

JD Edwards EnterpriseOne

HTML Server on WebSphere Reference Guide for UNIX

9.2

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Preface

Welcome to the JD Edwards EnterpriseOne documentation.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Information

For additional information about JD Edwards EnterpriseOne applications, features, content, and training, visit the JD Edwards EnterpriseOne pages on the JD Edwards Resource Library located at:

<http://learnjde.com>

Conventions

The following text conventions are used in this document:

Convention	Meaning
Bold	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
<i>Italics</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
Monospace	Monospace type indicates commands within a paragraph, URLs, code examples, text that appears on a screen, or text that you enter.
> Oracle by Example	Indicates a link to an Oracle by Example (OBE). OBEs provide hands-on, step-by-step instructions, including screen captures that guide you through a process using your own environment. Access to OBEs requires a valid Oracle account.

1 Accessing Certifications

Accessing Certifications

Customers must conform to the supported platforms for the release as detailed in the Certifications for JD Edwards EnterpriseOne. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the following link for cross-reference material in the Program Documentation for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

Access the Certifications from My Oracle Support by searching for this product from the Certifications tab:

- **JD Edwards EnterpriseOne HTML Server**

2 Understanding Server Manager and This Guide

Understanding Server Manager and This Guide

Beginning with *JD Edwards EnterpriseOne Tools Release 8.97*, a new tool called *Server Manager* is provided. This tool is a complete replacement for the *JD Edwards EnterpriseOne* legacy management and installation tools including internal components known as Server Administration Workbench (SAW), Server Management Console (SMC), and the InstallShield based installers previously used to install or upgrade *JD Edwards EnterpriseOne* servers. As a result, you should refer to the [JD Edwards EnterpriseOne Tools Server Manager Guide](#) for details on installing and configuring all *JD Edwards EnterpriseOne* server products, with the exception of the *JD Edwards EnterpriseOne* Deployment Server, whose installation is described in this guide. This guide only contains reference information for functionality outside the *Server Manager* tool.

Note: Management of *JD Edwards EnterpriseOne Tools Release 8.96* or earlier must be done using the existing tools. *Server Manager* cannot be used to manage any *JD Edwards EnterpriseOne Tools Release* prior to 8.97.

The *Server Manager* tool provides:

- **Web Based System Management**

You can securely access and manage your *JD Edwards EnterpriseOne* installation from anywhere using a standard web browser.

- **Remote Deployment and Upgrades**

You can install, uninstall, and update your *JD Edwards EnterpriseOne* servers regardless of their physical location or platform.

- **Remote Operational Control**

You can start and stop any of your *JD Edwards EnterpriseOne* servers, Oracle J2EE application servers, or supported third party J2EE application servers directly from the *Management Console*.

- **Secure Administrative Tasks**

Server Manager permits you to specify which existing *JD Edwards EnterpriseOne* users have access to the *Management Console* control which *JD Edwards EnterpriseOne* servers the user may view, and specify which administrative tasks the user may perform on those servers.

- **Configuration Management**

Server Manager provides a web-based interface for managing the configuration of all managed servers. The application presents each configuration item along with integrated help describing the configuration setting.

Note: Beginning with the availability of *Server Manager*, it is strongly advised that all changes to configuration files (such as *jde.ini*, *jas.ini*, *jdbj.ini*, *jdelog.properties*, etc.) for any *JD Edwards EnterpriseOne* server managed by *Server Manager* be accomplished using only the *Management Console* interface of *Server Manager*. In addition to providing usability improvements, using *Server Manager* reduces the risk of introducing configuration errors by providing dropdowns that contain only valid values where applicable. Further, the tool provides a useful audit history for any modifications made to configurations using *Server Manager*.

- **Configuration Comparison**

Use *Server Manager* to compare the configuration of two or more servers to identify configuration differences. You can compare configurations through the *Management Console* application regardless of the platform or location of the actual *JD Edwards EnterpriseOne* server. You can also compare individual servers with the default configuration of the corresponding server groups to which the servers belong.

- **Audit History**

Server Manager maintains a history of changes made to the managed servers. This includes a history of each configuration change, each server start and stop, and each tools release update, including the user that performed the change or operation. The *Management Console* application provides mechanisms to query and view the audit history that is maintained.

- **Integrated EnterpriseOne Software Management**

Use *Server Manager* to centrally maintain all your *JD Edwards EnterpriseOne* server tools releases, including the ability to copy the software to the remote server machines.

- **Logical Server Grouping**

Server Manager allows you to group servers with a similar purpose. These groups can include any of the server types such as Enterprise Server, *HTML Server*, and so on. A default, or template, configuration is maintained for each server group.

- **Application Release Independence**

Server Manager is delivered with *JD Edwards EnterpriseOne* Tools Release 8.97 and is compatible with any supported *JD Edwards EnterpriseOne* application release beginning with Application Release 8.9 through the currently supported release. No electronic software updates (ESUs) are required to support *Server Manager*.

- **Self-Contained Installation**

The installation of *Server Manager* delivers all components that are required by the *Management Console* application. There are no third party requirements regardless of your existing or intended middleware topology (for example, WebLogic Server, Oracle Application Server, WebSphere Application Server, or no application server).

- **Tools Release Independence**

Newer versions of the *Server Manager* application will continue to support the management of earlier tools releases back to *JD Edwards EnterpriseOne* Tools Release 8.97.

3 Installing, Updating, and Configuring WebSphere 8.5.x/9.0 (Release 9.2.1)

Installing, Updating, and Configuring WebSphere 8.5.x/9.0 (Release 9.2.1)

CAUTION: IBM WebSphere Application Server 8.5.5 supports SDK 1.6 as the basic configuration but with SDK 1.7 as an optional configuration. For JD Edwards EnterpriseOne, the implementation requires SDK 1.7 as the default run-time configuration for WebSphere Application Server 8.5.5. Therefore, after WebSphere Application Server is installed with the basic configuration, you **MUST** change the default SDK to 1.7.

Before You Begin

Before you install WebSphere, you must first set up a local user account that is in the Administrative group and has these advanced user rights:

- Act as part of operating system
- Create a token object
- Log on as a service
- Replace a process level token

To set up a local user account with the above user rights, navigate to:

Control Panel > Administrative Tools > Local Security Policy > Local Policies > Users Rights Assignment

On User Rights Assignment, double-click one of the user rights, click Add, select a local user account from the list, and click OK. Repeat this process for the remaining user rights.

You should also download all the required software from the JD Edwards Update Center.

Before You Begin

Before you begin the installation of WebSphere 8.5.x/9.0 on UNIX systems, you should perform the steps in this section.

- In the WebSphere Application Server Version 8.5.x/9.0 Information Center, review the section entitled: "Preparing the operating system for product installation". Update your system according to the requirements.
- For WebSphere Application Server Version 8.5.x see:

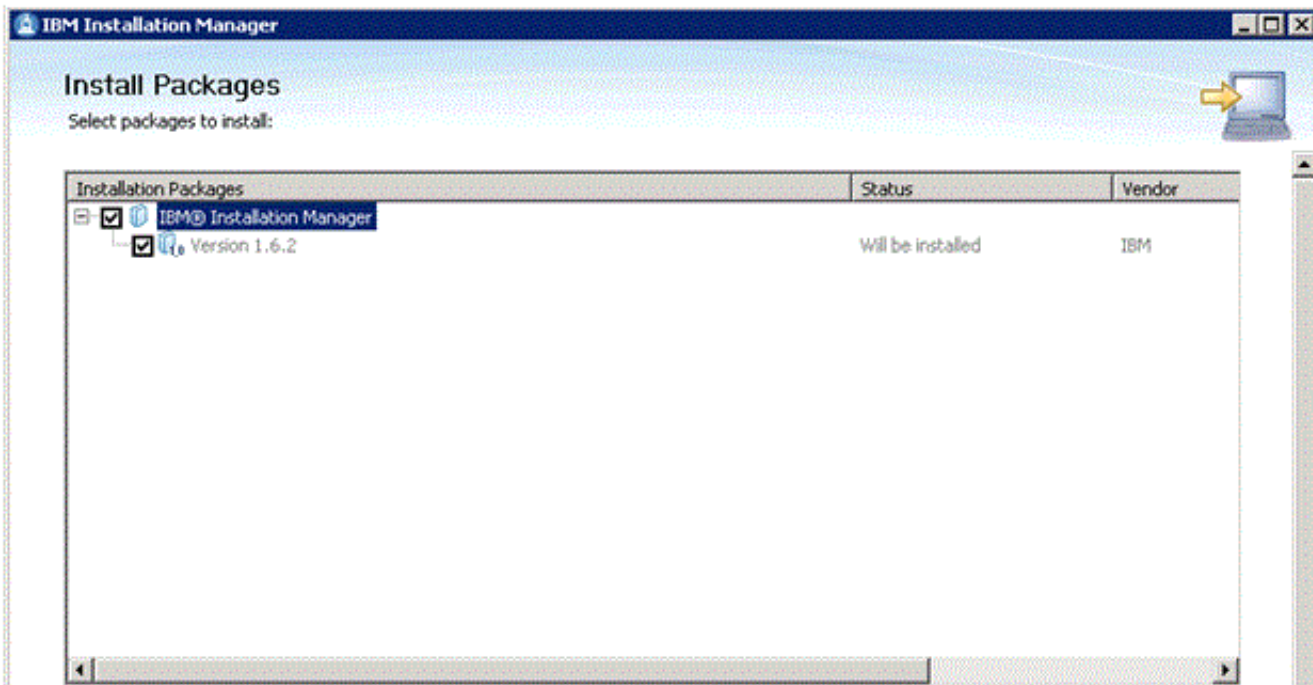
http://pic.dhe.ibm.com/infocenter/wasinfo/v8r5/index.jsp?topic=%2Fcom.ibm.websphere.installation.nd.doc%2Fae%2Ftins_prepare.html

- For WebSphere Application Server Version 9.0 see:
http://www.ibm.com/support/knowledgecenter/SSAW57_9.0.0/com.ibm.websphere.installation.nd.doc/ae/tins_prepare.html
- Download all the required software from IBM web site:
 - WebSphere Application Server Network Deployment
 - WebSphere Application Server Supplement
 - WebSphere Application Server SDK 1.7 for 8.5.x
 - WebSphere Application Server SDK 1.8 for 9.0

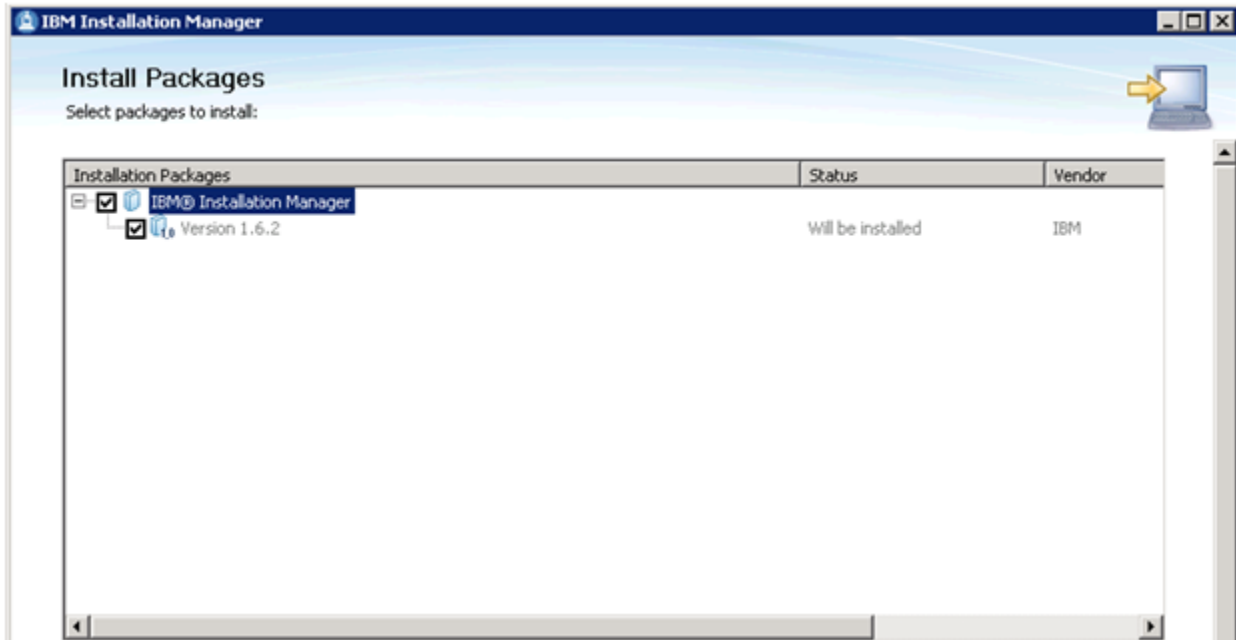
Installing the IBM Installation Manager

For all supported platforms, you must install the IBM Installation Manager before an IBM WebSphere Application Server can be installed. Follow the steps below to install the Installation Manager.

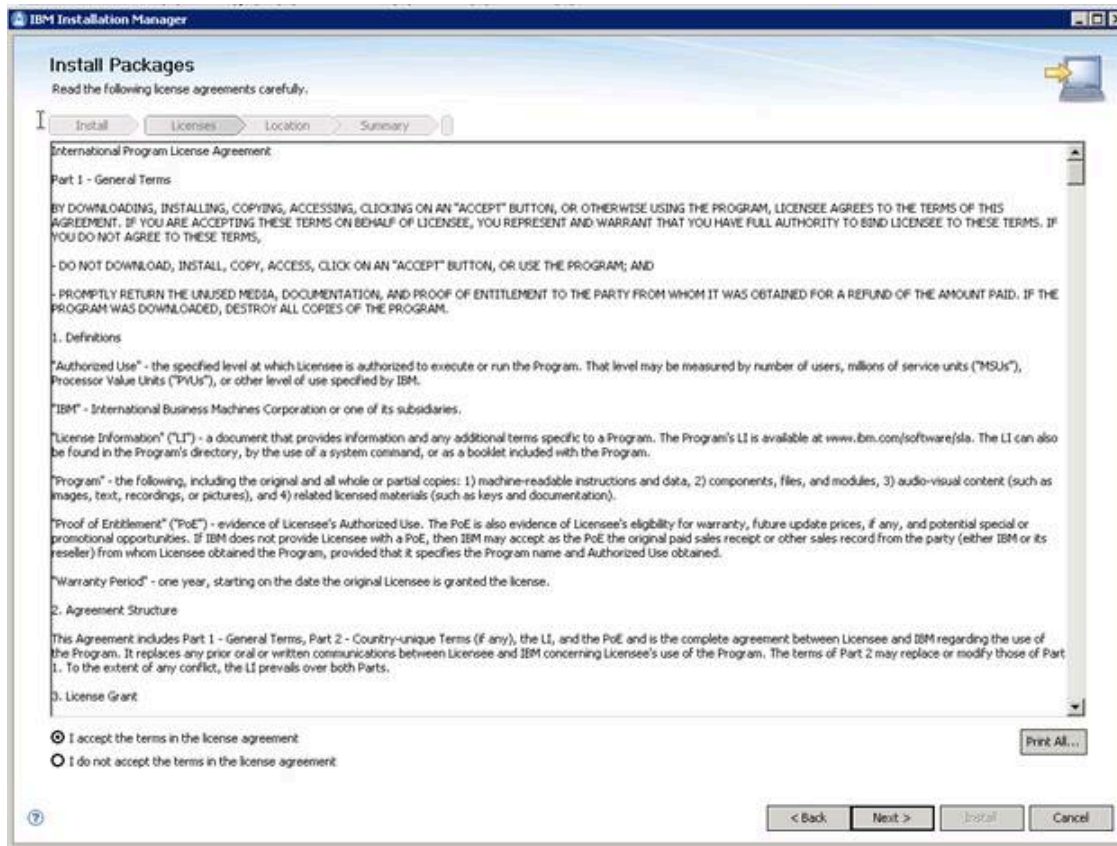
1. From the IBM web site, download the IBM Installation Manager.
2. Unzip the IBM Installation Manager software, and locate the install executable, which is named `install.exe`.
3. On Microsoft Windows platforms, you must right-click and select the **Run as administrator** option.



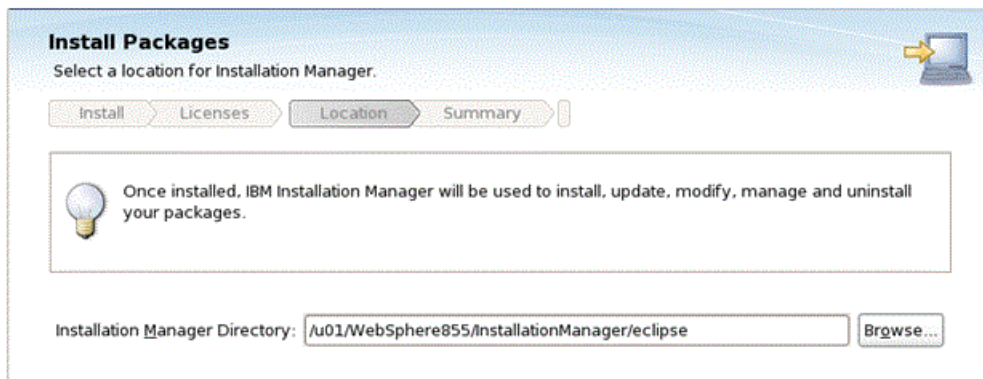
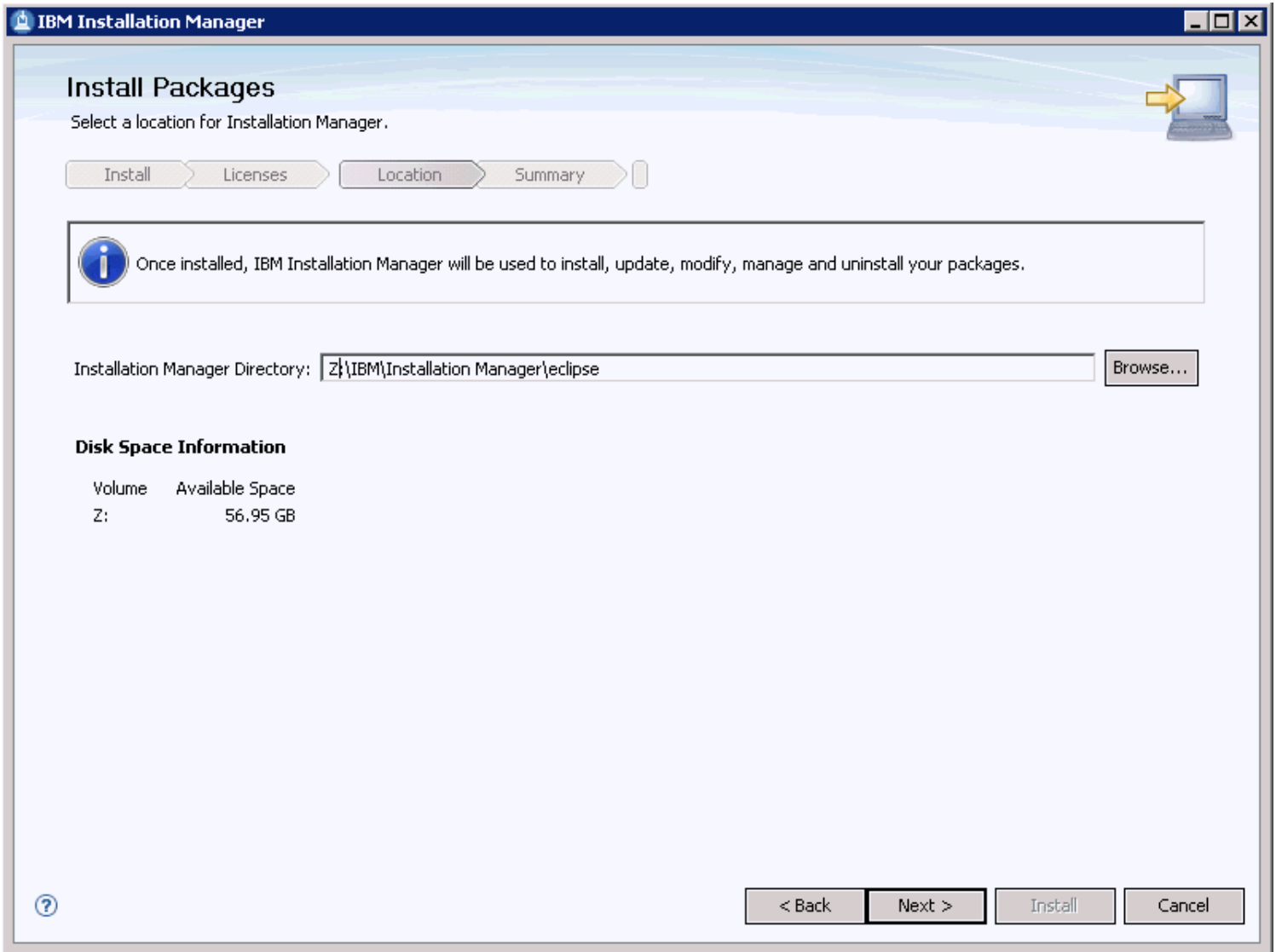
- Unzip the IBM Installation Manager software and locate the install executable, which is named `install.exe`.



- On Install Packages, package selection, select the check box for the latest version of the IBM Installation Manager.
- Click the **Next** button.



7. On Install Packages, review the International Program License Agreement and click the radio button to accept the terms if you want to continue with the installation.
8. Click the **Next** button.

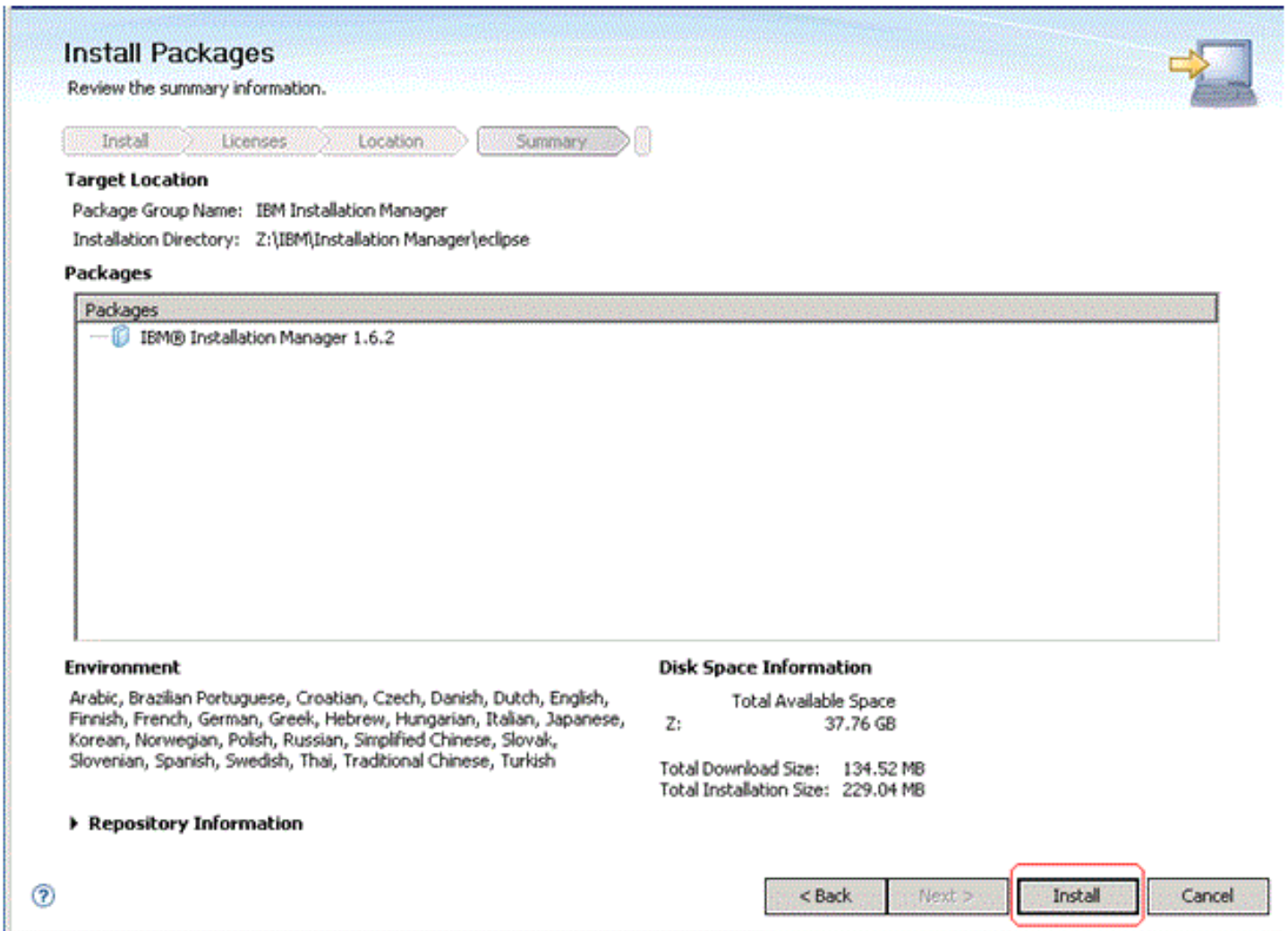


9. On Install Packages, Select a location for Installation Manager, enter an installation directory.

For example:

```
Z:\IBM\Installation Manager\eclipse
```

```
/u01/WebSphere855 /InstallationManager/eclipse
```



Install Packages
Review the summary information.

Install Licenses Location **Summary**

Target Location
Package Group Name: IBM Installation Manager
Installation Directory: /u01/WebSphere855/InstallationManager/eclipse

Packages

Packages
IBM® Installation Manager 1.6.2

Environment
Arabic, Brazilian Portuguese, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Russian, Simplified Chinese, Slovak, Slovenian, Spanish, Swedish, Thai, Traditional Chinese, Turkish

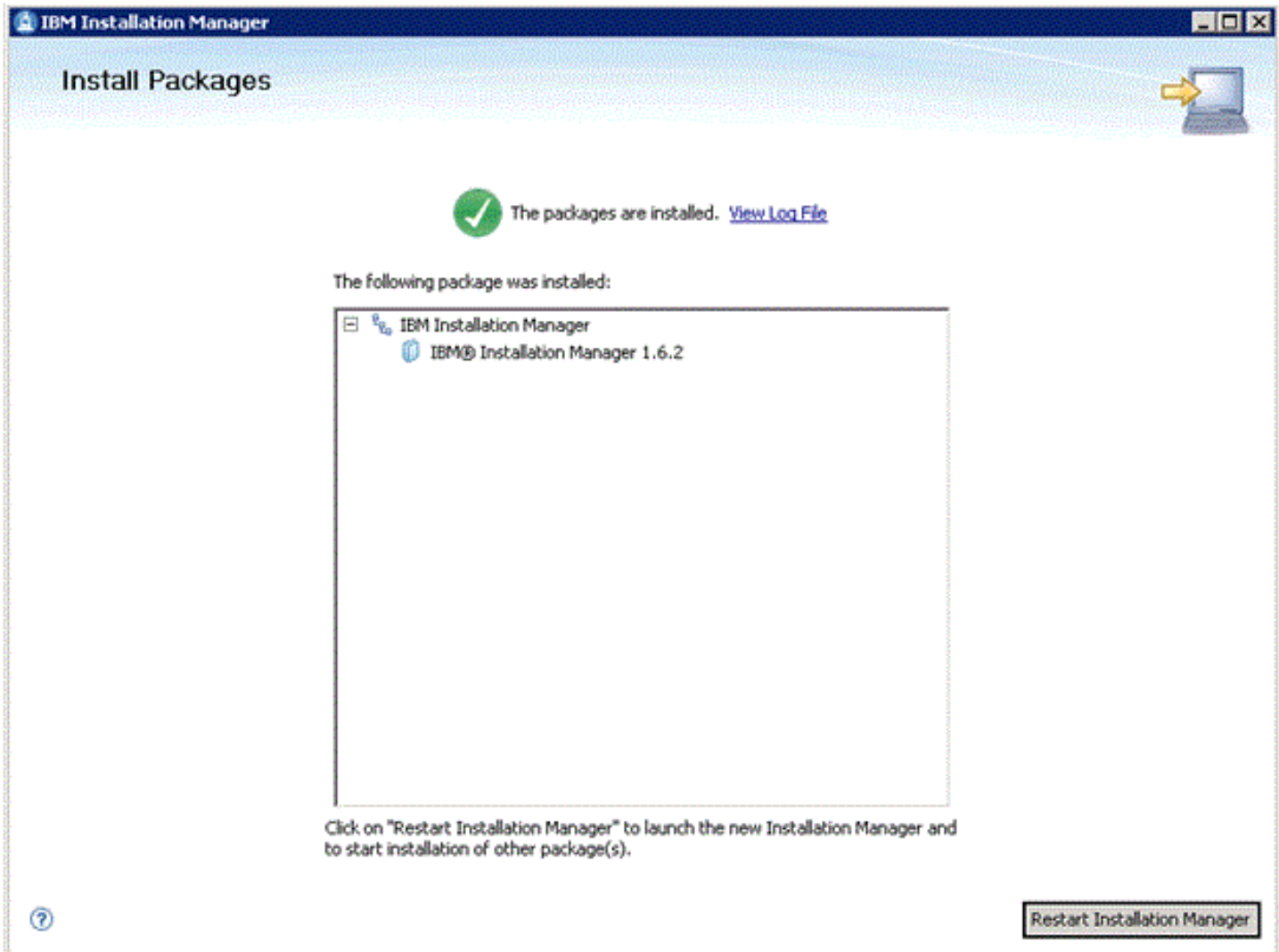
Disk Space Information

	Total Available Space
/u01	6.39 GB
Total Download Size:	135.03 MB
Total Installation Size:	248.07 MB

Repository Information

< Back Next > **Install** Cancel

10. On Install Packages, summary information, review the summary information and click the **Install** button to begin the installation.



11. On Install Packages, if you are ready to install using the IBM Installation Manager, click the **Restart Installation Manager** button.
12. After the Installation Manager is restarted, continue to the next section in this chapter entitled: *Installing an IBM WebSphere Application Server 8.5.x/9.0*.

Installing an IBM WebSphere Application Server 8.5.x/9.0

IBM WebSphere Application Server (WAS) 8.5.x/9.0 is installed through the IBM Installation Manager. Fix Pack 8.5.x/9.0 can be installed as a new installation or an update.

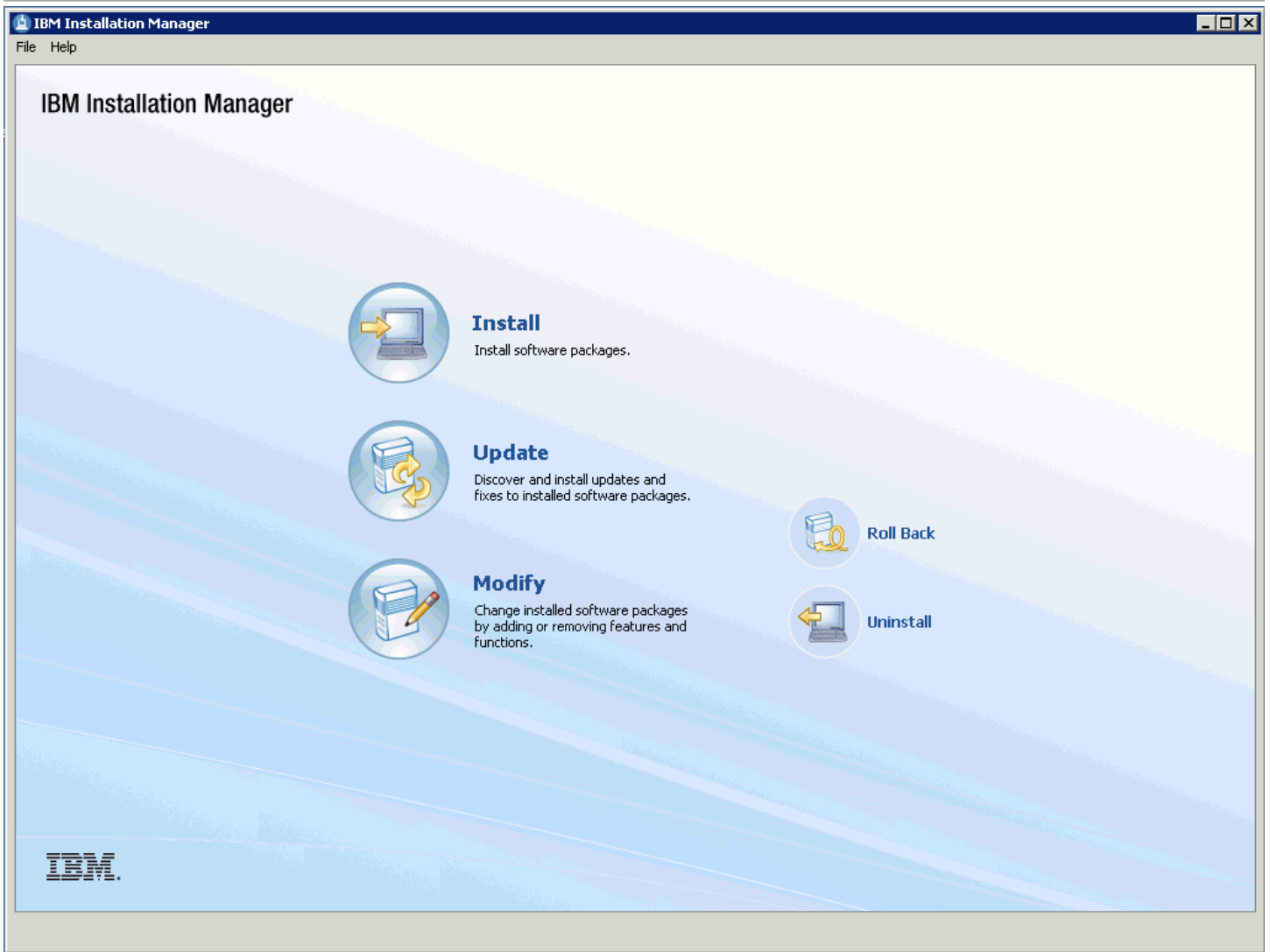
To install an IBM WebSphere Application Server 8.5.x/9.0:

1. Start the IBM Installation Manager, which you must have previously installed as described in the preceding chapter of this guide entitled: *Installing the IBM Installation Manager*.

