Appeon Installation Guide for WebLogic

Appeon® 6.5 for PowerBuilder®

UNIX, LINUX

DOCUMENT ID: DC00808-01-0650-01

LAST REVISED: November 2010

Copyright © 2010 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 it may be used or copied only in accordance with the terms of that agreement.

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

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

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

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

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

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

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

Contents

1 About This Book 1
1.1 Audience 1
1.2 How to use this book 1
1.3 Related documents 1
1.4 If you need help 2
2 Introduction 4
2.1 Overview 4
2.2 System architecture 4
2.3 Appeon editions 5
2.4 Appeon components 6
2.4.1 Appeon Developer (Windows only) 6
2.4.2 Appeon Server 6
2.4.3 Appeon Server Web Component (for third-party Web servers) 6
2.4.4 Appeon Help (Windows only) 6
3 Installation Requirements 7
3.1 Client requirements 7
3.1.1 Software requirements 7
3.1.2 Hardware requirements 7
3.2 Appeon Server requirements 7
3.2.1 Software requirements 7
3.2.2 Hardware requirements 7
3.2.3 (Optional) Third-party Web Server requirements 7
3.3 Database server requirements 8
4 Installing Appeon 6.5 9
4.1 Overview 9
4.2 Installation scenarios 9
4.2.1 Overview 9
4.2.2 Remote Appeon Server using WebLogic HTTP server 10
4.2.3 Remote Appeon Server using a third-party Web server 10
4.2.4 Appeon Server Cluster 11
4.3 Two installation methods 11
4.4 Appeon 6.5 new installation 12
4.4.1 Appeon Server installation 12
4.4.1.1 Deploying appeonserver.ear package manually (for WebLogic Production Mode only) 13
4.4.2 Appeon Server Web Component installation (for third-party Web servers only) 22
4.4.2.1 Prerequisites 22
4.4.2.2 Installation instructions 23
4.5 Appeon 6.5 upgrade installation 23
4.5.1 Overview 23
4.5.2 Upgrading Appeon Server 23
4.5.3 Upgrading Appeon Server Web Component 25
4.6 Starting/Stopping Appeon Server 26
4.6.1 Starting Appeon Server 26
4.6.2 Logging in to WebLogic Server Administration Console 26
4.6.3 Stopping Appeon Server 28

5 Configuring Appeon Server Cluster 29
5.1 Overview 29
5.2 Configuration instructions 29
6 Post-Installation Configuration Tasks 30
6.1 Overview 30
6.2 Configuration for client machine 31
6.2.1 Configuring IE security settings 31
6.2.2 Logging in as administrator or normal user 33
6.2.2.1 Using IE 8.0 33
6.2.2.2 Using IE 7.0 (or earlier) 34
6.2.3 Verifying Appeon ActiveX control installation 34
6.3 System language settings 35
7 Uninstalling Appeon 6.5 37
7.1 Overview 37
7.2 Uninstalling Appeon Server 37
7.3 Uninstalling Appeon Server Web Component (for third-party Web servers only) 37
8 Technical Support 38
Index 40

1 About This Book

1.1 Audience

This book is for users who want to install Appeon® 6.5 for PowerBuilder® (on WebLogic UNIX\LINUX).

1.2 How to use this book

There are eight chapters in this book.

Chapter 1: About This Book

A general description of this book.

Chapter 2: Introduction

An overview of Appeon 6.5 for PowerBuilder (on WebLogic UNIX\LINUX) and its system architecture.

Chapter 3: Installation Requirements

The system requirements for installing Appeon 6.5 for PowerBuilder (on WebLogic UNIX \LINUX).

Chapter 4: Installing Appeon 6.5

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

Chapter 5: Configuring Appeon Server Cluster

Instructions for configuring an Appeon Server cluster.

Chapter 6: Post-Installation Configuration Tasks

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

Chapter 7: Uninstalling Appeon 6.5

Instructions for uninstalling Appeon 6.5 for PowerBuilder (on WebLogic UNIX\LINUX).

Chapter 8: 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, Appeon ACF Demo, and Appeon Pet World, 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 Appeon Developer toolbar in Appeon 6.5.

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

- Appeon Server Configuration Guide:

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

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

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

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

- Appeon Installation Guide:

  Provides instructions on how to install Appeon for PowerBuilder successfully.

- Appeon Migration Guide:

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

- Appeon Performance Tuning Guide:

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

- Appeon Troubleshooting Guide:

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

- Introduction to Appeon:

  Guides you through all the documents included in Appeon 6.5.

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

  Introduces new features and changes in Appeon 6.5.

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

1.4 If you need help

Each Sybase installation that includes a support contract has one or more designated people who are authorized to contact Sybase Technical Support or an Authorized Sybase Support Partner. If you have any questions about this product or need assistance during the installation process, ask a designated person to contact Sybase Technical Support or

an Authorized Sybase Support Partner listed in your support contract. You may access the Technical Support Web site at http://www.sybase.com/support.

2 Introduction

2.1 Overview

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

From the native source code of PowerBuilder applications, Appeon for PowerBuilder can generate *bona fide* n-Tier Web applications that precisely replicate the Client/Server user interface with HTML running in standard Microsoft Web browsers. These Web applications offer the rich user experience of the original PowerBuilder applications and deliver the superior Quality Of Service (QOS) of the n-Tier Web architecture and J2EE platform, as well as greater availability, scalability, security and reliability.

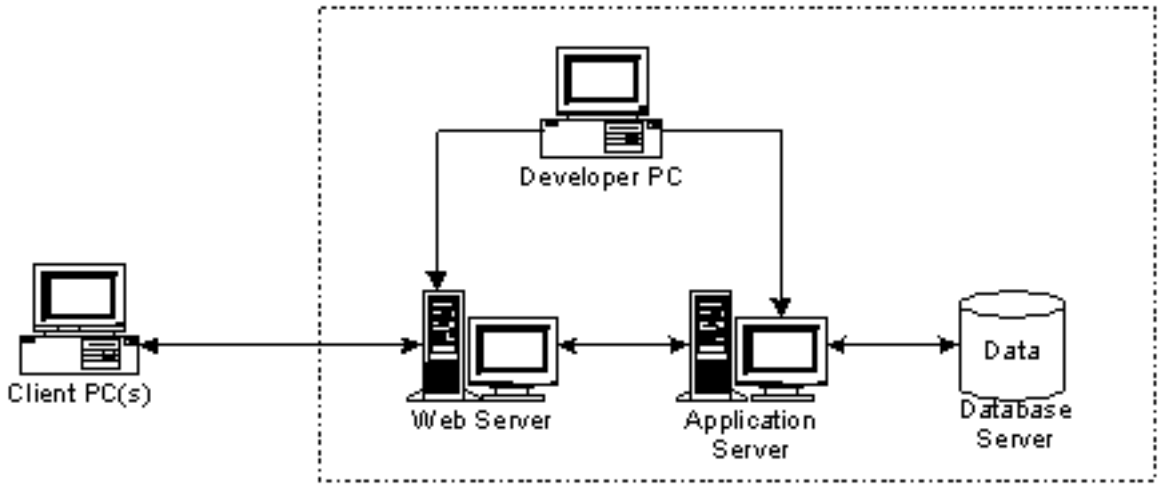
Appeon for PowerBuilder allows the entire Web application conversion process to be executed within the PowerBuilder IDE. It does not require the developer to write a single line of HTML, Java, .NET or JavaScript code. Only standard PowerBuilder programming skills are required.

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

2.2 System architecture

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

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	Deploys your PowerBuilder application to the testing and production Web environments with the n-Tier architecture.	Appeon Developer	PowerBuilder Internet Explorer
Web Server	Hosts the presentation layer of Appeon Web applications, responds to incoming requests from Client PC and dispatches requests to the application server.	Appeon Server Web Component	WebLogic HTTP Server or any WebLogic-compatible Web server, such as Apache or IIS.
Application Server	Hosts the DataWindows and n-Tier components of Appeon Web applications, provides necessary runtime services to the Web application, such as DataWindow retrieval and update, execution of business logic, and security authentication.	Appeon Server	WebLogic Server
Database Server	Hosts the application database.	None	JDBC-compliant RDBMS supported by Appeon. Please see Database server requirements for more information.

2.3 Appeon editions

Appeon 6.5 for PowerBuilder (on WebLogic UNIX\LINUX) contains the following editions.

Table 2.2: Appeon editions

Edition	Platform	Component	Description
Enterprise Edition	IBM AIX, Sun Solaris, HP Unix, RedHat Linux	• Appeon Server • Appeon Server Web Component	1) Appeon Developer and Appeon Help are not provided. 2) The Appeon Server clustering service is provided in Enterprise Edition only.

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

2.4 Appeon components

2.4.1 Appeon Developer (Windows only)

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 component support, transaction management, and security for Appeon Web applications.

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

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

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

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

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

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

2.4.4 Appeon Help (Windows only)

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

3 Installation Requirements

3.1 Client requirements

3.1.1 Software requirements

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

3.1.2 Hardware requirements

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

3.2 Appeon Server requirements

3.2.1 Software requirements

- Unix OS (such as IBM AIX, Sun Solaris, or HP Unix), or Linux (such as RedHat Linux) that is supported by Oracle WebLogic Server
- Oracle® WebLogic Server 8.1.6, 9.2, 10.3, or 11g

3.2.2 Hardware requirements

- Processor(s)

  Linux: 86 Pentium IV above, X86 AMD above

  IBM AIX: IBM Power4

  Solaris: UltraSparcIII, Solaris X86 Pentium

  HP-Unix: HP Itanium, HP PA-Risc
- At least 1 GB RAM (2 GB RAM recommended)
- 680 MB hard drive space (for WebLogic Server installation) plus 250 MB hard drive space (for Appeon Server installation)
- DVD-ROM drive (for Appeon installation from DVD)

3.2.3 (Optional) Third-party Web Server requirements

- Apache 1.3, 2.0, or 2.2 on Windows or Unix\Linux, or Microsoft IIS 5.0, 6.0, 7.0, or 7.5

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

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

3.3 Database server requirements

Appeon 6.5 for PowerBuilder can run with any of the following database servers and drivers:

- Sybase Adaptive Server Anywhere 7.0.4, 8.0.2, 9.0, 10.0.1, 11.0, or 12.0 with Sybase iAnywhere or jConnect JDBC driver
- Sybase Adaptive Server Enterprise (ASE) 12.5.x or 15.x with Sybase jConnect or iAnywhere JDBC driver
- Sybase Adaptive Server Anywhere WEB Edition with Sybase jConnect or iAnywhere JDBC driver
- Sybase IQ 12.7.x with jConnect JDBC driver
- Oracle 8i, 9i, 10g, or 11g with Oracle JDBC driver

  Note: Verify that the version of the downloaded driver is compatible with the Oracle database in use.
- Microsoft SQL Server 2000 SP4, 2005 SP1, or 2008 with MSFT JDBC driver or JTDS driver
- IBM DB2 UDB 8.1, 8.2, or 9.5 with IBM JDBC driver
- Informix 7.x, 8.x, 9.x, or 10.x with IBM JDBC driver

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

4 Installing Appeon 6.5

4.1 Overview

Appeon 6.5 for PowerBuilder (on WebLogic UNIX\LINUX) consists of two components: Appeon Server and Appeon Server Web Component. To deploy the application to Appeon Servers and Web servers running on Unix\Linux, you can use an Appeon Developer installed from an Appeon for PowerBuilder **for Windows** edition.

