computer 3: Appeon Server |
|--|---|------------------------------|

4.2.5 Appeon Server Cluster

Table 4-5: Appeon Server cluster installation

| Scenarios | Requirements | Appeon Components |
|---|--|---|
| In this example, N (N \geq 4) computers are used: Computer 1 is used for Developer PC; | Computer 1: Microsoft Windows 2000, XP or 2003 Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA | Computer 1: Appeon Developer |
| Computer 2 is used for Web server. | Computer 2: Microsoft IIS or Apache | Computer 2: Appeon Server Web Component |
| Computer 3 is the database server. | Computer 3: Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database | Computer 3: None |
| Computers 4 to n are a group of WebSphere servers. | Computers 4 to n: Microsoft Windows 2000, XP or 2003 IBM WebSphere | Computers 4 to n: Appeon Server (After installing Appeon Server to each WebSphere, configure the Appeon Servers as a cluster. Refer to Configuring Appeon Server Cluster for details) |

4.3 Appeon 6.0 installation

Appeon 6.0 for PowerBuilder for Windows WebSphere provides only new installation, and provides no upgrade installation. If your computer has Appeon 5.x or an earlier version installed, you must uninstall the version, prepare the environment for Appeon 6.0 installation, and then use the installation program to install.

4.3.1 Starting the installation

Step 1 – Double click the Setup.exe file in the installation package. The entry page has several links.

- View Readme for Installation: Click this link to read the key system requirements and installation information for this version.
- Install Appeon for PowerBuilder: Click this link to install one or more of the three components – Appeon Server, Appeon Developer, or Appeon Server Web Component.
- Install Appeon PDF Printer: Click this link to install the PDF printer. Since PDF printing is unsupported for WebSphere, you do not need to install the PDF printer.
- Exit: Click this link 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.”

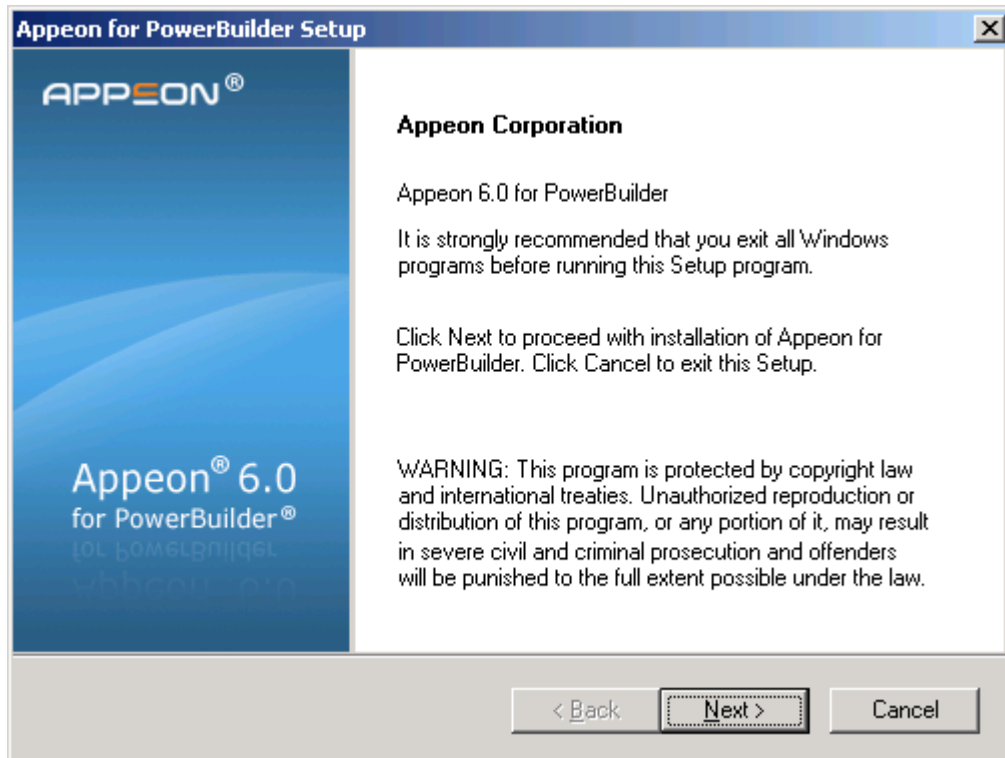
Step 2 – Click *Install Appeon for PowerBuilder*.

Figure 4-1: Install Appeon for PowerBuilder



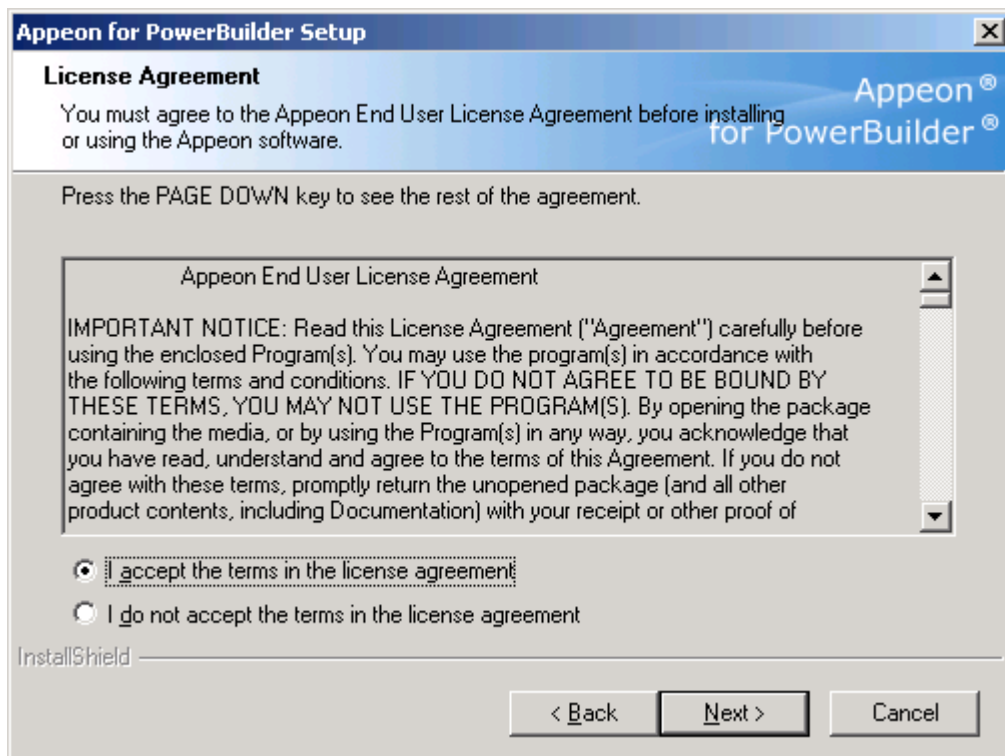
Step 3 – Click *Next* on the Appeon for PowerBuilder introduction screen (Figure 4-2).

Figure 4-2: Introduction page

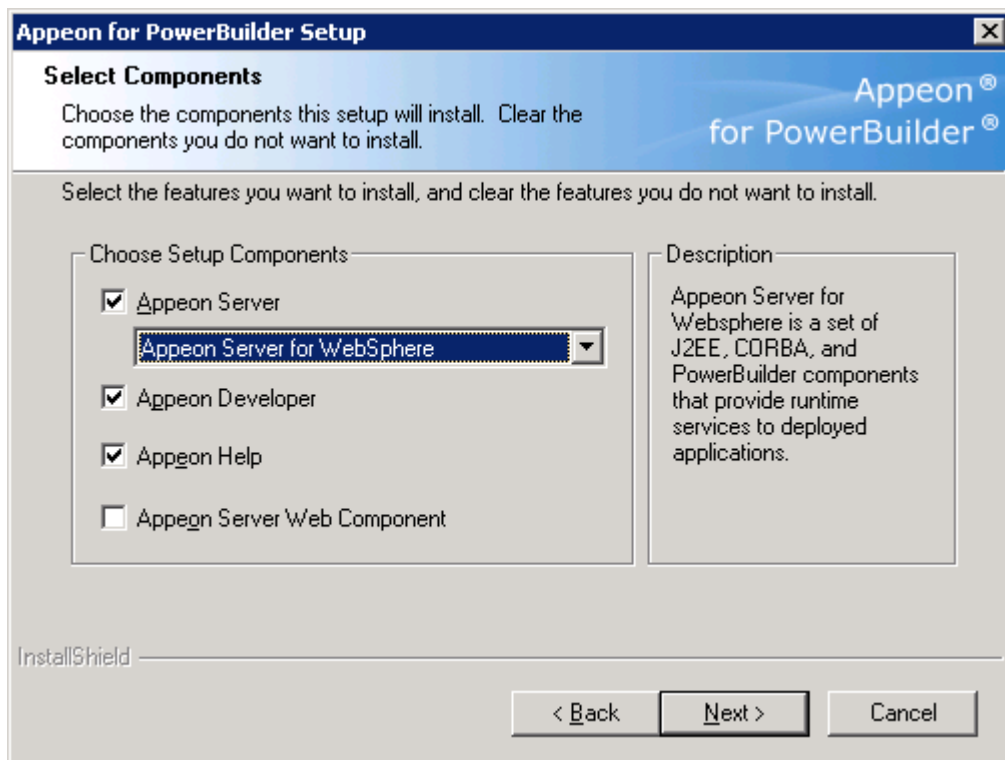


Step 4 – Accept the terms in the license agreement page and click *Yes* (Figure 4-3).

Figure 4-3: License Agreement page



Step 5 – Select the component(s) you want to install and click *Next* (Figure 4-4). The Setup program will install the selected component(s) in the order listed.

Figure 4-4: Appeon for PowerBuilder introduction screen

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

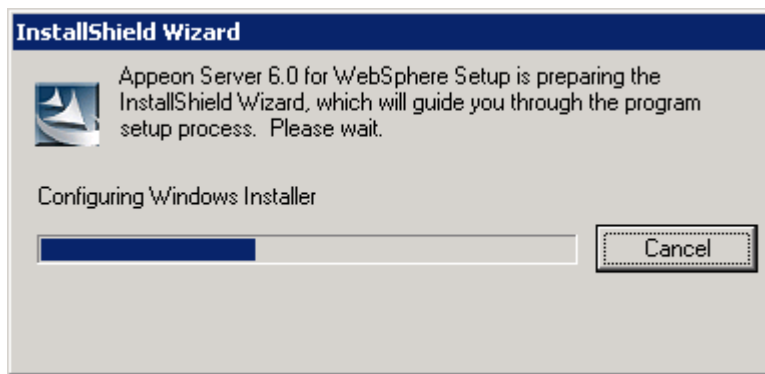
- For Appeon Server installation instructions, refer to [Appeon Server installation](#).
- For Appeon Developer installation instructions, refer to [Appeon Developer installation](#).
- For Appeon Server Web Component installation instructions, refer to [Appeon Server Web Component installation](#).
- For Appeon Help installation instructions, refer to [Appeon Help installation](#).

4.3.2 Appeon Server installation

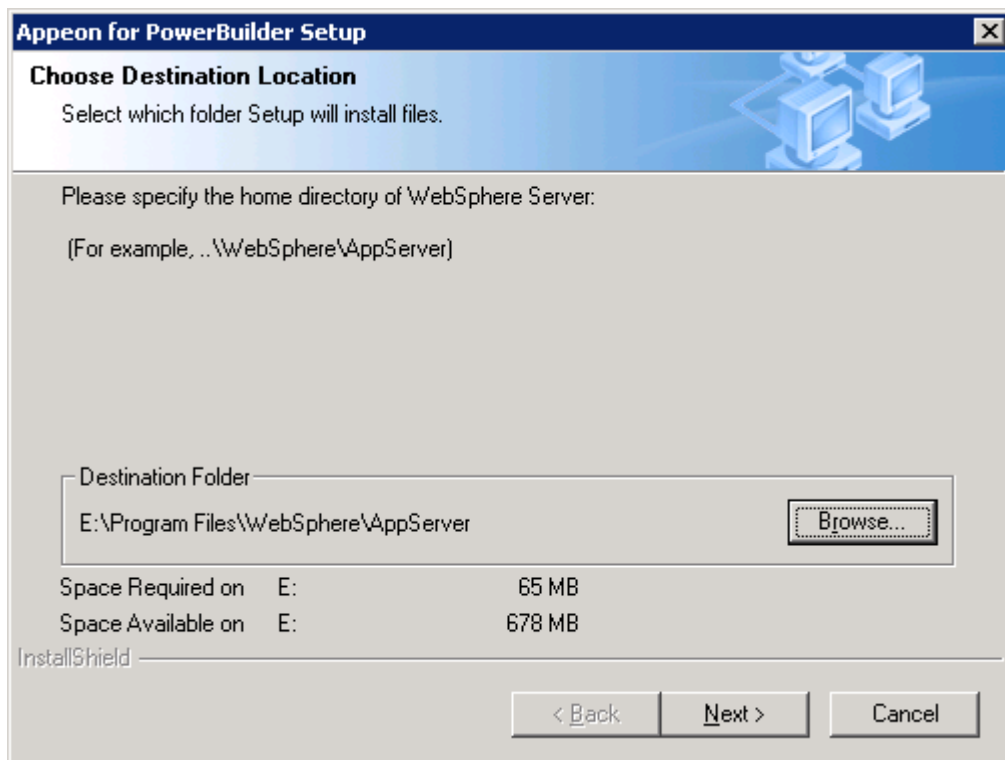
Follow the instructions below to install Appeon Server to the WebSphere server:

Step 1 – Verify that WebSphere server, as well as any other programs you may be running, is closed.

Step 2 – Launch the Appeon for PowerBuilder Setup program and select to install **Appeon Server for WebSphere** (see [Starting the installation](#) section). Wait until Appeon Server completes the preparation (Figure 4-5).

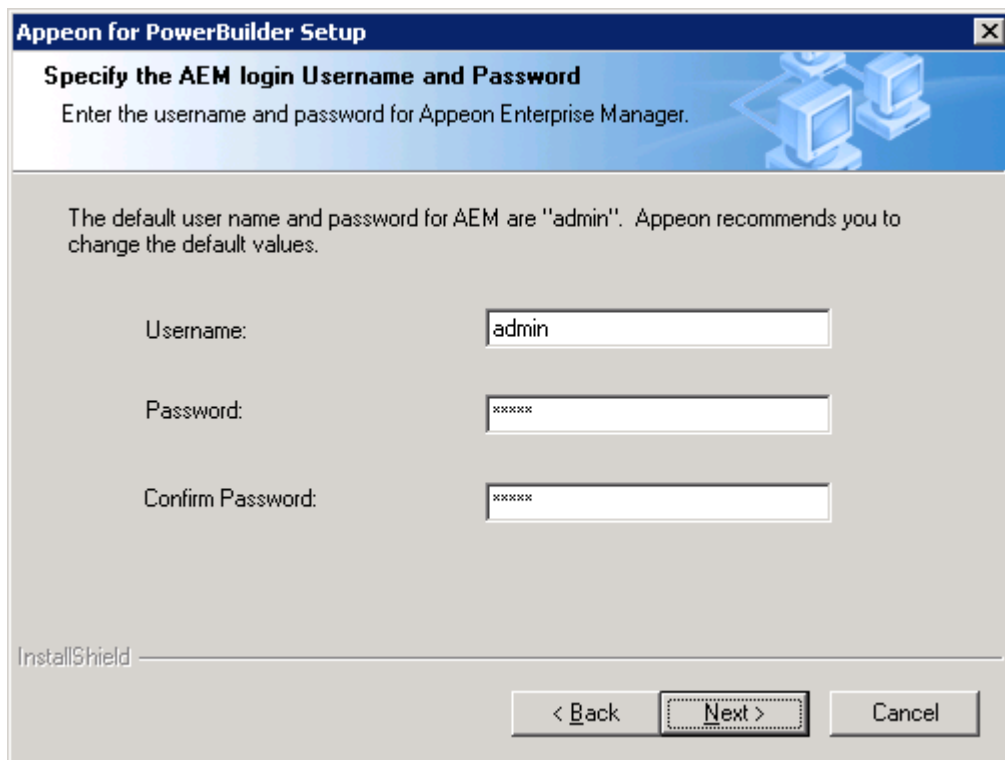
Figure 4-5: Appeon Server preparing to install

Step 3 – Click *Browse* to specify the WebSphere server home directory where Appeon Server will be installed, for example, C:\Program Files\WebSphere\AppServer. Click *Next* (Figure 4-6).

Figure 4-6: Specify installation directory

Step 4 – Specify the user name and password for Appeon Enterprise Manager (AEM).

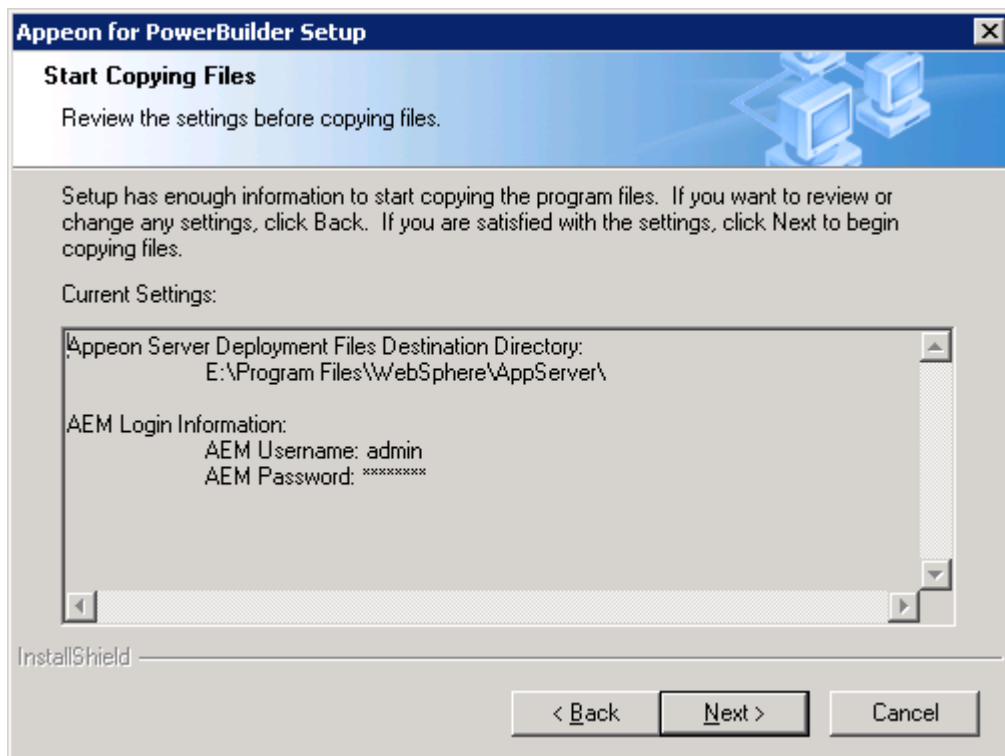
Figure 4-7: Configure Appeon Server



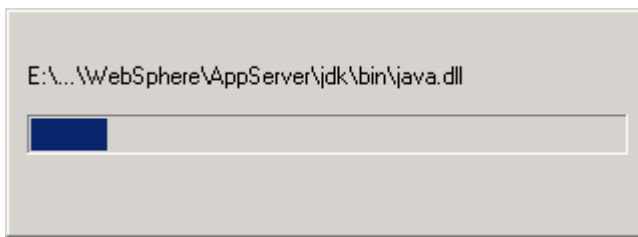
Step 5 – Check the summary of settings (Figure 4-8).

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

Figure 4-8: Summary of settings



At the click of the *Next* button, the installation program begins copying files to your computer, as shown in Figure 4-9.