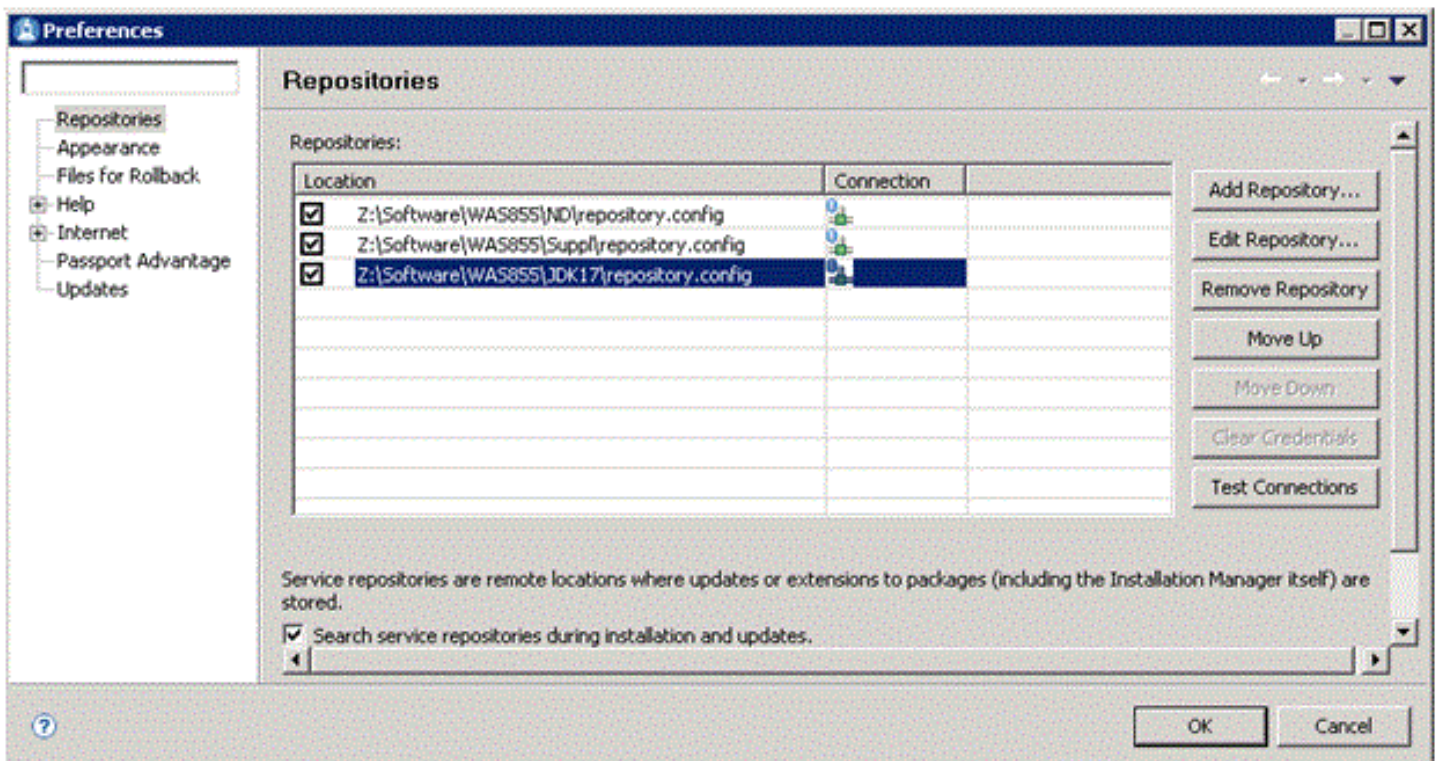
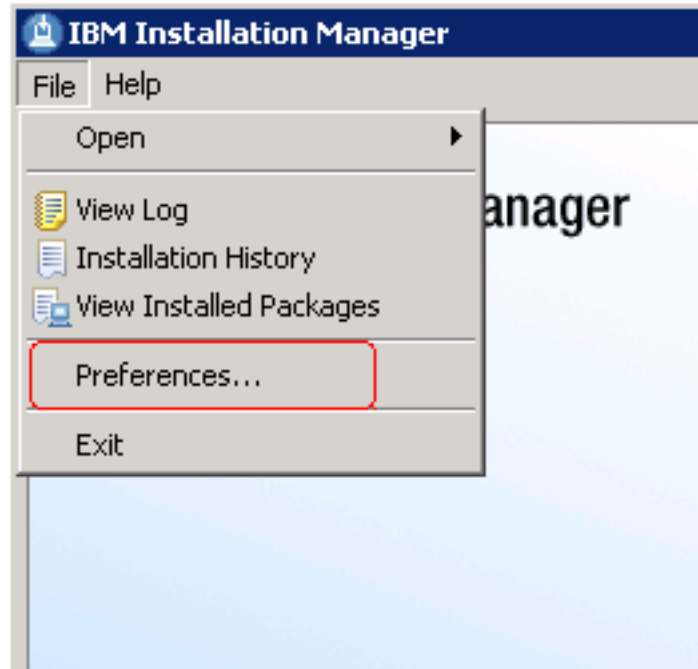
To start the Installation Manager manually, execute IBMIM from `<IM_HOME>/eclipse` folder. For example:

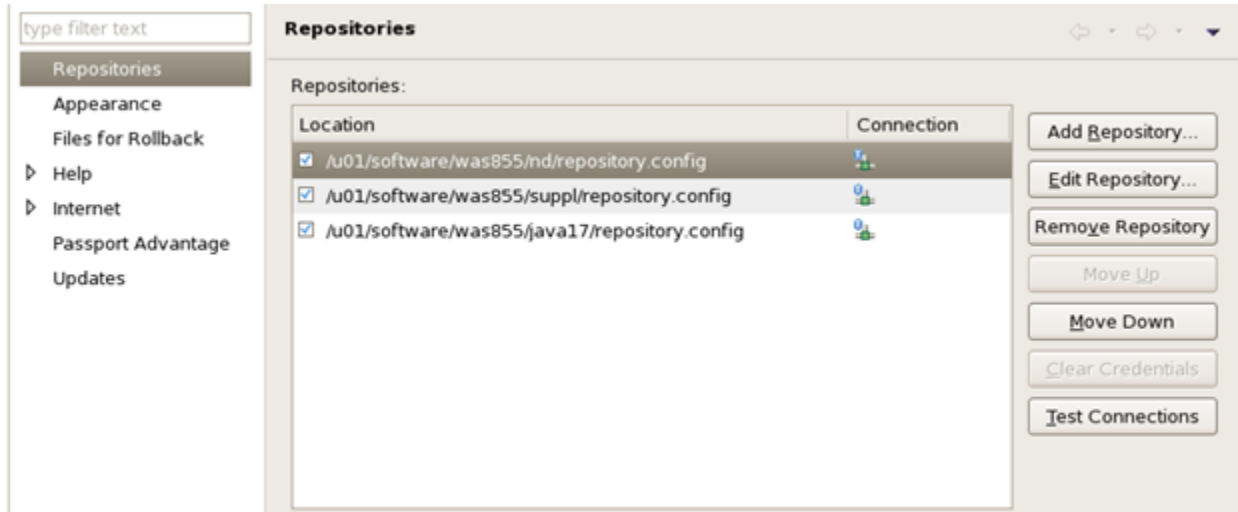
```
/u01/WebSphere855/InstallationManager/eclipse
```

The IBM Installation Manager screen displays.



2. You must configure the software repository in the Installation Manager before you can start the product installation. On the initial screen of the IBM Installation Manager, navigate File > Preferences.





3. On Preferences, click on the **Add Repository...** button and enter the location of the `repository.config` for each of the product. For example:

```
Z:\Software\WAS855\ND\repository.config
```

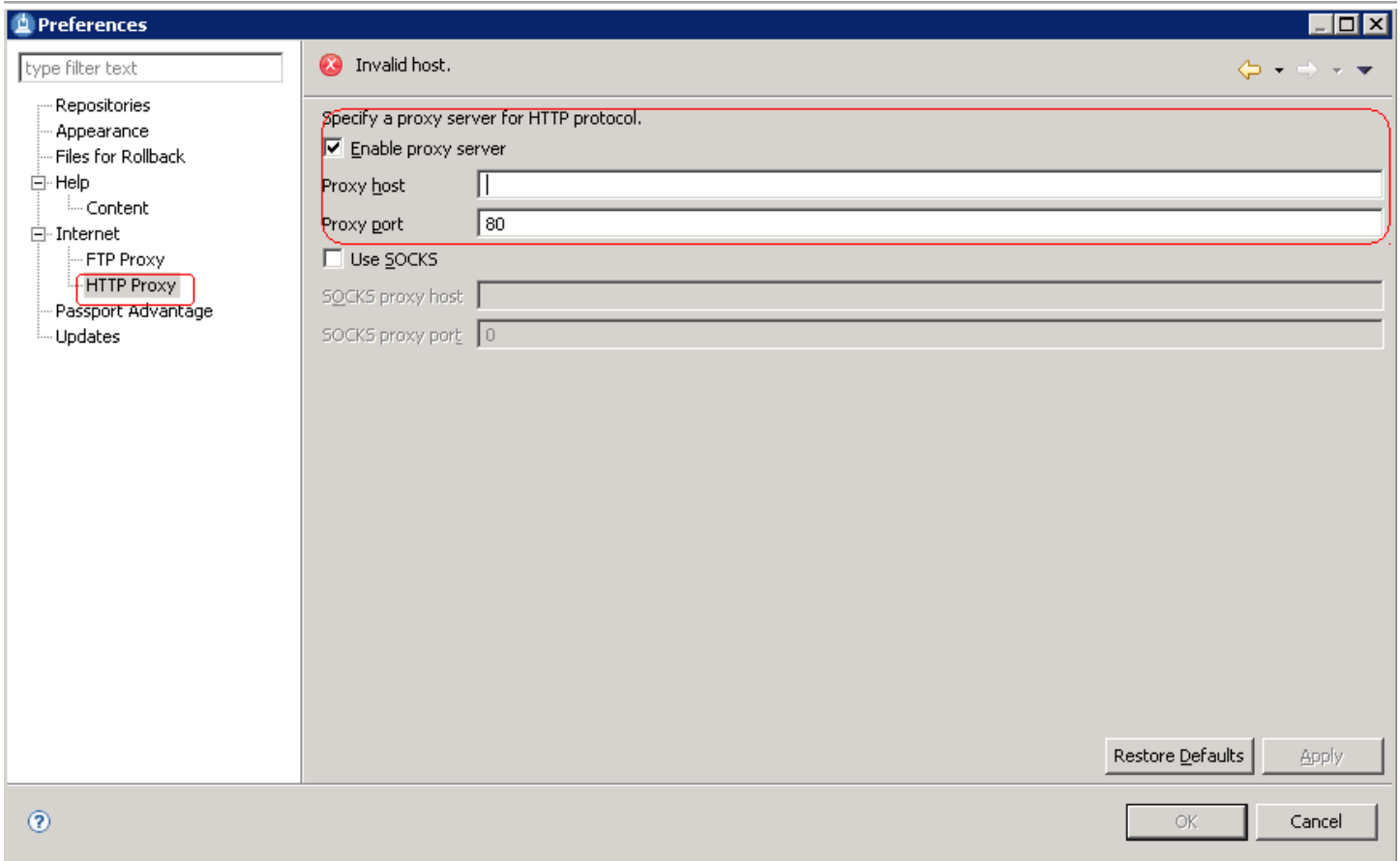
```
Z:\Software\WAS855\Suppl\repository.config
```

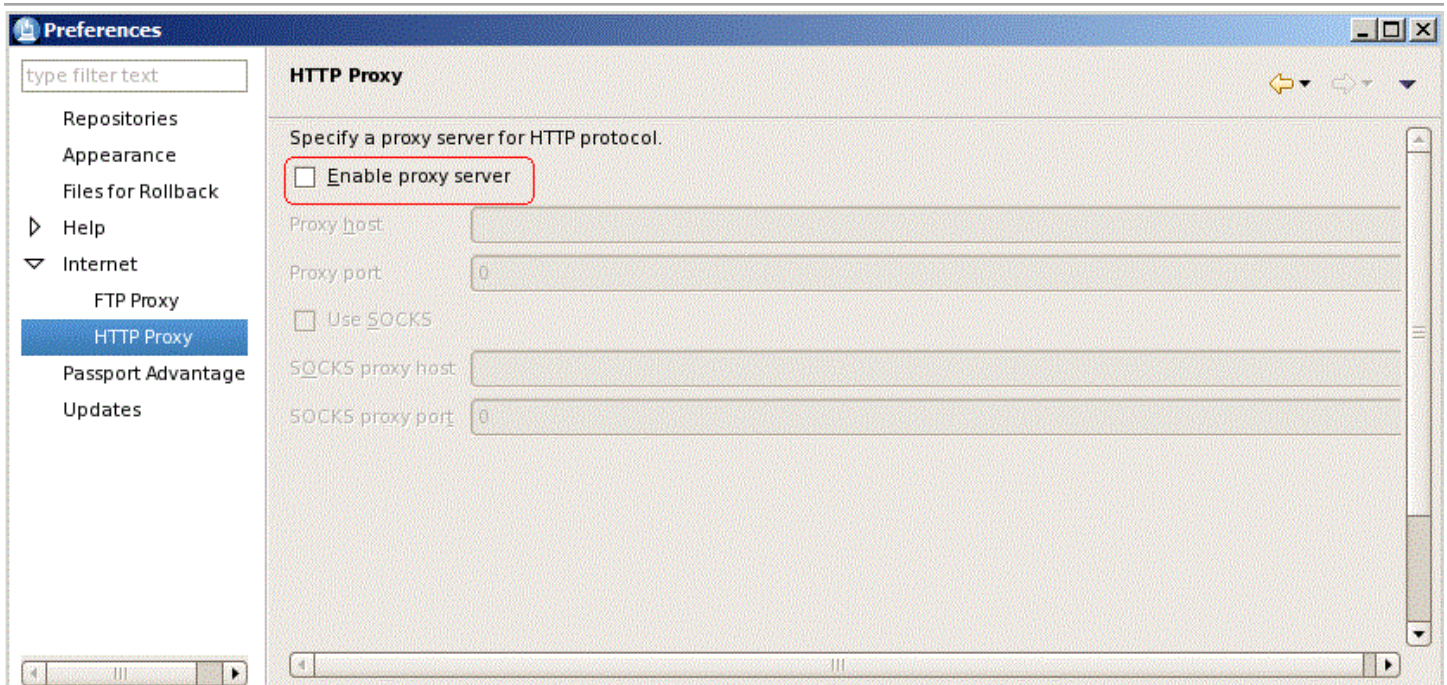
```
Z:\Software\WAS855\JDK17\repository.config
```

```
/u01/software/was855/nd/repository.config
```

```
/u01/software/was855/suppl/repository.config
```

```
/u01/software/was855/java17/repository.config
```

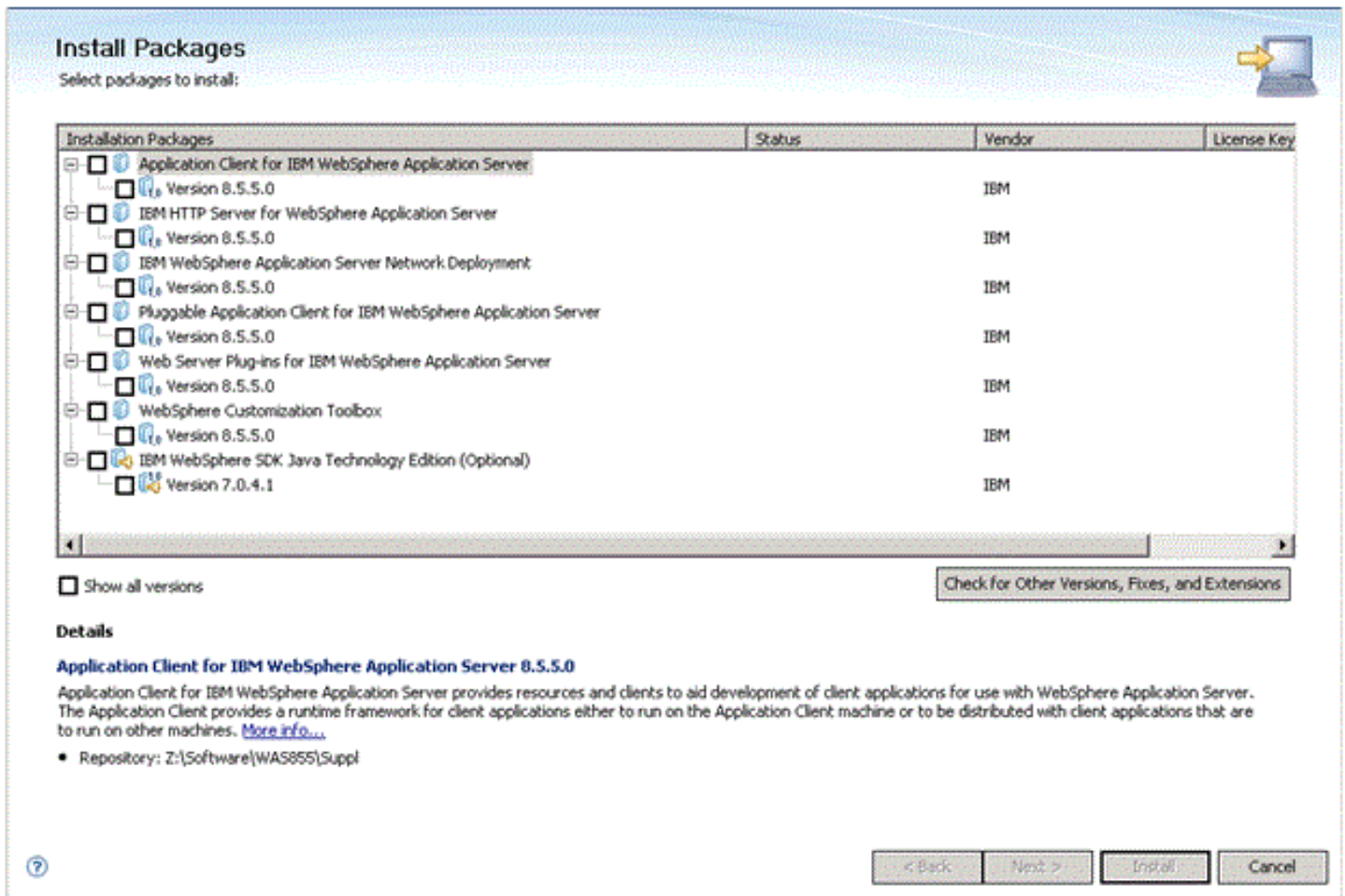




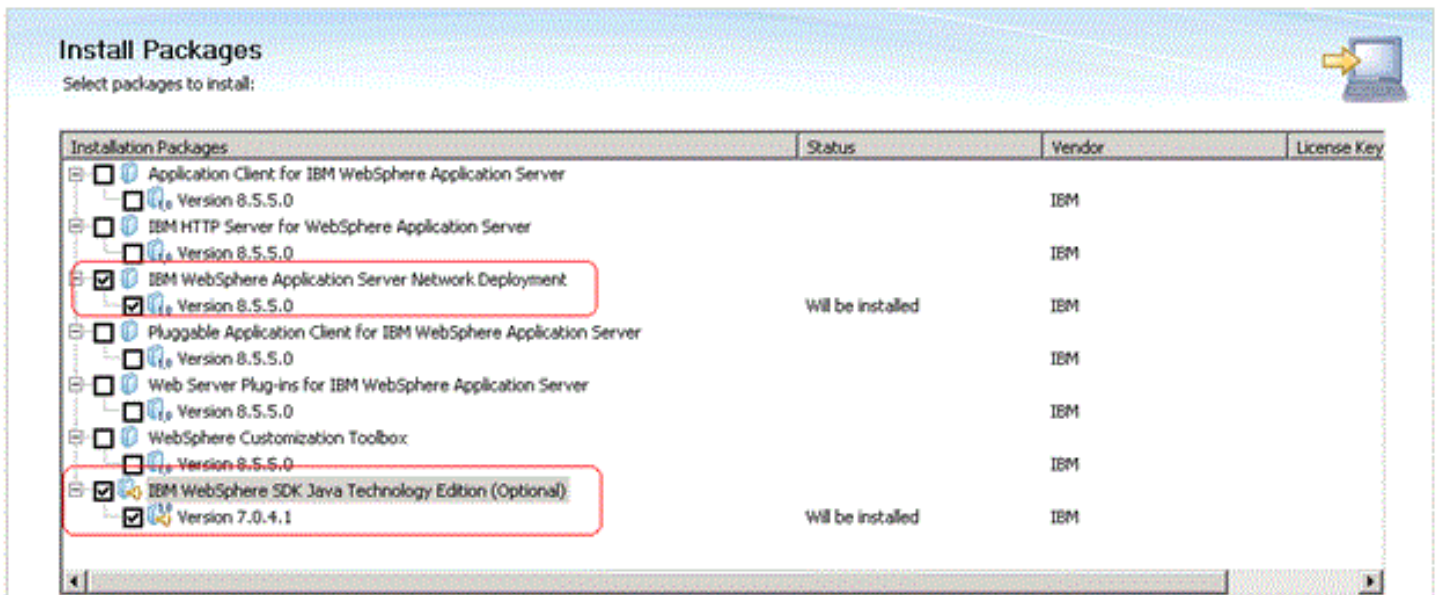
4. Optionally, if needed for your installation, you should enable a proxy server and enter proxy information.

5. After all repositories are added, click the **Install** option from the Installation Manager.

IBM Installation Manager displays a list of available products, as shown in the following example:



6. The IBM Install Manager displays a list of available products (packages) to install.



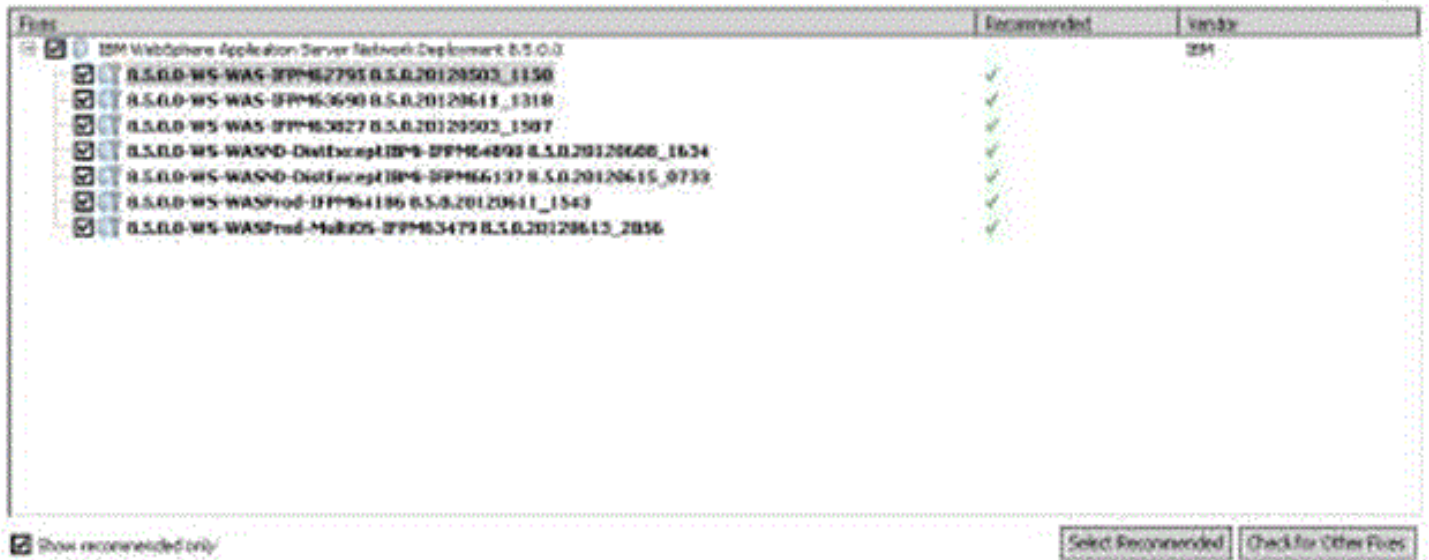
7. On Install Packages, select packages, select the products you want to install such as:

- WebSphere Network Deployment
- SDK 1.7 / SDK 1.8

8. Click the **Next** button.

Note: Once the installation begins, the installer may prompt to inform you that updates are available.

If updates are available, the installer will display a list as shown in this example:




Note: If the IBM Install Manager displays a list of updates, it is recommended that you click the **Select Recommended** button to accept and install the updates.

9. On Install Packages, review the International Program License Agreement and click the radio button to accept the terms if you want to continue with the installation.

Install Packages

Select a location for the shared resources directory.



Install Licenses **Location** Features Summary

When you install packages, files are stored in two locations:

- 1) The shared resources directory - resources that can be shared by multiple packages.
- 2) The installation directory - any resources that are unique to the package that you are installing.

Important: You can only select the shared resources directory the first time you install a package with the IBM Installation Manager. For best results select the drive with the most available space because it must have adequate space for the shared resources of future packages.

Shared Resources Directory:

Disk Space Information

Volume	Available Space
Z:	54.70 GB

Install Packages
Select a location for the shared resources directory.

Install Licenses **Location** Features Summary

When you install packages, files are stored in two locations:

- 1) The shared resources directory - resources that can be shared by multiple packages.
- 2) The installation directory - any resources that are unique to the package that you are installing.

Important: You can only select the shared resources directory the first time you install a package with the IBM Installation Manager. For best results select the drive with the most available space because it must have adequate space for the shared resources of future packages.

Shared Resources Directory:

Disk Space Information

Volume	Available Space
/u01	297.00 GB

11. On Install Packages, select location for the shared resources directory, enter an appropriate location for **IMShared**. These files will be used by all IBM products installed through the Installation Manager (such as HTTP Server and Customization Toolbox).

For example:


`z : \IBM\IMShared`

`/u01/WebSphere855/IMShared`

12. Click the **Next** button.

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.



Install Licenses Location Features Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory	Architecture
IBM WebSphere Application Server V8.5	Z:\IBM\WebSphere\AppServer	

Package Group Name: IBM WebSphere Application Server V8.5
Installation Directory: Z:\IBM\WebSphere\AppServer

Details
Shared Resources Directory: Z:\IBM\IMShared

Disk Space Information

Volume	Available Space
Z:	54.70 GB

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install Licenses **Location** Features Summary

Use the existing package group

Create a new package group

Package Group Name	Installation Directory	Architecture
IBM WebSphere Application Server V8.5	/u01/WebSphere855/AppServer	

Package Group Name: IBM WebSphere Application Server V8.5

Installation Directory:

13. On Install Packages, package group, click the radio button entitled: **Create a new package group**.

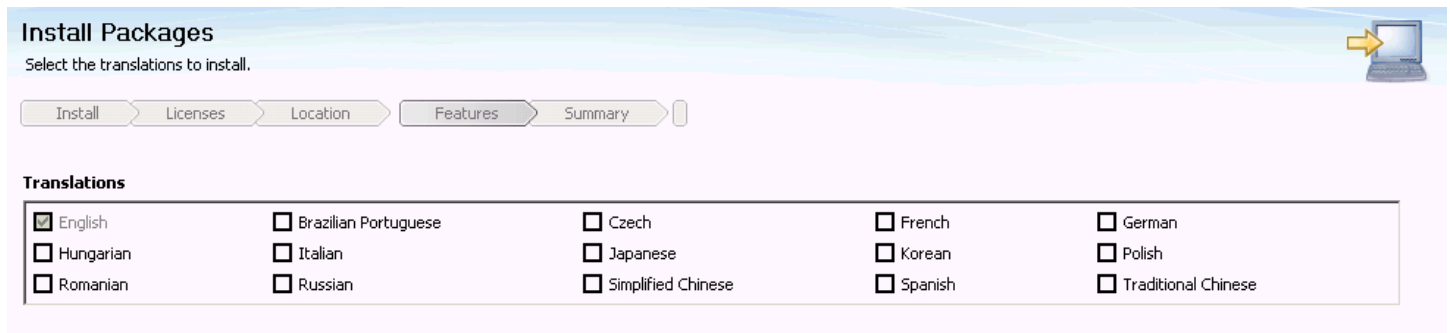
In the Installation Directory field, enter an appropriate location to install the IBM WebSphere Application Server 8.5.x/9.0 software. It does not have to be the same location as the shared location.

For example:

`z:\IBM\WebSphere\AppServer`

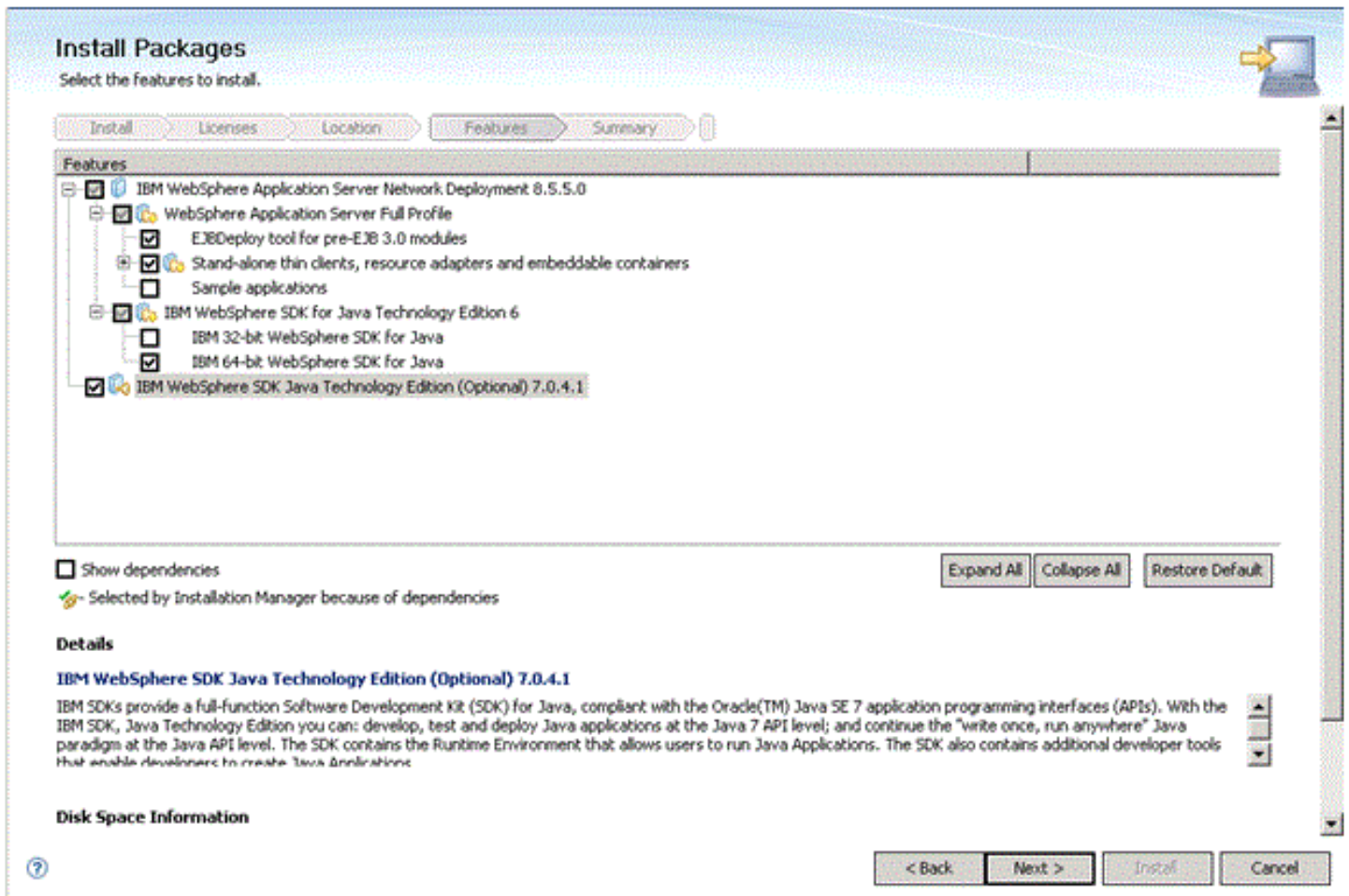
`/u01/WebSphere855/AppServer`

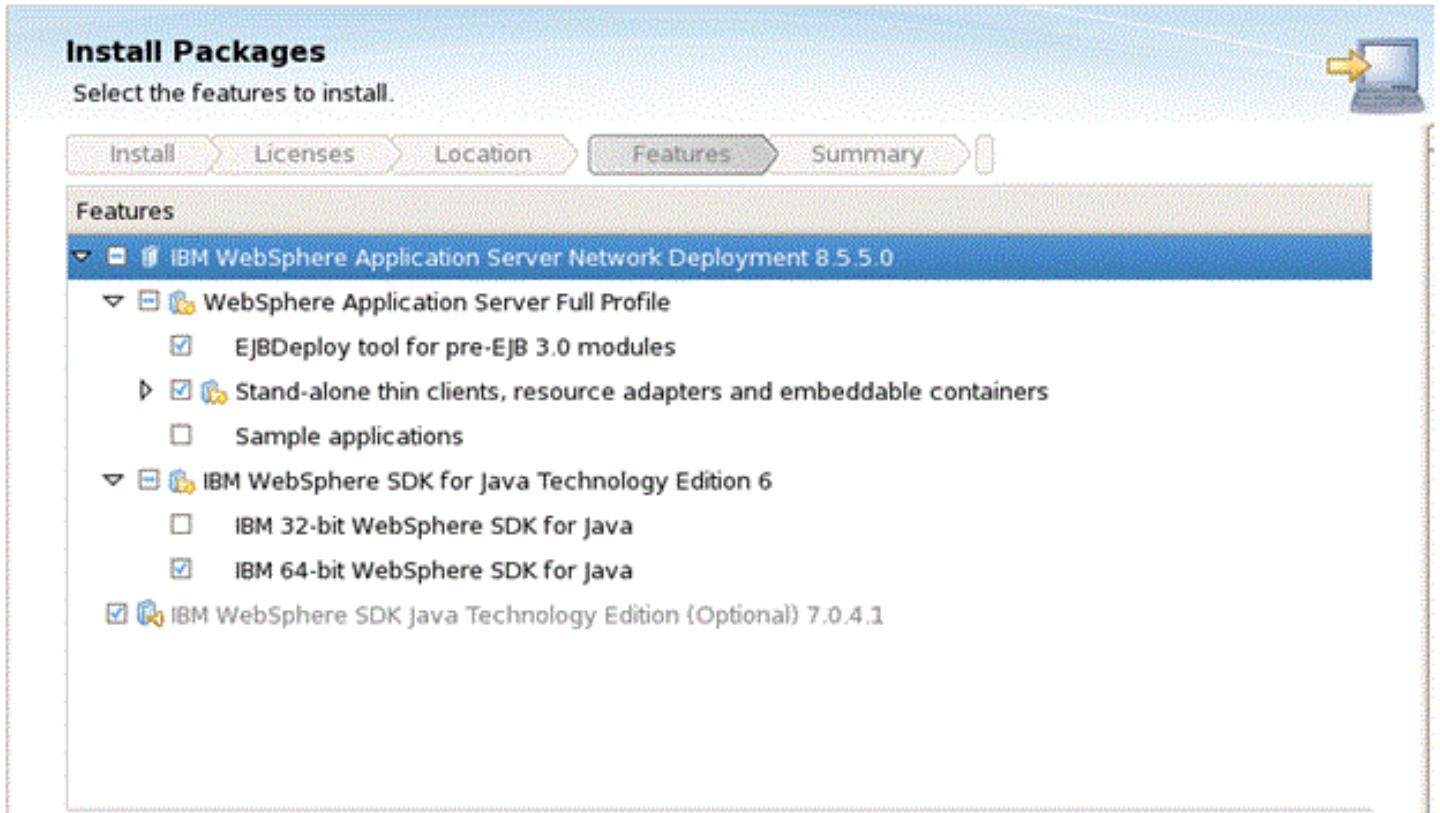
14. Click the **Next** button.