Table 4.1: Appeon components

Component	Description	Installed on
Appeon Developer	An add-in that provides the Web deployment option to PowerBuilder.	PowerBuilder on Windows operating system.
Appeon Server	A set of server components that provide runtime services for the Appeon Web applications, such as data connectivity, DataWindows support, transaction management, and security. Appeon Server also includes Appeon Enterprise Manager (AEM) and Appeon Server Web Component.	WebLogic Server on Unix \Linux operating system.
Appeon Server Web Component	The runtime environment that supports a PowerBuilder-style Web graphical user interface within standard Microsoft Web browsers. Appeon Server Web Component is a library of JavaScript, HTML and XML files that form the foundation of the/an Appeon Web application.	Third-party Web server. For WebLogic HTTP server, this installation is unnecessary since the Web Component is included in Appeon Server.
Appeon Help	The online help of all Appeon user documents which saves time and conveniently places the help information at your fingertips.	Windows operating system.

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 Remote Appeon Server using WebLogic HTTP server

Table 4.2: 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, 2003, 2008, 7, XP, or Vista Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA	Computer 1: Appeon Developer
Computer 2 serves as Web server, application server and database server.	Computer 2: Unix\Linux Oracle WebLogic Server Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database	Computer 2: Appeon Server

4.2.3 Remote Appeon Server using a third-party Web server

Table 4.3: 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, 2003, 2008, 7, XP, or Vista Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA	Computer 1: Appeon Developer
Computer 2 serves as Web server	Computer 2: Microsoft IIS or Apache	Computer 2: Appeon Server Web Component
Computer 3 serves as application server and database server.	Computer 2: Unix\Linux Oracle WebLogic Server Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database	Computer 2: Appeon Server

4.2.4 Appeon Server Cluster

Table 4.4: Appeon Server cluster 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, 2003, 2008, 7, XP, or Vista Microsoft Internet Explorer Sybase PowerBuilder Sybase ASA	Computer 1: Appeon Developer
Computer 2 is the database server.	Computer 2: Sybase ASA, Sybase ASE, Sybase IQ, Oracle, Microsoft SQL Server, Informix or IBM DB2 depending on application database	Computer 2: None
Computer 3 is the Web server.	Computer 3: Microsoft IIS or Apache	Computer 3: Appeon Server Web Component
Computers 4 to n are a group of WebLogic Server.	Computers 4 to n: Unix\Linux Oracle WebLogic Server	Computers 4 to n: Appeon Server (After installing Appeon Server to each WebLogic Server, configure the Appeon Servers as a cluster. Refer to Configuring Appeon Server Cluster for details)

4.3 Two installation methods

Appeon 6.5 for PowerBuilder provides two installation methods: "new installation" and "upgrade installation".

- If your computer has not installed any version of Appeon for PowerBuilder, the installation program automatically takes the new installation method.
- If your computer has Appeon 5.x or an earlier version installed, you must uninstall the version, prepare the environment for Appeon 6.5 installation, and then use the installation program to install. The installation program takes the new installation method.
- If your computer has Appeon 6.0, 6.1 or 6.2 installed, the installation program automatically takes the upgrade installation method.

4.4 Appeon 6.5 new installation

4.4.1 Appeon Server installation

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

Step 1: Verify that WebLogic server, as well as any other programs you may be running, is stopped.

Step 2: Open the *Appeon4WebLogic* folder from the Appeon installation program and run the *install.sh* file using the command below:

```
./install.sh
```

Notes:

1. If you copy the Appeon installation program to the computer before installation, make sure that the directory does not contain special characters or spaces.

2. When you input the command, please be aware that file names and directory names are case sensitive.

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

Step 3: Press Enter or input "Next" to proceed.

```
Step 1. Welcome
-------------------------

###################################################################

Welcome to Appeon Server 6.5 for WebLogic Server installation!

###################################################################

Press Enter to start the installation [Exit][Next]>
```

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

Step 4: Specify the home directory of the WebLogic server as the Appeon Server installation directory, for example, /home/bea/weblogic92/.

```
Step 2. Install Directory
-------------------------

Please input the WebLogic home directory you want to install Appeon Server 6.5
(e.g. ../bea/weblogic92) or [Exit][Previous]>
```

Step 5: Specify the WebLogic domain path where the Appeon Server EAR package (appeonserver.ear) will be deployed.

```
Step 3. Specify Weblogic Domain
------------------------

Please input the WebLogic domain directory you want to deploy Appeon Server 6.5
(e.g. ../bea/user_projects/domains/base_domain/) or [Exit][Previous]>
```

Step 6: Confirm the setup settings.

```
Step 4. Confirm Information
------------------------

#####################################################################

               Confirm the installation

The installation directory is "/root/bea/weblogic92"
The specified Weblogic domain home is "/root/bea/user_projects/domains/base_domain"
AEM Console:
    Username: admin
    Password: admin

The installer will start installing the files on your system.
Go back if you want to change any settings for the installation.

#####################################################################

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

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

Step 7: When the installation is complete, choose whether to start Appeon Server.

```
#####################################################################

Congratulations! The installation has been successfully completed.