Figure 4-9: Appeon Server installation process

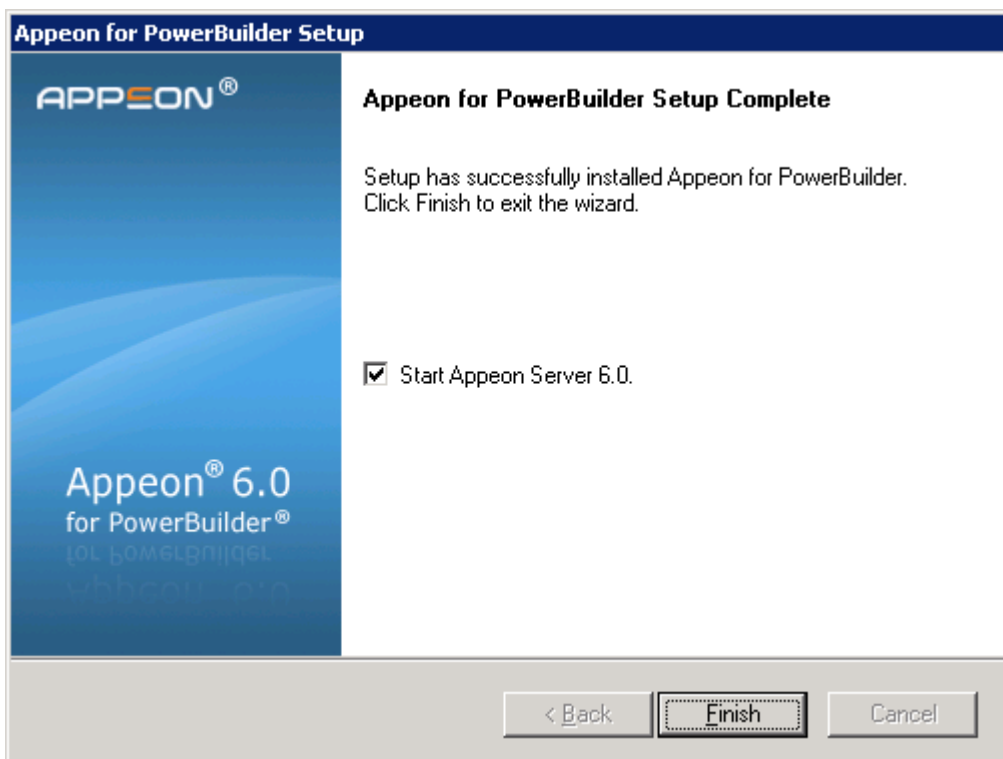
Step 6 – Wait until Appeon Server installation is completed.

An Appeon Server EAR package (appeonserver.ear) has been successfully installed to the specified WebSphere home directory.

Step 7 – You will be prompted to activate Appeon for PowerBuilder. For more details, refer to the [Product Activation](#) section.

Step 8 – Choose whether to “*Start Appeon Server 6.0*”. It is selected by default. To manually start Appeon Server from the Windows shortcut later, uncheck the box. Click *Finish* to end the installation of Appeon Server.

For details about starting Appeon Server, refer to Section 4.4.1: [Starting Appeon Server](#).

Figure 4-10: Appeon Server finish page

4.3.2.1 Deploying appeonserver.ear package

After installing Appeon Server to the WebSphere server home directory, you must deploy the Appeon Server EAR package (appeonserver.ear) manually, via the WebSphere Server Administrative Console.

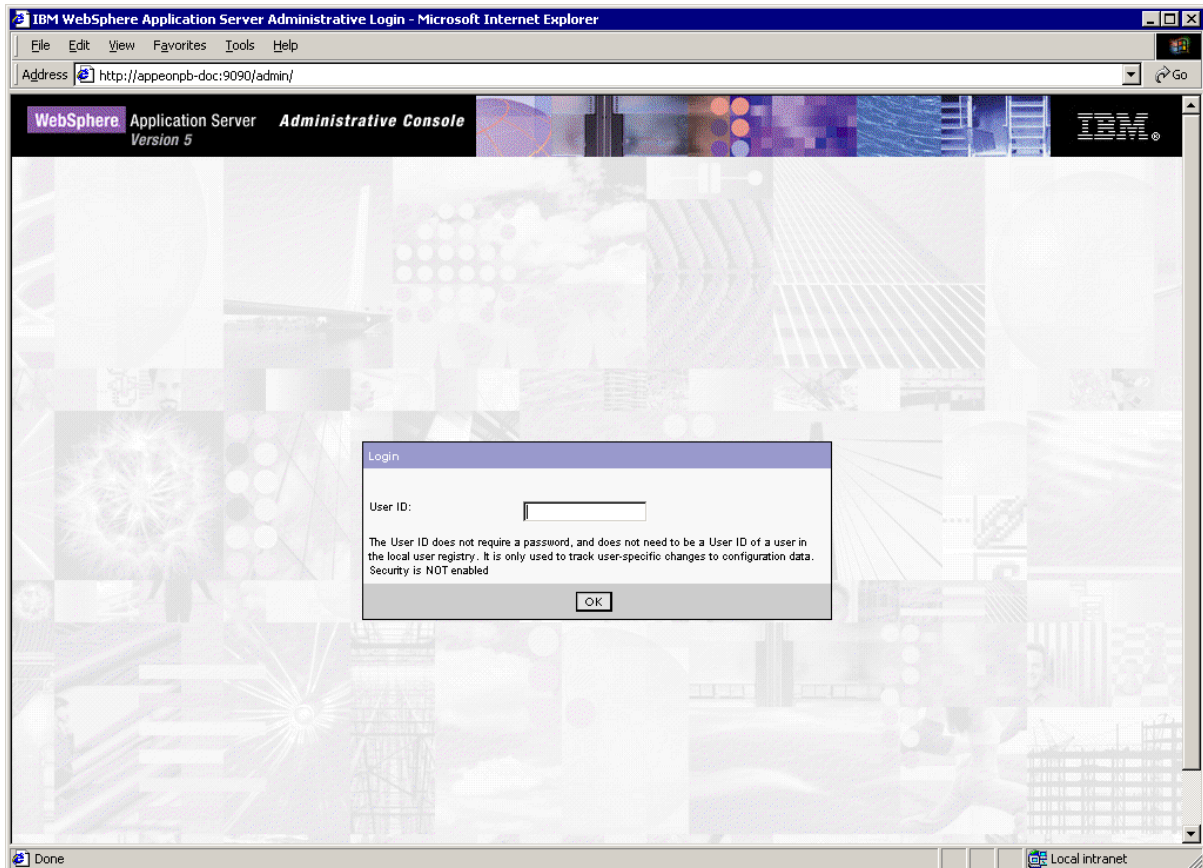
Follow the instructions below to deploy the appeonserver.ear package.

Step 1 – Start WebSphere server. Open the Windows Start menu and select: Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | Start WebSphere. For details on starting WebSphere server, refer to Section 4.4: [Starting/Stopping Appeon Server](#).

Step 2 – Start WebSphere Application Server Administrative Console. Open the Windows Start menu and select: Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | WebSphere Manager.

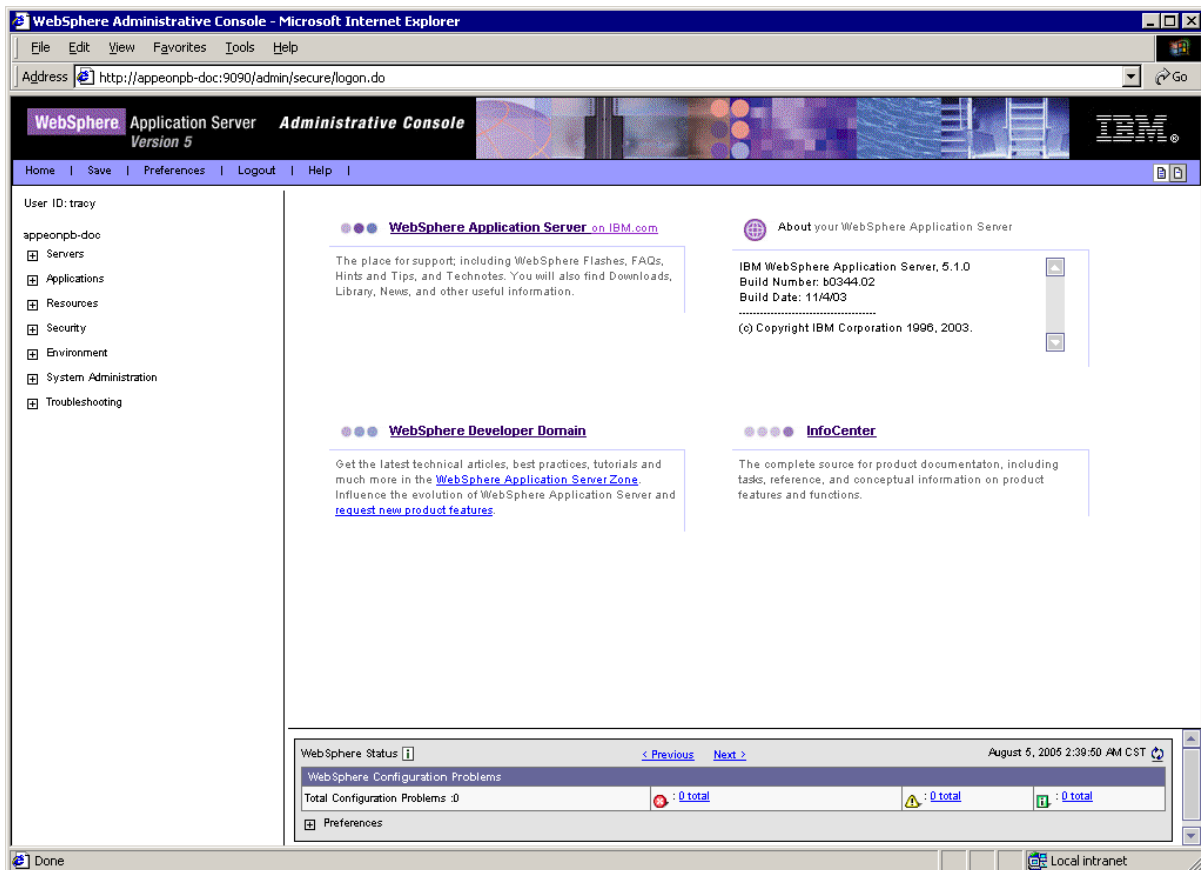
The WebSphere Login window will appear (See Figure 4-11).

Figure 4-11: Login page



Step 3 – Log in to the WebSphere console with the appropriate user ID. The WebSphere Administrative Console appears (See Figure 4-12).

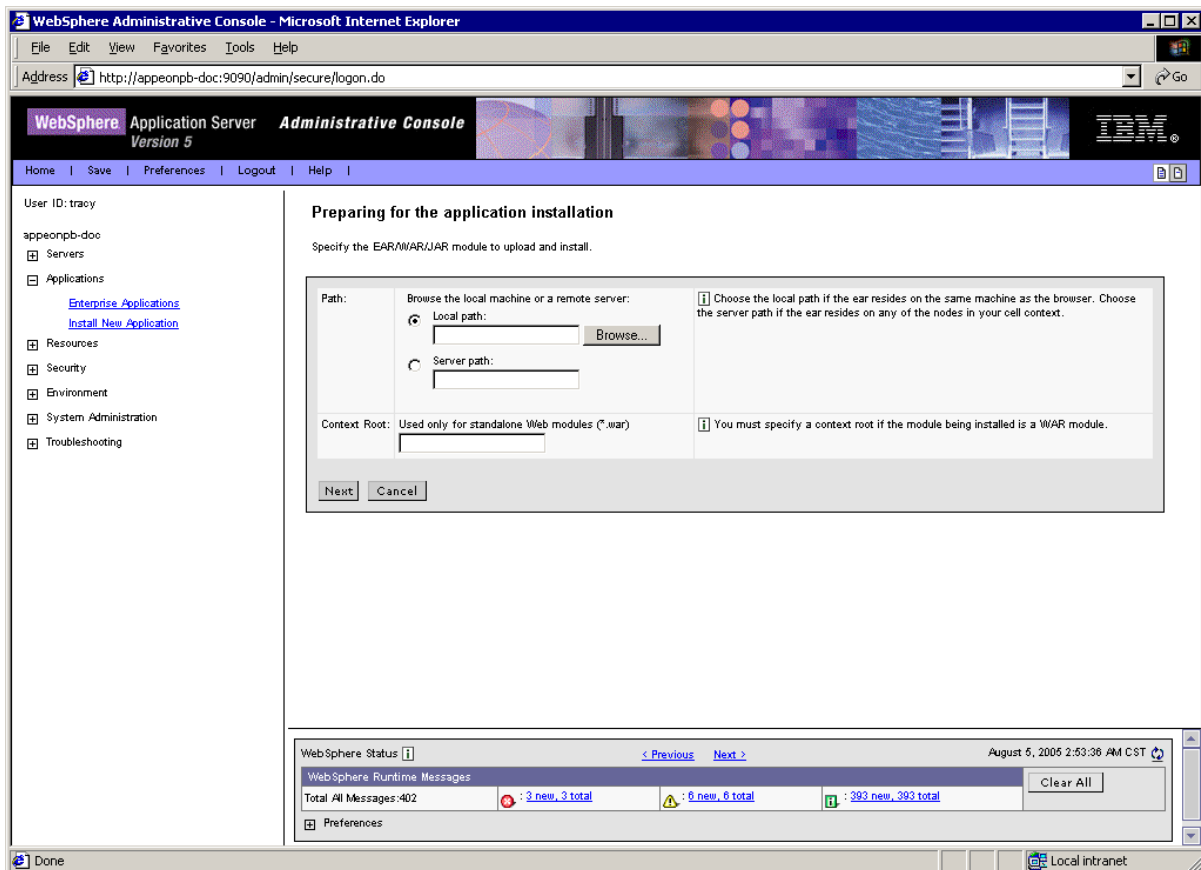
Figure 4-12: Main page



Step 4 – Expand the *Applications* node and click *Install New Application* in the left pane.

Step 5 – Click the *Browse* button on the “Preparing for the application installation” window that appears in the right pane (See Figure 4-13) and select the *apeonserver.ear* package deployed to the home directory of the WebSphere server.

Figure 4-13: Select the appeonserver.ear package



If the *appeonserver.ear* package is not installed on the local machine, select “Server path” and specify a path for *appeonserver.ear*.

Step 6 – Follow the prompts and click *Next*. It is safe to use the default settings.

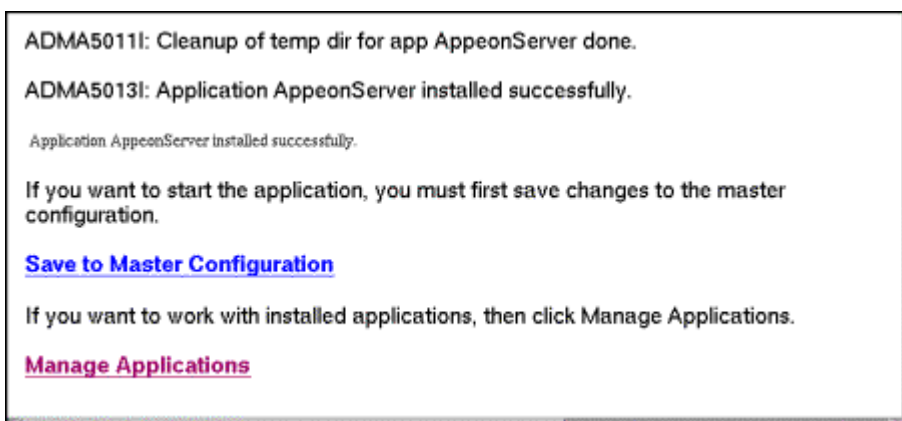
During this process, you may encounter "Application Security Warnings" from WebSphere. You can simply disregard these warnings, because the *appeonserver.ear* application requires no security settings to be set on WebSphere.

Step 7 – Click *Finish* to complete the installation.

Check to make sure that the installation was successful (See Figure 4-14).

The name used to identify the application (*appeonserver.ear*) is *AppeonServer* by default.

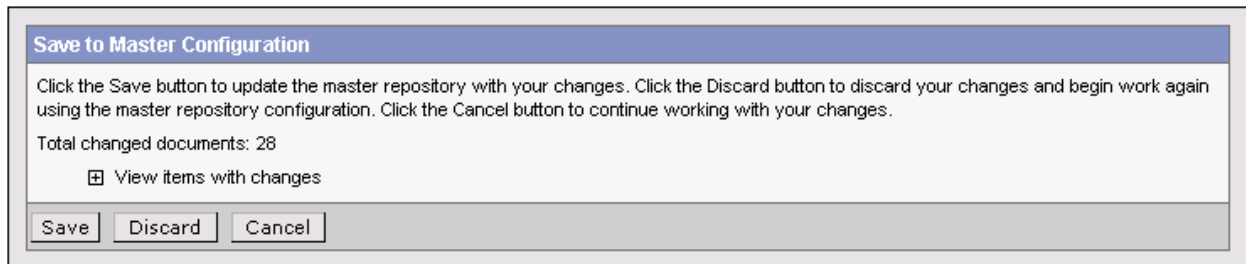
Figure 4-14: Deployment status



Step 8 – Click the Save to Master Configuration link.

Step 9 – Click the *Save* button to save the new installation to the master configuration. (See Figure 4-15).

Figure 4-15: Save to master configuration



Step 10 – Restart the WebSphere server to enable new configurations.

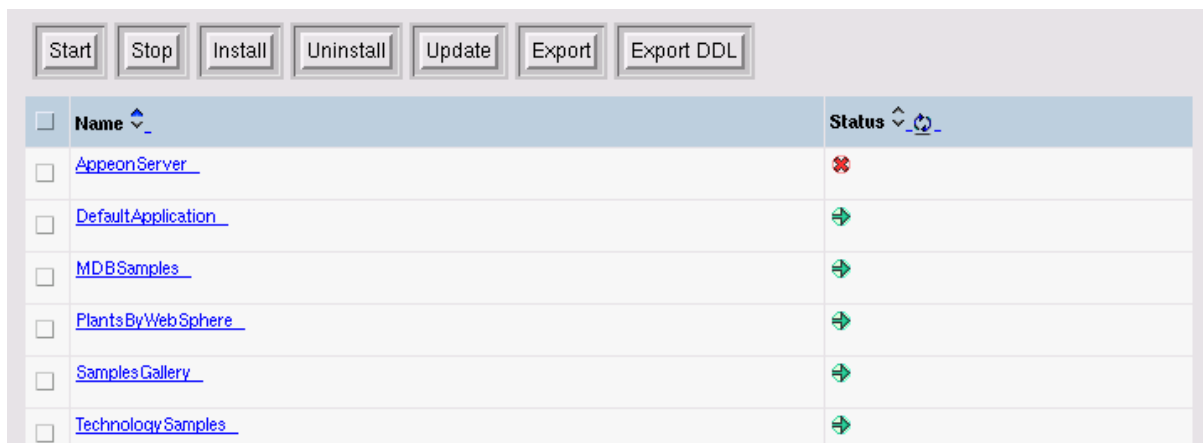
Step 11 – Ensure that the newly installed application: *AppeonServer* (the default application name for *appeonserver.ear*), is started as shown in Figure 4-16.

Expand the *Application* node and click *Enterprise Applications* in the left pane. *AppeonServer* is listed as an installed application in the table in the right pane.

- Check to make sure that *AppeonServer* has successfully started (➡).
- If the initial status of *AppeonServer* is “stopped” (✖), select *AppeonServer* by checking the appropriate box on the left and click the *Start* button to start it.