15. On Install Packages, translations, select your desired language.

16. Click the **Next** button.



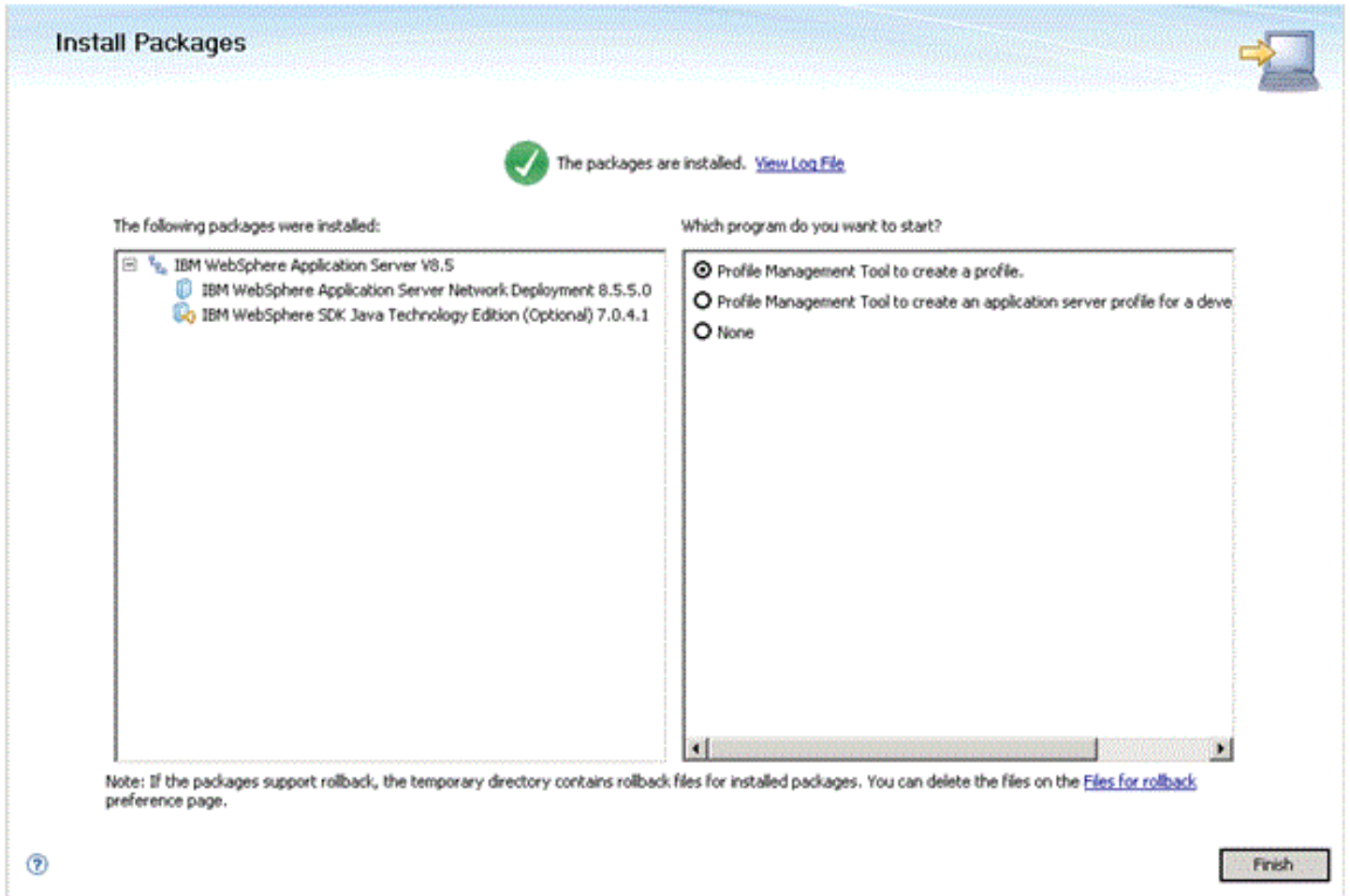


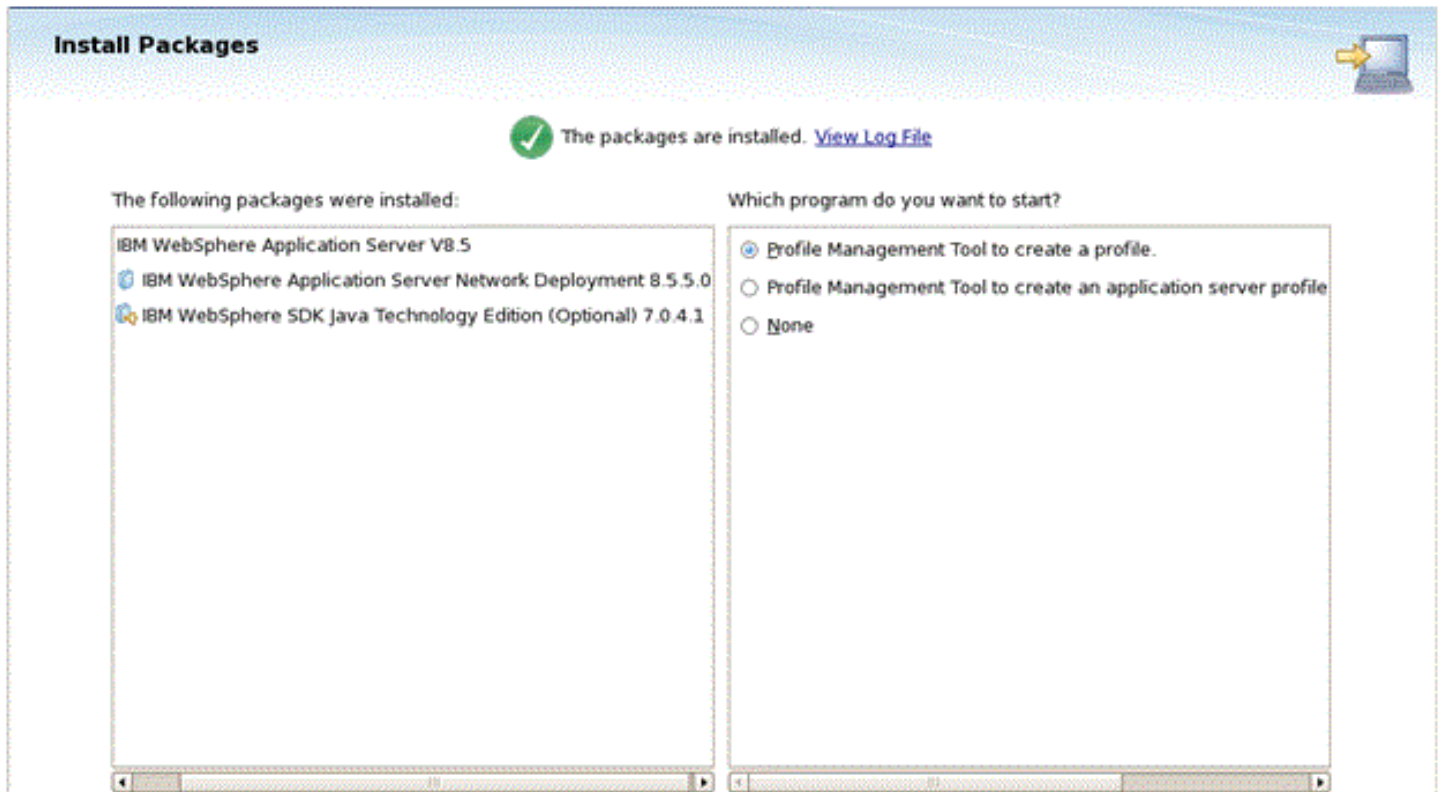
17. On Install Packages, select features, verify that the package for Java JDK 1.7/JDK 1.8 is selected.

CAUTION: Although JDK 1.6 is the default installation for Websphere Application Server 8.5.x, you must choose to install JDK 1.7 in order to be compatible with JD Edwards EnterpriseOne.

18. Click the **Next** button.

19. Review the summary information and click the **Install** button.





20. On Install Packages, the packages are installed, click the **Finish** button.
21. To create a profile, ensure this radio button in the right pane is selected:

Profile Management Tool to create a profile.

Continue to the next section of this chapter entitled: *Creating a New Profile for WebSphere Application Server 8.5.x/9.0.*

Creating a New Profile for WebSphere Application Server 8.5.x/9.0

The section describes how to create a new profile. This profile will be used later in the installation process to create a web server and configure the plugin.

Note: This document describes how to create a "standalone" application server. For information on how to create a cell and managed node, refer to IBM's Infocenter:

<http://www-01.ibm.com/software/webservers/appserv/was/library/>

You can choose to create your first profile now or after the remaining software packages have been installed. If you create your profile now, you will need to manually define the web server before configuring the plug-in later in this chapter. As an alternative, you can use the advanced profile creation option to automatically create a web server, but

this must be done **after** all of the other software components described in this guide are installed and updated to the correct level.

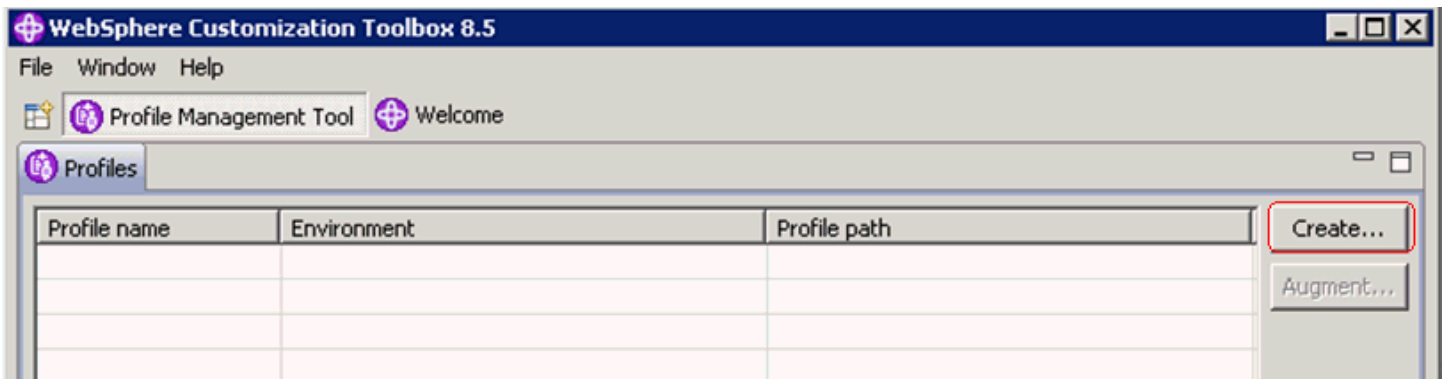
This procedure assumes you are creating a new profile at this time so that you can verify your installation.

Note: If the Profile Management wizard did not launch, you might have encountered a bug within the eclipse XWindow Client product. You might see this error: show 'BadWindow (invalid Window parameter)'. If you see the above error, follow the suggestions in IBM doc PM56382 at the below link, and re-launch the Profile Management Tools: <http://www-01.ibm.com/support/docview.wss?uid=swg1PM56382>

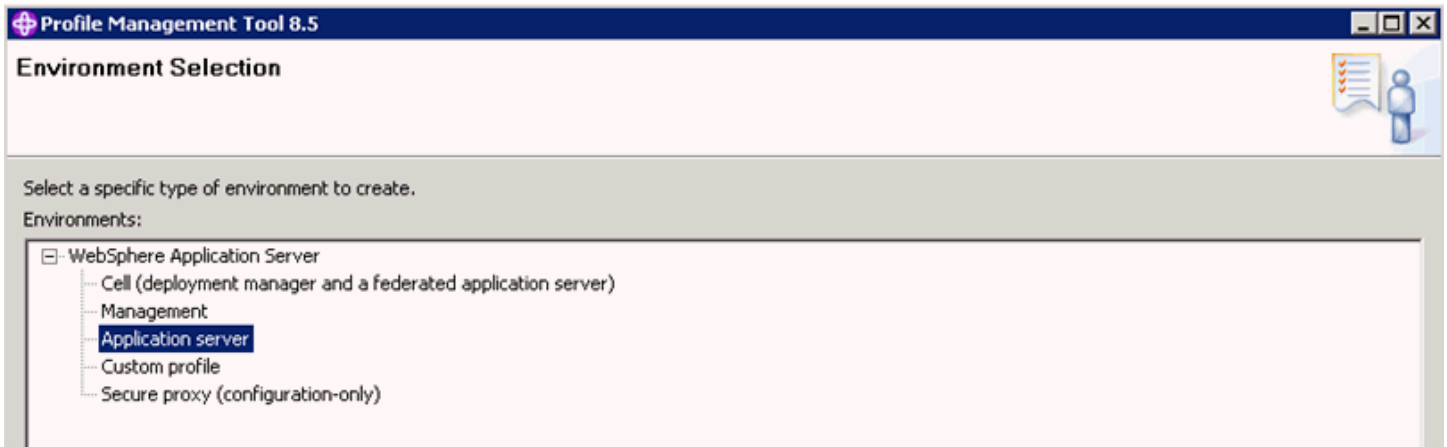
1. If you followed the last step in the preceding chapter entitled: *Installing an IBM WebSphere Application Server 8.5.x/9.0*, the Profile Management Tool was launched.

Alternately, you can use this navigation:

IBM WebSphere > IBM WebSphere Application Server > Tools > Profile Management Tool

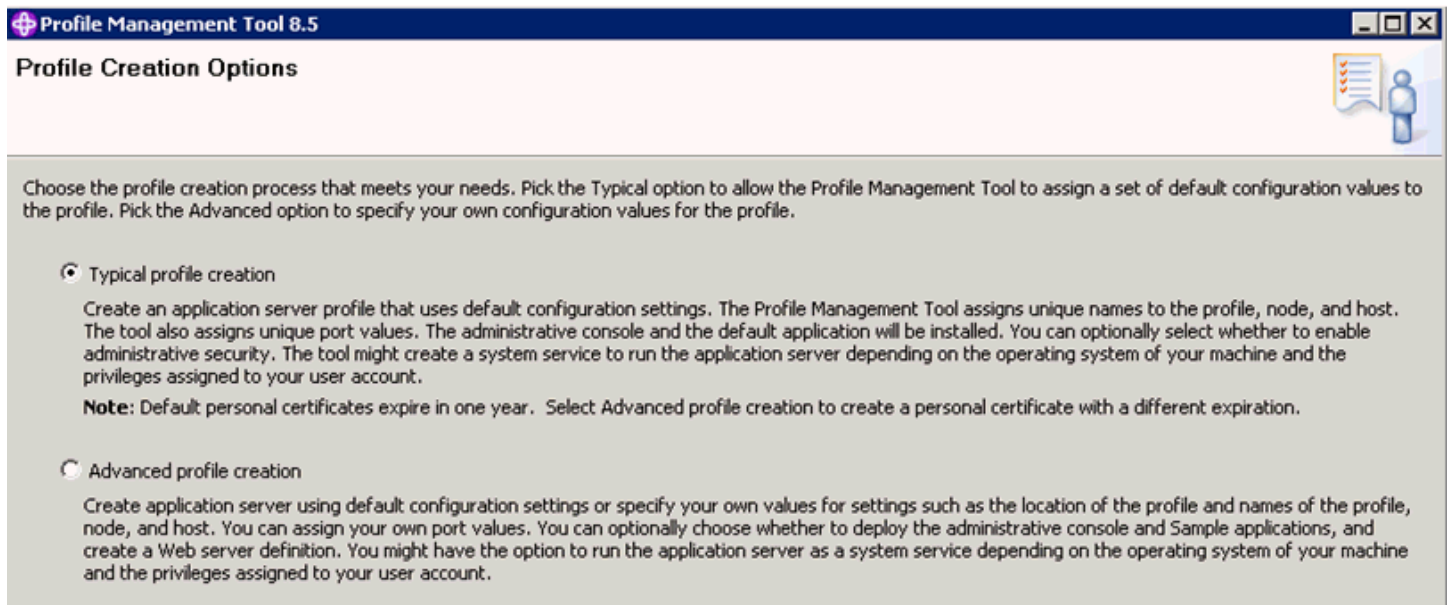


2. On WebSphere Customization Toolbox, Profile Management Tool, with the Profiles tab selected, click the **Create** button.



3. On Profile Management Tools, Environment Selection, highlight the Application server environment type.

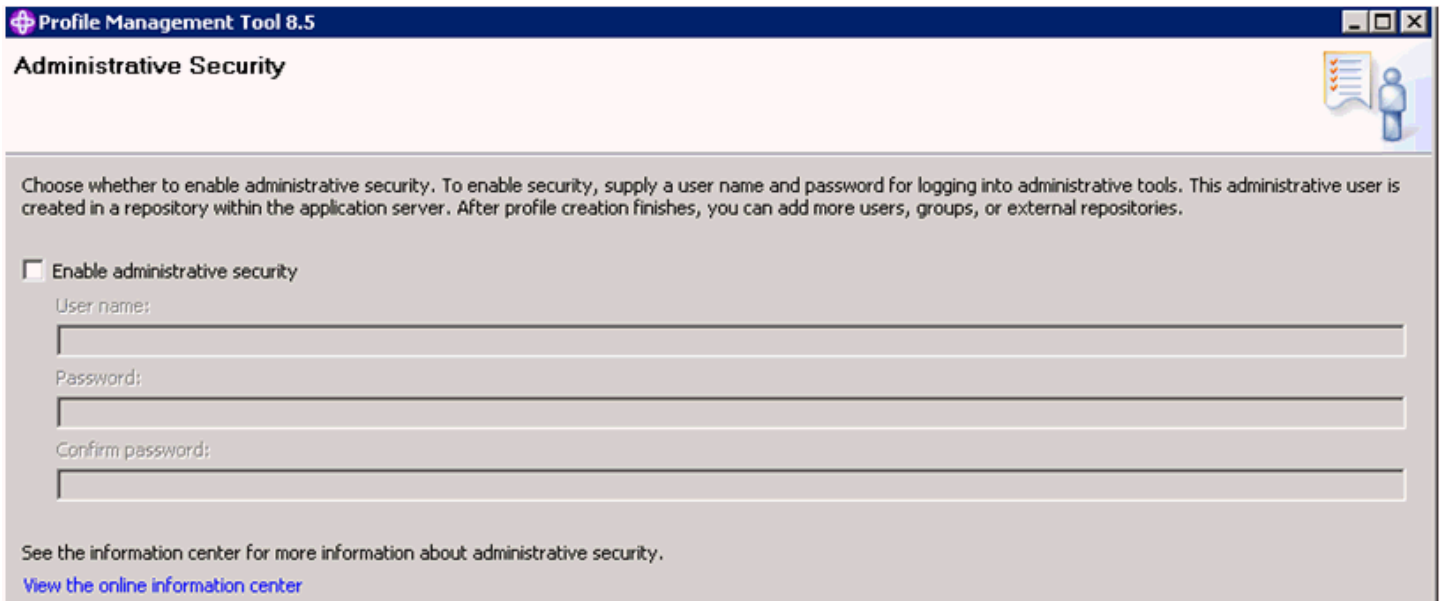
4. Click the **Next** button.



5. On Profile Creation Options, select the **Typical profile creation** radio button.

Note: Choosing **Typical profile creation** uses the default configuration settings. It assigns unique names to the profile, node, and host. The tool also assigns unique port values. Alternatively, you can choose **Advanced profile creation** to specify your own values for settings such as the location of the profile and names of the profile, node, and host.

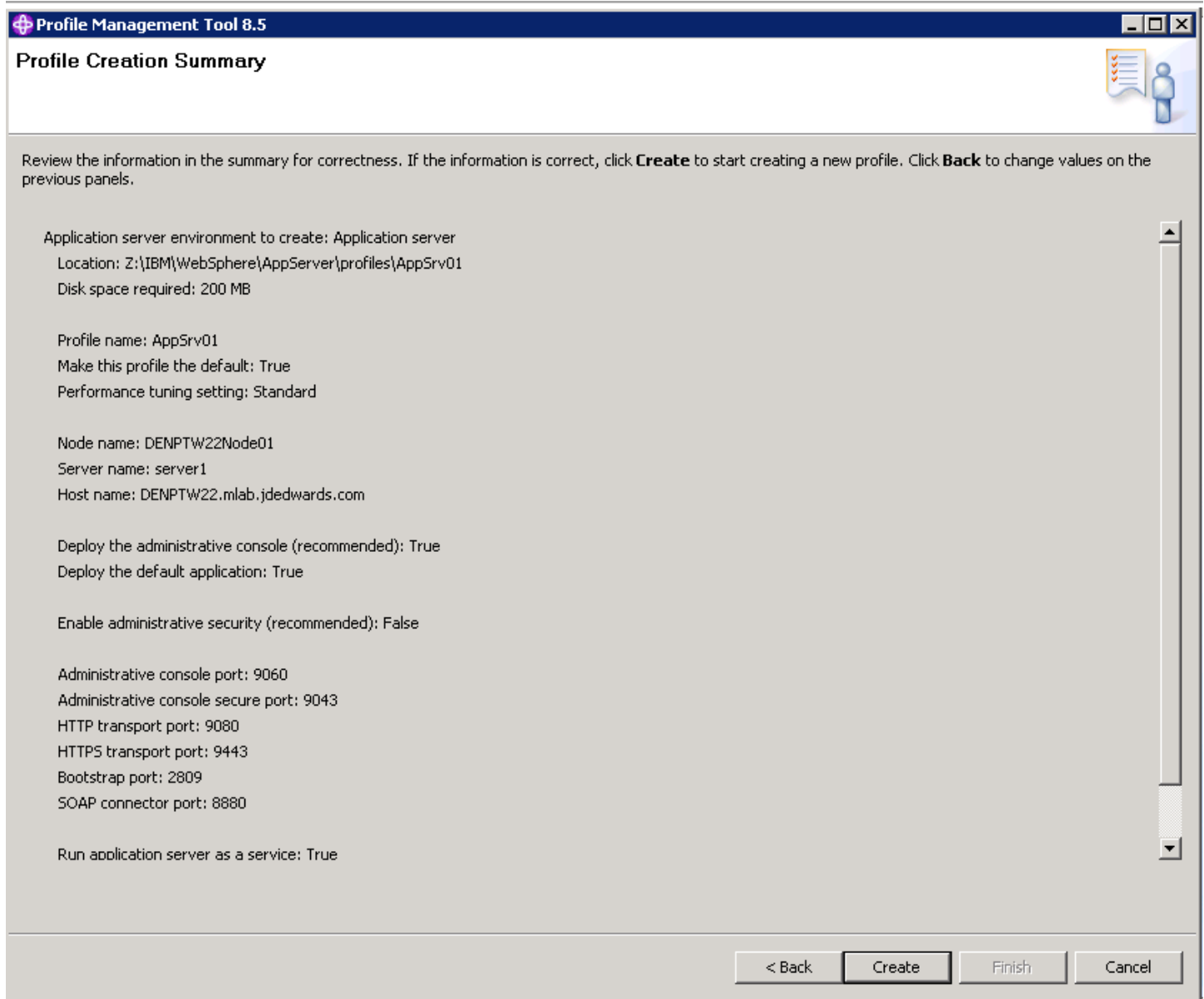
6. Click the **Next** button.




The screenshot shows a web browser window titled "Profile Management Tool 8.5" with a sub-header "Administrative Security". The main content area contains the following text: "Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users, groups, or external repositories." Below this text is a checkbox labeled "Enable administrative security" which is currently unchecked. Underneath the checkbox are three text input fields labeled "User name:", "Password:", and "Confirm password:". At the bottom of the form, there is a link that says "See the information center for more information about administrative security." and a blue hyperlink labeled "View the online information center".

7. On Administrative Security, clear the **Enable administrative security** checkbox.

8. Click the **Next** button.



Profile Creation Summary



Review the information in the summary for correctness. If the information is correct, click **Create** to start creating a new profile. Click **Back** to change values on the previous panels.

Application server environment to create: Application server
Location: /u01/WebSphere85/AppServer/profiles/AppSrv01
Disk space required: 200 MB

Profile name: AppSrv01
Make this profile the default: True
Performance tuning setting: Standard

Node name: dnptlx105Node01
Server name: server1
Host name: dnptlx105.mlab.jdedwards.com

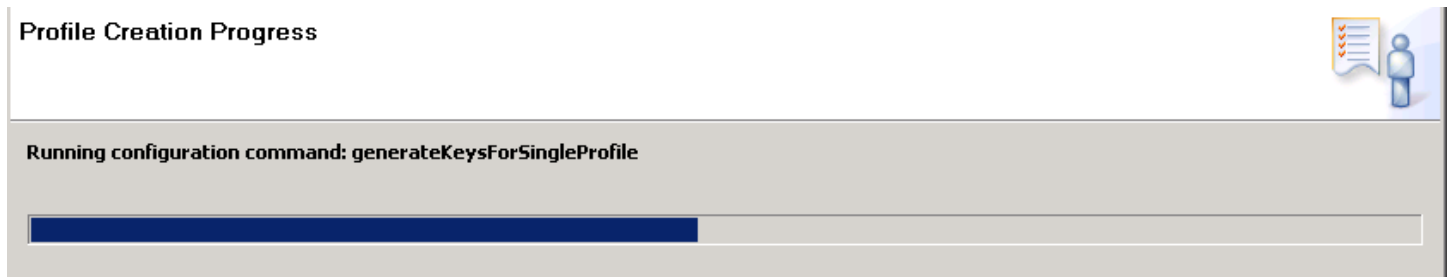
Deploy the administrative console (recommended): True
Deploy the default application: True

Enable administrative security (recommended): False

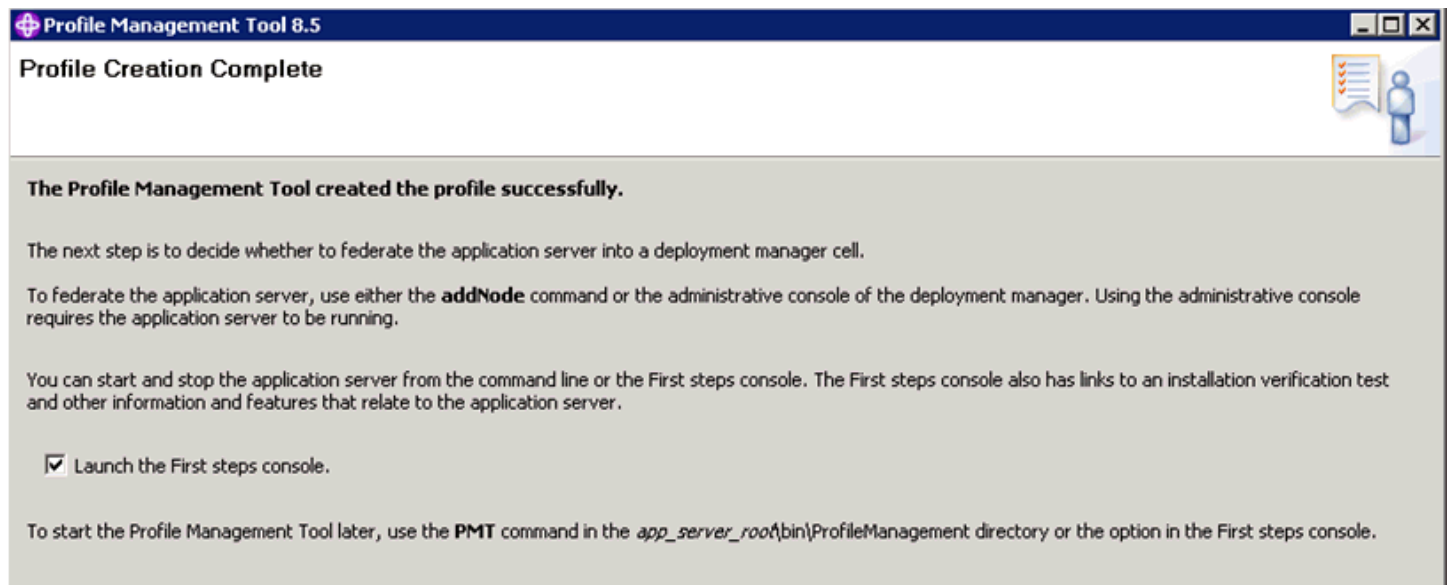
Administrative console port: 9060

< Back Create Cancel Finish

9. On Profile Creation Summary, review the information for accuracy and click the **Create** button.

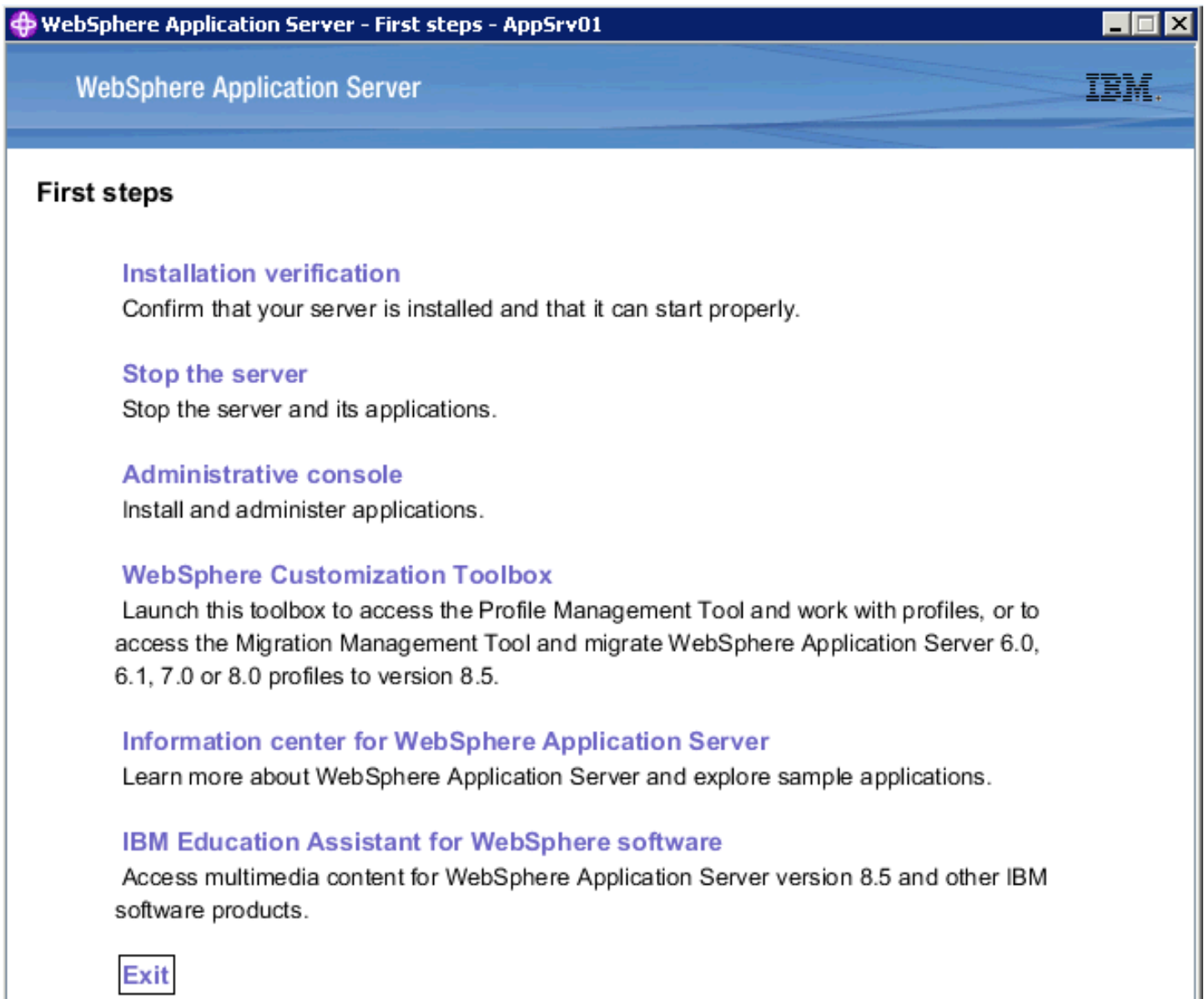


The progress screen is displayed. Wait for the progress to complete 100%, which may take several minutes.