#####################################################################

Start Appeon Server
-----------------------------

Do you want to start the Appeon Server now? [Yes|No]>
```

To start Appeon Server immediately input "y". To start it later input "n". Refer to Starting/ Stopping Appeon Server for how to manually start Appeon Server using commands.

4.4.1.1 Deploying appeonserver.ear package manually (for WebLogic Production Mode only)

If the WebLogic Server runs in the Production mode (rather than the Development Mode), you would need to manually deploy the Appeon Server EAR package (appeonserver.ear) in the WebLogic Server Administration Console after the Appeon Server installation.

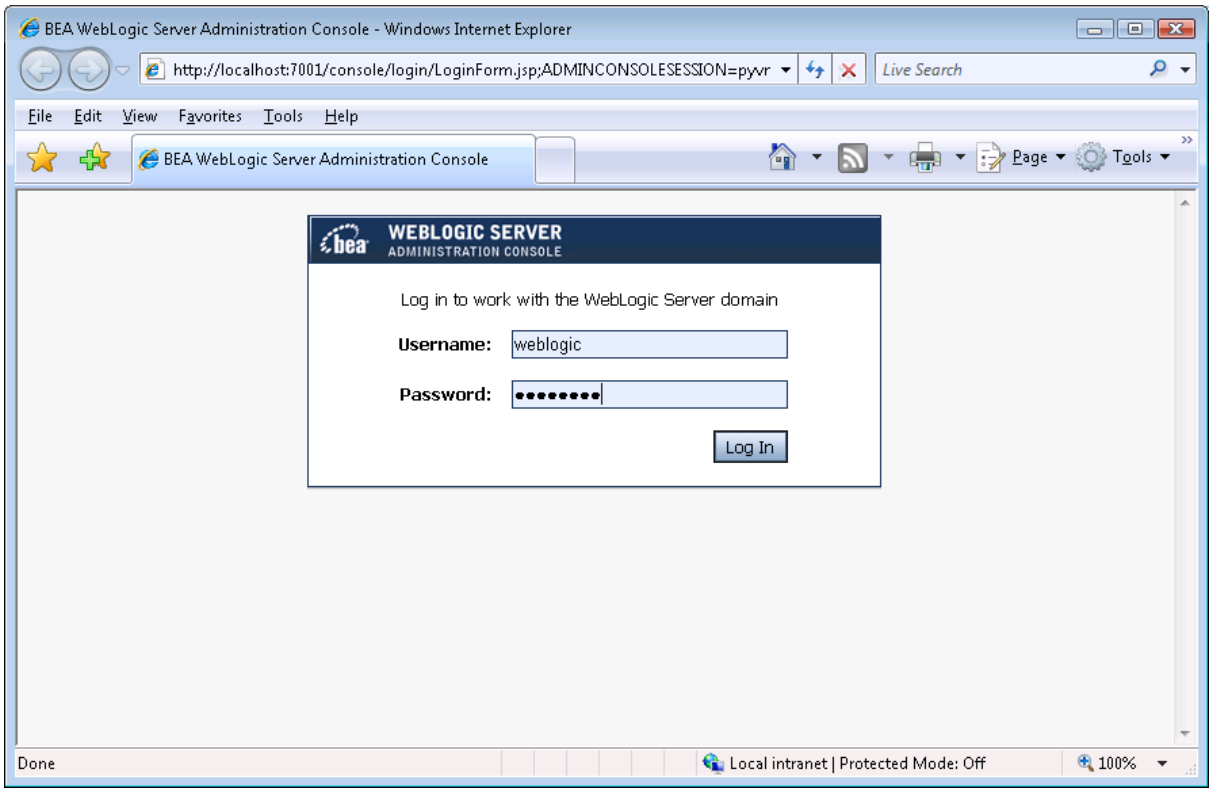
Skip this section if WebLogic Server runs in the Development mode because WebLogic Server in Development mode includes an auto-deployment feature which can detect the Appeon Server EAR package (appeonserver.ear) and automatically deploy it. In this case, you can verify that Appeon Server was successfully installed and deployed by starting WebLogic Server and then accessing Appeon Enterprise Manager (AEM) via http://localhost:7001/AEM on the local machine.

Follow the instructions below to deploy the appeonserver.ear package if WebLogic Server runs in the Production mode.

Step 1: Start WebLogic Server. Open the $BEA_HOME/user_projects/domains/mydomain/bin/ folder and run the startWebLogic.sh file. For details on starting WebLogic Server, refer to Starting/Stopping Appeon Server.

Step 2: Access WebLogic Server Administration Console via http://localhost:7001/console on the local machine. The WebLogic Login window will appear.

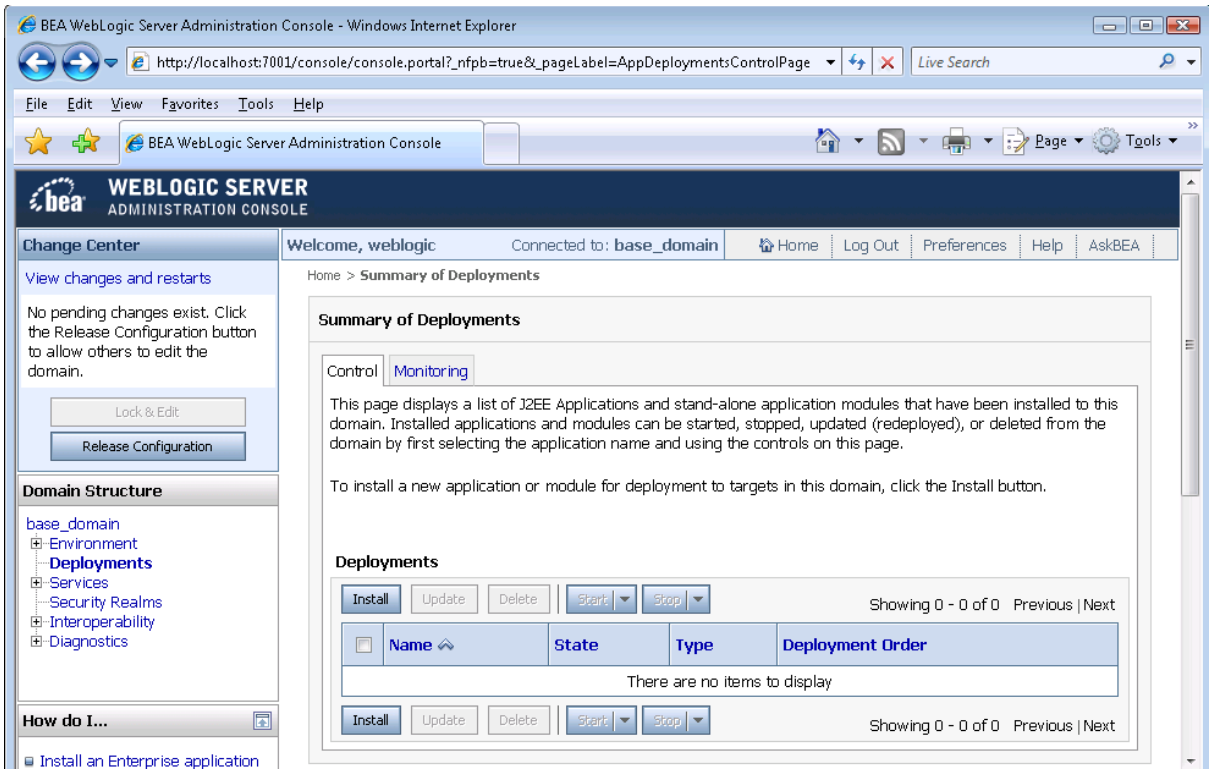
Figure 4.1: WebLogic Login window



Step 3: Log in to the WebLogic console with the correct username and password.

