

Appeon Installation Guide

Appeon® 3.1 for PowerBuilder®
FOR WINDOWS

DOCUMENT ID: DC37816-01-0310-01

LAST REVISED: September 13, 2005

Copyright © 2000-2005 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	3
2 Introduction	4
2.1 Overview	4
2.2 Section 508 compliance	4
2.3 System architecture	4
2.4 Appeon components	6
2.4.1 Appeon Developer	6
2.4.2 Appeon Server	6
2.4.3 Appeon Server Web Component (for third-party Web Servers)	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 Developer requirements	7
3.2.1 Software requirements	7
3.2.2 Hardware requirements	7
3.3 Appeon Server requirements	8
3.3.1 Software requirements	8
3.3.2 Hardware requirements	8
3.3.3 (Optional) Third-party Web Server	8
3.4 Database Server requirements	8
4 Installing Appeon 3.1	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 EAServer HTTP server	11
4.2.4 Remote Appeon Server using a third-party Web Server	11
4.2.5 Multiple Appeon Servers	12
4.3 Three installation methods	12
4.4 Appeon 3.1 new installation	13
4.4.1 Starting the installation	13
4.4.2 Appeon Server installation	16
4.4.3 Appeon Developer installation	33
4.4.4 Appeon Server Web Component installation	43
4.4.5 PDF printers installation	49
4.5 Appeon 3.1 upgrade installation	59
4.5.1 Overview	59
4.5.2 Before you upgrade	59

4.5.3 Upgrade procedure	60
4.5.4 Upgrade of configuration settings	68
5 Third-party Web Server Configuration	72
5.1 Overview	72
5.2 Configuring Apache 1.3 as the Web server	72
5.2.1 Basic configuration	73
5.2.2 Additional configuration for Appeon Xcelerator deployment	74
5.2.3 Additional configuration for Pure-JavaScript deployment	74
5.3 Configuring Apache 2.0 as the Web server	75
5.3.1 Basic Configuration	76
5.3.2 Additional configurations	77
5.4 Configuring IIS as the Web server	77
5.4.1 Basic configuration	77
5.4.2 Additional configuration if you are using IIS 6.0	82
5.4.3 Additional configurations for Appeon Xcelerator deployment	83
5.4.4 Additional configurations for Pure-JavaScript deployment	83
6 Configuring Load Balancing for Multiple Appeon Servers	84
6.1 Overview	84
6.2 Installing to multiple EAServers	84
6.3 Configuring the Web Server and EAServers for load balancing	84
6.3.1 Division of work between multiple Appeon Server and Web Server	85
6.3.2 EAServer configuration	85
6.4 Configuring AEM for multiple Appeon Servers	89
7 Post-Installation Configuration Tasks	90
7.1 Internet Explorer configuration	91
7.1.1 Overview	91
7.1.2 Verifying Internet Explorer settings are correct	91
7.1.3 Security settings	91
7.1.4 Internet Explorer files caching	92
7.1.5 Internet Explorer advanced settings	93
7.2 System language settings	93
7.3 Checking the version of JScript.dll	94
7.4 Configuration for supporting dynamic DataWindows	94
7.5 Configuration for ASE Chained mode issue	94
7.5.1 Known issue with ASE Chained Mode	95
7.5.2 Stored procedures provided for solving the issue	95
8 Uninstalling Appeon 3.1	96
8.1 Overview	96
8.2 Uninstalling Appeon Developer	96
8.3 Uninstalling Appeon Server	99
8.3.1 Uninstalling EAServer 5.2 that is installed with Appeon Server	102
8.4 Uninstalling Appeon Server Web Component (for third-party Web Servers only)	103
8.4.1 Web Component uninstall if multiple third-party Web Servers are involved	105

8.5 Uninstalling PDF printers.....	105
8.5.1 Uninstalling Appeon PDFPrinter	105
8.5.2 Uninstalling Customer PDFPrinter	107
9 Technical Support.....	110
Index.....	111

1 About This Book

1.1 Audience

This book is for users who want to install Appeon[®] 3.1 for PowerBuilder[®].

1.2 How to use this book

There are nine chapters in this book.

Chapter 1: About This Book

A general description of this book

Chapter 2: Introduction

An overview of Appeon for PowerBuilder and its system architecture

Chapter 3: Installation Requirements

The system requirements for installing Appeon for PowerBuilder

Chapter 4: Installing Appeon 3.1

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

Chapter 5: Third-party Web Server Configuration

Instructions for installing and configuring the redirector plug-ins

Chapter 6: Configuring Load Balancing with Multiple Appeon Servers

Instructions for configuring multiple Appeon Servers for load balancing

Chapter 7: Post-Installation Configuration Tasks

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

Chapter 8: Uninstalling Appeon 3.1

Instructions for uninstalling Appeon for PowerBuilder

Chapter 9: Technical Support

Important information for technical support

1.3 Related documents

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

- *Appeon Demo Applications Tutorial*:

Introduces Appeon's demo applications, including the Appeon Sales Application Demo, Appeon Code Examples and the Appeon ACF Demo, which show Appeon's capability in converting PowerBuilder applications to the Web.

- *Appeon Developer User Guide (or Working with Appeon Developer Toolbar)*

Provides instructions on how to use the Apppeon Developer toolbar in Apppeon 3.1.

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

- *Apppeon Enterprise Manager User Guide:*

Introduces the Apppeon Enterprise Manager, a Web application that maintains Apppeon Web applications and Apppeon Server over the Internet, an intranet or an extranet.

- *Apppeon Supported Features Guide for Apppeon Xcelerator (or Apppeon Features Help for Apppeon Xcelerator):*

Provides a detailed list of supported PowerBuilder features which can be converted to the Web with Apppeon 3.1 Xcelerator deployment option as well as which features are unsupported.

Apppeon Features Help for Apppeon Xcelerator is an HTML version of the *Apppeon Supported Features Guide for Apppeon Xcelerator Deployment*.

- *Apppeon Supported Features Guide for Pure-JavaScript (or Apppeon Features Help for Pure-JavaScript):*

Provides a detailed list of supported PowerBuilder features which can be converted to the Web with Apppeon 3.1 using the Pure-JavaScript deployment option, as well as features which are unsupported.

Apppeon Features Help for Pure-JavaScript is an HTML version of the *Apppeon Supported Features Guide for Pure-JavaScript Deployment*.

- *Apppeon Installation Guide:*

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

- *Apppeon Migration Guide:*

A process-oriented guide that illustrates the complete diagram of the Apppeon Web migration procedure and includes various topics related to steps in the procedure.

- *Apppeon Migration Tutorial:*

A tutorial that walks the user through the entire process of deploying a small PowerBuilder application to the Web.

- *Apppeon Performance Tuning Guide:*

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

- *Apppeon Troubleshooting Guide:*

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

- *Introduction to Apppeon:*

Guides you through all the documents included in Apppeon 3.1 for PowerBuilder.

- *Using the PowerBuilder Foundation Class Library with Apppeon (or Apppeon-compliant Framework Reference):*

Provides a detailed list of supported PowerBuilder PFC features which and can be converted to the Web with Apeon, as well as which features are not supported.

Apeon-compliant Framework Reference is an HTML version of the *Using the PowerBuilder Foundation Class Library with Apeon*.

- *What's New in Apeon:*

Introduces new features and changes in Apeon 3.1 for PowerBuilder.

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.

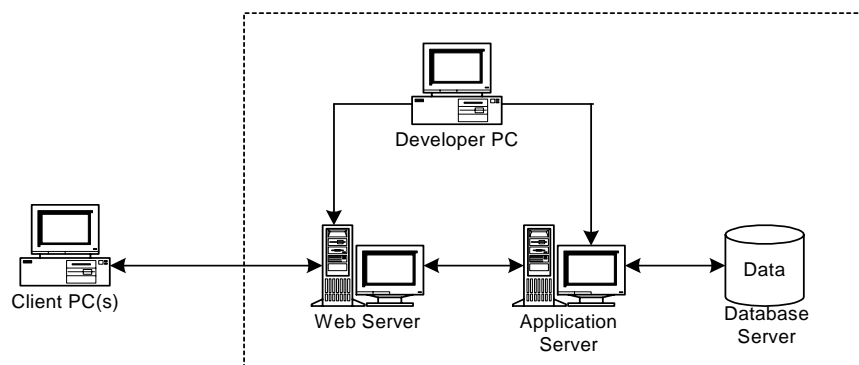
With Apeon for PowerBuilder, enterprises can continue to use PowerBuilder to build Client/Server applications. At the click of a button, the applications can be deployed to the Web. Enterprises can also transform existing Client/Server applications into Web applications. It is no longer a daunting task 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 a group of nonclustered EAServers involving multiple computers to provide load balancing.

Figure 2-1: Appeon 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	The Developer PC will ultimately deploy your PowerBuilder application to the testing and production Web environments with the n-Tier architecture. The Developer PC should be configured with both Appeon Developer and Appeon Server	Appeon Developer Appeon Server	PowerBuilder Internet Explorer Appeon provided EAServer (or the user can use a previously installed EAServer)
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	EAServer HTTP Server or any EAServer-compatible Web Server, such as Apache or IIS.
Application Server	Hosts the DataWindows and n-Tier NVOs 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 PDF printing.	Appeon Server	EAServer
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 components

2.4.1 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.

2.4.2 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 NVO support, transaction management, PDF 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 EAServer.

During the Appeon Server installation, the Appeon Server Web Component is copied to the EAServer HTTP server. If you are using one EAServer 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)

The 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 Sybase redirector plug-in. For detailed instructions, refer to Chapter 5: [Third-party Web Server Configuration](#).

3 Installation Requirements

3.1 Client requirements

3.1.1 Software requirements

- Microsoft Windows 2000 (any edition) or Windows XP (any edition) or Windows Server 2003 (any edition).

Applications deployed in Pure-JavaScript can be run in Windows 98 though applications deployed with Apeon Xcelerator cannot.

- Microsoft Internet Explorer 6.0 SP1 or Internet Explorer 6.0 SP2
- (Optional) Adobe Acrobat Reader 6.0 (for viewing printed PDF DataWindows or reports)

3.1.2 Hardware requirements

- A Pentium-class processor running at 1 GHz or faster
- At least 128 MB RAM (256 MB RAM recommended)

3.2 Apeon Developer requirements

3.2.1 Software requirements

- Sybase PowerBuilder® 8.0.4 Build 10784, PowerBuilder 9.0.2 Build 7578 or PowerBuilder 10.2 Build 8050. If you do not have the required build, update it by running the PowerBuilder EBF program provided on the Apeon Installation CD or downloaded from the Sybase Downloads website.
- Microsoft Windows 2000 SP4 (Professional, Server and Advanced Server Edition), Windows XP SP1 (Professional Edition), Windows XP SP2 (Professional Edition) or Windows Server 2003 (Enterprise, Standard, WebServer and DataCenter Edition).
- Microsoft Internet Explorer 6.0 SP1 or SP2
- 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 or an IBM DB2 database.
- (Optional) Sybase Adaptive Server® Anywhere 7.0.4 or 8.0.2 or 9.0 (for running the PowerBuilder demos included in Apeon installation)

3.2.2 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.

- CD-ROM drive (for Appeon installation from CD)

3.3 Appeon Server requirements

3.3.1 Software requirements

- Microsoft Windows 2000 SP4 (Professional, Server or Advanced Server Edition), Windows XP SP1 (Professional Edition) or Windows XP SP2 (Professional Edition) or Windows Server 2003 (Enterprise, Standard, WebServer and DataCenter Edition).
- Sybase EAServer 5.2 Build 52025 (Developer, Workgroup and Advanced Edition). Appeon offers to install EAServer 5.2 during the Appeon Server installation, (EAServer 5.2 is bundled with Appeon Server and it is called a “silent install” in this document). Alternatively, you can install it separately before installing Appeon Server.
- Sybase PowerBuilder® Virtual Machine (PBVM) 8.0.4 Build 10784, 9.0.2 Build 7578 or 10.2 Build 8050. If you do not have the required build, update it by running the PowerBuilder EBF setup program, which is available on both the Appeon Installation CD and the Sybase Downloads website.
- Sun® Java 2 JDK 1.3.1 patch level 06 or JDK 1.4 patch level 01.

3.3.2 Hardware requirements

- Pentium-class processor(s) running at 733 MHz or faster
- 512 MB RAM
- 588 MB hard drive space (for EAServer installation) plus 250 MB hard drive space (for Appeon Server installation)
- CD-ROM drive (for Appeon installation from CD)

3.3.3 (Optional) Third-party Web Server

Appeon Server can run with any of the following third-party Web Servers: Apache 1.3, Apache 2.0 or Microsoft IIS 5.0 or 6.0; all will require the Sybase Web Server Redirector plug-in to be installed.

When you use Apache 2.0 and IIS 6.0 as the Web server, note that:

- If you use Apache 2.0 as the Web server, only the Appeon Xcelerator deployment option can be used to deploy your application. The Pure-JavaScript deployment does not work in Apache 2.0.
- 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.

3.4 Database Server requirements

Appeon 3.1 for PowerBuilder can run with any of the following Database Servers and their drivers:

- Sybase Adaptive Server Anywhere 7.0.4 or 8.0.2 or 9.0 with Sybase iAnywhere™ JDBC driver

- Sybase Adaptive Server[®] Enterprise (ASE) 12.x with Sybase jConnect[™] or iAnywhere[™] 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 with Microsoft SQL Server JDBC 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

Copy the corresponding driver files for the Database Server in use to the %JAGUAR%\java\lib folder on the machine hosting Apeon Server. %JAGUAR% indicates the EAServer installation path. Refer to *JDBC driver preparation* Section in the *Apeon Migration Guide* for more information.

4 Installing Appeon 3.1

4.1 Overview

Appeon for PowerBuilder consists of the following three components; each is installed using a separate Setup program.

Table 4-1: Appeon components

Component	Description	Installed on
Appeon Developer	An add-in that provides the Web deployment option to PowerBuilder.	PowerBuilder running Windows 2000, XP or 2003.
Appeon Server	A set of EAServer 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.	EAServer running Windows 2000, XP or 2003. 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.)

Note: If you try to install more than one Appeon component at a time, you will receive the following error message: “1628: Failed to complete installation”.

You must wait until an installation has finished before starting another.

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 Sybase ASA (Optional) Sybase ASE, Oracle, Microsoft SQL Server or IBM DB2 depending on application database (Optional) PDF printer and Adobe Acrobat Reader	Computer 1: Appeon Developer Appeon Server

4.2.3 Remote Appeon Server using EAServer 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 (Optional) Adobe Acrobat Reader and PDF printer	Computer 1: Appeon Developer
Computer 2 serves as Web Server, Application Server and Database Server.	Computer 2: Microsoft Windows 2000, XP or 2003 (Optional) Sybase ASA, Sybase ASE, Oracle, Microsoft SQL Server or IBM DB2 depending on application database (Optional) Appeon PDFPrinter	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 (Optional) Adobe Acrobat Reader and PDF printer	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 or XP (Optional) Sybase ASA, Sybase ASE, Oracle, Microsoft SQL Server or IBM DB2 depending on application database (Optional) Appeon PDFPrinter	Computer 3: Appeon Server

4.2.5 Multiple Appeon Servers

Table 4-5: Multiple Appeon Server installation

Scenarios	Requirements	Appeon Components
In this example, N (N>=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 (Optional) Adobe Acrobat Reader and PDF printer	Computer 1: Appeon Developer
Computer 2 is used for Web Server;	Computer 2: Microsoft IIS or Apache Sybase Web Server redirector plug-in	Computer 2: Appeon Server Web Component
Computer 3 is the Database Server.	Computer 3: Sybase ASA, Sybase ASE, Oracle, Microsoft SQL Server or IBM DB2 depending on application database	Computer 3: None
Computers 4 to n are a group of nonclustered EAServers.	Computers 4 to n: Microsoft Windows 2000, XP or 2003 (Optional) Appeon PDFPrinter	Computers 4 to n: Appeon Server

4.3 Three installation methods

Appeon 3.1 provides three installation methods, “new installation”, “upgrade installation” and “EBF installation”.

Table 4-6: Three installation methods

Method	When to use it
New installation	<ul style="list-style-type: none"> • If no version of Appeon for PowerBuilder is already installed; • If a version earlier than Appeon 2.8 is installed;

	<ul style="list-style-type: none"> If Appeon 2.8 or 3.0 is already installed, and you plan to upgrade to Appeon 3.1 for deploying PowerBuilder 10 application; The upgrade installation and EBF installation methods cannot change the PowerBuilder and PBVM versions you selected to use with Appeon. If Appeon 2.8 is installed, and you plan to specify configuration from the beginning Appeon recommends new installation rather than upgrade installation, because with new installation, you are required to specify configuration settings from the beginning. Upgrading, requires certain modifications to configuration settings that are lost or changed during the upgrade, otherwise, applications that previously worked with Appeon 2.8, after redeployment using Appeon 3.1, may fail.
Upgrade installation	<ul style="list-style-type: none"> If Appeon 2.8 is already installed Run the Appeon 3.1 installation program and the program automatically performs an upgrade installation. If you prefer a new installation, uninstall Appeon 2.8, prepare the environment for Appeon 3.1 installation, and run the installation program.
EBF installation	<ul style="list-style-type: none"> If Appeon 3.0 is already installed Run the appropriate Appeon 3.0 EBF program and follow the instructions in the EBF readme file to upgrade to Appeon 3.1. The Appeon EBF program and the readme file can be downloaded from the Sybase Website (http://downloads.sybase.com/swd/summary.do) or the Appeon Website (http://www.appeon.com/downloads/). Note that the EBF installation cannot change the PowerBuilder version selected during Appeon 3.0 installation. When you want to deploy PowerBuilder 10 with Appeon 3.1, you cannot use the EBF installation option, but use new installation for installing Appeon 3.1.

4.4 Appeon 3.1 new installation

4.4.1 Starting the installation

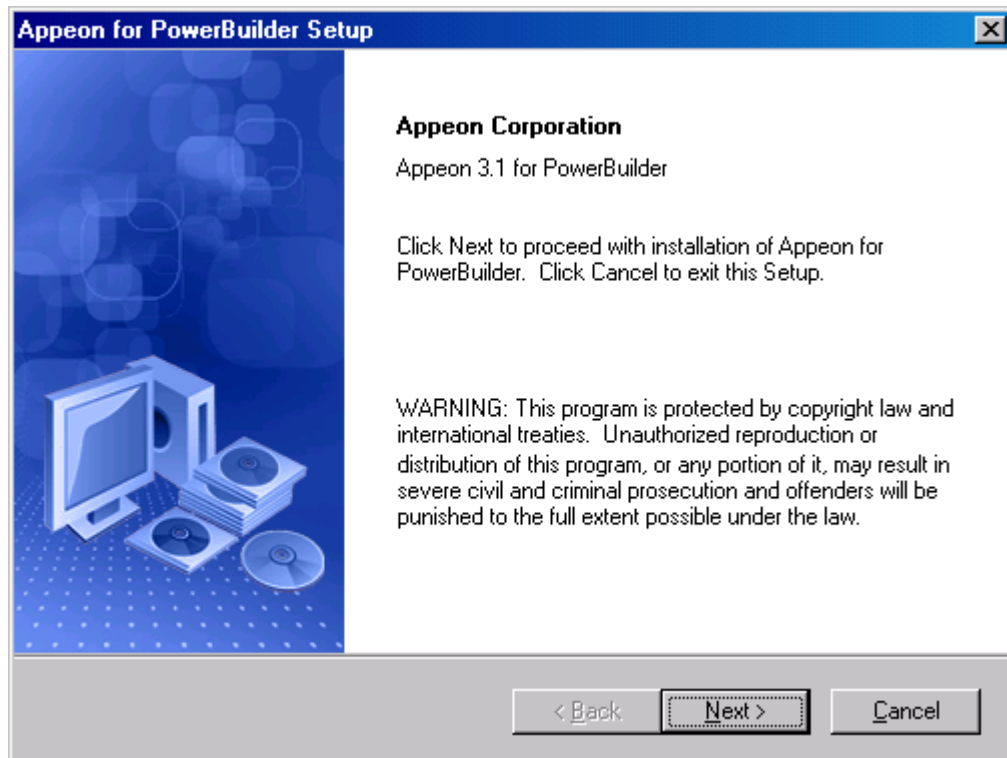
Step 1 – Double click *Setup.exe* in the installation root. The entry page has three links (Figure 4-1).

- View Appeon for PowerBuilder Readme: includes key system requirements and installation information.
- Install Appeon for PowerBuilder: installs one or more of the three components – Appeon Server, Appeon Developer, or Appeon Server Web Component.
- Install Appeon PDFPrinter: installs Appeon PDFPrinter (see [Installing Appeon PDFPrinter](#) section).

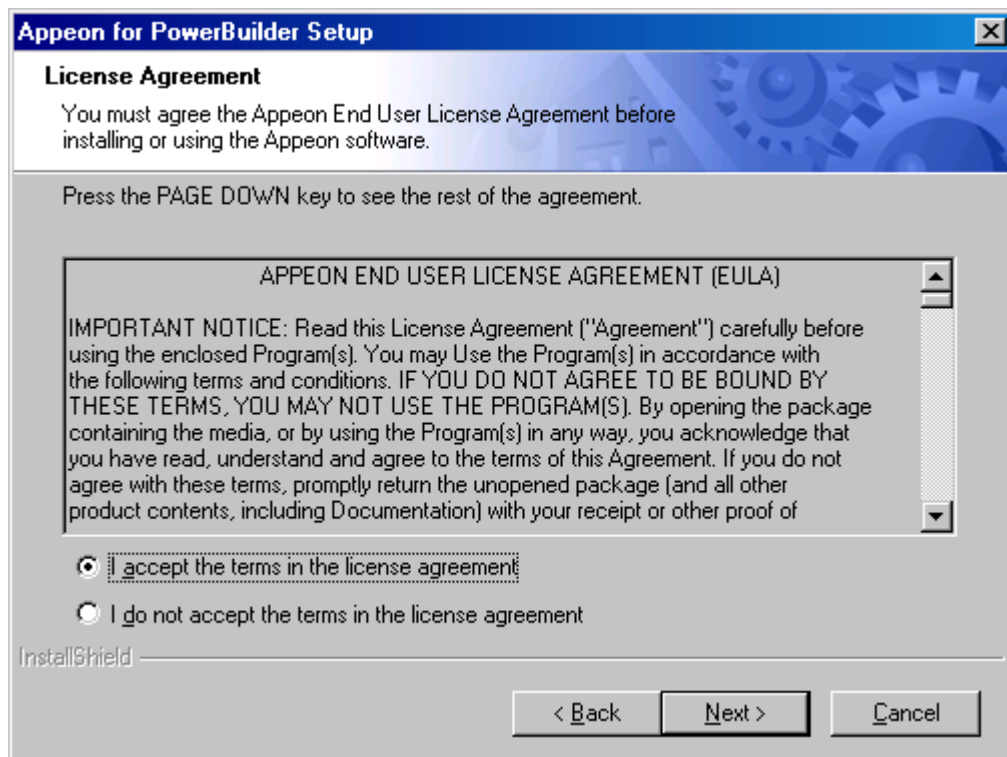
Figure 4-1: Entry page

Step 2 – Click *Install Appeon for PowerBuilder*.

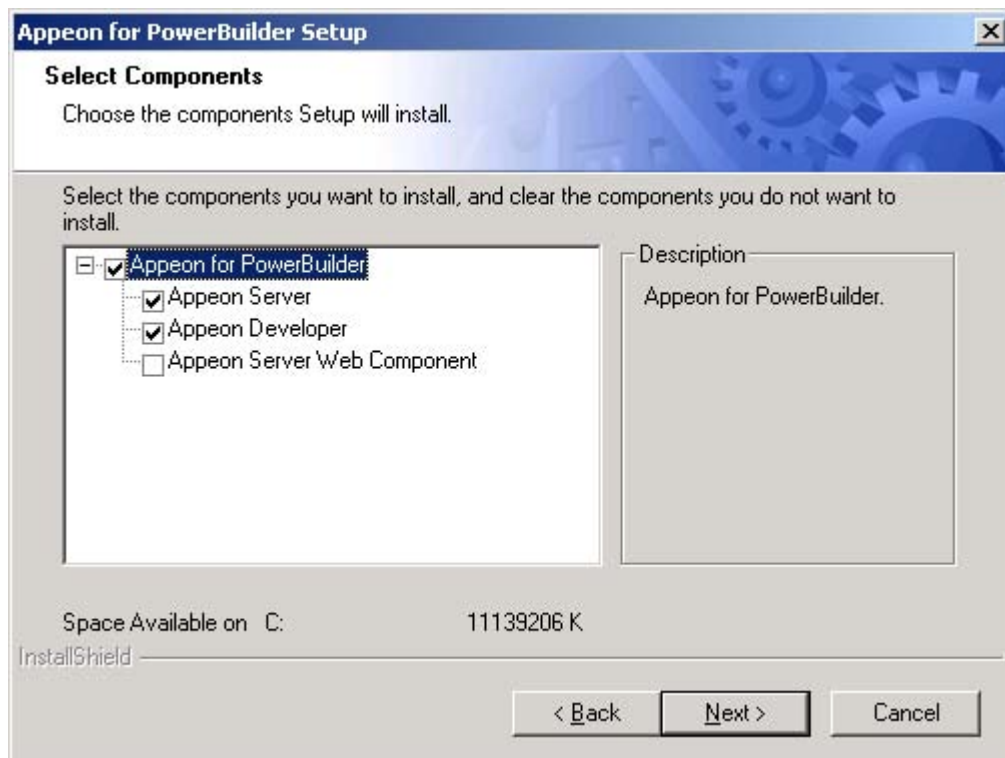
Step 3 – Click *Next* on the Appeon for PowerBuilder introduction screen (Figure 4-2).

Figure 4-2: Introduction page

Step 4 – Accept the terms in the license agreement page and click *Next* (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](#).

4.4.2 Appeon Server installation

4.4.2.1 Prerequisites

- 1) Verify that PBVM is installed. Setup will automatically search the registry for the PBVM location in the following order:
 - PBVM installed with PowerBuilder
 - PBVM installed by running the independent PBVM Setup program
 - PBVM installed with EAServer.

You must make sure PBVM is installed before installing Appeon Server.

- 2) 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 Section 7.2.5 in the *Appeon Troubleshooting Guide*.

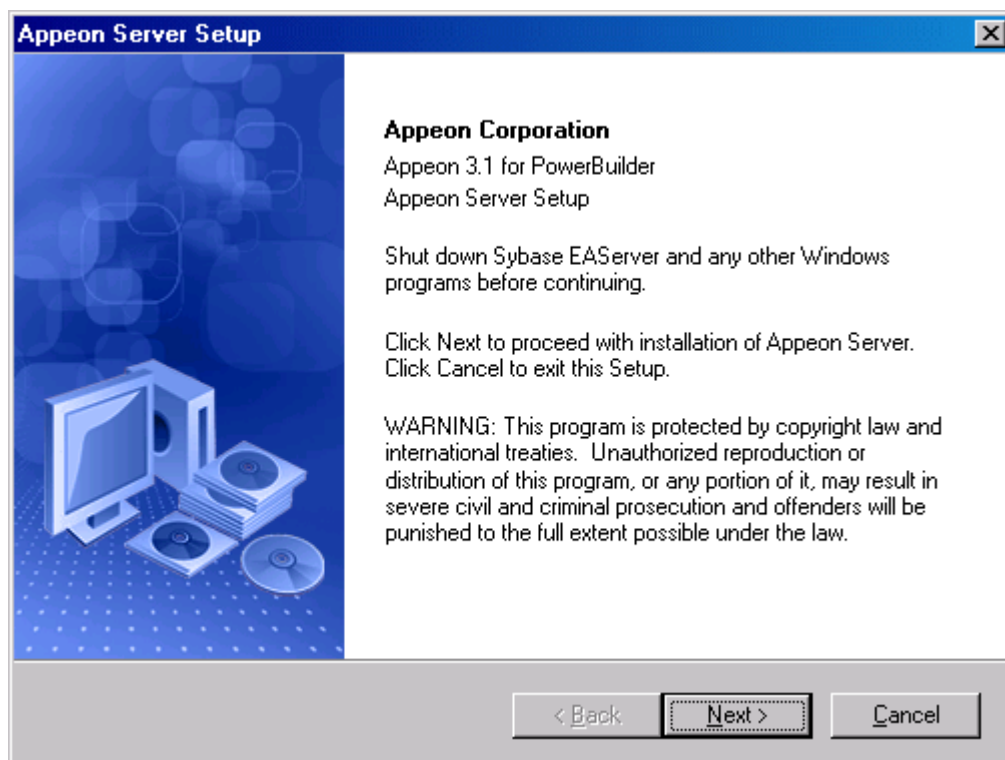
- 3) Before beginning the installation process, make sure that you shut down Sybase PowerBuilder, EAServer, Sybase ASA, Sybase EP Management Agent service and any other Windows programs that are running.
- 4) Verify in Windows Task Manager that the following processes are not running in the processes tab: *adt.exe*, *jagsrv.exe*, *jagsrvagent.exe*, *PBParser.exe*, *pb80.exe*, *pb90.exe* and *pb100.exe*. If these processes are running, be sure to end them by clicking the *End Process* button on the Windows Task Manager. You will get a Task Manager warning; acknowledge this warning and proceed by clicking *Yes*.
- 5) If you do not have EAServer 5.2 installed on your computer and plan to install it by Appeon installation program, copy the Appeon installation program to the computer to which EAServer and Appeon Server are built in.

4.4.2.2 Installation instructions

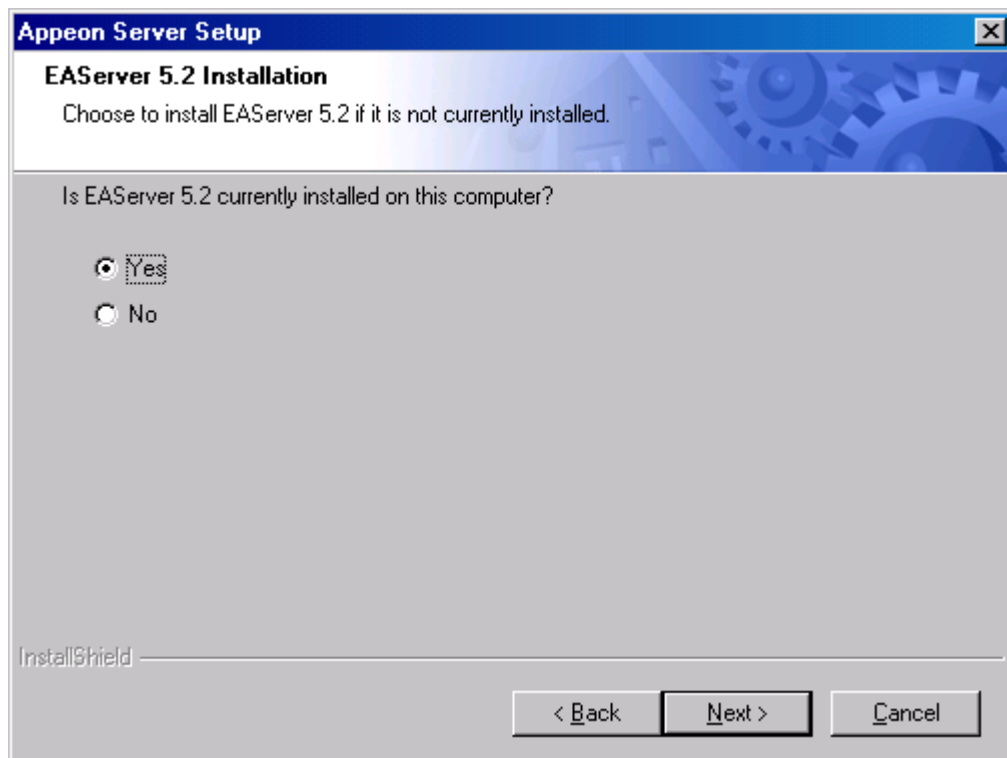
Step 1 – Launch the Appeon for PowerBuilder Setup program and select to install Appeon Server (see [Starting the installation](#) section).

Step 2 – Click *Next* on the Appeon Server introduction screen (Figure 4-5).

Figure 4-5: Appeon Server introduction screen



Step 3 – Specify whether EAServer 5.2 has already been installed on your computer (Figure 4-6).

Figure 4-6: EAServer 5.2 installation

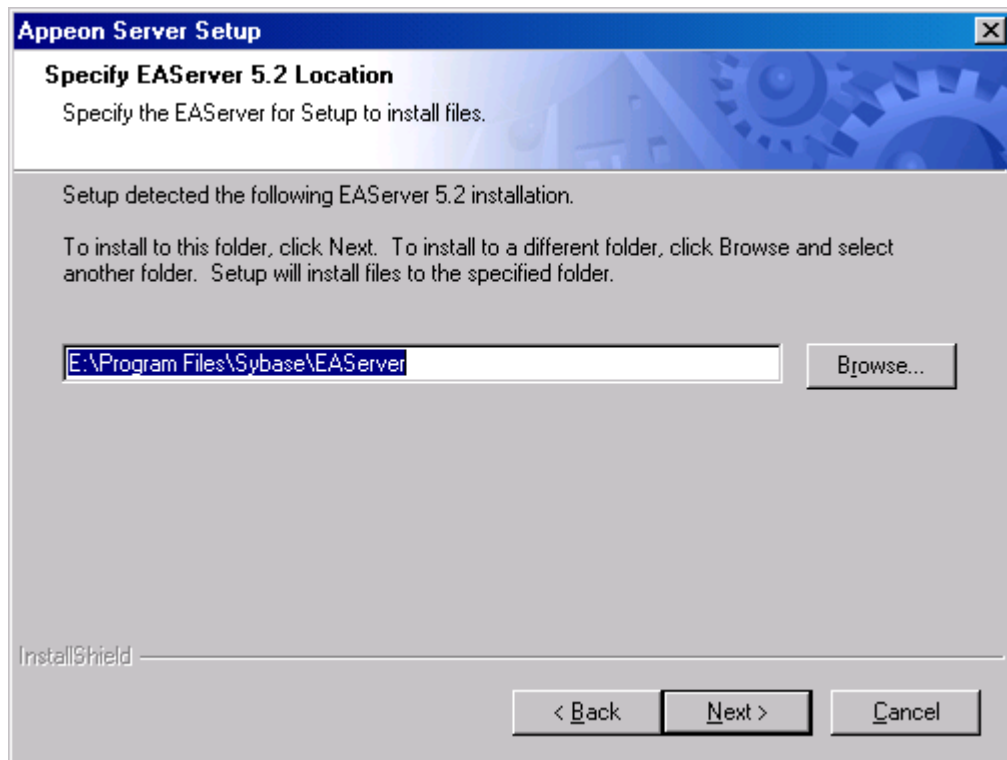
- Select “Yes” if EAServer 5.2 has been installed on your computer. (Figure 4-6).
- Select “No” if you do not have EAServer 5.2 on your machine. With this option, the Appeon installation program will silently install EAServer 5.2. There will be two additional steps in the Appeon Server installation process to perform EAServer 5.2 installation. Refer to Section 4.4.2.3: [EAServer 5.2 silent install](#) for details on these additional steps.

The subsequent steps assume that you have selected “Yes”.

Step 4 – Specify the path of the EAServer where Appeon Server will be integrated and click *Next* (Figure 4-7).

Setup displays the EAServer 5.2 location. Click *Browse* to select a different location.

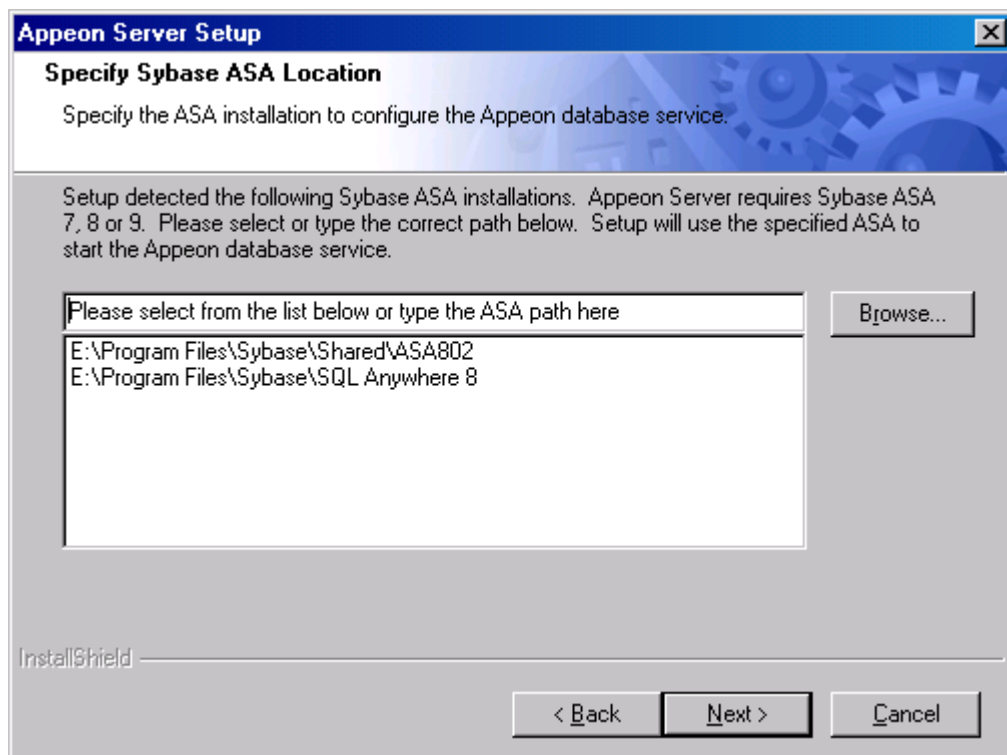
Figure 4-7: EAServer 5.2 location



Step 5 – Specify the path for the ASA (Figure 4-8) and click *Next*.

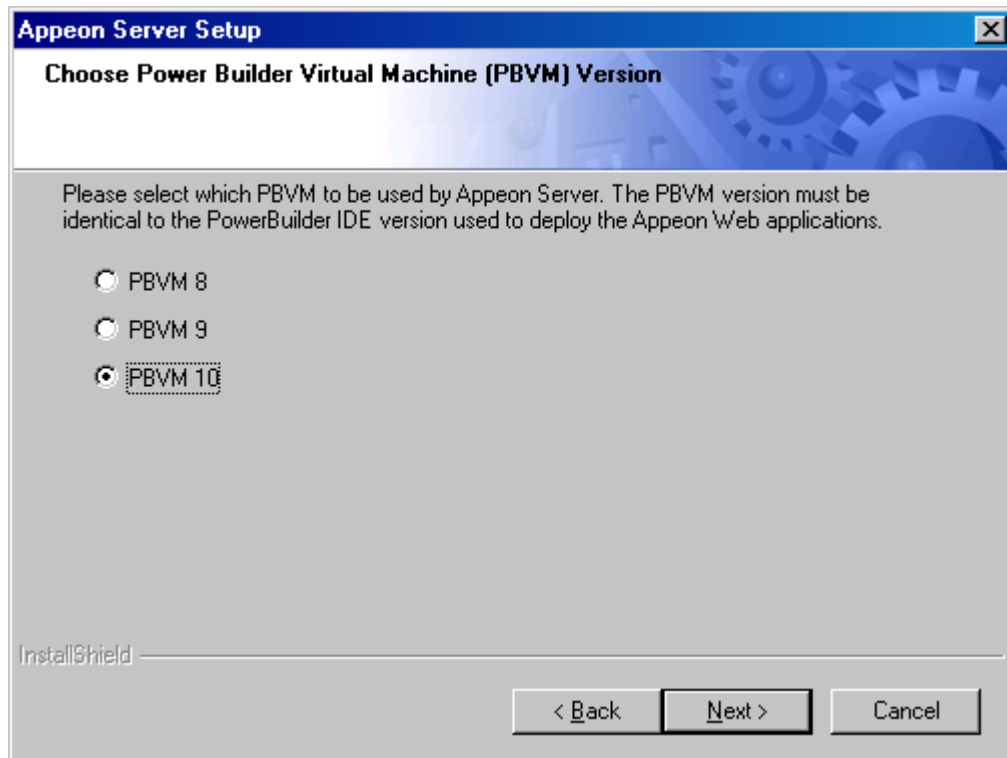
Setup lists all copies of ASA detected in your machine. The reason that Appeon Server requires ASA is that Appeon Server has a private ASA database (Appeondb) for storing profile information and security-sensitive information.

Figure 4-8: ASA location



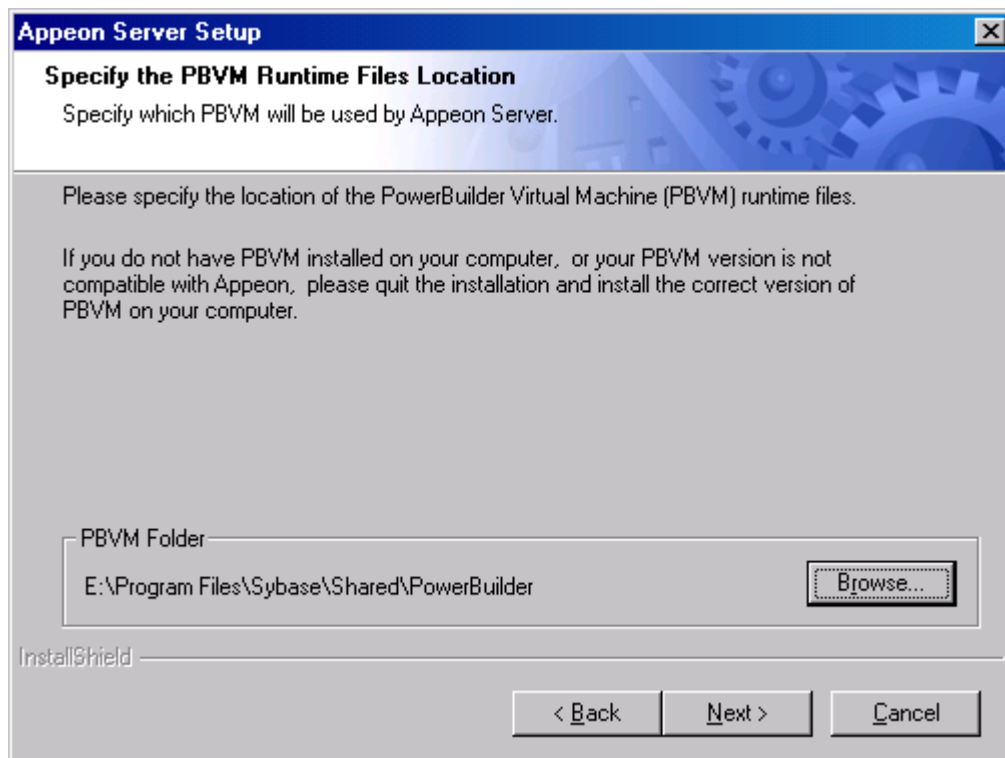
Step 6 – Specify the version of PowerBuilder Virtual Machine (PBVM) to be used by Appeon Server (Figure 4-9) and click *Next*.