10. Optionally, on Profile Creation Complete, you can select the check box for **Launch the First steps console**.

11. Click the **Finish** button.

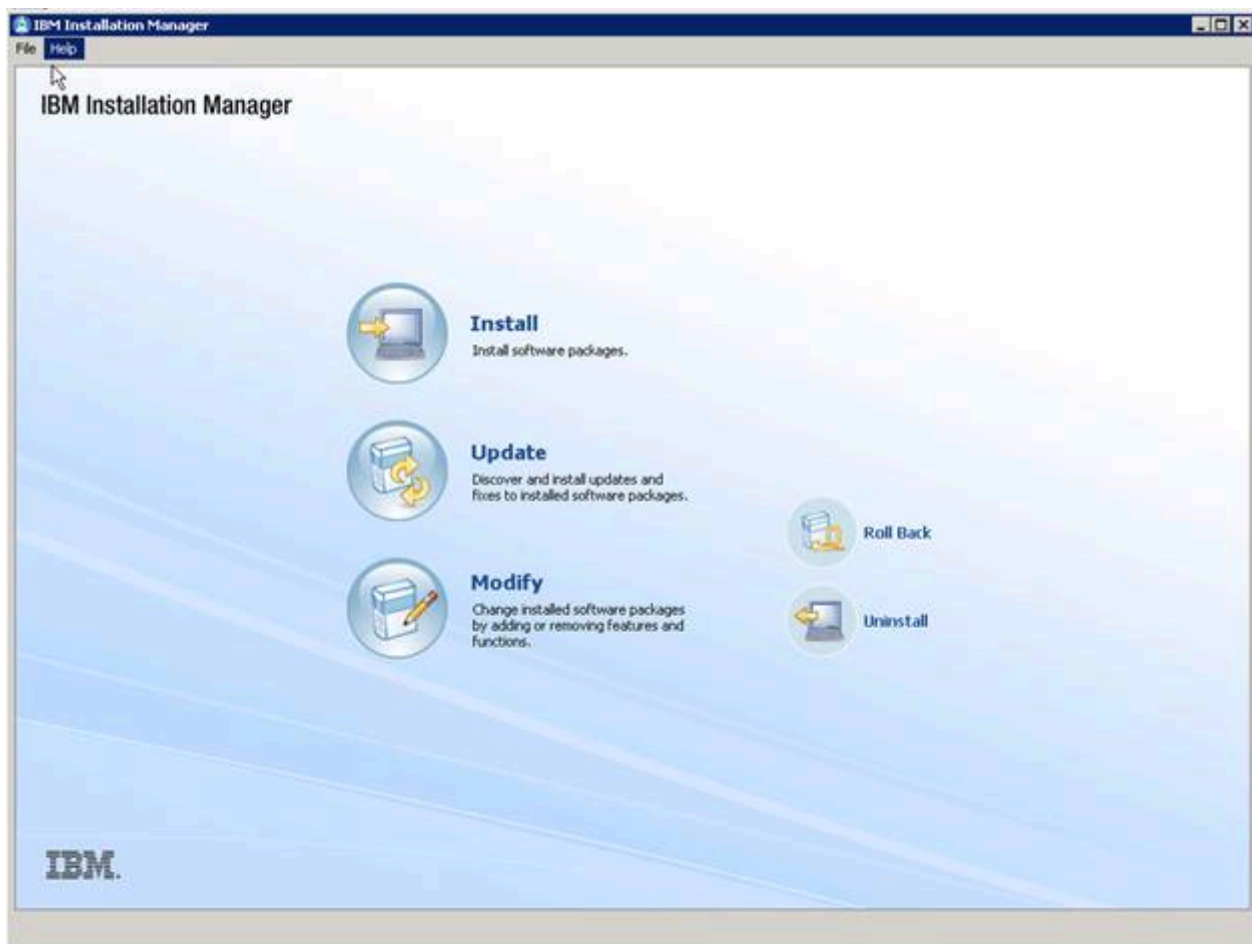


Location	Connection
<input checked="" type="checkbox"/> Z:\Software\WAS855\ND\repository.config	
<input checked="" type="checkbox"/> Z:\Software\WAS855\Suppl\repository.config	
<input checked="" type="checkbox"/> Z:\Software\WAS855\JDK17\repository.config	

Repositories:

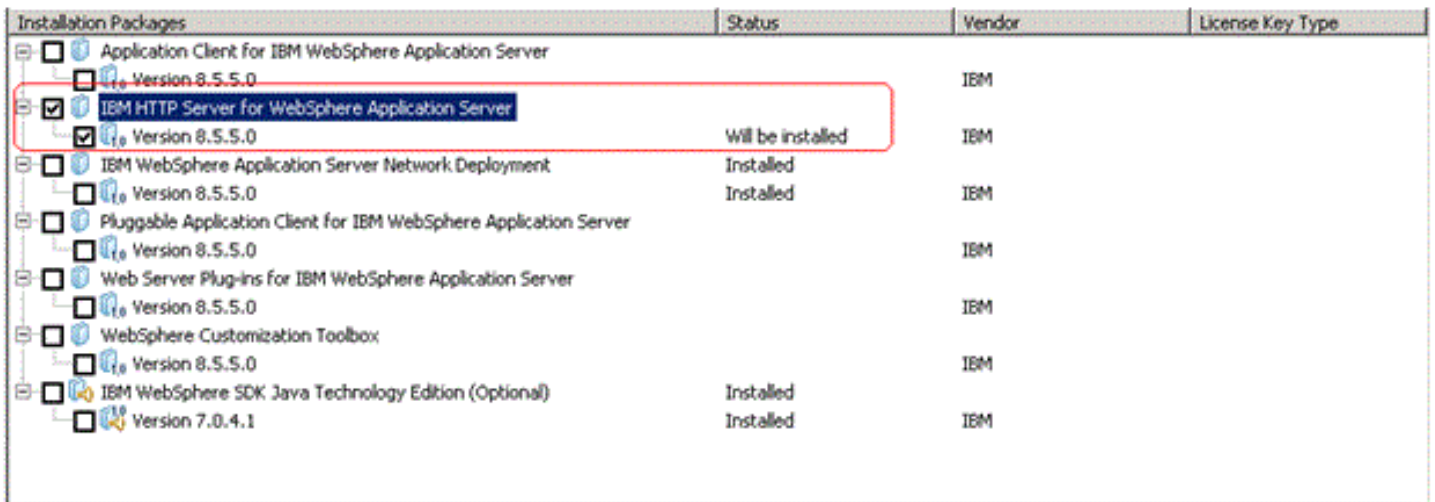
Location	Connection
<input checked="" type="checkbox"/> /u01/software/was855/nd/repository.config	
<input checked="" type="checkbox"/> /u01/software/was855/suppl/repository.config	
<input checked="" type="checkbox"/> /u01/software/was855/java17/repository.config	

To install an IBM HTTP Server 8.5.x/9.0:



1. Start the IBM Installation Manager, which you must have previously installed as described in the preceding chapter of this guide entitled: *Installing the IBM Installation Manager*.

2. Click the **Install** option.



Installation Packages	Status	Vendor	License Key Type
<input type="checkbox"/> Application Client for IBM WebSphere Application Server			
<input type="checkbox"/> Version 8.5.5.0		IBM	
<input checked="" type="checkbox"/> IBM HTTP Server for WebSphere Application Server	Will be installed	IBM	
<input checked="" type="checkbox"/> Version 8.5.5.0	Will be installed	IBM	
<input type="checkbox"/> IBM WebSphere Application Server Network Deployment	Installed		
<input type="checkbox"/> Version 8.5.5.0	Installed	IBM	
<input type="checkbox"/> Pluggable Application Client for IBM WebSphere Application Server			
<input type="checkbox"/> Version 8.5.5.0		IBM	
<input type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server			
<input type="checkbox"/> Version 8.5.5.0		IBM	
<input type="checkbox"/> WebSphere Customization Toolbox			
<input type="checkbox"/> Version 8.5.5.0		IBM	
<input type="checkbox"/> IBM WebSphere SDK Java Technology Edition (Optional)	Installed		
<input type="checkbox"/> Version 7.0.4.1	Installed	IBM	

3. On Install Packages, select packages, click the checkboxes for the **HTTP Server for WebSphere Application Server** and the **HTTP Server Version (8.5.x/9.0)**.
4. Click the **Next** button.
5. Review the International Program License Agreement and click the radio button to accept the terms if you want to continue with the installation.

6. Click the **Next** button.

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install > Licenses > **Location** > Features > Summary

Use the existing package group
 Create a new package group

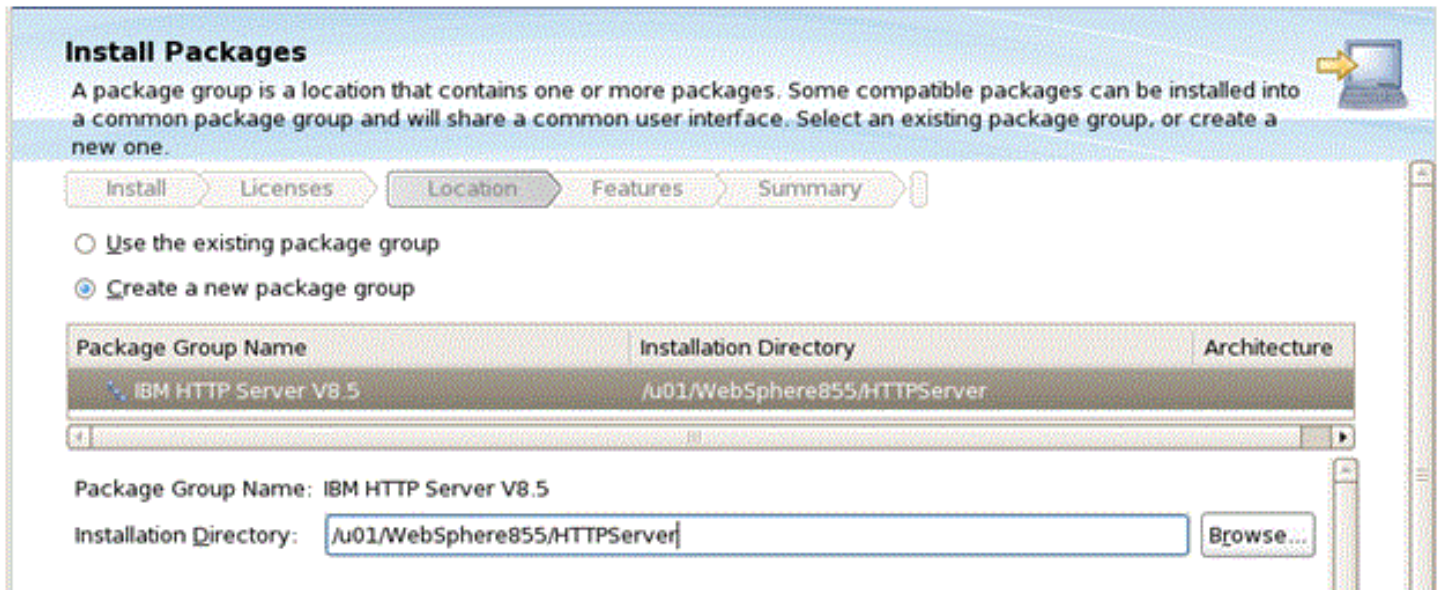
Package Group Name	Installation Directory	Architecture
IBM HTTP Server V8.5	Z:\IBM\HTTPServer	

Package Group Name: IBM HTTP Server V8.5
Installation Directory:

Details
Shared Resources Directory: Z:\IBM\IMShared

Disk Space Information

Volume	Available Space
Z:	51.91 GB



7. On Install Packages, package group, click the radio button entitled: **Create a new package group**. In the Installation Directory field, enter an appropriate location to install the IBM HTTP Server 8.5.x/9.0 software. It does not have to be the same location as the shared location.

For example:

`z:\IBM\HTTPServer`

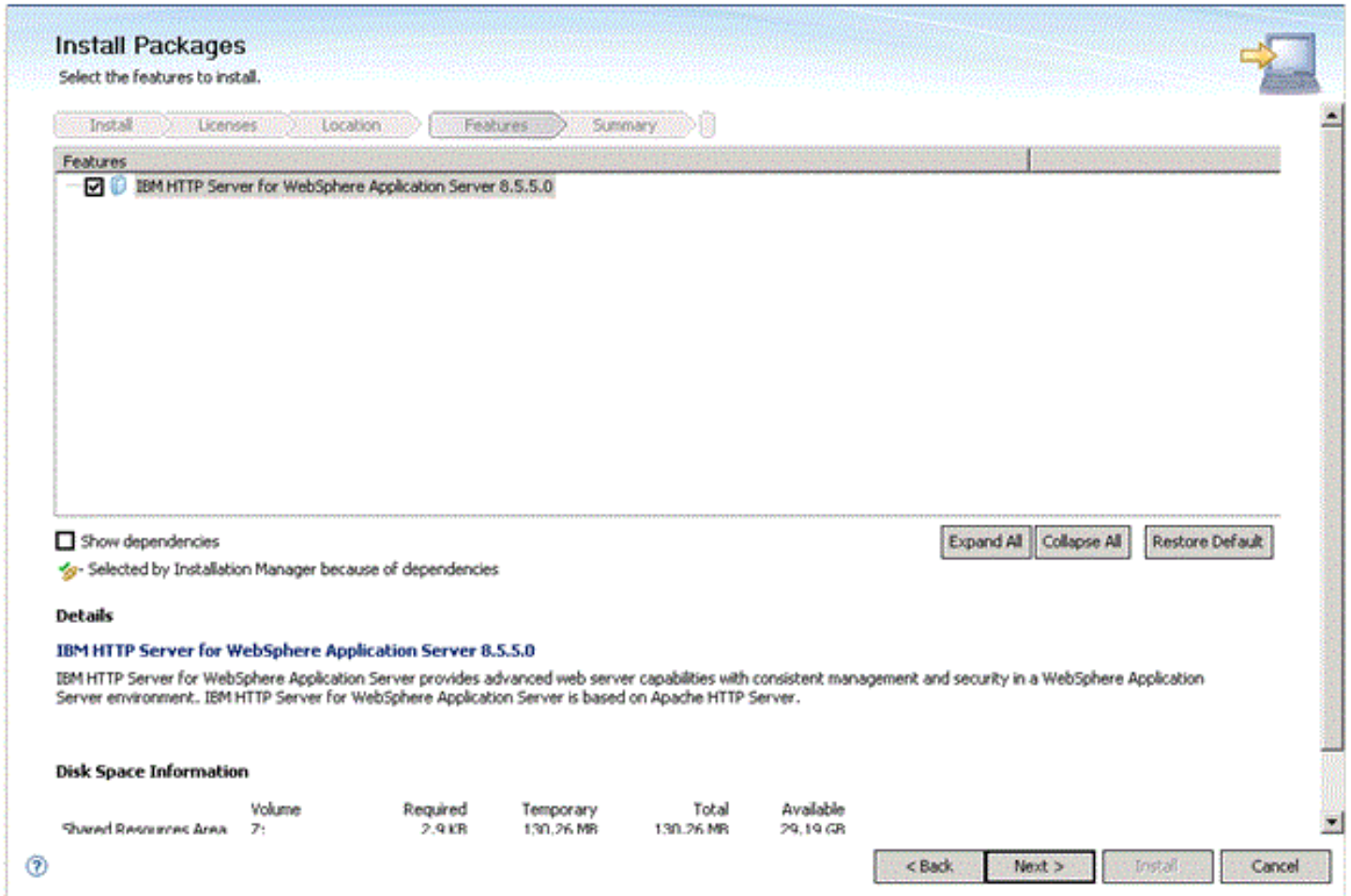
`/u01/WebSphere855/HTTPServer`

This document refers to a local IBM HTTP server installed on the same machine as the IBM WebSphere Application Server. For instructions on how to install a remote HTTP server, refer to the IBM info center:

<http://www-01.ibm.com/software/webservers/appserv/was/library/>

Also note that the shared location that you defined when you installed the IBM WebSphere Application Server in the previous section cannot be changed.

8. Click the **Next** button.





9. On Install Packages, select the features to install, verify the package you chose is selected.

10. Click the **Next** button.

Install Packages
Fill in the configurations for the packages.

Install > Licenses > Location > **Features** > Summary

Configuration for IBM HTTP Server for WebSphere Application Server 8.5.0.0
Web Server Configuration

Specify a port number for IBM HTTP Server to communicate. The default port is 80. If the default port is already in use, then change to another port that is available. Running IBM HTTP Server without root or Administrative privileges might restrict use of ports below 1024.

HTTP port:

Choose whether to use a Windows service to run IBM HTTP Server. If a service is created, also select a startup type to have the Windows service start manually or automatically when rebooting the system.

Run IBM HTTP Server as a Windows Service.

Log on as a local system account
 Log on as a specified user account

User name:

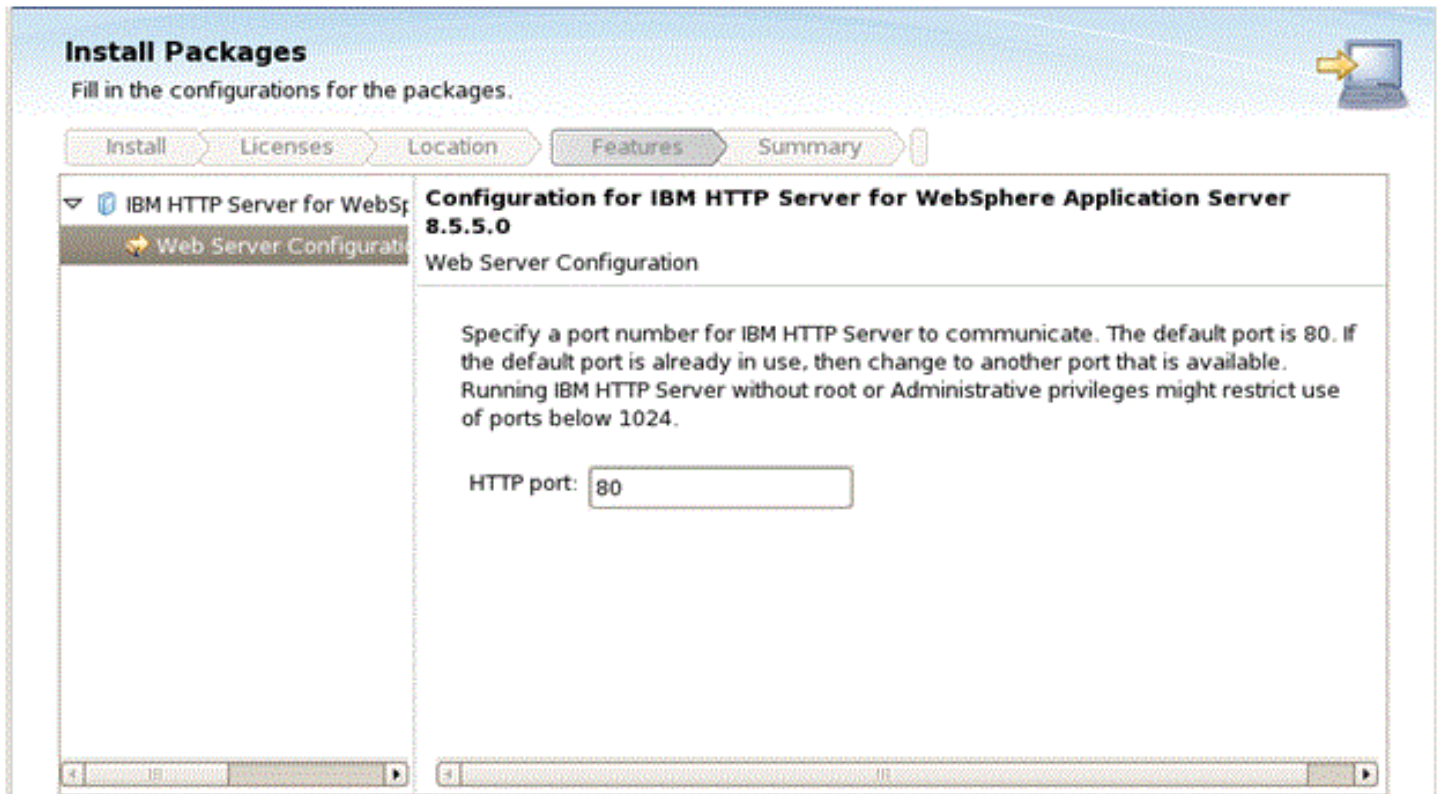
Password:

The user account that runs the Windows service must have the following user rights:

- Act as part of the operating system
- Log on as a service

Startup type:

< Back Next > Install Cancel



11. On Install Packages, configuration, complete these fields:

- *HTTP Port*

Specify a port for IBM HTTP Server to communicate. The default port is 80. If the default port is already in use, then change to another port that is available. Running IBM HTTP Server without root or Administrative privilege might restrict use of ports below 1024.

- *Run IBM HTTP Server as a Windows Service*

Ensure this check box is checked.

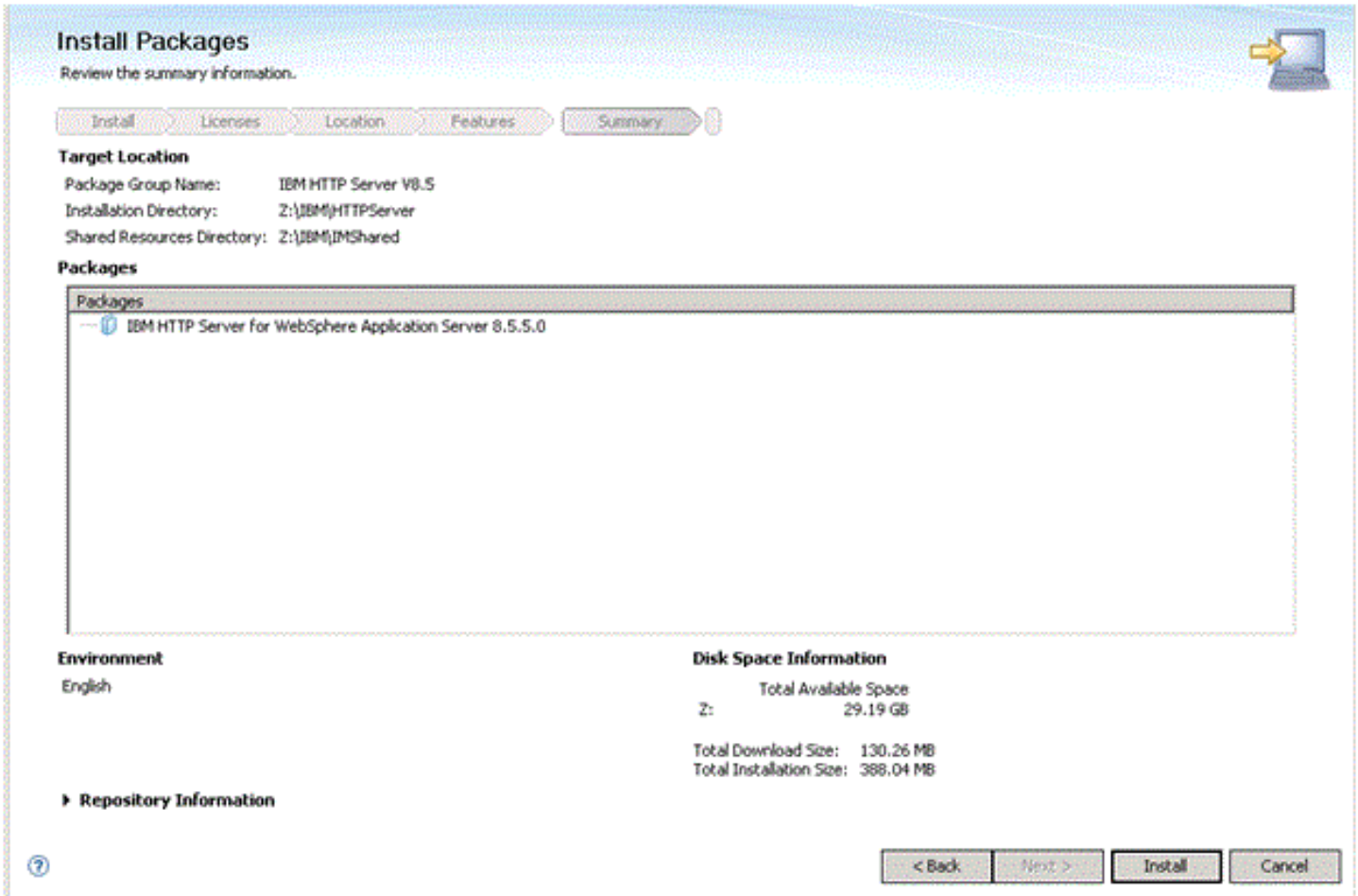
- *Log on as a local system account*

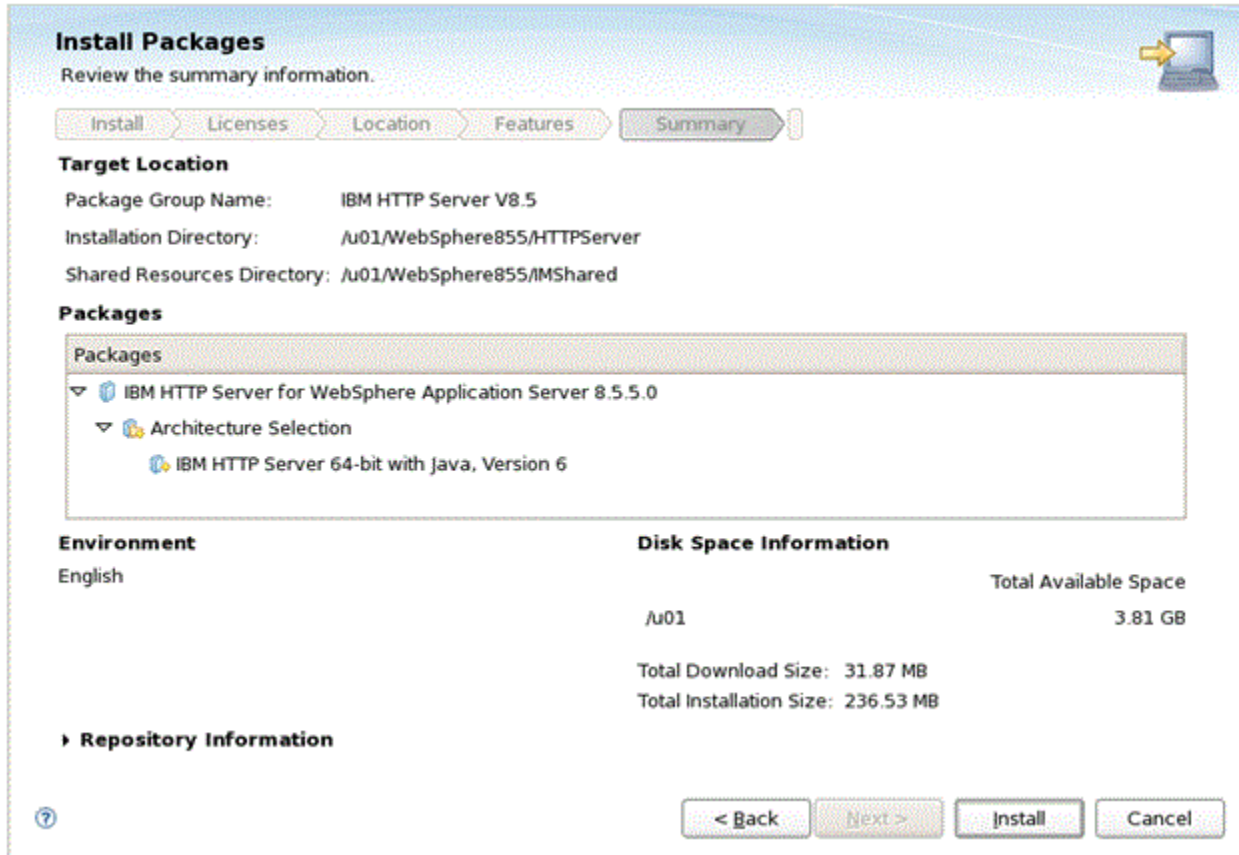
Normally this check box should be selected. However your network configuration may require you to specify a user with specific authority across domains or network segments. Contact your System Administrator for more information.

- *Startup type*

Use the pull down to choose a startup type for the Windows service. The default value is Automatic.

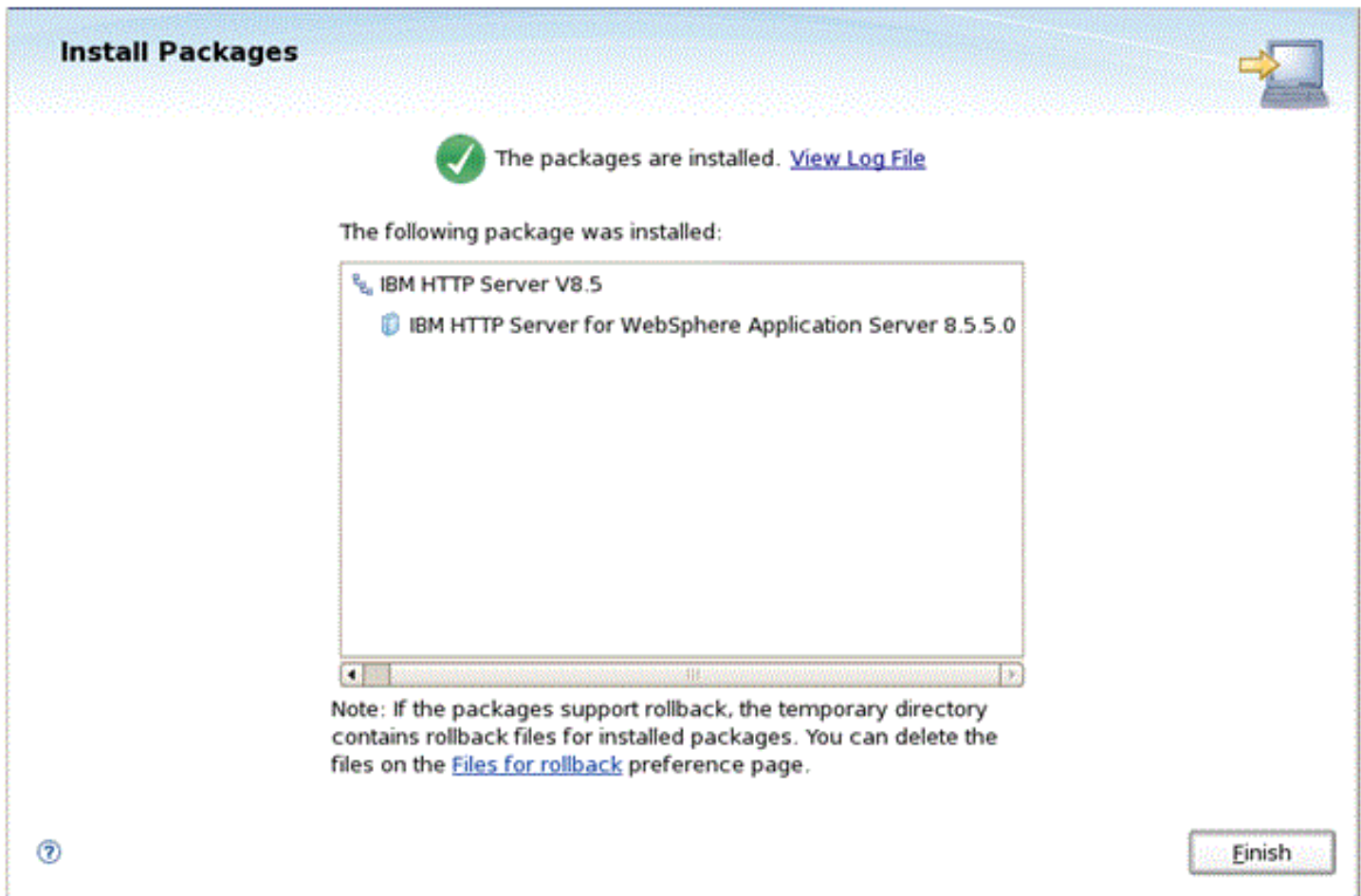
12. Click the **Next** button.





13. On Install Packages, review summary information, verify the accuracy of the selections.

14. Click the **Install** button to begin the installation of the IBM HTTP Server.



15. On Install Packages, verify the installation completed successfully. You may want to click the link: View Log File.
16. Click the **Finish** button.

You are returned to the IBM Installation Manager home screen.

17. To install the plug-ins, continue to the next section entitled: *Installing Web Server Plug-ins for IBM WebSphere Application Server*.

Installing Web Server Plug-ins for IBM WebSphere Application Server

As with the previous software packages described in this guide, the plug-ins for IBM WebSphere Application Server 8.5.x/9.0 must be installed using the IBM Installation Manager.