Step 4: Click the *Deployments* node and click *Lock & Edit* in the left pane, and then click *Install* in the right pane.

Figure 4.2: install appeonserver.ear

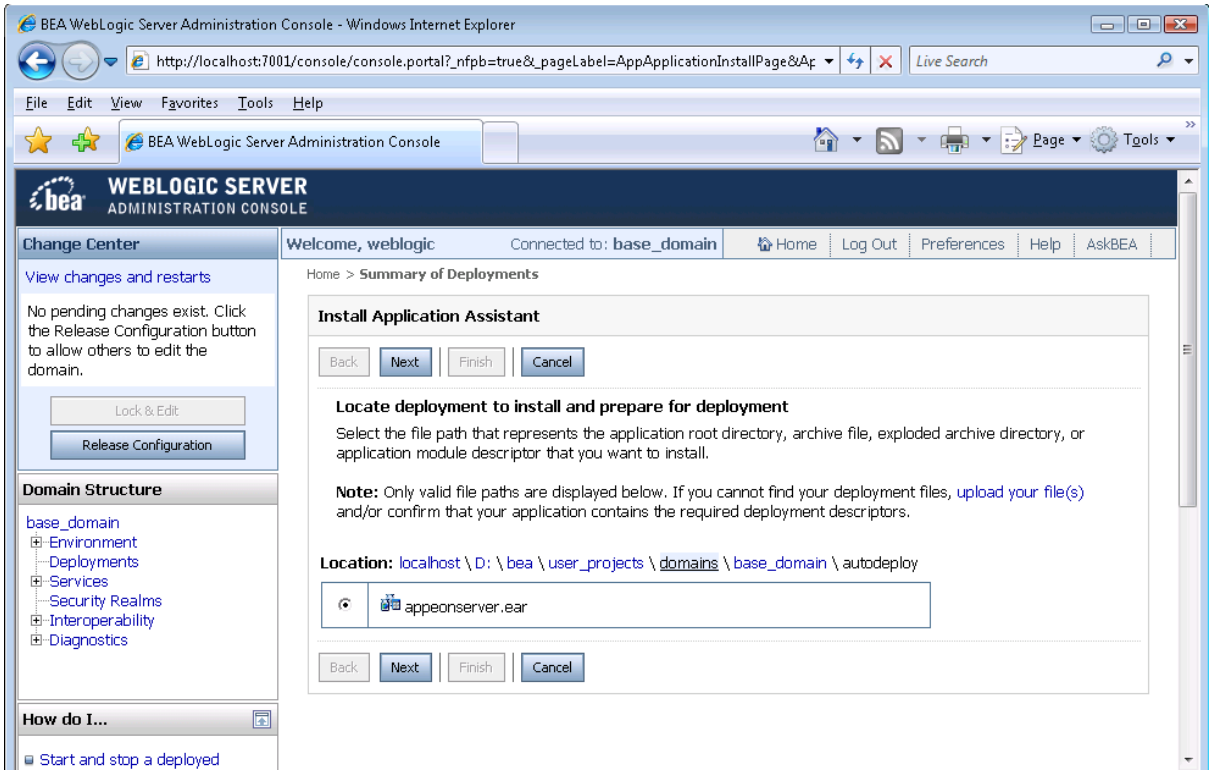


Step 5: Specify an application folder you want to install the appeonserver.ear using *Install Application Assistant* in the Install Application Assistant page, and then click *Next*.

The applications folder is where the Appeon Server EAR package (appeonserver.ear) should be placed when it is installed to the WebLogic Server domain.

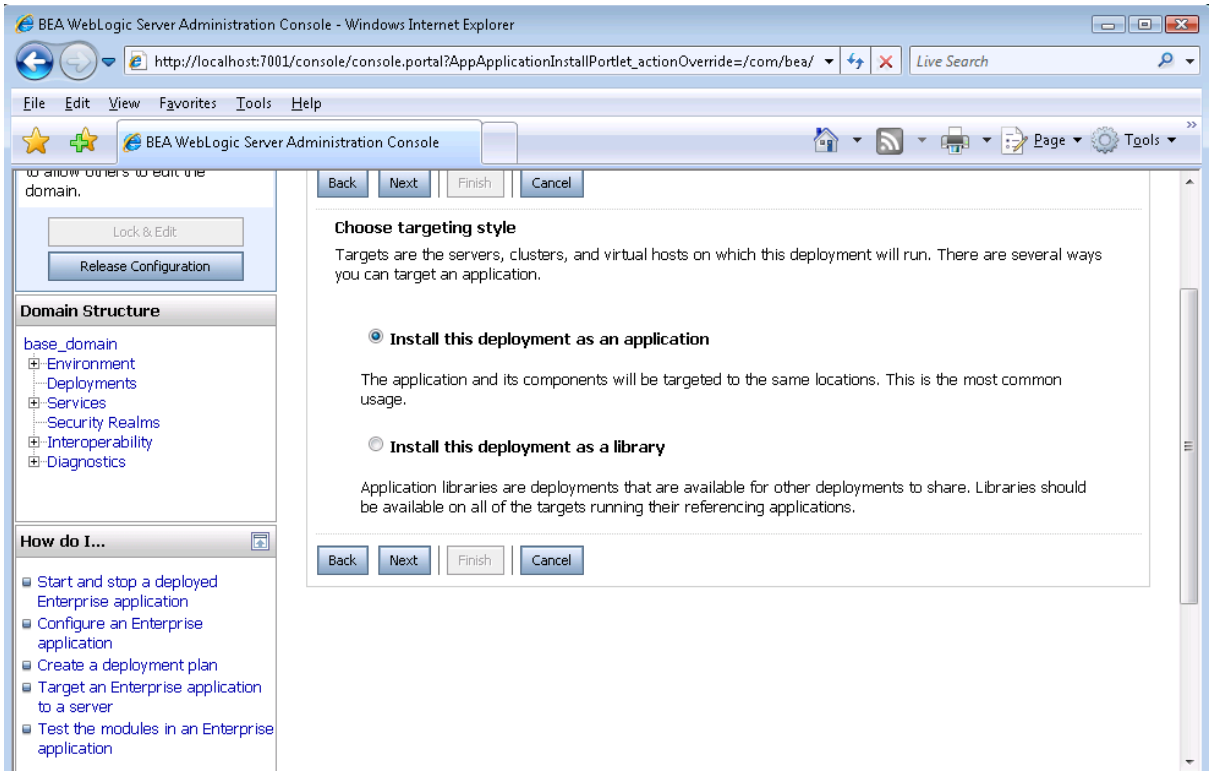
- If you are using WebLogic 8, the appeonserver.ear resides in $BEA_HOME/user_projects/domains/mydomain/applications.
- If you are using WebLogic 9/10, the appeonserver.ear resides in $BEA_HOME/user_projects/domains/mydomain/autodeploy.

Figure 4.3: Specify an application folder



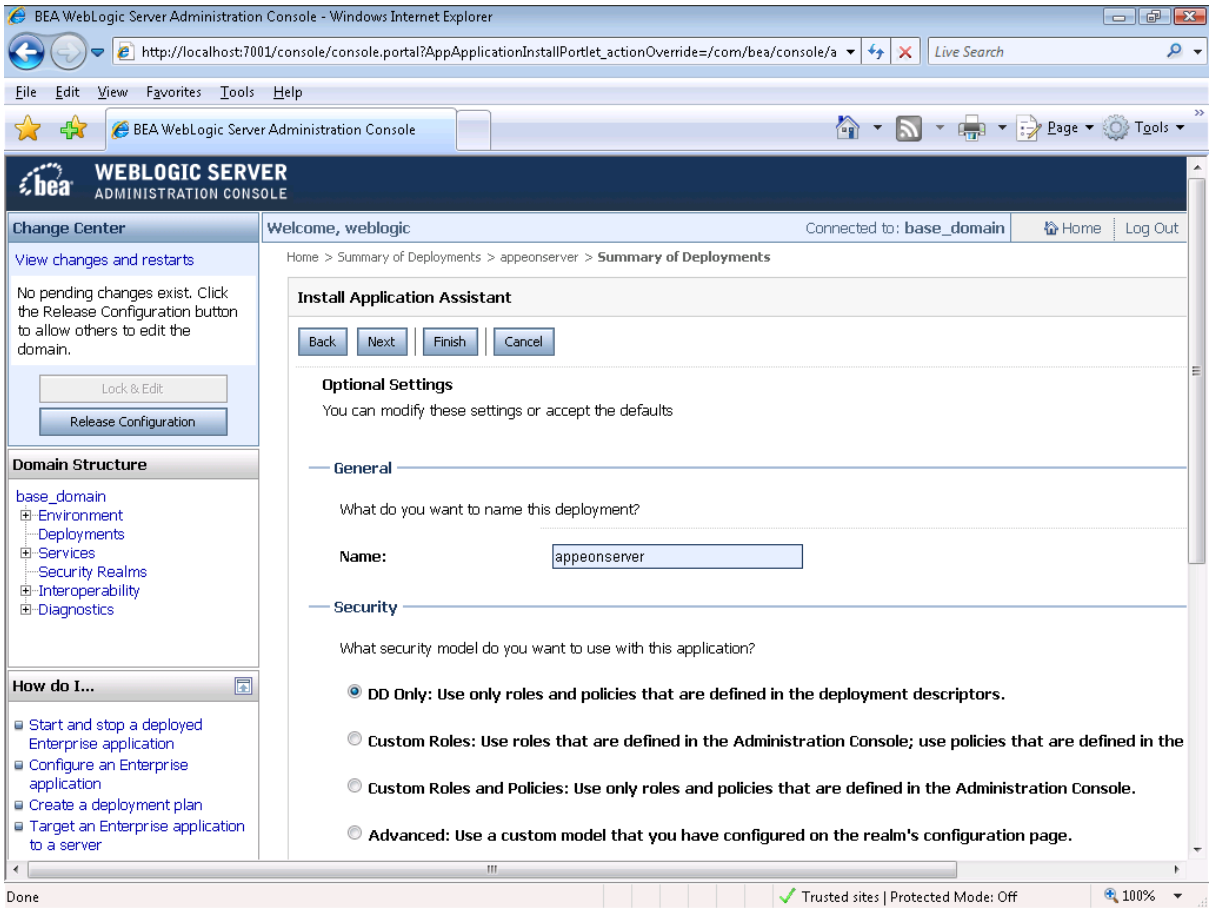
Step 6: Select *Install this deployment as an application*. Click *Next*.

Figure 4.4: Install this deployment as an application



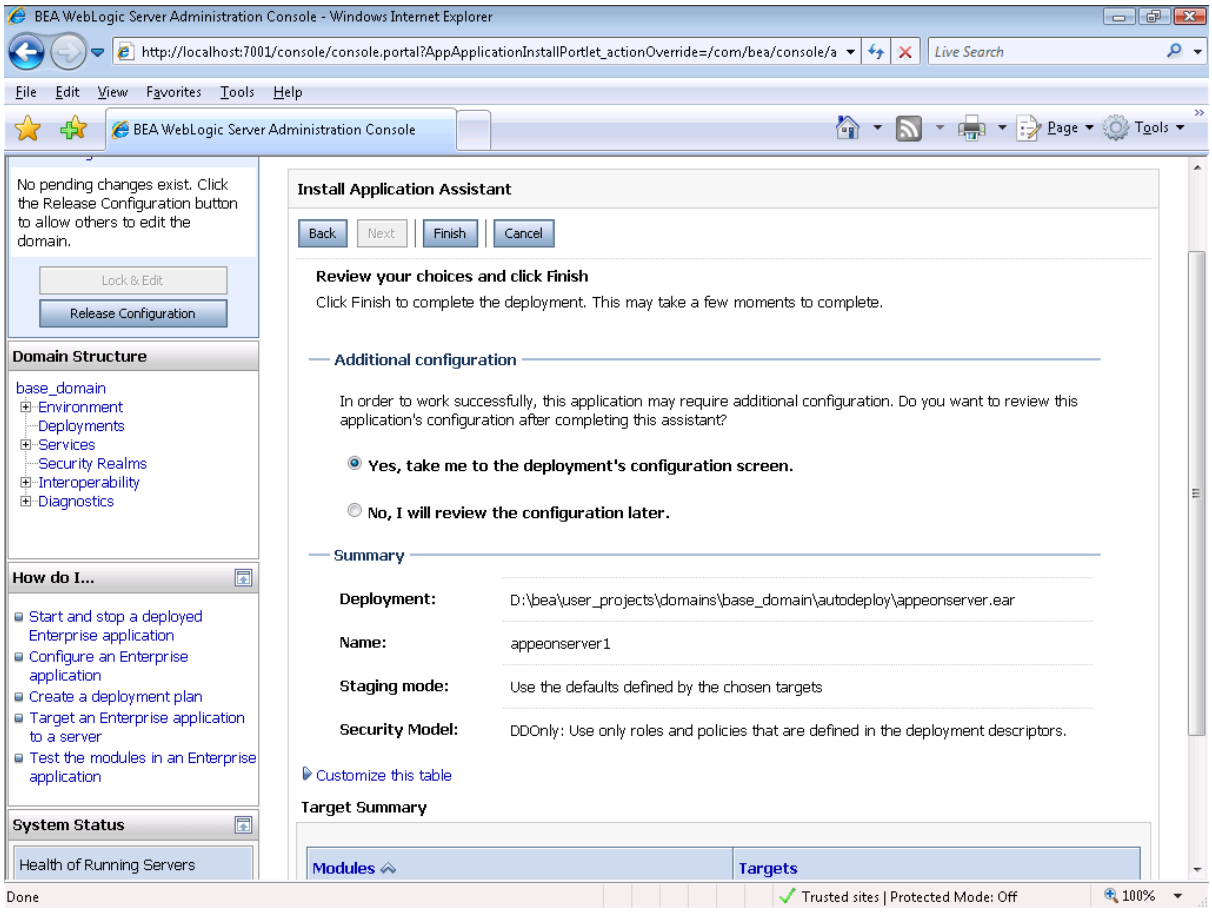
Step 7: Use the default settings, and then click *Next*.

Figure 4.5: Use the default settings



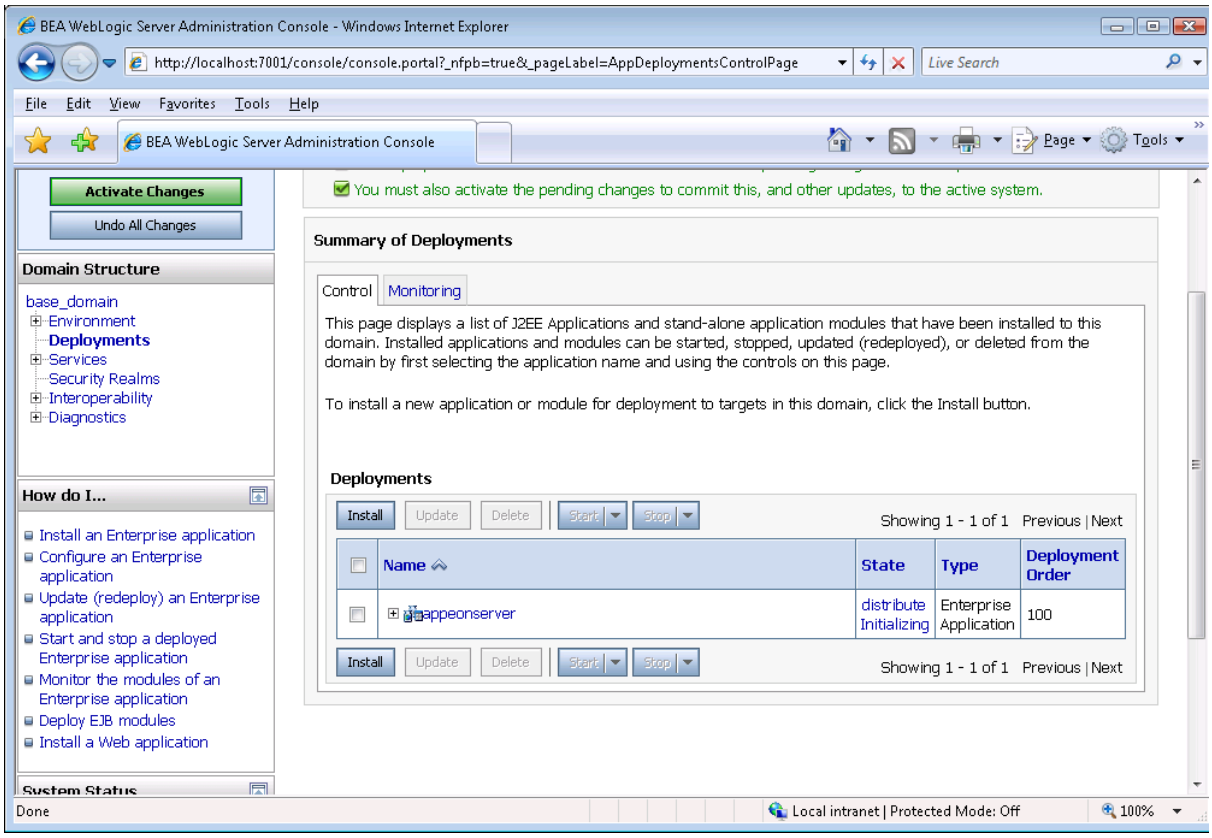
Step 8: Review and check the summary of settings you have chosen, select *No, I will review the configuration later*, and then click *Finish*, the Deployment page appears with the installed appeonserver.ear being displayed in the Deployments table.

Figure 4.6: Review the summary of settings



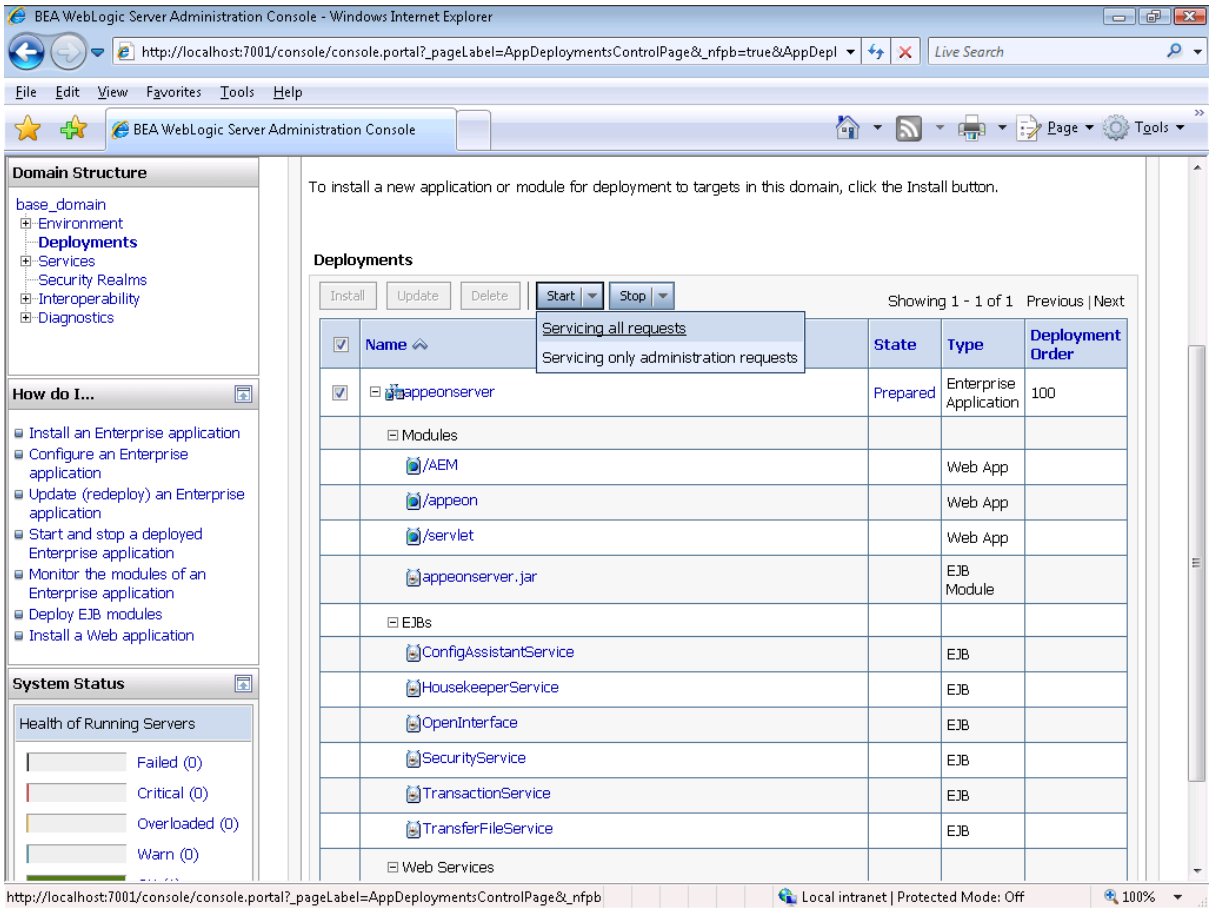
Step 9: Click *Activate Changes* in the left pane to commit your pending changes to the server.

Figure 4.7: Commit your pending changes to the server



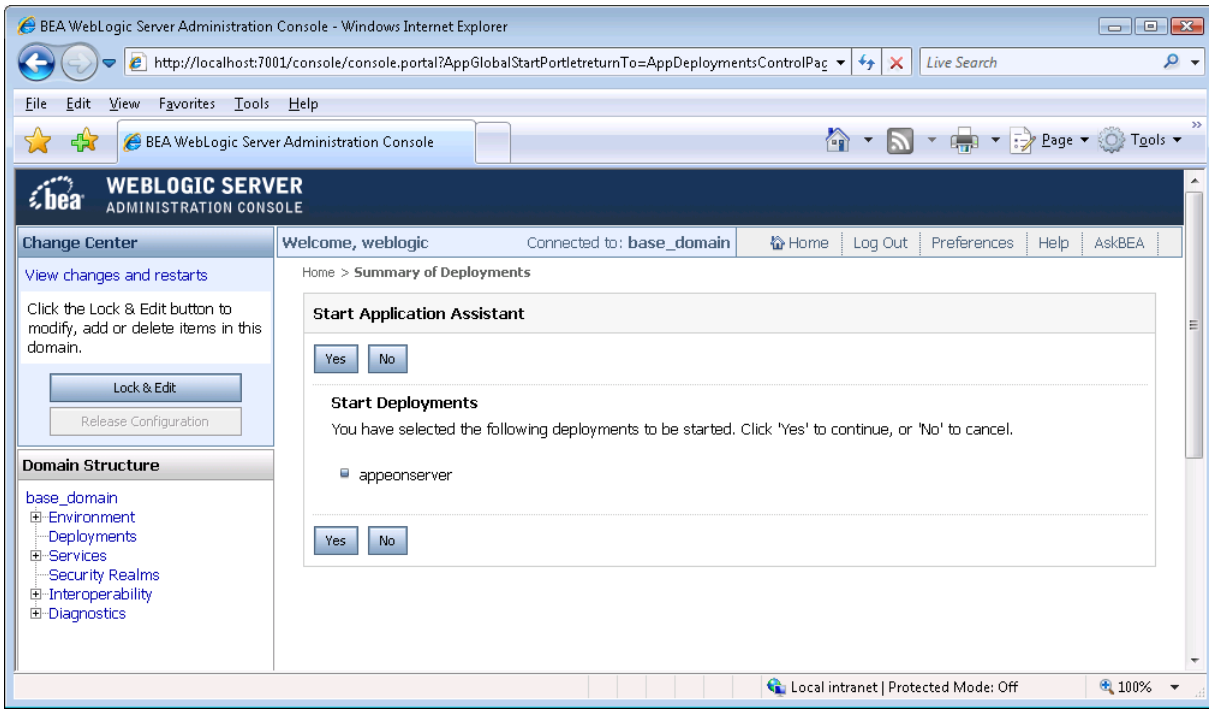
Step 10: Click the Start | Servicing all requests to deploy the appeonserver.ear file.

Figure 4.8: deploy the appeonserver.ear file