Figure 4-9: PBVM version



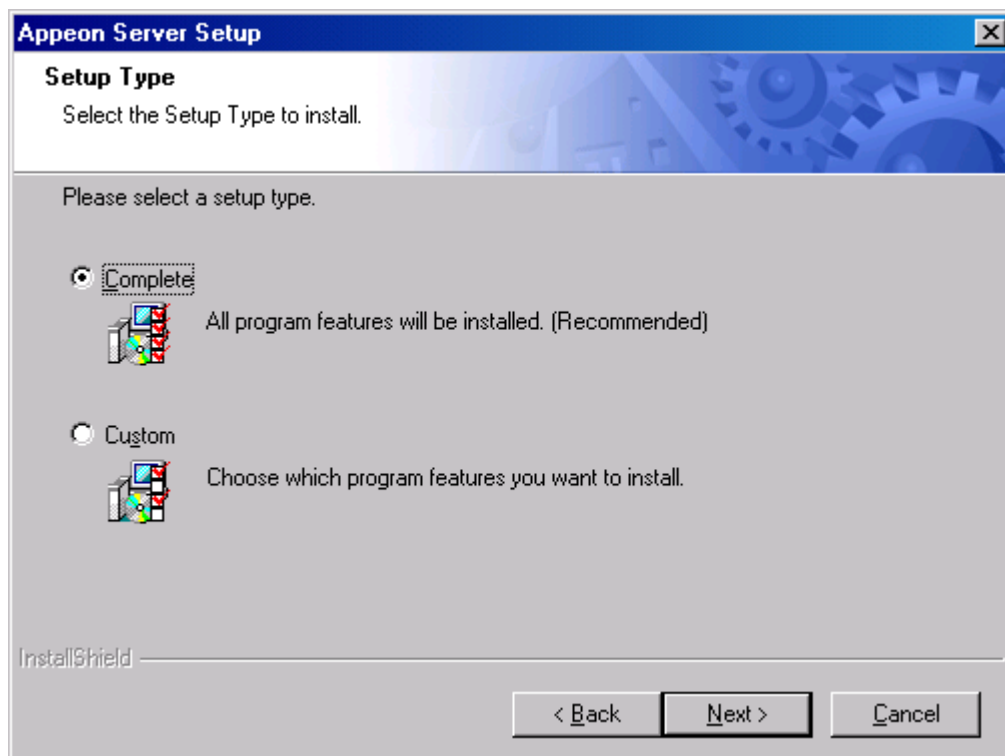
- Select PBVM 8 to deploy applications with PowerBuilder 8 IDE.
- Select PBVM 9 to deploy applications with PowerBuilder 9 IDE.
- Select PBVM 10 to deploy applications with PowerBuilder 10 IDE.

Step 7 – Specify the location for the PowerBuilder Virtual Machine (PBVM) files (Figure 4-10) and click *Next*.

Figure 4-10: PBVM location

Setup will display the location of the first PBVM detected. If you do not have the correct version of PBVM installed on your computer, a warning message will appear indicating “PBVM cannot be found in the specified folder”. In this case, exit the setup and install the correct version of PBVM on your machine.

Step 8 – Specify the setup type (Figure 4-11):

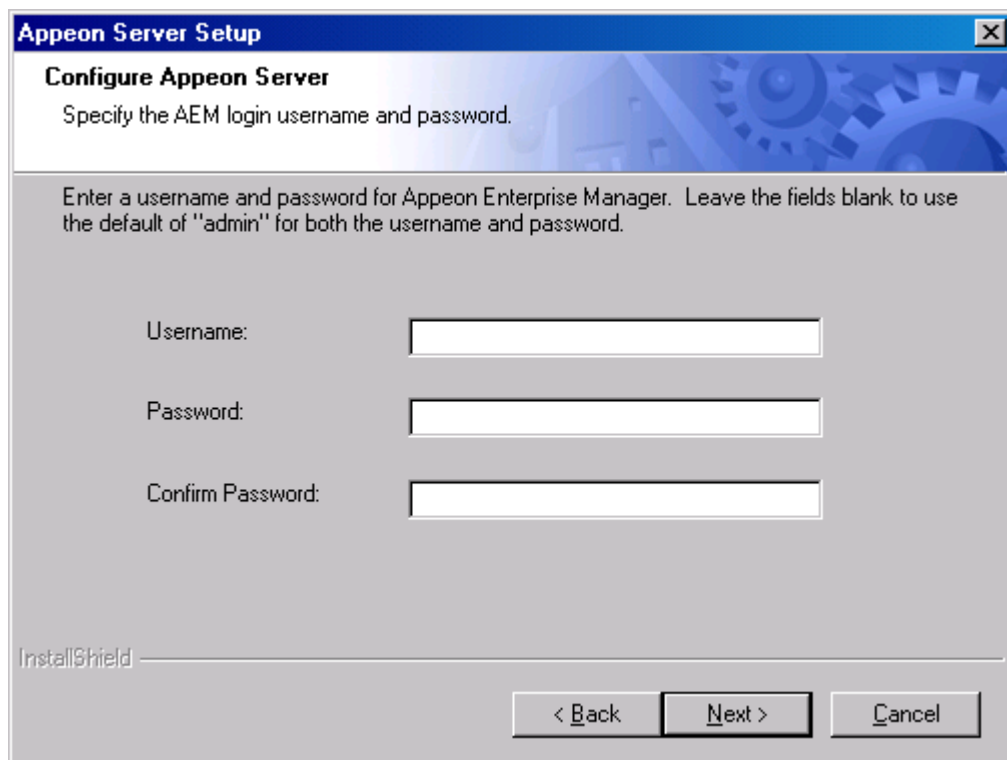
Figure 4-11: Appeon Server setup type

- Choosing the Complete setup will install Appeon Server program files and two versions of each Appeon Web Demo Application (one Pure-JavaScript deployment and one Appeon Xcelerator deployment). The Complete setup is recommended.
- If you choose the Custom setup, you can decide whether or not to install the Demo Applications. The Database for Demos is required and cannot be unchecked if any of the three Web demos is selected. The Appeon Server program files must be installed and cannot be unchecked.

Step 9 – Specify the user name and password for Appeon Enterprise Manager (AEM).

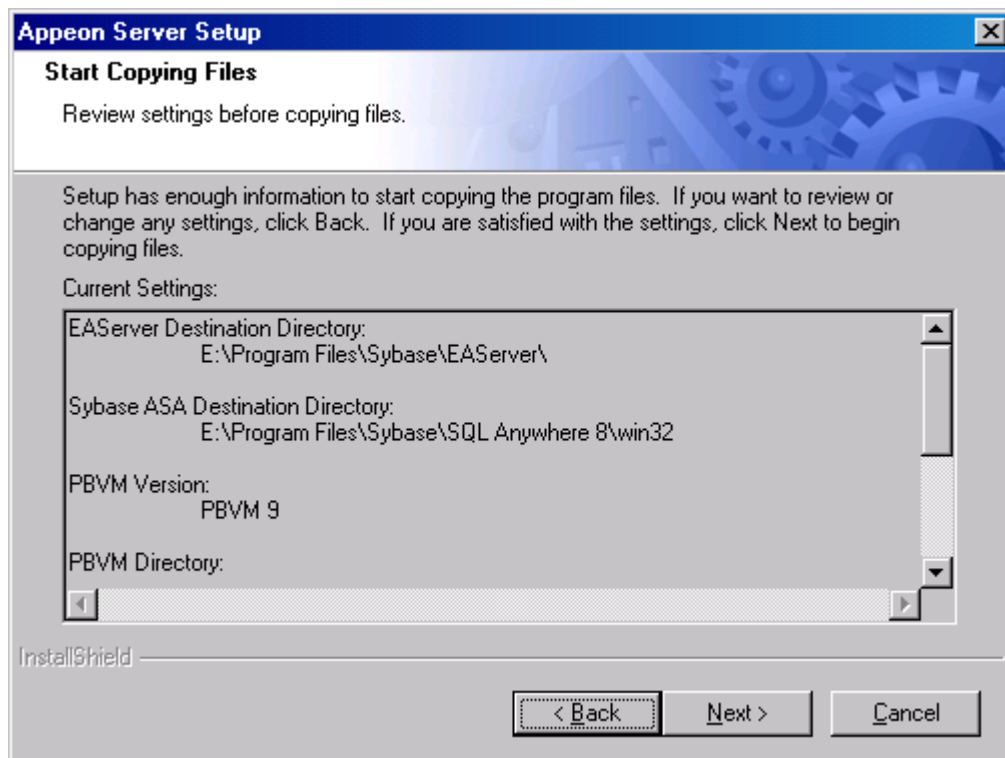
Leaving these fields blank indicates that both the user name and the password are “admin” by default, as shown in Figure 4-12.

Figure 4-12: Configure Appeon Server



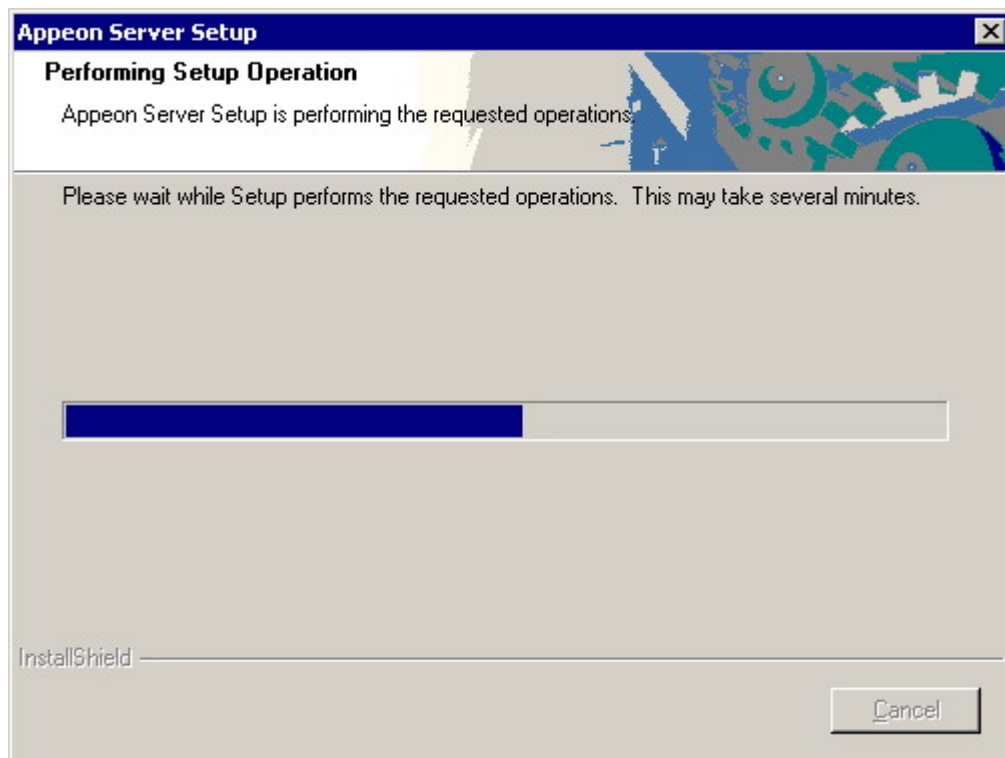
Step 10 – Check the summary of settings (Figure 4-13).

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

Figure 4-13: Summary of settings

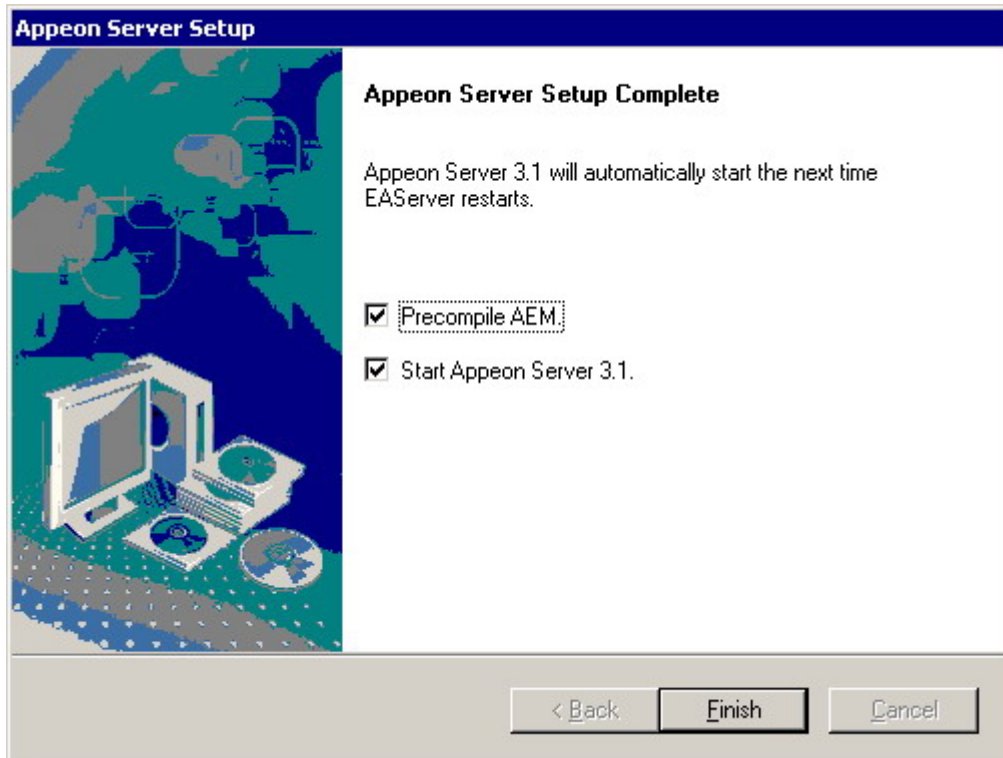
At the click of the *Next* button, the installation program begins copying files to your computer, as shown in Figure 4-14.

Note: If you are silently installing EAServer 5.2, please refer to [Copy EAServer 5.2 files to your computer](#) for more information.

Figure 4-14: Appeon Server installation process

Step 11 – Choose whether to “*Precompile AEM*” or “*Start Appeon Server 3.1*” (Figure 4-15). Both of the items on the complete page are selected by default. To manually start Appeon Server from the Windows shortcut later, uncheck the box. Click the *Finish* button and wait until the installation is complete.

Figure 4-15: Appeon Server finish page



Step 12 – Click *Finish* to end the installation of Appeon Server (Figure 4-15).

If *Precompile AEM* is checked and you click the *Finish* button, a command window will open indicating that the program is now pre-compiling the AEM. Pre-compiling improves start-up performance for AEM. Refer to Figure 4-16 for more information:

Figure 4-16: Precompile window

```

C:\WINNT\system32\cmd.exe
ation/AEM/WEB-INF/lib/commons-fileupload.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/Repository/WebApplic
ation/AEM/WEB-INF/lib/castor-xml.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/Repository/WebApplic
ation/AEM/WEB-INF/lib/commons-beanutils.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/extensions/CacheTags
.jar for TLD entry
Parsing TLD in jar file /CacheTags.jar
added mapping: http://www.sybase.com/EAServer/cachetags.tld -> /CacheTags.jar ME
TA-INF/cachetags.tld

-----
Compiling /configAssistant/activation.jsp...
-----
Compiling /configAssistant/addApplication.jsp...
-----
Compiling /configAssistant/addCharsetOfApplication.jsp...
-----
Compiling /configAssistant/addClusteringServer.jsp...
-----
Compiling /configAssistant/addTransObject.jsp...
-----
Compiling /configAssistant/application.jsp...
-----
Compiling /configAssistant/applicationList.jsp...

```

If *Start Appeon Server 3.1* is checked and you click the *Finish* button, EAServer is started. Refer to Figure 4-17 for more information.

Figure 4-17: Start Appeon Server

```

C:\WINNT\system32\cmd.exe

Confidential property of Sybase, Inc.
(c) Copyright Sybase Inc. 1987,2005
All rights reserved.

Use, duplication, or disclosure by the United States Government
is subject to restrictions as set forth in FAR subparagraphs
52.227-19 (a)-(d) for civilian agency contracts and DFARS 252.227-7013
(c)(1)(ii) for Department of Defense contracts. Sybase reserves all
unpublished rights under the copyright laws of the United States.
Sybase, Inc. One Sybase Drive, Dublin, CA 94568 USA.

Enabling "128-bit" encryption.

Enterprise Application Server(TM)(EAS), has not been installed or set-up properl
y. The software is unable to locate the product license information.
Please contact Sybase, Inc. at 1-800-8-SYBASE; or support@sybase.com; or http://
support.sybase.com to obtain the proper license information. This EAS software w
ill default to Workgroup Edition.
2 Phase Commit option is not licensed
Clustering option is not licensed
High Availability option is not licensed

Starting services...

```

Note: During the Appeon Server installation, the Appeon Enterprise Manager (AEM) Web application and the Appeon Server Web Component are automatically installed to the EAServer HTTP server.

The Appeon Server Status Monitor is installed to the %JAGUAR%\appeon\bin folder. The Status Monitor will become effective only after the computer has been restarted. For detailed instructions on using and configuring the Status Monitor, refer to Chapter 7: *Status Monitor* in the *Appeon Enterprise Manager User Guide*.

4.4.2.3 EAServer 5.2 silent install

If you select “No” in response to the question “Is EAServer 5.2 currently installed on the computer?”, there are two additional steps in the Appeon Server installation process for performing the EAServer 5.2 silent install.

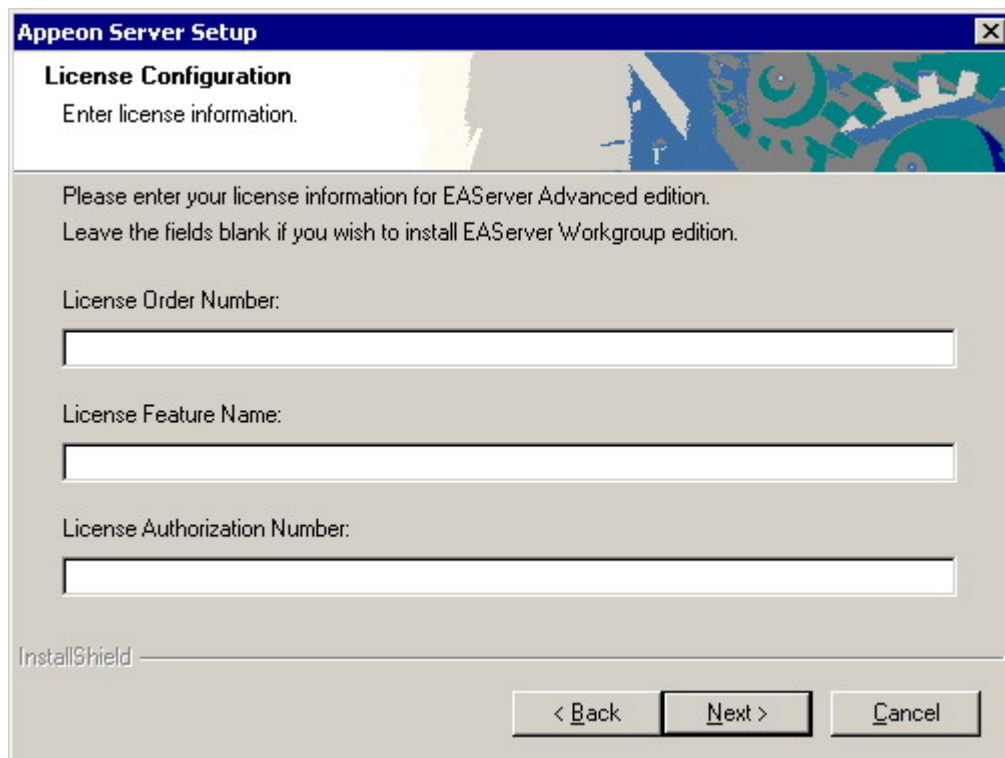
- Enter the necessary EAServer license information.
- The installation program copies EAServer 5.2 files to your computer after you confirm the installation settings.

EAServer license information

Provide the necessary license information in the License Configuration page as shown in Figure 4-18.

If you are installing the Advanced Edition of EAServer, type the information in the following text boxes: License Order Number, License Feature Name and License Authorization Number. The product license information is located on the license management certificate enclosed in an envelope in the shipping box.

Figure 4-18: EAServer license configuration page



If you do not provide the correct license information or the supplied information is incorrect, the Workgroup Edition will be installed.

Upgrading EAServer license from Workgroup to Advanced

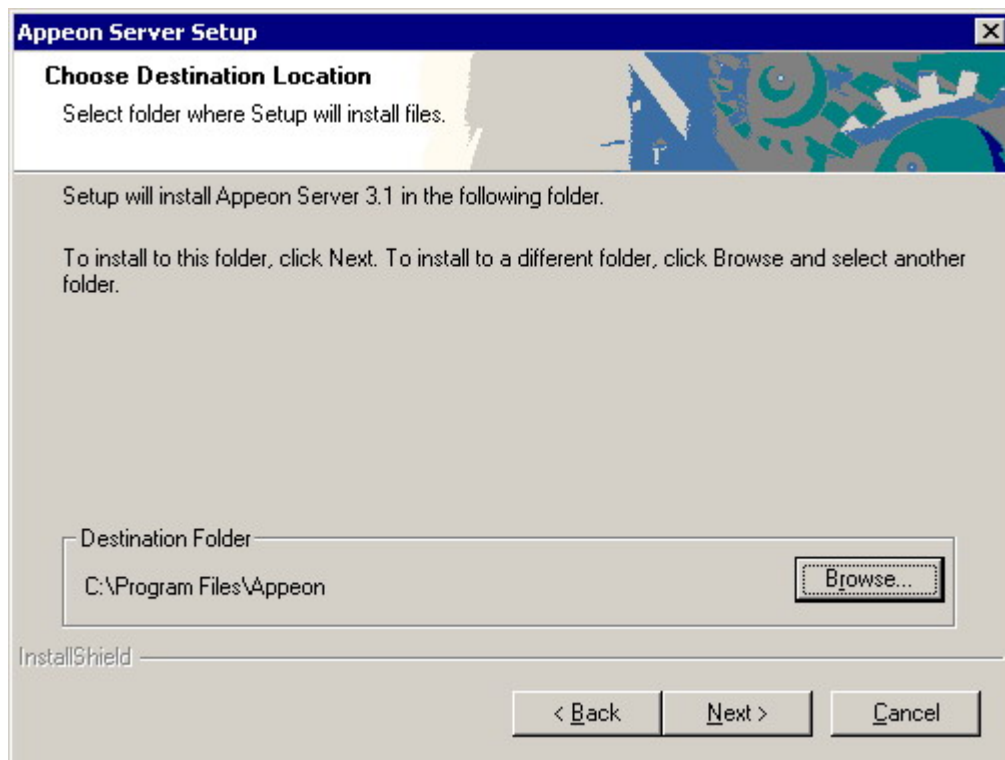
You can upgrade the license from the Workgroup to the Advanced Edition with the following steps:

1. Copy the EAServer folder from the Appeon setup folder located on the Appeon Installation CD (or on a network location) to the local computer. Do not attempt to run the installation from a network location.
2. Open the configuration file *SilentInstall_Win.txt* located in the EAServer folder;
 - Change the value of “-W SilentInstallType.value” directive to “InstallLicense”;
 - Specify the EAServer location in your local computer using the directive “-W SilentInstallLocation.value” (for example, -W SilentInstallLocation.value=“C:\Program Files\Sybase”).
 - Add the following three product license directives and their values: “-W LicenseOrderNumber.value”, “-W LicenseFeatureName.value” and “-W LicenseAuthorizationNumber.value”.

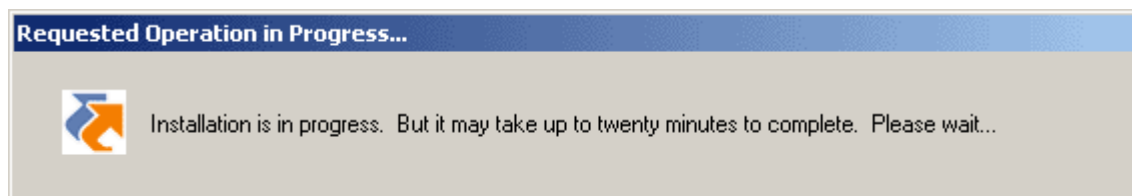
These values can be found on the license management certificate, which is enclosed in an envelope in the product box.
3. Save and close the *SilentInstall_Win.txt* file;
4. Run the *SilentInstall_Win.bat* batch file in the EAServer folder to apply the new license information.

Copying EAServer 5.2 files to your computer

After the EAServer license information is filled in, you are prompted to specify the destination location for Appeon Server setup, as shown in Figure 4-19. If the destination folder is C:\Program Files\Appeon, EAServer 5.2 will be installed to C:\Program Files\Appeon\EAServer, and Appeon Server will be installed to C:\Program Files\Appeon\EAServer.

Figure 4-19: Choose location

After all the installation settings are confirmed, the installation program copies EAServer 5.2 files before copying Appeon Server files to the destination location. The whole EAServer 5.2 installation process may take up to twenty minutes as shown in the Progress window.

Figure 4-20: The Progress window for EAServer 5.2 silent install

4.4.2.4 Verifying installation

4.4.2.4.a Verifying Appeon Server program files

Step 1 – Access the ODBC Data Source Administrator from the Windows control panel.
 Note: If you do not see the ODBC Data Source Administrator on the Control Panel, double-click Administrative Tools on the Windows 2000 control panel and then click Data Sources (ODBC). Verify that the “AppeonDB” data source has been added under the System DSN tab.

The “Appeondb” data source is used in the application deployment process for database connectivity.

Step 2 – Open EAServer Manager and connect to EAServer. Verify that the following listeners have been added:

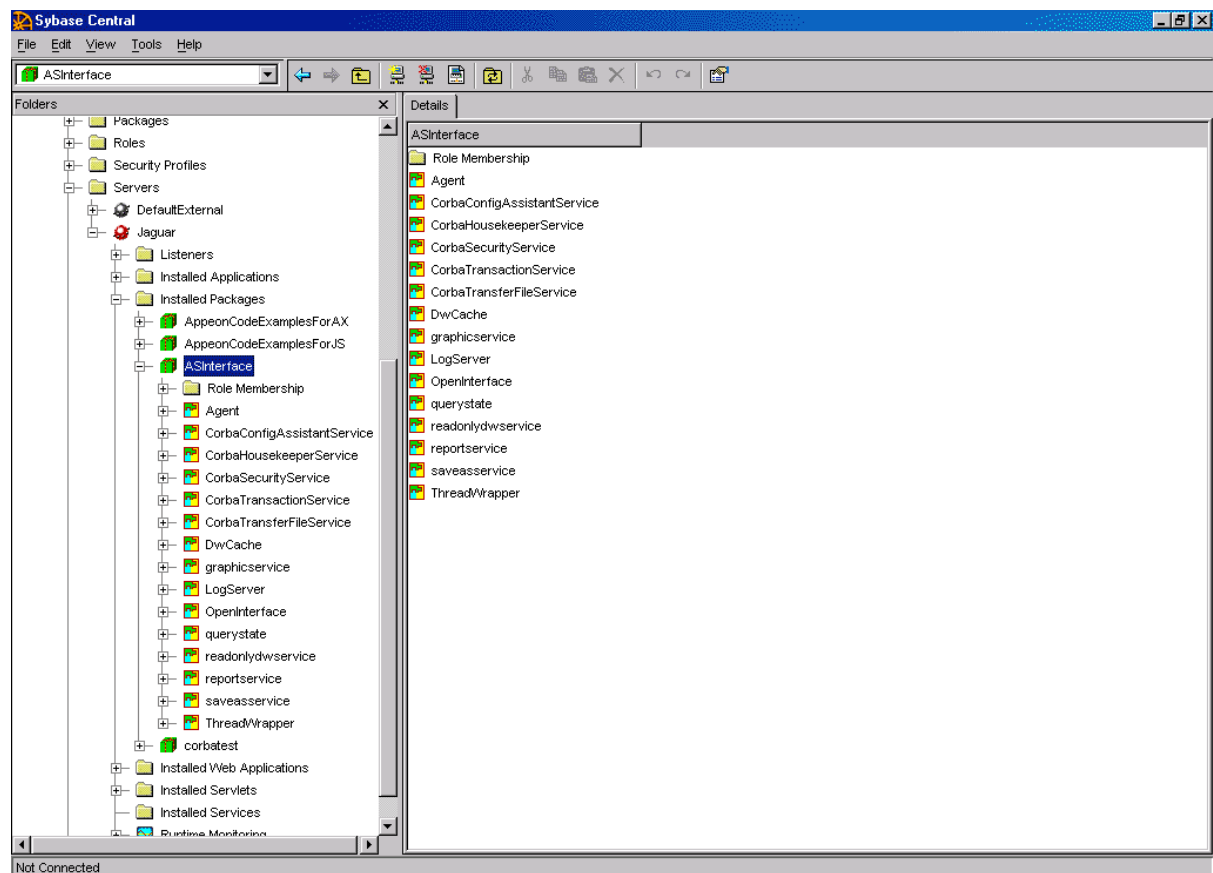
Listeners	Host Name	Port Number
appeonserverhttp	localhost	9988

apeonserveriiop	localhost	9989
-----------------	-----------	------

Note: Changing or removing the `apeonserverhttp` listener is NOT recommended. The two listeners are used in the default configuration of Apeon Developer for the demo applications as well as the source code of n-Tier support examples in the Apeon Code Examples demo. Any change to the two listeners may stop the demo applications running in PowerBuilder or on the Web. If you need to change or remove these two listeners, you must modify the default configuration in Apeon Developer and redeploy the demo applications with the modified or new listeners.

Step 3 – Verify that the `ASInterface` package is installed. This package contains Apeon Server core components, as shown in Figure 4-21.

Figure 4-21: Components contained in ASInterface package



Step 4 – Verify that under Servers | Jaguar | Installed Web Applications, the following applications exist:

- AEM
- ajsdownload

Step 5 – Verify that under Servers | Jaguar | Installed Services, the following three services exist:

- ASInterface/CorbaHousekeeperService
- ASInterface/HousekeeperService
- ASInterface/LogServer

Step 6 – Verify that the appeondb connection cache has been added and that the ping test is successful. The appeondb connection cache connects to Apeon Server’s private database (appeondb).

IMPORTANT: If pinging the appeondb fails, refer to the *Apeon Troubleshooting Guide*.

Step 7 – Verify that the Apeon Server Web Component files have been installed.

In Windows Explorer, navigate to %JAGUAR%\html\appeon. %JAGUAR% refers to the EAServer directory.

Verify that the \weblibrary folder and the \weblibrary_ax folder exist and contain the files shown in Figure 4-22 and Figure 4-23.

Figure 4-22: Files contained in Weblibrary folder

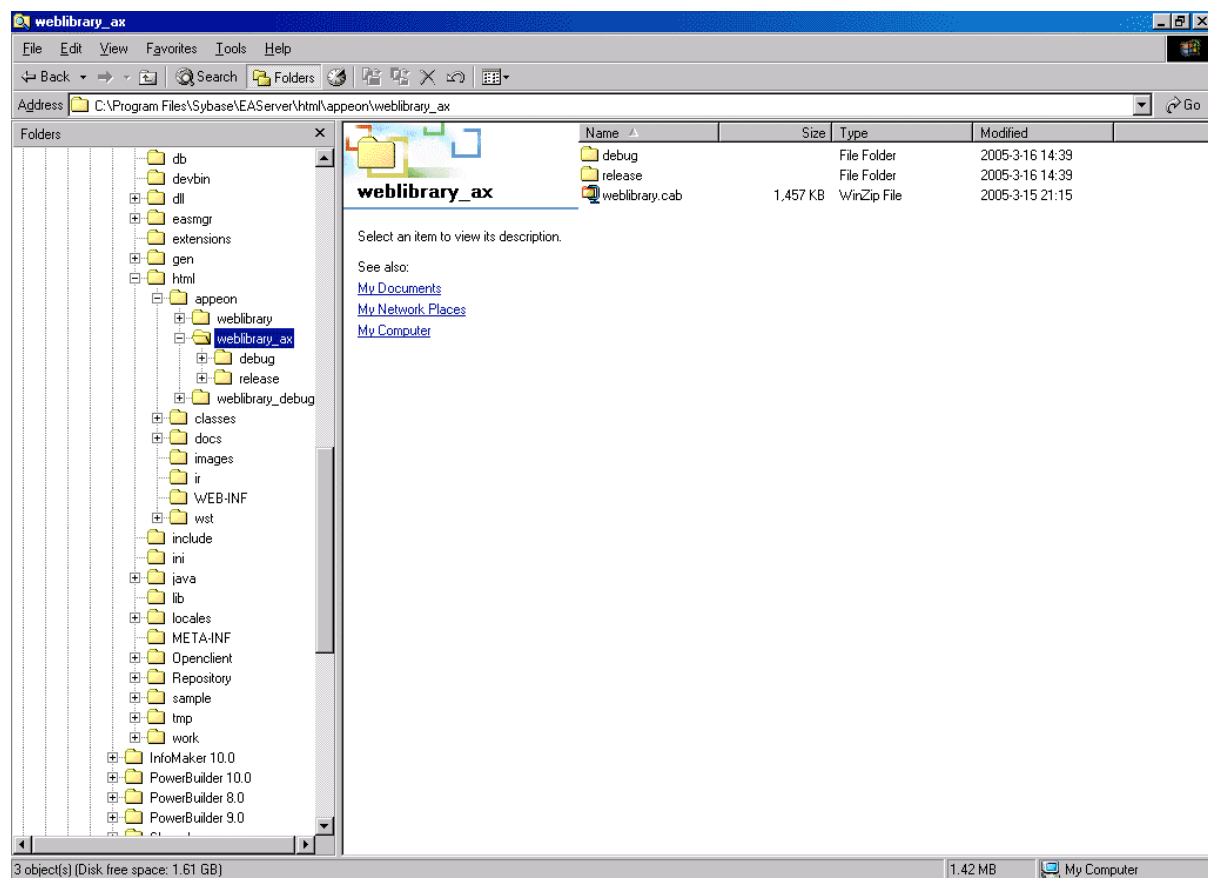
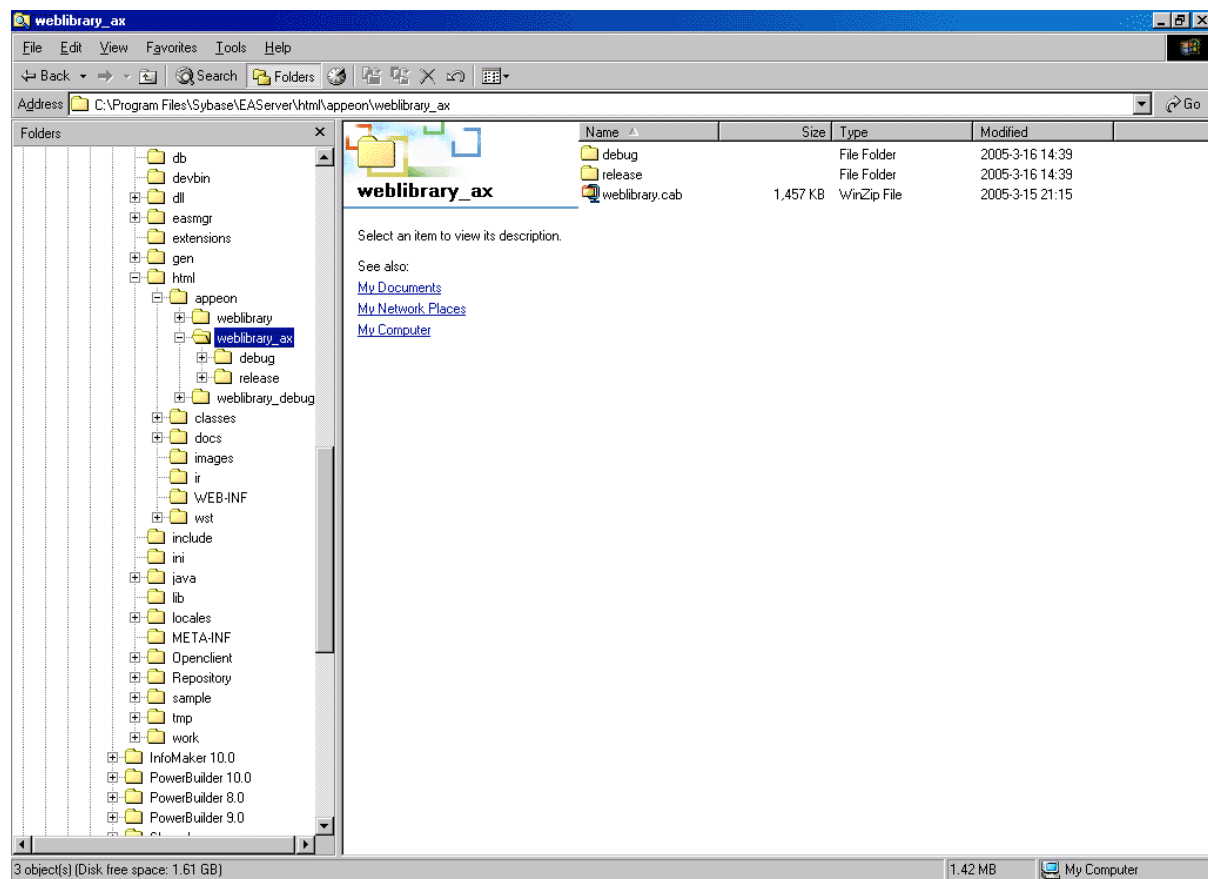


Figure 4-23: Files contained in Weblibrary_ax folder

Step 8 – Verify that you can locate the *ThreadWrapper.idl* file and the *ThreadWrapper.props* file, respectively, in the following directories:

- %JAGUAR%\Repository\IDL\ASInterface
- %JAGUAR%\Repository\Component\ASInterface

Step 9 – Verify that AEM can be accessed:

1. Start EAServer.
2. Open Internet Explorer; type `http://localhost:9988/AEM/` into the address bar and press Enter.
3. Log in to AEM with the username and password specified in the installation process. If you did not specify the username and password during installation process, use “admin” for both username and password as default.

4.4.2.4.b Verifying demo applications installation

If the Appeon Server Web demo applications were installed (by performing either a complete or custom installation with the Demo Applications option checked), go through the following steps to verify that the Web demos have been installed correctly.

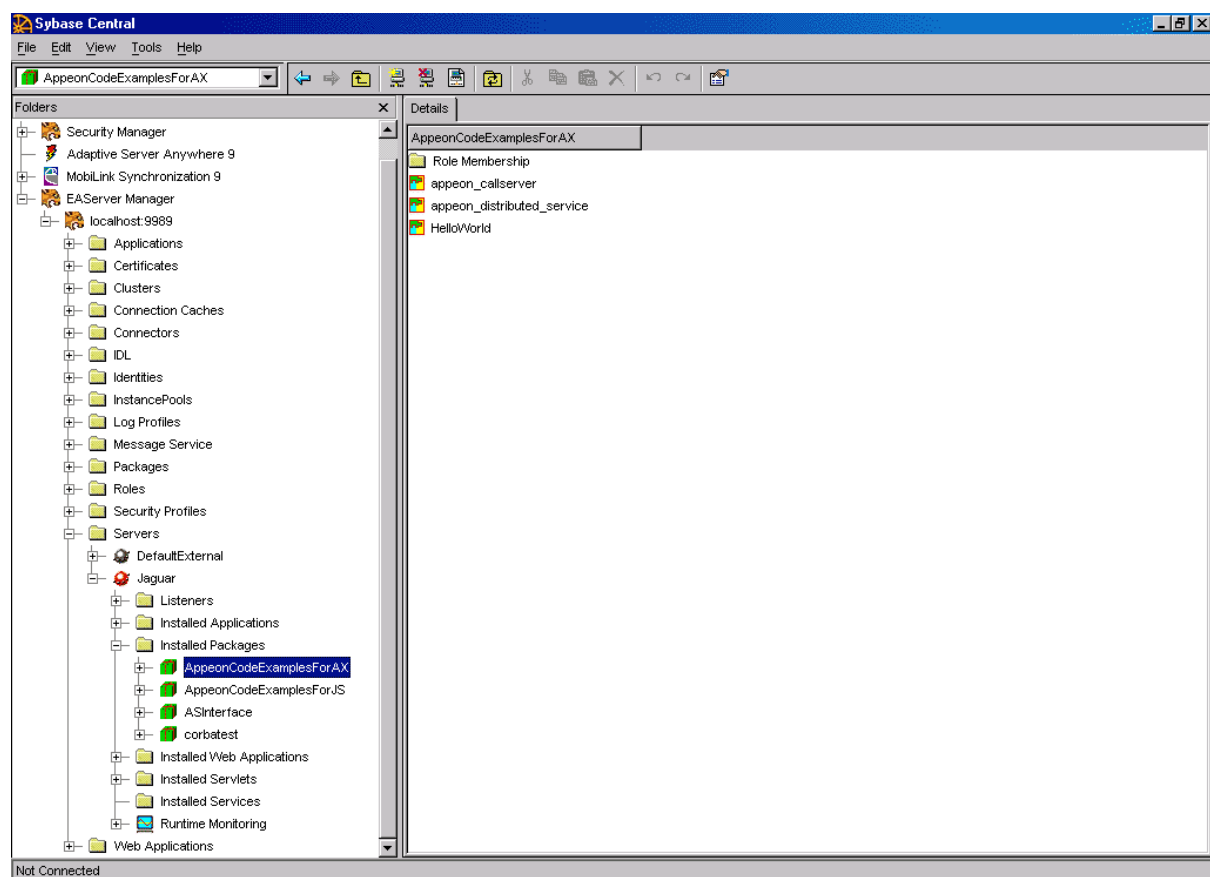
Step 1 – Access the ODBC Data Source Administrator from the Windows control panel (note that it may be inside Administrative Tools) and verify that the “AppeonSampleForServer” and “AppeonSample2ForServer” data sources have been added under the System DSN tab. The “AppeonSampleForServer” and “AppeonSample2ForServer” data sources are used by

the Appeon Web demo applications for database connectivity. Verify that the Test Connection is successful.

Step 2 – Start EAServer/Appeon Server and log in using EAServer Manager.