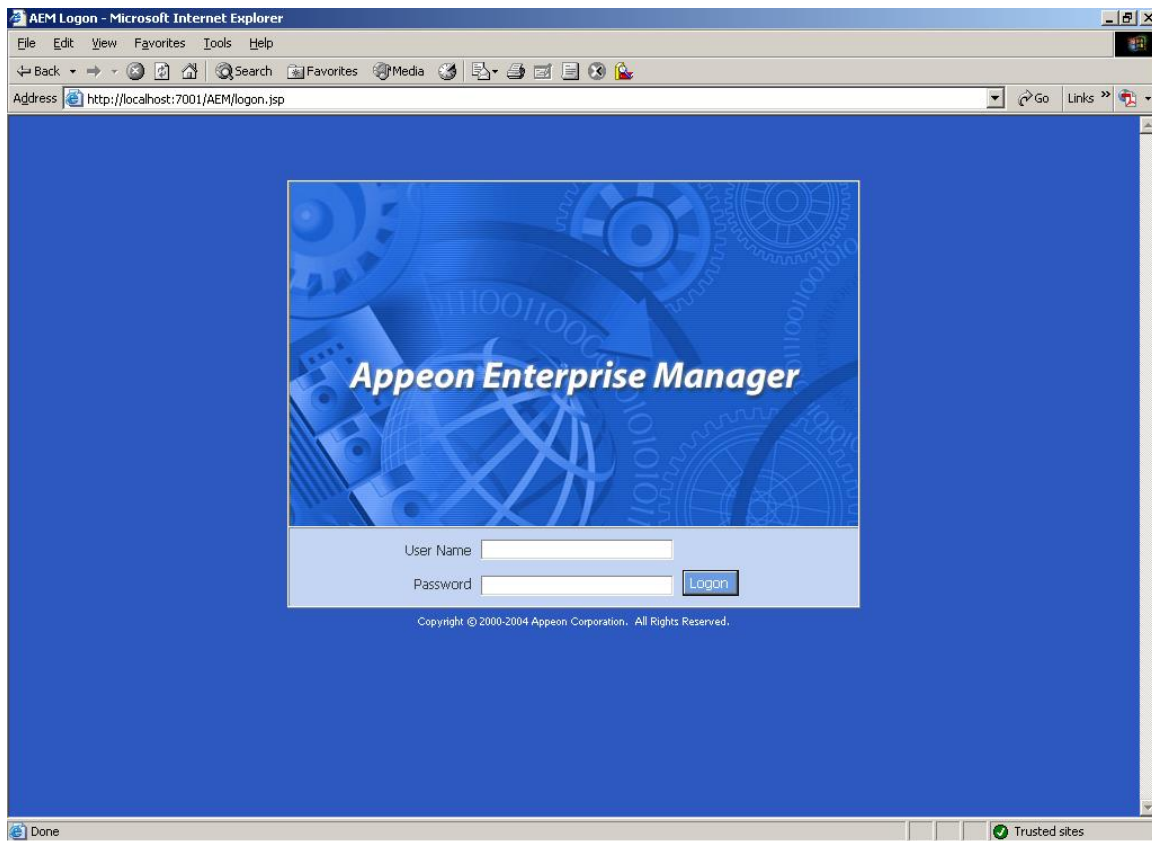
AppeonServer will start automatically when WebSphere server is started.

Figure 4-16: Enterprise Applications



Step 12 – Launch Appeon Enterprise Manager (AEM) to further verify that the Appeon Server EAR Package is successfully deployed.

Open the Windows Start menu and select: Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | Appeon Enterprise Manager; or directly enter the following URL in the Web browser address bar: `http://host:port/AEM`, for example, `http://localhost:9080/AEM`. If the AEM logon window can be opened, as shown in Figure 4-17, the Appeon Server EAR package is deployed correctly and is ready for use.

Figure 4-17: AEM login page

4.3.3 Appeon Developer installation

4.3.3.1 Prerequisites

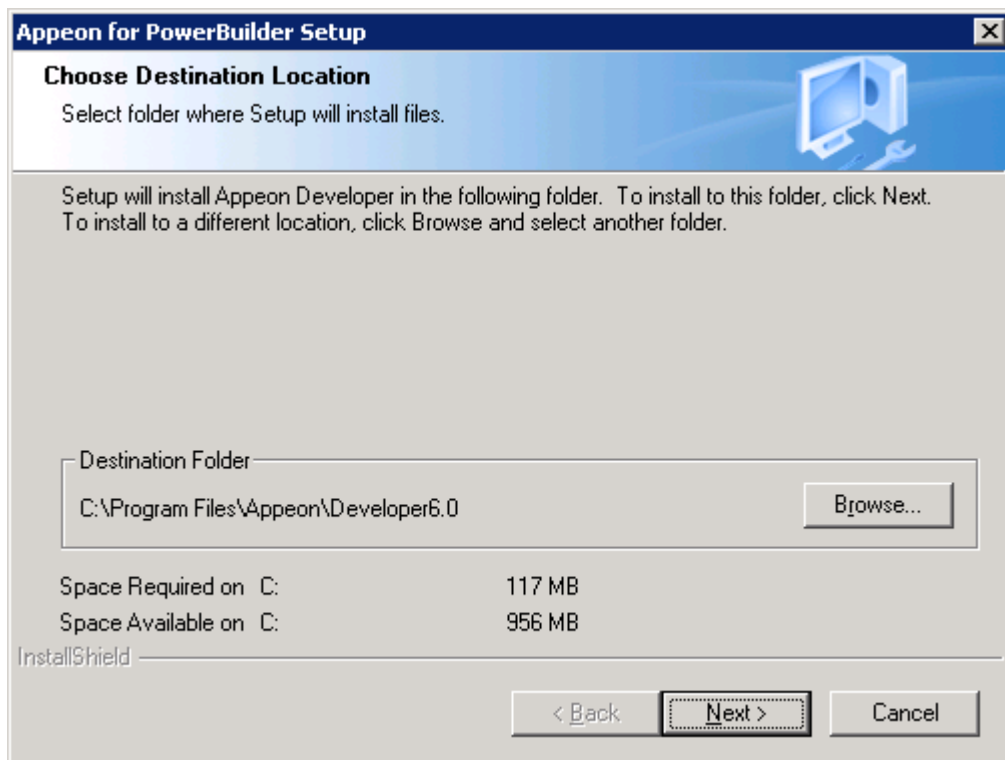
- The Developer PC meets the system requirements in Section 3.3: [Appeon Developer requirements](#). Verify that PowerBuilder 9.0.3, 10.5.2 or 11.1 is installed or updated by running the PowerBuilder Setup program. You cannot install or update the software by copying files and folders from another source.
- Verify that PowerBuilder has been upgraded to the latest available build.
- Shut down Sybase PowerBuilder, Sybase ASA, Sybase Enterprise Portal Management Agent service 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: *EonADT60.exe*, *java.exe*, *jagsrv.exe*, *jagsrvagent.exe*, *pb90.exe*, *pb100.exe*, *pb105.exe*, and *pb110.exe*. If these processes are running, be sure to end them.

4.3.3.2 Installation instructions

Step 1 – Launch the Appeon for PowerBuilder Setup program and select to install Appeon Developer (see [Starting the installation](#) section).

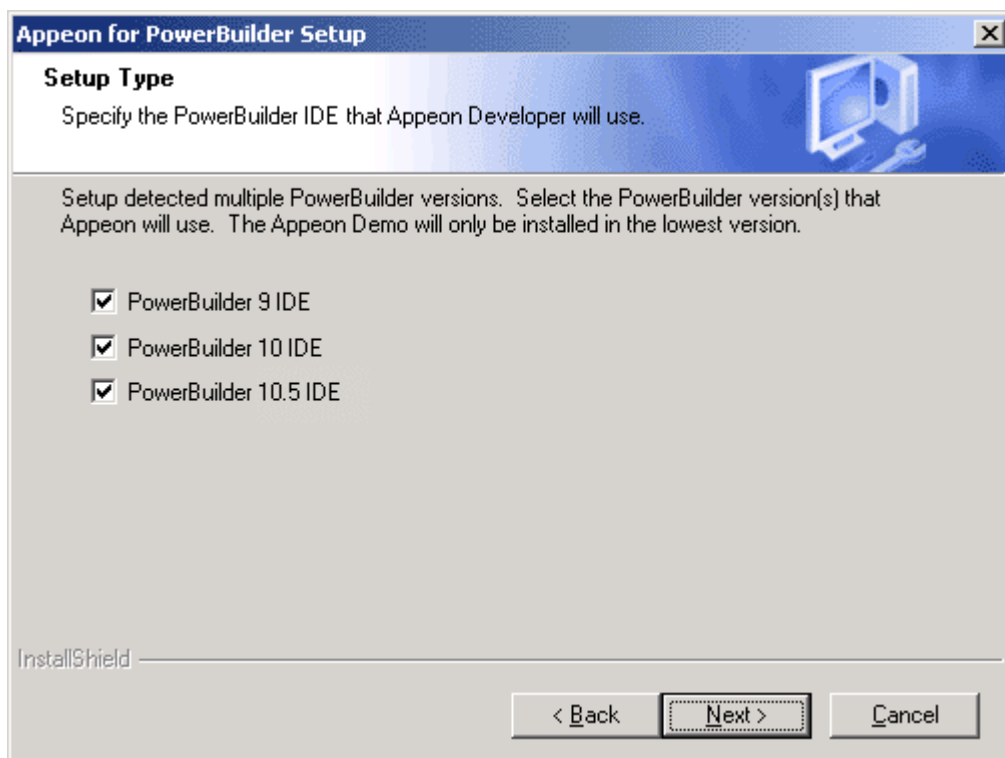
Step 2 – Click *Next* to install Appeon Developer to the default location, or click *Browse* to select another location (Figure 4-18).

Figure 4-18: Appeon Developer location



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 4-19).

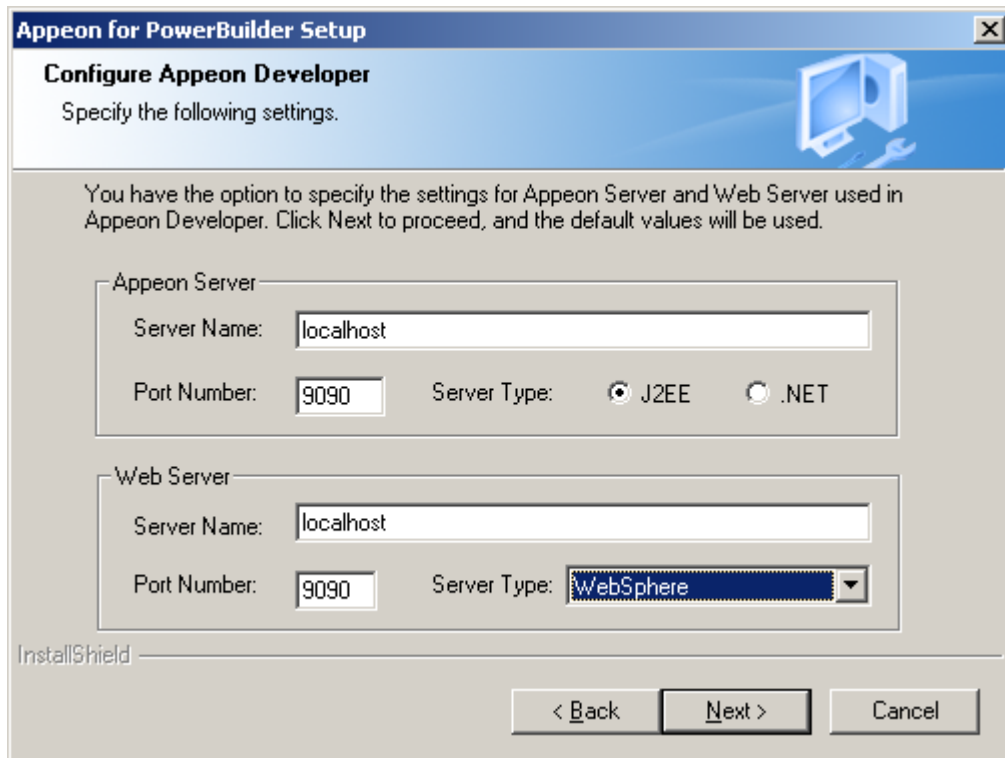
Figure 4-19: PowerBuilder IDE



Step 4 – Specify the server name and port number for Appeon Server and Web server used in Appeon Developer. Click *Next* (Figure 4-20).

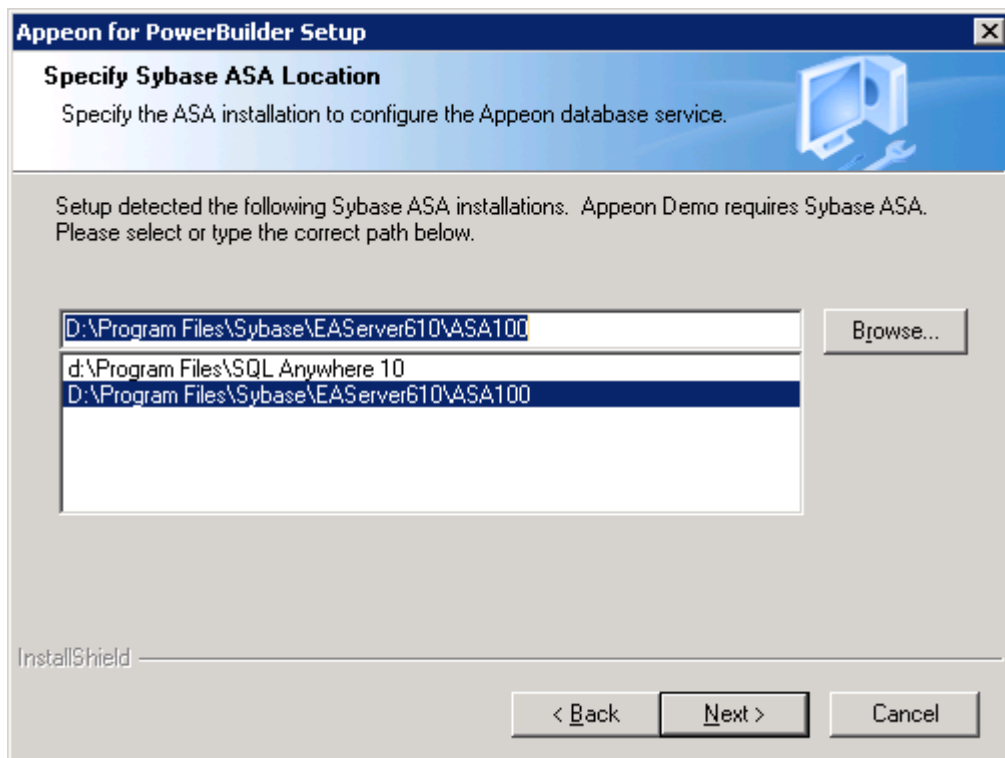
You can change these settings in the Configure tool of Appeon Developer after the installation when necessary.

Figure 4-20: Configure Appeon Developer

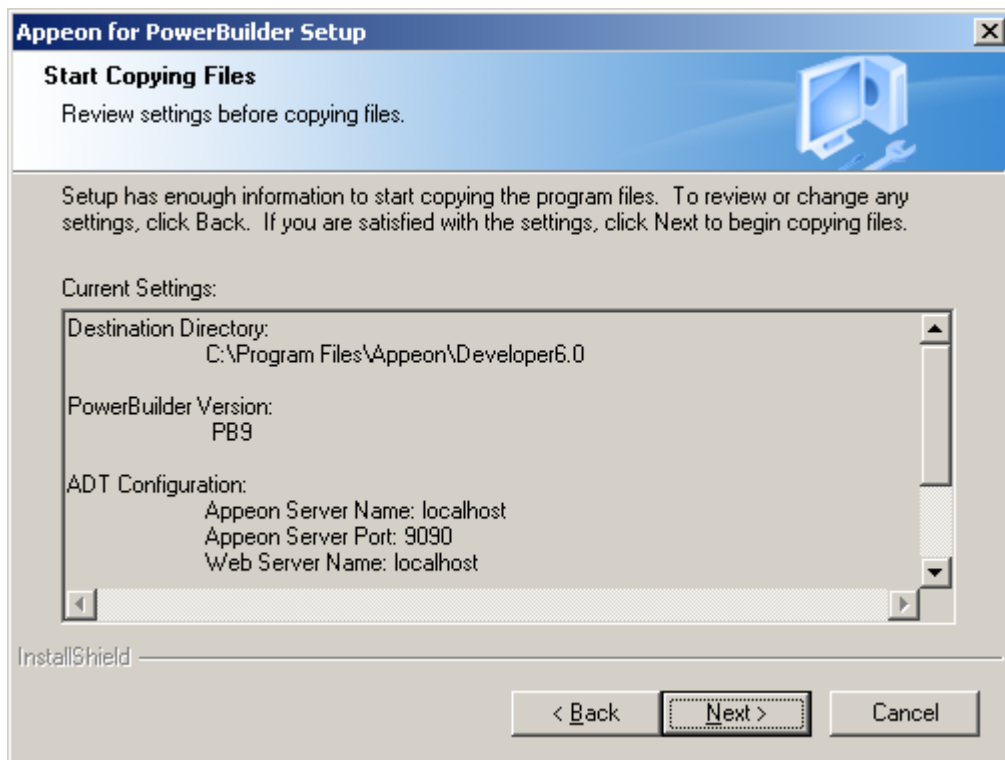


Step 5 – Select the ASA location for running Appeon Demos.

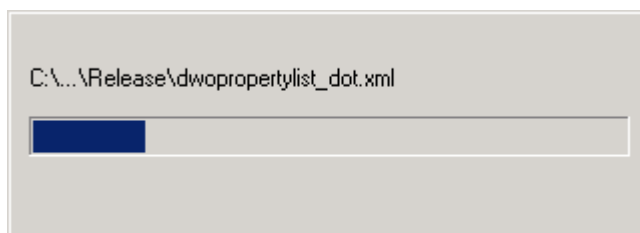
Figure 4-21: ASA for Appeon Demos



Step 6 – Check the summary of settings (Figure 4-22).

Figure 4-22: Summary of settings

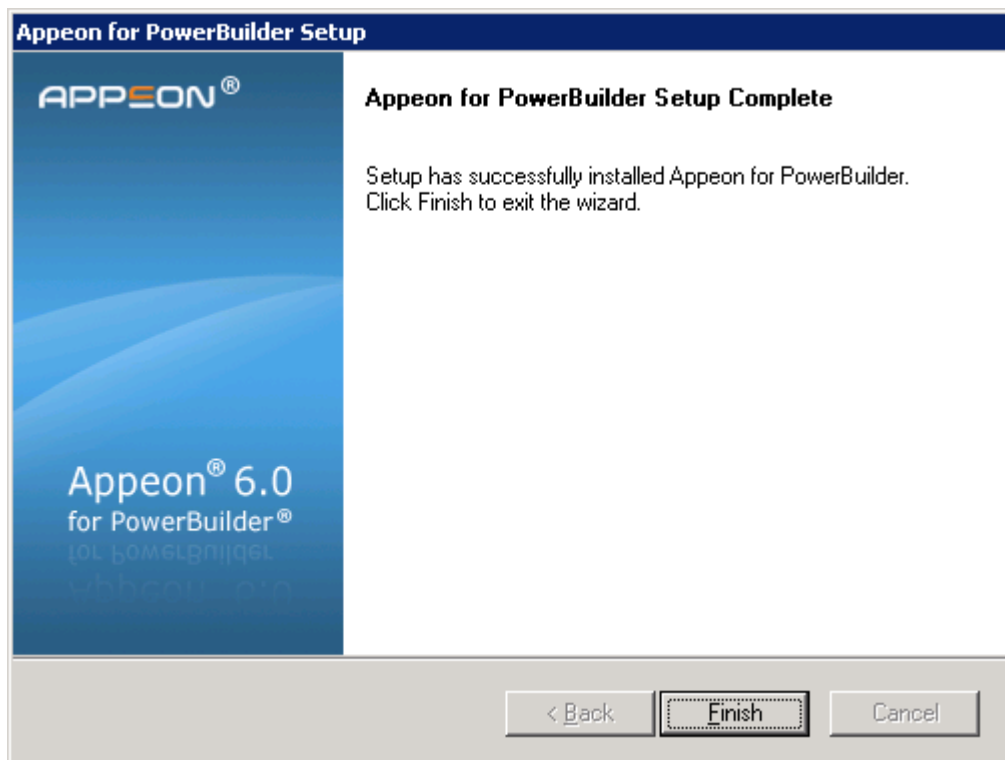
Click *Back* to change any unwanted settings or click *Next* and Setup will begin copying files (Figure 4-23).