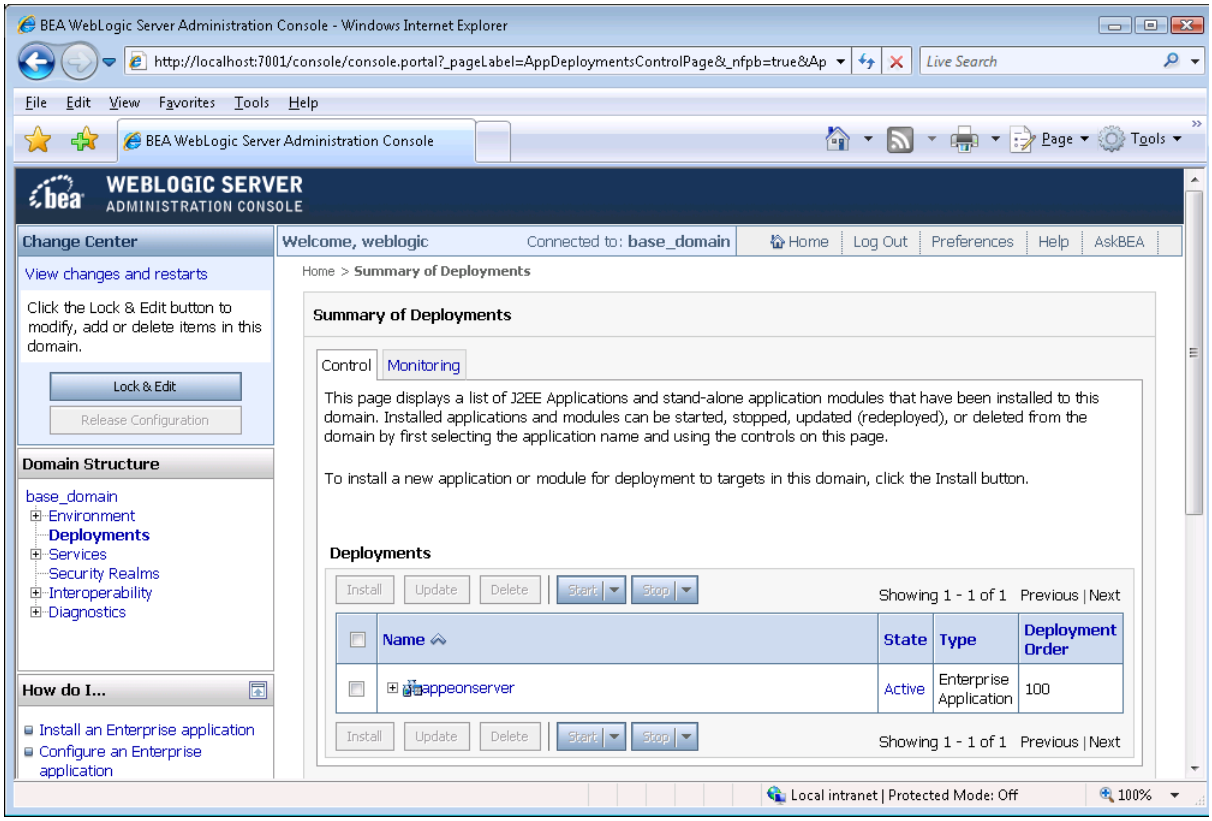
Step 11: Click *Yes* in the Start Application Assistant window.

Figure 4.9: Start Application Assistant window



Wait until the appeonserver.ear is successfully deployed, and the State column shows *Active*.

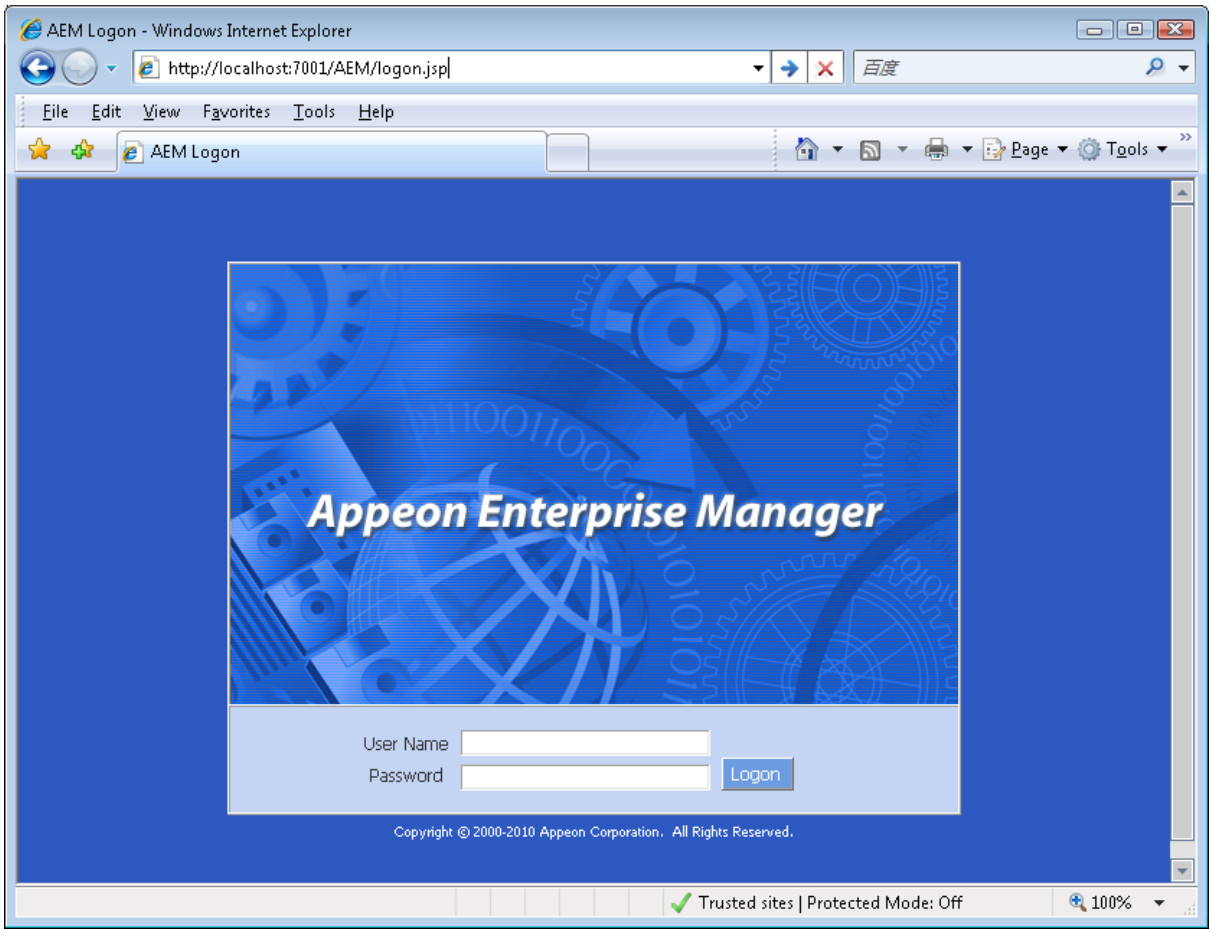
Figure 4.10: appeonserver.ear successfully deployed



Step 12: Access Appeon Enterprise Manager (AEM) via http://localhost:7001/AEM.

The successfully opened AEM login window confirms that the deployment was successful.

Figure 4.11: Start AEM



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

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

4.4.2.1 Prerequisites

- Install a third-party Web server that is compatible with the WebLogic redirector plug-in. For a list of compatible third-party Web servers, refer to (Optional) Third-party Web server requirements.
- Stop the Web server and any other programs before beginning the installation process.

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

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

4.4.2.2 Installation instructions

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

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

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

4.4.2.2.1 Installing and configuring the Web server redirector plug-in

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

4.5 Appeon 6.5 upgrade installation

4.5.1 Overview

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

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

4.5.2 Upgrading Appeon Server

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

Step 1 - Verify that WebLogic Server, as well as any other programs you may be running, is stopped.

Step 2 - Open the *Appeon4WebLogic* folder from the Appeon installation program and then run the *upgrade.sh* file using the command below:

```
./upgrade.sh
```

Note: File names and directory names are case sensitive.

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

Step 3 - Press Enter or input "Next" to proceed.

```
Step 1. Welcome
----------------------

######################################################################

Welcome to Appeon Server 6.5 for WebLogic upgrade!

NOTE: Please make sure the Weblogic Server is not running before you continue.

######################################################################

Press Enter to start the upgrade [Exit][Next]>
```

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

Step 4 - Input the location of JDK 1.5 or 1.6 if the upgrade installation procedure detects that the JAVA_HOME variable does not exist.

```
Step 2. Check JAVA_HOME
----------------------

######################################################################

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

Please input the directory where the JDK 1.5/1.6 is located or [Exit]>
```

Step 5 - Input the path of the Appeon Server EAR package (appeonserver.ear) which you want to upgrade, for example, /root/bea/user_projects/domains/mydomain. Press Enter. The upgrade installation procedure will automatically check whether the path you input is valid.

```
Step 3. Upgrade Directory
-------------------------

Please input the directory of Appeon Server needs to upgrade
(e.g. ../bea/user_projects/domains/mydomain) or [Exit][Previous]>
```

Step 6 - Confirm the path of Appeon Server installation. The upgrade installation procedure will automatically detect the Appeon Server installation directory.

```
Step 4. Appeon Server 6.5 Installation Directory
-------------------------

The Appeon Server 6.5 installation directory is "/root/bea/weblogic92"
Press Enter to continue or [Exit][Previous]>
```

Step 7 - Confirm the setup settings.

```
Step 5. Confirm Information
------------------------

######################################################################

                    Confirm the installation

JAVA_HOME is "/root/bea/jdk150_04"
The Upgrade directory is "/root/bea/user_projects/domains/base_domain2"
The Appeon Server 6.5 for Weblogic installation directory is "/root/bea/weblogic92"
Appeon Server EAR file will be copied to
"/root/bea/user_projects/domains/base_domain2/autodeploy".
If your Weblogic is running in  Production Mode, you should manually re-deploy
this application in Weblogic Console.

The installer will start installing the files on your system.
Go back if you want to change any settings for the installation.

######################################################################

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

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

Step 8 - Wait until the upgrade installation is complete.

```
######################################################################

Congratulations! The upgrade for WebLogic has been completed successfully.

######################################################################
```

4.5.3 Upgrading Appeon Server Web Component

4.5.3.1 Prerequisites

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

4.5.3.2 Upgrade instructions

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

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

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

4.6 Starting/Stopping Appeon Server

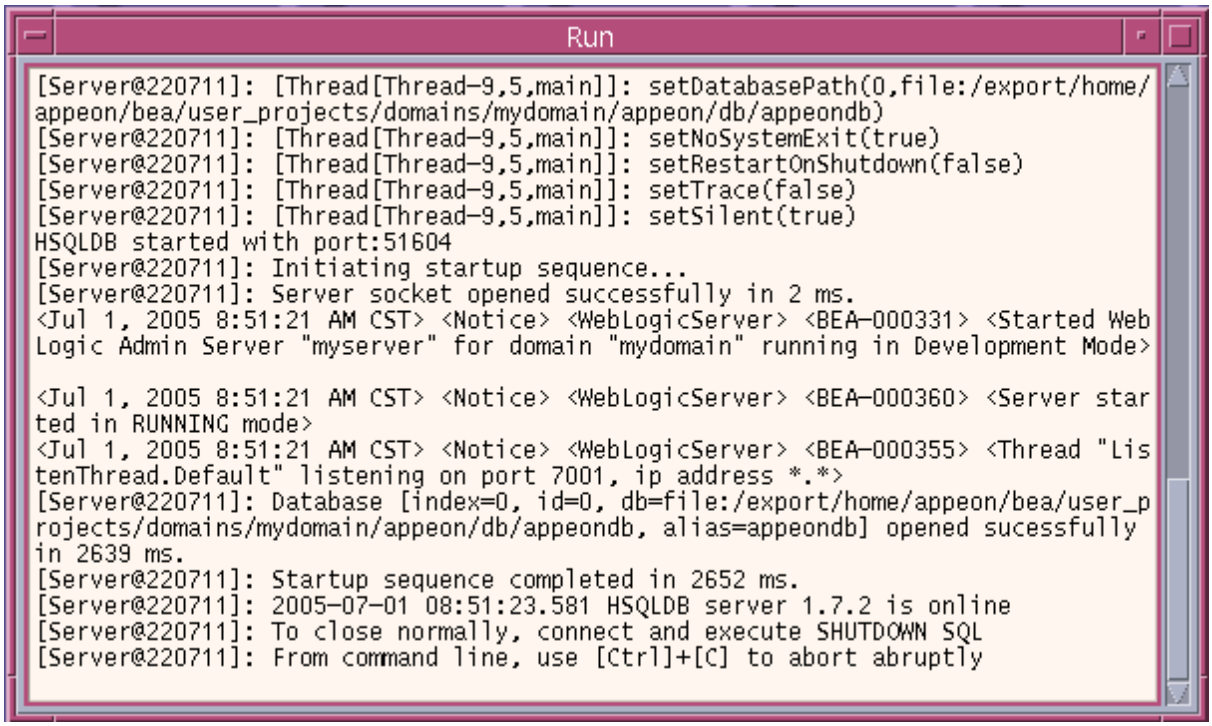
4.6.1 Starting Appeon Server

Change to the $appeon/bin/ folder, for example, /home/bea/weblogic92/appeon/bin/, and run the appeonserver.sh file.

If WebLogic Server is set to run in Production mode, you will be asked to enter your user name and password to start the server. The user name and password was created when you configured the domain.

When the server startup process is completed, the following message will appear in the command window.

Figure 4.12: Startup complete



4.6.2 Logging in to WebLogic Server Administration Console

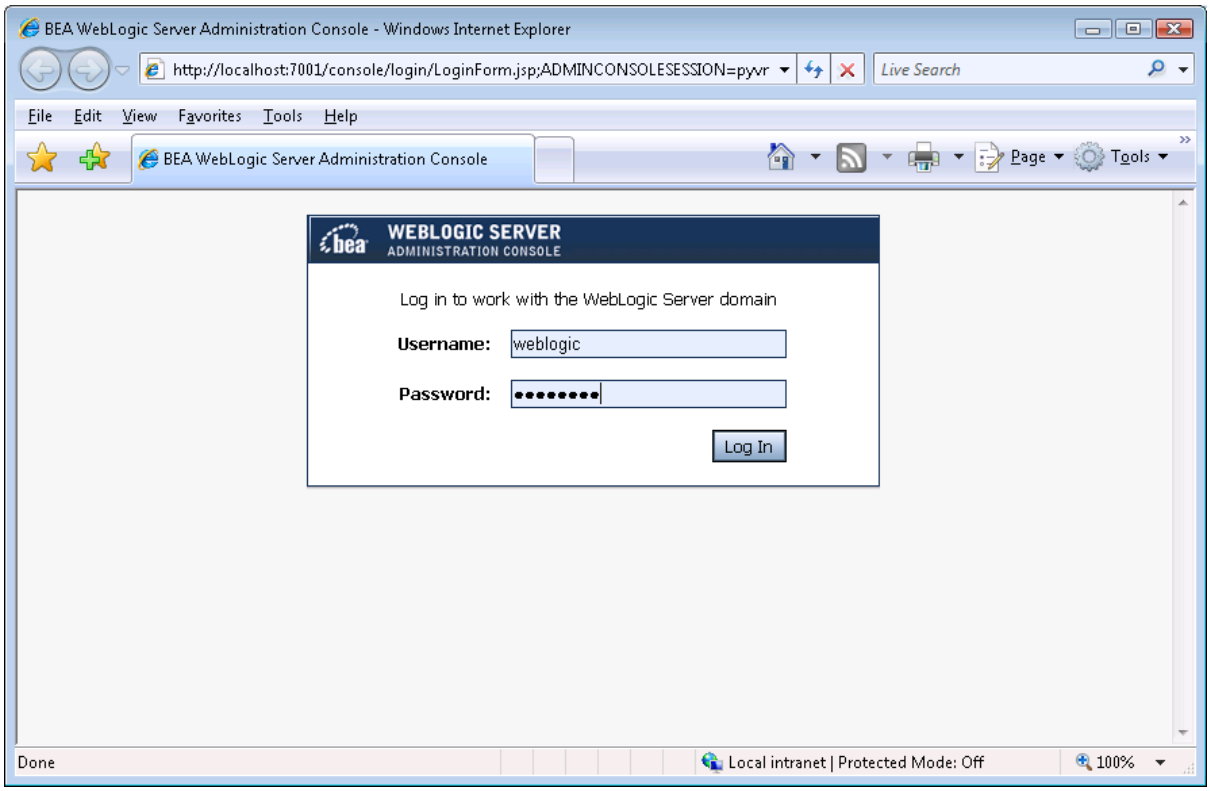
Step 1: Enter the following URL in a Web browser to access the WebLogic Server Administration Console.