Verify that the *AppeonCodeExamplesForAX* and *AppeonCodeExamplesForJS* packages are installed. The *AppeonCodeExamplesForAX* package contains components used by the Appeon Code Examples demo for Appeon Xcelerator deployment, while *AppeonCodeExamplesForJS* contains components used for Pure-JavaScript deployment. The two sets of components have identical names. Figure 4-24 shows the components used by the Appeon Code Examples demo for Appeon Xcelerator deployment.

Figure 4-24: Components contained in Appeon Code Examples package



Note: If EAServer Manager does not start properly, refer to the *Appeon Troubleshooting Guide*.

Step 3 – Verify that the “appeonsample” and “appeonsample2” connection caches have been added and that they ping successfully.

The “appeonsample” and “appeonsample2” connection caches connect to the database used by the Appeon Web demo applications.

IMPORTANT: If pinging of “appeonsample” or “appeonsample2” fails, refer to the *Appeon Troubleshooting Guide*.

Step 4 – Log in to AEM and verify that the transaction objects are correctly mapped to the “appeonsample” and “appeonsample2” connection caches for each of the Web demo applications.

The transaction objects and connection caches for each of the Web demo applications are as follows:

Web demo applications	Transaction Object → Connection Cache
appeon_acf_demo_ax	sqlca → appeonsample
Appeon_acf_demo_js	sqlca → appeonsample
appeon_code_examples_ax	sqlca → appeonsample its_sql → appeonsample its_sqt → appeonsample2
appeon_code_examples_js	sqlca → appeonsample its_sql → appeonsample its_sqt → appeonsample2
appeon_code_examples_server_js	sqlca → appeonsample
sales_application_demo_ax	sqlca → appeonsample
Sales_application_demo_js	sqlca → appeonsample

Step 5 – Verify that EAServer is running and that the following Web demo applications can be launched successfully in Internet Explorer. To access these applications, open Windows Start menu and select: Programs | Appeon 3.1 for PowerBuilder | Appeon Demos.

The following six Web demo applications are available (AX denotes deployment with Appeon Xcelerator; JS denotes Pure-JavaScript deployment):

- Appeon ACF Demo (AX)
- Appeon ACF Demo (JS)
- Appeon Code Examples (AX)
- Appeon Code Examples (JS)
- Appeon Sales App Demo (AX)
- Appeon Sales App Demo (JS)

For an introduction to the Appeon demo applications, refer to the *Appeon Demo Applications Tutorial*.

4.4.3 Appeon Developer installation

4.4.3.1 Prerequisites

- The Developer PC meets the system requirements in Section 3.2: [Appeon Developer requirements](#). Verify that PowerBuilder 8.0.4, 9.0.2 or 10.2 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.

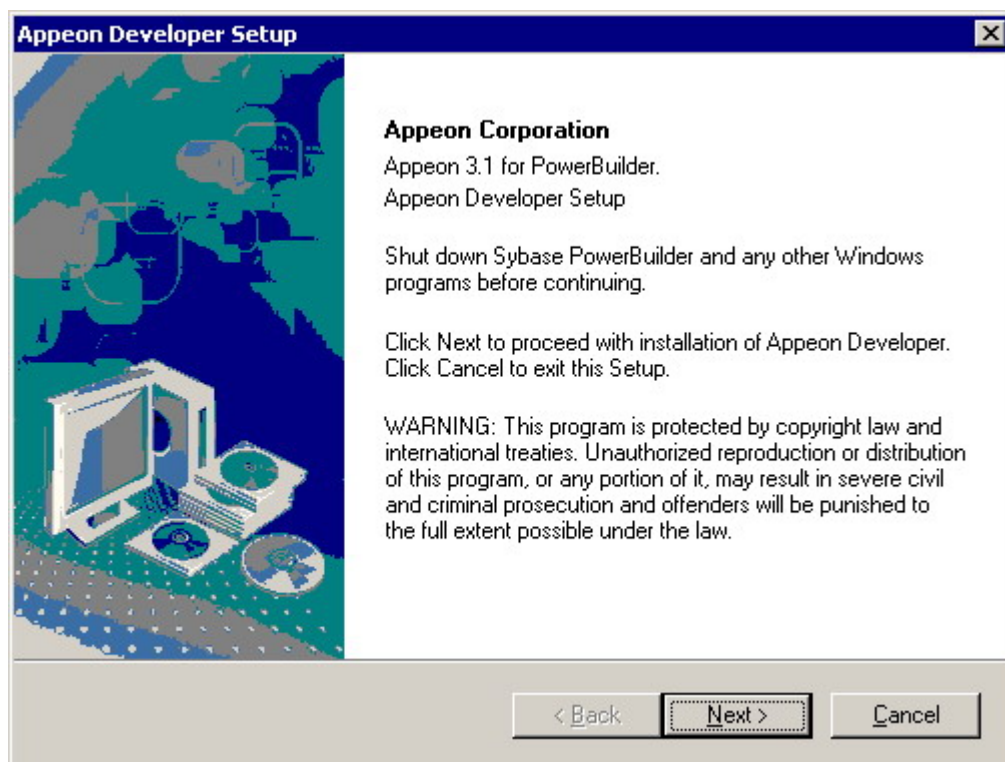
- Shut down Sybase PowerBuilder, Sybase ASA, Sybase Enterprise Portal Management Agent service and any other Windows programs before beginning the installation process.
- Verify in Windows Task Manager that the following processes are not running under the Process tab: *adt.exe*, *jagsrv.exe*, *jagsrvagent.exe*, *PBParser.exe*, *pb80.exe*, *pb90.exe* and *pb100.exe*. If these processes are running, be sure to end them.
- Verify that Appeon Server is installed before Appeon Developer if both will be installed on the same machine.

4.4.3.2 Installation instructions

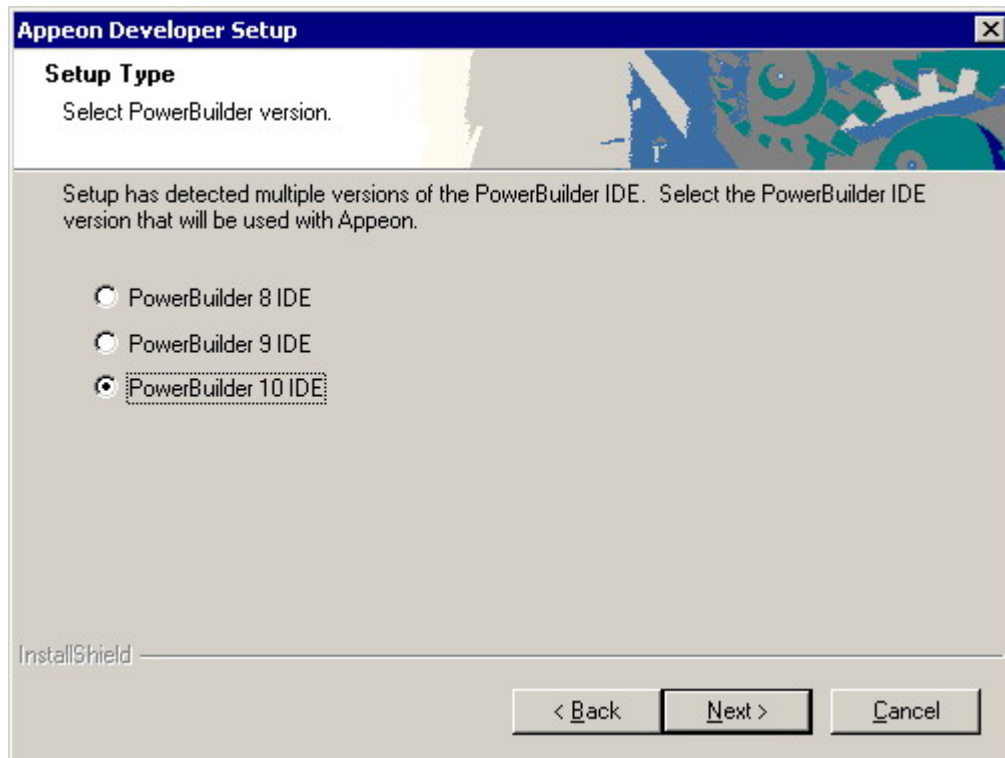
Step 1 – Launch the Appeon for PowerBuilder Setup program and select to install Appeon Developer (see [Starting the installation](#) section).

Step 2 – Click *Next* on the Appeon Developer introduction screen (Figure 4-25).

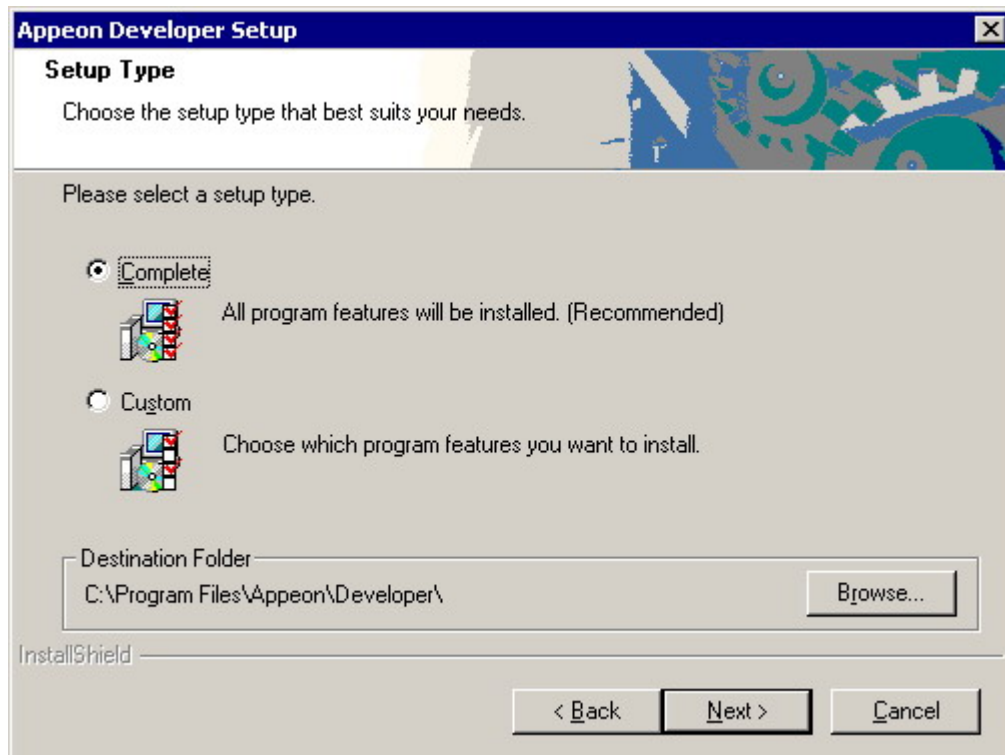
Figure 4-25: Appeon Developer introduction screen



Step 3 – If you have PowerBuilder 8, 9 and 10 installed, you will be given a choice of which version to integrate into Appeon Developer (Figure 4-26). If you only have PowerBuilder 8, 9 or 10 installed, you will be guided to Step 4.

Figure 4-26: PowerBuilder version

Step 4 – Choose the setup type and the folder where Appeon Developer files will be copied (Figure 4-27).

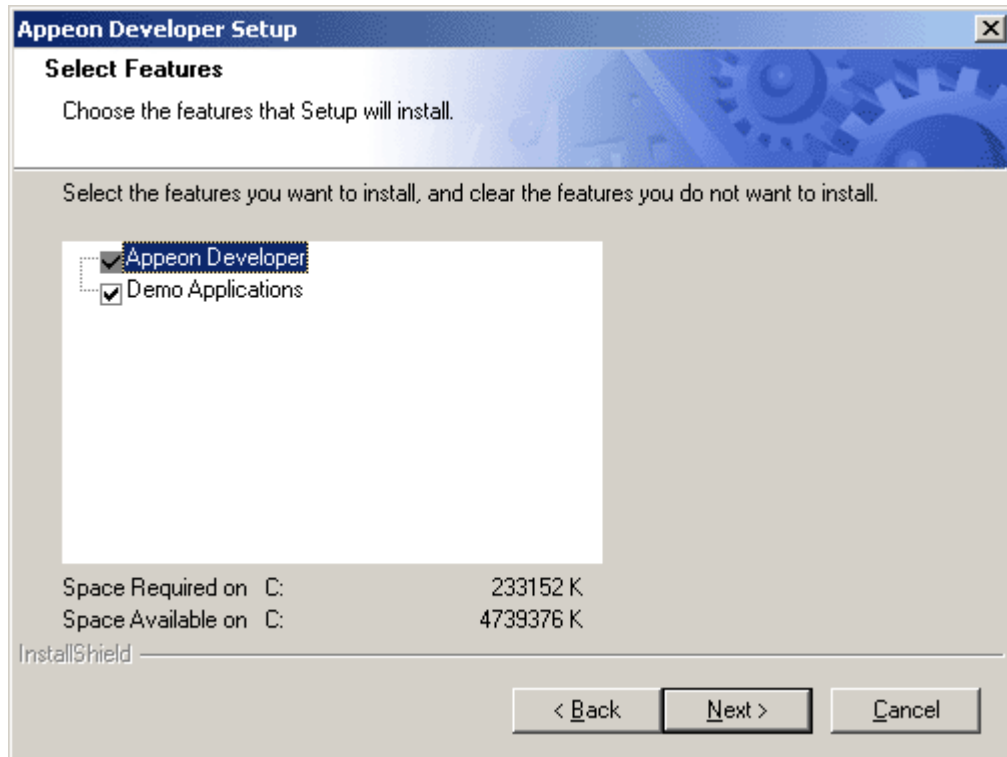
Figure 4-27: Appeon Developer setup type

The default destination folder is C:\Program Files\Appeon\Developer. To change the default, click the *Browse* button and select another folder.

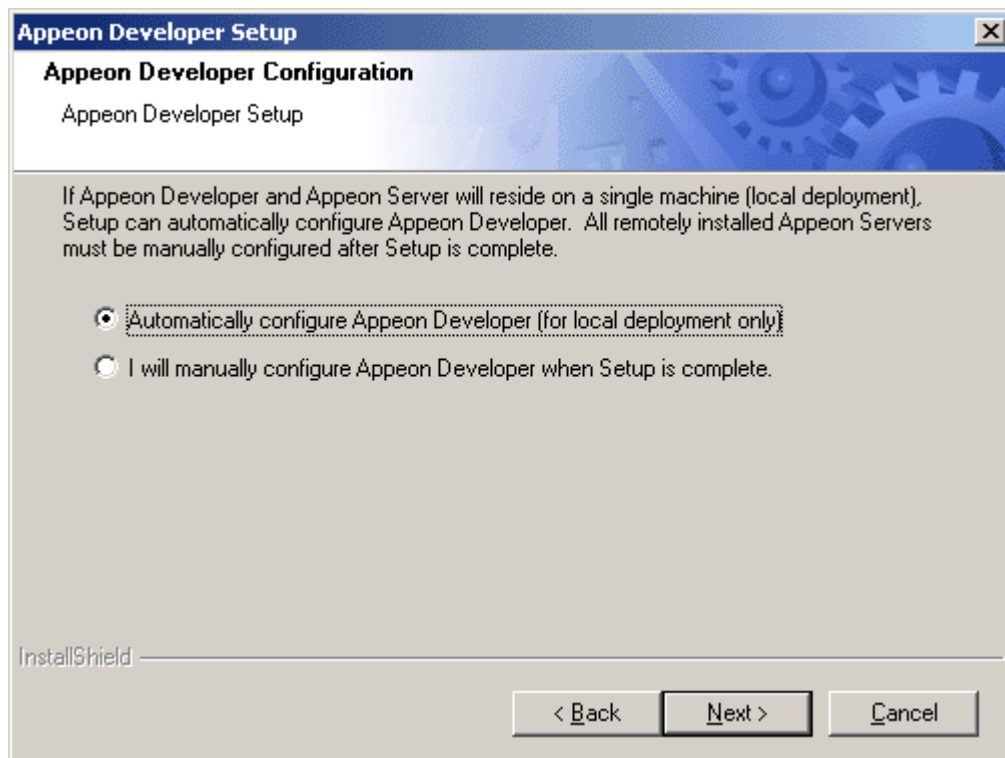
Choosing the Complete setup will install Appeon Developer program files and two versions of each Appeon Demo Application (one Pure-JavaScript deployment and one Appeon Xcelerator). The Complete setup is recommended.

If you choose the Custom setup, you can select whether to install the Demo Applications. The Appeon Developer program files are required and cannot be unchecked (Figure 4-28).

Figure 4-28: Custom setup



Step 5 – Choose how you want Setup to configure Appeon Developer (Figure 4-29).

Figure 4-29: Automatically/manually configure Appeon Developer

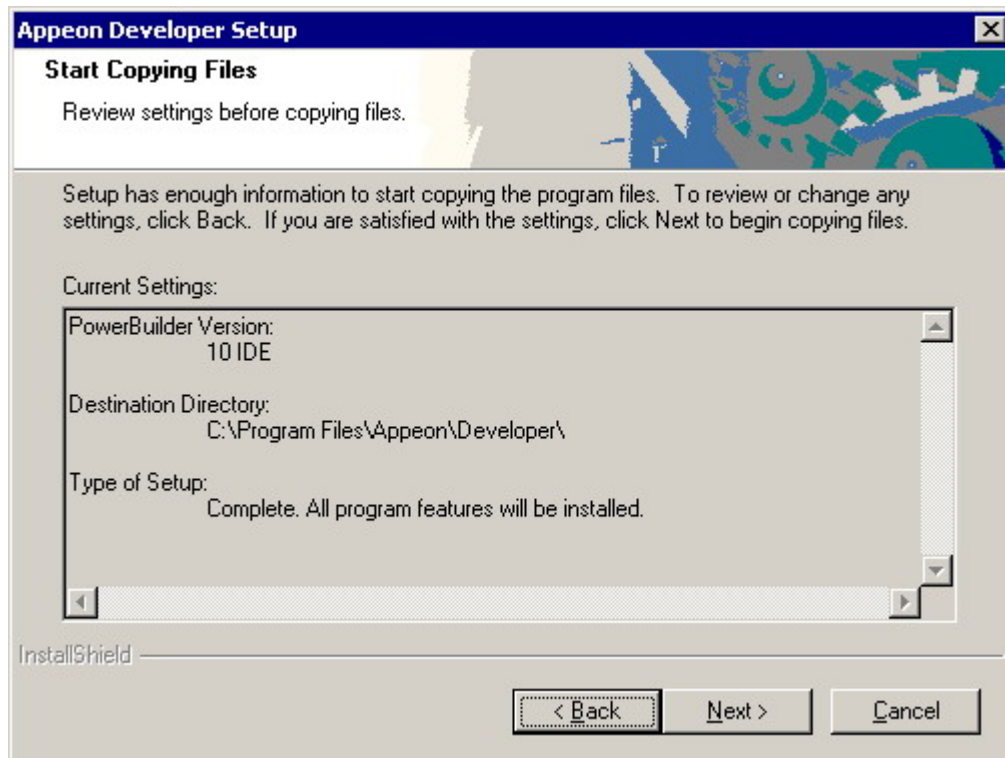
If Appeon Server has been installed to the same machine where Appeon Developer is being installed, we suggest that you check *Automatically configure Appeon Developer (for local deployment only)*. Setup will configure Appeon Developer so that it can interact with the locally installed Appeon Server when Setup is complete.

If Appeon Server has not been installed to the same machine, you can:

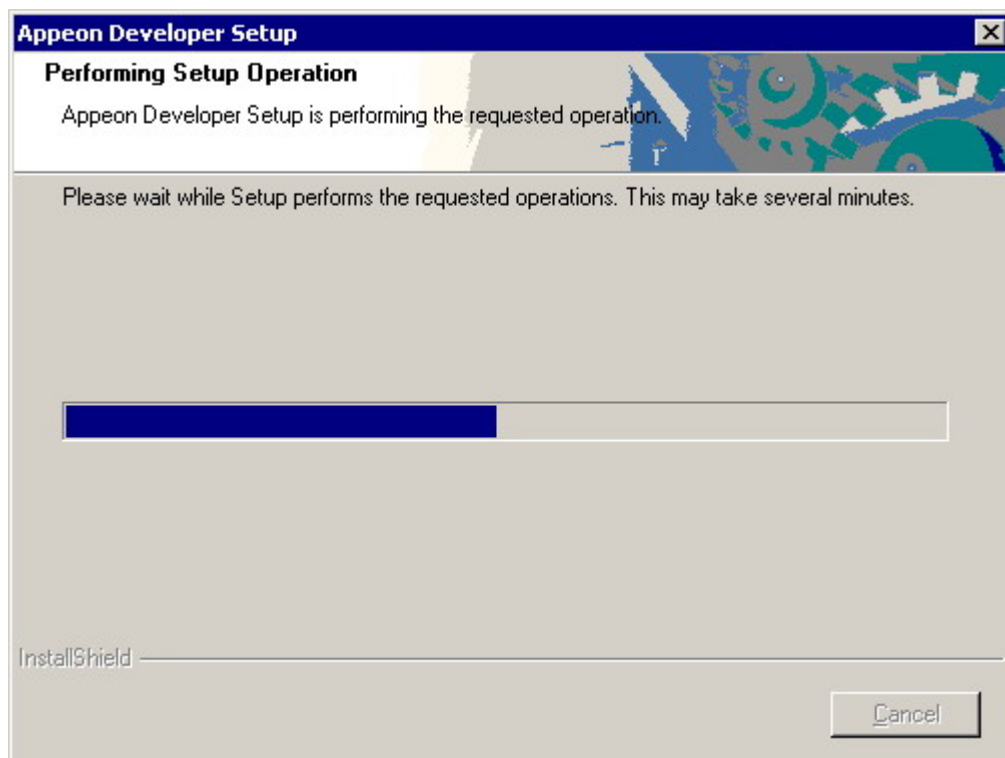
- Choose *I will manually configure Appeon Developer when Setup is complete* and continue with the Setup process, or
- Exit the Setup program and install Appeon Server to the local machine first.

Using a local Appeon Server is recommended. However, if you plan to install Appeon Server and Appeon Developer into different machines, you can choose *I will manually configure Appeon Developer when Setup is complete*. When Setup is complete, refer to the *Appeon Developer User Guide* to determine how to configure Appeon Developer.

Step 6 – Check the summary of settings (Figure 4-30).

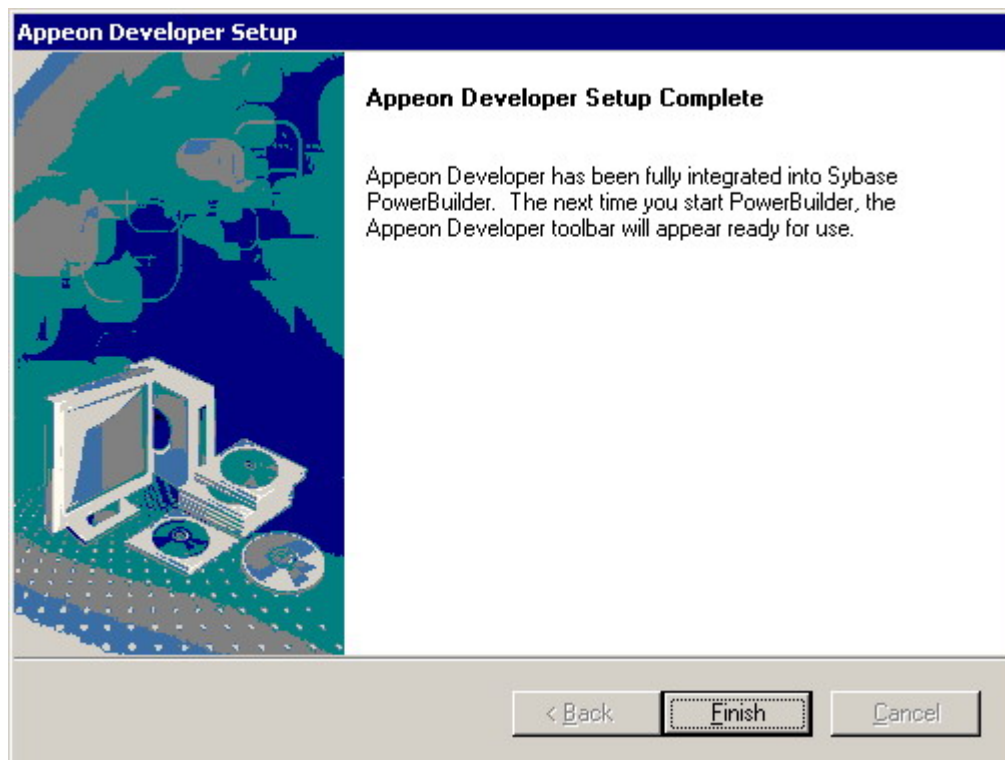
Figure 4-30: Summary of settings

Click *Back* to change any unwanted settings if you do not want to use the current settings or click *Next* and Setup will begin copying files (Figure 4-31).

Figure 4-31: Appeon Developer installation progress

Step 7 – Wait until the installation is complete.

Step 8 – Click *Finish* to exit (Figure 4-32).

Figure 4-32: Appeon Developer Setup Complete

4.4.3.3 Verifying installation

4.4.3.3.a Verifying Appeon Developer program files

Step 1 – Verify that the Appeon Developer folder specified during installation (e.g. C:\Program Files\Appeon\Developer) has been created.

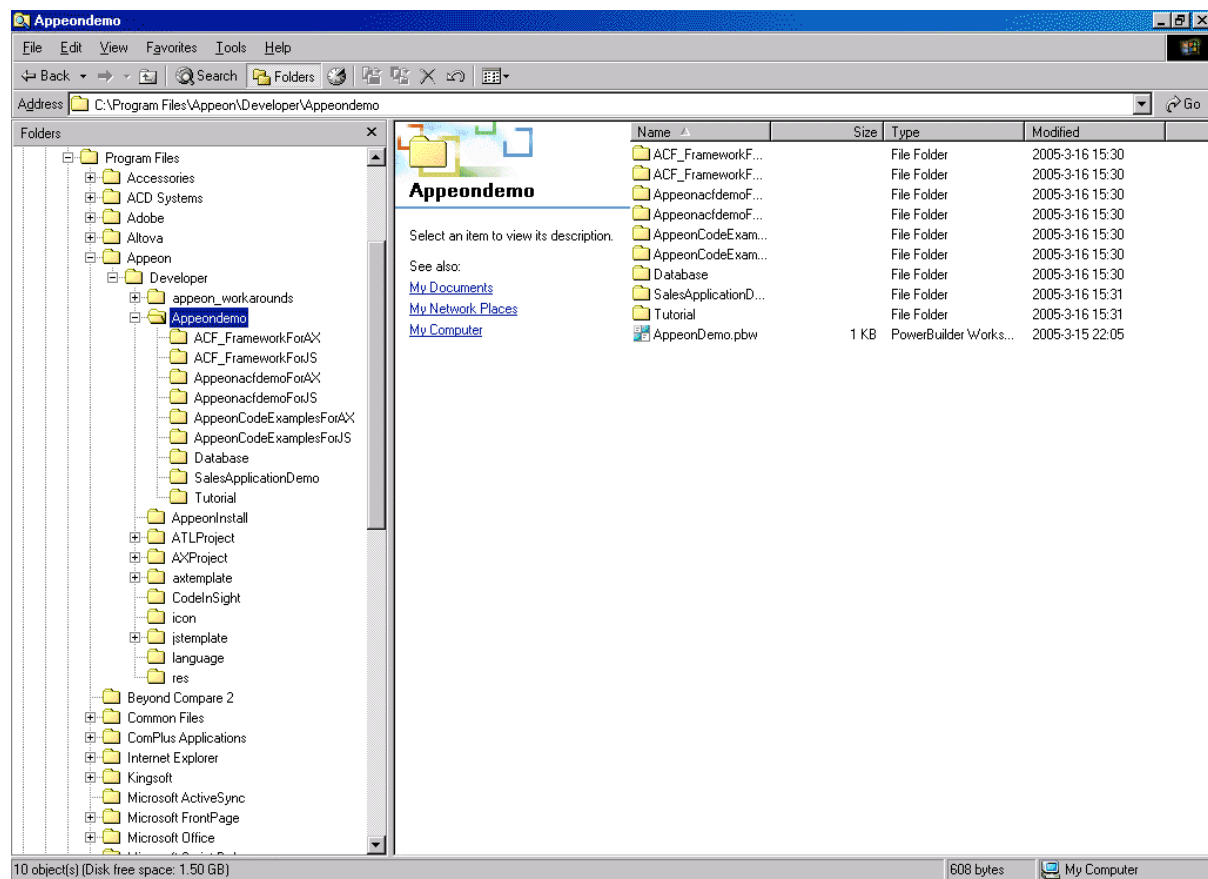
Step 2 – Open Windows Start menu and select: Programs | Appeon 3.1 for PowerBuilder | PowerBuilder and verify that the Appeon Developer toolbar is displayed in the PowerBuilder IDE.

4.4.3.3.b Verifying demo applications installation

If the Appeon Developer demo applications are installed, perform the following steps to verify that the demos were installed correctly:

Step 1 – Verify that under the Appeon Developer folder the \Appeondemo folder exists and contains the following sub-folders and the demo application files:

The following sub-folders are contained in the \Appeondemo folder (Figure 4-33).

Figure 4-33: Sub-folders contained in the \Appeondemo folder

Step 2 – Verify that the \appeon_workarounds\JS folder exists under the Appeon Developer folder and that it contains the following files:

- appeon_workarounds_js.pbl
- EonEmfPic.dll
- EonJSNVO.dll

Also, verify that the \appeon_workarounds\AX folder exists and that it contains the following files:

- appeon_workarounds_ax.pbl
- EonEmfPic.dll
- EonAXNVO.dll

Step 3 – Access the ODBC Data Source Administrator from the Windows control panel and verify that the “AppeonSample” and “AppeonSample2” data sources have been added under the System DSN tab.

The “AppeonSample” and “AppeonSample2” data sources are used by demo applications for database connectivity. Verify that the Test Connection is successful.

Step 4 – Open Windows Start menu and select: Programs | Appeon 3.1 for PowerBuilder | Appeon Demos | Appeon Demo PB Workspace. Verify that the following application targets are loaded under the AppeonDemo workspace in PowerBuilder:

The following eight targets will be loaded:

- `appeon_code_examples_js`
- `appeon_code_examples_ax`
- `sales_application_demo_js`
- `sales_application_demo_ax`
- `appeon_code_examples_server_js`
- `appeon_code_examples_server_ax`
- `appeon_acf_demo_js`
- `appeon_acf_demo_ax`

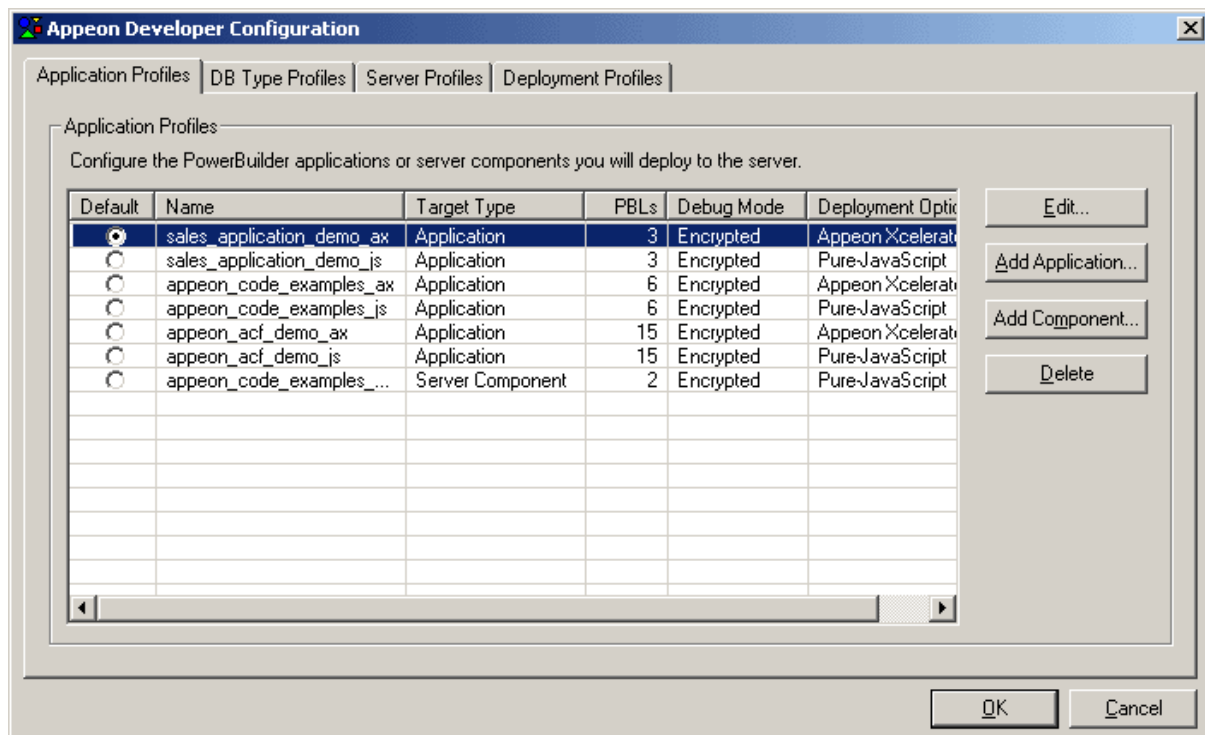
Verify that each application, except `appeon_code_examples_server_js` and `appeon_code_examples_server_ax`, can run successfully in PowerBuilder (clicking Select and Run in PowerBar1). The `appeon_code_examples_server_js` and `appeon_code_examples_server_ax` targets contain the server NVO components used by Appeon Code Examples.

Step 5 – Click the *Configure* button in the Appeon Developer toolbar. Check the settings under the different tabs on the Appeon Developer Configuration dialog box.

Check the settings on the Application Profiles tab, as shown in the following figures.

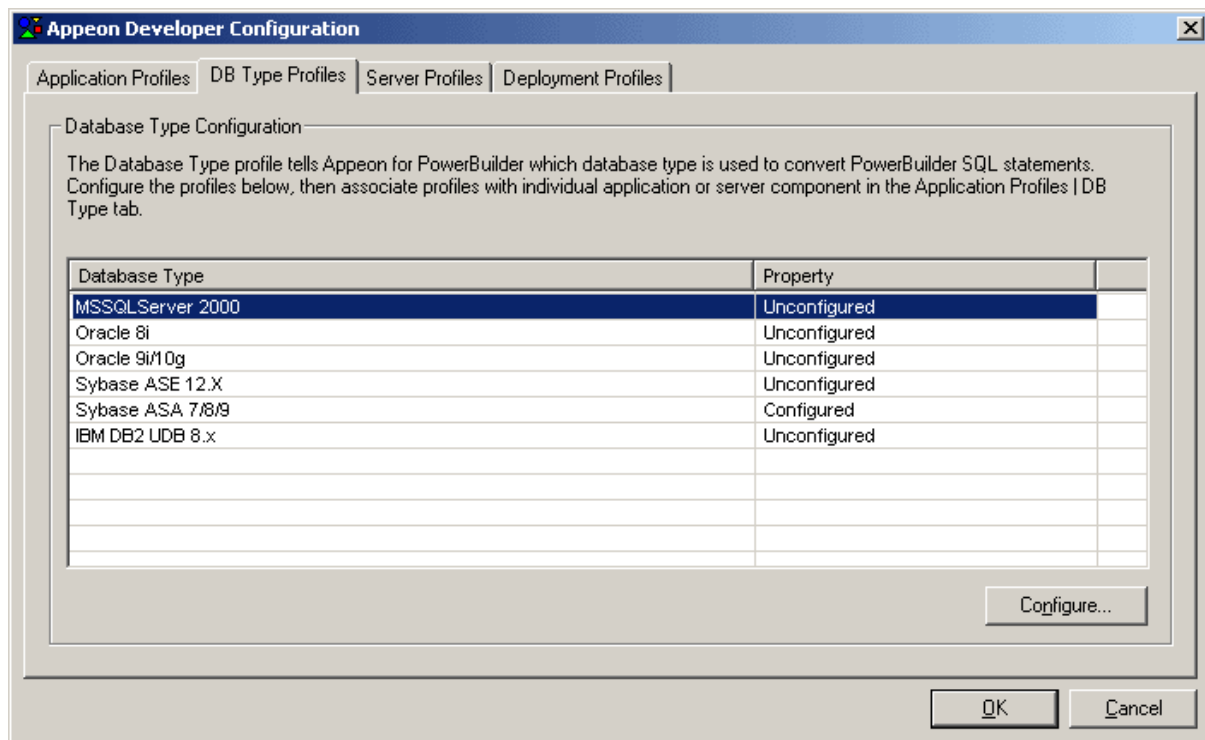
The following seven Application Profiles exist, as shown in Figure 4-34.

Figure 4-34: Settings on the Application Profiles tab



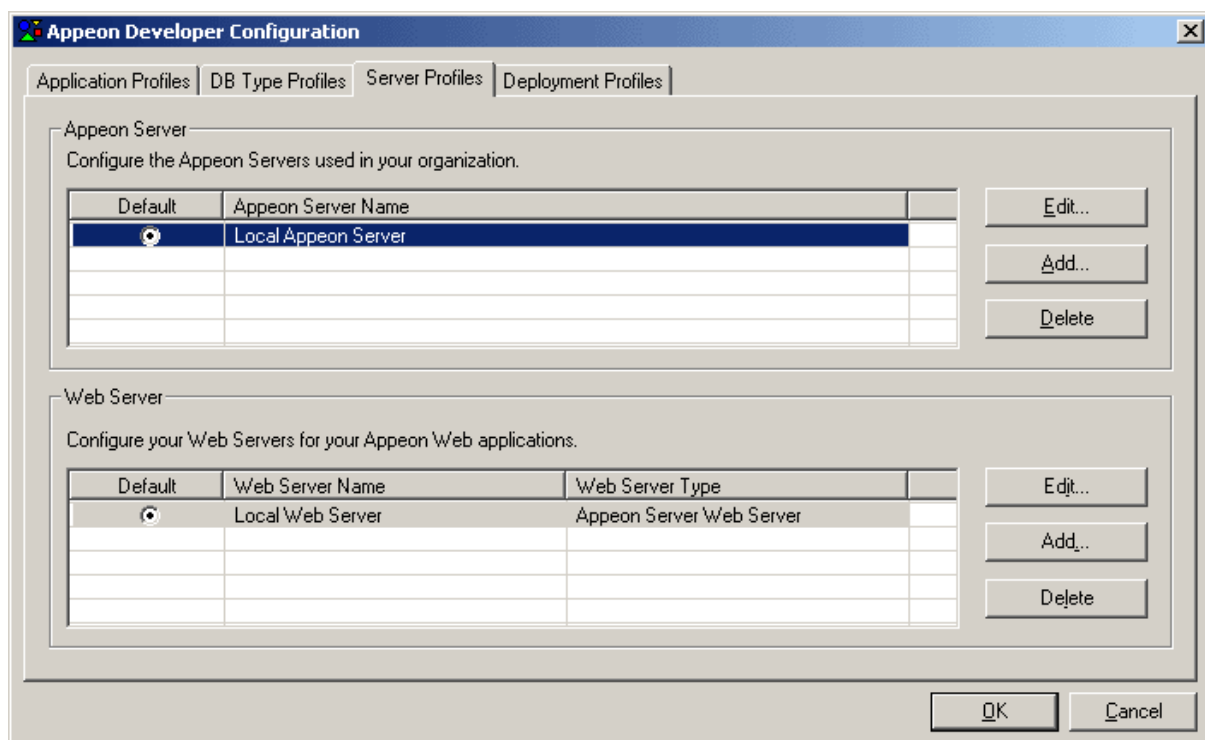
Check the settings on the DB Type Profiles tab, as shown in Figure 4-35.

Figure 4-35: Settings on the DB Type Profiles tab

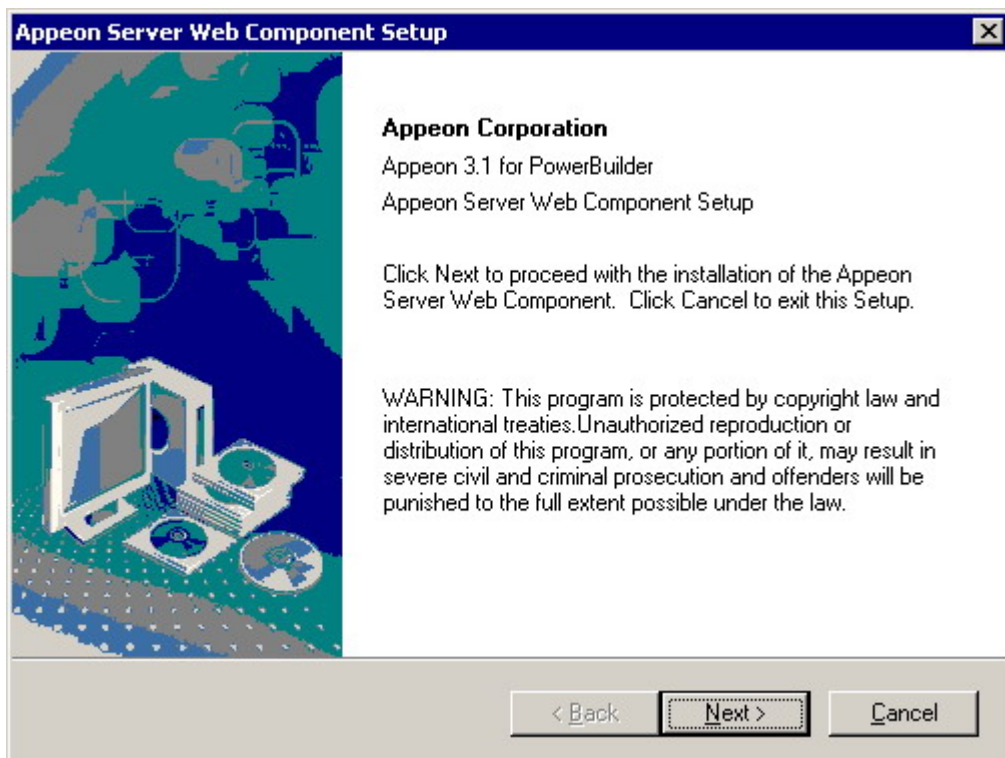


Check the settings on the Server Profiles tab, as shown in Figure 4-36.