Figure 4-23: Appeon Developer installation progress

Step 7 – Wait until the installation is complete.

Step 8 – Click *Finish* to exit (Figure 4-24).

Figure 4-24: Setup Complete



4.3.4 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, 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.

4.3.4.1 Prerequisites

- On Windows 2000, XP or 2003, install a third-party Web server that is compatible with the WebSphere redirector plug-in. For a list of compatible third-party Web servers, refer to Section 3.2.3: [\(Optional\) Third-party Web server](#).
- Shut down the Web server and any other Windows programs before beginning the installation process.

4.3.4.1.a 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 participating Web server.

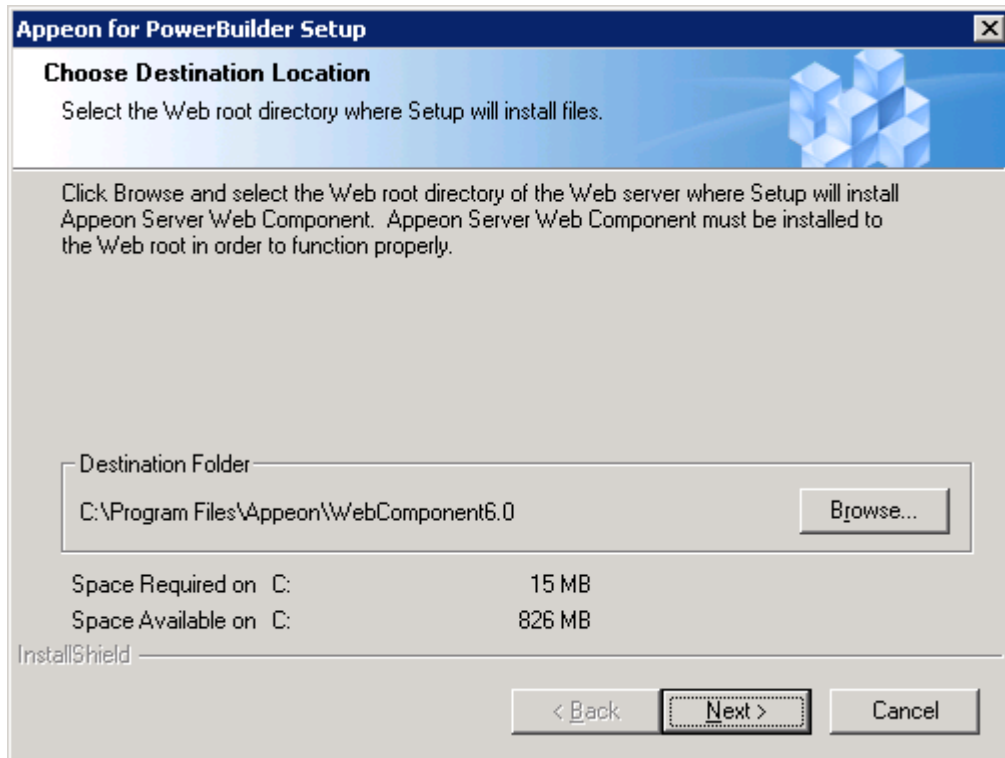
4.3.4.2 Installation instructions

Step 1 – Launch the Appeon for PowerBuilder Setup program and select to install Appeon Server Web Component (see [Starting the installation](#) section).

Step 2 – Click *Browse* to select the Web root for the Web server (for example, “C:\Program Files\Apache Group\Apache2\htdocs” for Apache 2.0 Web server).

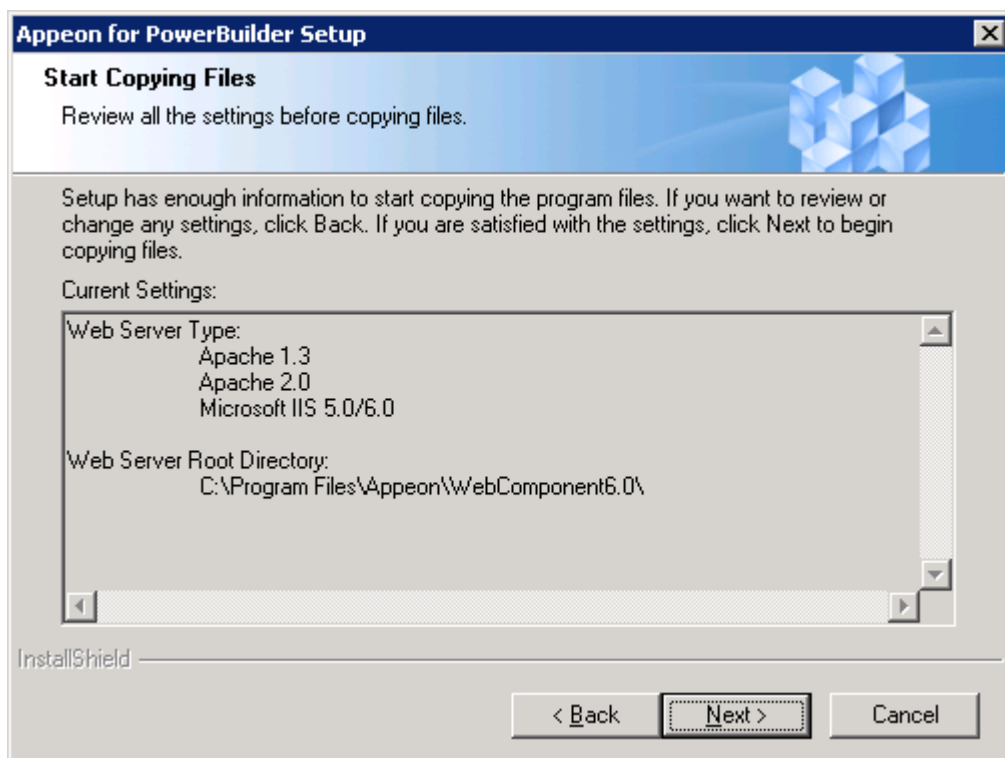
If you do not select the Web root for the Web server, Appeon Server Web Component will be installed to the default path: “C:\Program Files\Appeon\WebComponent6.0”(Figure 4-25), and you must manually copy it to the Web server Web root later in order to run the Web application.

Figure 4-25: Web root



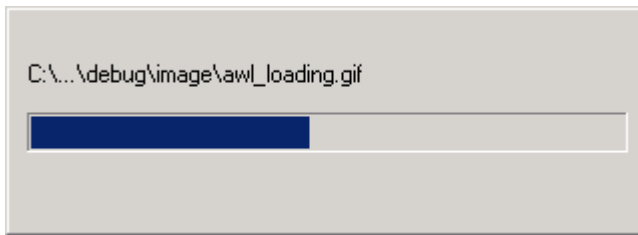
Step 3 – Check the summary of settings (Figure 4-26).

Figure 4-26: Summary of settings



Click *Back* to change any unwanted settings or click *Next* and Setup will begin copying files (Figure 4-27).

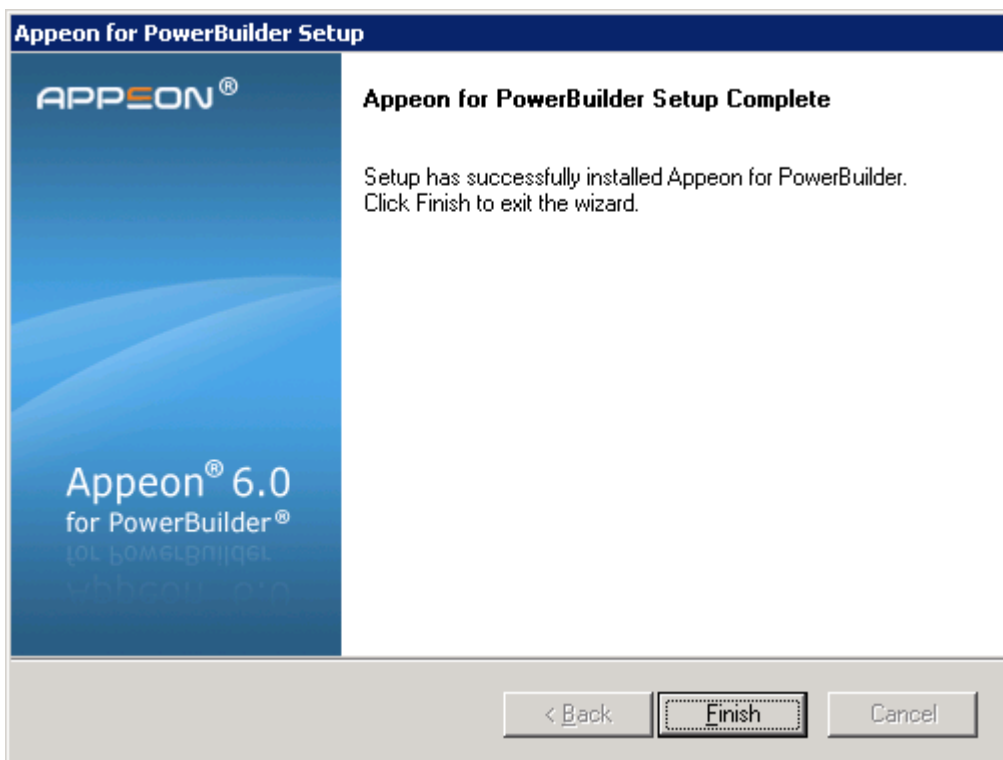
Figure 4-27: Appeon Server Web Component installation process



Step 4 – Wait until the installation is complete.

Step 5 – Click *Finish* to exit (Figure 4-28).

Figure 4-28: Setup complete



4.3.4.3 Installing and configuring a Web server redirector plug-in

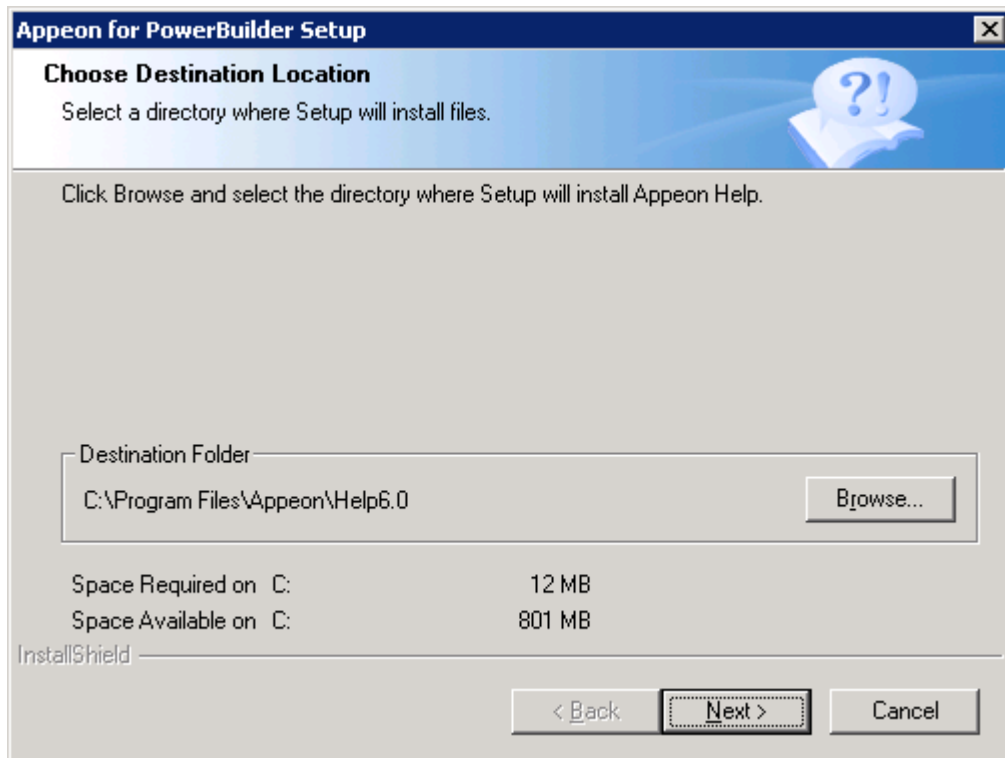
To ensure that the third-party Web server works correctly with Appeon Server, install and configure the corresponding redirector plug-in for the Web server. Instructions for installing and configuring the redirector plug-in are provided in the *Web Server Configuration Guide* in Appeon Help.

4.3.5 Appeon Help installation

Step 1 – Launch the Appeon for PowerBuilder Setup program and select to install Appeon Help (see [Starting the installation](#) section).

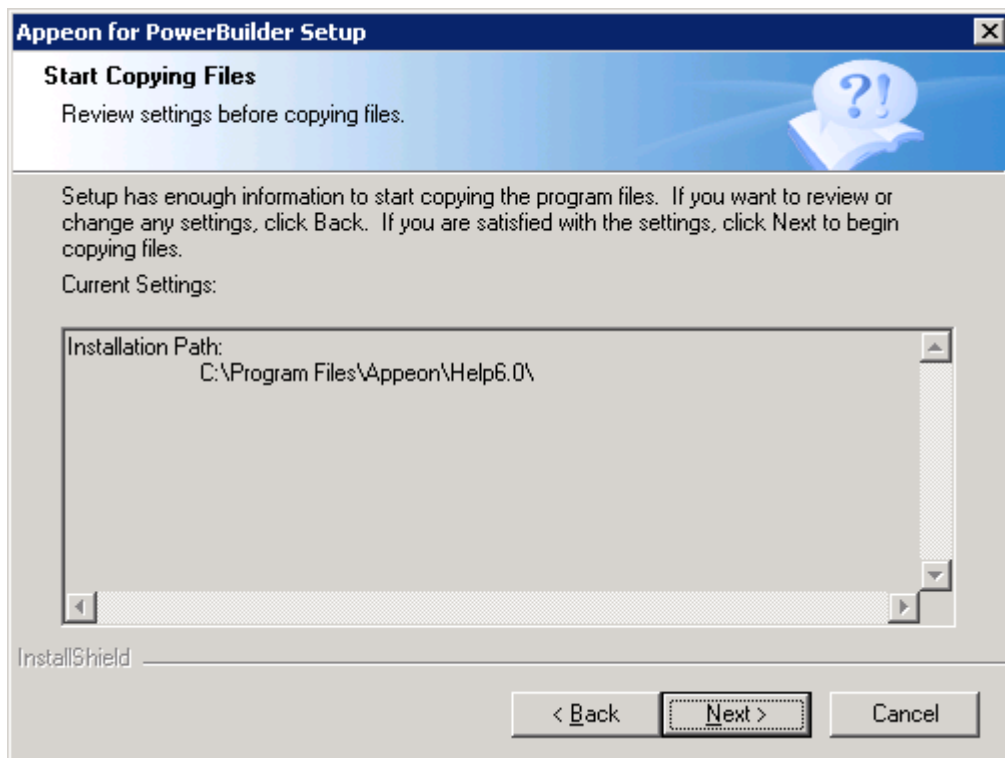
Step 2 – Choose the directory for Appeon Help. Use the default “C:\Program Files\Appeon\Help6.0”, or click *Browse* to select another folder, as shown in Figure 4-29).

Figure 4-29: Help location



Step 3 – Check the summary of settings (Figure 4-30).

Figure 4-30: Summary of settings

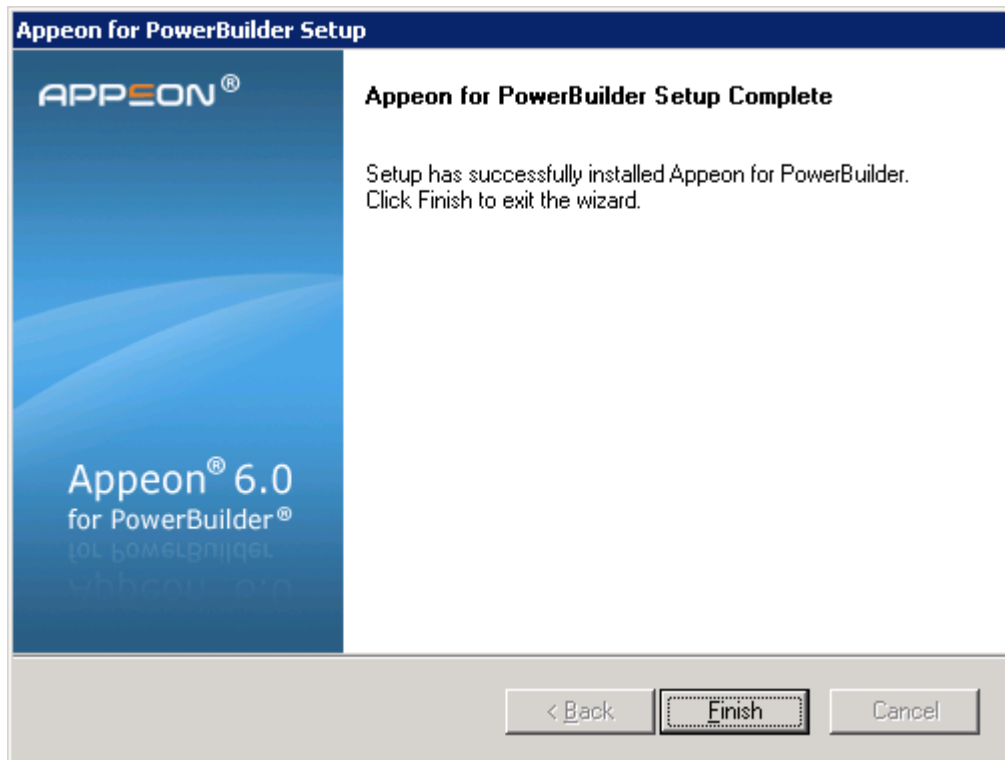


Click *Back* to change any unwanted settings or click *Next* and Setup will begin copying files.

Step 4 – Wait until the installation is complete.

Step 5 – Click *Finish* to exit (Figure 4-31).

Figure 4-31: Setup complete



4.3.6 Product Activation

After Appeon for PowerBuilder installation is completed, you must follow the instructions to activate Appeon for PowerBuilder (Figure 4-32). You can get the valid MAC address on the local computer by clicking the View Address button.

If you want to activate Appeon for PowerBuilder later, you can get the valid MAC address from AEM.