In order to install the IBM HTTP server, you must have the Supplemental images in the repository, as shown in the second line item in the following screen sample.

Location	Connection
<input checked="" type="checkbox"/> Z:\Software\WAS855\ND\repository.config	
<input checked="" type="checkbox"/> Z:\Software\WAS855\Suppl\repository.config	
<input checked="" type="checkbox"/> Z:\Software\WAS855\JDK17\repository.config	

Repositories:

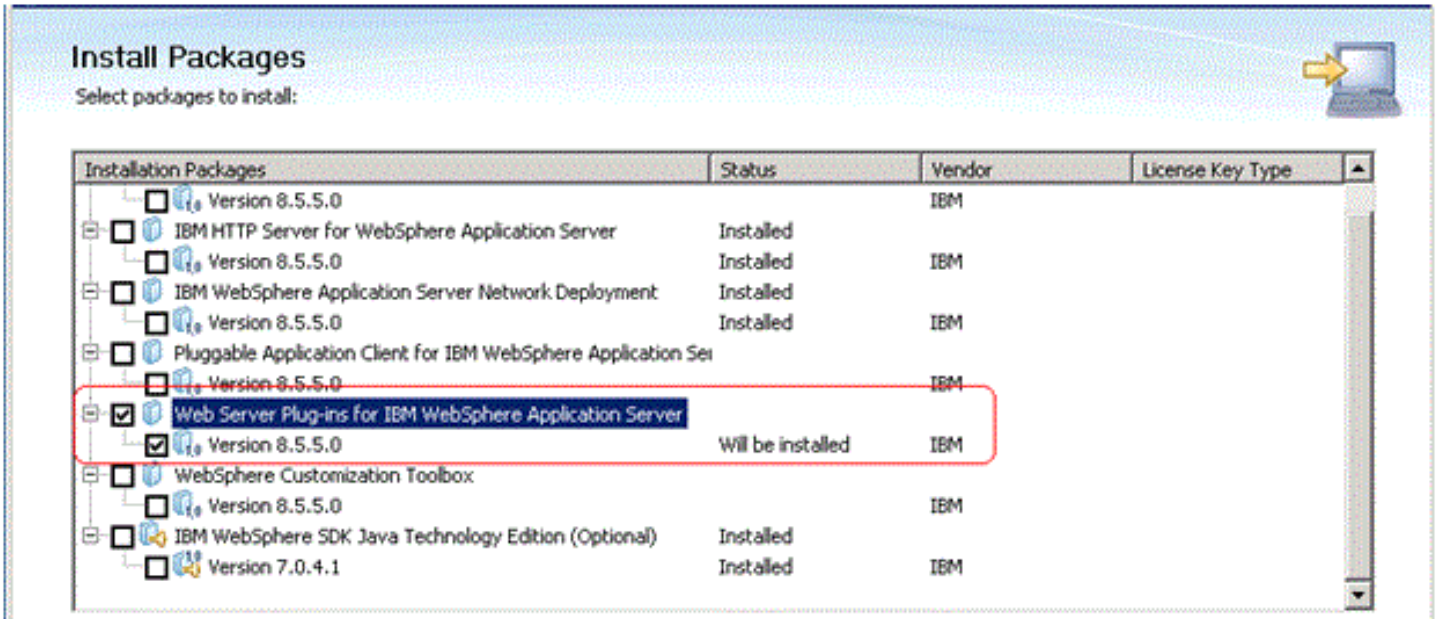
Location	Connection
<input checked="" type="checkbox"/> /u01/software/was855/nd/repository.config	
<input checked="" type="checkbox"/> /u01/software/was855/suppl/repository.config	
<input checked="" type="checkbox"/> /u01/software/was855/java17/repository.config	

To install Web Server Plug-ins for IBM WebSphere Applications Server:

1. Start the IBM Installation Manager, which you must have previously installed as described in the preceding chapter of this guide entitled: *Installing the IBM Installation Manager*.



2. On IBM Installation Manager, click the **Install** option.



3. On Install Packages, select packages, click the checkboxes for the **Web Server Plug-ins for WebSphere Application Server** and the **HTTP Server Version (8.5.x/9.0)**.
4. Click the **Next** button.
5. On Install Packages, review the International Program License Agreement and click the radio button to accept the terms if you want to continue with the installation.

6. Click the **Next** button.

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install > Licenses > Location > Features > Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory	Architecture
Web Server Plug-ins for IBM WebSphere Application Server V8.5	Z:\IBM\WebSphere\Plugins	

Package Group Name: Web Server Plug-ins for IBM WebSphere Application Server V8.5
Installation Directory: Z:\IBM\WebSphere\Plugins

Details
Shared Resources Directory: Z:\IBM\IMShared

Disk Space Information

Volume	Available Space
Z:	51.55 GB

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install Licenses Location Features Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory	Architecture
Web Server Plug-ins for IBM WebSphere Application Server V8.5	/u01/WebSphere855/Plugins	

Package Group Name: Web Server Plug-ins for IBM WebSphere Application Server V8.5
Installation Directory:

Details
Shared Resources Directory: /u01/WebSphere855/MSHared

Disk Space Information

Volume	Available Space
/u01	3.58 GB

7. On Install Packages, package group, click the radio button entitled: **Create a new package group**.

In the Installation Directory field, enter an appropriate location to install the Web Server Plugins for IBM WebSphere Application Server 8.5.x/9.0.

For example:

```
z:\IBM\WebSphere\Plugins
```

```
/u01/WebSphere85/Plugins
```

Note: New functionality for IBM WebSphere 8.5.5 for the plug-in installs provides this default location: `\IBM\WebSphere\Plugins`. The remainder of this guide assumes you chose to accept the default location.



8. Select this checkbox from the Features screen:

IBM 64-bit WebSphere Runtime Environment for Java

9. Click the **Next** button.

10. Verify the SDK level. At this point in the process in this guide, SDK 1.6 is still the default installation for WebSphere Application Server 8.5.x and SDK 1.8 is the default installation for Websphere Application Server 9.0.

Install Packages
Review the summary information.

Install Licenses Location Features **Summary**

Target Location
Package Group Name: Web Server Plug-ins for IBM WebSphere Application Server V8.5
Installation Directory: /u01/WebSphere855/Plugins
Shared Resources Directory: /u01/WebSphere855/IMShared

Packages

- Web Server Plug-ins for IBM WebSphere Application Server 8.5.5.0
 - IBM WebSphere SDK for Java Technology Edition 6
 - IBM 64-bit WebSphere Runtime Environment for Java

Environment
English

Disk Space Information

	Total Available Space
/u01	3.58 GB
Total Download Size: 54.57 MB	
Total Installation Size: 301.08 MB	

Repository Information

< Back Next > Install Cancel

11. On Install Packages, review summary information, verify the accuracy of the selections.

12. Click the **Install** button to begin the installation of the JDK.

The progress screen is displayed. Wait for the progress to complete 100%, which may take several minutes.



13. On Install Packages, verify the installation completed successfully. You may want to click the link: View Log File.
14. Click the **Finish** button.

You are returned to the IBM Installation Manager home screen.

15. To install the plug-ins, continue to the next section entitled: *Installing the WebSphere Customization Toolbox*.

Enabling SDK 7.0 on WebSphere Application Server 8.5.5

Starting with WebSphere Application Server 8.5.x/9.0, SDK 7.0 is supported as an optional feature. The Java version1.6 SDK is still the default installation.

CAUTION: JD Edwards EnterpriseOne supports WebSphere Application Server 8.5.5 running with SDK 7.0 only. You must switch the java level after the installation is completed.

You can switch the java level by using the **managesdk** command. The executable for the **managesdk** command is located in the bin directory of your profile application server. For example:

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin
/u01/WebSphere85/AppServer/bin
```

This section discusses how to use the **managesdk** command for these purposes:

- *View Available Java Products*
- *View Available Java Products with Detail Information*
- *Syntax Examples using the managesdk Command*

View Available Java Products

Use this command to view the available Java products:

```
managesdk.bat -listAvailable
managesdk.sh -listAvailable
```

The following shows a sample of returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -listAvailable
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
CWSDK1005I: SDK name: 1.7_64
CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -listAvailable
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
CWSDK1005I: SDK name: 1.7_64
CWSDK1001I: Successfully performed the requested managesdk task.
```

View Available Java Products with Detail Information

Use this command to view the available Java products with detail information:

```
managesdk.bat -listAvailable -verbose
managesdk.sh -listAvailable -verbose
```

The following shows sample returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -listAvailable -verbose
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
- com.ibm.websphere.sdk.version.1.6_64=1.6
- com.ibm.websphere.sdk.bits.1.6_64=64
- com.ibm.websphere.sdk.location.1.6_64=${WAS_INSTALL_ROOT}/java
- com.ibm.websphere.sdk.platform.1.6_64=windows
- com.ibm.websphere.sdk.architecture.1.6_64=x86_64
- com.ibm.websphere.sdk.nativeLibPath.1.6_64=${WAS_INSTALL_ROOT}/lib/native/win/x86_64/

CWSDK1005I: SDK name: 1.7_64
- com.ibm.websphere.sdk.version.1.7_64=1.7
- com.ibm.websphere.sdk.bits.1.7_64=64
- com.ibm.websphere.sdk.location.1.7_64=${WAS_INSTALL_ROOT}/java_1.7_64
- com.ibm.websphere.sdk.platform.1.7_64=windows
- com.ibm.websphere.sdk.architecture.1.7_64=x86_64
- com.ibm.websphere.sdk.nativeLibPath.1.7_64=${WAS_INSTALL_ROOT}/lib/native/win/x86_64/

CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -listAvailable -verbose
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
- com.ibm.websphere.sdk.version.1.6_64=1.6
- com.ibm.websphere.sdk.bits.1.6_64=64
- com.ibm.websphere.sdk.location.1.6_64=${WAS_INSTALL_ROOT}/java
- com.ibm.websphere.sdk.platform.1.6_64=linux
- com.ibm.websphere.sdk.architecture.1.6_64=x86_64
- com.ibm.websphere.sdk.nativeLibPath.1.6_64=${WAS_INSTALL_ROOT}/lib/native/linux/x86_64
/

CWSDK1005I: SDK name: 1.7_64
- com.ibm.websphere.sdk.version.1.7_64=1.7
- com.ibm.websphere.sdk.bits.1.7_64=64
- com.ibm.websphere.sdk.location.1.7_64=${WAS_INSTALL_ROOT}/java_1.7_64
- com.ibm.websphere.sdk.platform.1.7_64=linux
- com.ibm.websphere.sdk.architecture.1.7_64=x86_64
- com.ibm.websphere.sdk.nativeLibPath.1.7_64=${WAS_INSTALL_ROOT}/lib/native/linux/x86_64
/

CWSDK1001I: Successfully performed the requested managesdk task.
```

Syntax Examples using the managesdk Command

The following examples demonstrate correct syntax when you run the **managesdk** command:

```
managesdk.bat -listAvailable [-verbose]

managesdk.bat -listEnabledProfile -profileName AppSrv01 [-verbose]

managesdk.bat -listEnabledProfileAll [-verbose]

managesdk.bat -enableProfile -profileName AppSrv01 -sdkname 1.7_64 -enableServers

managesdk.bat -enableProfileAll -sdkname 1.7_64 -enableServers

managesdk.bat -getNewProfileDefault [-verbose]

managesdk.bat -setNewProfileDefault -sdkname 1.7_64

managesdk.bat -getCommandDefault [-verbose]

managesdk.bat -setCommandDefault -sdkname 1.7_64

managesdk.sh -listAvailable [-verbose]

managesdk.sh -listEnabledProfile -profileName AppSrv01 [-verbose]

managesdk.sh -listEnabledProfileAll [-verbose]

managesdk.sh -enableProfile -profileName AppSrv01 -sdkname 1.7_64 -enableServers

managesdk.sh -enableProfileAll -sdkname 1.7_64 -enableServers

managesdk.sh -getNewProfileDefault [-verbose]

managesdk.sh -setNewProfileDefault -sdkname 1.7_64

managesdk.sh -getCommandDefault [-verbose]

managesdk.sh -setCommandDefault -sdkname 1.7_64
```

Switching to SDK 7.0 on WebSphere Application Server 8.5.5

CAUTION: JD Edwards EnterpriseOne supports WebSphere Application Server 8.5.5 running with SDK 7.0 only. You must switch the java level after the installation is completed.

This section discusses how to use the **managesdk** command for these purposes:

- *View List of Available SDK Names*
- *Set the command default to the version 7.0 SDK*
- *Set the command default to the version 7.0 SDK*
- *If Profiles Already Exist, Enable the Profiles to use the Version 7.0 SDK*

View List of Available SDK Names

Use this command to view a list of available SDK names for the product installation:

```
managesdk.bat -listAvailable
```

```
managesdk.sh -listAvailable
```

The following shows sample returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -listAvailable
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
CWSDK1005I: SDK name: 1.7_64
CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -listAvailable
CWSDK1003I: Available SDKs :
CWSDK1005I: SDK name: 1.6_64
CWSDK1005I: SDK name: 1.7_64
CWSDK1001I: Successfully performed the requested managesdk task.
```

Set the command default to the version 7.0 SDK

Use this command to set the command default to the version 7.0 SDK:

```
managesdk.bat -setCommandDefault -sdkname 1.7_64
```

```
managesdk.sh -setCommandDefault -sdkname 1.7_64
```

The following shows sample returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -setNewProfileDefault -sdkname 1.7_64
CWSDK1022I: New profile creation will now use SDK name 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -setCommandDefault -sdkname 1.7_64
CWSDK1021I: The command default SDK name is now set to 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

Set the New Profile Default to the Version 7.0 SDK

Use this command to set the new profile default to version 7.0 SDK:

```
managesdk.bat -setNewProfileDefault -sdkname 1.7_64
```

```
managesdk.sh -setNewProfileDefault -sdkname 1.7_64
```

The following shows sample returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -setNewProfileDefault -sdkname 1.7_64
CWSDK1022I: New profile creation will now use SDK name 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -setNewProfileDefault -sdkname 1.7_64
CWSDK1022I: New profile creation will now use SDK name 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

If Profiles Already Exist, Enable the Profiles to use the Version 7.0 SDK

If profiles already exist, use this command to enable the profiles to use the version 7.0 SDK:

```
managesdk.bat -enableProfileAll -sdkname 1.7_64 -enableServers
```

```
managesdk.sh -enableProfileAll -sdkname 1.7_64 -enableServers
```

The following shows sample returned information.

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin>managesdk.bat -enableProfileAll -sdkname 1.7_64 -enableServers
CWSDK1017I: Profile AppSrv01 now enabled to use SDK 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

```
[root@dnptlx102 bin]# ./managesdk.sh -enableProfileAll -sdkname 1.7_64 -enableServers
CWSDK1017I: Profile AppSrv01 now enabled to use SDK 1.7_64.
CWSDK1001I: Successfully performed the requested managesdk task.
```

Note: To change federated profiles in a Network Deployment installation, the deployment manager must be running. The **managesdk** command updates the master configuration repository. After the command runs, a synchronization operation must occur before the new SDK can be used for federated profiles.

Installing the WebSphere Customization Toolbox

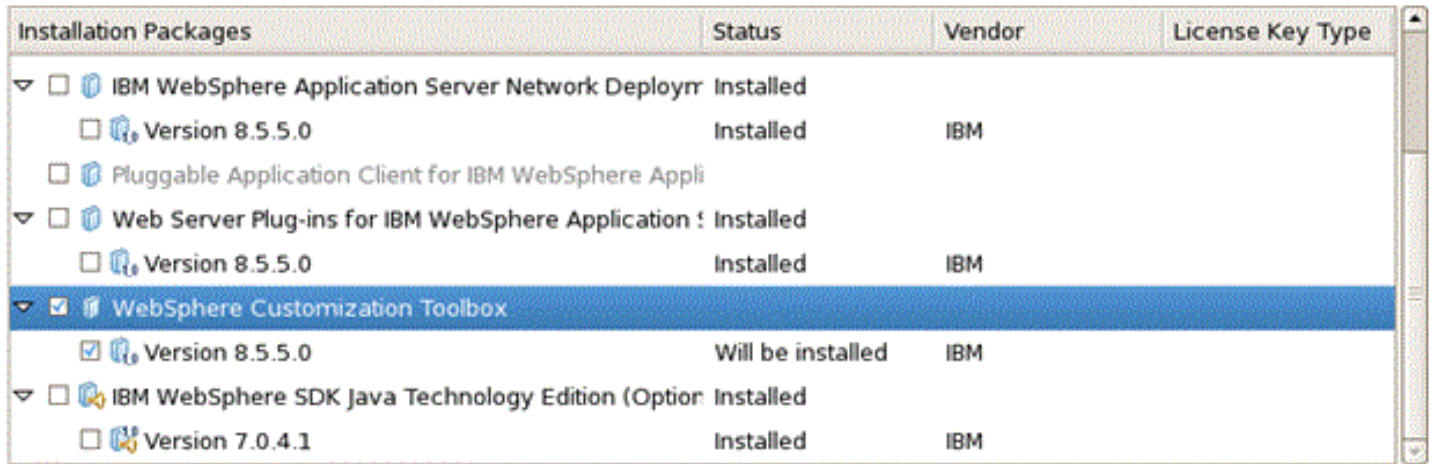
New tool functionality with IBM WebSphere 8.5.x/9.0 includes the requirement to install the WebSphere Customization Toolbox. This tool aids in configuring your plug-in properly. The WebSphere Customization Toolbox comes from the

supplemental software repository that was downloaded, decompressed, and added to the repository list as described in previous procedures in this document.

1. Start the IBM Installation Manager.



2. On IBM Installation Manager, click the **Install** option.



Installation Packages	Status	Vendor	License Key Type
▼ <input type="checkbox"/> IBM WebSphere Application Server Network Deployr	Installed		
<input type="checkbox"/> Version 8.5.5.0	Installed	IBM	
<input type="checkbox"/> Pluggable Application Client for IBM WebSphere Appli			
▼ <input type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application	Installed		
<input type="checkbox"/> Version 8.5.5.0	Installed	IBM	
▼ <input checked="" type="checkbox"/> WebSphere Customization Toolbox			
<input checked="" type="checkbox"/> Version 8.5.5.0	Will be installed	IBM	
▼ <input type="checkbox"/> IBM WebSphere SDK Java Technology Edition (Option	Installed		
<input type="checkbox"/> Version 7.0.4.1	Installed	IBM	

3. On Install Packages, select packages, select the two check boxes for **WebSphere Customization Toolbox** and his package and version 8.5.x/9.0.
4. Click the **Next** button.
5. On Install Packages, review the International Program License Agreement and click the radio button to accept the terms if you want to continue with the installation.

6. Click the **Next** button.

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install Licenses **Location** Features Summary

Use the existing package group
 Create a new package group

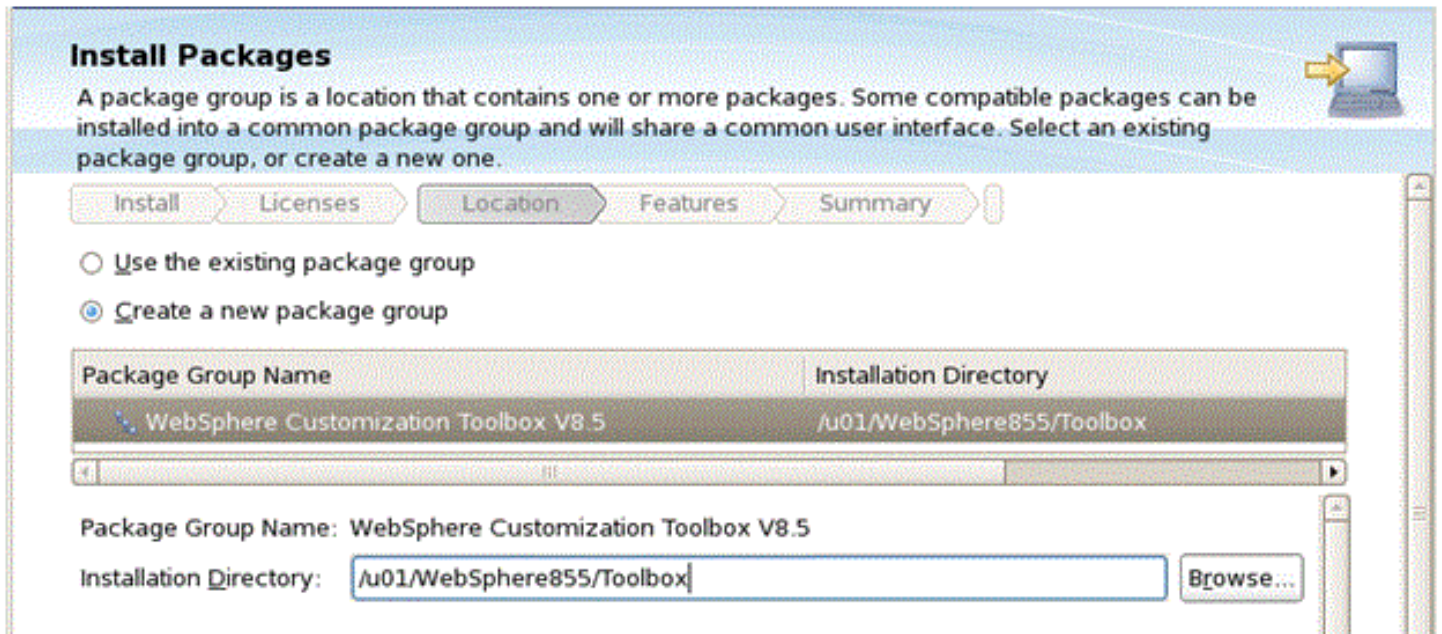
Package Group Name	Installation Directory	Architecture
WebSphere Customization Toolbox V8.5	Z:\IBM\WebSphere\Toolbox	

Package Group Name: WebSphere Customization Toolbox V8.5
Installation Directory: Z:\IBM\WebSphere\Toolbox

Details
Shared Resources Directory: Z:\WebSphere85\IMShared

Disk Space Information

Volume	Available Space
Z:	30.08 GB



7. On Install Packages, package group, click the radio button entitled: **Create a new package group**.

In the Installation Directory field, enter an appropriate location to install the WebSphere Customization Toolbox 8.5.x/9.0.

For example:

```
z:\IBM\WebSphere\Toolbox
```

```
/u01/WebSphere855/Toolbox
```

8. Click the **Next** button.

Install Packages

Select the features to install.

Install
Licenses
Location
Features
Summary

Features

- WebSphere Customization Toolbox 8.5.0.0
 - Web Server Plug-ins Configuration Tool**
 - Profile Management Tool (z/OS only)
 - z/OS Migration Management Tool
 - Remote Installation Tool for IBM i

Show dependencies

Selected by Installation Manager because of dependencies

Details

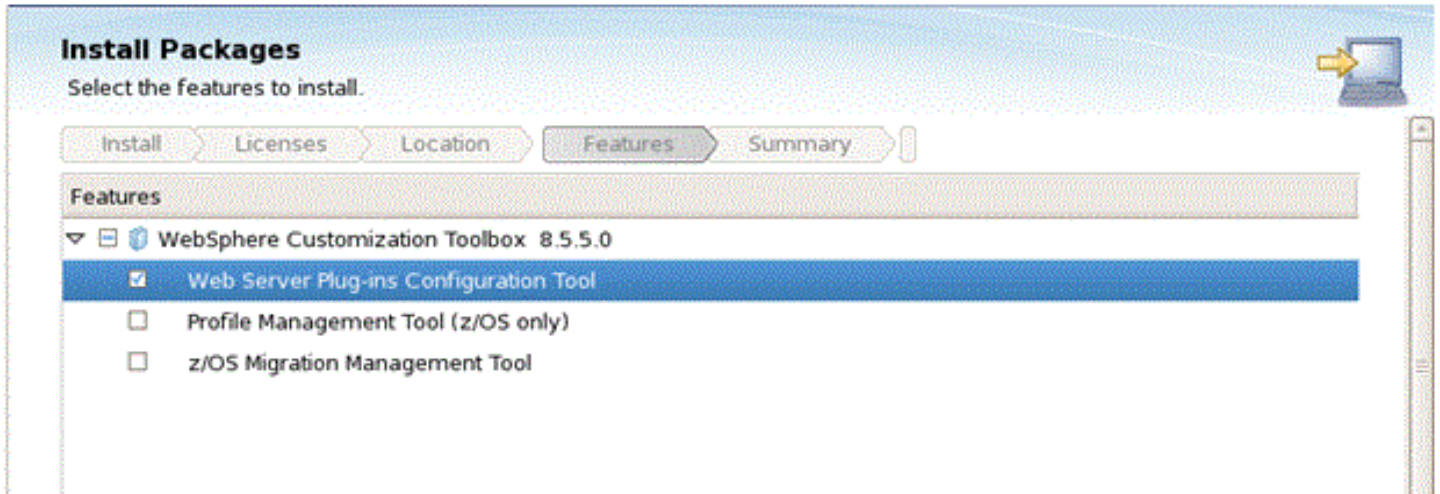
Web Server Plug-ins Configuration Tool

Use the Web Server Plug-ins Configuration Tool to configure the Web server plug-ins for IBM WebSphere Application Server Version 8.5 so that your Web server and application server can communicate with each other. Learn more about configuring the Web server plug-ins from the Web Server Plug-ins Configuration Roadmap for WebSphere Application Server Version 8.5 or the online information center.

Disk Space Information

	Volume	Required	Temporary	Total	Available
Shared Resources Area	Z:	0.0 KB	48.02 MB	48.02 MB	30.08 GB
Installation Directory	Z:	258.34 MB		258.34 MB	30.08 GB

< Back
Next >
Install
Cancel



9. On Install Packages, select features, select **Web Server Plug-ins Configuration Tool**.

10. Click the **Next** button.

Install Packages

Review the summary information.

Install | Licenses | Location | Features | **Summary** |

Target Location
Package Group Name: WebSphere Customization Toolbox V8.5
Installation Directory: Z:\IBM\WebSphere\Toolbox
Shared Resources Directory: Z:\WebSphere85\IMShared

Packages

- WebSphere Customization Toolbox 8.5.0.0
 - Web Server Plug-ins Configuration Tool

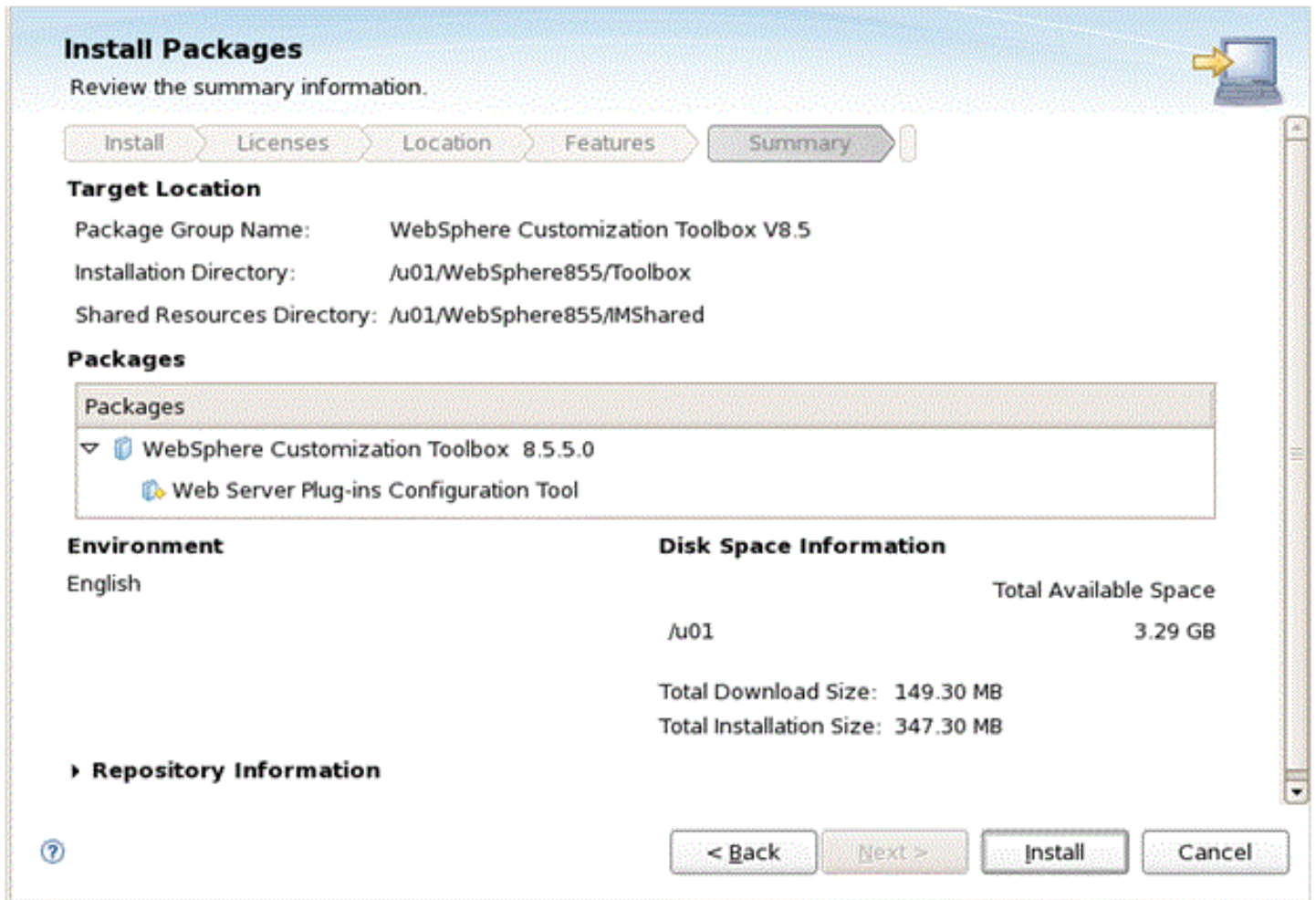
Environment
English

Disk Space Information

Total Available Space	
Z:	30.08 GB
Total Download Size:	48.02 MB
Total Installation Size:	306.36 MB

► **Repository Information**

[?](#) < Back | Next > | **Install** | Cancel



11. On Install Packages, review summary information, verify the accuracy of the selections.

12. Click the **Install** button to begin the installation of the WebSphere Customization Toolbox.

Install Packages

Review the summary information.

Install > Licenses > Location > Features > Summary

Target Location
Package Group Name: WebSphere Customization Toolbox V8.5
Installation Directory: Z:\IBM\WebSphere\Toolbox
Shared Resources Directory: Z:\WebSphere85\IMShared

Packages

- WebSphere Customization Toolbox 8.5.0.0
 - Web Server Plug-ins Configuration Tool

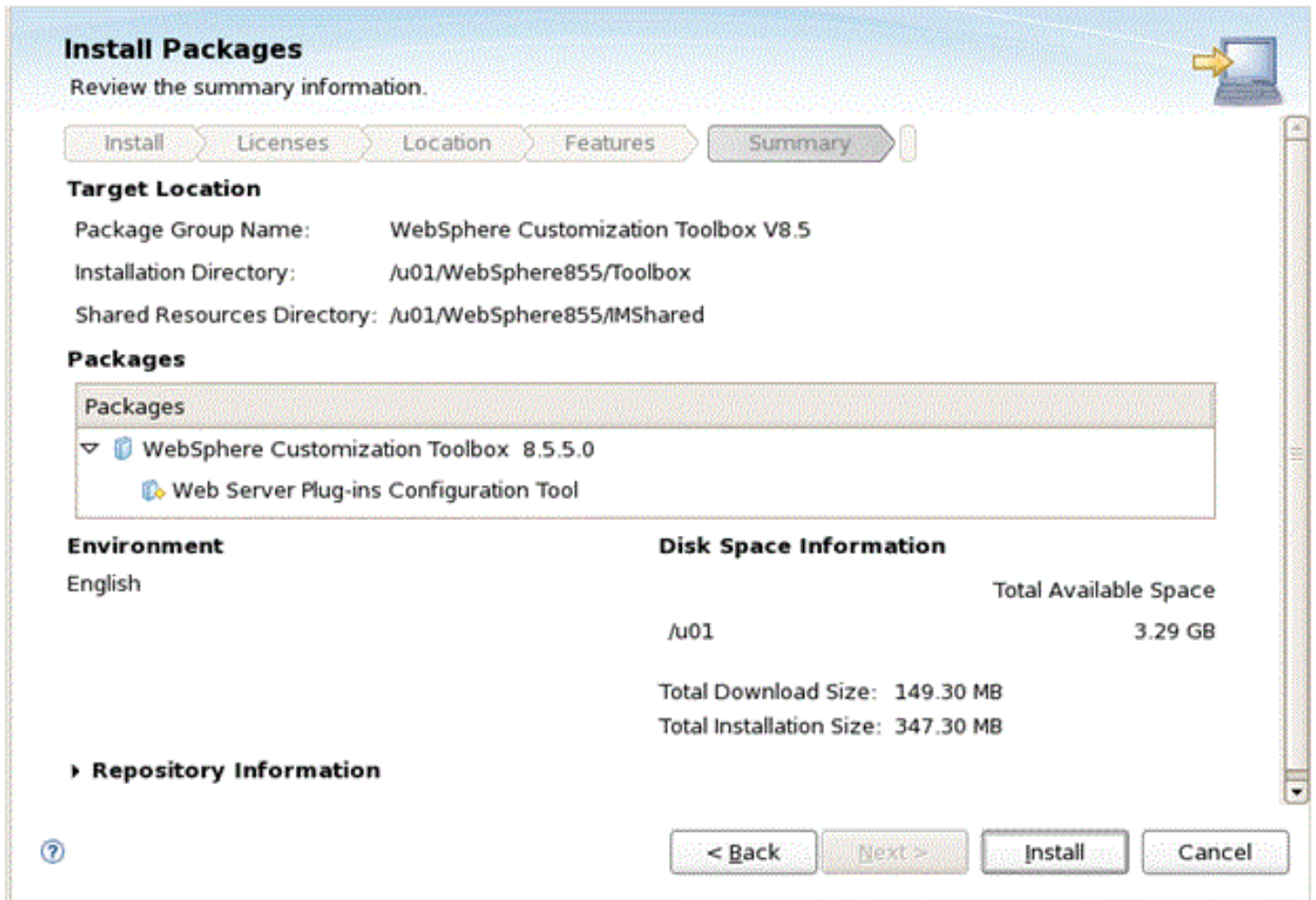
Environment
English

Disk Space Information
Total Available Space
Z: 30.08 GB
Total Download Size: 48.02 MB
Total Installation Size: 306.36 MB

► **Repository Information**

Installing.: Retrieving files at 164.1 MB/s. 12 MB of 48 MB (28%) completed.