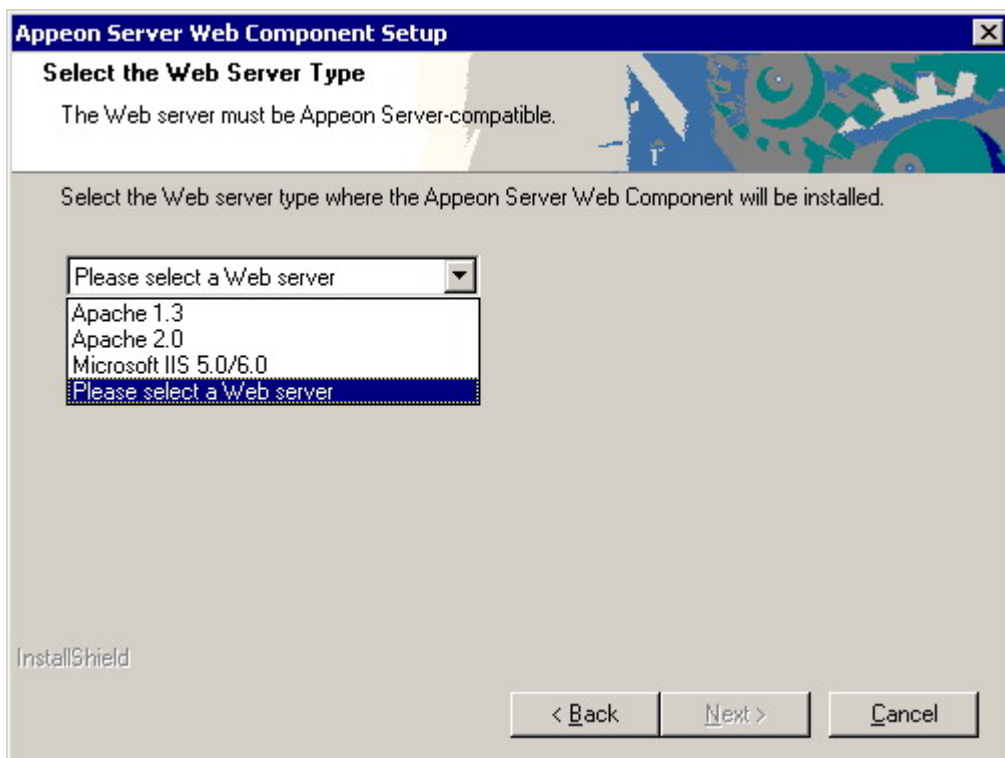
Figure 4-36: Settings on the Server Profiles tab



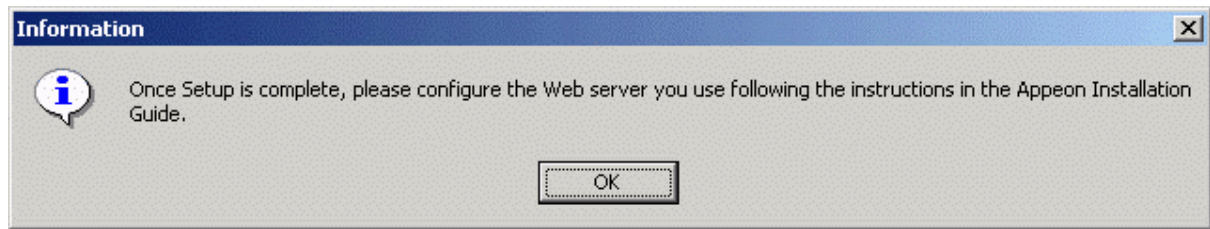
Check the settings on the Deployment Profiles tab, as shown in Figure 4-37.

Figure 4-38: Apeon Server Web Component introduction screen

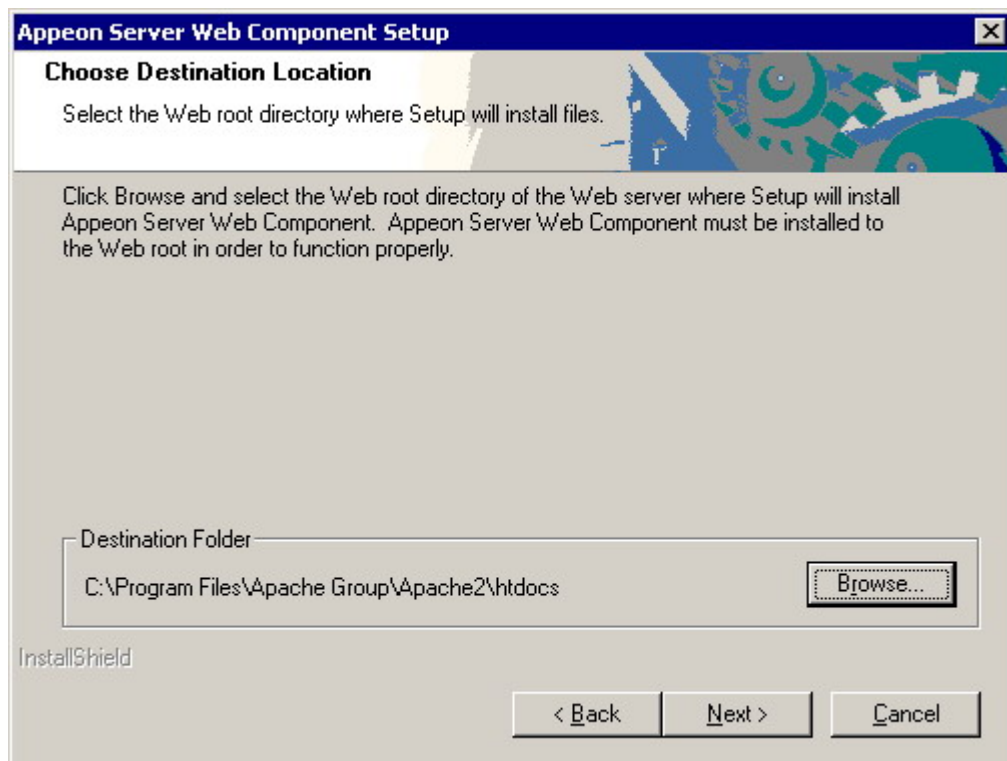
Step 3 – Select the Web Server type (only EAServer-compatible Web Servers for Windows are displayed, as shown in Figure 4-39).

Figure 4-39: Web Server type

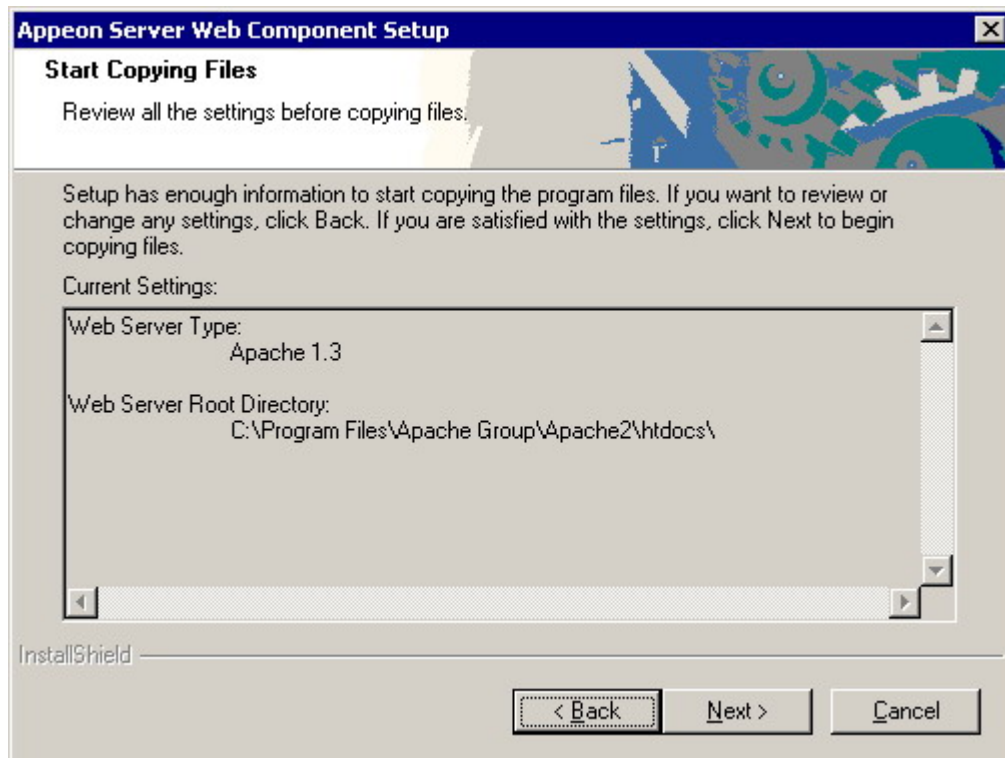
Once a Web server is chosen and the *Next* button is clicked, the following message will appear: (Figure 4-40)

Figure 4-40: Web Server configuration message

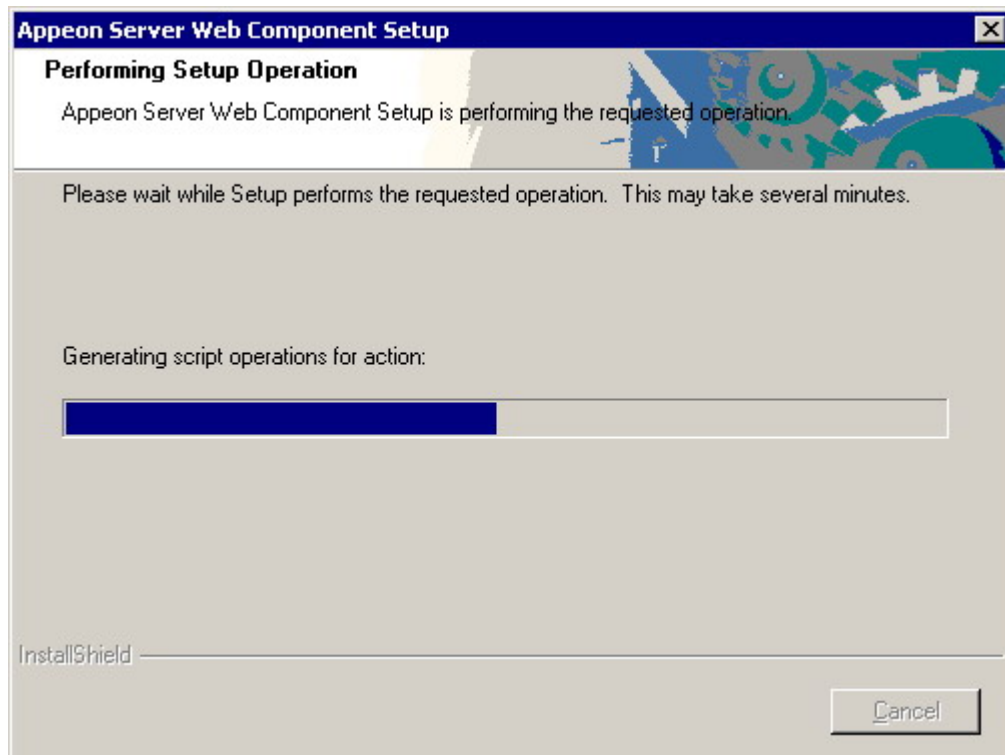
Step 4 – Enter the Web root for the Web Server. Click *Browse* to select the correct folder (for example, “C:\Program Files\Apache Group\Apache2\htdocs” for Apache 1.3 Web Servers, as shown in Figure 4-41).

Figure 4-41: Web root

Step 5 – Check the summary of settings (Figure 4-42).

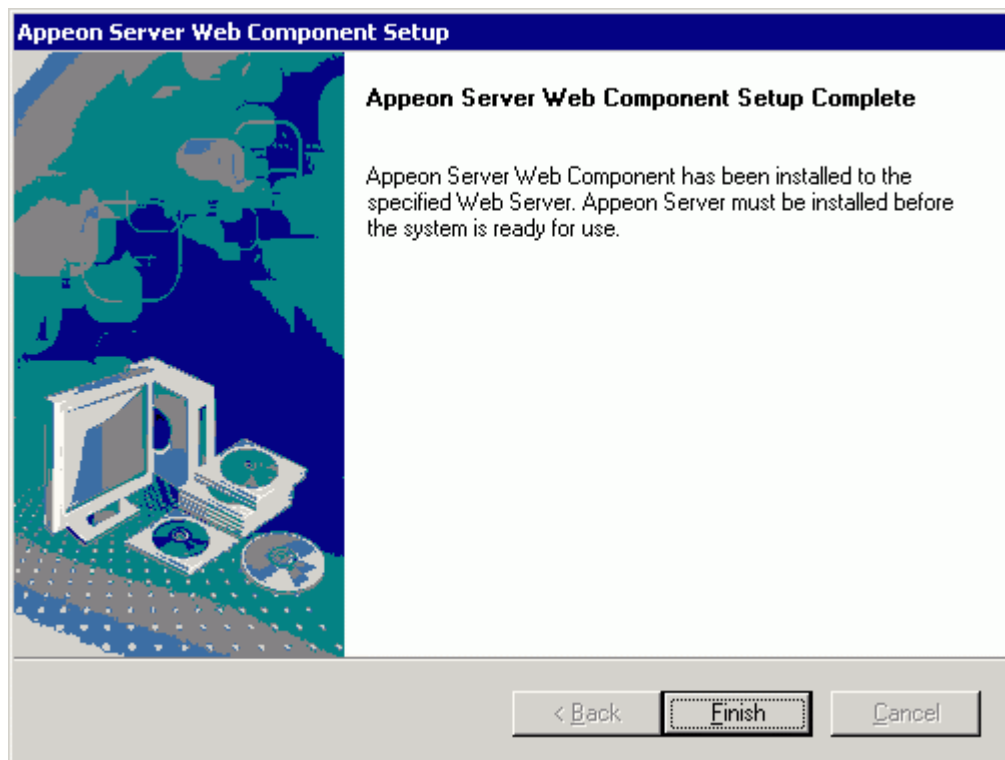
Figure 4-42: Summary of settings

Click *Back* to change any unwanted settings or click *Next* and Setup will begin copying files (Figure 4-43).

Figure 4-43: Apeon Server Web Component installation process

Step 6 – Wait until the installation is complete.

Step 7 – Click *Finish* to exit (Figure 4-44).

Figure 4-44: Appeon Server Web Component Setup complete

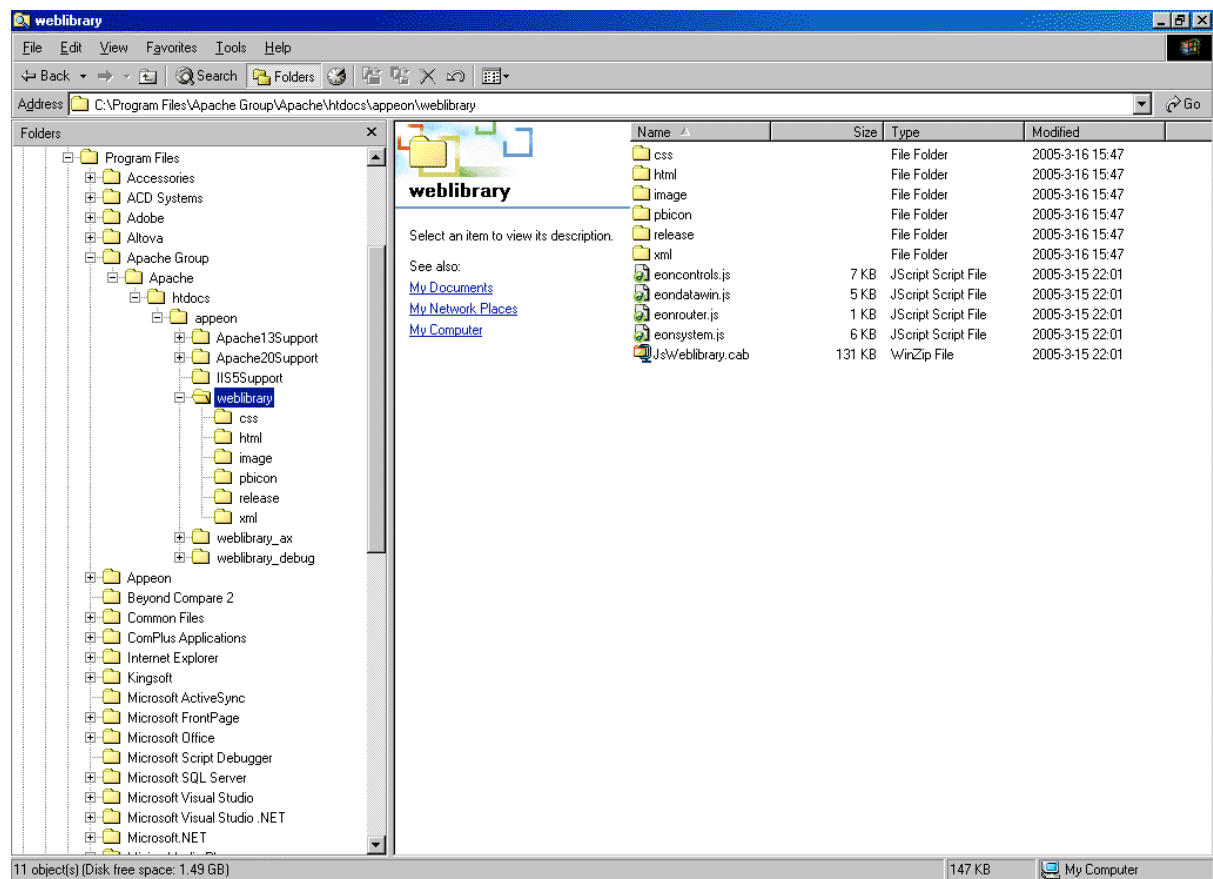
4.4.4.3 Installing and configuring a Web Server redirector plug-in

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 Chapter 5: [Third-party Web Server Configuration](#).

4.4.4.4 Verifying installation

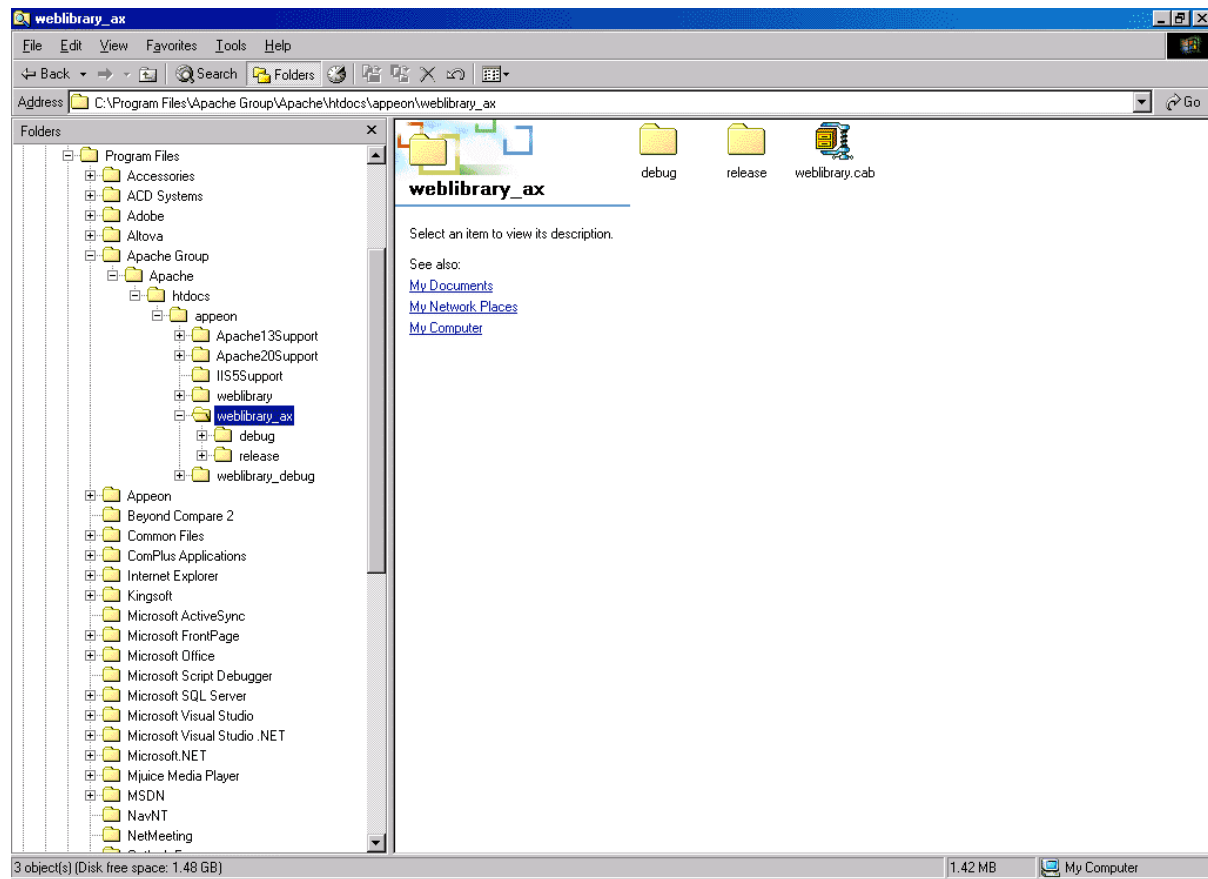
Verify that the Appeon Server Web Component was successfully installed.

In Windows Explorer, navigate to the Web root where the Web Component is installed (e.g. “C:\Program Files\Apache Group\Apache\htdocs” for Apache 1.3 Web Servers) and verify that the \weblibrary folder and its sub-folders have been copied (as shown in Figure 4-45).

Figure 4-45: \weblibrary folder

Also, verify that the \weblibrary_ax folder and its sub-folders have been copied (as shown in Figure 4-46).

Figure 4-46: \weblibrary_ax folder



4.4.5 PDF printers installation

Appeon provides two PDF printers for printing Web DataWindows to PDF at the server or client:

	Appeon PDFPrinter	Customer PDFPrinter
Where to install	Appeon Server	Client
What it does	Fulfills the request from a Web application for printing a DataWindow with server printer. It is the only PDF printer that works for Appeon Server printing.	Fulfills the request from a Web application for printing a DataWindow with the client printer. Optional. You can install other PDF printers (such as Adobe PDFWriter) to perform client printing.
How to access the generated PDF files	A PDF Repository displays at the bottom right of Internet Explorer listing the PDF files printed by Appeon PDFPrinter. If the default printer on the client is also Appeon PDFPrinter, the results are all saved as .pdf in the "\My Documents\Appeon Printer" folder.	Clients are prompted to specify file name and location before printing, and then can access the created PDF files according to the specified name and path.
<p>Important: Do not install the Customer PDFPrinter to Appeon Server for PDF printing, because the Save As dialog will prevent the server from responding to requests from clients.</p>		

These two PDF printers are open-source software products distributed under the GNU General Public License. The license information may be viewed under the “Open Source Licenses” folder in the printer installation package on the Appeon installation disk.

4.4.5.1 Installing Appeon PDFPrinter

4.4.5.1.a Prerequisite

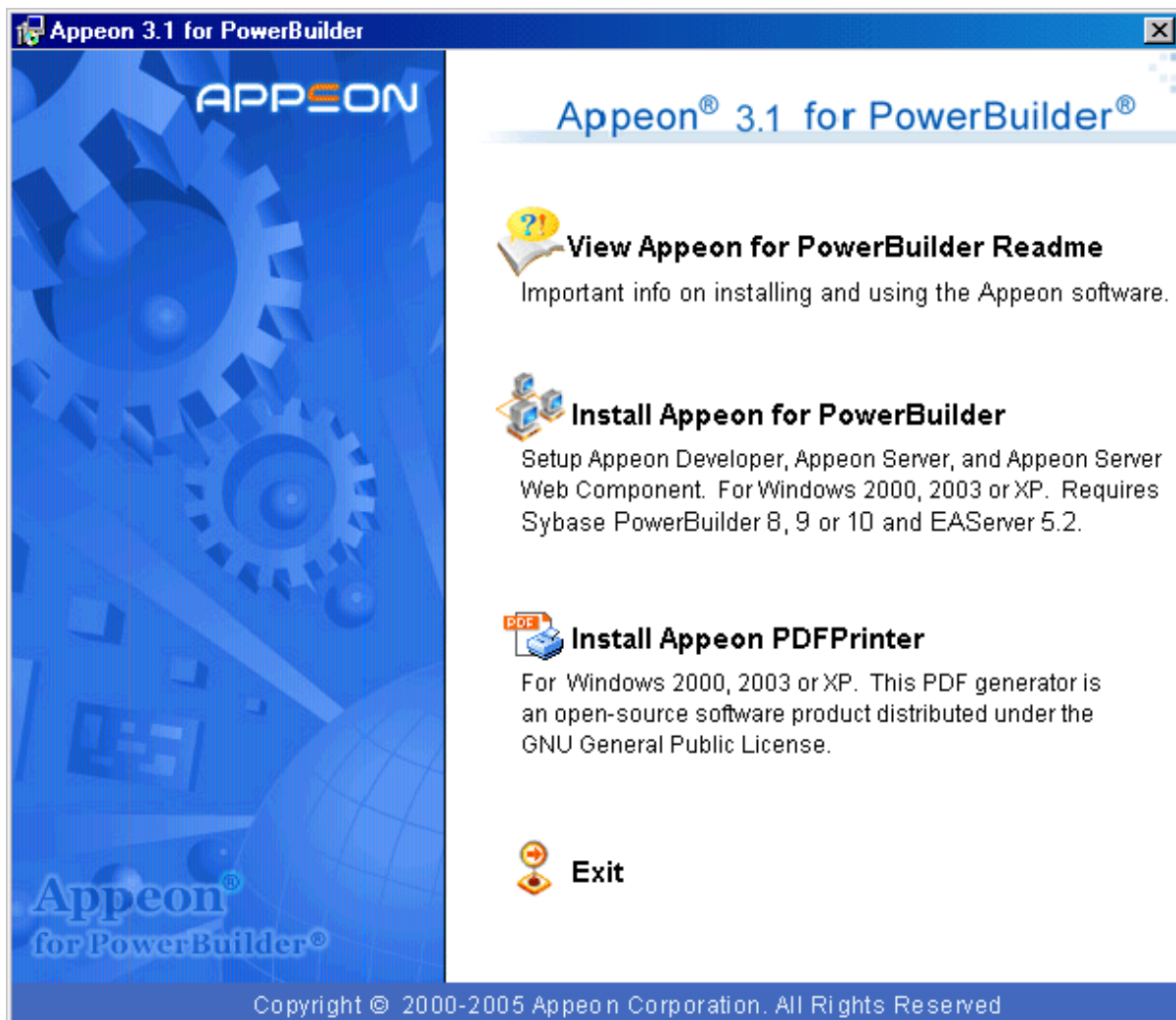
If the operating system is Windows XP, verify that the logon user of the computer is the same for Appeon PDFPrinter installation and Appeon Server installation.

4.4.5.1.b Installation instructions

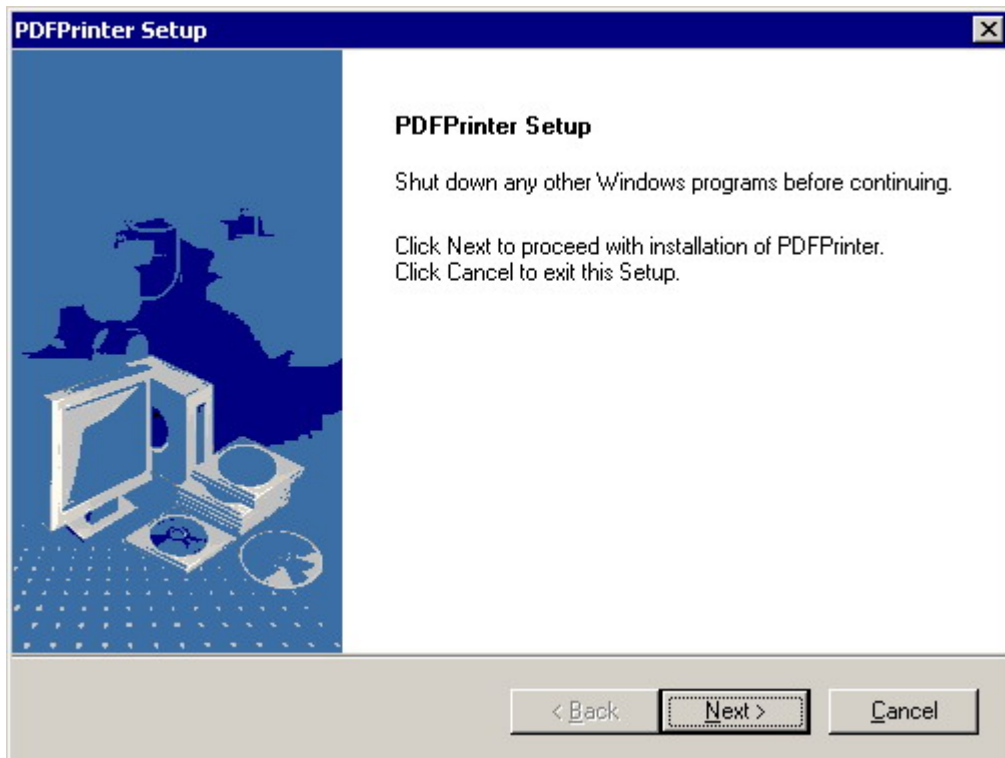
Step 1 – Double-click *Setup.exe* in the root directory of the installation package. The entry page has several links to guide you through the various installation tasks.

Step 2 – Click *Install Appeon PDFPrinter* (Figure 4-47).

Figure 4-47: Entry page

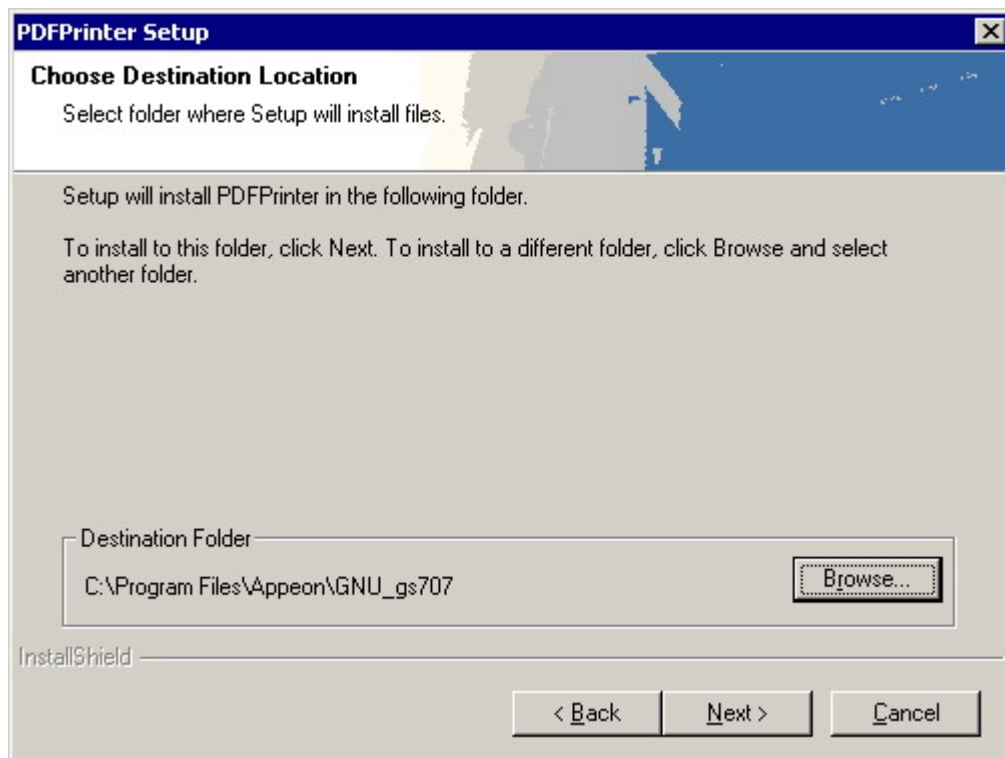


Step 3 – Click *Next* on the Appeon PDFPrinter introduction screen (Figure 4-48).

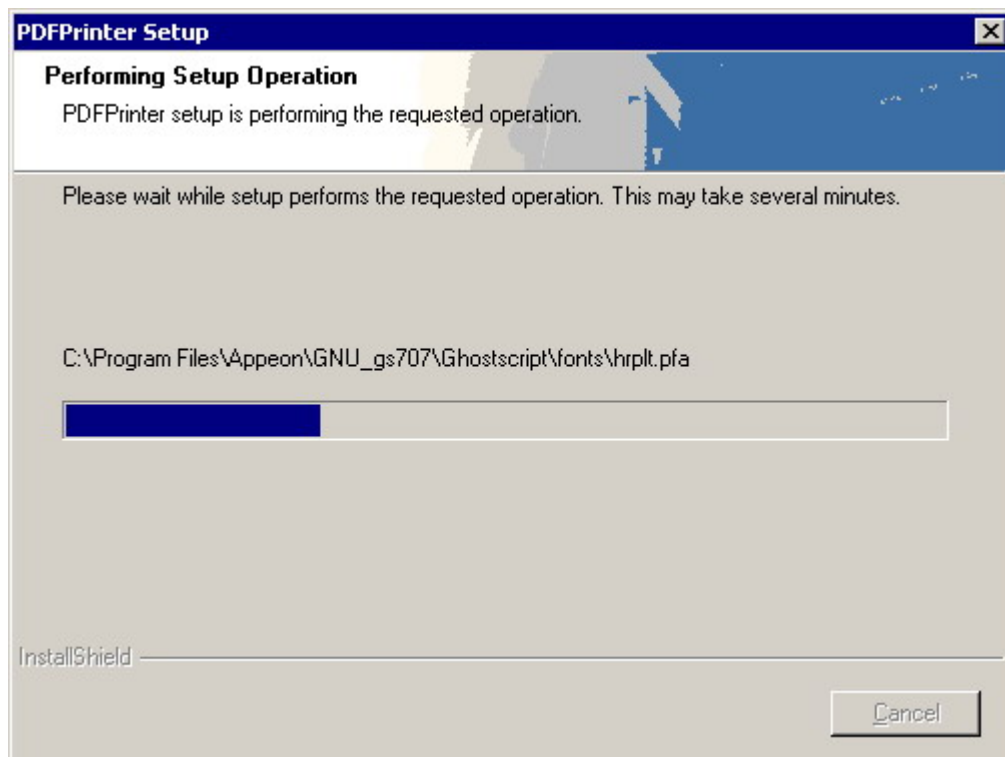
Figure 4-48: PDFPrinter introduction screen

Step 4 – Specify the destination folder for Appeon PDFPrinter installation (Figure 4-49). Click *Browse* to select a different folder. Click *Next* to begin copying files.

Note that if you are using Windows XP, when you click *Browse* to select a different folder, the Choose Folder popup window loses focus automatically. However, this will not prevent you from specifying the new directory. This is an InstallShield issue; it will not affect the installation process. This issue does not exist in Windows 2000 or Windows Server 2003.

Figure 4-49: PDFPrinter destination

Step 5 – Wait while Appeon PDFPrinter Setup copies the required files (Figure 4-50).

Figure 4-50: PDFPrinter installation process

During the file-copying process, Setup will create a *PDFPrinter_bak* folder in %SystemRoot%\Driver Cache\i386 and copy the following files to the folder:

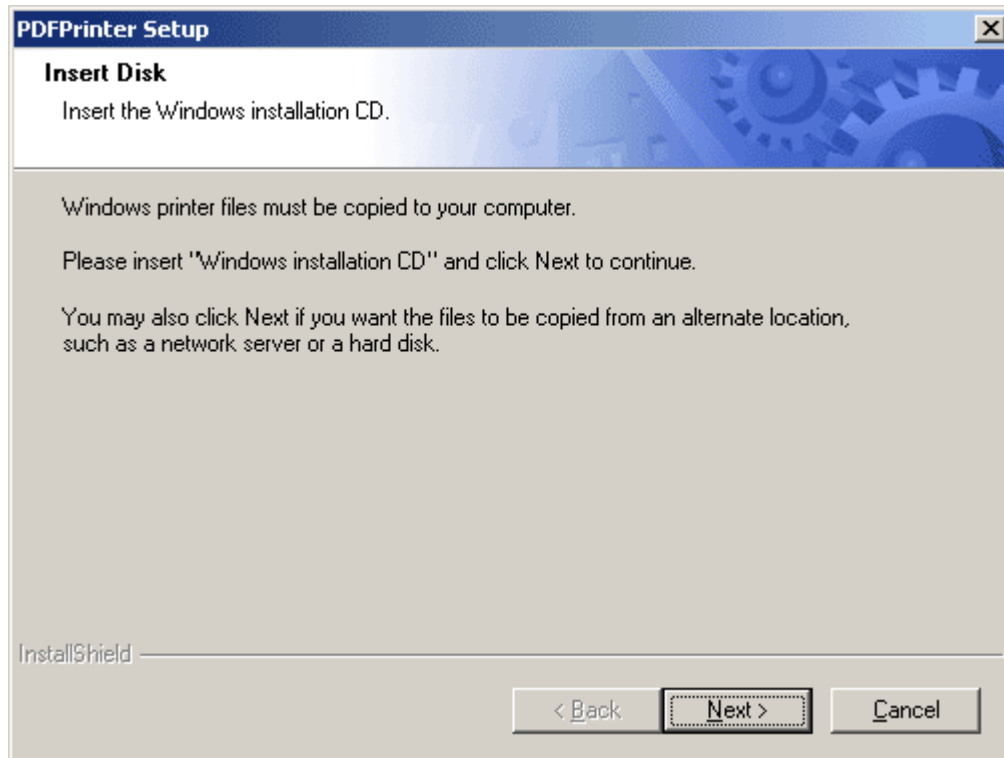
1. NTPRINT.INF in %SystemRoot%\inf

2. DRIVER.CAB in %SystemRoot%\Driver Cache\i386
3. (If you are using Windows XP or Windows Server 2003) NTPRINT.CAT in %SystemRoot%\system32\CatRoot\{F750E6C3-38EE-11D1-85E5-00C04FC295EE}

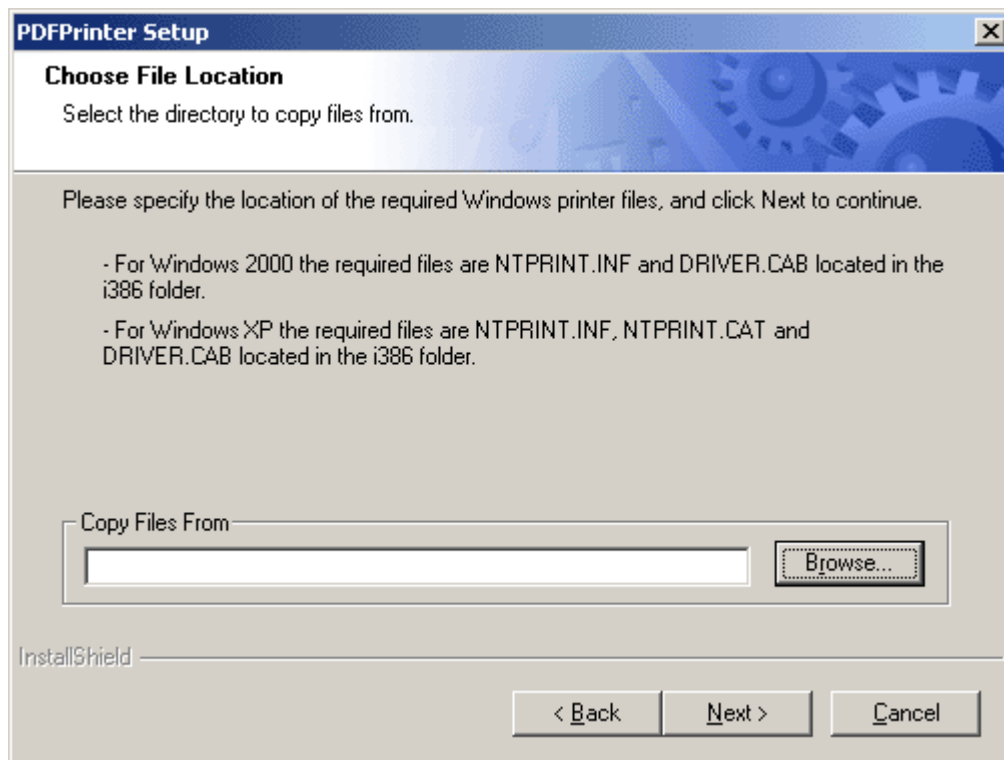
If the files are missing in the local system, you will be prompted to insert the Windows installation disk or specify the file location from other sources.

- Insert the Windows installation disk into the CD-ROM drive and click *Next* (Figure 4-51). PDFPrinter Setup will automatically locate and copy the required files from the disk without opening the “Specify Location” window in the next process.

Figure 4-51: Insert Windows installation CD



- Click *Next* without inserting the disk. The “Specify Location” window will open (Figure 4-52).

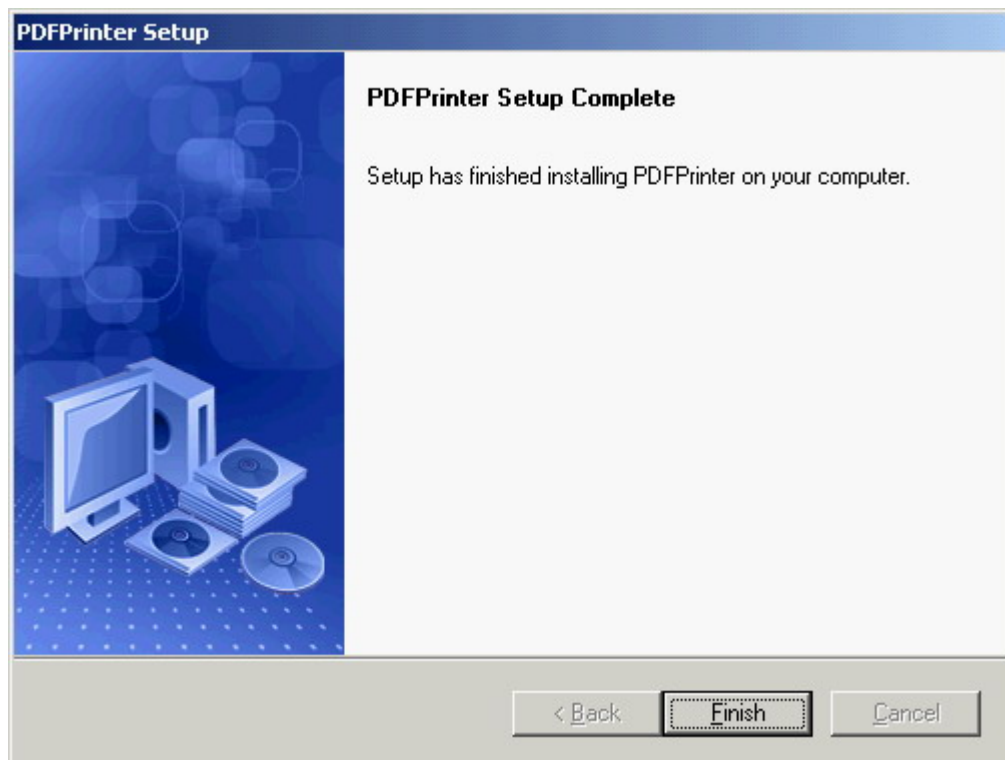
Figure 4-52: File location

Specify the location of the required files if they have already been copied to the local system before installing Appeon PDFPrinter. The files must be copied into one folder (for example, C:\My Documents\SourceFiles).