Figure 4-32: Product Activation

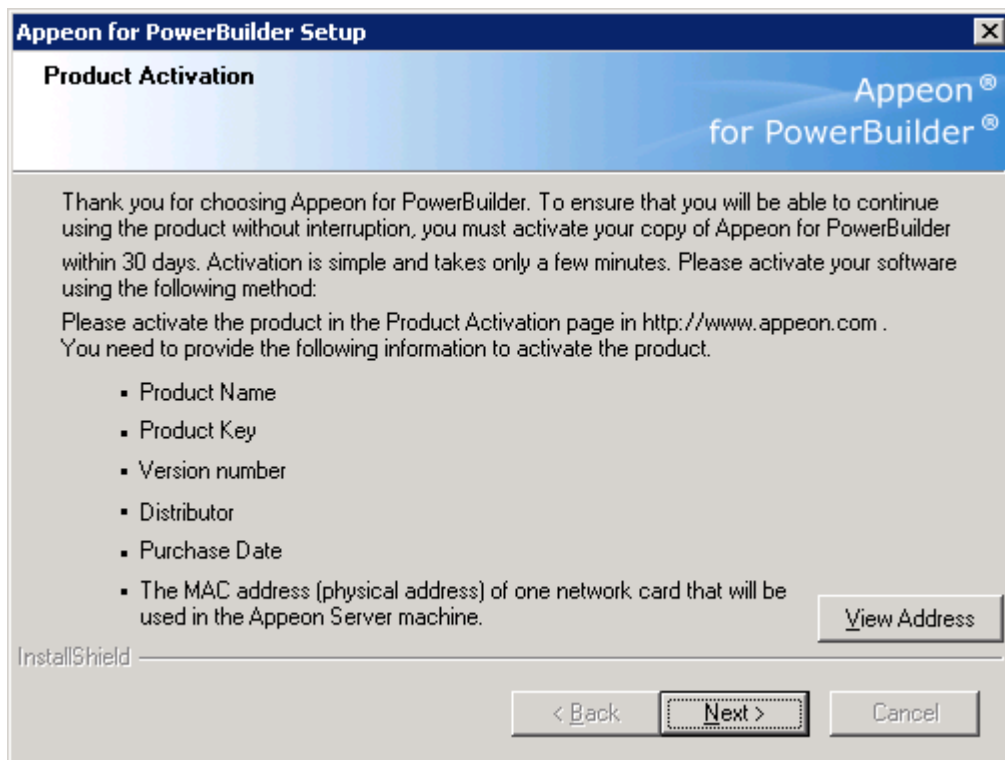
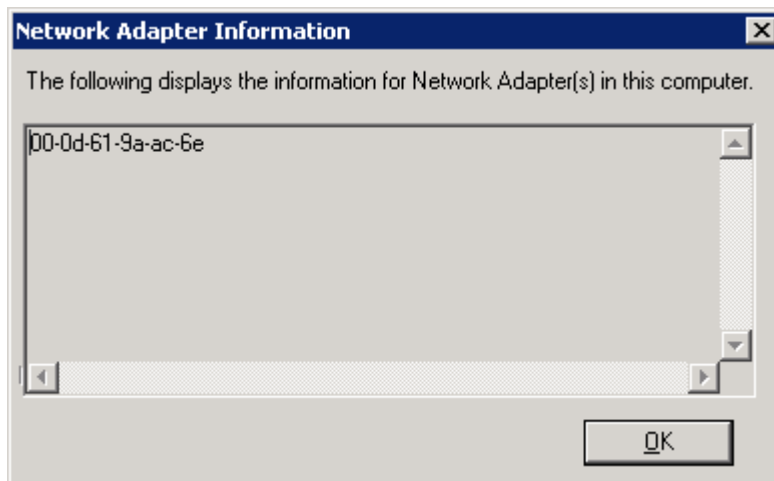


Figure 4-33: MAC address



Follow the instructions below to activate Appeon for PowerBuilder and install the Appeon license file:

Step 1: Use either of the following methods to provide the required information to Appeon:

- Send the information to Appeon (license@appeon.com)
- Use the Product Activation page on the Appeon Website (www.appeon.com)

The required information includes: Product Name, Product Key, Version Number, Distributor, and MAC address.

Step 2: After validating the information, Appeon will return a valid license file, named license.appeon. Copy this file and replace the one under the installation directory of Appeon Server (for example, %WAS_HOME%\appeon\).

Please note that the license file is generated against the MAC address you provided, so it can only be used on the server with that MAC address.

Step 3: Restart Appeon Server if Appeon Server is started.

Step 4: Go to AEM | Server Properties | Licensing, and verify that the product license status is shown as activated.

Step 5: Back up your new license file so you can use it again in case you will reinstall Appeon Server.

4.4 Starting/Stopping Appeon Server

4.4.1 Starting Appeon Server

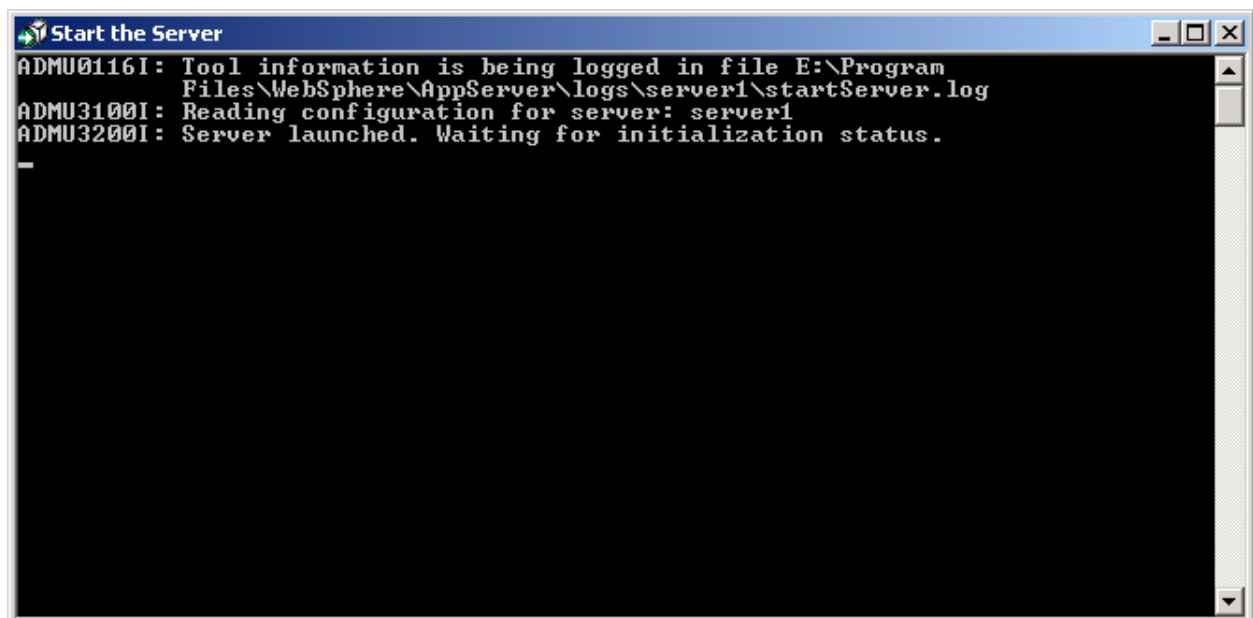
Once Appeon Server has been installed and integrated into WebSphere, starting WebSphere server will automatically start Appeon Server. To start WebSphere/Appeon Server:

Open the Windows Start menu and select: Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | Start WebSphere.

When the server startup process is complete, the following message will appear in the command window, as shown in Figure 4-34:

```
ADMU3200I: Server launched. Waiting for initialization status.
```

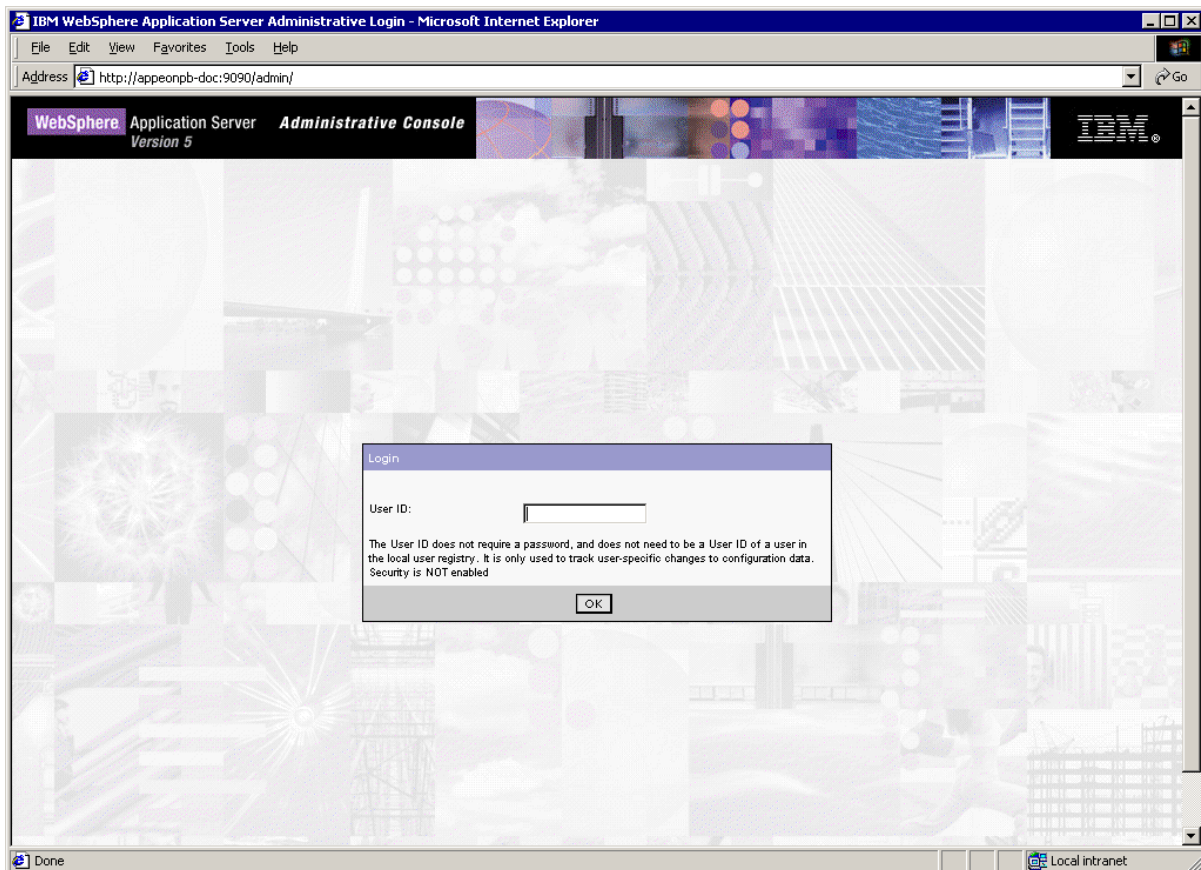
Figure 4-34: WebSphere server startup window



4.4.2 Logging in to WebSphere Server Administrative Console

Step 1 – On the computer where the WebSphere server is running, open the Windows Start menu and select: Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | WebSphere Manager.

The Administrative Console will be loaded, as shown in Figure 4-35.

Figure 4-35: Logon page

Step 2 – Log in to the Administrative Console using the appropriate user name.

The “WebSphere Server Administrative Console” main page displays.

4.4.3 Stopping Apeon Server

Shutting down WebSphere server can also shut down Apeon Server:

Open the Windows Start menu and select: Programs | IBM WebSphere | Application Server | Stop the Server.

If you have any problems in using WebSphere server, refer to the WebSphere server documents at <http://www7b.software.ibm.com/wsdd/zones/was/>.

5 Configuring Appeon Server Cluster

5.1 Overview

Appeon 6.0 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 WebSphere servers, each with Appeon Server and Appeon plug-in installed.

5.2 Configuration instructions

1. Install Appeon Server to multiple WebSphere servers.
 - Set up a group of WebSphere servers.
 - Install Appeon Server to each WebSphere server by following the installation instructions in Section 4.3.2: [Appeon Server installation](#).
2. Create Appeon Server cluster in AEM.
 - Run AEM and configure the *Cluster* tool in the *Server Properties* to add Appeon Servers into a cluster. Instructions are provided in the *Appeon Server Configuration Guide*.
3. Configure the Web server for the Appeon Server cluster.
 - Set up one or more separate third-party Web server(s).
 - Install the Appeon Server Web Component on each third-party Web server by following the installation instructions in Section 4.3.4: [Appeon Server Web Component installation](#).
 - Configure the third-party Web server(s) with the Appeon plug-in. For detailed instructions, refer to the *Web Server Configuration Guide* in Appeon Help.
4. Deploy the application to the Appeon Server cluster and Web server(s). For detailed instructions, refer to the *Appeon Developer User Guide*.

6 Post-Installation Configuration Tasks

The previous chapters provide instructions on how to set up Apeon system architecture, including installing Apeon for PowerBuilder components, as well as configuring Apeon Server cluster.

Once the system is set up and before you start deploying applications, the post-installation configuration tasks listed in Table 6-1 will help ensure that the deployed applications run as desired. *Post-installation configuration tasks* refer to configurations required for Apeon system architecture that affect the running of all applications but do not include configuration tasks performed in Apeon Developer and Apeon Enterprise Manager for specific applications.

Table 6-1: Post-installation tasks

| Task | Description | Detailed Instructions Given in... |
|--|--|---|
| Internet Explorer configuration | Configuration required for the client. Sometimes settings in Internet Explorer can prevent the deployed application from running | Section 6.2 in this book |
| System language setting | Configuration required for the client, Apeon Server and database server. The Windows language settings can affect the characters that are displayed in the Apeon Web application. | Section 6.3 in this book |
| JScript.dll version checking | Configuration required for the client. The version of jscript.dll at the client cannot be lower than 5.6. | Section 6.4 in this book |
| Database JDBC driver preparation | Configuration required for Apeon Server. You should copy the corresponding driver files for the database server in use to the %WAS_HOME%\lib folder in the machine hosting Apeon Server. %WAS_HOME% indicates the WebSphere home directory. | <i>JDBC driver preparation</i> section in the <i>Apeon Server Configuration Guide</i> |
| Configuration for supporting DataWindow Data Cache feature | The configuration is 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). | <i>DataWindow Data Cache</i> section in the <i>Apeon Server Configuration Guide</i> |
| Configuration for supporting dynamic DataWindows | The configuration is required for database server. Additional configuration at the database server is required for support of dynamic DataWindows. | Section 6.5 in this book |

| | | |
|---------------------------------------|---|--------------------------|
| Configuration for fixing an ASE issue | Apeon 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” | Section 6.6 in this book |
|---------------------------------------|---|--------------------------|

6.1 Windows account with administrator privileges

When you run an Apeon Web application for the first time, the Xcelerator plug-in must be downloaded to the client. If the login account of the Windows system does not have administrator rights, the Xcelerator plug-in download will be blocked and the application will fail to run.

Ask your administrator to assign the current login account to the Administrators group, so that it can successfully download and register the Xcelerator plug-in.

If using Internet Explorer 7 whose settings are closely bundled with group, you need to also make sure that the group which contains the current login account has rights to download and register ActiveX controls.

6.2 Internet Explorer configuration

6.2.1 Overview

Internet Explorer settings can prevent the Apeon Web application from running. For example, if your security is set too high, the Web files needed may not be downloaded or run properly. Verify that your Internet Explorer settings are correct before you install and use Apeon.

6.2.2 Verifying Internet Explorer settings are correct

You can check the Internet Explorer settings by attempting to run the Apeon Web Demos over the Internet from the Try.Sybase.Com Website:

(<http://www.try.sybase.com/trysybase/AvailableDemos.aspx>)

Click the Apeon Web demos in the list. If you have already signed into MySybase, you will be led directly to the Apeon Demonstration page. If you are not signed in, you will be prompted for your MySybase login credentials. If you do not have a MySybase account, you can create one immediately at no cost.

If you receive error messages, such as “Create session failed” or “Load application failed”, while running Web applications, check your Security and Advanced Internet Explorer settings. Follow the instructions in Section 6.2.3: [Security settings](#) to configure Internet Explorer correctly.

6.2.3 Security settings

6.2.3.1 Choosing security level and zone

It is recommended that you set Internet Explorer’s security level to the Default or Custom Level. The security level should not be set to “High”.

For Apeon Web applications using any of the following features – call OLE objects or DLL files or run executable programs on the Client – it is recommended that you specify Custom

Level security settings appropriately so Internet Explorer will not prevent the ActiveX control or the Apeon Xcelerator plug-in from being downloaded. Refer to Section 6.2.3.3 for information on how to specify Custom Level settings.

If you use a firewall, make sure that it does not block JavaScript files and permits connection to the specified port number if port 80 is not used.

Typically, if Web applications are within a corporate LAN, they fall into the *Local intranet* zone; if you access Apeon Web applications on the Internet, they belong to the *Internet* zone. Ask your network administrator if you cannot decide to which zone you should apply the security settings.

6.2.3.2 Specifying Default level settings

To set the Internet Explorer security level to the default level:

- Select Tools | Internet Options; the Internet Options dialog box is displayed.
- Click the Security tab.
- Click the appropriate zone.
- Click the *Default Level* button on the Security tab and click *Apply*.

6.2.3.3 Specifying Custom level settings

If you plan to use a custom level, select the zone used to access and run Apeon Web applications and verify that the security options are as shown below:

- Allow previously unused ActiveX controls to run without prompt (If Internet Explorer 7) (Enabled)
- Download signed ActiveX controls (or Download unsigned ActiveX controls in Windows XP) (Enabled)
- Initialize and script ActiveX controls not marked as safe (Prompt)
- Run ActiveX controls and plug-ins (Enabled)
- Script ActiveX controls marked safe for scripting (Enabled)
- File download (Enabled)
- Active scripting (Enabled)
- Allow active content to run in files on My Computer (If the version of Internet Explorer is 6.0 SP2) (Enabled)

To keep you protected from browsing with unsafe settings, Internet Explorer 7 warns you with an Information Bar when current security settings may put you at risk. You can instantly reset Internet Explorer security settings to the "Medium-High" default level by clicking the "Fix My Settings" option in the Information Bar. However, after performing this action, the access to Apeon applications may fail, because settings of ActiveX control may be disabled. In this case, check that settings listed above are correctly set.

6.2.4 Add-on settings (for Internet Explorer 7)

Internet Explorer add-on settings determine whether Apeon Xcelerator plug-in can run correctly, therefore you need to perform the following configuration.

6.2.4.1 Enabling Xcelerator add-on

After Apeon Xcelerator plug-in is successfully downloaded and before the application is run, the plug-in must be enabled in Internet Explorer using Add-on Management with the following steps:

Step 1 – Select Tools | Internet Options from Internet Explorer 7.

Step 2 – In the Internet Properties dialog box, click the Programs tab.

Step 3 – On the Programs tab, click *Manage Add-ons*.

Step 4 – Select Xcelerator plug-in from the list and then click *Enable*.

Step 5 – In the Add-on Status box, click *OK*.

Step 6 – Click *OK* to close Manage Add-ons.

6.2.4.2 Discarding add-on disabled mode

To help troubleshoot difficulties launching Internet Explorer or reaching specific websites, you can start in "No-Add-ons" mode where only critical system add-ons are enabled. However, browser window started in "No-Add-ons" mode will not be able to access the Apeon application. In this case, exit Internet Explorer and restart it in normal mode.

6.2.5 Internet Explorer files caching

The Web file caching functionality of Internet Explorer should be fully used in order to ensure optimal performance. This will significantly reduce the time required to load and start an application following the initial load. The configuration outlined below will ensure that you achieve the best performance while safeguarding your application from becoming "stale" (such that out of date cache settings override recent changes).

Step 1 – Open Internet Explorer and select Tools | Internet Options. Verify that the *Empty Temporary Internet Files folder when browser is closed* option is not checked under the Advanced tab of Internet Options.