- From the computer on which the WebLogic Server is running: http://localhost:7001/console
- From any other computer: http://*HOST*:7001/console

  HOST indicates the machine name or the IP address of the computer on which the WebLogic Server is running. Make sure no other programs are using the same port.

The logon page of "WebLogic Server Administration Console" appears.

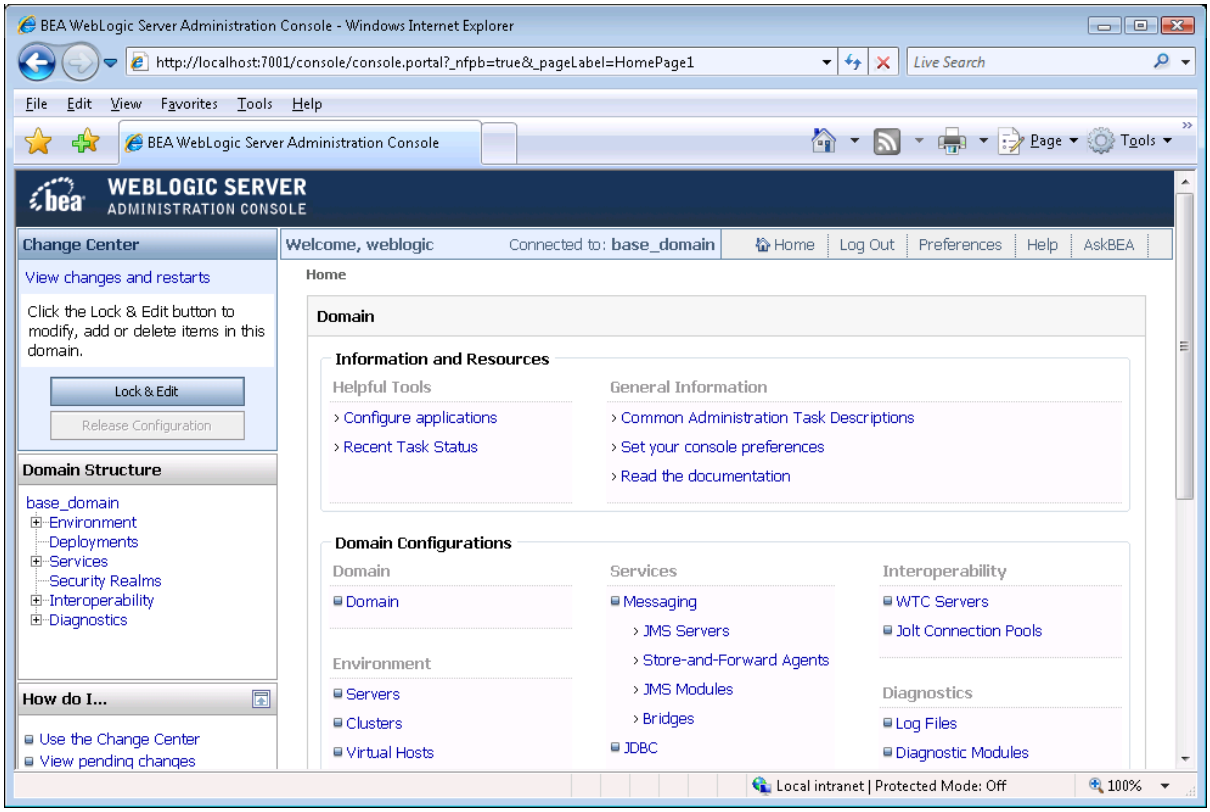
Figure 4.13: Logon page



Step 2: Input user name and password to log in to the Administration Console.

The "WebLogic Server Administration Console" main page appears.

Figure 4.14: Main page



4.6.3 Stopping Appeon Server

Stopping WebLogic Server will shut down Appeon Server.

Change to the $WL_Domain/bin directory, for example, $BEA_HOME/user_projects/domains/mydomain/bin, and run the *stopWebLogic.sh* file.

If you have any problems in using WebLogic Server, refer to the WebLogic Server documents at http://download.oracle.com/docs/cd/E12839_01/wls.htm.

5 Configuring Appeon Server Cluster

5.1 Overview

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

5.2 Configuration instructions

Following are high level steps for configuring an Appeon Server cluster. For detailed instructions, you may need to go through the documents and sections as specified below.

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

6 Post-Installation Configuration Tasks

6.1 Overview

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

Table 6.1: Post-installation tasks

Task	Description	Detailed Instructions Given in...
Configuration for the client machine	The IE security settings and Windows login user privileges may prevent downloading the Appeon Xcelerator plug-in.	Configuration for client machine
System language setting	Configuration required for the client, Appeon Server and database server. The operating system language settings can affect the characters that are displayed in the Appeon Web application.	System language settings
Database JDBC driver preparation	Configuration required for Appeon Server. You should copy the corresponding driver files for the database server in use to the WebLogic server installation folder in the machine hosting Appeon Server.	*JDBC driver preparation* in the *Appeon Server Configuration Guide*
Configuration for supporting DataWindow Data Cache feature	Configuration required for database server and Web server. The DataWindow Data Cache feature can cache DataWindow data that are frequently used on the Web server to improve runtime performance, but will not work until you fulfill the configuration requirements for database server(s) and Web server(s). This feature is not available for Web servers running Unix\Linux.	*DataWindow Data Cache* in the *Appeon Server Configuration Guide*
Configuration for supporting dynamic DataWindows	Configuration required for database server. Configuration at the database server is required for support of dynamic DataWindows.	*Dynamic DataWindow* in the *Appeon Features Help*

Task	Description	Detailed Instructions Given in...
Configuration for fixing an ASE issue	Appeon provides several SQL files for you modifying the chain modes of stored procedures in ASE database to avoid the following error: "Select error: Stored procedure... may be run only in unchained transaction mode"	*ASE Chained mode issue* in the *Appeon Troubleshooting Guide*

6.2 Configuration for client machine

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

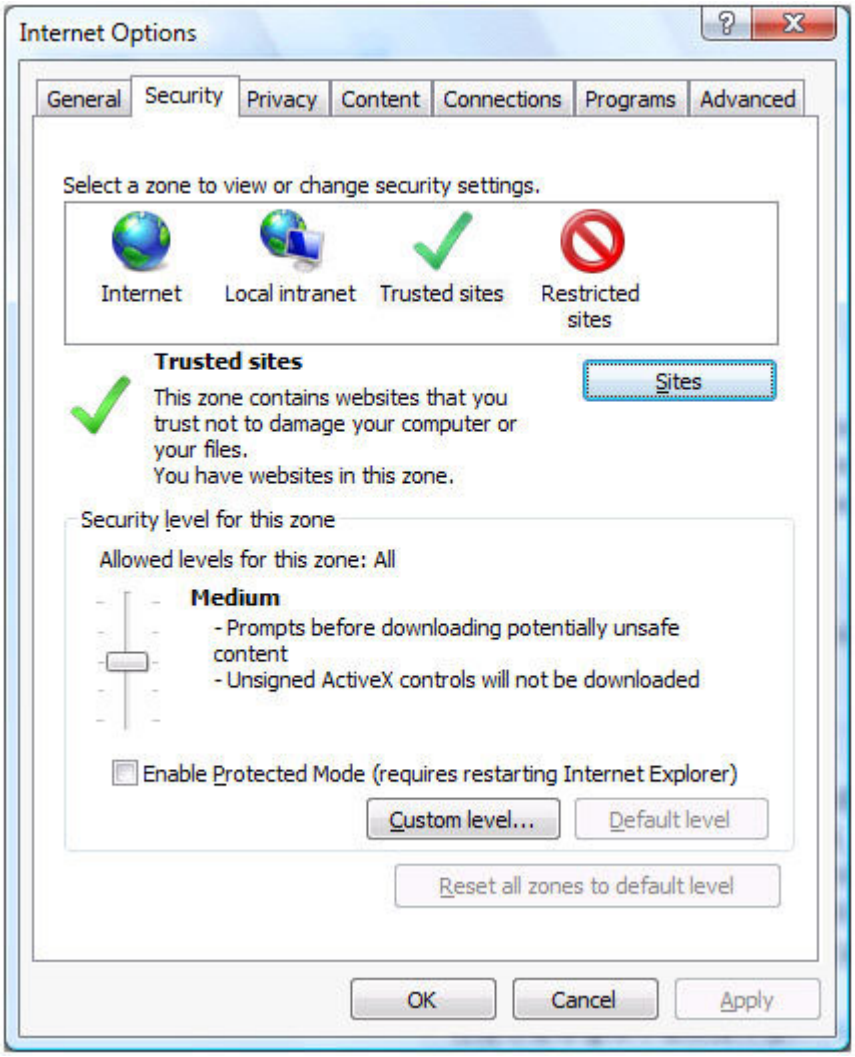
6.2.1 Configuring IE security settings

We recommend you add the URL of Appeon Web application to the Trusted Sites zone in Internet Explorer, because the default security settings of this zone are appropriate for downloading and installing the Appeon ActiveX controls. The following are detailed steps.