If the Windows installation files are stored in a network server, for example, [\\SoftwareServer\Windows\2000\ENGLISH\SERVER\i386](#) you can specify the location of the i386 folder. Note that the i386 folder must be included in the specified location.

Note: When uninstalling Appeon PDFPrinter, the *PDFPrinter_bak* folder will not be removed and can be used in subsequent installations. You can manually delete this file if it is no longer required.

Step 6 – Setup is complete. Click *Finish* to end the installation of Appeon PDFPrinter (Figure 4-53).

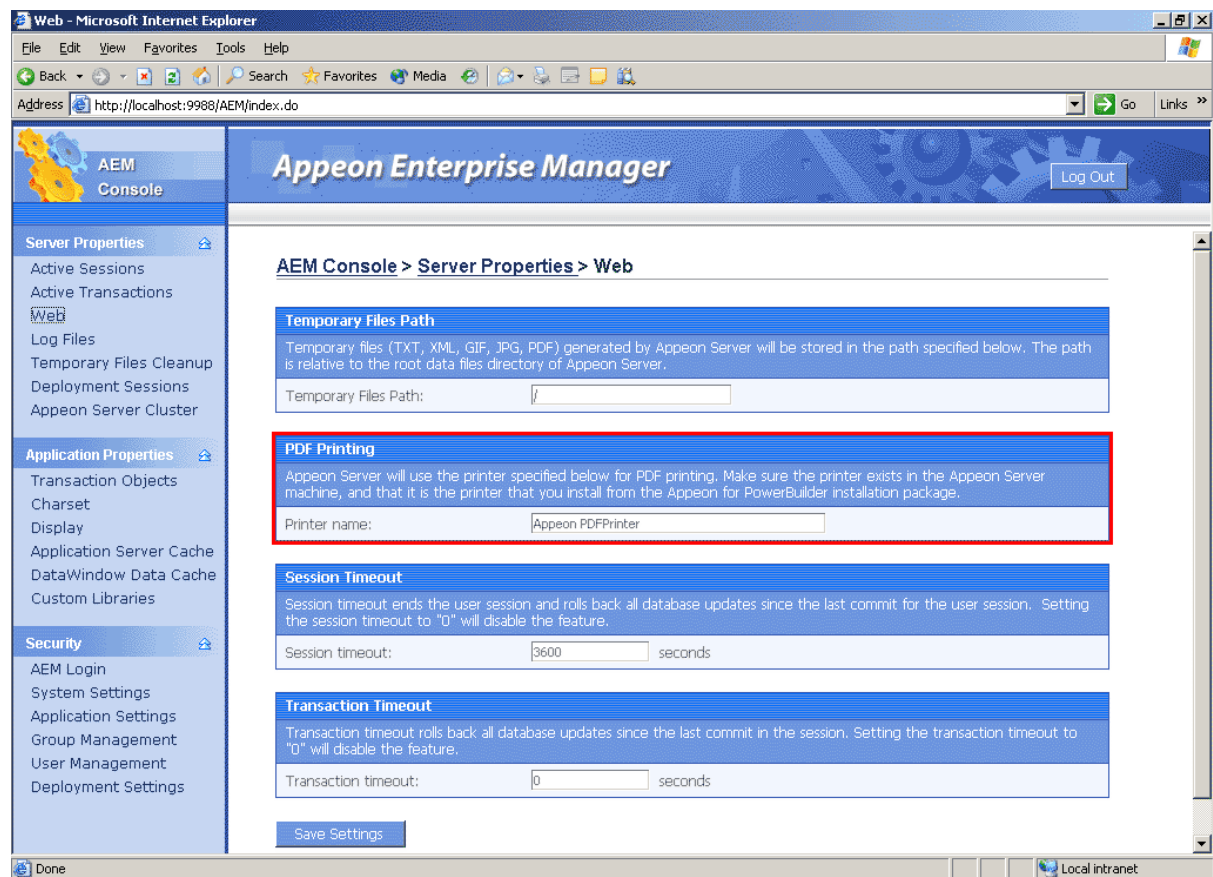
Figure 4-53: PDFPrinter Setup Complete

4.4.5.1.c Configuring Appeon PDFPrinter in AEM

A printer named "Appeon PDFPrinter" will be listed in Control Panel | Printers window once Appeon PDFPrinter is installed. Verify that Appeon PDFPrinter is listed as the printer in AEM:

Go to AEM Console | Server Properties | Web page.

By default, "Appeon PDFPrinter" is displayed in the *Printer name* text box in the *PDF Printing* group box (Figure 4-54).

Figure 4-54: PDF Printing

If you use multiple Appeon Servers, you must ensure that the Appeon PDFPrinter name in each Appeon Server is identical to the specified printer name in AEM.

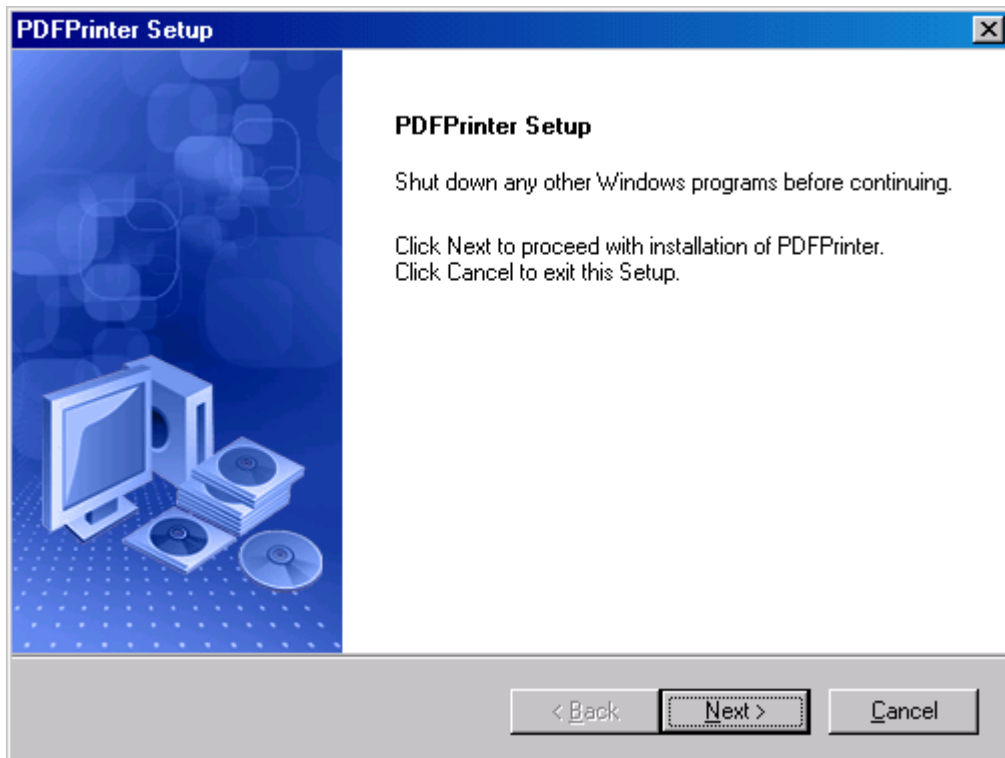
Changing the name of Appeon PDFPrinter is not recommended. If you have changed the name of PDFPrinter in the Control Panel | Printers window, enter the new name in the *Printer name* text box in AEM. Before uninstalling Appeon PDFPrinter, change the name back to “Appeon PDFPrinter” to ensure a successful uninstall.

4.4.5.2 Installing Customer PDFPrinter

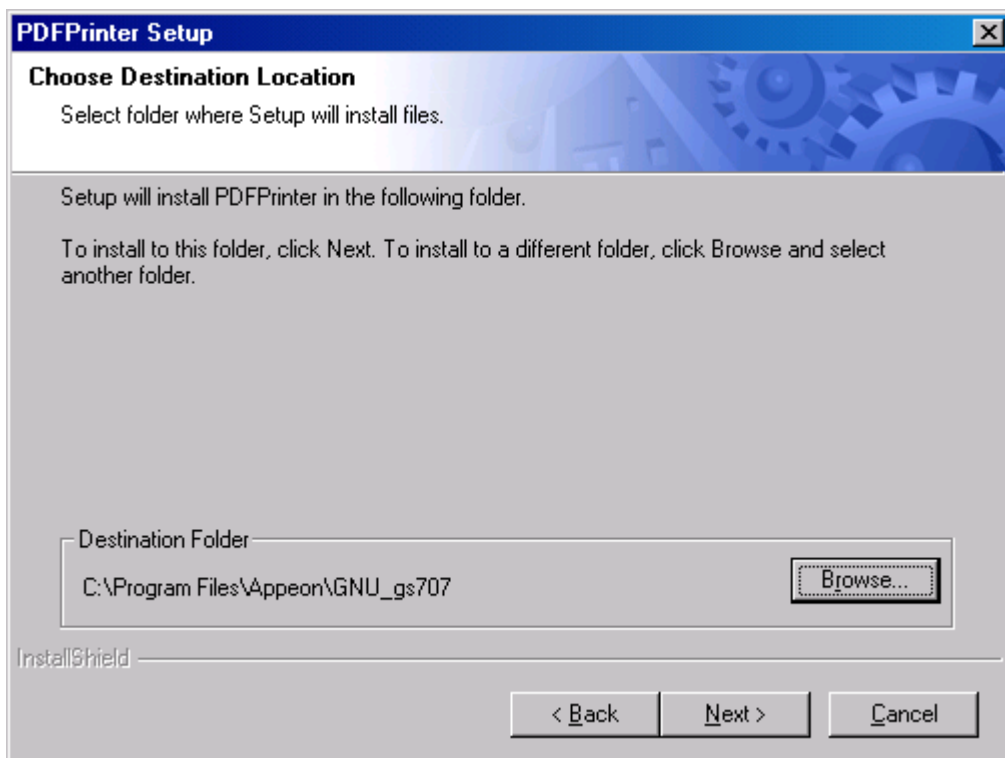
4.4.5.2.a Installation instructions

Step 1 – (On a client computer) Double-click *setup.exe* in the *Customer PDFPrinter* folder in the installation package.

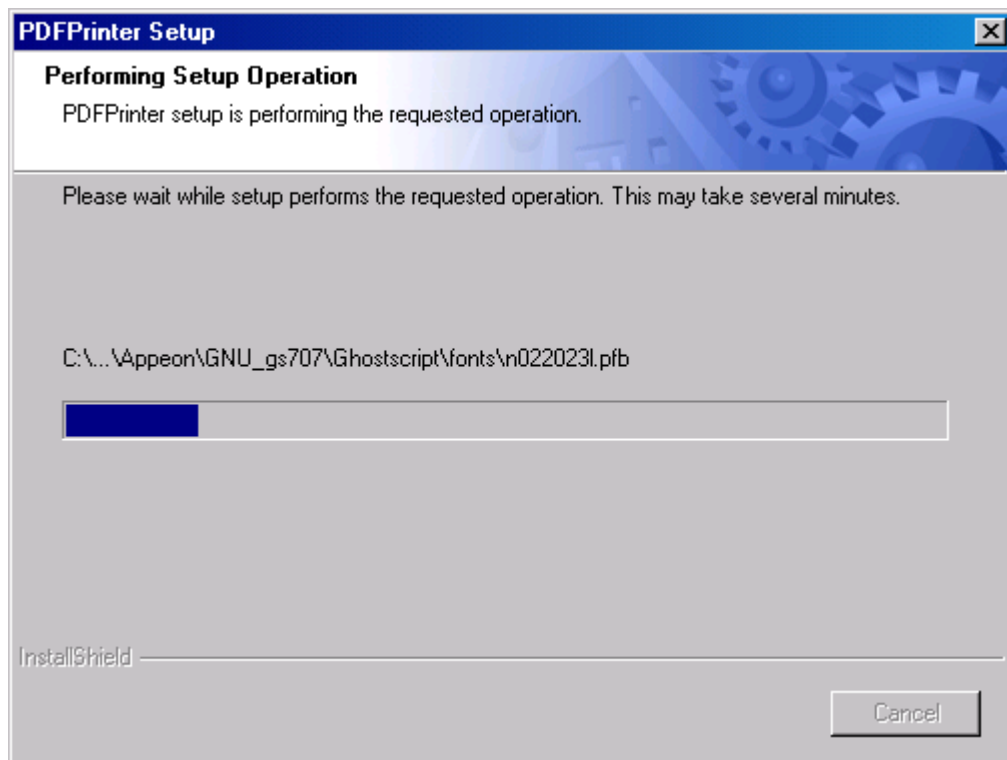
Step 2 – Click *Next* on the Customer PDFPrinter setup introduction screen (Figure 4-55).

Figure 4-55: Introduction screen

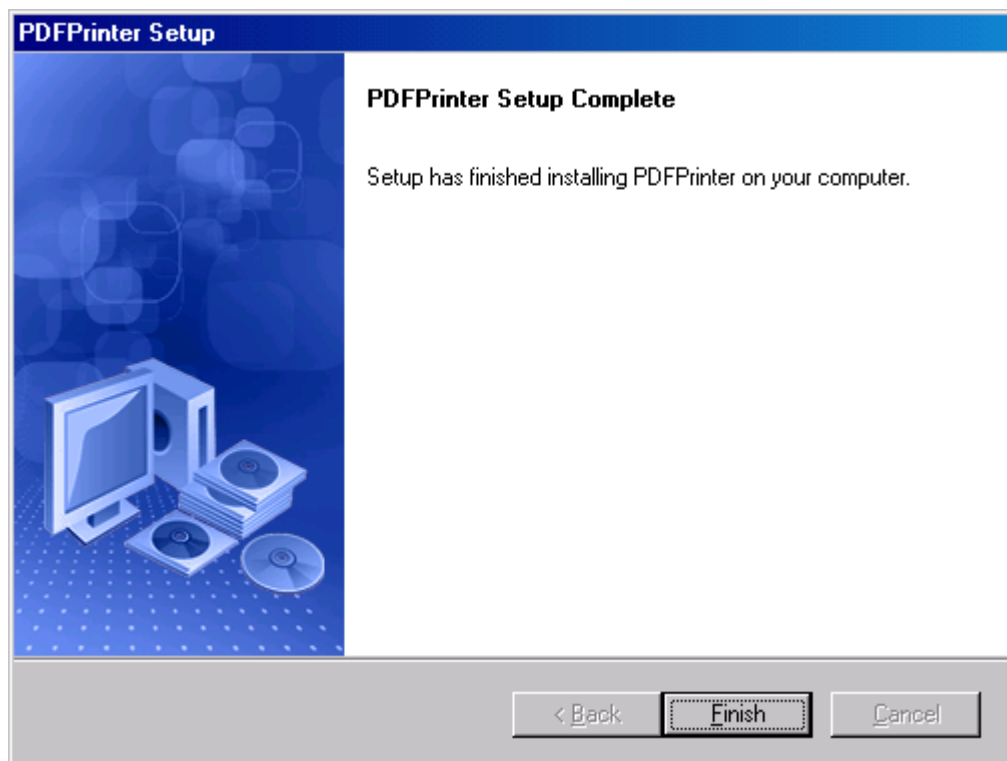
Step 3 – Specify the destination folder for Customer PDFPrinter installation (Figure 4-56). Click *Browse* to select a different folder. Click *Next* and Setup will begin copying files.

Figure 4-56: PDFPrinter destination

Step 4 – Wait while Customer PDFPrinter Setup copies the required files (Figure 4-57).

Figure 4-57: PDFPrinter installation process

Step 5 – Setup is complete. Click *Finish* to end the installation of Customer PDFPrinter (Figure 4-58).

Figure 4-58: PDFPrinter Setup Complete

4.5 Appeon 3.1 upgrade installation

4.5.1 Overview

You can only upgrade Appeon 2.8 to Appeon 3.1. If you are using Appeon 2.7 or an earlier version, or you want to deploy PowerBuilder 10 applications with Appeon 3.1, uninstall the existing version and then install Appeon 3.1.

Although the upgrade process is simpler than a new installation and can retain most of the configurations you made in the old Appeon Developer and Appeon Server, you may prefer a new installation (after uninstalling the old version) because new installation guarantees that you start everything cautiously from the very beginning, whereas upgrading means that you must be aware of the following issues:

- If your system does not meet the requirements of Appeon 3.1, the upgrade may fail, resulting in a malfunction of Appeon 3.1.
- The configuration settings of Appeon 3.1 have been adjusted since Appeon 2.8, so some of the settings are lost or changed in the upgrade. Upgrade the settings when the installation is done, following the instructions in Section 4.5.4: [Upgrade of configuration settings](#).
- Web applications deployed with Appeon 2.8 must be redeployed with Appeon 3.1 after the upgrade.

This chapter contains detailed instructions on upgrading from Appeon 2.8 to Appeon 3.1.

4.5.2 Before you upgrade

Before upgrading Appeon 2.8 to Appeon 3.1, upgrade the system environment as required in Chapter 3: [Installation Requirements](#). The following highlights key installation requirements added in Appeon 3.1.

- Upgrade the PowerBuilder version and PBVM version to 8.0.4 Build 10784, 9.0.2 Build 7578 or 10.2 Build 8050.
- Do not install Appeon Developer to Windows NT, but to Windows 2000 SP4, Windows XP SP1, Windows XP SP2 or Windows Server 2003.
- If using Windows XP as the operating system for Appeon Server or Appeon Developer, upgrade to Windows XP SP1 or SP2.
- Do not use iPlanet, Netscape or IIS 4.0 as the Web server.
- Upgrade the EA Server version from 5.0 to 5.2. Make sure you use the “*Upgrade install*” setup type provided by the EA Server installation program. Do not use Add/Remove programs to uninstall EA Server 5.0 or manually remove any EA Server 5.0 related folders.

In addition to the system environment requirements, you should meet the installation prerequisites listed in Section 4.4: [Appeon 3.1 new installation](#) before upgrading each of the Appeon components.

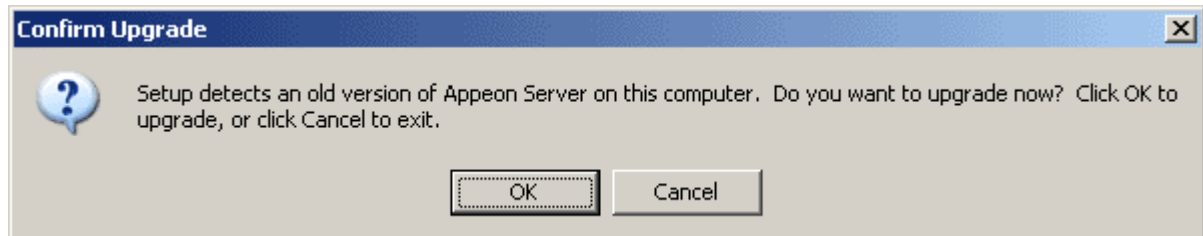
4.5.3 Upgrade procedure

4.5.3.1 Upgrading Appeon Server

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

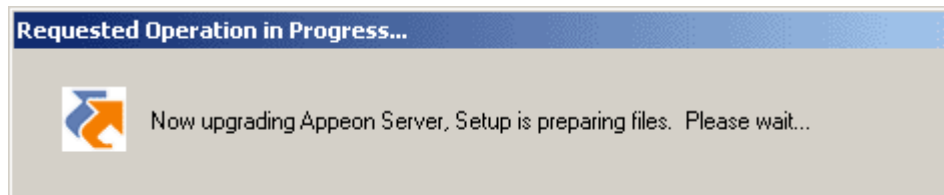
Step 2 – Click the *OK* button in the *Confirm Upgrade* message box, as shown in Figure 4-59.

Figure 4-59: Confirm upgrade

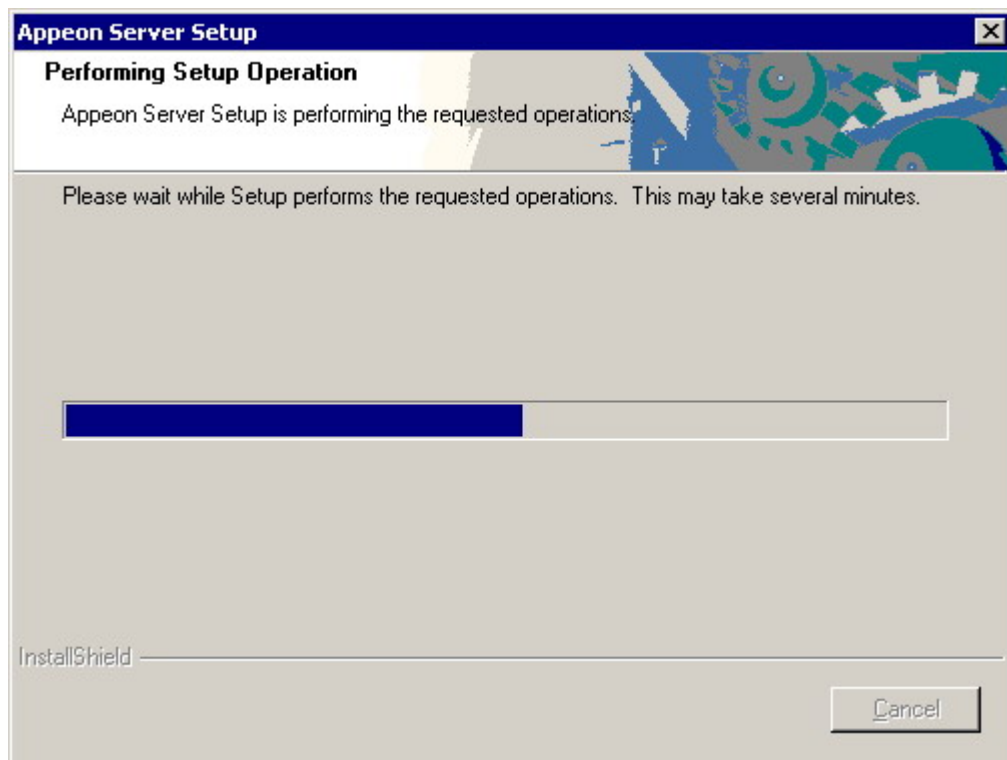


When the *OK* button is clicked, a message box opens indicating that the upgrade is preparing files, as shown in Figure 4-60.

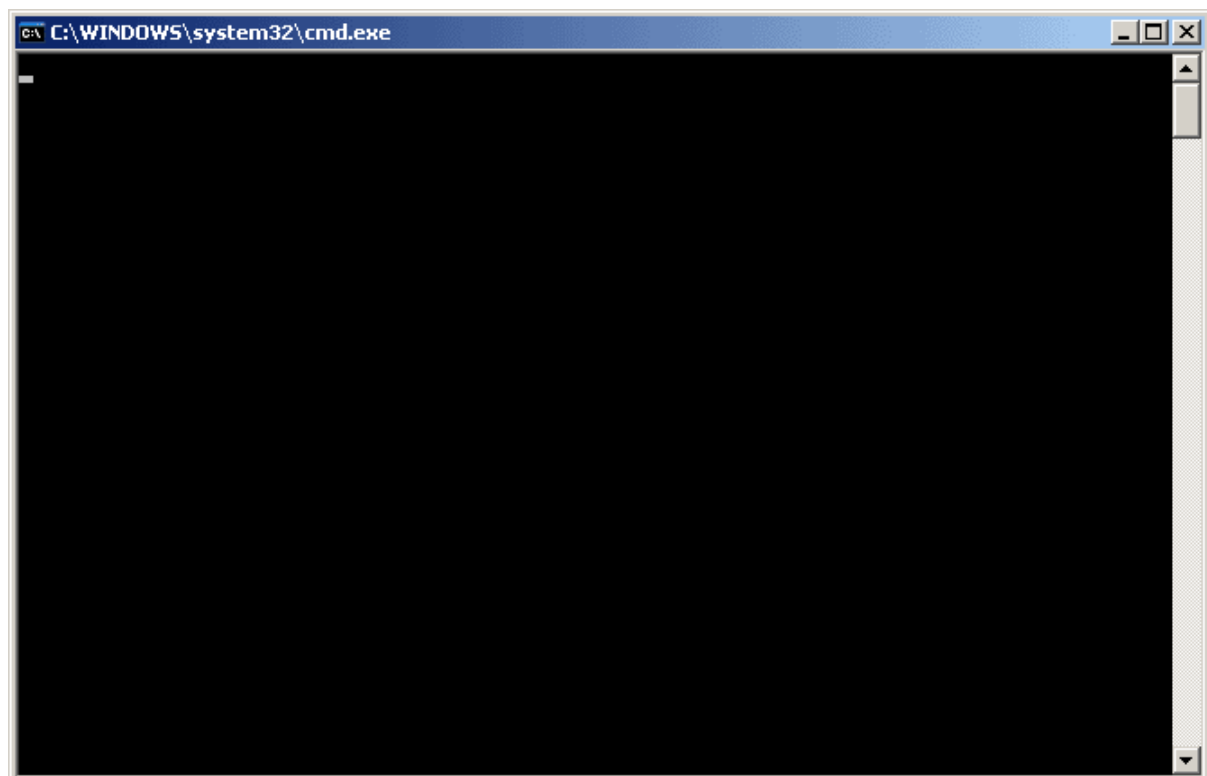
Figure 4-60: Setup is preparing files



The upgrade process uninstalls Appeon Server 2.8, backs up configurations made to the Appeon Server and begins the installation of Appeon Server 3.1 based on the previously backup information. The following window opens once the Appeon Server 3.1 installation is in progress, as shown in Figure 4-61.

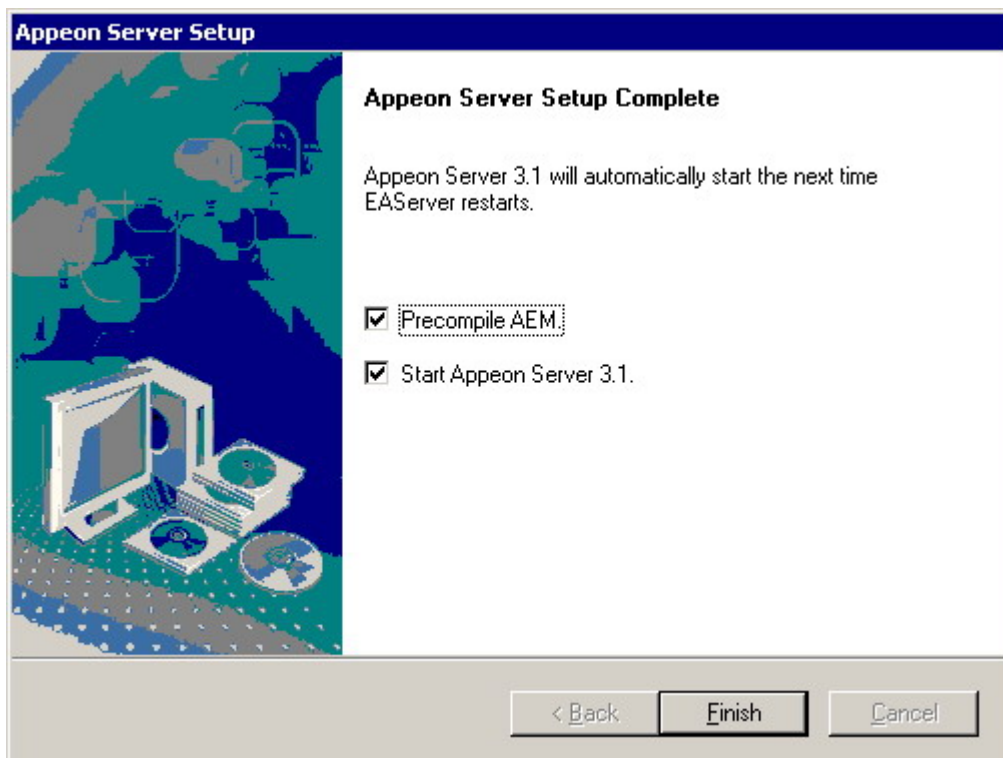
Figure 4-61: Setup in progress

At the end of the process, a command window (shown in Figure 4-62) opens and remains for a few minutes. Do not close this window as it will close by itself.

Figure 4-62: Command window

When the Appeon Server upgrade installation completes, there will be two items in InstallShield: *Precompile AEM* and *Start Appeon Server 3.1*.

Figure 4-63: Setup is complete



If you check *Precompile AEM* and click the *Finish* button, a command window will open indicating that the program is now precompiling AEM. This helps to speed up the initial startup of AEM, as shown in Figure 4-64.

Figure 4-64: Precompile AEM

```

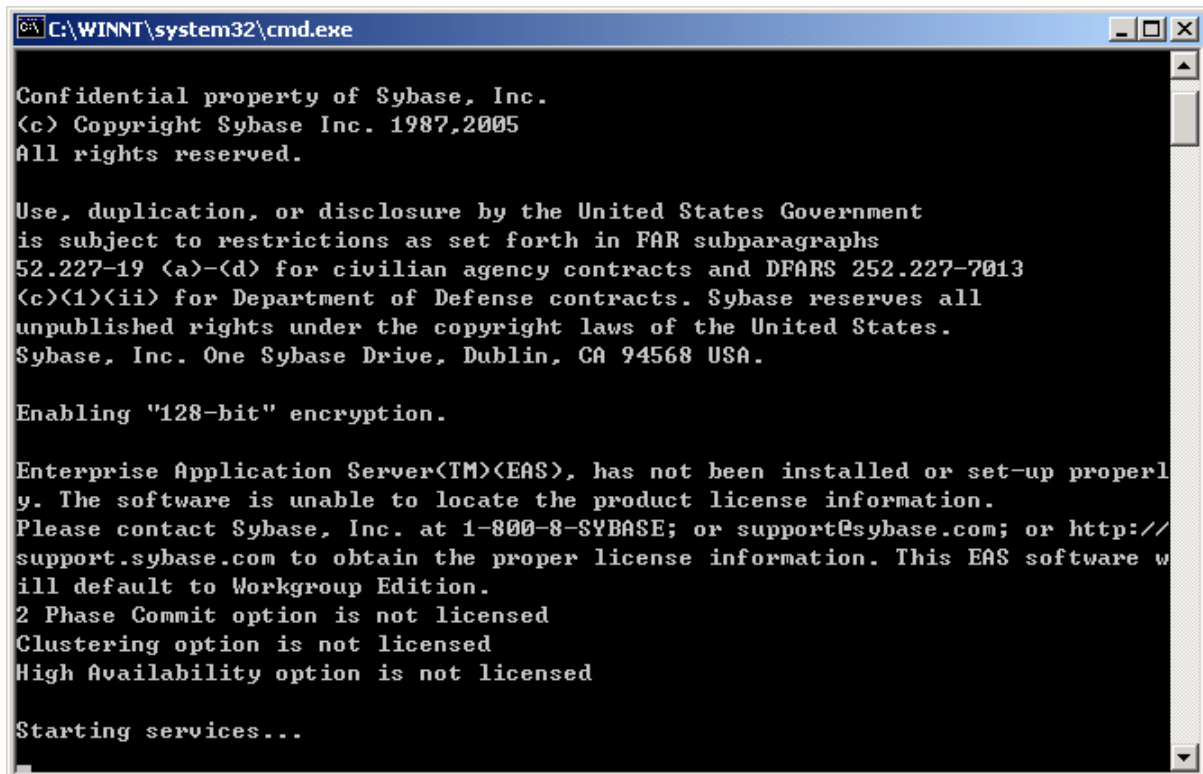
C:\WINNT\system32\cmd.exe
ation/AEM/WEB-INF/lib/commons-fileupload.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/Repository/WebApplic
ation/AEM/WEB-INF/lib/castor-xml.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/Repository/WebApplic
ation/AEM/WEB-INF/lib/commons-beanutils.jar for TLD entry
Checking the jar file file:C:/Program Files/Appeon/EAServer/extensions/CacheTags
.jar for TLD entry
Parsing TLD in jar file /CacheTags.jar
added mapping: http://www.sybase.com/EAServer/cachetags.tld -> /CacheTags.jar ME
TA-INF/cachetags.tld
-----
Compiling /configAssistant/activation.jsp...
-----
Compiling /configAssistant/addApplication.jsp...
-----
Compiling /configAssistant/addCharsetOfApplication.jsp...
-----
Compiling /configAssistant/addClusteringServer.jsp...
-----
Compiling /configAssistant/addTransObject.jsp...
-----
Compiling /configAssistant/application.jsp...
-----
Compiling /configAssistant/applicationList.jsp...

```

Precompiling takes a few minutes; the time varies based on the server hardware.

If you check *Start Appeon Server 3.1* and click the *Finish* button, Appeon Server starts as shown in Figure 4-65.

Figure 4-65: Start Appeon Server

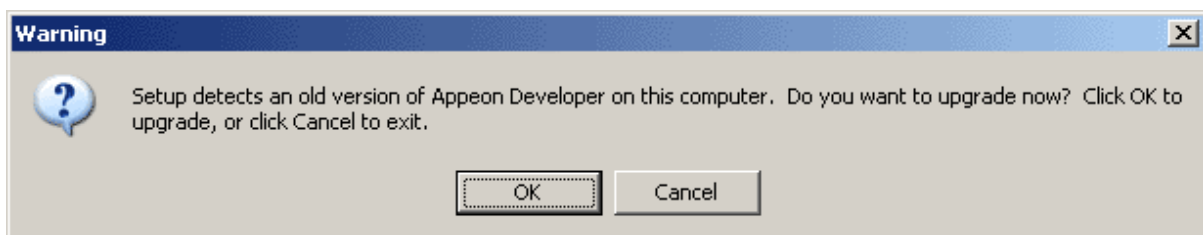


4.5.3.2 Upgrading Appeon Developer

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

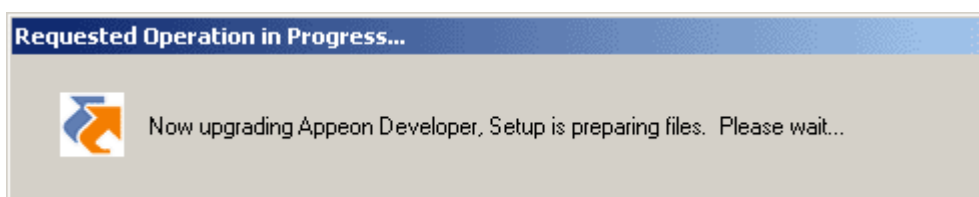
Step 2 – Click the *OK* button in the *Confirm Upgrade* message box, as shown in Figure 4-66.

Figure 4-66: Confirm upgrade



Once you click the *OK* button, a message box opens indicating that Setup is preparing files, as shown in Figure 4-67.

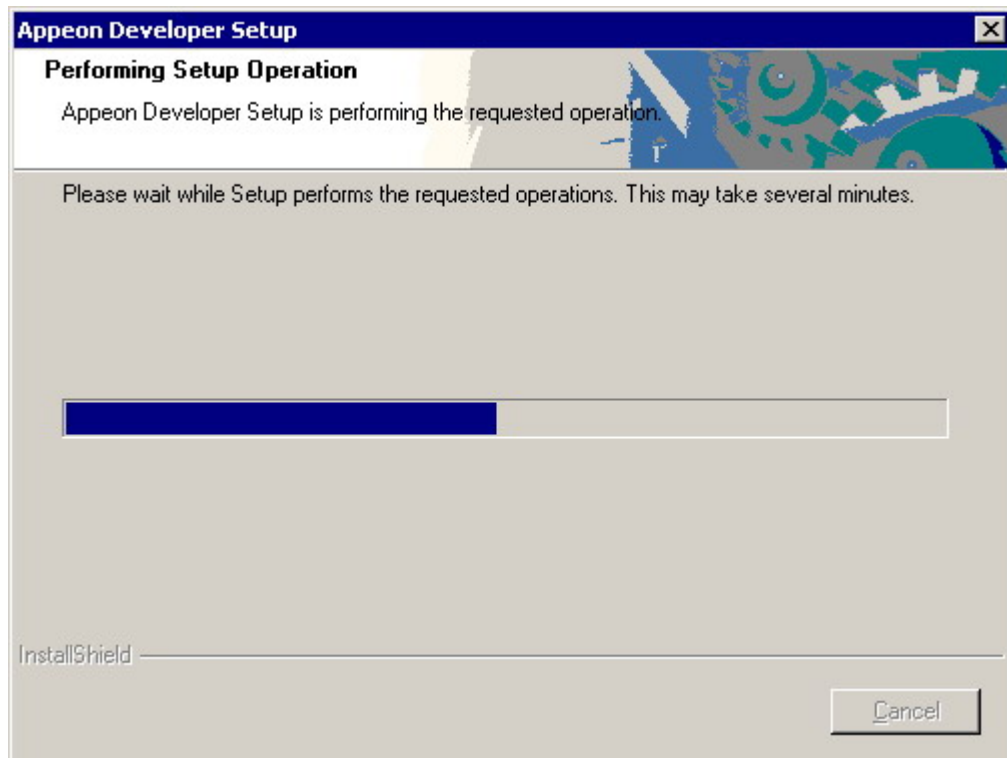
Figure 4-67: Setup is preparing files



The upgrade process uninstalls Appeon Developer 2.8, backs up configurations made to the Appeon Developer then begins the installation of Appeon Developer 3.1 based on the backup

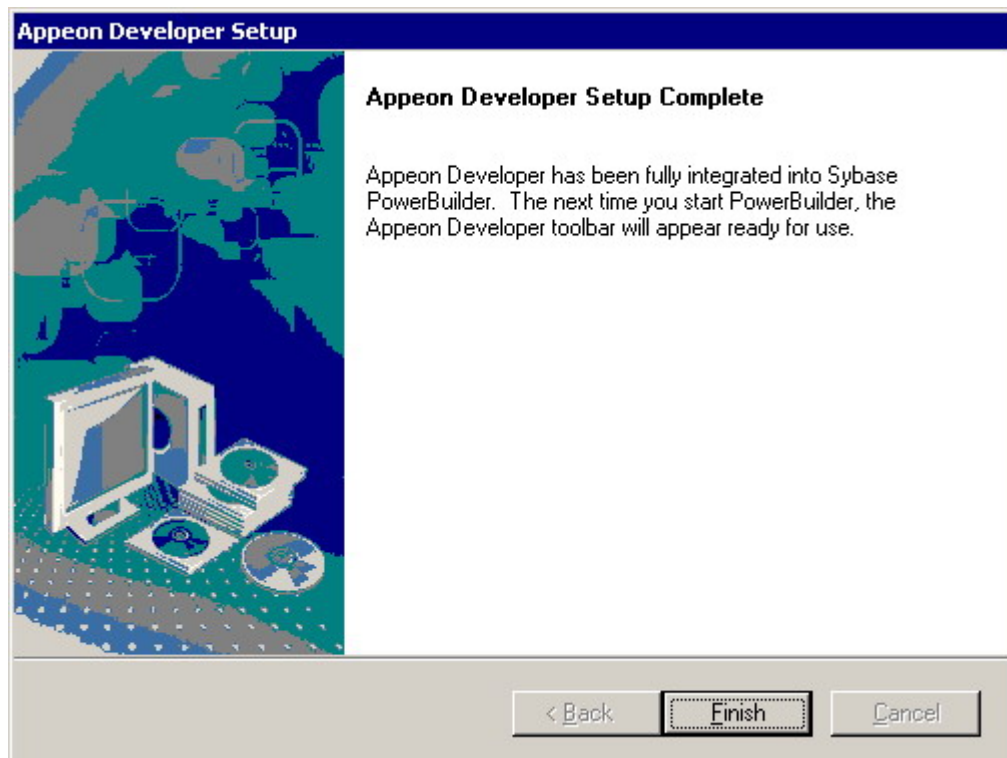
information. The following window opens once the Appeon Developer 3.1 installation is in progress, as shown in Figure 4-68.

Figure 4-68: Setup in progress



Wait until the installation is complete, as shown in Figure 4-69.

Figure 4-69: Setup is complete



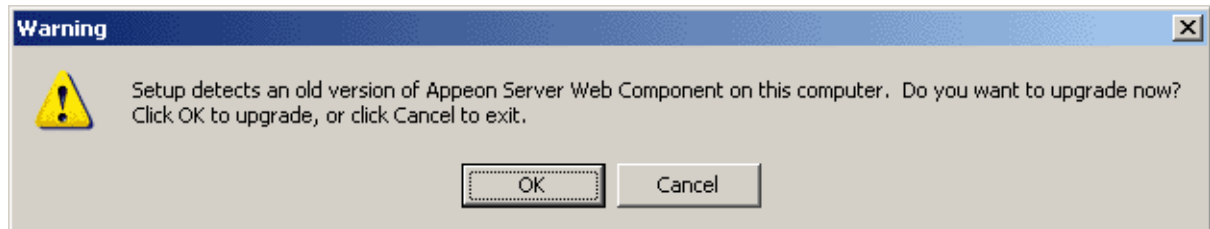
Step 3 – Click the *Finish* button.

4.5.3.3 Upgrading Appeon Server Web component

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

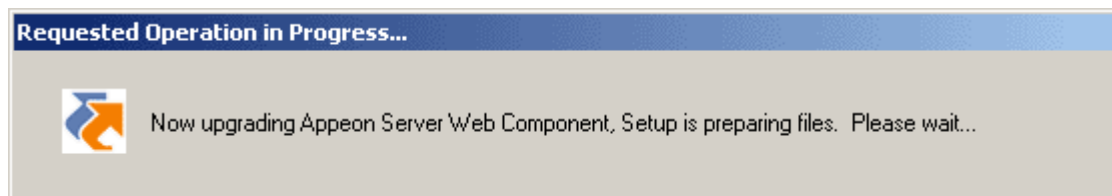
Step 2 – Click the *OK* button in the *Confirm Upgrade* message box, as shown in Figure 4-70.