Step 2 – Click the *Settings* button under the General tab to configure the Temporary Internet Files settings.

Step 3 – Select the *Automatically* radio button and verify that the *Amount of disk space to use* scroll box is set to a reasonable number, such as 200 MB.

Now the browser is set to automatically check for newer versions of a Web application. The browser will also check to see that there is enough allocated space in the Temporary Internet Files folder to allow for caching Apeon Web applications as well as other Web applications and Web sites.

Note: If you experience problems or errors when accessing a Web application after deployment, the cached Web application files may be the cause. There are two ways to solve this problem:

- Check the *Empty Temporary Internet Files folder when browser is closed* option (under the Advanced tab of Internet Options) to ensure that no cached files remain whenever Internet Explorer is restarted or
- Manually delete the temporary Internet files: go to Tools | Internet Options, click the *Delete Files...* button, restart Internet Explorer and try again.

Allowing the temporary Internet files folder to be emptied each time the browser is closed is an option recommended for use only during the development stage. During development, it is best to have the latest Web application loaded in the browser to avoid any problems caused by cached files. When your Web application is ready for production deployment, this setting can be disabled (unchecked) so that the Web application can be cached at each Client PC for better scalability and Client-side performance.

6.2.6 Internet Explorer advanced settings

Some options under the Advanced tab will prevent Apeon Web applications from running properly, such as when *Always send URLs as UTF-8* is disabled. If you cannot load an Apeon Web application, you should try restoring the default settings to see if that resolves the problem. You can restore the default settings by clicking the *Restore Defaults* button.

Note: Clicking the *Default Settings* button will remove the check from *Use HTTP 1.1 through proxy connections*. This setting is required if you access your application through a proxy server.

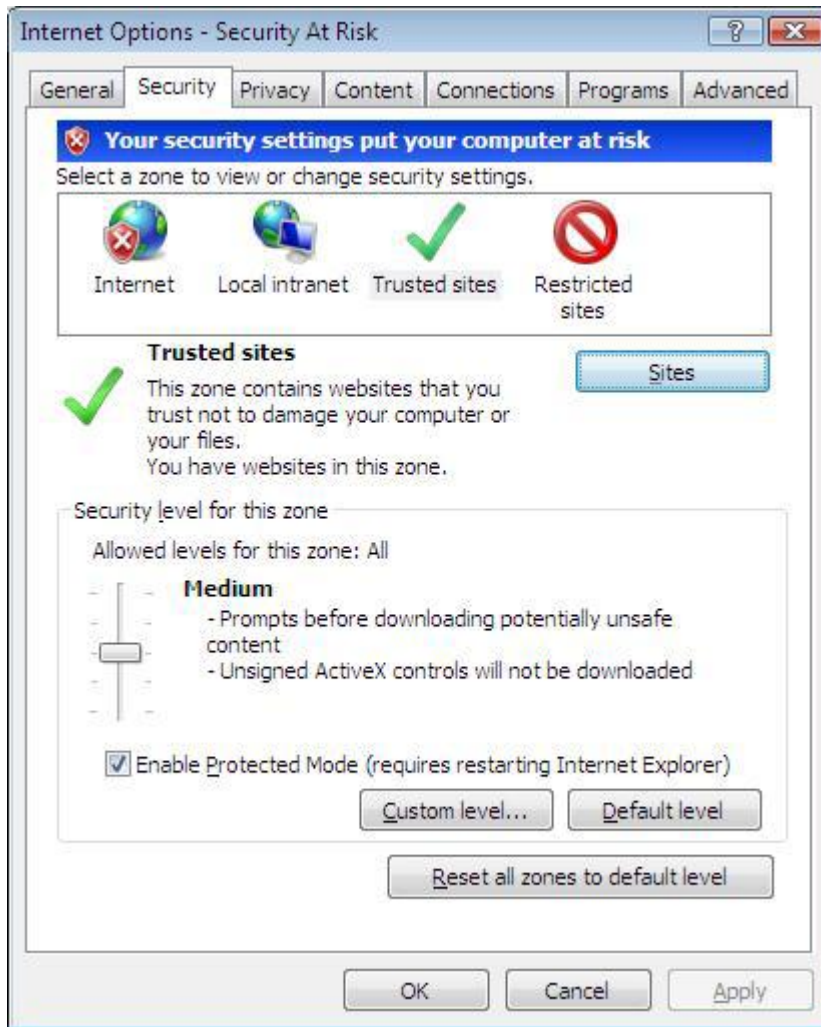
6.2.7 Additional configurations of IE 7 under Windows Vista

To run Apeon Web application in Internet Explorer 7 under Windows Vista, the Internet Explorer security settings must be properly configured. There are two ways:

1st way (recommended): Add the application website to Trusted sites zone. Below are detailed steps.

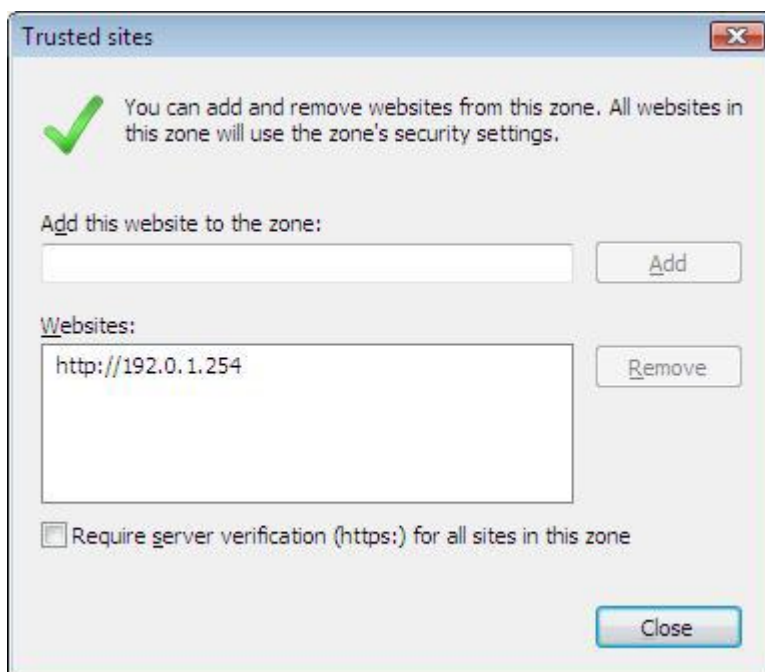
Step1 – Click *Trusted sites* and then click the *Sites* button, as shown in the Figure 6-1.

Figure 6-1: Trusted sites zone settings



Step 2 – Add the application website to the Websites list.

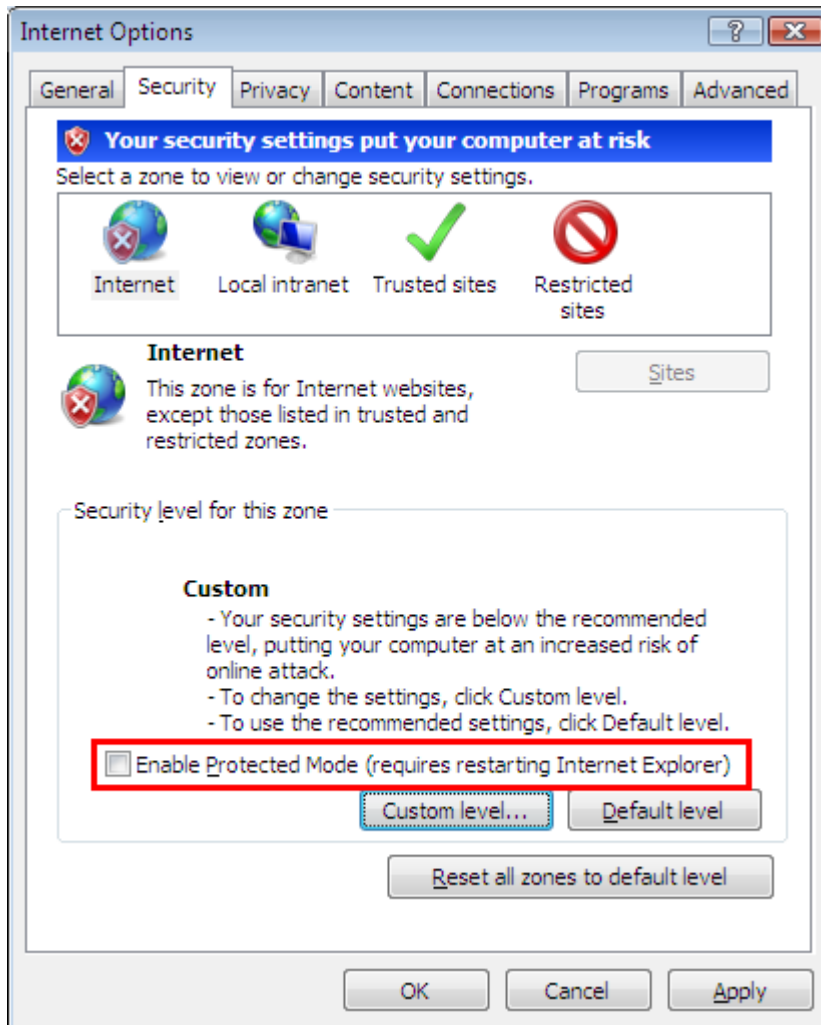
Figure 6-2: adding application website



2nd way: configure the security settings of Internet zone. Below are detailed steps.

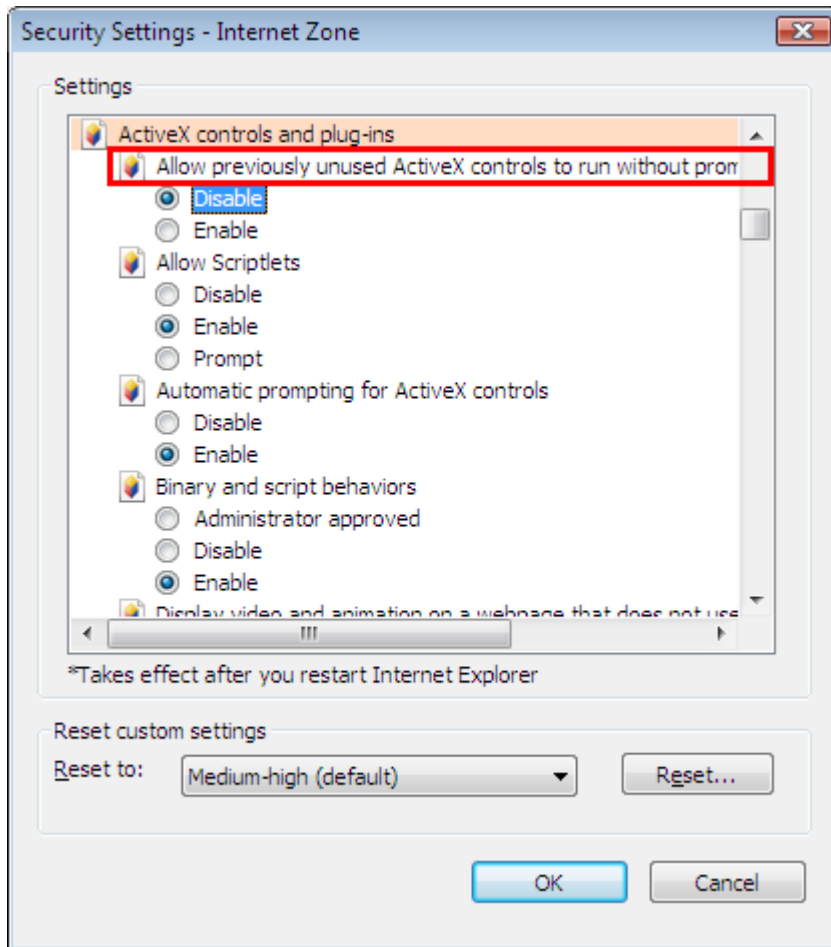
Step1 – Disable the “Enable Protected Mode” option.

Figure 6-3: Internet zone settings



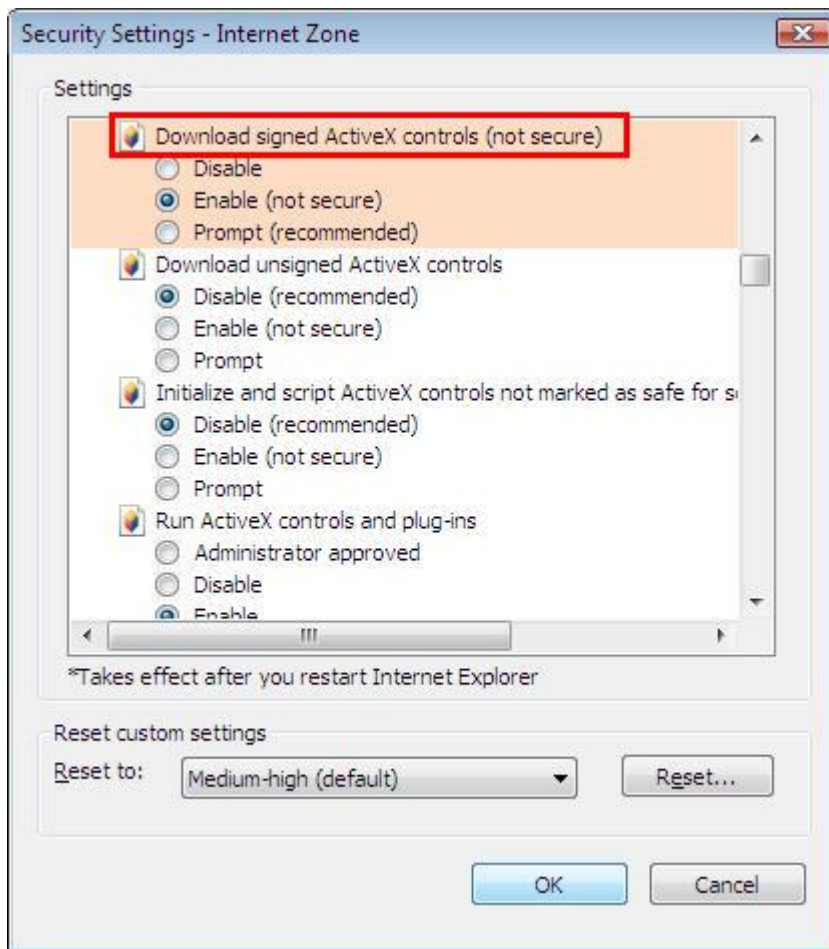
Step 2 – Enable the “Allow Previously unused ActiveX control to run without prompting” option.

Figure 6-4: Internet zone settings



Step 3 – Enable the “Download signed ActiveX controls” option.

Figure 6-5: Internet zone settings



6.3 System language settings

Sometimes the operating system language settings can affect the characters displayed in the Apeon 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 Apeon 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 Apeon-deployed Web application matches the language settings of the Windows.

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.

6.4 Checking the version of JScript.dll

Check the version of JScript.dll at the client with the following steps:

Step 1 – Go to the \WINNT\system32 folder at the client.

Step 2 – Open the Properties window for the jscript.dll file.

Step 3 – Get the version information in the Version tab of Properties.

The version of jscript.dll should be 5.6.x.xxxx. If the version number is older than 5.6.x.xxxx, download and install the latest JScript.dll from <http://www.microsoft.com/downloads/details.aspx?FamilyID=c717d943-7e4b-4622-86eb-95a22b832caa&DisplayLang=en>.

6.5 Configuration for supporting dynamic DataWindows

The following configuration at the database server is required for support of dynamic DataWindows: Find the following SQL files in the “\sql\dynamicsql” folder under the Apeon Server installation directory (for example, C:\Program Files\WebSphere\AppServer\apeon\sql\dynamicsql) and install the corresponding SQL for the database you are using.

- install_apeon_syntaxfromsql_ASA.sql
- install_apeon_syntaxfromsql_ASE.sql
- install_apeon_syntaxfromsql_DB2.sql
- install_apeon_syntaxfromsql_IQ.sql
- install_apeon_syntaxfromsql_MSSQL.sql
- install_apeon_syntaxfromsql_ORACLE.sql

For detailed instructions, refer to the *Dynamic DataWindow* section in *Apeon Features Help*.

6.6 Configuration for ASE Chained mode issue

6.6.1 Known issue with ASE Chained Mode

A PowerBuilder application can execute ASE stored procedures successfully. However, when the PowerBuilder application is converted to the Web, the following error may occur:

“Select error: Stored procedure 'dbo.up_edw001_001' may be run only in unchained transaction mode. The 'SET CHAINED OFF' command will cause the current session to use unchained transaction mode”

There are three ASE stored procedure (SP) modes: chained, unchained and anymode. There are two ASE transaction modes: chained and unchained. For Web applications:

- (1) If the transaction mode is chained, the SP running mode must be chained or anymode.
- (2) If the transaction mode is unchained, the SP running mode must be unchained or anymode.
- (3) If the transaction mode and SP mode do not match the requirements in (1) or (2), the error occurs.

6.6.2 Stored procedures provided for solving the issue

Appeon provides two stored procedures that help modify the modes of ASE stored procedures to ensure that the stored procedures meet the requirements in (1) or (2). The following files are located in the “\sql\asechain_sql” folder under the Appeon Server installation directory (for example, C:\Program Files\WebSphere\AppServer\appeon\sql\asechain_sql).

- (1) readme.txt
- (2) install_appeon_rebuildchainmode.sql: modifies the modes of ASE stored procedures
- (3) uninstall_appeon_rebuildchainmode.sql: restores the original modes of ASE stored procedures

Follow the instructions in the “readme.txt” for the method of modifying the stored procedure modes with the two SQL files.

7 Uninstalling Appeon 6.0

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. Uninstall 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 6.0 for PowerBuilder.
- 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 software:

- Shut down Sybase PowerBuilder
- Stop the Sybase EP Management Service.

Step 2 – Verify that Appeon Developer and all Sybase software 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:

- EonADT60.exe
- pb90.exe, pb100.exe, pb105.exe, and pb110.exe
- java.exe, jagsrv.exe and jagsrvagent.exe
- dbengx.exe and dbsrvx.exe

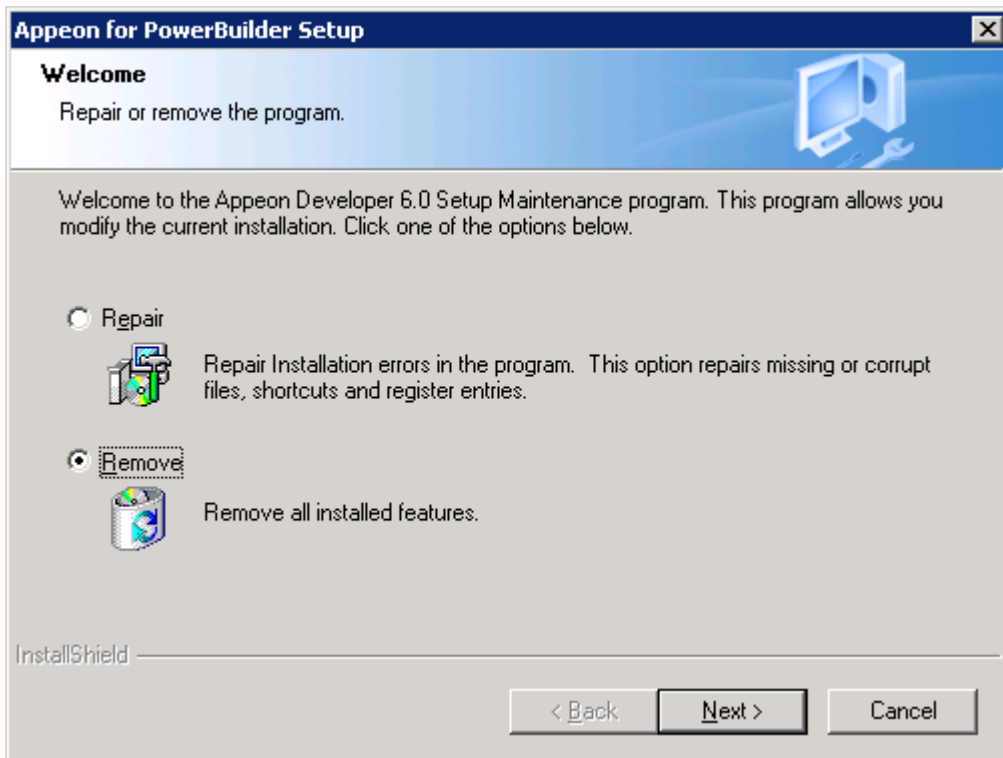
If *EonADT60.exe* is running when attempting to uninstall Appeon Developer on a machine running Windows 2000, XP or 2003, Appeon Setup will detect that the processes are running and an error message will appear.