Pause Download Cancel



The progress screen is displayed. Wait for the progress to complete 100%, which may take several minutes.



13. On Install Packages, verify the installation completed successfully. You may want to click the link: [View Log File](#).

14. Click the **Finish** button.

You are returned to the IBM Installation Manager home screen.

Installing or Updating to WebSphere 8.5.x/9.0 Fix Pack

Use these procedures to install or update your existing WebSphere components to WebSphere 8.5.x/9.0 Fix Pack:

- [Updating the IBM Installation Manager to WebSphere 8.5.x or Greater](#)
- [Updating WebSphere Application Server 8.5.x or Greater](#)
- [Working with the HTTP Server Component](#)
- [Working with the Plug-ins Component](#)

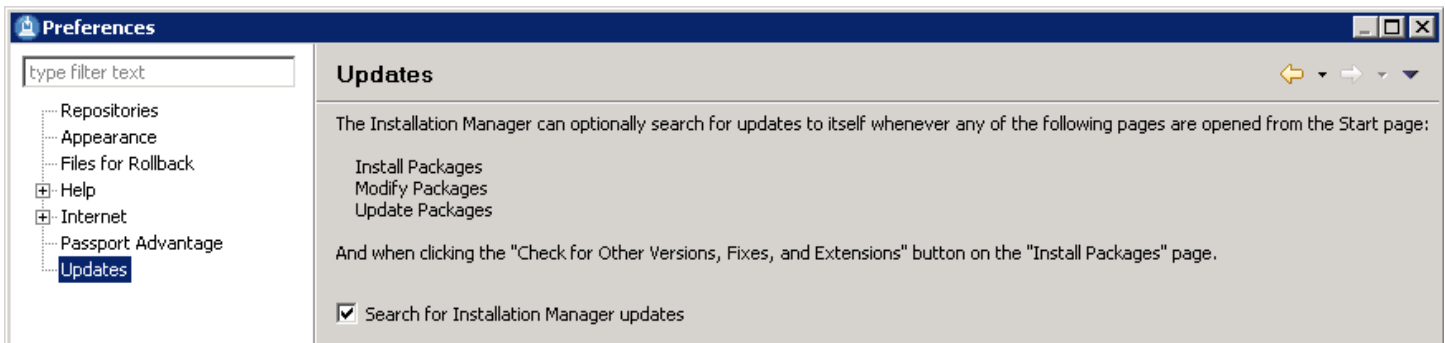
- *Working with the Customization Toolbox Component*

Updating the IBM Installation Manager to WebSphere 8.5.x or Greater

Use this procedure to update the IBM Installation Manager.

Note: For instructions on installing the Update Installer itself, refer to the section of this guide entitled: *Installing the WebSphere Update Installer*.

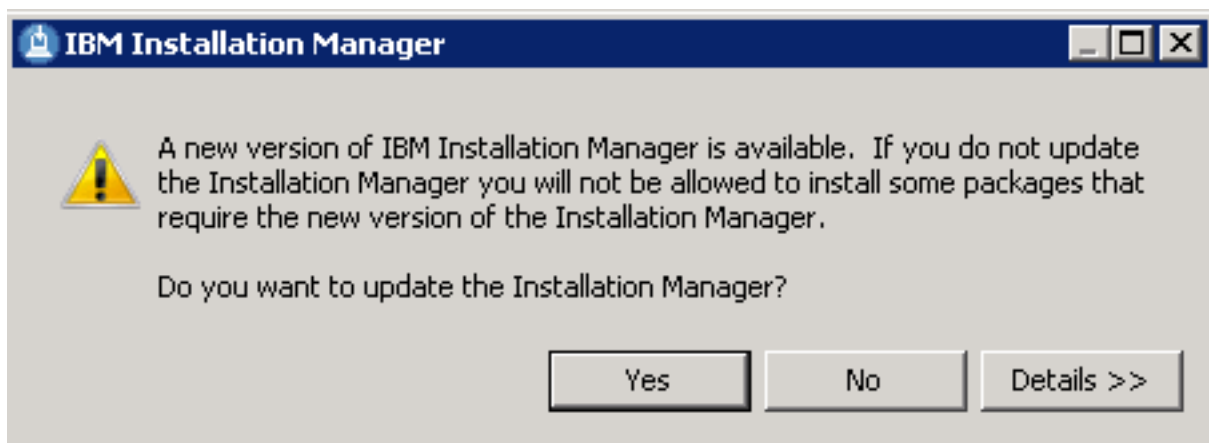
1. Start the IBM Installation Manager using the `IBMIM` executable..
2. Open the Preferences of the IBM Installation Manager.



3. Highlight the **Updates** node and select this checkbox:

Search for Installation Manager Updates

4. Log out of IBM Installation Manager.
5. Log in to the Installation Manager and you will be prompted if a new version of Installation Manager is available.

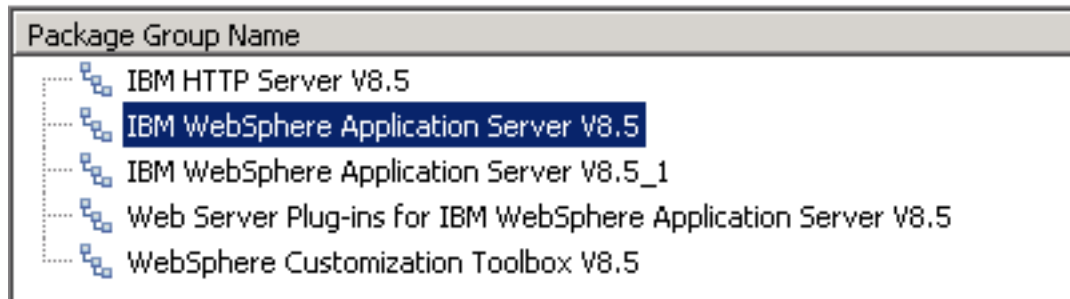


6. On IBM Installation Manager, click the **Yes** button and follow the installation wizard to complete the upgrade.

Updating WebSphere Application Server 8.5.x or Greater

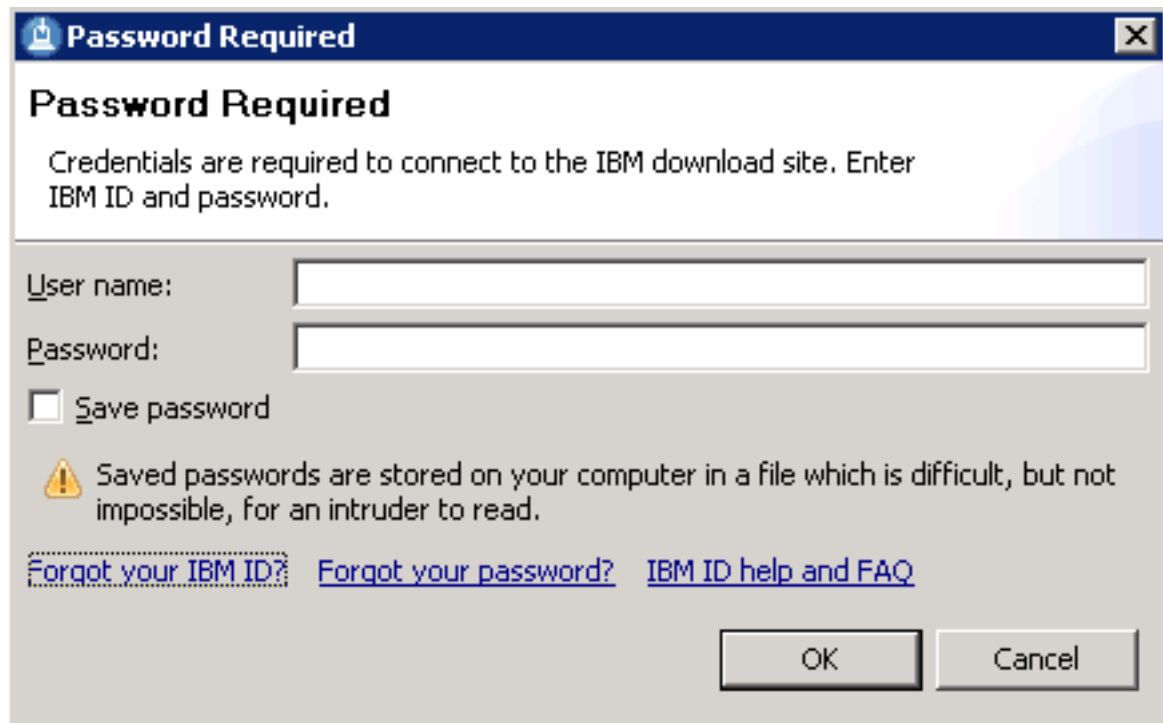
Use this procedure to update WebSphere 8.5.x or greater.

1. Stop all the WebSphere Processes including the HTTP Server and Web Server.
2. Launch the IBM Installation Manager using the `IBMIM` executable.
3. Select the **Update** option.



4. On Package Group Name, select the **IBM WebSphere Application Server** product to which you wish to upgrade. For example:

IBM WebSphere Application Server V8.5.x



5. On Password Required, enter valid credentials for your IBM ID to connect to the IBM download site by completing these fields:

- o **User name**
- o **Password**

Update	Recommended	Vendor
<input checked="" type="checkbox"/> IBM WebSphere Application Server V8.5 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> IBM WebSphere Application Server Network Deployment 8.5.0 (I <ul style="list-style-type: none"> <input type="checkbox"/> Only fixes for version 8.5.0 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Version 8.5.5.0 IBM <input checked="" type="checkbox"/> IBM WebSphere SDK Java Technology Edition (Optional) 7.0.4.0 (I <ul style="list-style-type: none"> <input type="checkbox"/> Only fixes for version 7.0.4.0 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Version 7.0.4.1 IBM 		

Note: You can uncheck the **Show Recommended only** option to list all available fix packs.

6. Review the license agreement and accept the terms in order to continue.

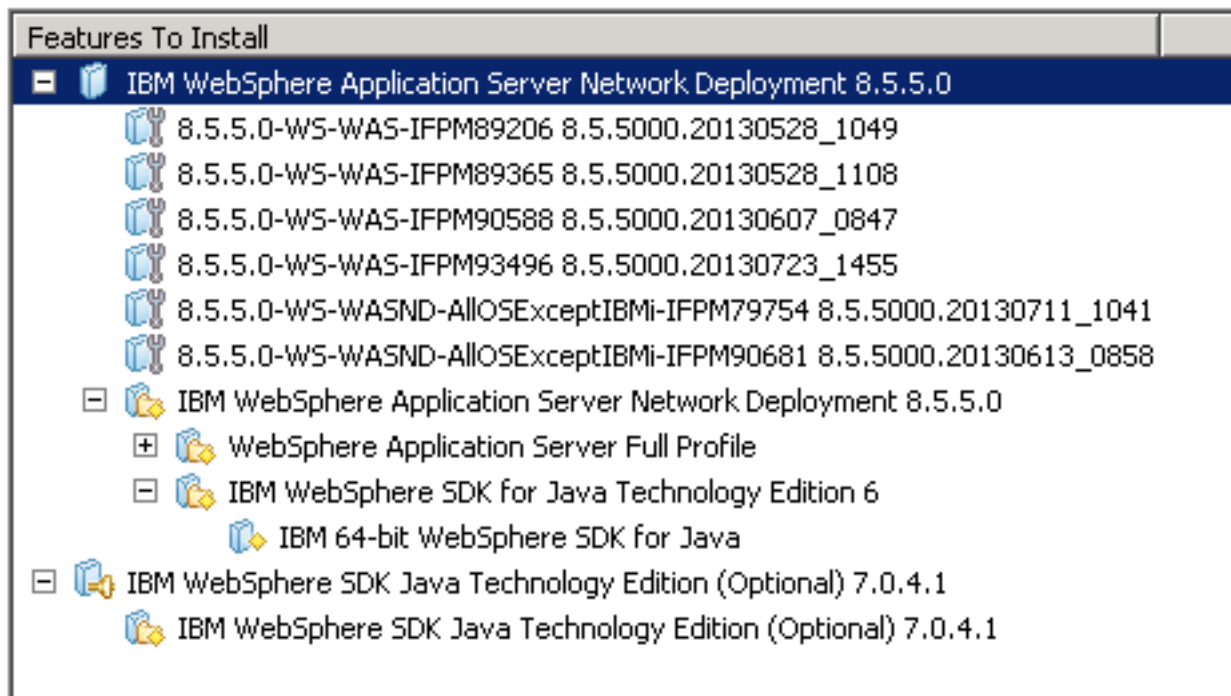
Fixes	Recommended	Vendor
<input checked="" type="checkbox"/> IBM WebSphere Application Server Network Deployment 8.5.5.0 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 8.5.5.0-WS-WAS-IFPM89206 8.5.5000.20130528_1049 ✓ <input checked="" type="checkbox"/> 8.5.5.0-WS-WAS-IFPM89365 8.5.5000.20130528_1108 ✓ <input checked="" type="checkbox"/> 8.5.5.0-WS-WAS-IFPM90588 8.5.5000.20130607_0847 ✓ <input checked="" type="checkbox"/> 8.5.5.0-WS-WAS-IFPM93496 8.5.5000.20130723_1455 ✓ <input checked="" type="checkbox"/> 8.5.5.0-WS-WASND-ALIOSExceptIBMi-IFPM79754 8.5.5000.20130711_1041 ✓ <input checked="" type="checkbox"/> 8.5.5.0-WS-WASND-ALIOSExceptIBMi-IFPM90681 8.5.5000.20130613_0858 ✓ 		IBM
<input checked="" type="checkbox"/> IBM WebSphere SDK Java Technology Edition (Optional) 7.0.4.1		IBM

7. You can accept the recommended fix packs that are automatically checked.

Note: The recommended fix packs may vary depends on the platform.



8. On Features, use the checkboxes to select the components you want to install.



9. On Features to Install, review the summary of components that you have selected and click the **Update** button.

Updating.: Retrieving files at 682 KB/s. 672 MB of 825 MB (82%) completed.



The update process downloads the fix pack from the IBM web site. The download speed depends on the network connections.



The packages are updated. [View Log File](#)

All the following updates were installed:

Update	Installation Directory
[-] IBM WebSphere Application Server V8.5	
[-] IBM WebSphere Application Server Network Deployment 8.5.5.0	
8.5.5.0-WS-WAS-IFPM89206 8.5.5000.20130528_1049	
8.5.5.0-WS-WAS-IFPM89365 8.5.5000.20130528_1108	
8.5.5.0-WS-WAS-IFPM90588 8.5.5000.20130607_0847	
8.5.5.0-WS-WAS-IFPM93496 8.5.5000.20130723_1455	
8.5.5.0-WS-WASND-AllOSExceptIBMi-IFPM79754 8.5.5000.20130711_1041	
8.5.5.0-WS-WASND-AllOSExceptIBMi-IFPM90681 8.5.5000.20130613_0858	
IBM WebSphere SDK Java Technology Edition (Optional) 7.0.4.1	

10. Click the **Finish** button when the update is completed as indicated by this message:

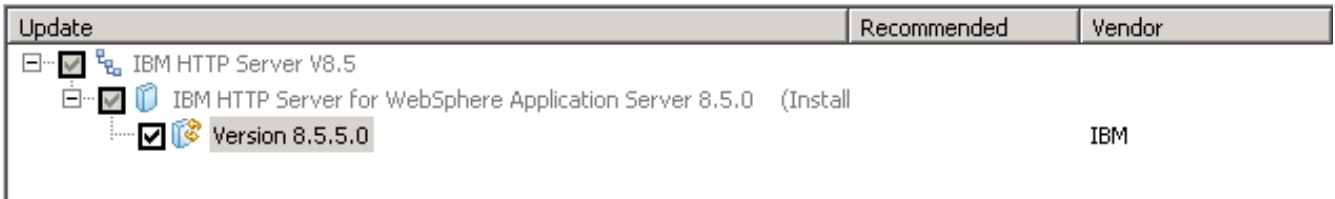
The packages are updated.

Working with the HTTP Server Component

Use this procedure to install or update the IBM HTTP Server Component for WebSphere 8.5.x or greater.

1. Launch the IBM Installation Manager using the `IBMIM` executable.

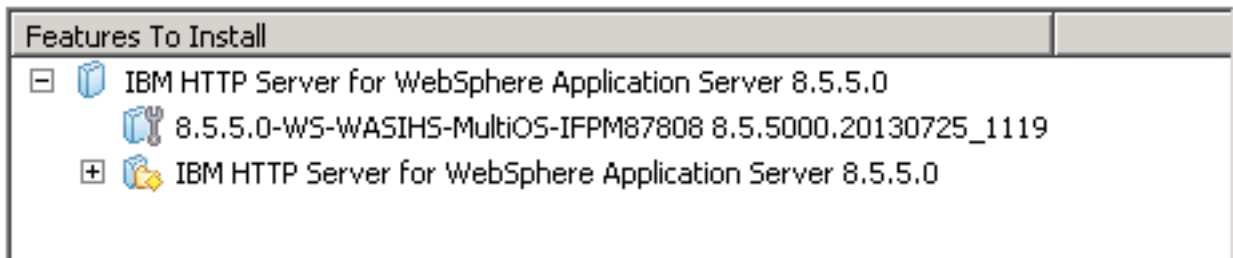
2. Select the **Update** option.



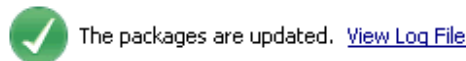
3. On Update, select this component for the version you want to install or update:

IBM HTTP Server

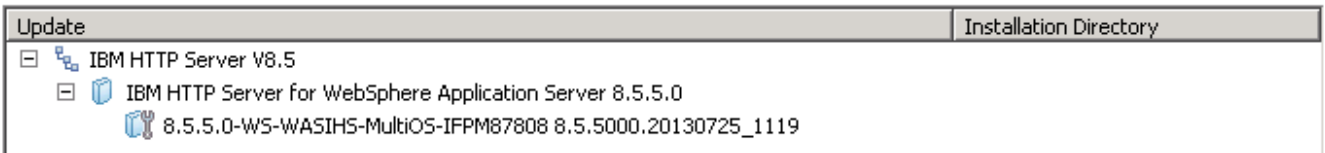
Updates



4. On Features to Install, review the summary of selected features and click **Update**.



All the following updates were installed:



5. Click the **Finish** button when the update is completed as indicated by this message:

The packages are updated.

Working with the Plug-ins Component

Use this procedure to install or update the Plug-ins Component for WebSphere 8.5.x or greater.

1. Launch the IBM Installation Manager using the `IBMIM` executable.

2. Select the **Update** option.

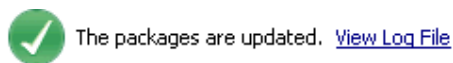
Update	Recommended	Vendor
<input checked="" type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server V8.5		
<input checked="" type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server 8.5.0		
<input checked="" type="checkbox"/> Version 8.5.5.0		IBM

3. On Update, select this component for the version you want to install or update:

Web Server Plug-ins for IBM WebSphere Application Server

Features
<input checked="" type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server 8.5.5.0
<input checked="" type="checkbox"/> IBM WebSphere SDK for Java Technology Edition 6
<input type="checkbox"/> IBM 32-bit WebSphere Runtime Environment for Java
<input checked="" type="checkbox"/> IBM 64-bit WebSphere Runtime Environment for Java

4. On Features, review the summary of selected features and click **Update**.



The following update was installed:

Update	Installation Directory
<input type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server V8.5	
<input checked="" type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server 8.5.5.0	

5. Click the **Finish** button when the update is completed as indicated by this message:

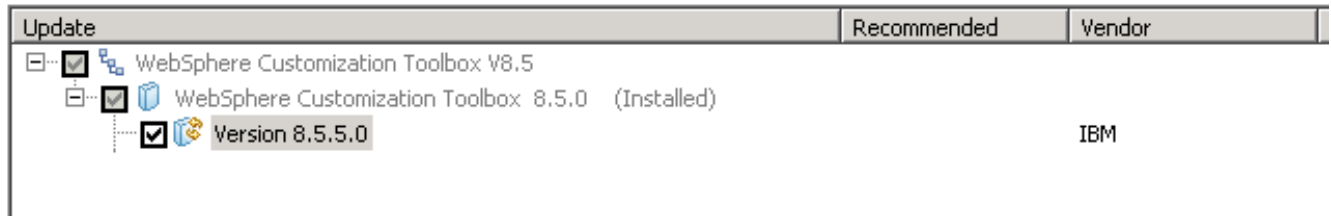
The packages are updated.

Working with the Customization Toolbox Component

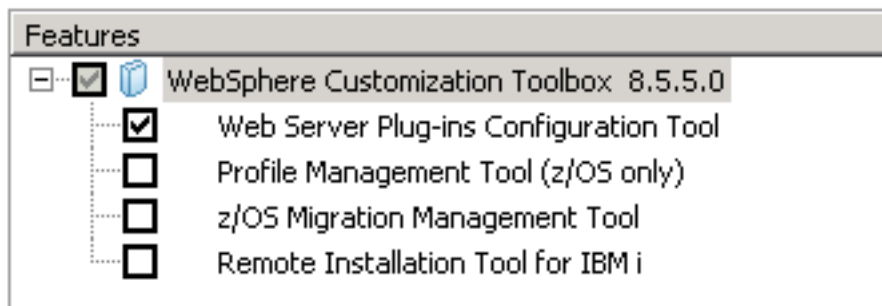
Use this procedure to install or update the Customization Toolbox Component to WebSphere 8.5 or greater.

1. Launch the IBM Installation Manager using the `IBMIM` executable.

2. Select the **Update** option.

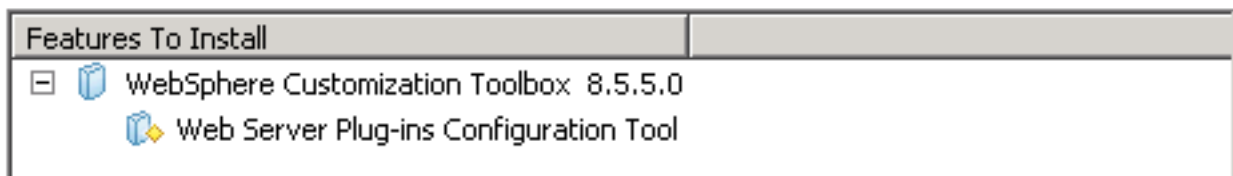


3. On Update, select this component for the version you want to install or update:
WebSphere Customization Toolbox

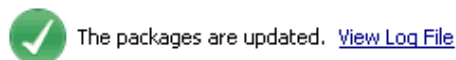


4. On Features, verify the component you want to installed is selected..

Updates



5. On Update, review the summary of selected features and click **Update**.



The packages are updated. [View Log File](#)

The following update was installed:



6. Click the **Finish** button when the update is completed as indicated by this message:
The packages are updated.
7. Restart all HTTP Services.

8. Restart all Web Server instances.

Configuring the IBM Web Server Plug-in

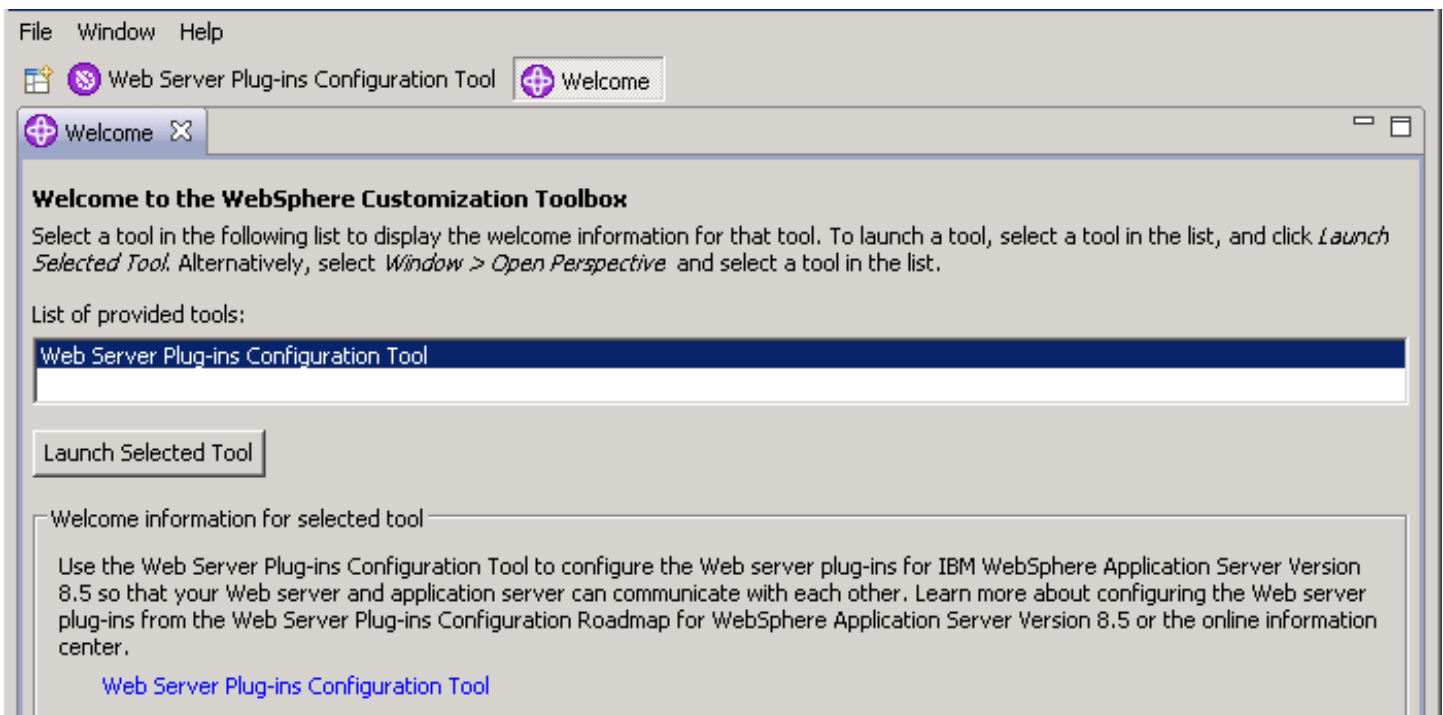
After you have updated all software packages as described in the preceding section of this document entitled: *Installing or Updating to WebSphere 8.5.x/9.0 Fix Pack*, you must configure the plug-in. This process is performed through the IBM WebSphere Customization Toolbox. You must complete this configuration before you install the JD Edwards EnterpriseOne HTML Web Server.

1. Start the WebSphere Customization Toolbox using this navigation by starting the executable in this directory:

Start > Programs > IBM WebSphere > WebSphere Customization Toolbox V8.5.x/9.0 > WebSphere Customization Toolbox

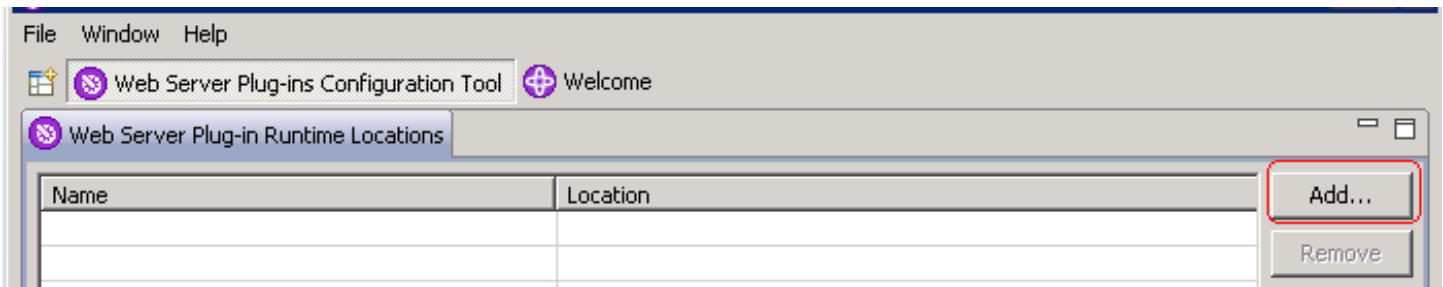
```
/u01/WebSphere855/Toolbox/WCT/wct.sh
```

Note: If the Customization Toolbox failed to start with this error: **See the log file in /root/.ibm/.WebSphere/workspace/WCT85/.metadata/.log** For details on the above error, review the IBM solution.



2. On WebSphere Customization Toolbox, Welcome, in the list of provided tools, highlight the Web Server Plug-ins Configuration Tool.

3. Click the **Launch Selected Tool** button.



4. In the Web Server Plug-in Runtime Location section, click the **Add** button.

Add Web Server Plug-in Location

Add a previously installed Web server plug-in location to your working set.

Web server plug-in location

Name:

Location:

Add Web Server Plug-in Location

Add a previously installed Web server plug-in location to your working set.

Web server plug-in location

Name:

Location:

5. On Add Web Server Plug-in Location, complete these fields:

- o *Name*

Enter a name for the plug-in location. For example:

IHS_webserver1

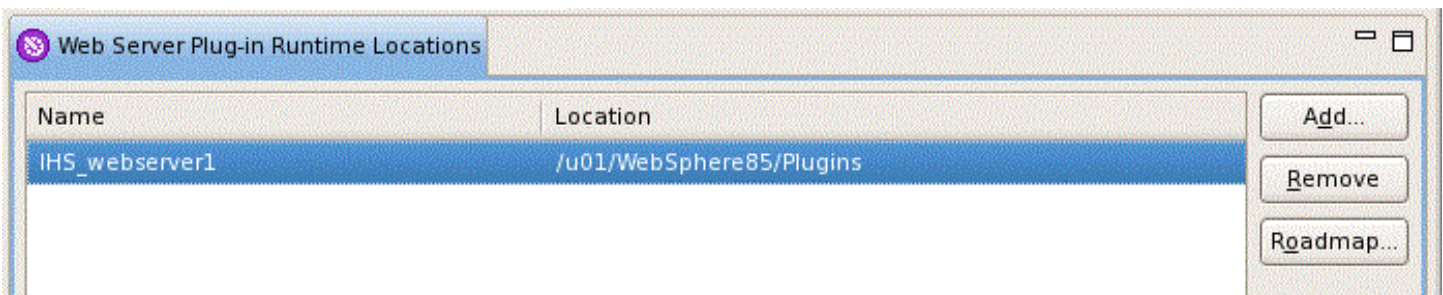
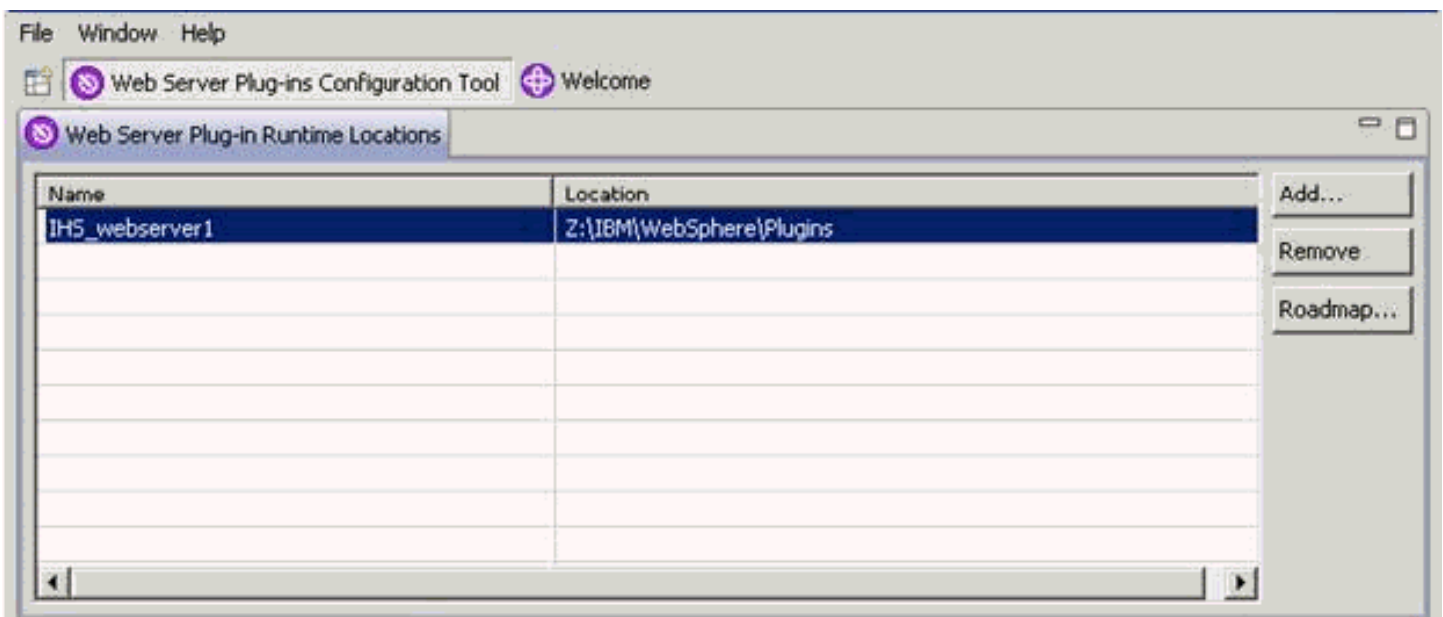
- o *Location*

Enter the location of your plug-in. The default plug-in directory is:

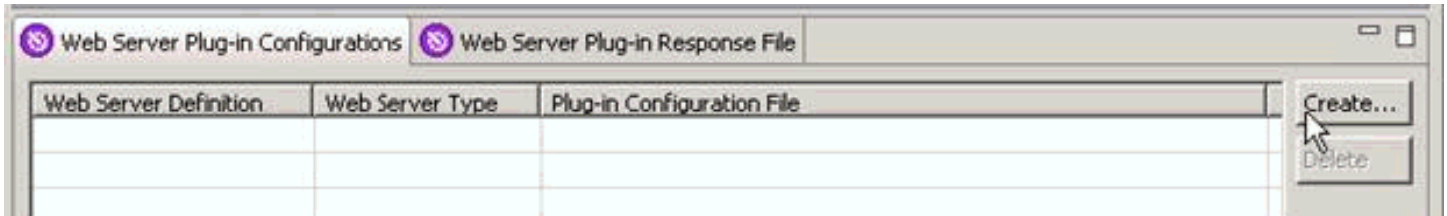
`Z:\IBM\WebSphere\Plugins`

`/u01/WebSphere855/Plugins`

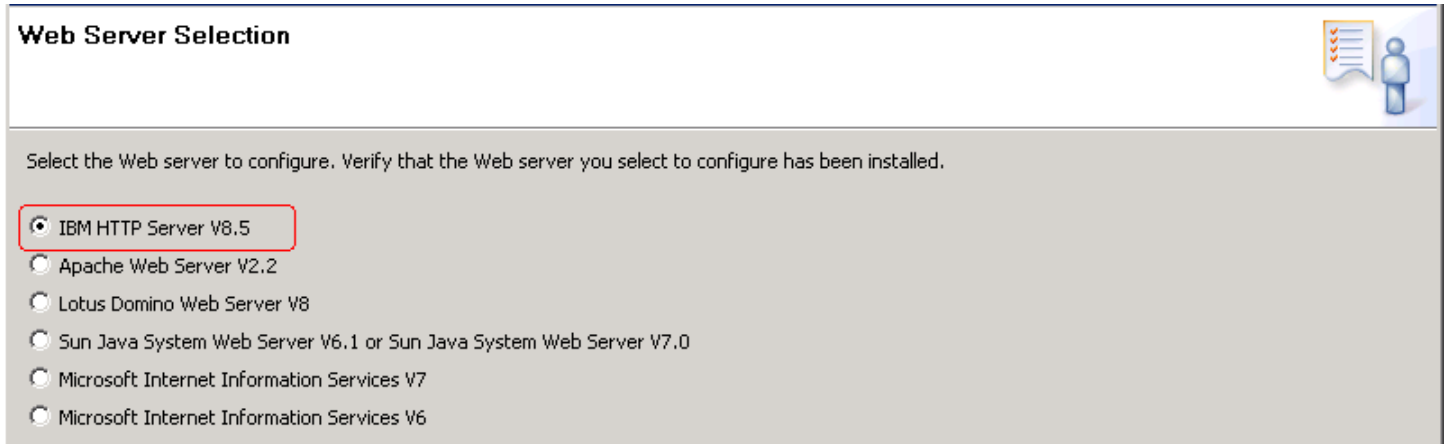
6. Click the **Finish** button.