Figure 4-70: Confirm upgrade



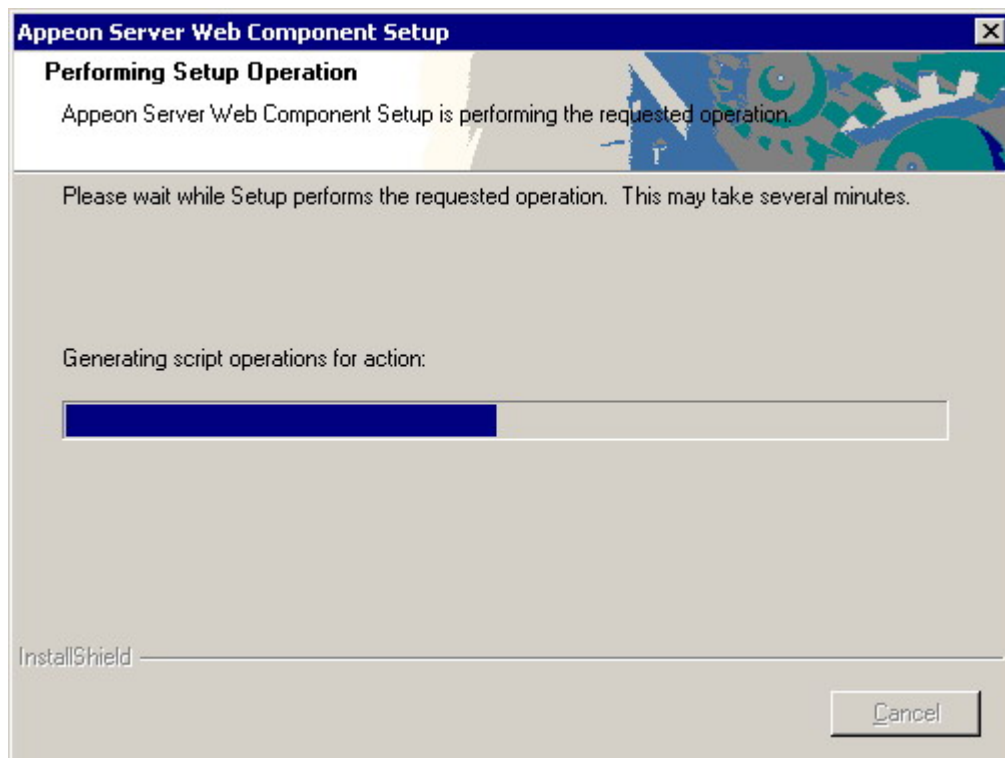
Once you click the *OK* button, a message box opens indicating that Setup is preparing files, as shown in Figure 4-71.

Figure 4-71: Setup is preparing files



The upgrade process uninstalls Appeon Server Web Component 2.8 and begins the installation of Appeon Server Web Component 3.1. The following window opens once the Appeon Server Web Component 3.1 installation is in progress, as shown in Figure 4-72.

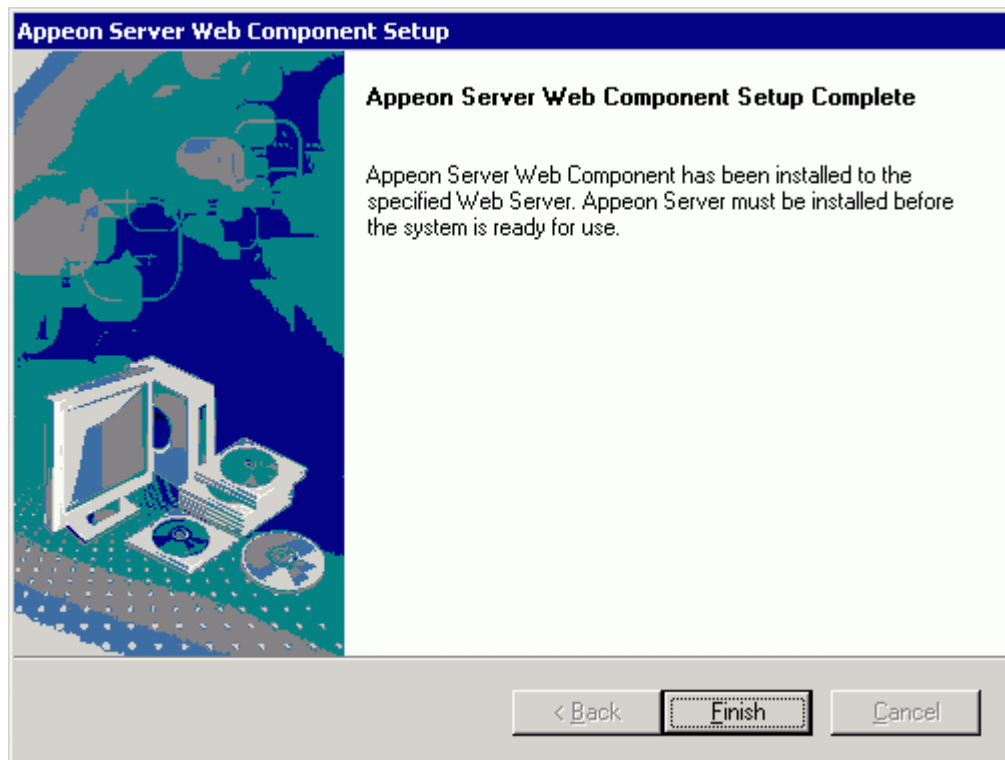
Figure 4-72: Setup in progress



Wait until the upgrade installation completes.

Step 3 – Click the *Finish* button to finish the installation, as shown in Figure 4-73.

Figure 4-73: Setup is complete



4.5.3.4 Upgrading Appeon PDFPrinter

Besides Appeon PDFPrinter, Appeon provides an additional PDF printer, Customer PDFPrinter, for printing Web DataWindows to PDF files at the client. Refer to Section 4.4.5: [PDF printers installation](#) for installation instructions for Customer PDFPrinter.

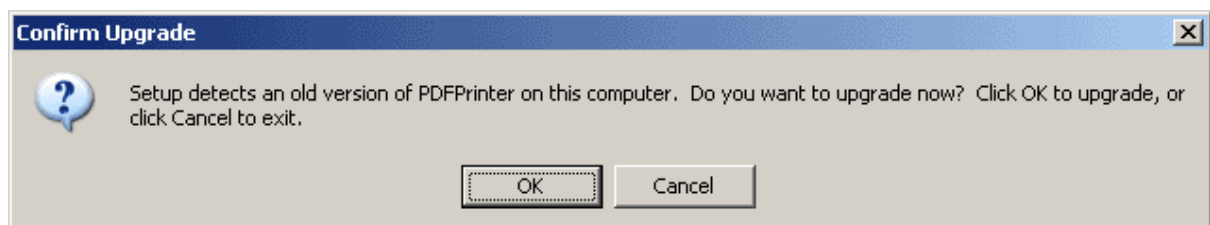
Follow the instructions below to upgrade Appeon PDFPrinter:

Step 1 – Double click the *Setup.exe* file to run the installation program.

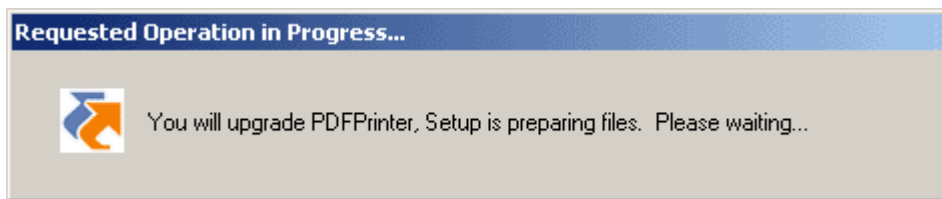
Step 2 – Click *Install Appeon PDFPrinter*.

Step 3 – Click the *OK* button in the *Confirm Upgrade* message box, as shown in Figure 4-74.

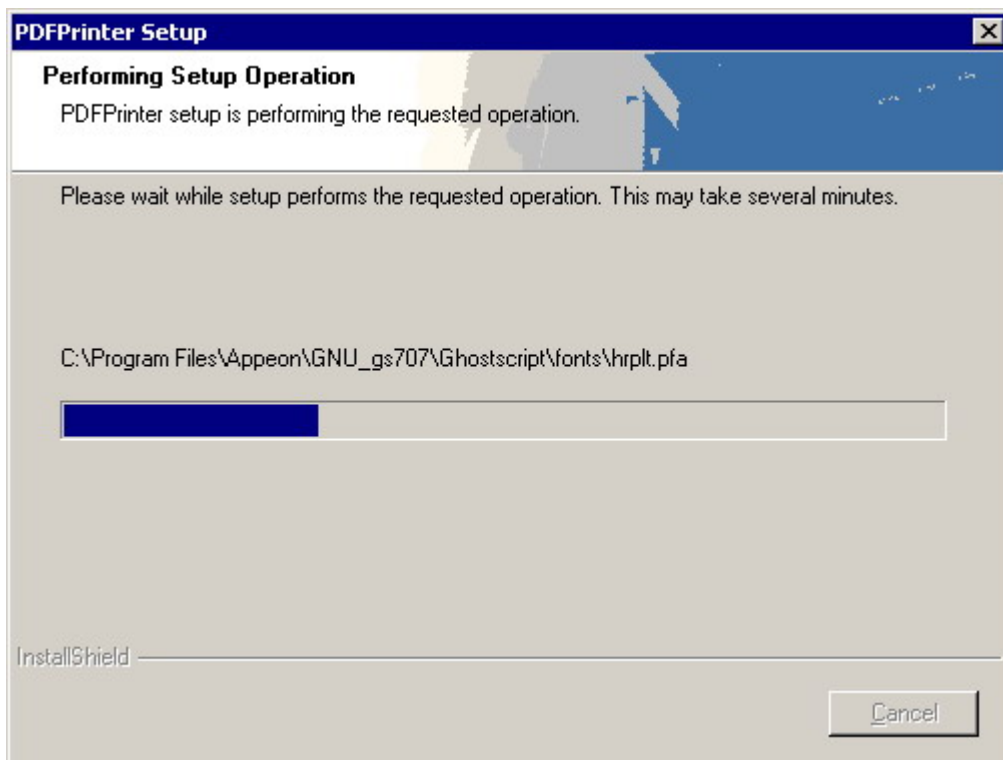
Figure 4-74: Confirm upgrade



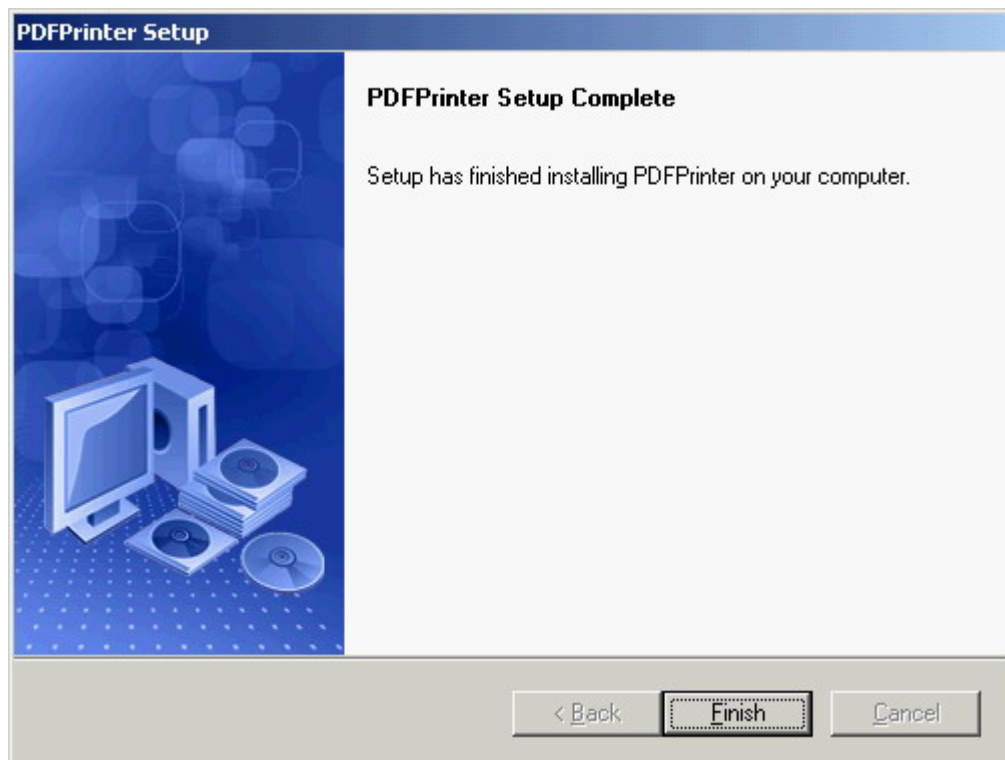
Once you click the *OK* button, a message box opens indicating that Setup is preparing files, as shown in Figure 4-75.

Figure 4-75: Setup is preparing files

When all files are ready, the program begins to upgrade the Appeon PDFPrinter.

Figure 4-76: Setup in progress

Wait until the installation is complete.

Figure 4-77: Setup is complete

Step 4 – Click the *Finish* button to finish the installation, as shown in Figure 4-77.

4.5.4 Upgrade of configuration settings

After the product upgrade, most configurations made in Appeon Developer 2.8 are retained and will continue to work in Appeon 3.1. However, because the configuration settings of Appeon 3.1 have been adjusted since Appeon 2.8, it is recommended that you review the configuration settings in Appeon Developer, AEM and Appeon Server to become familiar with the new settings and make sure the old ones are not lost. Pay special attention to the settings marked “setting that is lost” in the tables included in this section.

After verifying all settings, Web applications deployed with Appeon 2.8 must be redeployed in Appeon 3.1.

Note: If the application uses ACF framework or Appeon Workarounds PBL, you must use the new ACF or Appeon Workarounds PBL to replace those used in Appeon 2.8. If the application contains server NVO(s), redeploy the NVO(s) to EAServer 5.2 in PowerBuilder and generate stub and skeleton for the server NVO(s) as required in the *Appeon Migration Guide*.

4.5.4.1 Upgrading settings in Appeon Developer

If you upgrade from Appeon 2.8 Advanced Edition to any edition of Appeon 3.1, most of the settings made for Pure-JavaScript deployment are retained, though some are changed (Appeon 2.8 Advanced Edition only supports Pure-JavaScript deployment).

If you upgrade from Appeon 2.8 Enterprise Edition to any edition of Appeon 3.1, settings specifically made for Pure-JavaScript are lost; most settings made for Appeon Xcelerator deployment are retained, though some are changed.

Table 4-7 gives instructions on upgrading settings in Appeon Developer made for Appeon 2.8 Advanced Edition Pure-JavaScript deployment or for Appeon 2.8 Enterprise Edition Appeon

Xcelerator deployment. If you have used the Appeon 2.8 Enterprise Edition Pure-JavaScript deployment, manually restore all settings related to the deployment.

Table 4-7: Upgrading settings in Appeon Developer

Setting	Upgrade of the Setting	
	Type of Change	Detail
Application Profile Settings	Settings that are retained	The following settings made in Appeon 2.8 can still work in Appeon 3.1: Deployment option (debug or encrypted), Deployment path, Application PBLs, INI files, Images, Command Line Arguments, Performance settings, Application Language, Generate Heavy Window Report” settings.
	Setting that is upgraded	All settings made for demo applications are upgraded based on Appeon 3.1 configuration requirements.
	Setting that is lost	You need to reconfigure database profile settings in the DB Type tab page.
	Setting that can be newly-added	You can specify and deploy external non-system DLL/OCX files
	Setting that can be newly-added	You can specify application PBLs for deployment with Appeon Xcelerator.
DB Type Profile	Setting that is lost	You need to reconfigure database type profile settings in the DB Type Profile tab page.
Server Profile Settings	Settings that are retained	The following settings made in Appeon 2.8 can still work in Appeon 3.1: Default server, Appeon Server (Web Server) profile settings
	Setting that is lost	You need to specify a working server port (for example, “9988”) for the Local Appeon Server profile that is created during the Appeon Developer installation.
	Setting that should be changed	The configuration made in Appeon 2.8 for the Server port IOP is not compatible with Appeon 3.1 and should be removed.
	Setting that must be newly-added	You need to specify a deployment user and password authorized in AEM for an Appeon Server profile.
Deployment Profile Settings	Settings that are retained	The deployment profile settings made in Appeon 2.8 can still work in Appeon 3.1.
Preview Options	Settings that are lost	All preview options are lost because Appeon 3.1 does not provide preview functionality.
Customize UFA Report Settings	Settings that are lost	You have to reconfigure the UFA report settings. Moreover, there are more UFA report settings available in Appeon 3.1.

Other Settings	Settings that are lost	You have to reconfigure the following settings: Web Report Configuration. Web Debug Report configuration Performance Tracing Report configuration
----------------	-------------------------------	--

4.5.4.2 Upgrading settings in Appeon Enterprise Manager

Table 4-8 lists settings that are retained after the upgrade installation as well as those that need to be reconfigured or adjusted according to the requirements of Appeon Enterprise Manager 3.1.

Table 4-8: Upgrading settings in Appeon Enterprise Manager

Setting	Upgrade of the Setting	
	Type of Change	Detail
Server Properties Settings	Settings that are retained	The following settings made in Appeon 2.8 can still work in Appeon 3.1: Active Sessions, Active Transactions, all Web Settings, Log files operations, Replace log file, Temporary files cleanup settings, deployment sessions, Appeon Server cluster.
	Setting that is lost	Log files path specified is lost. Instead, all server logs are stored to %JAGUAR%\appeon\log.
Application properties	Settings that are retained	The following settings The following settings made in Appeon 2.8 can still work in Appeon 3.1: Transaction Objects, Charset, Display formats of date, time and concurrency data, Cache
	Setting that is lost	Appeon DataWindow menu setting is lost. Instead, you should apply the two Appeon DataWindow menu functions, AppeonPopupMenu and AppeonPopupMenuOn, provided in the Appeon Workarounds PBL for enabling the menu.
	Setting that can be newly-added	You can apply the DataWindow Data Cache tool to cache DataWindow data that are frequently used on the Web Server for boosting performance. If your application calls to any DLL or OCX files, you can apply the Custom Libraries tool to configure how the DLL or OCX files should be downloaded to the Client.
Security Settings	Settings that are retained	The following settings The following settings made in Appeon 2.8 can still work in Appeon 3.1: AEM login setting, System settings, Application settings, Group management, User management
	Setting that can be newly-added	You can use the Deployment Settings tool to manage Appeon Server deployment security, which controls what PowerBuilder developers are allowed to deploy applications to Appeon Server.

4.5.4.3 Upgrading settings in Appeon Server

Table 4-9 lists settings that are retained after the upgrade installation as well as those that need to be reconfigured or adjusted according to the requirements of Appeon Server 3.1.

Table 4-9: Upgrading settings in Appeon Server

Setting	Upgrade of the Setting	
	Type of Change	Detail
Connection Cache and listener settings	Settings that are retained	The following settings made in Appeon 2.8 can still work in Appeon 3.1: All connection cache settings, listener settings.
Appeon Server Status Monitor	Settings that are lost	All settings made to Appeon Server Status Monitor are lost. Follow the instructions in the <i>Appeon Enterprise Manager User Guide</i> to configure the status monitor.

5 Third-party Web Server Configuration

5.1 Overview

When the Apeon Server Web Component is installed on a third-party Web server, install and configure the appropriate Sybase redirector plug-in on the Web server immediately following the installation. The *Sybase EAServer Installation Guide* includes instructions on how to configure the redirector plug-in for Web servers.

This chapter focuses on the following aspects:

- Configuring the redirector plug-in to allow the Web server to work with Apeon Server.
- Configuring the plug-in to enable the Web server to compress Web files by a factor of 10.
Before configuring the plug-in, make sure that the “10X Web file compression” feature is enabled during the application deployment by following the instructions in the *Performance Settings* section in the *Apeon Developer User Guide*.
- Configuring the plug-in to enable the Web server to cache DataWindow data.
Before configuring the plug-in, make sure the “DataWindow Data Cache” feature in AEM is enabled by following the instructions in the *DataWindow data cache* section in the *Apeon Enterprise Manager User Guide*.

5.2 Configuring Apache 1.3 as the Web server

When you install Apeon Server Web Component to Apache 1.3, an *Apache13Support* folder is installed to %Apache%\htdocs\Apeon folder.

There are two folders, *conf* folder and *modules* folder, in *Apache13Support*, each of which contains components provided by Apeon to allow Apache 1.3 to work correctly.

- Components in conf folder
 - apeoncache.conf – The configuration file for enabling the Apeon Xcelerator DataWindow Data Cache feature.
 - easinit.conf – The configuration file for the redirector plug-in.
- Components in modules folder
 - ajtdown.so – A component specially designed for Pure-JavaScript deployment.
 - ApacheModuleGzip.dll – A component for Pure-JavaScript deployment provided by Apache.
 - modcache.dll – A component for configuring the Apeon Xcelerator DataWindow Data Cache feature.

Apeon 3.1 supports two deployment options, Pure-JavaScript deployment and Apeon Xcelerator deployment. Some configurations differ for the two methods.

5.2.1 Basic configuration

Basic configurations are those that should be made regardless of the deployment option you choose.

Step 1 – Copy the following libraries from the %JAGUAR%\dll folder to the %Apache%\modules folder:

```
libjcc.dll
libjcomn.dll
libjctssecct.dll
libjeasproxy_mod.dll
libjeas_mod.dll
libjintl.dll
libjspks.dll
libjsybscl.dll
libjtml.dll
libjutils.dll
nlwnsck.dll
nlwnsck64.dll
```

Step 2 – Copy the easinit.conf file from %Apache%\htdocs\apeon\Apache13Support\conf to the %Apache%\conf folder.

Step 3 – Open the file and specify the name and port for Apeon Server to receive requests from Apache Web Server. The syntax is:

```
Connector.WebApp
servlet,imagefile,reportfile,dwfile,AEM=http://EaserverName:Port/
```

EAServerName is the IP address or the name of the EAServer hosting Apeon Server. Port is the http port number of the EAServer.

Note: If you changed the default settings of Temporary Files Path in AEM (AEM Console > Server Properties > Web > Temporary Files Path), you should add the directory of the temporary files path to the easinit.conf file. For example, if the directory of the temporary file path is changed to "/test", the syntax in easinit.conf should be changed accordingly to:

```
Connector.WebApp
test,servlet,imagefile,reportfile,dwfile,apeonfile,AEM=http://Eas
erverName:Port/
```

Step 4 – Add the following scripts to the httpd.conf file in the %Apache%\conf folder:

```
# EAServer 5.2 redirector configuration #
LoadModule easredirector_module modules/libjeas_mod.dll
EASConfigFile "%Apache%\conf\easinit.conf"
<LocationMatch
/servlet/*|/dwfile/*|/reportfile/*|/imagefile/*|/AEM/*>
SetHandler eas-handler
</LocationMatch>
# End of EAServer 5.2 redirector configuration #
```

Step 5 – Specify an appropriate timeout period in the “Timeout” script in the httpd.conf file. The default value is 300 seconds.

Step 6 – Add the full path of the %Apache%\modules folder to the PATH system environment variable.

5.2.2 Additional configuration for Apeon Xcelerator deployment

5.2.2.1 Using 10X Web file compression

Add the following scripts to the httpd.conf file in %Apache%\conf folder:

```
#Apeon Configuration:for 10X Web file compression#
<LocationMatch /gzip/*>
AddEncoding x-gzip htm js html xml dat srd jpg bmp gif ico win
jpeg dll ocx
</LocationMatch>
#end of Apeon Configuration for 10X Web File Compression#
```

5.2.2.2 Configuring DataWindow Data Cache

Step 1 – Copy the apeoncache.conf file from %Apache%\htdocs\apeon\Apache13Support\conf to the %Apache%\conf folder and make the appropriate configuration according to the instructions provided in the file.

Step 2 – Copy the modcache.dll file from %Apache%\htdocs\apeon\Apache13Support\modules folder to %Apache%\modules folder.

Step 3 – Add the following scripts to the httpd.conf file in %Apache%\conf folder:

```
# Cache Module Apeon Data Cache function, AX only
#-----mod_cache for web cache configuration-----#
LoadModule data_cache_module modules/modcache.dll
<IfModule mod_cache.c>
include conf/apeoncache.conf
</IfModule>
#-----End configuration-----#
```

5.2.3 Additional configuration for Pure-JavaScript deployment

To ensure that Pure-JavaScript deployment works correctly, make the following additional configurations:

Step 1 – Copy the ajsdown.so file and ApacheModuleGzip.dll file from the %Apache%\htdocs\apeon\Apache13Support\modules folder to %Apache%\modules folder.

Step 2 – Add the following scripts to the httpd.conf file in %Apache%\conf folder:

```
# mod_gzip configuration
LoadModule gzip_module modules/ApacheModuleGzip.dll
<IfModule mod_gzip.c>
mod_gzip_on Yes
mod_gzip_can_negotiate Yes
mod_gzip_static_suffix .gz
AddEncoding gzip .gz
mod_gzip_update_static No
mod_gzip_command_version '/mod_gzip_status'
## Working directory for temporary files and the compression cache
## If not specified, the following default values are used:
```

```

## [Win32=\tmp] If Apache is installed in drive C: tmp indicates
C:\tmp
## [UNIX=/tmp]
mod_gzip_temp_dir /tmp
## (This directory must already exist and the user id being used
for
## running the Apache server must have read and write access to
this
## directory.
mod_gzip_keep_workfiles No
mod_gzip_minimum_file_size 1000
mod_gzip_maximum_file_size 0
mod_gzip_maximum_inmem_size 4000000
mod_gzip_min_http 1001
mod_gzip_item_include file \.html$
mod_gzip_item_include file \*$
mod_gzip_item_include handler ^ajsdwn/ajsdwn$
mod_gzip_item_include mime ^text/html$
mod_gzip_item_include mime ^text/xml$
mod_gzip_dechunk No
LogFormat "%h %l %u %t \"%V %r\" %<s %b mod_gzip:
%{mod_gzip result}n In:%{mod_gzip input size}n -<
Out:%{mod_gzip output size}n = %{mod_gzip compression ratio}n
pct." common_with_mod_gzip_info2
CustomLog logs/mod_gzip.log common_with_mod_gzip_info2
mod_gzip_add_header_count Yes
mod_gzip_send_vary Yes
</IfModule>

# ajsdwn configuration, for JS Version only
LoadModule loadapp_module modules/ajsdwn.so
<Location /ajsdwn>
SetHandler ajsdwn/ajsdwn
Order deny,allow
Deny from all
Allow from all
</Location>

```

5.3 Configuring Apache 2.0 as the Web server

Apache 2.0 only supports applications deployed with Apeon Xcelerator.

When you install Apeon Server Web Component to Apache 2.0, an *Apache20Support* folder is installed to %Apache%\htdocs\Apeon folder.

There are two folders, *conf* folder and *modules* folder, in *Apache20Support*. Each contains components provided by Apeon to ensure that Apache 2.0 works correctly with Apeon Server.

- components in *conf* folder
 - apeoncache.conf – The configuration file for enabling the Apeon Xcelerator DataWindow Data Cache feature.

easinit.conf – The configuration file for the redirector plug-in.

- component in *modules* folder

modcache.dll – This is a component for configuring the Apeon Xcelerator DataWindow Data Cache feature.

5.3.1 Basic Configuration

Step 1 – Copy the following libraries from the %JAGUAR%\dll folder to the %Apache%\modules folder:

```
libjcc.dll
libjcomn.dll
libjctssecct.dll
libjeasproxy_mod.dll
libjeas2_mod.dll
libjintl.dll
libjspks.dll
libjsybscl.dll
libjtml.dll
libjutils.dll
nlwnsck.dll
nlwnsck64.dll
```

Step 2 – Copy the easinit.conf file from %Apache%\htdocs\apeon\Apache20Support\conf to the %Apache%\conf folder.

Step 3 – Open the file and specify the name and port to have Apeon Server receive requests from Apache Web Server. The syntax is:

```
Connector.WebApp
servlet,imagefile,reportfile,dwfile,AEM=http://EaserverName:Port/
```

EAServerName stands for the IP address or the name of the EAServer that hosts Apeon Server. Port stands for the http port number of the EAServer.

Note: If you changed the default settings of Temporary Files Path in AEM (AEM Console > Server Properties > Web > Temporary Files Path), you should add the directory of the temporary files path to the easinit.conf file. For example, if the directory of temporary file path is changed to "/test", the syntax in easinit.conf should be changed to:

```
Connector.WebApp test, servlet,imagefile,reportfile,dwfile,apeon,
file,AEM=http://EaserverName:Port/
```

Step 4 – Add the following scripts to the httpd.conf file in %Apache%\conf folder:

```
LoadModule easredirector_module modules/libjeas2_mod.dll
EASConfigFile "%Apache%\conf/easinit.conf"
<LocationMatch
/servlet/*|/dwfile/*|/reportfile/*|/imagefile/*|/AEM/*>
    SetHandler eas-handler
</LocationMatch>
# End of EAServer 5.2 redirector configuration #
```

Step 5 – Specify a proper timeout period in the “Timeout” script in the httpd.conf file. The default value is 300 seconds.

Step 6 – Add the full path of the %Apache%\modules folder into the PATH system environment variable.

5.3.2 Additional configurations

5.3.2.1 Using 10X Web file compression

Add the following scripts into the httpd.conf file in %Apache%\conf folder:

```
#Apeon Configuration:for 10X Web file compression#
<LocationMatch /gzip/*>
AddEncoding x-gzip htm js html xml dat srd jpg bmp gif ico win
jpeg dll ocx
</LocationMatch>
#end of Apeon Configuration for 10X Web File Compression#
```

5.3.2.2 Configuring DataWindow Data Cache

Step 1 – Copy the appeoncache.conf file from the %Apache%\htdocs\apeon\Apache20Support\conf to the %Apache%\conf folder and make the appropriate configuration according to the instructions provided in the file.

Step 2 – Copy the modcache2.dll file from the %Apache%\htdocs\apeon\Apache20Support\modules folder to %Apache%\modules folder.

Step 3 – Add the following scripts into the httpd.conf file in the %Apache%\conf folder:

```
# Cache Module Apeon Data Cache function, AX only
#-----mod_cache for web cache configuration-----#
LoadModule data_cache_module modules/modcache2.dll
<IfModule mod_cache.c>
include conf/apeoncache.conf
</IfModule>
#-----End configuration-----#
```

5.4 Configuring IIS as the Web server

When installing Apeon Server Web Component to IIS 5.0 or IIS 6.0, an *IIS5Support* folder is installed to the Web root of IIS Server (for example, C:\Inetpub\wwwroot\Apeon).

5.4.1 Basic configuration

Basic configuration denotes configurations that should be made regardless of the IIS version and deployment option you use.

5.4.1.1 Verifying EAServer component

Certain EAServer components are essential in order for IIS to work correctly. Verify that EAServer 5.2 has been installed in Complete type or use the Custom setup to install the *IIS Plugin*.

5.4.1.2 Setting the WSPLUGIN_CONFIG_FILE environment variable

The WSPLUGIN_CONFIG_FILE environment variable identifies the redirector configuration file required by the Web Server to run the plug-in. Using the System Properties dialog box, create the WSPLUGIN_CONFIG_FILE variable and set it to the full path of the configuration file. Name the file whatever you want. For example, if the configuration file is iis_redirector.cfg and it is in the C:\Inetpub\wwwroot directory, set the variable value of WSPLUGIN_CONFIG_FILE to C:\Inetpub\wwwroot\iis_redirector.cfg. The configuration file must be on the server with the redirector plug-in.

5.4.1.3 Configuring the PROPS file

Locate %JAGUAR%\Repository\Listener, and open the *Jaguar_http.props* file. Find the following script in this file:

```
com.sybase.jaguar.listener.http.connector_events=false
```

Change it to:

```
com.sybase.jaguar.listener.http.connector_events=true
```

%JAGUAR% denotes the installation directory of EAServer.

5.4.1.4 Copying libraries from EAServer to the Web Server

Copy these DLLs from your %JAGUAR%\dll subdirectory to any directory specified in the PATH system environment variable or add the directory to the PATH system environment variable after copying the file to that directory.

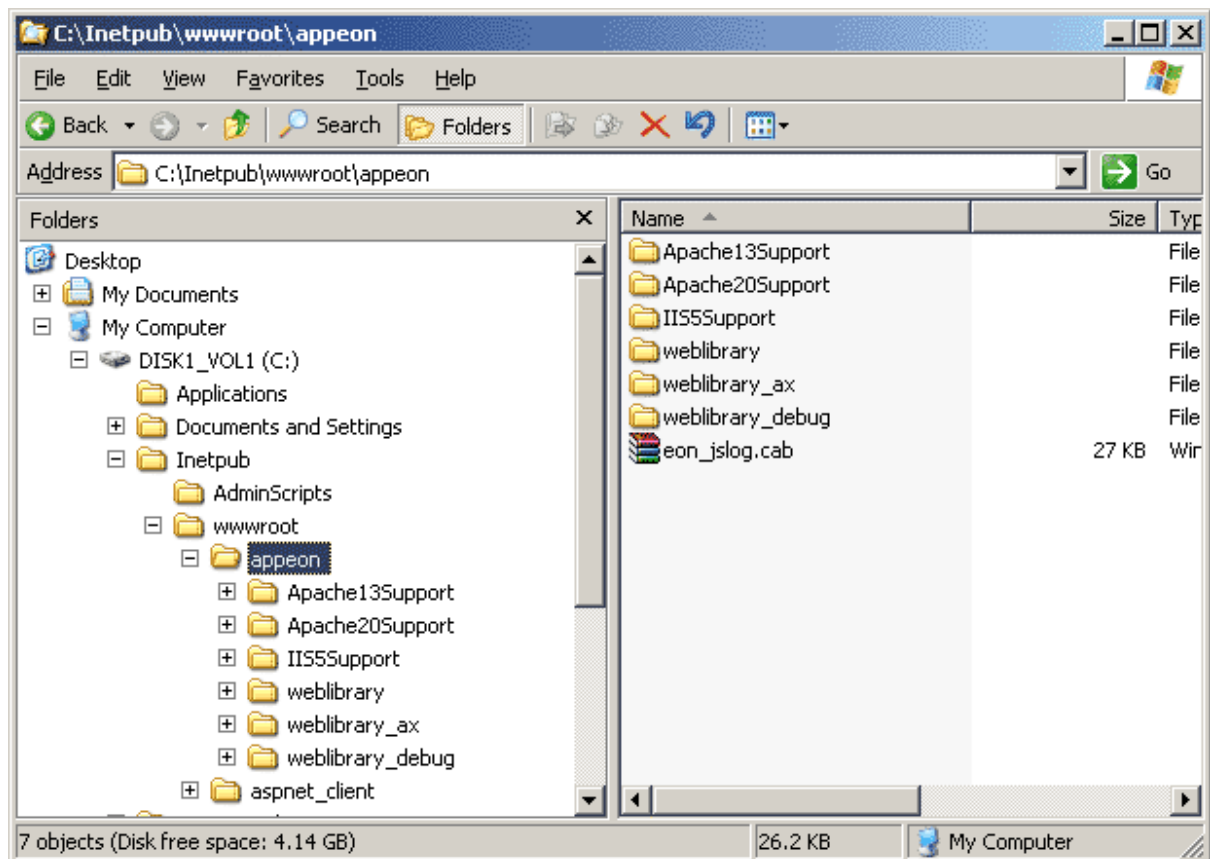
- libjtssecct.dll
- libjcc.dll
- libjintl.dll
- libjsybscl.dll
- libjtml.dll
- libjutils.dll
- nlwnsck.dll

Note: %JAGUAR% denotes the installation directory of EAServer.

5.4.1.5 Installing the IIS plug-in

Step 1 – Verify that an “apeon” folder exists in the Web root of IIS server (typically, C:\Inetpub\wwwroot) and that it contains the following files, as shown in Figure 5-1.

The “apeon” folder was created when the Apeon Server Web Component is installed to IIS server.

Figure 5-1: Apeon Server Web Component installed to IIS server

Step 2 – Copy libjeas_iis.dll from your EAServer\dll folder to the “apeon” folder (typically, C:\Inetpub\wwwroot\apeon).

Step 3 – Open Control Panel | Administrative Tools | Internet Service Manager.

1. Right click the Web site where you want to install libjeas_iis.dll and select New | Virtual Directory from the popup menu.
2. Create a virtual directory using the name specified in the Connector.IIS.Extension_URI directive in the redirector configuration file - see the next Section 5.4.1.6: [Editing the redirector configuration file](#).

For example,

Alias: ApeonWeb

Directory: C:\Inetpub\wwwroot\apeon

3. Enable read, run script and execute on the virtual directory.
4. Right click the Web site where you want to install the plug-in and select Properties from the popup menu.
5. On the ISAPI Filters tab, click Add and install libjeas_iis.dll as an ISAPI filter. Filters are invoked in the listed order. Apeon recommends that you install libjeas_iis.dll first on the list. Click OK.

For example,

Filter Name: apeon_filter

Executable: C:\Inetpub\wwwroot\apeon

6. Right click the Web site where you installed libjeas_iis.dll and select Properties from the popup menu.
7. On the Documents tab, specify the index.html file (startup HTML page for Apeon deployed Web applications) as one of the default startup documents in IIS.

Step 4 – Restart the machine. Go to the ISAPI Filters tab and verify that libjeas_iis.dll was loaded successfully. A green arrow pointing up indicates that the DLL file was successfully loaded while a red arrow pointing down indicates that the DLL file was not successfully loaded.

5.4.1.6 Editing the redirector configuration file

Create a redirector configuration file (for example, iis_redirector.cfg) in the location identified by the WSPLUGIN_CONFIG_FILE environment variable, for example, C:\Inetpub\wwwroot. Edit the file and configure these directives.

Note: do not leave trailing spaces at the end of each directive.

Table 5-1: Editing the IIS redirector configuration file

WebApp Directive	Description
Connector.IIS.Extension_URI	<p>Identifies the virtual directory path to the plug-in DLL on the IIS. If the path is incorrect, requests fail with an HTTP server error. Use this syntax to specify the virtual directory path (This is required for Apeon Server):</p> <pre>Connector.IIS.Extension_URI /virtual-directory/libjeas_iis.dll</pre> <p>For example:</p> <pre>Connector.IIS.Extension_URI /ApeonWeb/libjeas_iis.dll</pre>
Connector.IIS.URLS	<p>Identifies one or more context paths that the redirector handles. If the URL of an incoming request matches any of the path prefixes, the redirector handles the request. If you set the value to “/*”, the redirector handles all the requests sent to the Web Server. If this directive does not exist in the configuration file, the redirector does not handle any requests. Use this syntax to specify the context path:</p> <pre>Connector.IIS.URLS /context-path [, /context-path, ...]</pre> <p>The following is required for Apeon Server:</p> <pre>Connector.IIS.URLS /servlet, /dwfile, /reportfile, /imagefile, /AEM</pre>
Connector.IIS.LogFile	<p>Specifies the full path of the redirector log file. A separate log file is required because IIS-based logging is limited to 80 bytes per request. This is not sufficient for debugging. The default log file name is redirector.log that is created in the IIS current working directory. To specify another file name, use this syntax:</p> <pre>Connector.IIS.LogFile drive:\directory-name\file-name</pre> <p>For example:</p> <pre>Connector.IIS.LogFile C:\temp\redirector.log</pre>
Connector.LogLevel	<p>Determines how much information is written to the Web Server log file. To specify the logging level, use this syntax:</p> <pre>Connector.LogLevel logging-level</pre> <p>For example:</p> <pre>Connector.LogLevel error</pre> <p>Note: “Verbose” can be used only with the EA Server debug libraries.</p>

Connector.WebApp	<p>Maps Web Server requests to EAServer listeners. The syntax is:</p> <pre style="border: 1px solid black; padding: 5px;">Connector.WebApp contextpath1 [, contextpath2, and so on] =http://host:port [, http://host:port, and so on]</pre> <p>The following is required for Apeon Server:</p> <pre style="border: 1px solid black; padding: 5px;">Connector.WebApp /servlet, /dwfile, /reportfile, /imagefile, /AEM = http://EAServer1:port1, http://EAServer2:port2, http://EAServer3:port3)</pre> <p><i>EAServer1 (EAServer2, EAServer3)</i> stands for the IP address or the name of the EAServer machine that participates in load balancing.</p> <p><i>Port1 (port2, port3)</i> stands for the port number of the EAServer.</p> <p>Verify that you have configured the corresponding IP address or machine name and port number.</p>
------------------	---

Notice that in the “Connector.WebApp” directive, the target URL extends only to the target hostname and (optionally) the target port number. Redirection is NOT mapping from context_path_1 on the Web Server to context_path_2 on EAServer. For example, the following is a working redirector configuration file:

```
Connector.IIS.Extension_URI /ApeonWeb/libjeas_iis.dll
Connector.IIS.URLS /servlet, /dwfile, /reportfile, /imagefile,
/AEM
Connector.WebApp /servlet, /dwfile, /reportfile, /imagefile, /AEM
= http://192.0.0.67:8080, http://192.0.0.68:8080,
http://192.0.0.69:8080
Connector.IIS.LogFile C:\temp\redirector.log
Connector.LogLevel error
Connector.RetryAfter = 20
```

With the above redirector configuration file, the request mapping will be as follows:

From: http://webserver/dwfile/subdir1/subdirn/target.html

To: http://eashostname:8080/dwfile/subdir1/subdirn/target.html

-or- http://eas2hostname:8080/dwfile/subdir1/subdirn/target.html

-or- http://eas3hostname:8080/dwfile/subdir1/subdirn/target.html

However, the redirection will NOT map:

From: http://webserver/dwfile/subdir1/subdirn/target.html

To: http://eashostname:8080/reportfile/subdir1/subdirn/target.html

When all the above steps have been completed, restart the computer in order for the configurations to take effect.

5.4.2 Additional configuration if you are using IIS 6.0

5.4.2.1 Adding a Web service extension for libjeas_iis.dll

Step 1 – Open the IIS Manager.

Step 2 – Click the “Web Service Extensions” on the left side of IIS Manager.

Step 3 – Click the link “Add a new Web service extension...” on the right side of the IIS Manager. A “New Web Service Extension” window is opened.

- Specify the “Extension name”, for example “AppeonWeb”.
- Click the *Add* button and browse to locate libjeas_iis.dll. Click the *OK* button to finish the Web service extension.

Step 4 – Make sure the status of the new Web service extension is set to “*Allowed*”.

5.4.2.2 Granting “Full Control” access to anonymous user

Ensure that the anonymous access user has “Full Control” access to:

- The virtual directory where the libjeas_iis.dll is located.
- The login directory used by the EAServer plug-in specified in the iis_redirector.cfg file.
- The redirector log directory specified in the iis_redirector.cfg file. (For example, c:\temp\redirector.log)

Note: The anonymous access user is typically IUSR_ComputerName because IUSR_ComputerName is the built-in account for anonymous access to IIS.

To grant the “*Full Control*” access to IUSR_ComputerName:

Step 1 – Open IIS Manager.

Step 2 – Right click on the “Website” on the left side of IIS Manager.

Step 3 – Click the “Properties” item to open the “Web Sites Properties” window.

Step 4 – Go to the “Directory Security” tab and click the *Edit* button.

Step 5 – Check “Enable anonymous access” and fill in the user name and password for IUSR_ComputerName.