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 6.0 for PowerBuilder | Appeon Developer | Uninstall Appeon Developer to begin the uninstall process.

Step 4 – Choose *Remove* to delete all installed features. Click *Next* (Figure 7-1).

Figure 7-1: Welcome page



Step 5 – Confirm the removal of Appeon Developer. Click *OK* to uninstall (Figure 7-2 and Figure 7-3).

Figure 7-2: Confirm uninstall

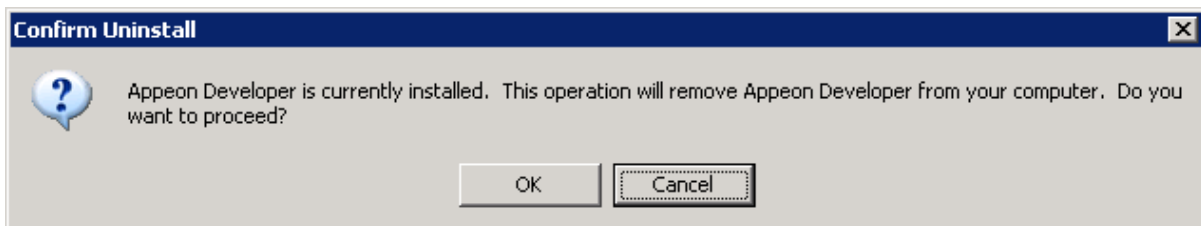
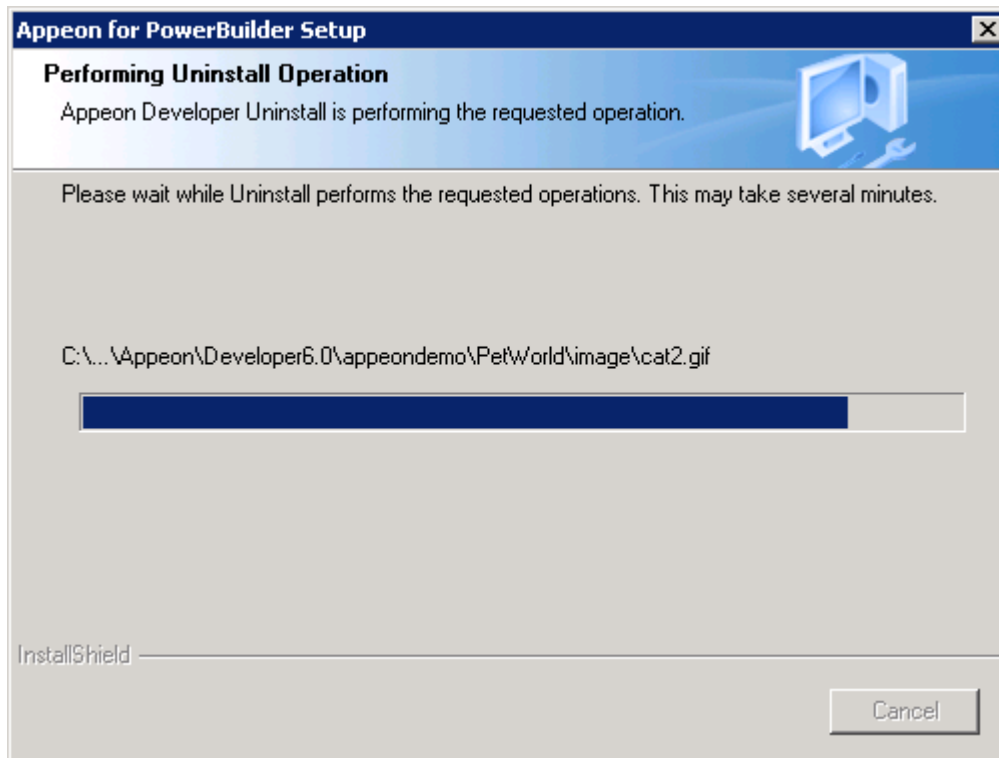
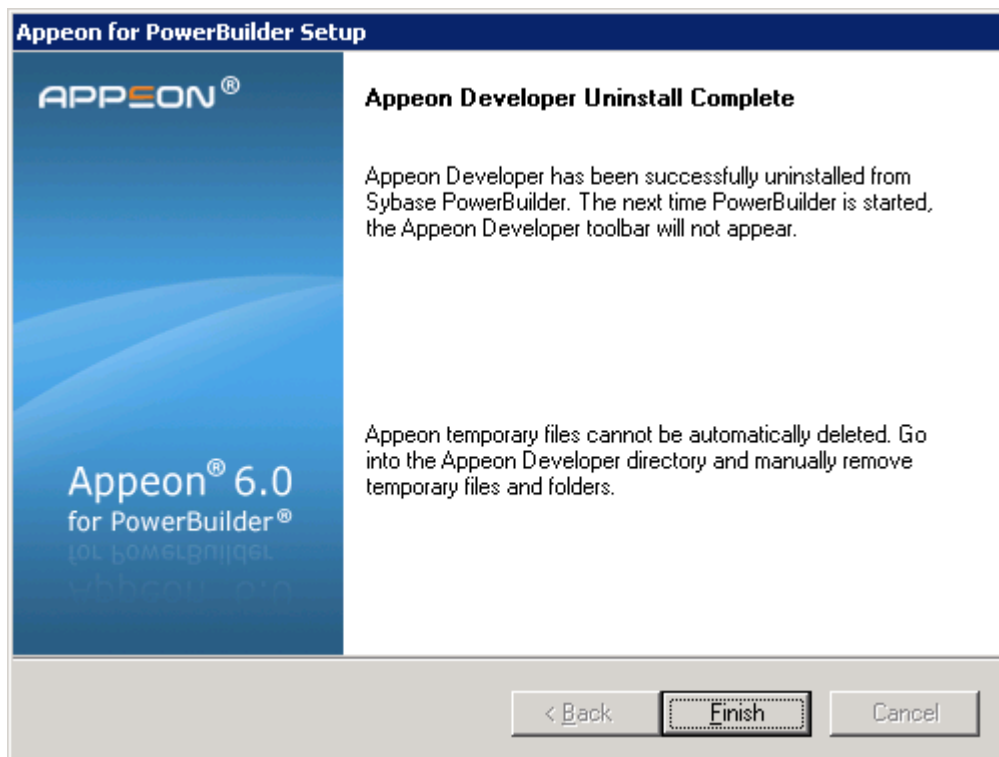


Figure 7-3: Appeon Developer uninstall process



Step 6 – Click *Finish* to exit (Figure 7-4).

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.

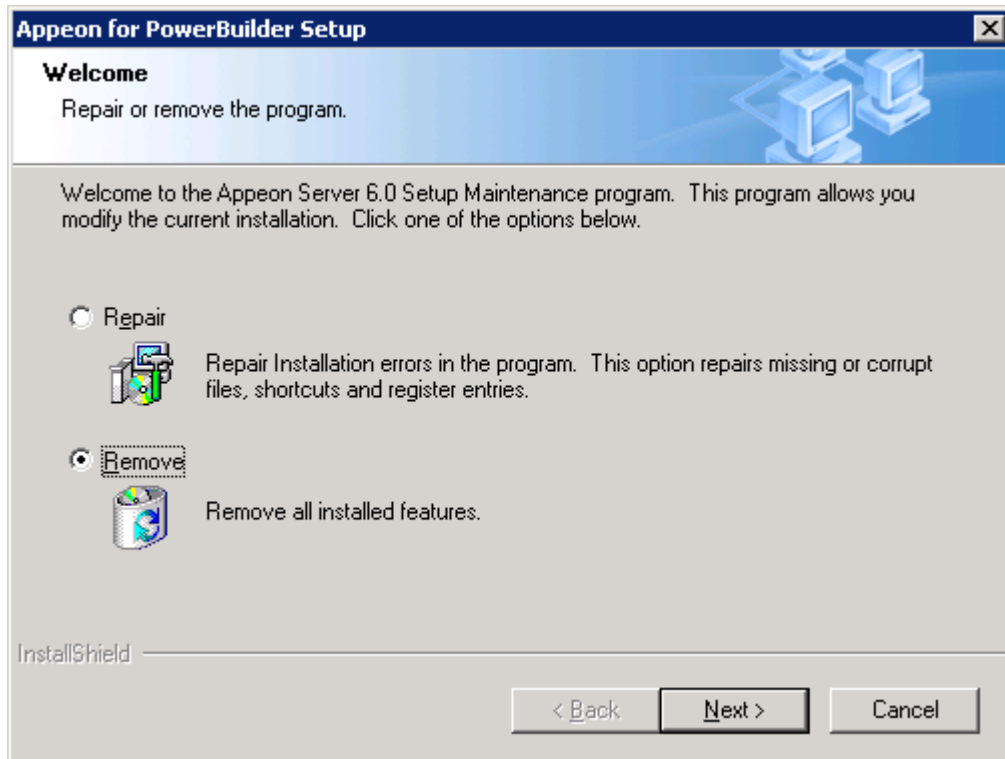
7.3 Uninstalling Appeon Server

Step 1 – Shut down Appeon Server and WebSphere.

Step 2 – Select Windows Start menu | Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | Uninstall Appeon Server to begin the uninstall process.

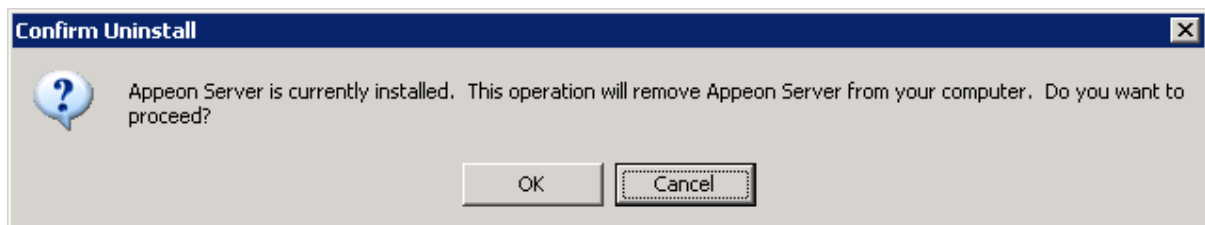
Step 3 – Choose *Remove* to delete all installed features. Click *Next* (Figure 7-5).

Figure 7-5: Welcome page



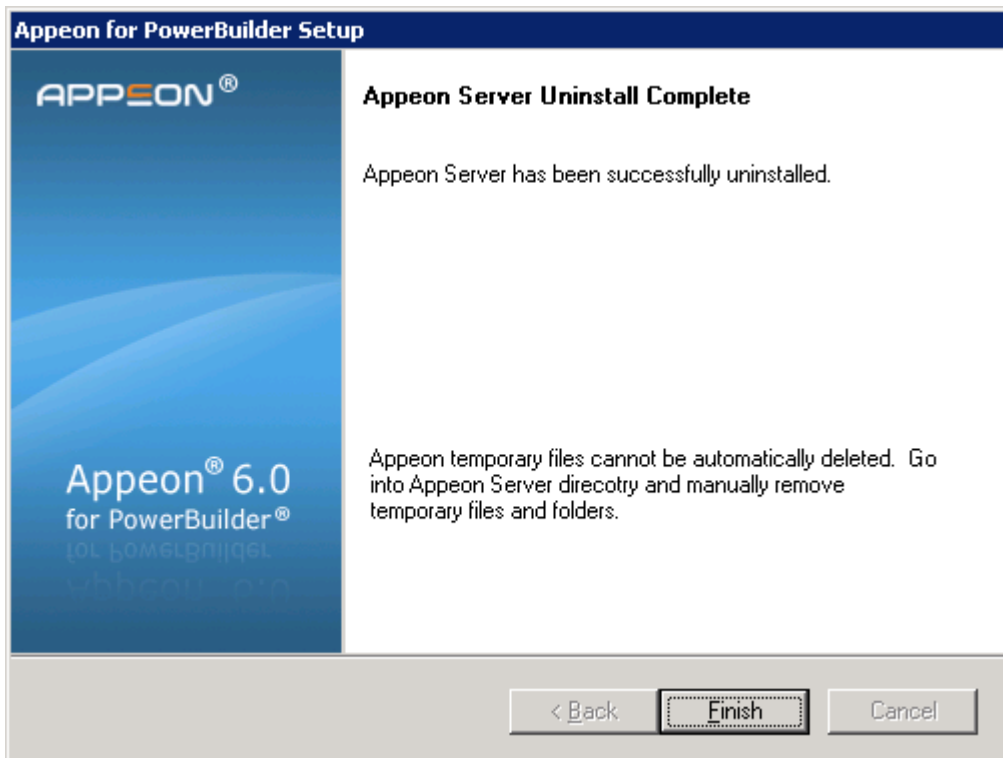
Step 4 – Confirm the removal of Appeon Server. Click *OK* to uninstall (Figure 7-6).

Figure 7-6: Confirm uninstall



Step 5 – Wait until Appeon Server is completely uninstalled.

Step 6 – Click *Finish* to exit (Figure 7-7).

Figure 7-7: Appeon Server uninstall complete

Step 7 – After the uninstall process is complete, remove any files or folders left in the Appeon installation folder.

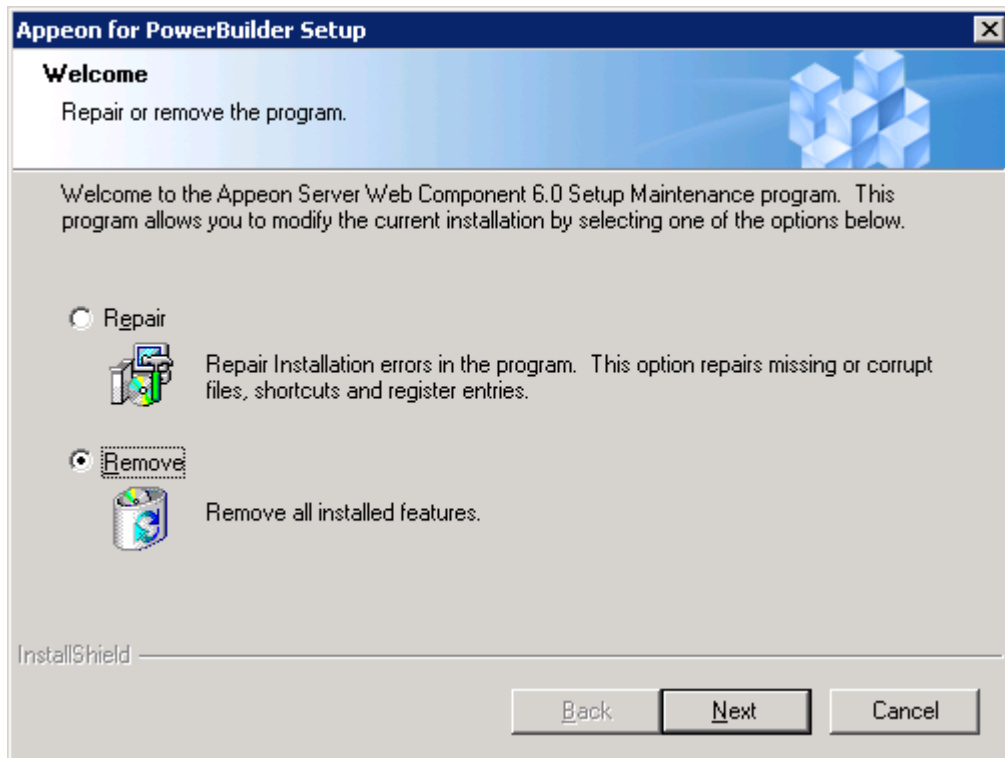
7.4 Uninstalling Appeon Server Web Component (for third-party Web servers only)

Step 1 – Shut down all Windows programs as well as the Web server.

Step 2 – Select Windows Start menu | Programs | Appeon 6.0 for PowerBuilder | Appeon Web Component | Uninstall Appeon Web Component to begin the uninstall process.

Step 3 – Choose *Remove* to delete all installed features. Click *Next* (Figure 7-8).

Figure 7-8: Welcome page



Step 4 – Confirm the removal of the Appeon Server Web Component. Click *OK* to uninstall (Figure 7-9 and Figure 7-10).