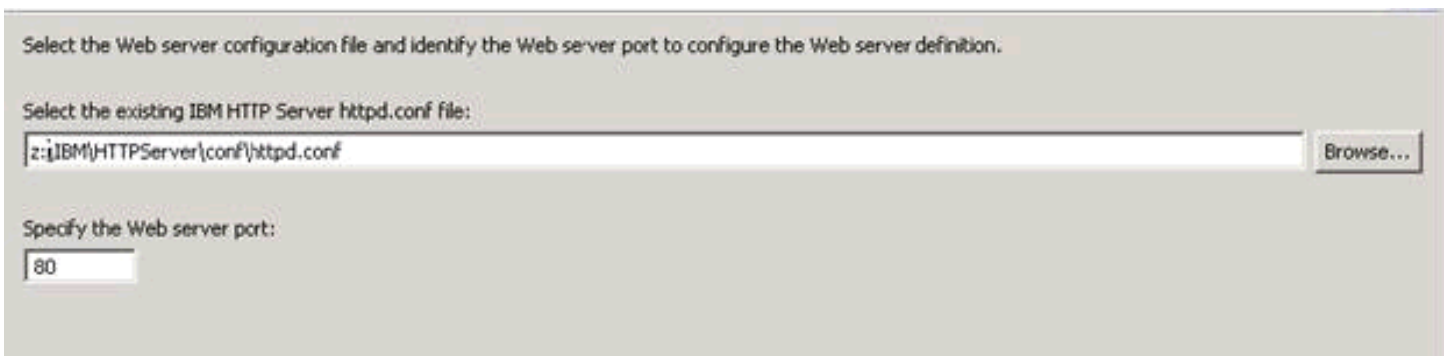
7. In the upper half of the form (shown above), verify the plug-in location that you just defined is displayed in the Web Server Plug-in Runtime Locations section in the upper half of the form.



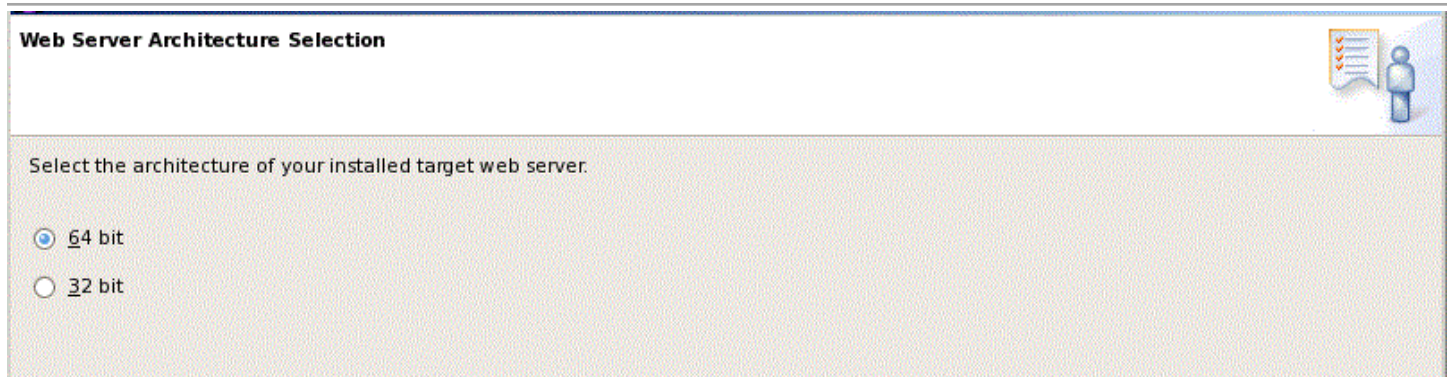
8. In the lower half of the screen (shown above), click the **Create** button.



9. On Web Server Selection, choose this radio button:
IBM HTTP Server V8.5.



10. On Web Server Selection, choose this radio button:
IBM HTTP Server V8.5/9.0.



11. On Web Server Architecture Selection, choose your bitness.
12. On Web Server Configuration File Selection, complete these fields:

- *Select the existing IBM HTTP Server httpd.conf file*

Enter in the location of your `httpd.conf` file. For example:

```
z:\IBM\HTTPServer\conf\httpd.conf
```

```
/u01/WebSphere855/HTTPServer/conf/httpd.conf
```

- *Specify the Web server port*

Specify a web server port that matches the port used by your HTTP server.

13. Click the **Next** button.



You will receive the Non-Administrative user configuration limitation screen if you are not logged on as an administrative user.

14. Click the **Next** button.

Optionally configure an administrative server to administer the Web server. You can manage the Web server from a WebSphere Application Server administrative console by using the IBM HTTP Server administrative server to control the communication between them.

Setup IBM HTTP Server Administration Server

Specify a port number for IBM HTTP Server administration server to communicate. The default port is 8008. If the default port is already in use, then change to another port that is available. Running IBM HTTP Server administration server without root or Administrative privileges might restrict use of ports below 1024.

HTTP Administration Port:

Optionally create a user ID and password to authenticate to the IBM HTTP Server Administration Server from the WebSphere Application Server administrative console. The user ID and password is encrypted and stored in the conf/admin.passwd file. You can create additional user IDs after the configuration by using the htpasswd utility.

Create a user ID for IBM HTTP Server Administration Server authentication

User ID:

Password:

Confirm password:

15. If you are signed on as an Administrative User, you will see the above screen. You can choose to create a user ID for IBM HTTP Server.

16. Click the **Next** button.

Choose whether to use a Windows service to run IBM HTTP Server administration server. The Administration Server must be run as a Windows service to be able to manage the web server from a WebSphere Application Server administration Console. If a service is created, also select a startup type to have the Windows service start manually or automatically when rebooting the system.

Run IBM HTTP Server Administration Server as a Windows Service.

Log on as a local system account

Log on as a specified user account

User name:

Password:

The user account that runs the Windows service must have the following user rights:

- Act as part of the operating system
- Log on as a service

Startup type:

17. You can choose whether to use a Windows service to run IBM HTTP Server administration server. It is recommended that you select to run the Server as a Windows Service. Optionally you can change the startup type to Manual if you are not going to use the HTTP Administration server often.

Use a Web server definition to manage a Web server through the WebSphere Application Server administrative console or the wsadmin tool. The definition name must be unique because this name is used to identify this Web server in the administrative console.

Specify a unique Web server definition name:

webserver1

The Web server definition name must not be empty and it must not contain the following special characters or space:

/*, ; = + ? | < > & % ' " [] > # \$ ^ { }

Note: a period(.) is not valid if it is the first character.

18. On Web Server Definition name, specify a web server name. If you already have a web server defined (for example, webserver1), then you should use the same name here.

Configure the Web server plug-ins to the computer where the Web server exists. When the Web server and application server are not on the same computer, choose the remote configuration scenario. When both Web server and application server are on the same computer, choose the local configuration scenario. In the local scenario, the Web server definition you create in this wizard is defined automatically in the application server.

Configuration scenario

(Remote) Host name or IP address of the application server

(Local) Installation location of WebSphere Application Server

Z:\IBM\WebSphere\AppServer

Browse...

For the remote configuration scenario, the host name must be accessible on the network through one of the following address formats:

Fully qualified domain name system (DNS) host name
The default short DNS host name
Numeric IP address

Configure the Web server plug-ins to the computer where the Web server exists. When the Web server and application server are not on the same computer, choose the remote configuration scenario. When both Web server and application server are on the same computer, choose the local configuration scenario. In the local scenario, the Web server definition you create in this wizard is defined automatically in the application server.

Configuration scenario

(Remote) Host name or IP address of the application server

(Local) Installation location of WebSphere Application Server

/u01/WebSphere85/AppServer

Browse...

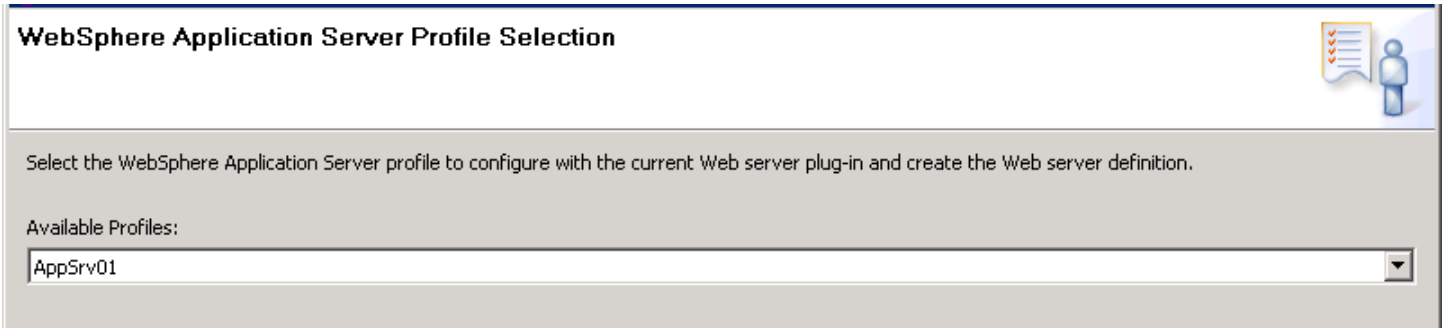
For the purposes of this guide, it is assumed that the HTTP Server and WebSphere Application Server are located on the same machine. Therefore, on Configuration Scenario Selection, the radio button for **(Local) Installation location of WebSphere Application Server** is selected.

19. Use the **Browse** button to locate the installation location of the WebSphere Application Server. For example:

```
z:\IBM\WebSphere\AppServer
```

```
/u01/WebSphere855/AppServer
```

20. Click the **Next** button.



21. On WebSphere Application Server Profile Selection, use the drop-down menu in Available Profiles to select the WebSphere Application Server profile to configure with the current Web server plug-in and create the Web server definition. For example, an available profile might be named AppSrv01.

Note: If the Available Profiles field is blank and no options show on the drop down, you must Cancel from this procedure. Create a profile and either use the advanced option to automatically create a web server definition or manually create the web server in the IBM WebSphere Application Server Administrative Console. For more information on either option, refer to the IBM info center:

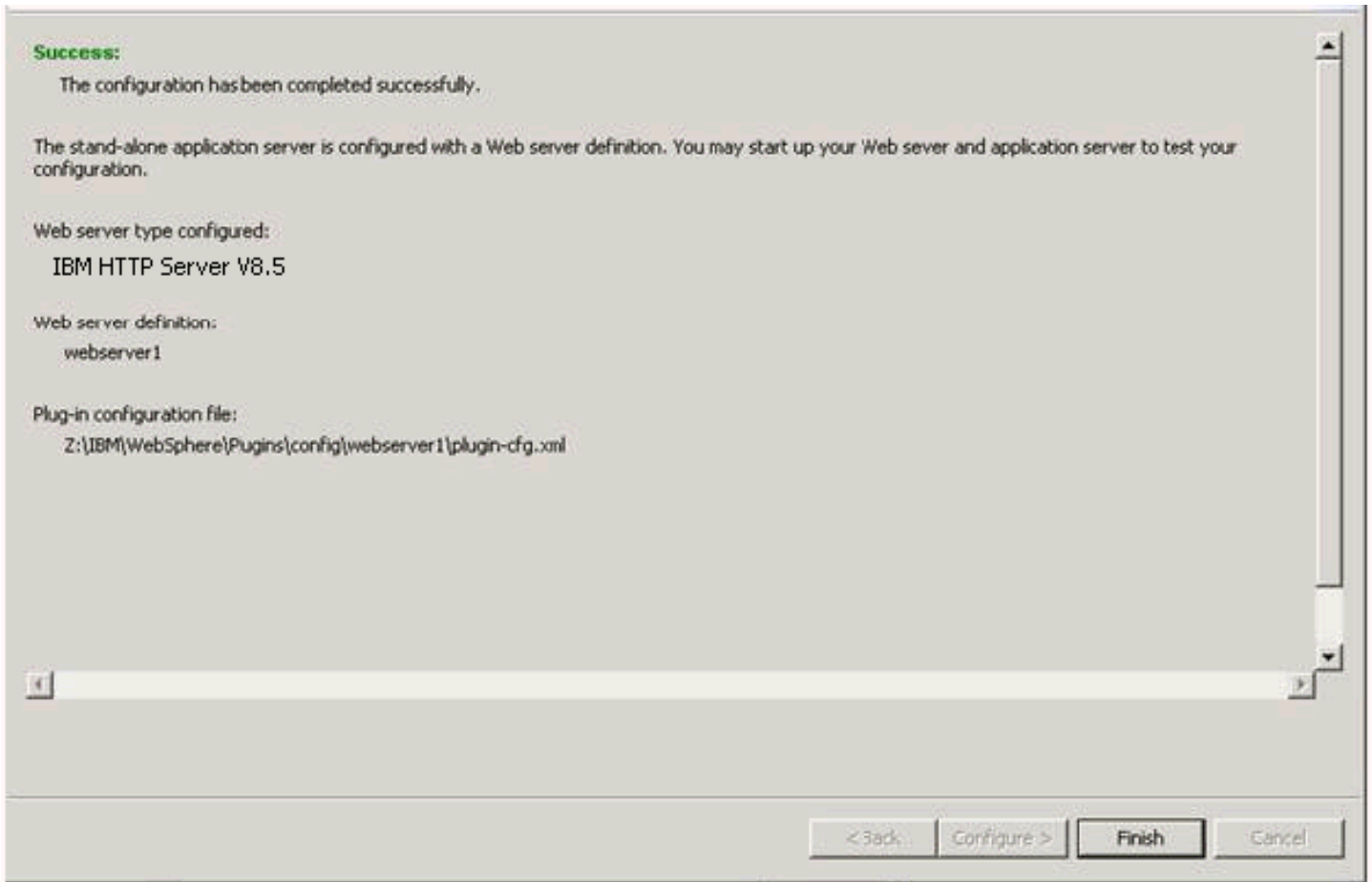
<http://www-01.ibm.com/software/webservers/appserv/was/library/>

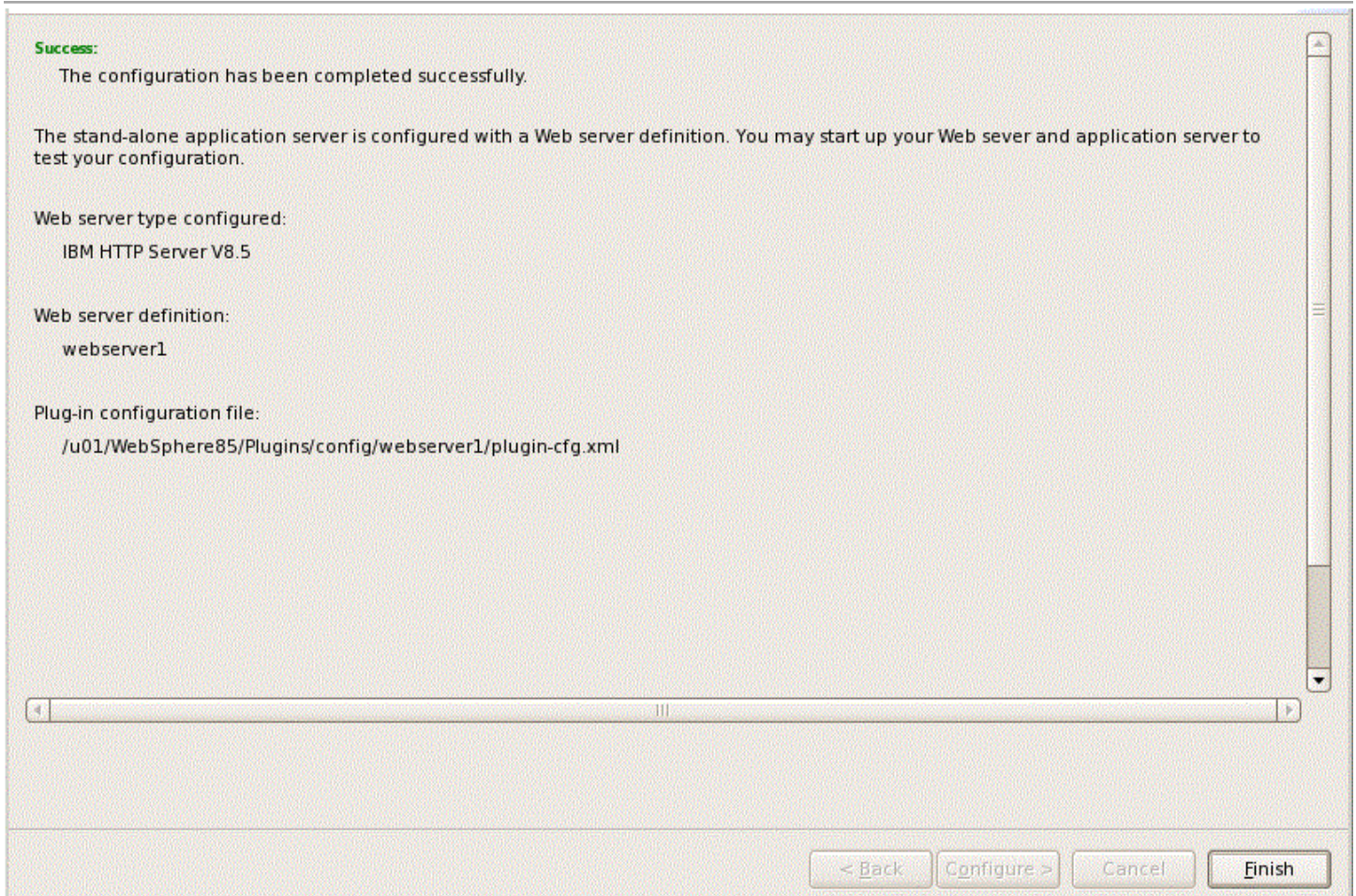
22. Click the **Next** button.



23. On Plug-in Configuration Summary, review the information for accuracy.

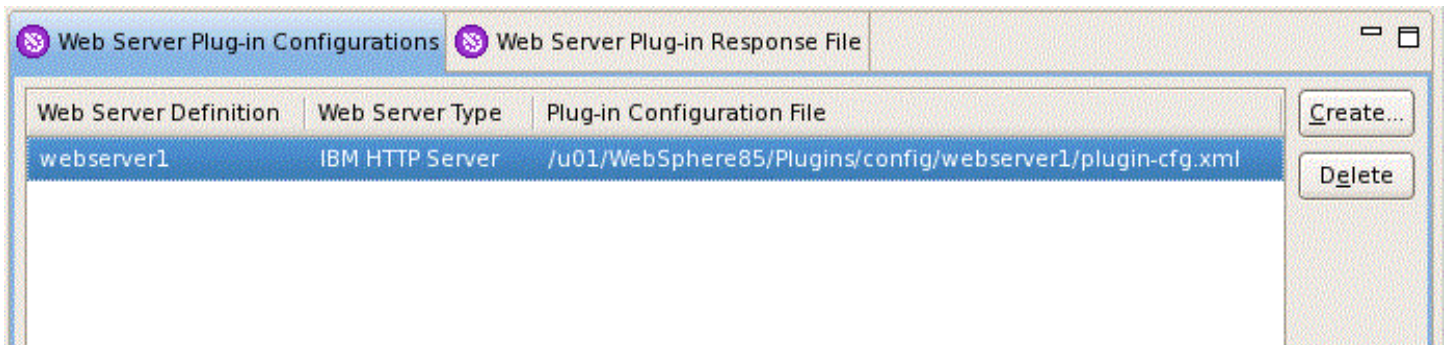
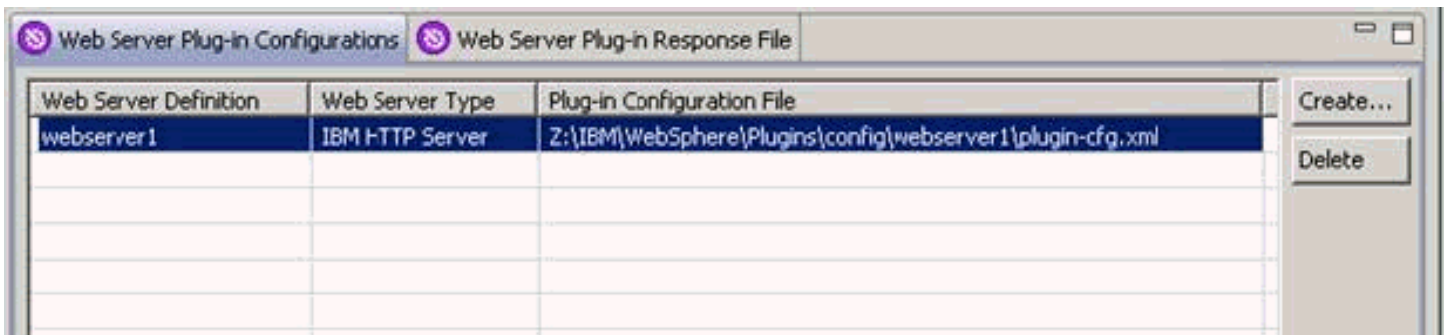
24. Click the **Configure >** button.





25. On Plug-in Configuration Result, verify that the configuration completed successfully. If necessary, follow the instructions to correct any errors.

26. Click the **Finish** button.



27. On WebSphere Customization Toolbox, with the Web Server Plug-in Configurations tab selected, verify that the server definition exists.

Setting the HTTP Server Properties

To use IBM WebSphere Application Server 8.5.x/9.0 properly with Oracle JD Edwards EnterpriseOne, you must set the HTTP server to automatically generate and propagate the plug-in. These steps briefly describe this process.

1. Log into the admin console for IBM WebSphere Application Server
2. Select Servers > Server Types > Web Servers.
3. Select your web server.

4. On the right hand side of the screen, select Additional Properties > Plug-in properties.

Plug-in properties

Ignore DNS failures during Web server startup

* Refresh configuration interval
60 seconds

Repository copy of Web server plug-in files:

* Plug-in configuration file name
plugin-cfg.xml View

Automatically generate the plug-in configuration file

Automatically propagate plug-in configuration file

* Plug-in key store file name
plugin-key.kdb

Manage keys and certificates

Copy to Web server key store directory

Additional Properties

- Request and Response
- Caching
- Request Routing
- Custom Properties

5. Make any necessary changes and ensure the checkboxes are selected next to these two properties:
 - o Automatically generate the plug-in configuration file
 - o Automatically propagate plug-in configuration file
6. Click **Apply**.
7. Click the **Save** button to save all changes.

Manually Generating a Plug-in

Occasionally, you may to manually generate the web server plug-in. The most common error that requires manual plug-in generation is the "HTTP 404" when trying to access the software. This section briefly explains how to manually generate the plug-in.

1. Log in to the WebSphere Application Server Administration Console for your profile.

2. Select Server Types > Web Servers.

Select	Name	Web server Type	Node	Host Name	Version	Status
<input checked="" type="checkbox"/>	webserver1	IBM HTTP Server	DENPTW22Node01	DENPTW22.mlab.jdedwards.com	ND 8.5.0.0	

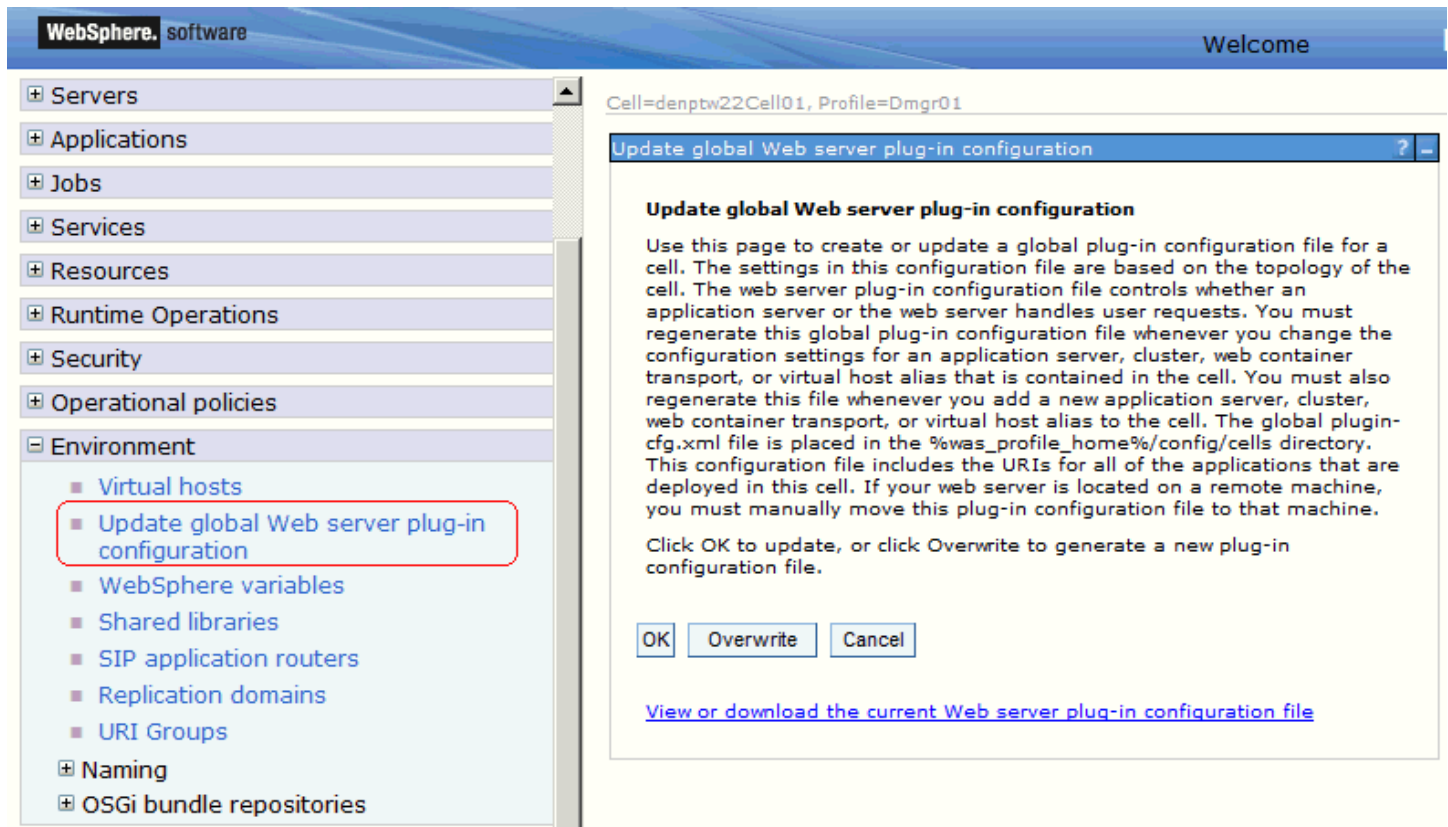
Total 1

3. Check the box next to the web server definition.
4. Click the **Generate Plug-in** button.
5. Click the **Propagate Plug-in** button.
6. Log off of the Admin Console.

Note: Federated (Clustered) Web Servers. If you are using WebSphere Application Server and running JD Edwards EnterpriseOne as part of a federated (or clustered) web server, you may need to regenerate the WebSphere global plugin configuration after deploying the newest tools release. This is required when new servlets have been added to the tools release you are deploying. To update (regenerate) plugins, refer to the following procedure.

To update (regenerate) and propagate the global web server plugin configuration:

1. Log on to the Deployment Manager Administration Console using the Dmgr01 profile.



2. Expand the Environment node and select **Update global Web server plug-in configuration**.
3. Review the content in the right-hand pane and note the location of the plug-in file in the description. For example, the description might say:

The global plugin-cfg.xml file is placed in the %was_profile_home%/config/cells directory.

4. Click the **OK** button.

Manually Editing the HTTP Configuration File

CAUTION: You must perform this step in order for JD Edwards EnterpriseOne HTML Server to work correctly.

To manually edit the HTTP configuration file (`httpd.conf`):

1. Locate your `httpd.conf` file. Typically the file is located in this directory:

```
Z:\IBM\WebSphere\HTTPServer\config
```

```
/u01/WebSphere855/HTTPServer/config
```

2. Open the file with an ASCII editor.
3. Assuming the location of your `httpd.conf` is that shown in the previous step, add the following lines to the bottom of the file:

```
LoadModule was_ap22_module "Z:\IBM\WebSphere\Plugins\bin\32bits\mod_was_ap22_http.dll"
```

```
WebSpherePluginConfig "Z:\IBM\WebSphere\Plugins\config\webserver1\plugin-cfg.xml"
```

```
LoadModule was_ap22_module "/u01/WebSphere855/Plugins/bin/64bits/mod_was_ap22_http.so"
```

Note: The extension of the `mod_was_ap22_http` file varies based on platform.

```
WebSpherePluginConfig "/u01/WebSphere855/Plugins/config/webserver1/plugin-cfg.xml"
```

4. Save and close the `httpd.conf` file.
5. Stop and restart HTTP Server from the Windows Services panel.
6. Stop the HTTP Server from the bin directory using this command:

```
./apachectl stop
```

7. Restart the HTTP Server from the bin directory using this command:

```
./apachectl start
```

4 Installing and Configuring WebSphere 7.0

Performing the Pre-installation Procedure

Before you install WebSphere, you must first set up a local user account that is in the Administrative group and has these advanced user rights:

- Act as part of operating system
- Create a token object.
- Log on as a service
- Replace a process level token

To set up a local user account with the above user rights, navigate to:

Control Panel > Administrative Tools > Local Security Policy > Local Policies > Users Rights Assignment

On User Rights Assignment, double-click one of the user rights, click Add, select a local user account from the list, and click OK. Repeat this process for the remaining user rights.

Installing WebSphere Application Server 7.0 (Using Network Deployment CD or Downloaded Image)

Note: It is important to follow the exact sequence of steps in this procedure.

Complete these steps to install the WebSphere Application Server version 7.0, and then install the EnterpriseOne Web Server to that installation. The WebSphere 7.0 Network Deployment CD may be used to install WebSphere Application Server for a base or standalone configuration.

Note: The typical IBM WebSphere installation includes the Application Server itself, HTTP Server, and the Plug-in components. You must install all these components to ensure WebSphere Application Server 7.0 is functioning correctly. For any additional requirements and Fix Packs once the basic install is completed, review the minimum technical requirements (MTRs) as described in **Accessing Certifications** in this document.

1. If you have not already set the display, complete this step. For example, if your local display has an IP address of 10.139.157.46:0.0, enter this command to properly set the display:

```
export DISPLAY=10.139.157.46:0.0
```

Note: For Solaris only, verify that you are in the ksh shell before executing the command using the `echo $SHELL` command.