5.4.3 Additional configurations for Appeon Xcelerator deployment

Configuring the Appeon Xcelerator DataWindow Data Cache feature, refer to Section 5.6.2.d: *Configuring IIS 5.0* in the *Appeon Enterprise Manager User Guide* for details.

5.4.4 Additional configurations for Pure-JavaScript deployment

Step 1 – Copy the awdfilter.dll and awdownload.dll files from the IIS5Support\modules folder to the %IIS5%\scripts folder.

Step 2 – Locate

“HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W3SVC\Parameters” in the registry, add a new key “Filter DLLs” and set the key value of “Filter DLLs” to the directory of the awdfilter.dll file, for example, “C:\inetpub\scripts\awdfilter.dll”.

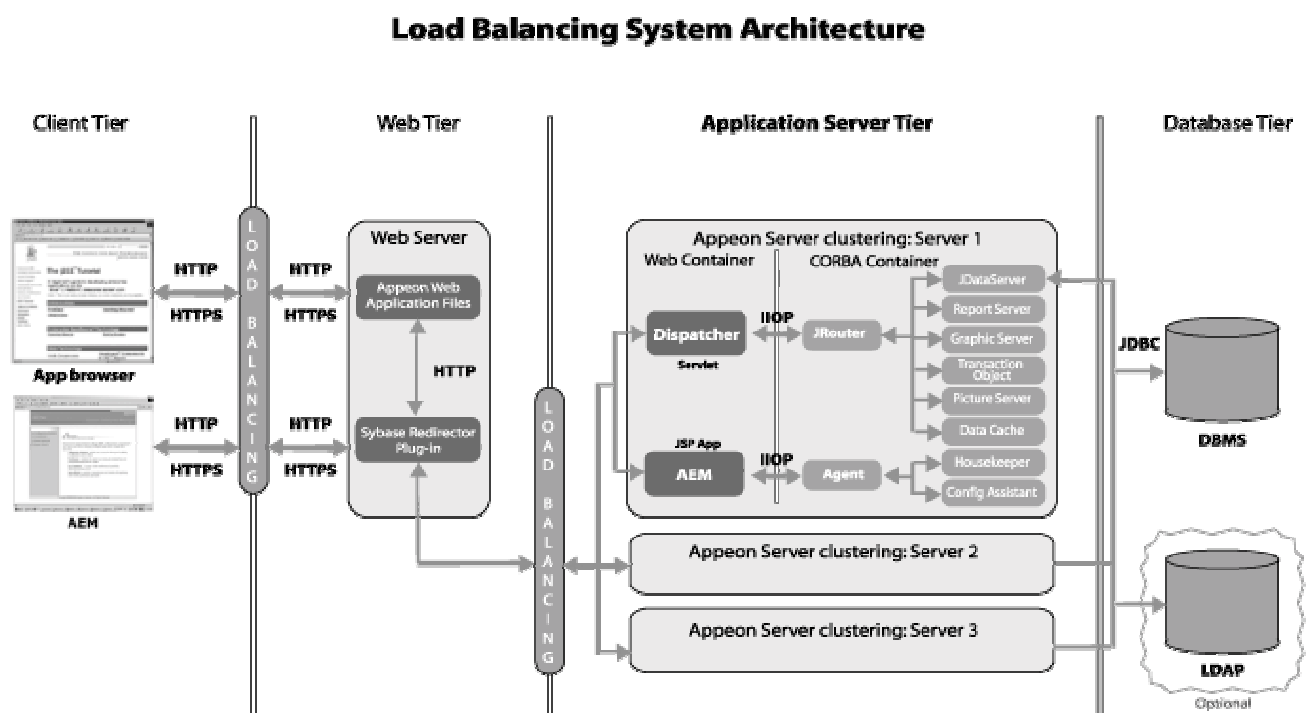
6 Configuring Load Balancing for Multiple Appeon Servers

6.1 Overview

Appeon does not support EAServer cluster and session failover, however, Appeon Server can still be installed to several individual EAServers to implement Appeon Server (EAServer) load balancing functionality using the EAServer Web server redirector plug-in.

Figure 6-1 shows the load balancing system architecture using the EAServer Web Server redirector plug-in.

Figure 6-1: Load balancing system architecture



6.2 Installing to multiple EAServers

To set up Appeon Server on multiple EAServers, follow these steps:

1. Set up a group of EAServers.
2. Install Appeon Server to the each EAServer by following the installation instructions in Section 4.4.2: [Appeon Server installation](#).

Note that Appeon does not support using EAServer synchronization to distribute Appeon Server to other EAServers from one EAServer.

6.3 Configuring the Web Server and EAServers for load balancing

Use the EAServer Web Server redirector plug-in to configure the Web server and multiple EAServers for load balancing. This requires that the Web Server be one or more separate

third party Web server(s) (but not the EAServer Web server). The third party Web server type can be either IIS or Apache.

1. Set up one or more separate third-party Web server(s).
2. Install the Appeon Server Web Component on each third-party Web server by following the installation instructions in Section 4.4.4: [Appeon Server Web Component installation](#).
3. Configure the third-party Web server(s) with the redirector plug-in according to Chapter 5: [Third-party Web Server Configuration](#).
4. Configure EAServer for load balancing according to Section 6.3.2: [EAServer configuration](#).
5. Deploy the application to all configured Appeon Servers and Web servers. For detailed instructions, refer to the *Appeon Developer User Guide*.

6.3.1 Division of work between multiple Appeon Server and Web Server

The division of work between multiple EAServers and a Web Server is the same as when Appeon Server is a single EAServer.

- The EAServer Application Servers host the following components:
- The DataWindows for the Web application(s)
- The AEM Web application (JSP)
- Data files generated for the Web application (such as DataWindow Image files, XLS and TXT files for DataWindow SaveAs and PDF files for DataWindow printing)

The third-party Web Server:

- Hosts the presentation layer of the Web application and Appeon Server Web Component
- Receives user operation requests from the Client PC
- Dispatches them to the Application Server

The division of work within the EAServers is session-level division because the load distribution policy in use is round-robin.

6.3.2 EAServer configuration

Configure EAServer to accept requests from the Web server.

6.3.2.1 Configuring the PROPS file

Locate %JAGUAR%\Repository\Listener, and open the *Jaguar_http.props* file. Find the following script in this file:

```
com.sybase.jaguar.listener.http.connector_events=false
```

Change it to:

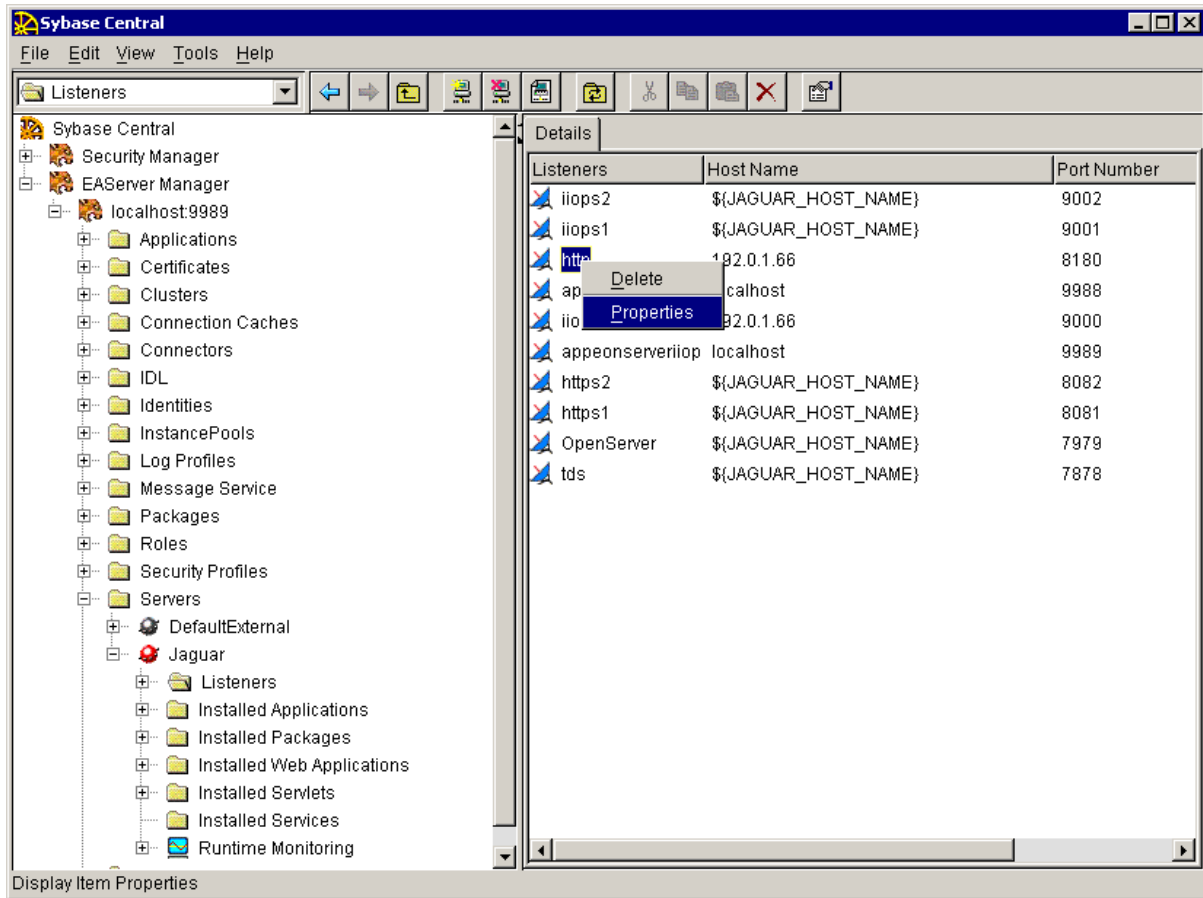
```
com.sybase.jaguar.listener.http.connector_events=true
```

6.3.2.2 Setting the EAServer HTTP listener properties

The HTTP listener properties can be specified in EAServer Manager when you create or edit an HTTP listener that receives Web Server requests.

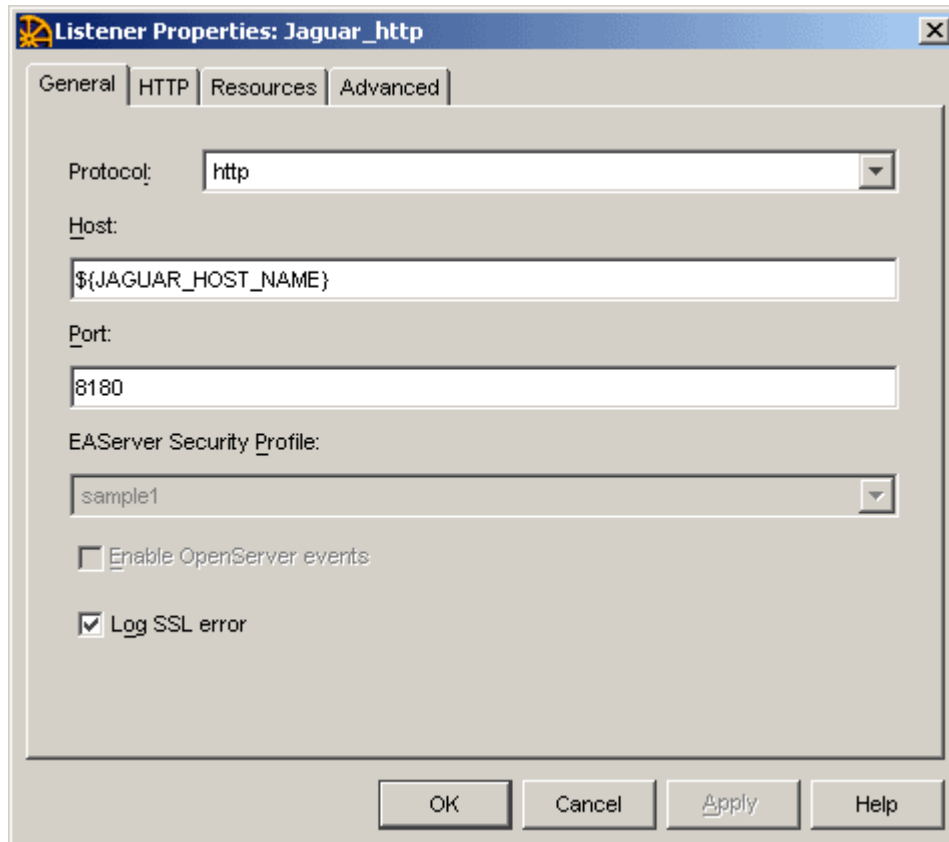
Right click on an HTTP listener and select *Properties* from the popup menu, as shown in Figure 6-2.

Figure 6-2: HTTP listener properties



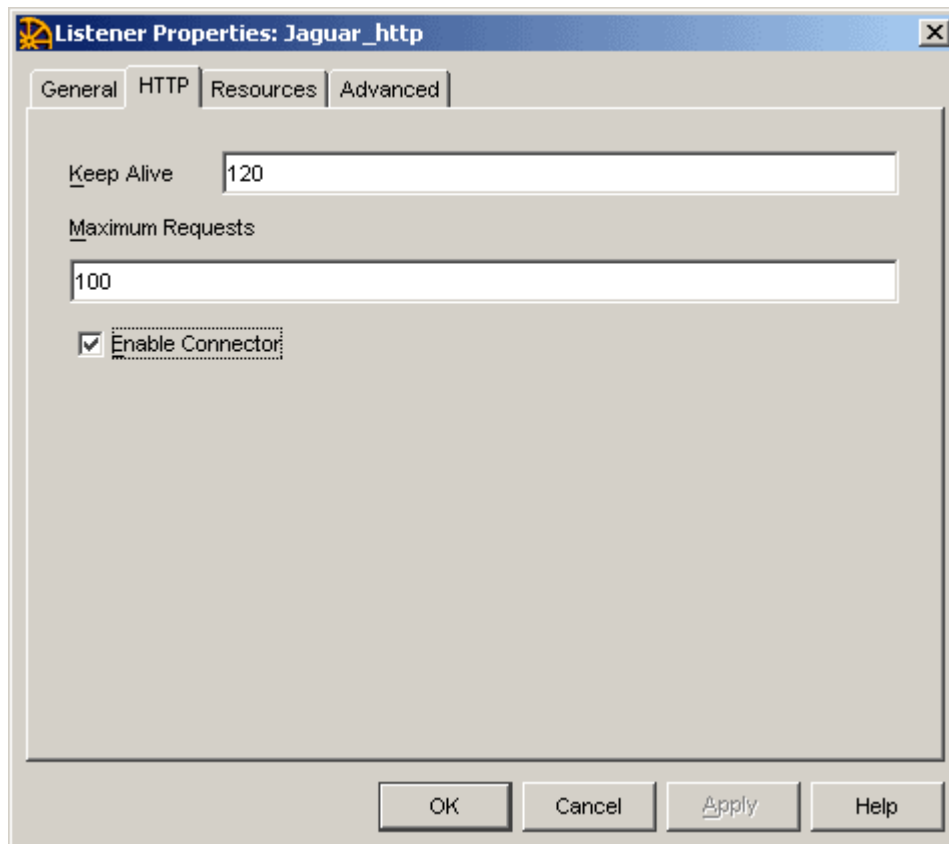
Click *Advanced* on the Listener Info window, as shown in Figure 6-3.

Figure 6-3: General settings



Specify the listener properties, as shown in Figure 6-4.

Figure 6-4: Advanced settings



Enable Connector – This is a required property and must be selected so the listener can process requests from the Web Server properly. If you do not select this option, some of the redirector's features, such as load balancing, may not work correctly.

Keep Alive – This optional property specifies the length of time, in seconds, that EAServer keeps a connection alive. The default value is 120 seconds (2 minutes) and can be modified, if necessary, to improve performance.

Maximum Requests – This optional property determines the number of requests processed before EAServer closes the connection. The default value is 100 and can be modified, if necessary, to improve performance.

6.3.2.3 Verifying EAServer host and port settings

Make sure that the EAServer host and the port, defined in the load-balancing configuration file (such as the redirector configuration file), are identical to the EAServer listener host and port fields.

For example, this redirector entry requires two EAServers to be configured with proper HTTP protocol listeners: one with a listener defined by the host name “jaghost1” and the port number “8080” and the other with a listener defined by the host name “jaghost2” and the port number “8180”:

```
Connector.WebApp /*=http://jaghost1:8080, http://jaghost2:8180
```

6.4 Configuring AEM for multiple Appeon Servers

Run AEM and configure the *Appeon Server Cluster* tool in the *Server Properties* to manage multiple Appeon Servers (that are being load-balanced) simultaneously. Instructions are provided in the *Appeon Enterprise Manager User Guide*.

7 Post-Installation Configuration Tasks

The previous chapters provide instructions on how to set up Apeon system architecture, including installing Apeon for PowerBuilder components, configuring third-party Web Server and configuring Web Server and Apeon Server for load balancing.

Once the system is set up and before you start deploying applications, the post-installation configuration tasks listed in Table 7-1 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 7-1: 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 7.1 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 or when DataWindows are printed to PDF.	Section 7.2 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 7.3 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 %JAGUAR%\java\lib folder in the machine hosting Apeon Server. %JAGUAR% indicates the EA Server installation path.	Section 8.2.3: <i>JDBC driver preparation</i> , in the <i>Apeon Migration Guide</i>
Configuration for supporting DataWindow Data Cache feature	This feature is available only for applications deployed in Apeon Xcelerator. 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).	Section 5.6: <i>DataWindow Data Cache</i> , in the <i>Apeon Enterprise Manager User Guide</i>

Configuration for supporting dynamic DataWindows	This feature is available only for applications deployed in Apeon Xcelerator. The configuration is required for database server. Additional configuration at the database server is required for support of dynamic DataWindows.	Section 7.4 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 7.5 in this book

7.1 Internet Explorer configuration

7.1.1 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.

7.1.2 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/tryonline/lab.jsp?pid=3>)

To run the Apeon Web demos, click the items listed in the “*Currently available Demonstration*” table. 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 7.1.3: [Security settings](#) to configure Internet Explorer correctly.

7.1.3 Security settings

7.1.3.1 Choosing security level and zone

It is recommended that you set Internet Explorer’s security level to the Default or Custom Level, depending on which deployment option is used to deploy the Web application. However, the security level should not be set to “High”.

For applications deployed with Apeon 3.1 Pure-JavaScript, it is recommended that you set the security level to the Default Level. Refer to Section 7.1.3.2 for how to specify settings to their Default Level.

For applications deployed with Apeon 3.1 Xcelerator or 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 7.1.3.3 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.

7.1.3.2 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*.

7.1.3.3 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:

- Download signed ActiveX controls (Enabled)
- Download unsigned ActiveX controls (prompt)
- 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 paste operations via script (Enabled)
- Allow active content to run in files on My Computer (If the version of Internet Explorer is 6.0 SP2) (Enabled)

7.1.4 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.

7.1.5 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.

7.2 System language settings

Sometimes the Windows language settings can affect the characters displayed in the Apeon Web application or when DataWindows are printed to PDF. 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.

7.3 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>.

7.4 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 and install the corresponding SQL for the database you are using.

- install_appeon_syntaxfromsql_ORACLE.sql
- install_appeon_syntaxfromsql_MSSQL.sql
- install_appeon_syntaxfromsql_ASE.sql
- install_appeon_syntaxfromsql_ASA.sql

7.5 Configuration for ASE Chained mode issue

This configuration is useful to both Apeon Xcelerator and Pure-JavaScript deployments.

7.5.1 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.

7.5.2 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\ase chained mode” folder under the Appeon Server installation directory.

- (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.

8 Uninstalling Appeon 3.1

8.1 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:

1. Launch the Appeon uninstall program from Windows Start menu | Programs | Appeon 3.1 for PowerBuilder | Uninstall Appeon Developer (or Appeon Server).
2. Launch Add/Remove Programs from the Windows Control Panel. Select the Appeon component and click *Change/Remove* to begin the uninstall process.

8.2 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.

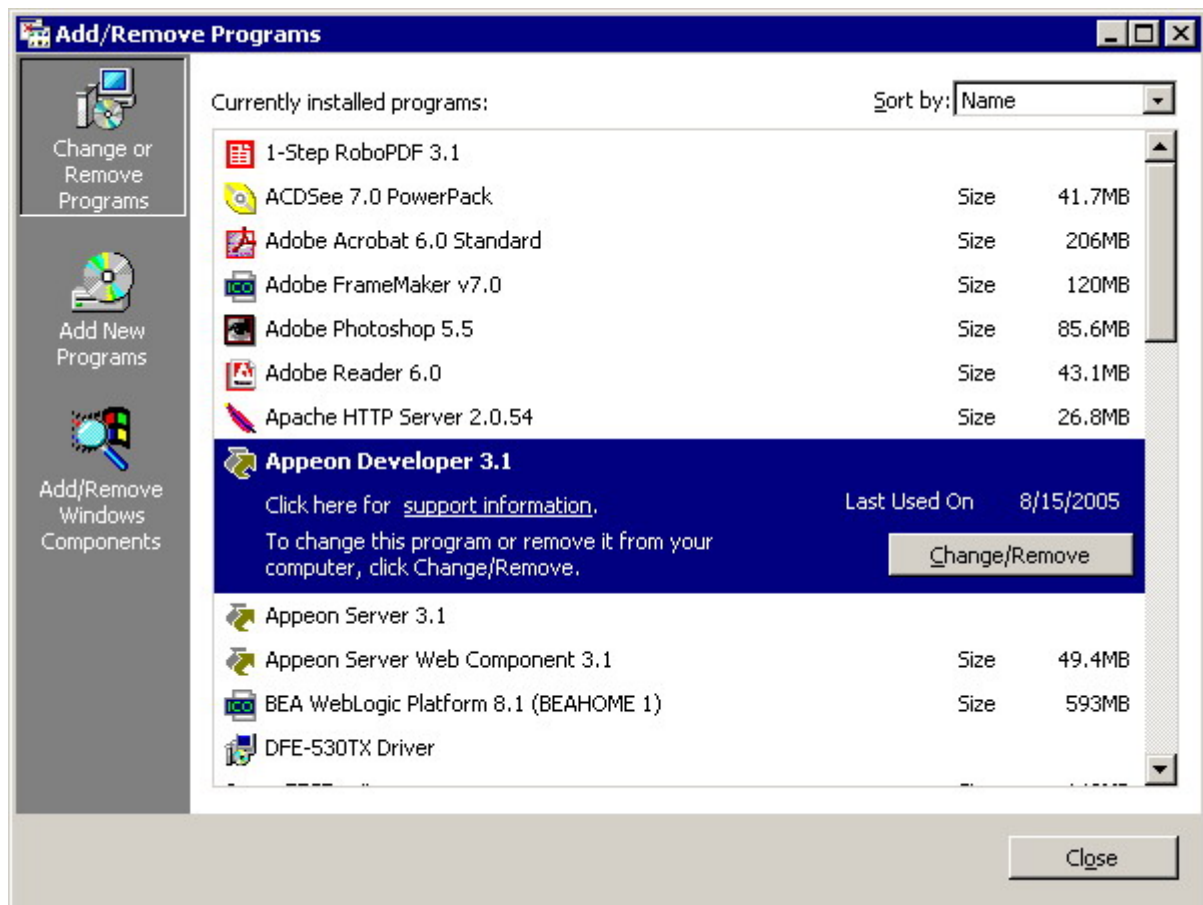
Open Windows Task Manager, switch to the Process tab and verify that the following processes are not running. If they are running, end them:

- *adt.exe* and *PBParser.exe*
- *pb80.exe*, *pb90.exe* or *pb100.exe*
- *jagsrv.exe* and *jagsrvagent.exe*
- *dbeng7.exe* or *dbeng8.exe* and *dbsrv7.exe* or *dbsrv8.exe*

If *adt.exe* or *PBParser.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 – Launch Add/Remove Programs from the Windows Control Panel. Select *Appeon Developer 3.1* and click the *Change/Remove* button to begin the uninstall process (Figure 8-1).

Figure 8-1: Launch Add/Remove program

Step 4 – Confirm the removal of Appeon Developer. Click *OK* to uninstall (Figure 8-2 and Figure 8-3).

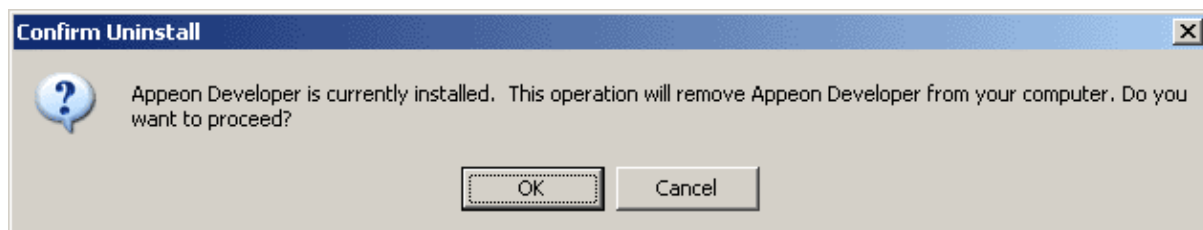
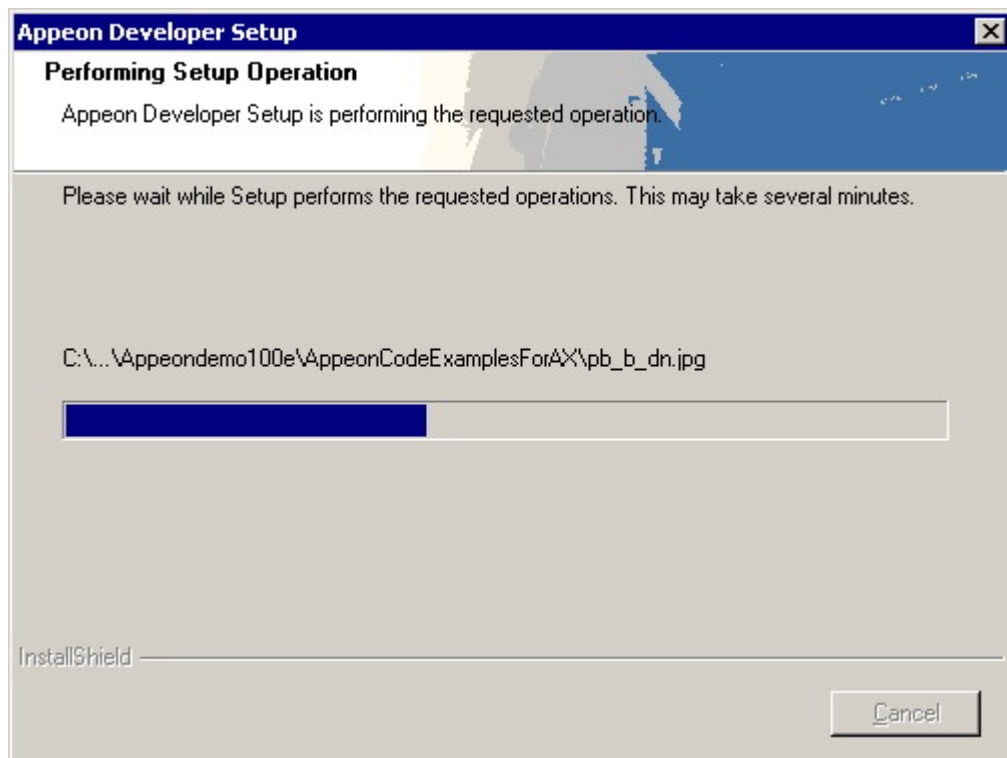
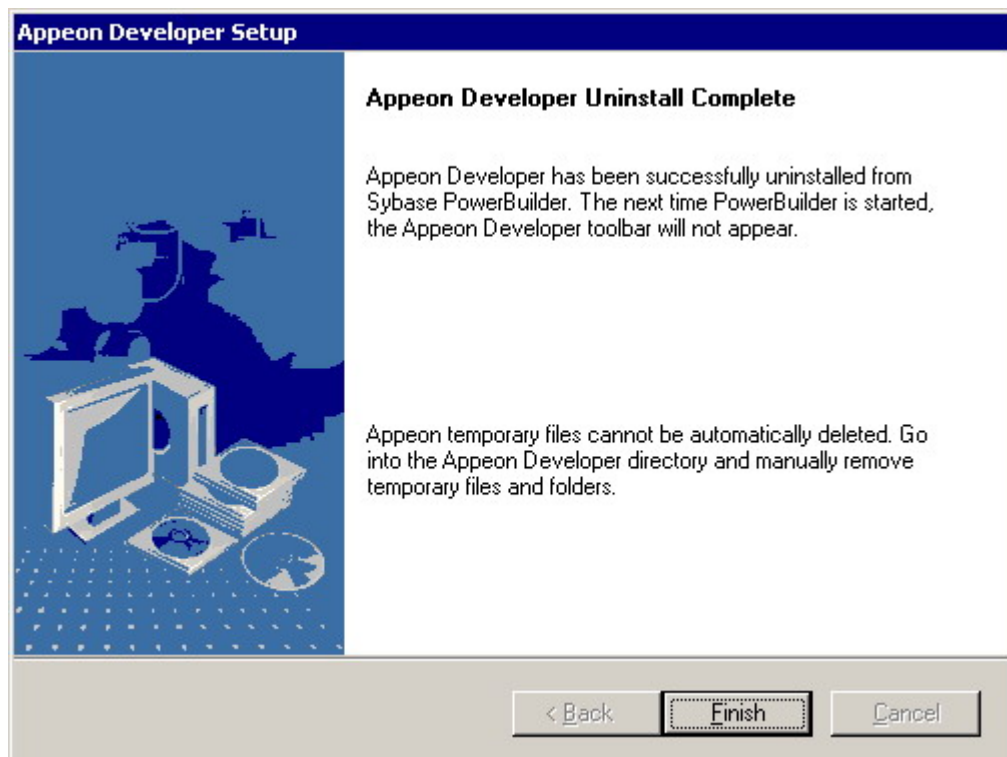
Figure 8-2: Confirm uninstall

Figure 8-3: Appeon Developer uninstall process

Step 5 – Click *Finish* to exit (Figure 8-4).

Figure 8-4: Appeon Developer uninstall complete

Step 6 – Use Windows Explorer and manually delete the folder where Appeon Developer was installed. This will remove all Appeon Developer files that are not automatically uninstalled.

8.3 Uninstalling Appeon Server

Step 1 – Shut down all Windows programs including all Sybase software:

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

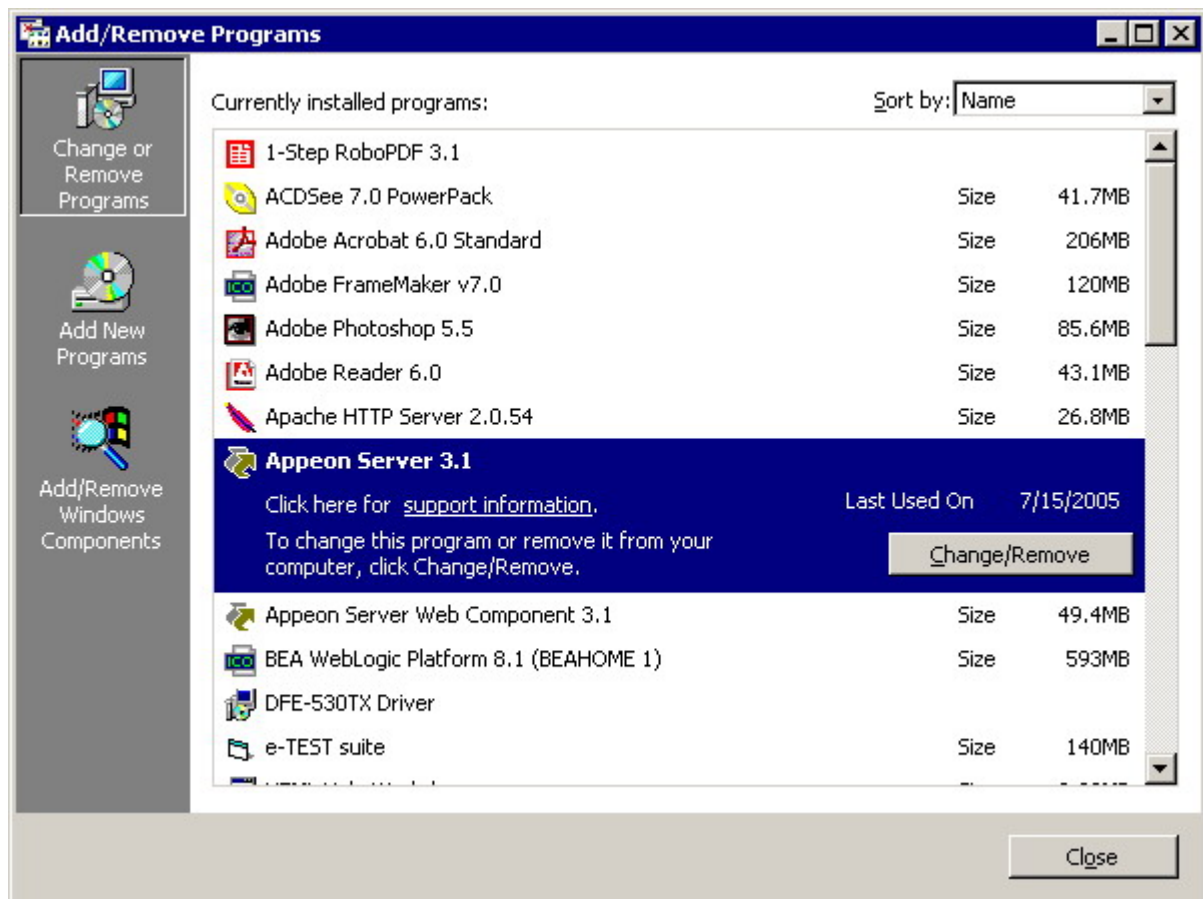
Step 2 – Verify that Appeon Server and all Sybase software have been shutdown.

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

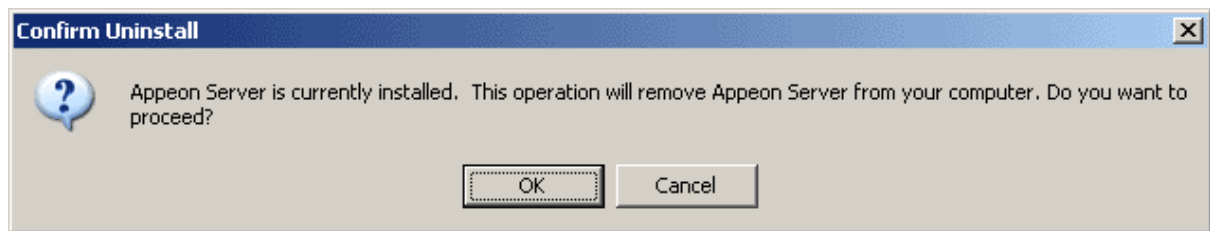
- adt.exe and PBParser.exe
- pb80.exe, pb90.exe or pb100.exe
- jagsrv.exe and jagsrvagent.exe
- dbeng7.exe or dbeng8.exe and dbsrv7.exe or dbsrv8.exe

Step 3 – Launch Add/Remove Programs from the Windows Control Panel. Select *Appeon Server 3.1* and click the *Change/Remove* button to begin the uninstall process (Figure 8-5).

Figure 8-5: Launch Appeon Server uninstall program

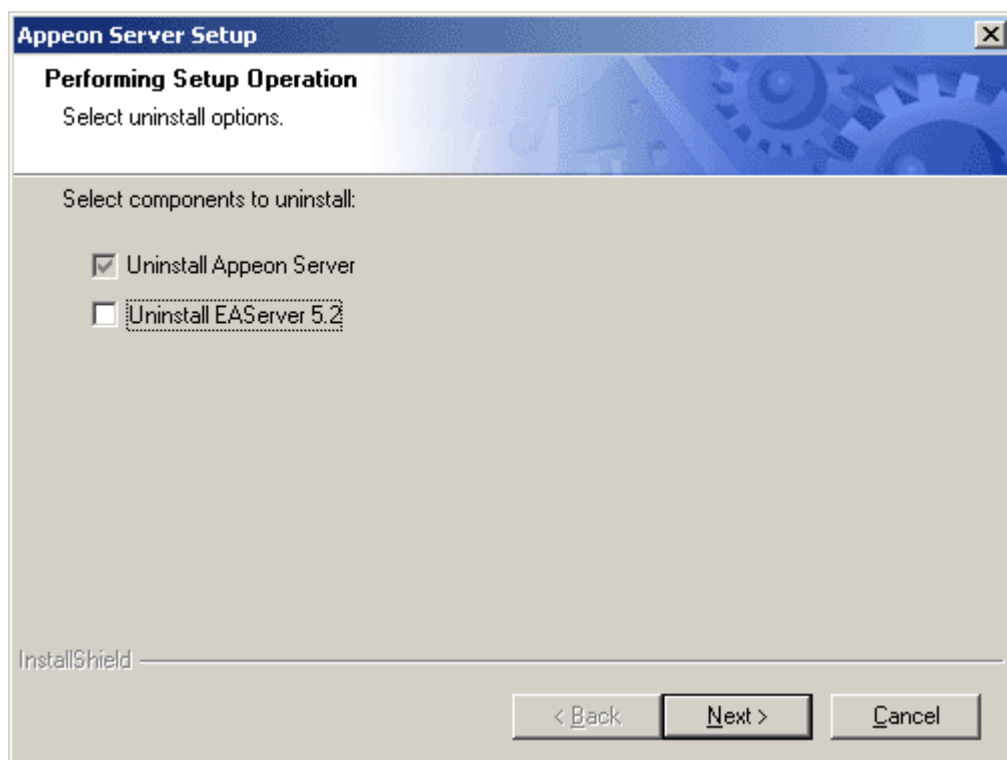


Step 4 – Confirm the removal of Appeon Server. Click *OK* to uninstall (Figure 8-6).

Figure 8-6: Confirm uninstall

Step 5 – Choose whether to uninstall EAServer 5.2 (Figure 8-7). Click *Next* and the selected options will be uninstalled.

This page will only be displayed if EAServer 5.2 was silently installed with the Appeon Server installation.

Figure 8-7: Uninstall options

It is recommended that you only uninstall Appeon Server. Keep EAServer 5.2 for later use in the installation of Appeon Server.

If you choose to uninstall EAServer 5.2 with Appeon Server, the whole uninstall process, including Appeon Server and the EAServer uninstall process, may take up to twenty minutes. The Appeon Server uninstall process will take place before the EAServer uninstall process (Figure 8-8, Figure 8-9 and Figure 8-10).