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

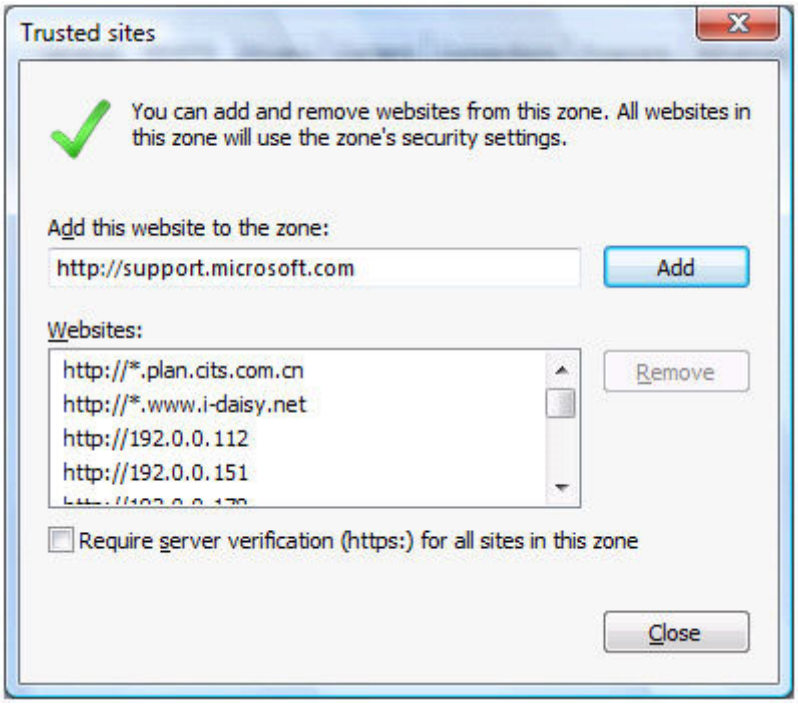
Step 2: In the Internet Options window, select the *Security* tab. Then select the *Trusted sites* Web content zone, and click the *Sites* button.

Figure 6.1: IE security settings



Step 3: In the Trusted sites window, input the URL of the Web application to the "Add this website to the zone" box. Click *Add* then click *Close* to return to the Internet Options window.

Figure 6.2: Trusted sites



Step 4: In the Internet Options window, make sure the *Trusted sites* Web content zone is selected, then click the *Custom Level* button, and double check the following settings are enabled (they are enabled by default, but we recommend you make sure):

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

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

6.2.2 Logging in as administrator or normal user

Different Internet Explorer versions require different privileges for installing the ActiveX control. If using IE 8.0 on Windows Vista/7/2008, you do not need administrative privileges to download and register the ActiveX control. You can log into the machine as a normal user. However, if using IE 8.0 on Windows XP/2003, or if using IE 7.0 or earlier, you must log in as a member of the Administrator group so you have the permissions to successfully download and register the ActiveX control. Please read the sections for the IE version you are using.

6.2.2.1 Using IE 8.0

If you are using IE 8.0, you can follow the prompts in IE information bar and install the ActiveX control successfully, no matter which user account (administrator or normal user) you use, and no matter which Windows operating system (except Windows XP and Windows 2003) you are on.

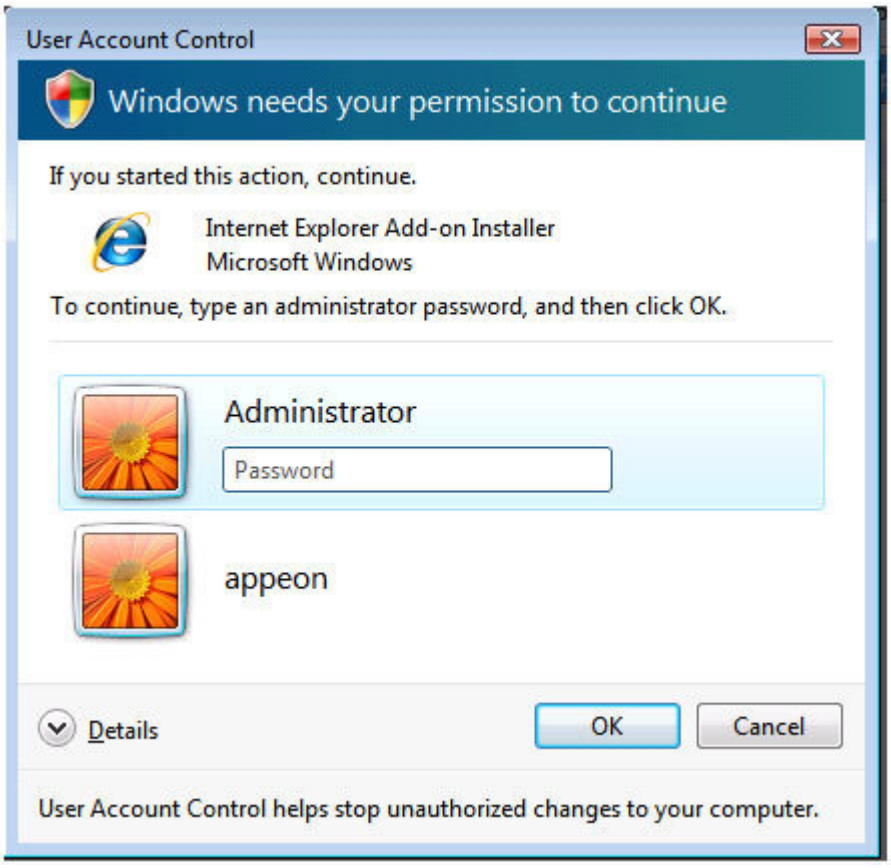
Exception: If on Windows XP/2003, first log in as an Administrator group member, then follow the prompts in IE information bar to complete the install of ActiveX control, then log off and log in again as a normal user.

6.2.2.2 Using IE 7.0 (or earlier)

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

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

Figure 6.3: User Account Control



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

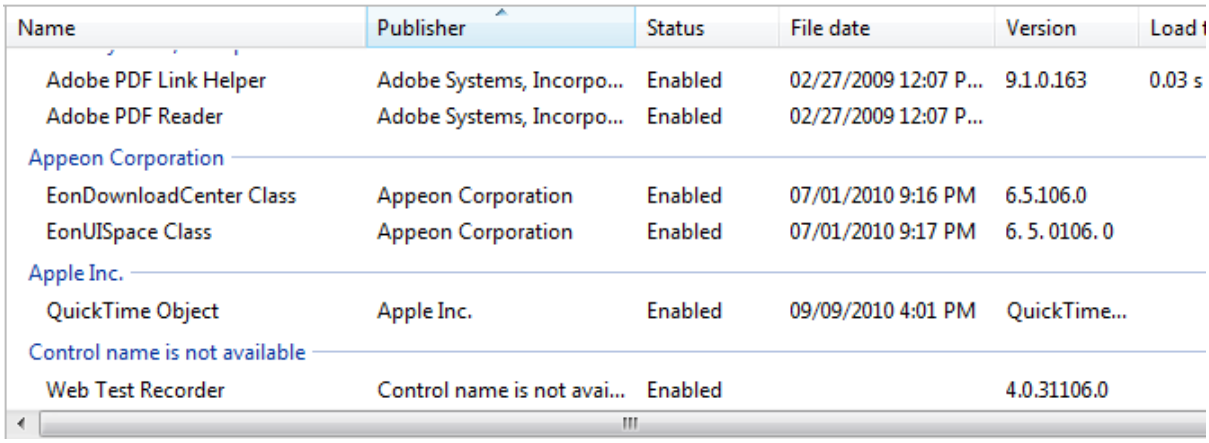
6.2.3 Verifying Appeon ActiveX control installation

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

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

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

Figure 6.4: Verify ActiveX control status



6.3 System language settings

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

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

To set the language settings in Windows operating system:

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

Step 2 -- Double-click *Regional Options*.

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

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

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

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

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

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

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

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

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

7 Uninstalling Appeon 6.5

7.1 Overview

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

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

7.2 Uninstalling Appeon Server

Step 1: Stop all running programs including Appeon Server and WebLogic Server.

Step 2: Run the apbuninstall.sh file in the "_uninst" folder under the Appeon Server installation directory, for example, /home/bea/user_projects/appeon/_uninst.

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

Step 4: After the uninstall process is complete, remove any files or folders left in the Appeon installation folder.

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

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

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

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

8 Technical Support

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

Get support for Sybase Distribution

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

Get support for Appeon Distribution

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

Table 8.1: Files required for technical support

File Type	File Name
WebLogic Server configuration file	$WL_Domain/setEnv.sh $WL_Domain/startWebLogic.sh $WL_Domain/config.xml $WL_Domain indicates the domain path of the WebLogic server, for example, bea/user_projects/domains/mydomain/.
WebLogic Server log file	$WL_Domain/mydomain.log and all of the $WL_Domain/mydomain.log* file * indicates the sequence number of the log files.
Appeon Server configuration file	All files in the $WL_Domain/appeon/repository/*instancename*/config folder.
Appeon Server log file	All files in the $WL_Domain/appeon/repository/*instancename*/log folder.
Appeon Server Repository DB	$WL_Domain/appeon/db/appeondb.script
Appeon license file	$WL_Domain/appeon/license.appeon

File Type	File Name
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) The Web server path of WebLogic Server is usually $WL_Domain/applications. 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

Appeon components, 6
  Appeon Developer, 6
  Appeon Help, 6
  Appeon Server, 6
  Appeon Server Web Component, 6
Appeon Developer, 6
Appeon editions, 5
Appeon Help, 6
Appeon Server, 6
Appeon Server cluster, 11
Appeon Server installation, 12
Appeon Server requirements, 7
  hardware requirements, 7
  software requirements, 7
  Web Server requirements, 7
Appeon Server Web Component, 6
Appeon Server Web Component installation, 22
  installation instruction, 23
  prerequisites, 22

C

Client requirements, 7
  hardware requirements, 7
  software requirements, 7
configuration for client machine, 31
configure Appeon Server cluster, 29
configure IE security settings, 31

D

database server requirements, 8

H

hardware requirements, 7, 7

I

installation instructions, 23
installation scenarios, 9
  Appeon Server cluster, 11
  remote Appeon Server using a third-party Web server, 10
  remote Appeon Server using WebLogic HTTP server, 10

L

log in as administrator or normal user, 33
log in to WebLogic Server console, 26

P

prerequisites, 22

R

remote Appeon Server using a third-party Web server, 10
remote Appeon Server using WebLogic HTTP server, 10

S

software requirements, 7, 7
start Appeon Server, 26
stop Appeon Server, 28
system architecture, 4
system language settings, 35

T

technical support, 38

U

uninstall Appeon Server, 37
uninstall Appeon Server Web Component, 37
upgrade Appeon Server, 23
upgrade Appeon Server Web Component, 25

W

Web Server requirements, 7