Figure 7-9: Confirm uninstall

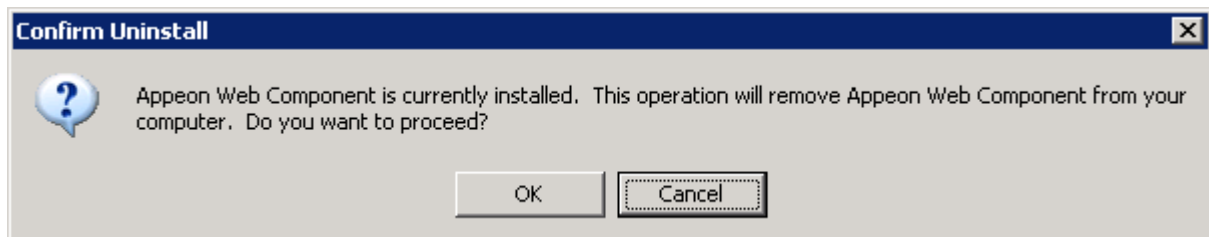
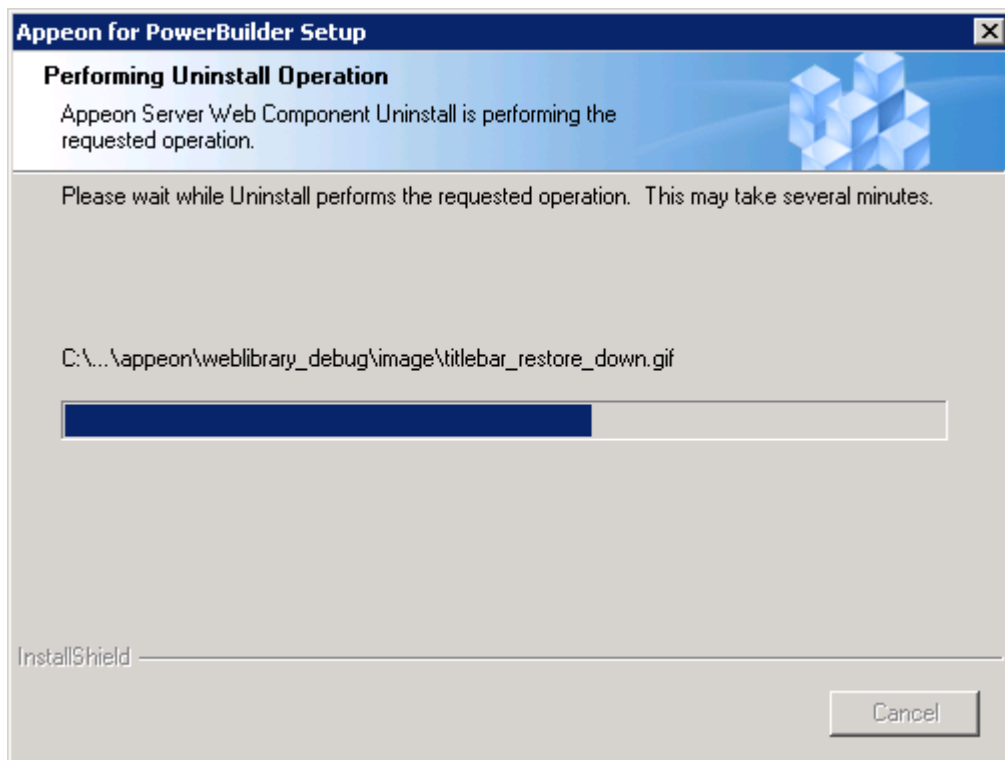
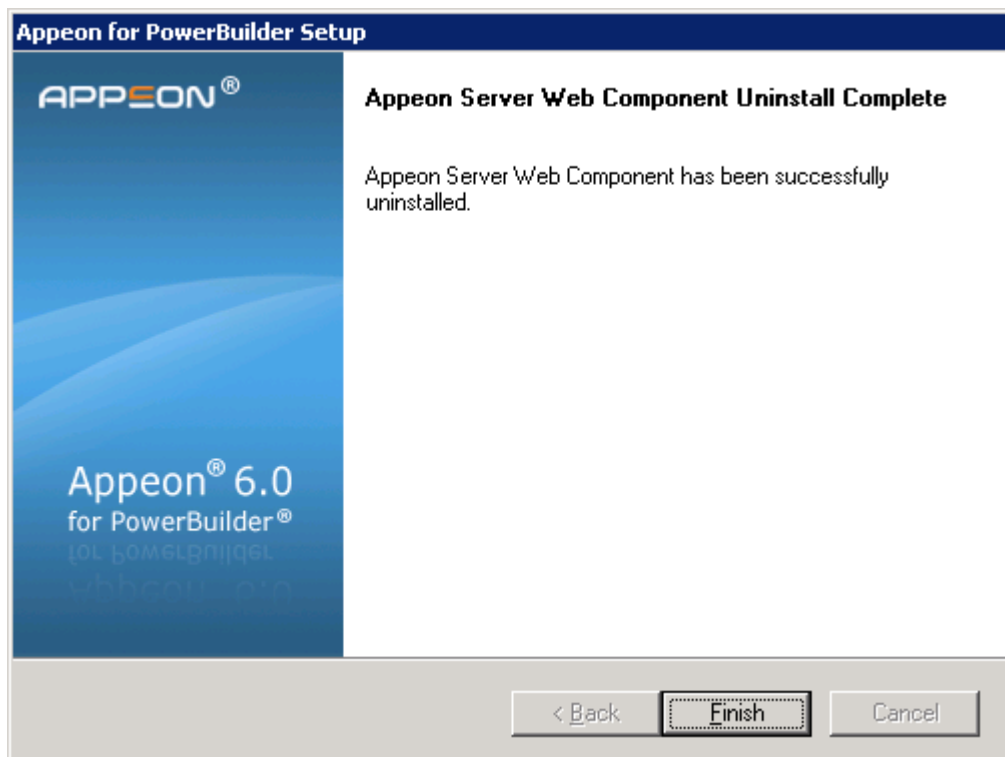


Figure 7-10: Appeon Server Web Component uninstall process



Step 5 – Click *Finish* to exit (Figure 7-11).

Figure 7-11: Appeon Server Web Component uninstall complete



Step 6 – Use Windows Explorer to manually delete Appeon temporary Web files and folders (if they exist) under the Web root of the Web server where the Appeon Server Web Component was installed. Delete the following files where %WEB_ROOT% is the root path of the Web server, such as C:\Program Files\Apache Group\Apache\htdocs:

- %WEB_ROOT%\apeon_code_examples
- %WEB_ROOT%\sales_application_demo
- %WEB_ROOT%\apeon_acf_demo
- Any other folders corresponding to applications deployed by Apeon. These folders are typically identified by the application names assigned to the corresponding PowerBuilder applications.

7.4.1 Web Component uninstall if multiple third-party Web servers are involved

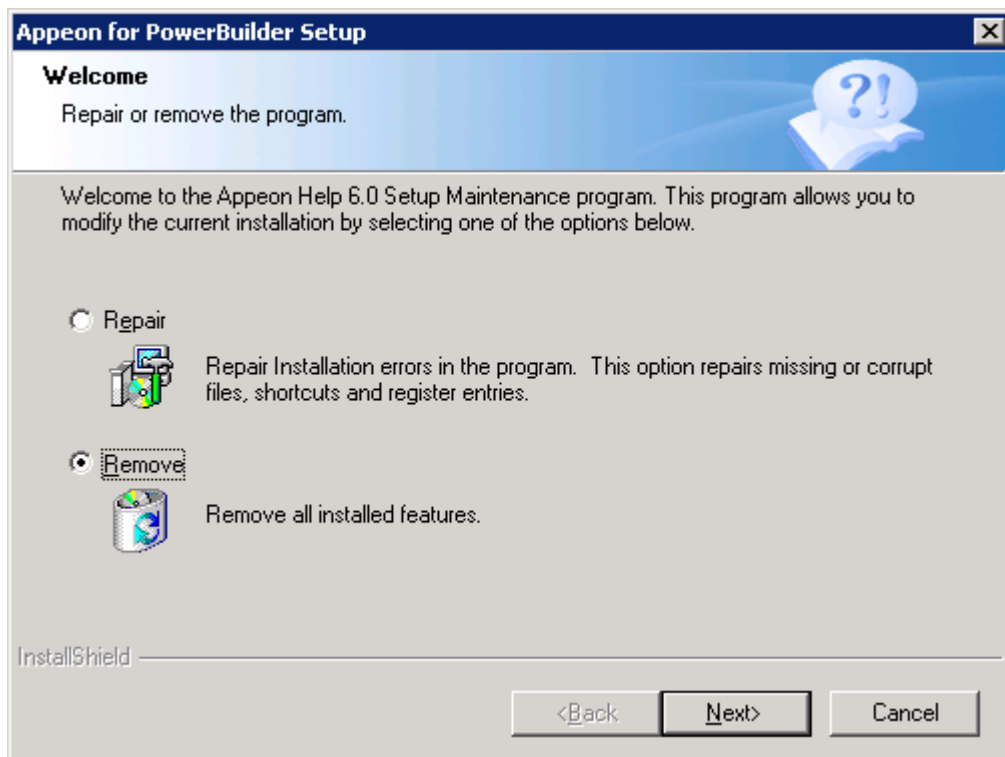
Repeat the Web Component uninstall steps for each third-party Web server.

7.5 Uninstalling Apeon Help

Step 1 – Select Windows Start menu | Programs | Apeon 6.0 for PowerBuilder | Apeon Help | Uninstall Apeon Help to begin the uninstall process.

Step 2 – Choose *Remove* to delete all installed features. Click *Next* (Figure 7-12).

Figure 7-12: Welcome page



Step 3 – Confirm the removal of the Apeon Help. Click *OK* to uninstall (Figure 7-13 and Figure 7-14).

Figure 7-13: Confirm uninstall

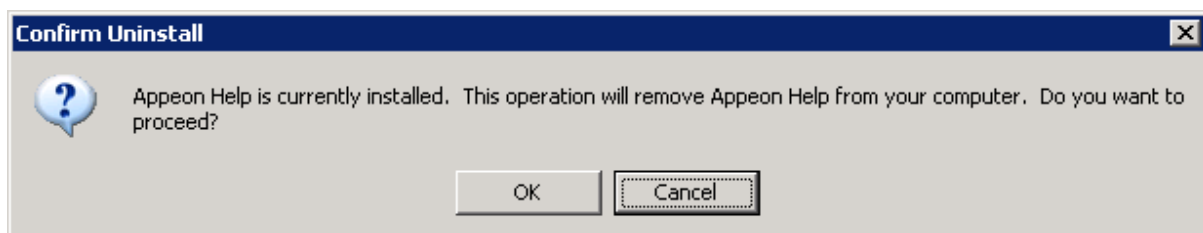
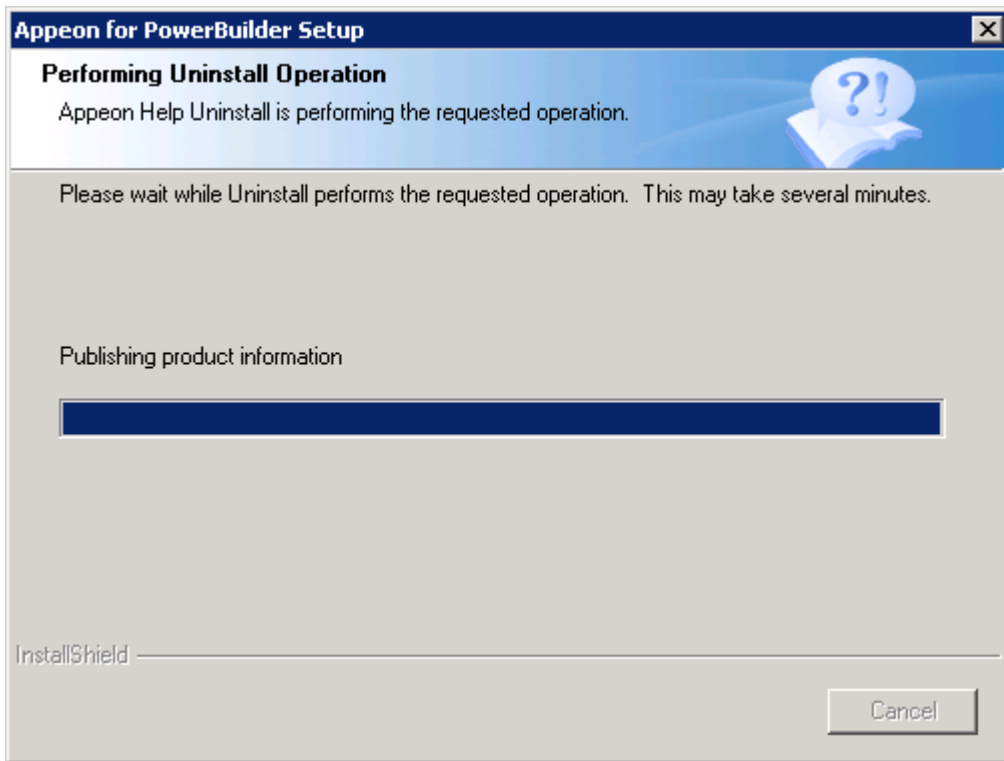
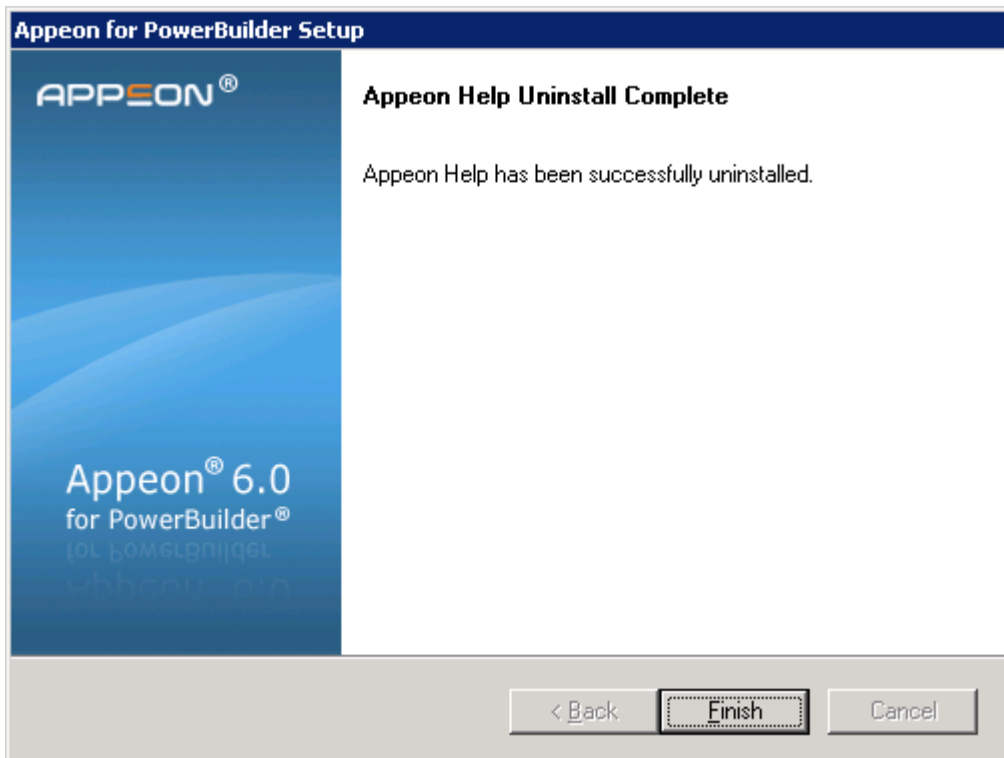


Figure 7-14: Appeon Help uninstall process



Step 4 – Click *Finish* to exit (Figure 7-15).

Figure 7-15: Appeon Help uninstall complete



8 Technical Support

In order to get more efficient technical support, please confirm which distribution you are using. Basically, if you obtained Appeon for PowerBuilder from Sybase, Inc. you are using the Sybase Distribution. If you obtained your distribution directly from Appeon Corporation, you are using the Appeon Distribution. You can confirm which distribution you are using by clicking the “Get Support” icon in the Appeon Developer toolbar appearing in the PowerBuilder IDE or launching the “Appeon Help” from the Windows “Start” menu. For more information about the differences of distribution, please refer to the *Distributions* section in *Introduction to Appeon*.

Get support for Sybase Distribution

Each Appeon installation that has purchased a support contract from Sybase has one or more designated people who are authorized to contact Sybase Technical Support. If you cannot resolve a problem using the manuals or online help, please have the designated person contact Sybase Technical Support or the Sybase subsidiary in your area. You can also find technical support information by visiting <http://www.sybase.com/support/> and clicking on the Contact Support link. When logging a case please make sure to inform the technical support you are using Sybase Distribution and be prepared to provide the following files listed in the following table to Sybase Technical Support. This will aid debugging.

Get support for Appeon Distribution

If your Appeon for PowerBuilder copy is directly purchased from Appeon Corporation, please contact your Email to support@appeon.com. Make sure that you will inform the technical support you are using Appeon Distribution and be prepared to provide the following files listed in the following table to Appeon Technical Support. This will aid debugging.

Table 8-1: Files required for technical support

| File Type | File Name |
|----------------------------------|--|
| WebSphere configuration file | %WAS_HOME%\startServer.cmd %WAS_HOME% indicates the home directory of the WebSphere server. |
| WebSphere log file | Files in the %WAS_HOME%\logs\server1 folder |
| Appeon Server configuration file | All files in the %WAS_HOME%\appeon\repository%\instancename%\config folder. |
| Appeon Server log file | All files in the %WAS_HOME%\appeon\repository%\instancename%\log folder. |
| Appeon Server Repository DB | %WAS_HOME%\appeon\db\appeondb.script |
| Appeon license file | %WAS_HOME%\appeon\license.appeon |
| Web server configuration file | httpd.conf |

| | |
|---|---|
| <p>Web Page file</p> | <p>Web server path\application name>window name.html Web server path\application name>window name.js Web server path\application name\all DataWindows on window.xml Notes: 1) The Web server Web root of WebSphere is usually %WAS_HOME%\installedApps. 2) If the window named includes inheritance, then also supply all ancestor HTML and JavaScript files.</p> |
| <p>PowerBuilder exported source code file</p> | <p>PowerBuilder application path\exported window name.srw PowerBuilder application path\exported DataWindow names.srd Note: Exported windows should include exported ancestor windows and exported ancestor user objects.</p> |

Index

A

- accessing Web applications problem, workaround
 - checking the Empty Temporary Internet Files folder when browser is closed option, 39
 - deleting the temporary Internet files manually, 39
- Add-on settings for IE 7, 38
- Appeon 6.0 installation
 - Appeon Developer installation
 - installation instruction, 23
 - prerequisites, 23
 - Appeon Help installation, 29
 - Appeon Server installation, 15
 - Appeon Server Web Component installation, 27
 - installation instructions, 27
 - prerequisites, 27
- Appeon components, 5
 - Appeon Developer, 5
 - Appeon Help, 6
 - Appeon Server, 5
 - Appeon Server Web Component, 5
- Appeon Developer uninstalling, 47
- Appeon editions, 4
- Appeon Server Cluster, 35
- Appeon server requirements
 - hardware, 7
 - software, 7
 - third-party Web server, 7
- Appeon Server uninstalling, 50
- Appeon Server Web Component installation

verifying the installation, 29

ASE Chained mode, 45

ASE Chained Mode, 45

audience, 1

B

- before installing Appeon Developer
 - checking Developer PC, 23
 - shutting down certain Window programs, 23
 - uninstalling the previous Appeon version, 23
 - upgrading PowerBuilder, 23
- before installing Appeon Server Web Component to a third-party Web server
 - installing and configuring WebSphere Redirector Plug-in, 29
 - shutting down certain program, 27
 - using compatible Web server, 27
- before installing Appeon Server Web Component to a third-party Web server:, 27
- before installing Web component
 - preparations for installing Web component to multiple Web server, 27

C

- checking the version of JScript.dll, 45
- client PC requirements
 - hardware, 7
 - software, 7
- configuration for installation
 - disabling Static Page Caching, 45
- configurations for IE 7 under Windows Vista, 40

Configuring Apeon Server Cluster, 35

D

Database server requirements, 8

developer PC requirements

hardware, 8

software, 8

dynamic DataWindows support, 45

H

how to use this book, 1

I

if you need help, 2

Installation Requirements

system language settings, 45

installation scenarios

Developer PC installation, 11

remote Apeon Server installation,
third-party Web server, 11

remote Apeon Server installation,
WebSphere HTTP server, 11

installation scenarios

Apeon Server Cluster, 12

Installing to non- WebSphere Web servers,
27

Internet Explorer configuration

Internet Explorer settings, 37

security settings, 37

Internet Explorer configuration

caching recommendation, 39

Internet Explorer configuration

caching recommendation

temporary Internet files folder,
Advanced tab, 39

Internet Explorer configuration

caching recommendation

temporary Internet files, General tab,
39

Internet Explorer configuration

caching recommendation

disk space to use, 39

Internet Explorer configuration

IE advanced settings, 40

J

JScript.dll, checking the version, 45

L

language setting

regional options, your locale, 44

system locale, 44

P

Post-Installation configuration, 36

Product Activation, 31

R

related documents, 1

S

section 508 compliance, 3

security settings

custom level settings, 38

default level settings, 38

security level and zone, 37

starting the installation, 13

Stored procedures provided for solving
ASE Chained Mode issue, 46

supporting dynamic DataWindows, 45

system architecture, 3

system architecture

Client PC, 4

system architecture

Developer PC, 4

system architecture

Web Server, 4

system architecture

Application Server, 4
system architecture
Database Server, 4
system language settings, 44

T

technical support, 56

U

uninstalling Appeon Developer, 47
Uninstalling Appeon Help, 54

uninstalling Appeon Server, 50
uninstalling Web Component from
multiple third-party Web servers, 54
uninstalling Web component from non
WebSphere Web server, 27, 51

W

Web component uninstall from non
WebSphere Web server, 51
Windows account with administrator
rights, 37