Figure 8-8: Appeon Server uninstall process

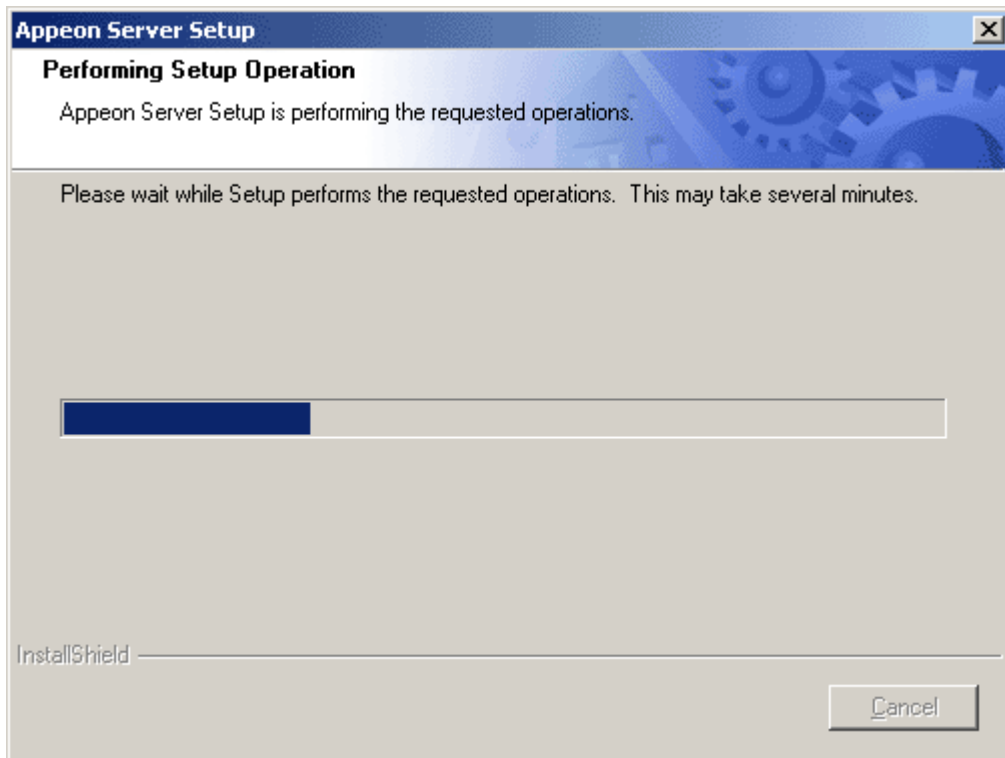


Figure 8-9: Command window for EAServer uninstall

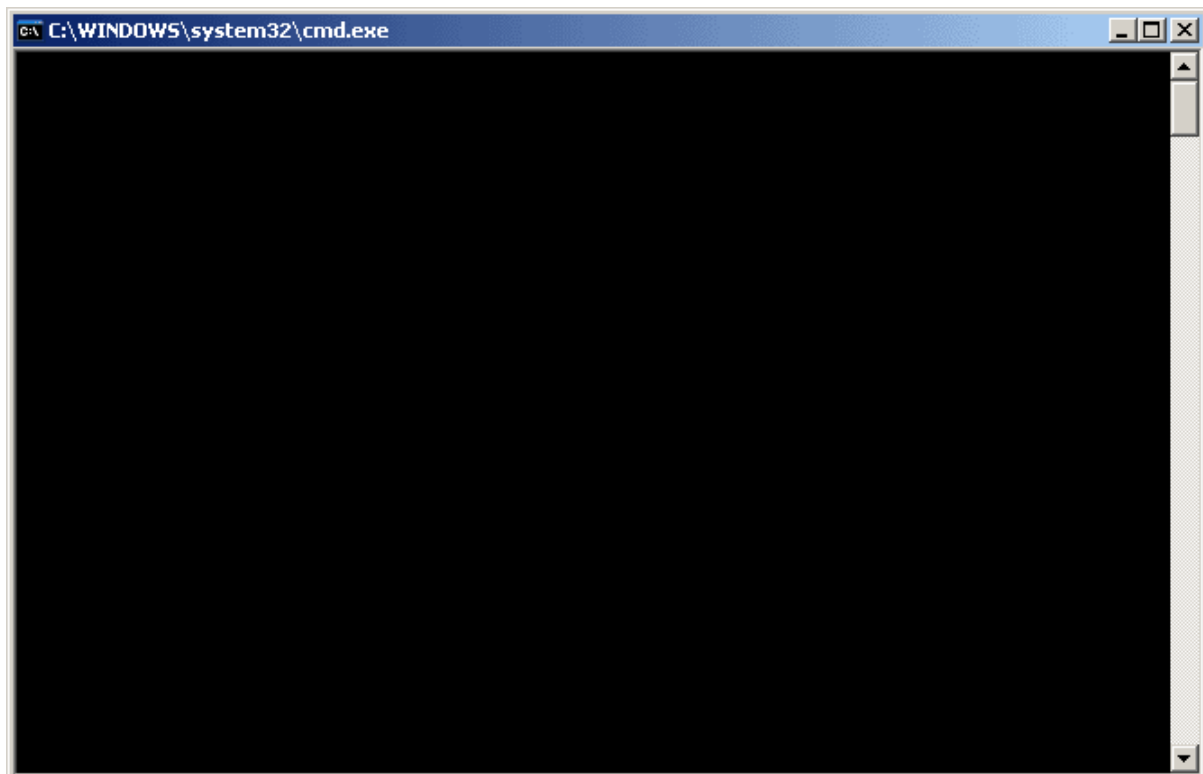
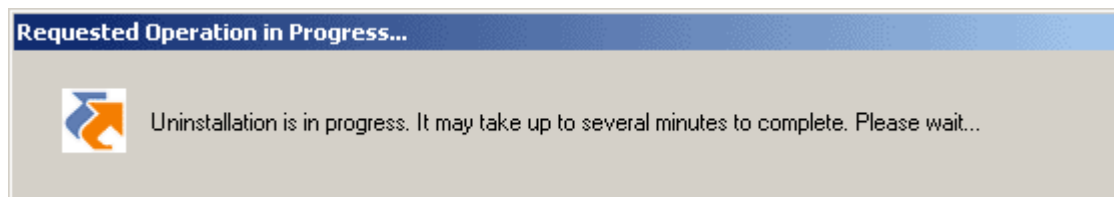
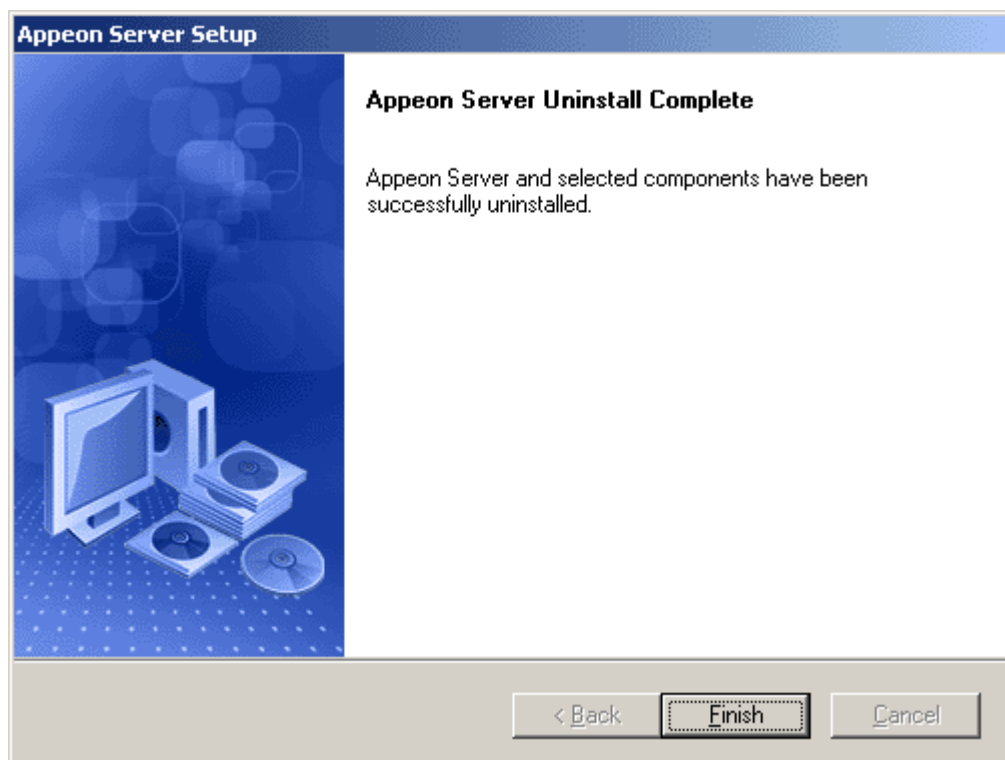


Figure 8-10: The Progress window

Step 6 – Click *Finish* to exit (Figure 8-11).

Figure 8-11: Appeon Server uninstall complete

8.3.1 Uninstalling EAServer 5.2 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 5.2 with the Appeon Server uninstall program.

When uninstalling Appeon Server, you can choose whether to uninstall EAServer 5.2, which is installed with Appeon Server. For detailed instructions, refer to Section 8.3: [Uninstalling Appeon Server](#).

- Uninstall EAServer 5.2 separately, after Appeon Server uninstall.

If you choose not to uninstall EAServer 5.2 with Appeon Server during the Appeon Server uninstall, you can still uninstall it by running the EASuninstall.exe program file in the %JAGUAR%_uninstall folder, where %JAGUAR% is the EAServer installation path.

During the uninstall process, you can choose whether to uninstall Sybase Central 4.1 if no program is using Sybase Central.

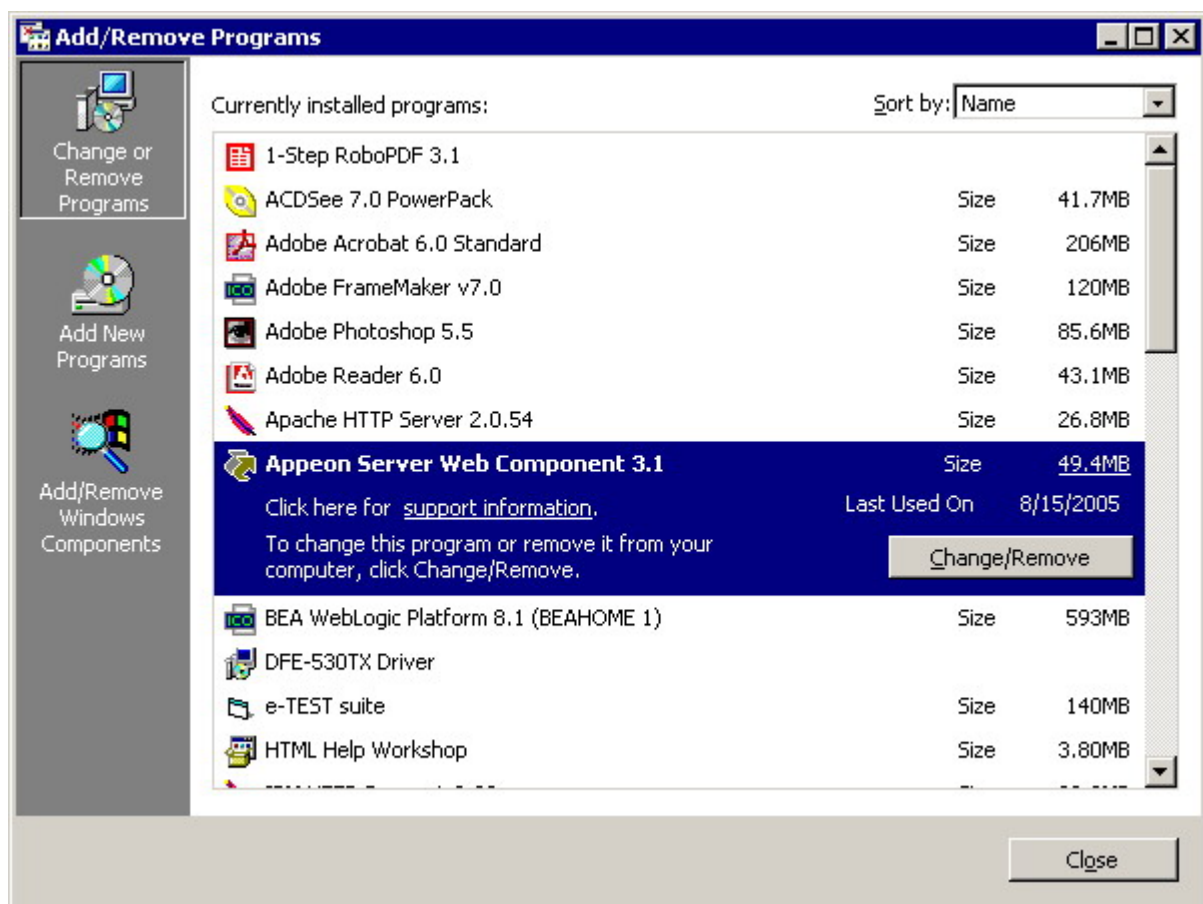
After EAServer is successfully uninstalled, some user created files might be left in the EAServer folder and the sybcent41 folder. You can manually remove these files.

8.4 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 – Launch Add/Remove Programs from the Windows Control Panel. Select *Appeon Server Web Component 3.1* and click the *Change/Remove* button to begin the uninstall process (Figure 8-12).

Figure 8-12: Remove Appeon Server Web Component



Step 3 – Confirm the removal of the Appeon Server Web Component. Click *OK* to uninstall (Figure 8-13 and Figure 8-14).

Figure 8-13: Confirm uninstall

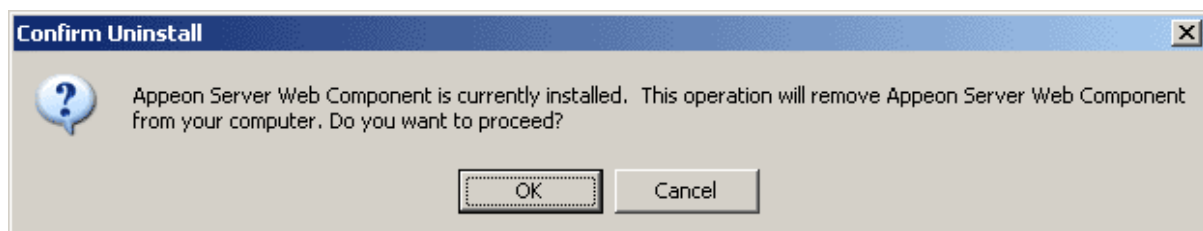
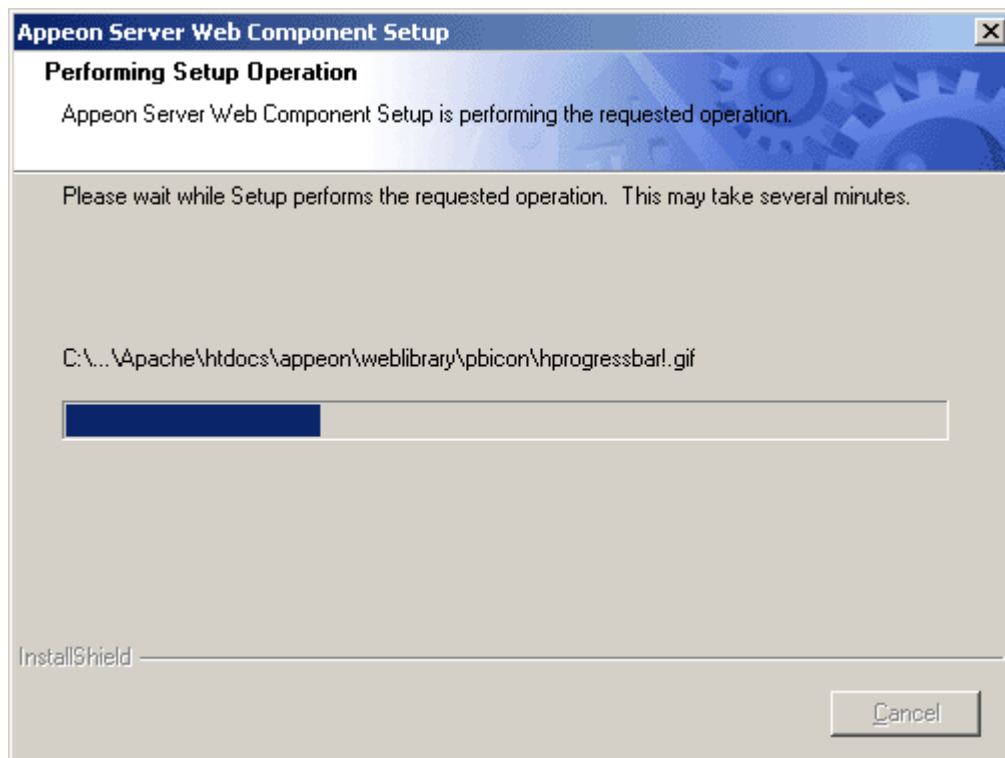
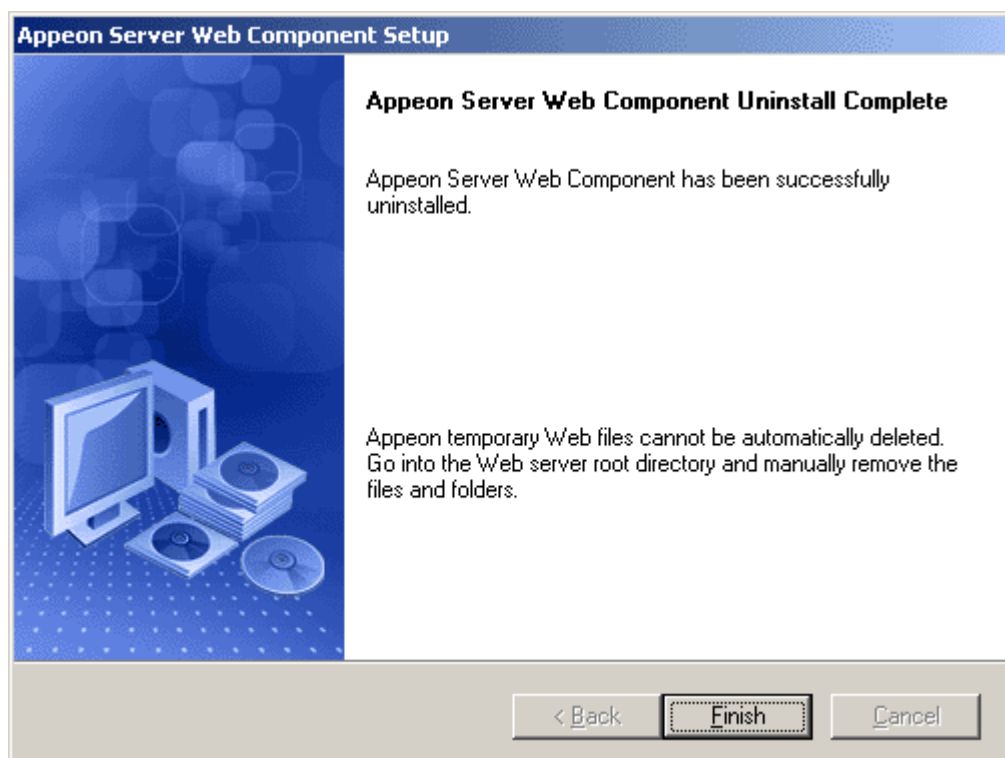


Figure 8-14: Appeon Server Web Component uninstall process

Step 4 – Click *Finish* to exit (Figure 8-15).

Figure 8-15: Appeon Server Web Component uninstall complete

Step 5 – Use Windows Explorer and 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 with applications deployed by Apeon. These folders are typically identified by the application names assigned to the corresponding PowerBuilder applications.

8.4.1 Web Component uninstall if multiple third-party Web Servers are involved

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

8.5 Uninstalling PDF printers

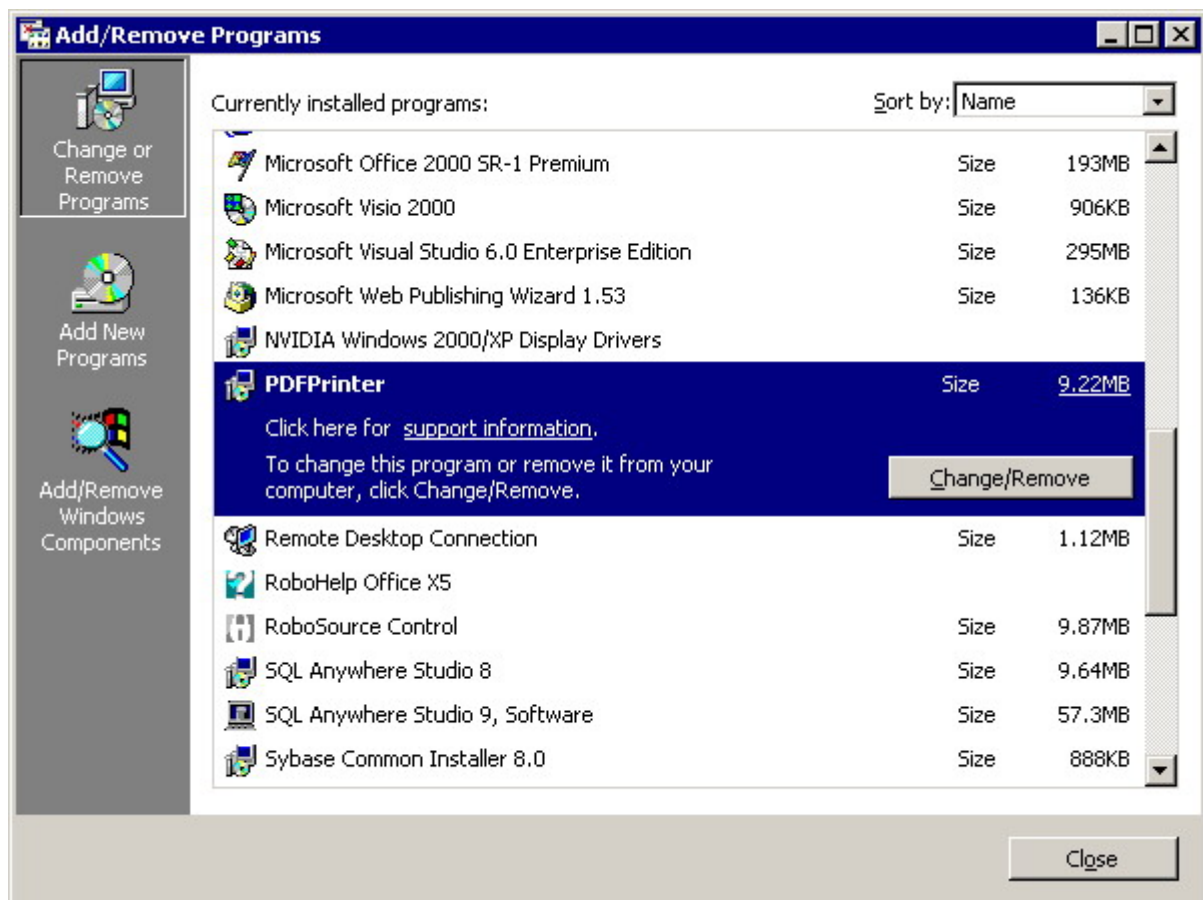
8.5.1 Uninstalling Apeon PDFPrinter

Before you uninstall Apeon PDFPrinter, verify that the name of Apeon PDFPrinter is “PDFPrinter” in the Control Panel | Printers window. If you have changed the name, be sure to change it back to “PDFPrinter”, otherwise, you will encounter problems with the uninstall process:

Step 1 – Shut down all Windows programs.

Step 2 – Launch Add/Remove Programs from the Windows Control Panel. Select *PDFPrinter* and click the *Change/Remove* button to begin the uninstall process (Figure 8-16).

Figure 8-16: Remove Apeon PDFPrinter



Step 3 – Confirm the removal of Appeon PDFPrinter. Click *OK* to uninstall (Figure 8-17 and Figure 8-18).

Figure 8-17: Confirm uninstall

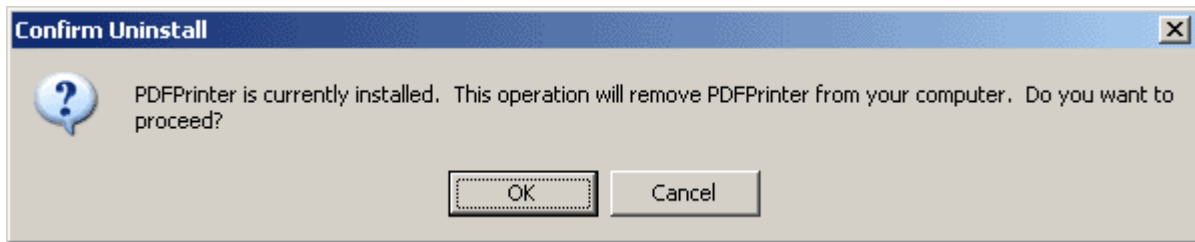
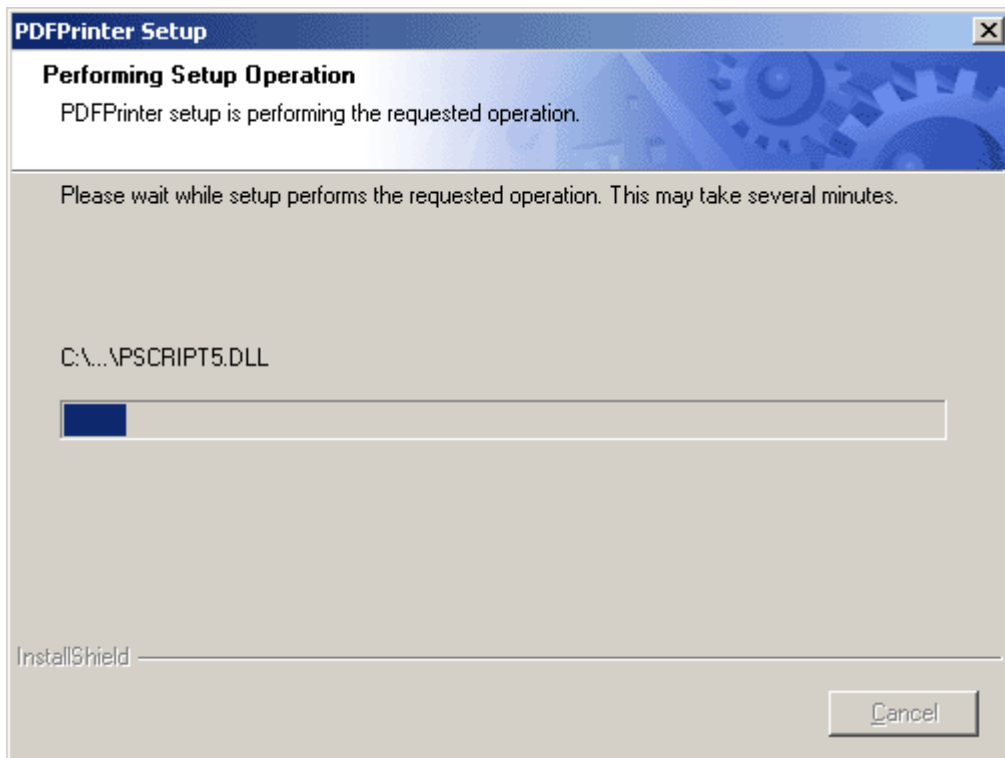
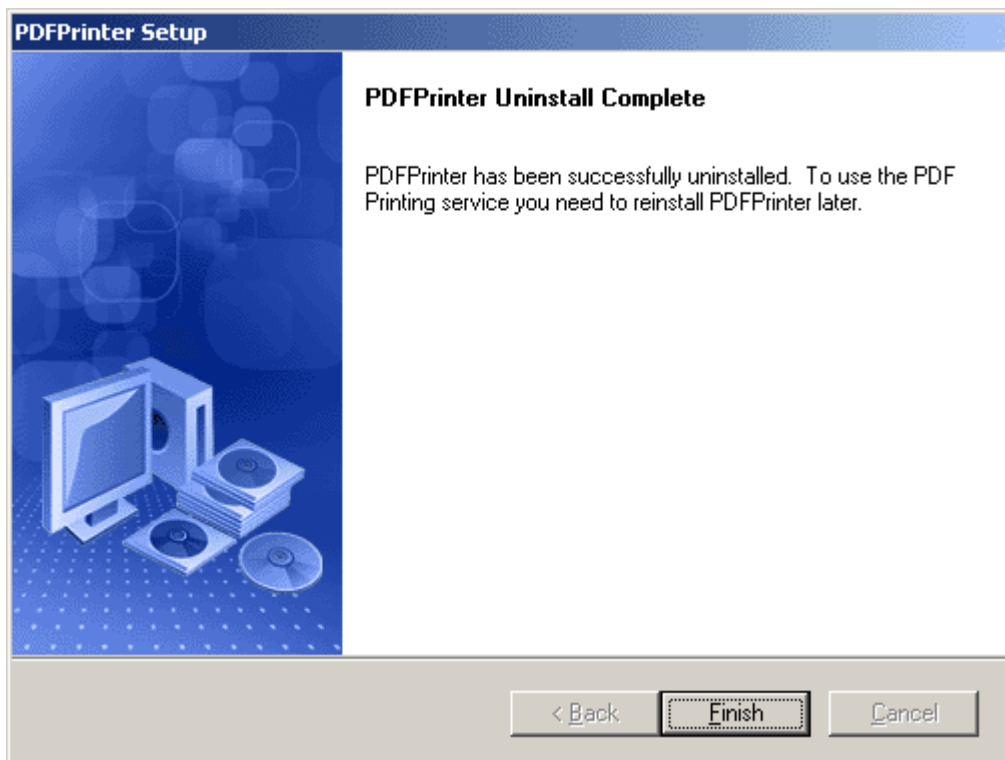


Figure 8-18: PDFPrinter uninstall process



Step 4 – Click *Finish* to exit (Figure 8-19).

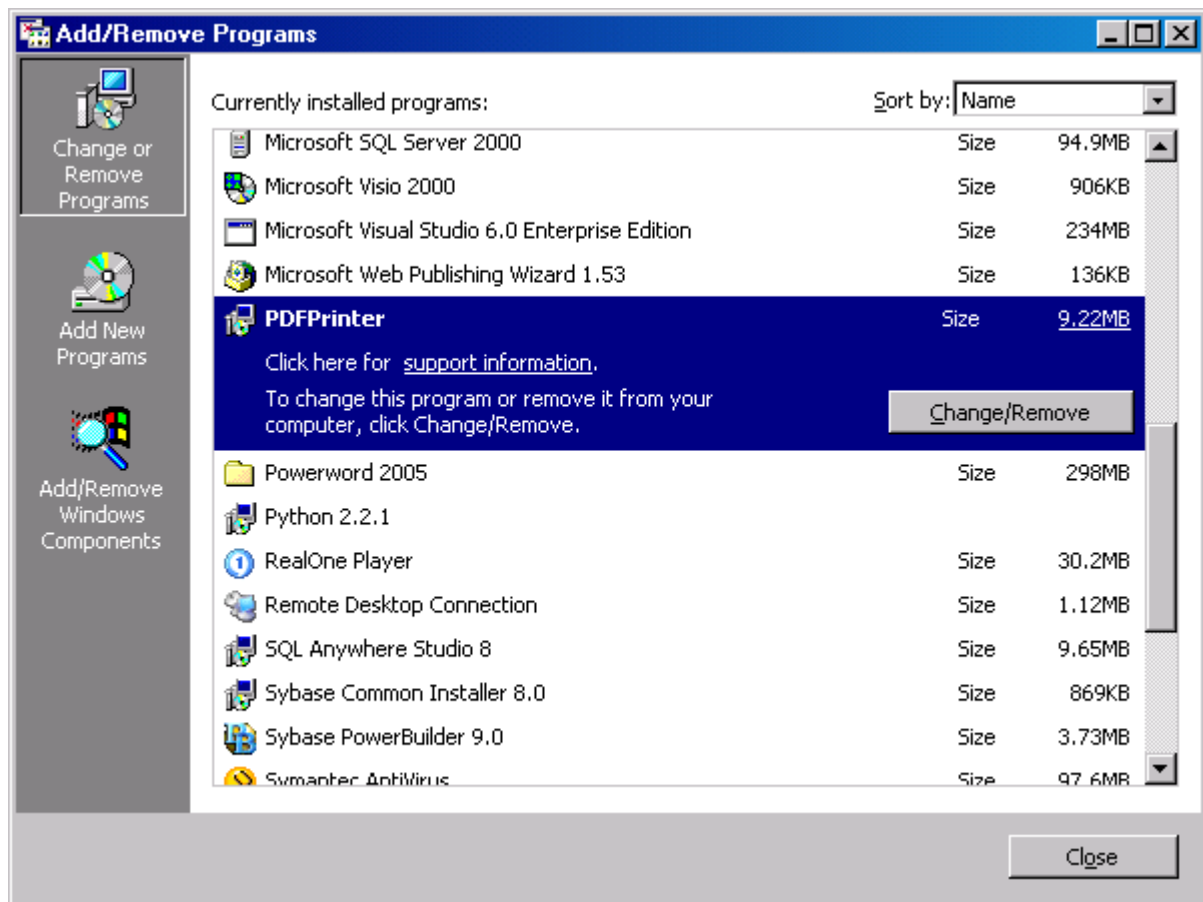
Figure 8-19: PDFPrinter uninstall complete

If you use multiple Appeon Servers, repeat the Appeon PDFPrinter uninstall steps for each Appeon Server.

8.5.2 Uninstalling Customer PDFPrinter

Step 1 – Shut down all Windows programs.

Step 2 – Launch Add/Remove Programs from the Windows Control Panel. Select *PDFPrinter* and click the *Change/Remove* button to begin the uninstall process (Figure 8-20).

Figure 8-20: Remove Customer PDFPrinter

Step 3 – Confirm the removal of Customer PDFPrinter. Click *OK* to uninstall (Figure 8-17 and Figure 8-18).

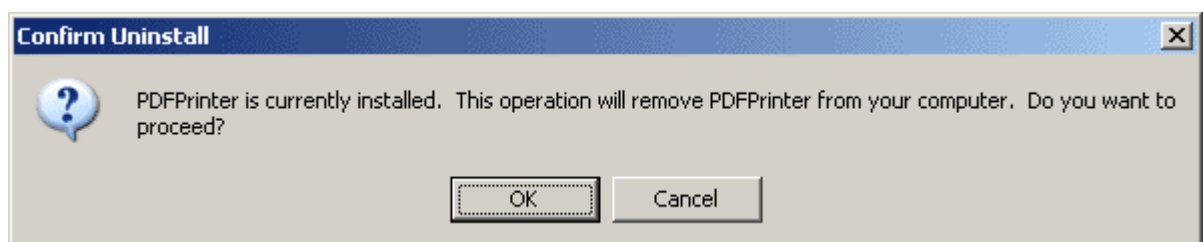
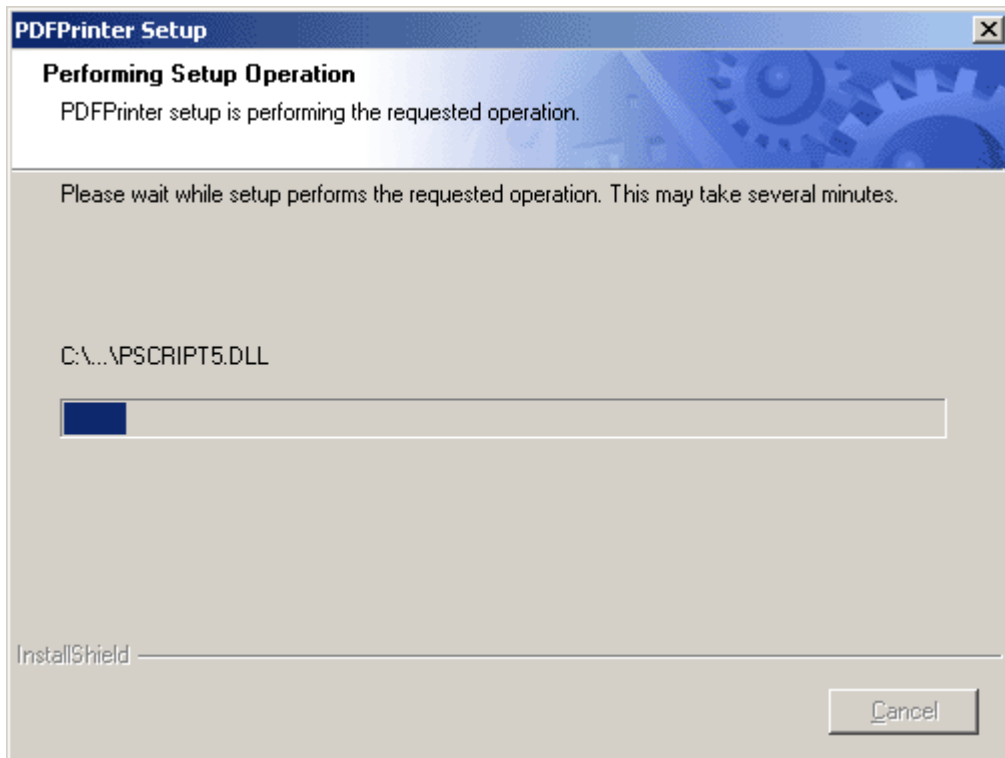
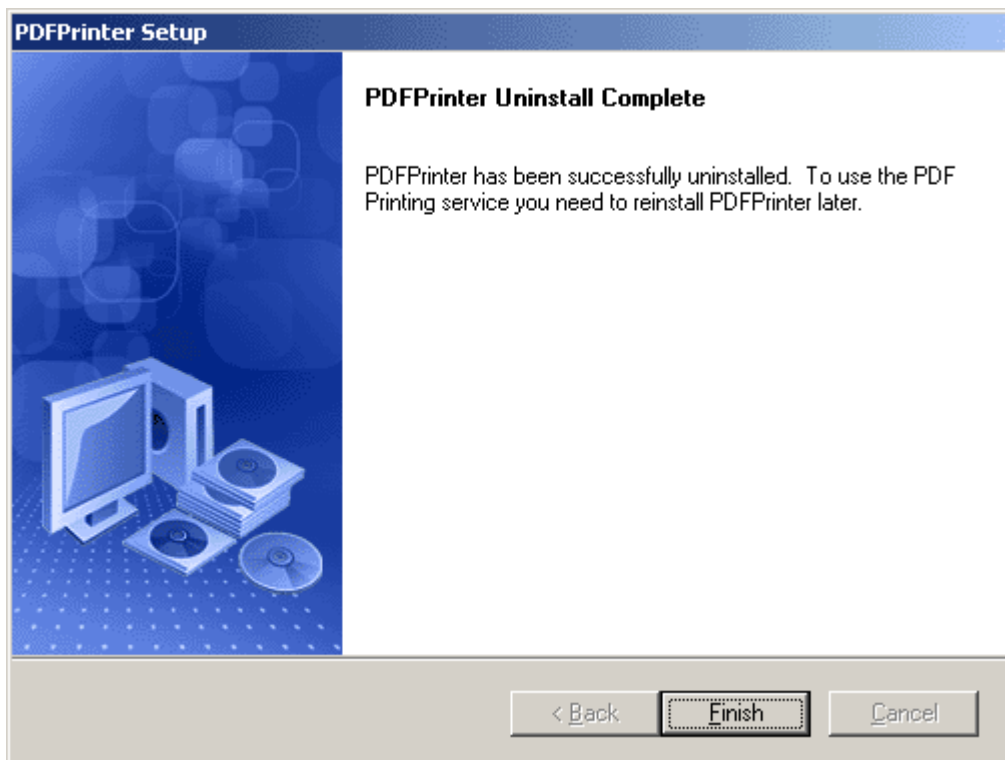
Figure 8-21: Confirm uninstall

Figure 8-22: PDFPrinter uninstall process



Step 4 – Click *Finish* to exit (Figure 8-19).

Figure 8-23: PDFPrinter uninstall complete



9 Technical Support

Technical support information is available at <http://www.sybase.com/support>. Please click on the *Contact Support* link for help.

When logging a case, be ready to provide the following files to Sybase Technical Support, these files will help with debugging.

Table 9-1: Files required for technical support

File Type	File Name
EAServer configuration file	%JAGUAR%\Repository\Server\Jaguar.props %JAGUAR%\bin\serverstart.bat %JAGUAR%\bin\setenv.bat
EAServer log file	%JAGUAR%\bin\Jaguar.log %JAGUAR%\bin\Jaguarhttperror.log %JAGUAR%\bin\Jaguarhttpervlet.log
Appeon Server configuration file	%JAGUAR%\appeon\config\application-config.xml %JAGUAR%\appeon\config\server-config.xml %JAGUAR%\appeon\config\aem-config.xml
Appeon Server log file	%JAGUAR%\appeon\log\LogSystem.log %JAGUAR%\appeon\log\AppeonServer.log
Appeon Server Repository DB	%JAGUAR%\appeon\db\AppeonServer.db
Appeon license file	%JAGUAR%\appeon\license.appeon
Web Server configuration file	httpd.conf
Web Page file	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) Web Server path of EAServer is usually %JAGUAR%\html. 2) If the window named includes inheritance, then also supply all ancestor HTML and JavaScript files.
PowerBuilder exported source code file	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.

Index

A

- accessing Web applications problem, workaround
- checking the Empty Temporary Internet Files folder when browser is closed option, 93
- deleting the temporary Internet files manually, 93
- Appeon 3.1 new installation
 - Appeon Developer installation
 - installation instruction, 34
 - prerequisites, 33
 - verifying Appeon Developer program files, 39
 - verifying demo applications installation, 39
 - Appeon PDFPrinter installation
 - configuration instructions, 55
 - installation instructions, 50
 - prerequisites, 50
 - Appeon Server installation
 - EAServer 5.2 install, 26
 - installation instruction, 17
 - prerequisites, 16
 - verifying Appeon Server program files, 28
 - verifying demo applications installation, 31
 - Appeon Server Web Component
 - installation, 43
 - installation instructions, 43
 - prerequisites, 43
 - Customer PDFPrinter installation
 - installation instructions, 56
 - PDF printer installation, 49
- Appeon 3.1 upgrade installation
 - prerequisites, 59
 - upgrade instructions
 - upgrade Appeon Developer, 63
 - upgrade Appeon PDFPrinter, 66
 - upgrade Appeon Server, 60
 - upgrade Appeon Server Web component, 65
 - upgrade instructions, 60
 - upgrade of configuration settings
 - Appeon Developer settings, 68
 - Appeon Enterprise Manager settings, 70
 - Appeon Server settings, 71
 - upgrade of configuration settings, 68
- Appeon components
 - Appeon Developer, 6
 - Appeon Server, 6
 - Appeon Server Web Component, 6
- Appeon components, installing
 - Appeon Server, 5
- Appeon Developer installation verification
 - demo files
 - checking demo applications in Application Profiles tab in Appeon Developer Configuration window, 41
 - system DSN AppeonSample, 40
- Appeon Developer uninstalling, 96
- Appeon server requirements
 - hardware, 8
 - software, 8

third-party Web Server, 8
 Apeon Server uninstalling, 99
 Apeon Server Web Component
 installation
 verifying the installation, 47
 Apeon Servers and Web Server, work
 division, 85
 ASE Chained mode, 94
 audience, 1

B

before installing Apeon Developer
 checking Developer PC, 33
 shutting down certain Window
 programs, 34
 stopping certain processes, 34
 uninstalling the previous Apeon
 version, 33
 upgrading PowerBuilder, 33
 before installing Apeon Server
 checking ASE EJB, 16
 stopping certain processes, 17
 before installing Apeon Server Web
 Component to a third-party Web server
 shutting down certain program, 43
 using compatible Web server, 43
 before installing Apeon Server Web
 Component to a third-party Web Server
 installing and configuring Sybase
 Redirector Plug-in, 47
 before installing Apeon Server Web
 Component to a third-party Web server:,
 43
 before installing Web component
 preparations for installing Web
 component to multiple Web Server,
 43

C

checking the version of JScript.dll, 94

client PC requirements
 hardware, 7
 software, 7
 configuration for installation
 disabling Static Page Caching, 94
 configuring PROPS file, 85
 configuring Web Server
 configuring Apache 1.3, 72
 configuring Apache 2.0, 75
 configuring IIS, 77
 configuring Web Server, 72
 Customer PDFPrinter installation
 installation instructions, 56

D

Database server requirements, 8
 developer PC requirements
 hardware, 7
 software, 7
 dynamic DataWindows support, 94

E

EAServer configuration
 host and port settings, 88
 HTTP listener properties, 85

H

how to use this book, 1
 HTTP listener properties, 85

I

if you need help, 3
 installation methods, 12
 Installation Requirements
 system language settings, 94
 installation scenarios
 Developer PC installation, 11

- remote Appeon Server installation,
 - EAServer HTTP server, 11
- remote Appeon Server installation,
 - third-party Web Server, 11
- installation scenarios
 - Multiple Appeon Servers, 12
- Installing to non-EAServer Web servers, 43
- installing Web component
 - selecting the Web Server type, 44
- instructions for installing Appeon Server
 - choosing setup type
 - complete setup, 22
- Internet Explorer configuration
 - Internet Explorer settings, 91
 - security settings, 91
- Internet Explorer configuration
 - caching recommendation, 92
 - disk space to use, 93
 - temporary Internet files folder,
 - Advanced tab, 93
 - temporary Internet files, General tab, 93
- IE advanced settings, 93

J

- JScript.dll, checking the version, 94

L

- language setting
 - regional options, your locale, 94
 - system locale, 94
- load balancing, 84
 - installing to multiple EAServers, 84

M

- Multiple Appeon Servers
 - EAServer configuration, 85

P

- PDF printer uninstalling, 105
- Post-Installation configuration, 90

R

- related documents, 1

S

- section 508 compliance, 4
- security settings
 - custom level settings, 92
 - default level settings, 92
 - security level and zone, 91
- starting the installation, 13
- supporting dynamic DataWindows, 94
- system architecture, 4
- system architecture
 - Application Server, 5
 - Client PC, 5
 - Database Server, 5
 - Web Server, 5
- system language settings, 93

T

- technical support, 110

U

- uninstalling Appeon Developer, 96
- uninstalling Appeon PDFPrinter, 105
- uninstalling Appeon Server, 99
- uninstalling Customer PDFPrinter, 107
- uninstalling EAServer this is install with Appeon, 102
- uninstalling PDF printer
 - uninstalling Appeon PDFPrinter, 105
 - uninstalling Customer PDFPrinter, 107
- uninstalling PDF printer, 105

uninstalling Web Component from
multiple third-party Web Servers, 105
uninstalling Web component from non
EAServer Web Server, 103

V

verifying Appeon Developer installation
demo files (complete setup), 39

W

Web component uninstall from non
EAServer Web Server, 103
Web Server and Appeon Servers, work
division, 85
Web Server configuration, 72
 Apache 1.3 configuration, 72
 Apache 2.0 configuration, 75
 IIS configuration, 77