2. If you are installing WebSphere 7.0 on Solaris with Exceed, enter this command to set the environment variable:

```
export NO_J2D_DGA=1
```

3. Insert the WebSphere Application Server Network Deployment CD, Version 7.0 (32-bit) or extract the downloaded image into a temporary location.
4. Enter this command to mount the CD drive:

```
mount /cdrom
```

Note: The syntax of the mount command can vary by platform, and is not required for Sun platforms.

5. Enter this command to change to the CD drive:

```
cd /cdrom
```

6. Run the launchpad executable from the extracted directory:

```
cd x:\dump\was7_windows\cd1
```

```
x:\dump\was7_windows\cd1 > launchpad.exe
```

where **x:** is the drive on which you downloaded the WebSphere 7.0 image.

```
./launchpad.sh
```

WebSphere Application Server Network Deployment

WebSphere. software

Language selection: English

Welcome

WebSphere Application Server Installation

IBM HTTP Server Installation

Web Server plug-ins Installation

WebSphere DMZ Secure Proxy Server Installation

Application Clients Installation

IBM Update Installer for WebSphere Software Installation

IBM WebSphere Installation Factory

IBM Edge Components

IBM Support Assistant

IBM Tivoli Composite Application Manager for WebSphere Application Server

Exit

Welcome to WebSphere Application Server Network Deployment

IBM WebSphere Application Server Network Deployment, Version 7.0 is an integrated platform that contains an Application Server, Web development tools, a Web server, and additional supporting software and documentation. This launchpad may serve as a single point of reference for installing your Application Server environment.

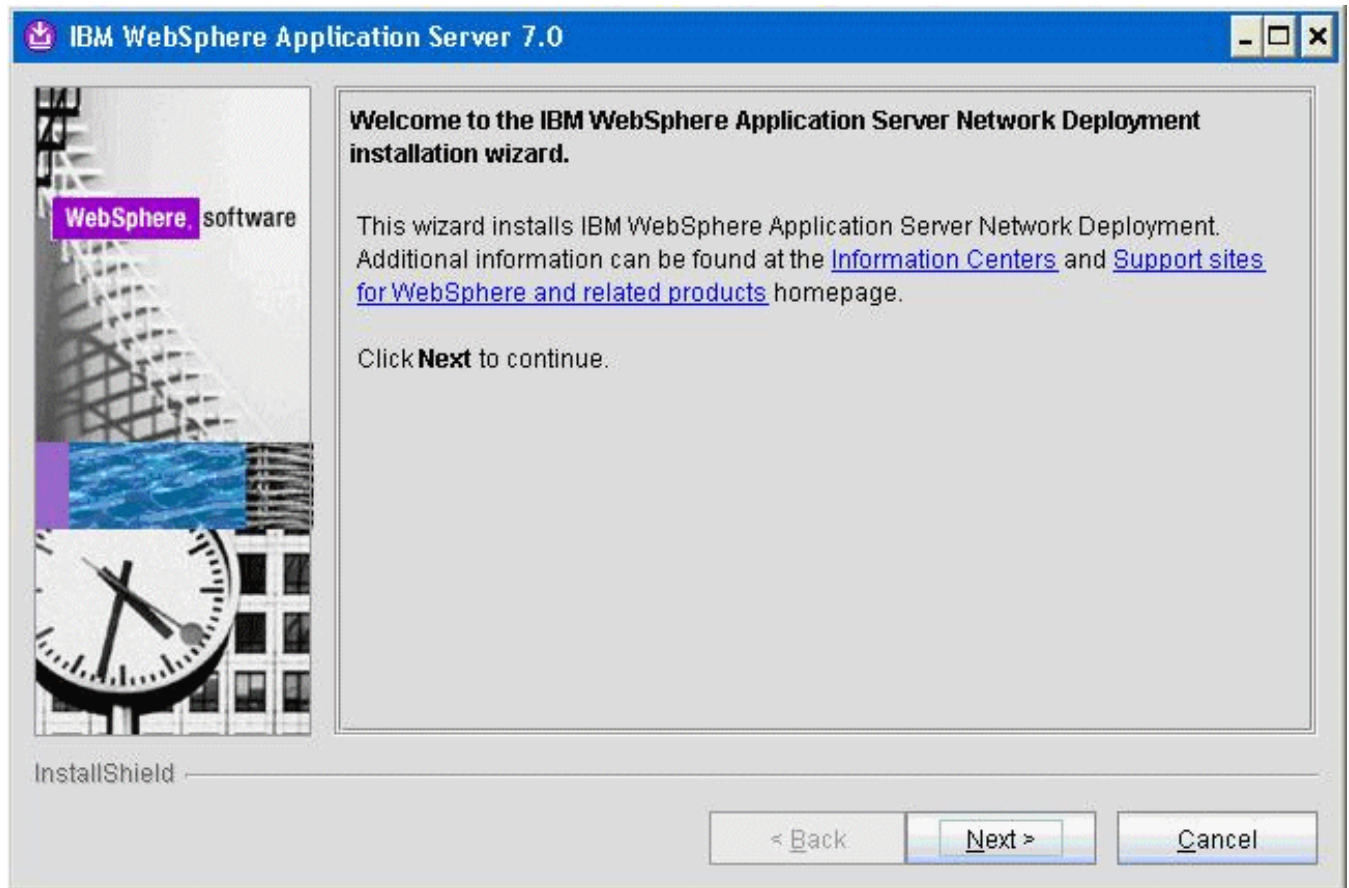
We recommend viewing the [installation diagrams](#) for illustrations of common application server environments. For full documentation visit the on-line [WebSphere Information Center](#).

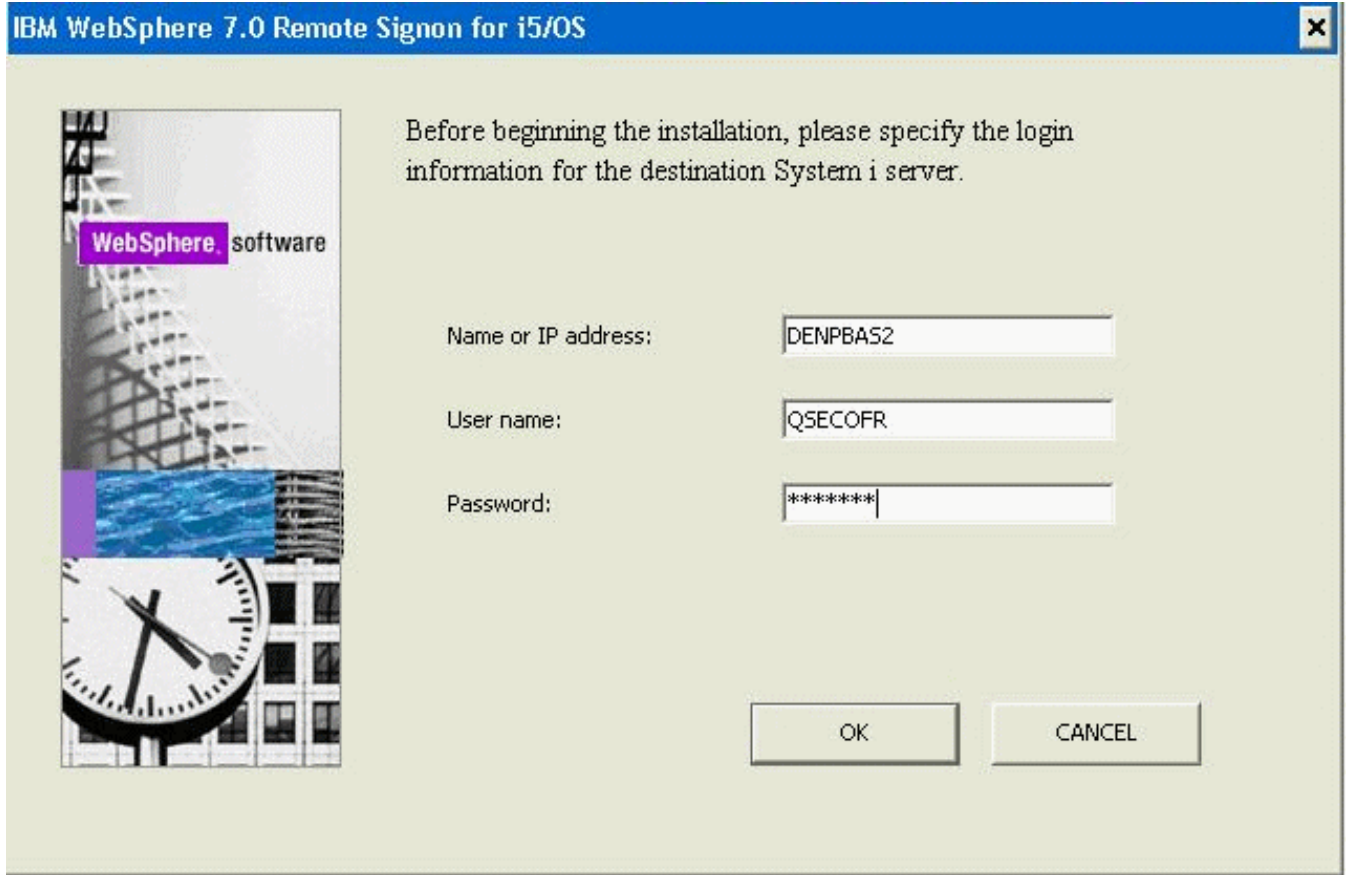
To begin, select an entry from the list below to initialize a product installation wizard. Alternatively, select a product on the navigation list to left to read descriptions of the products, and browse help documentation and support links before starting an installation wizard.

- **WebSphere Application Server Network Deployment**
Launch the installation wizard for WebSphere Application Server Network Deployment.
- **IBM HTTP Server**
Launch the installation wizard for IBM HTTP Server.
- **Web Server plug-ins**
Launch the installation wizard for Web Server plug-ins.
- **WebSphere DMZ Secure Proxy Server**
Launch the installation wizard for DMZ Secure Proxy Server.
- **Application Clients**
Launch the installation wizard for Application Clients.
- **IBM Update Installer for WebSphere Software**
Launch the installation wizard for IBM Update Installer for WebSphere Software.

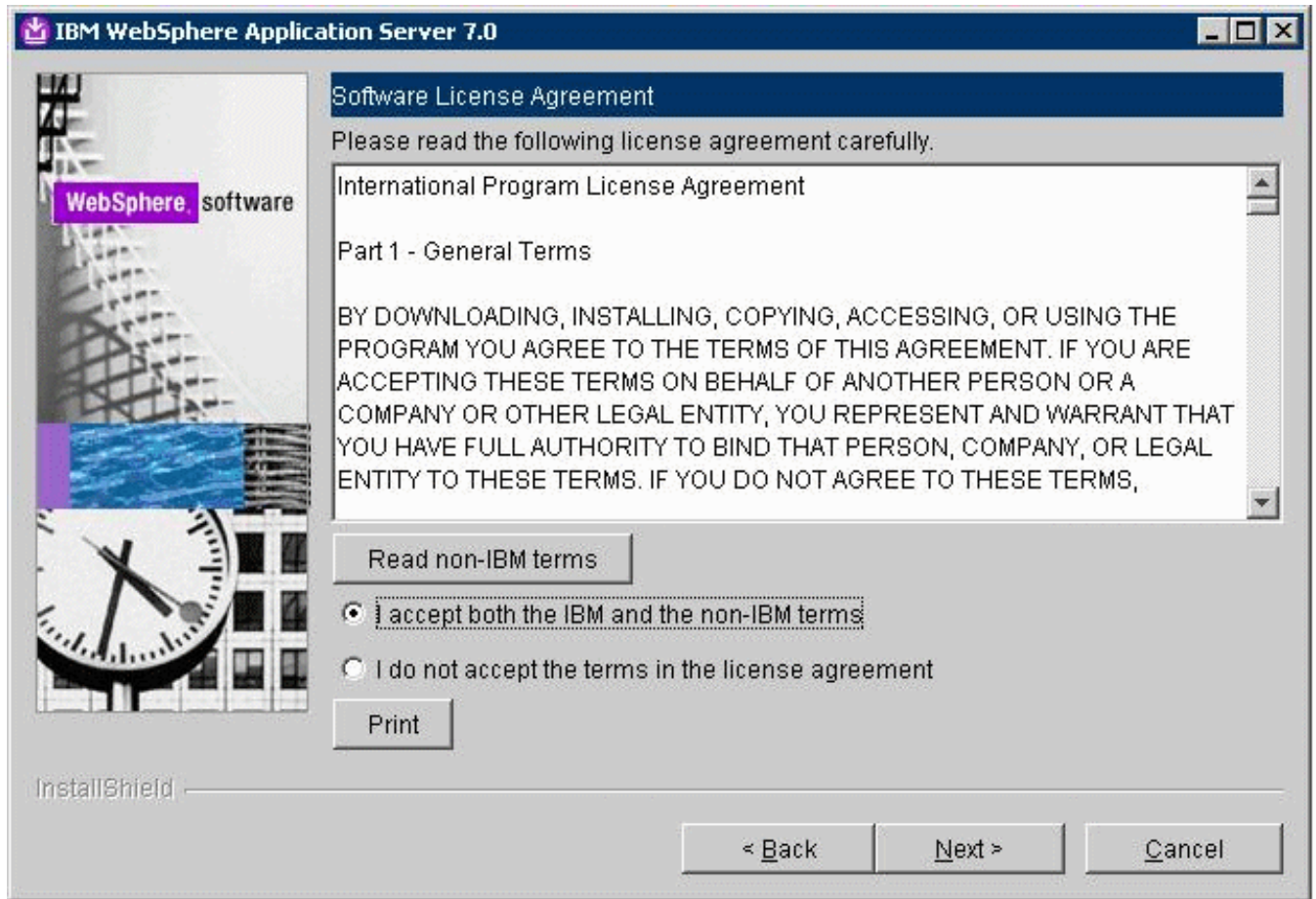
7. From that launchpad window, select the first link on the right panel:

Launch the installation wizard for WebSphere Application Server Network Deployment





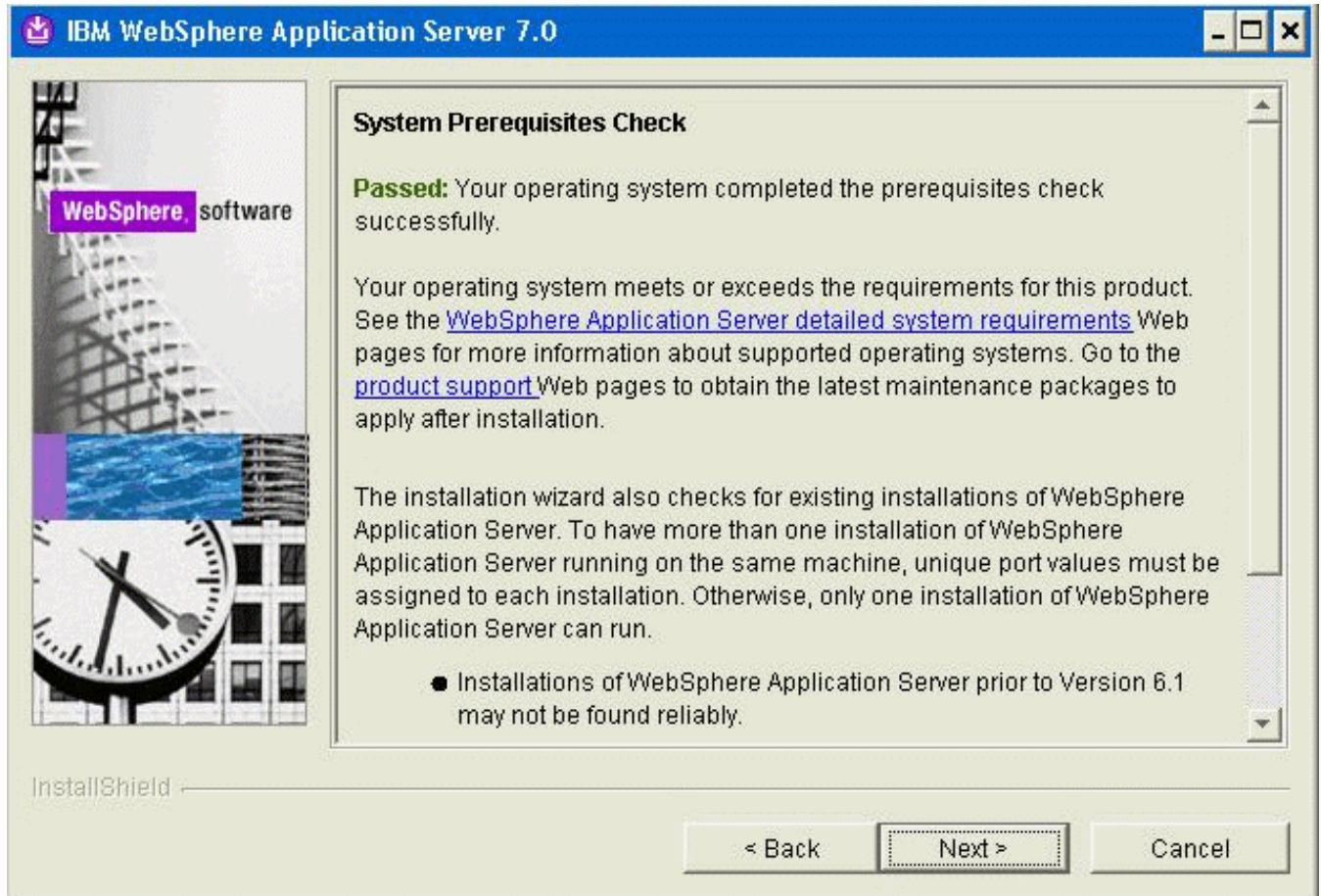
8. On the Welcome panel, click the **Next** button to continue.



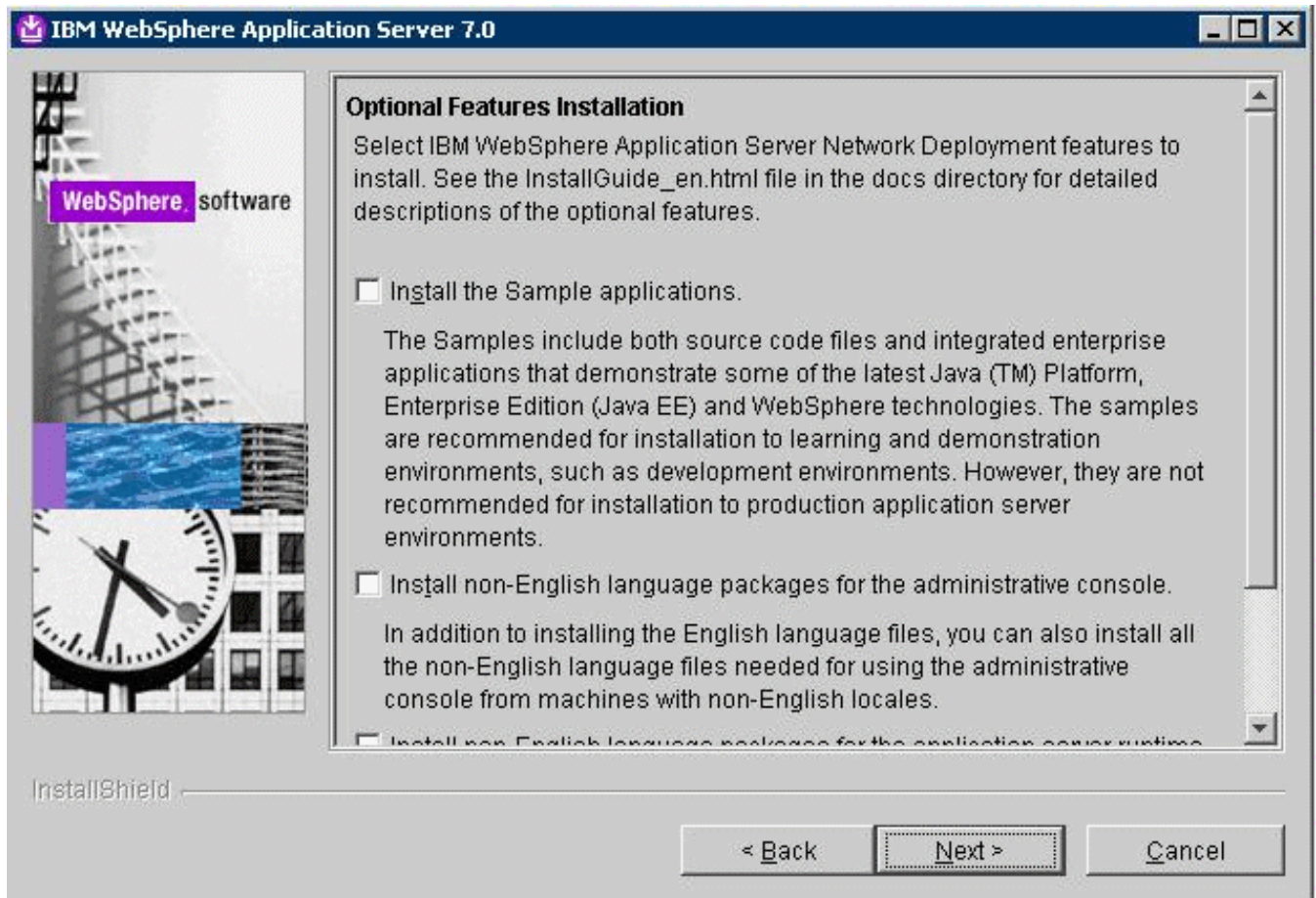
9. On Software License Agreement, review the License Agreement and select a radio button to accept or decline.

If you chose to accept, click the *Next* button to continue.

If you do not accept the terms of the license agreement, you cannot continue with the installation.

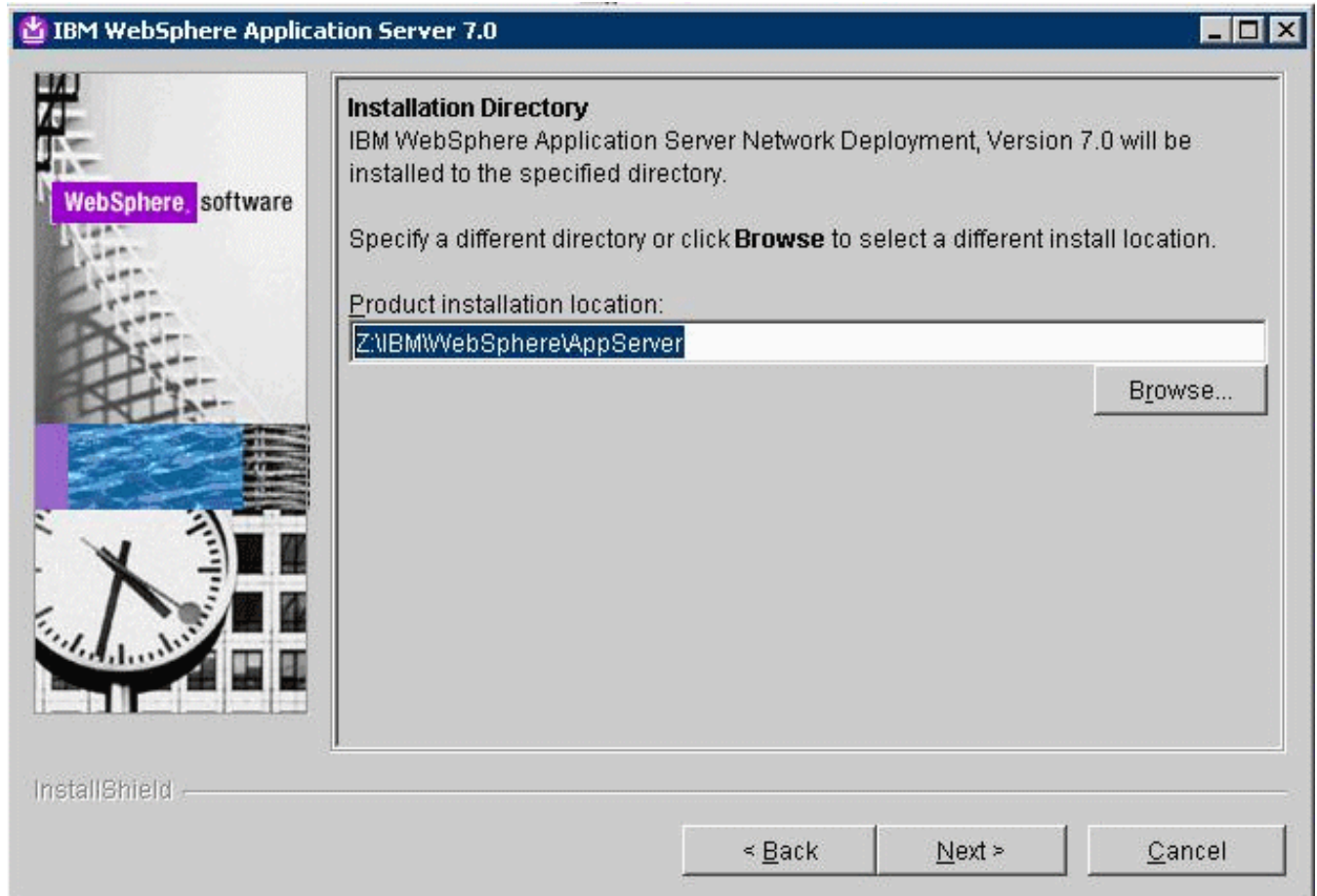


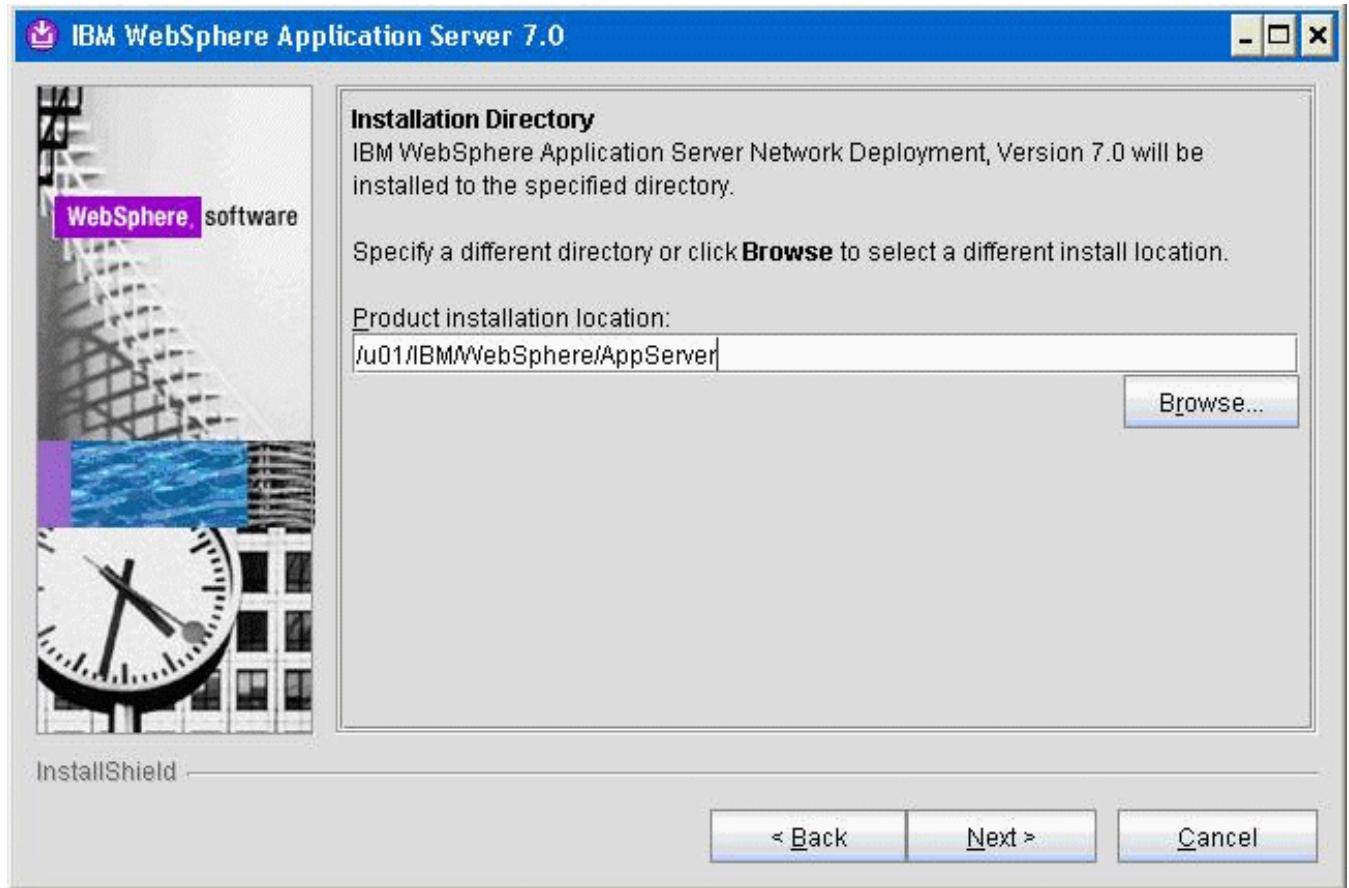
10. On System Prerequisites Check, the installer performs a quick system requirements check on the server. Once the check is complete and successful, click the **Next** button to continue.



11. On the Optional Features Installation screen, click the **Next** button to continue.

Tip: For production environments, it is recommended that you *not* enable the **Install the Sample application** check box. You should enable the check box for non-English support for the WebSphere Administrative Console if applicable to your installation.





12. On Installation Directory, enter or browse to a valid location where you want to install WebSphere Application Server Network Deployment (the default is `opt/IBM/WebSphere/AppServer`). For example:

`z:\IBM\WebSphere\AppServer`

`/u01/IBM/WebSphere/AppServer`

13. Click the **Next** button to continue.



14. On WebSphere Application Server Environments, select *Application Server* to create a standalone application server profile and then click the *Next* button to continue.

Note: The **Application Server** environment will create a default stand-alone application server called AppSrv01 during the installation. To use federated nodes configuration, select **Cell** environment to create a deployment manger (such as Dmgr01) and a managed node (for example, AppSrv01) during the installation.

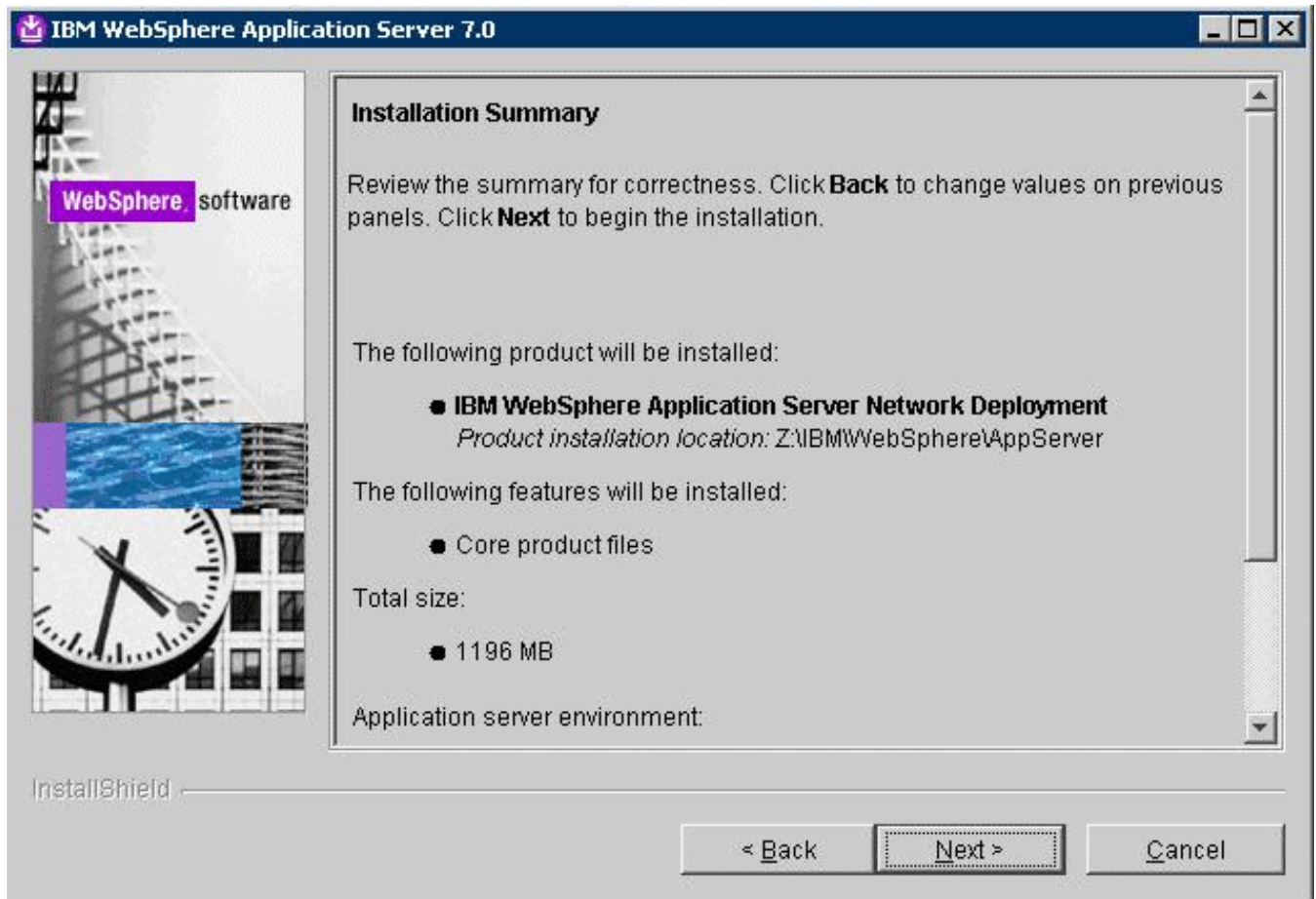


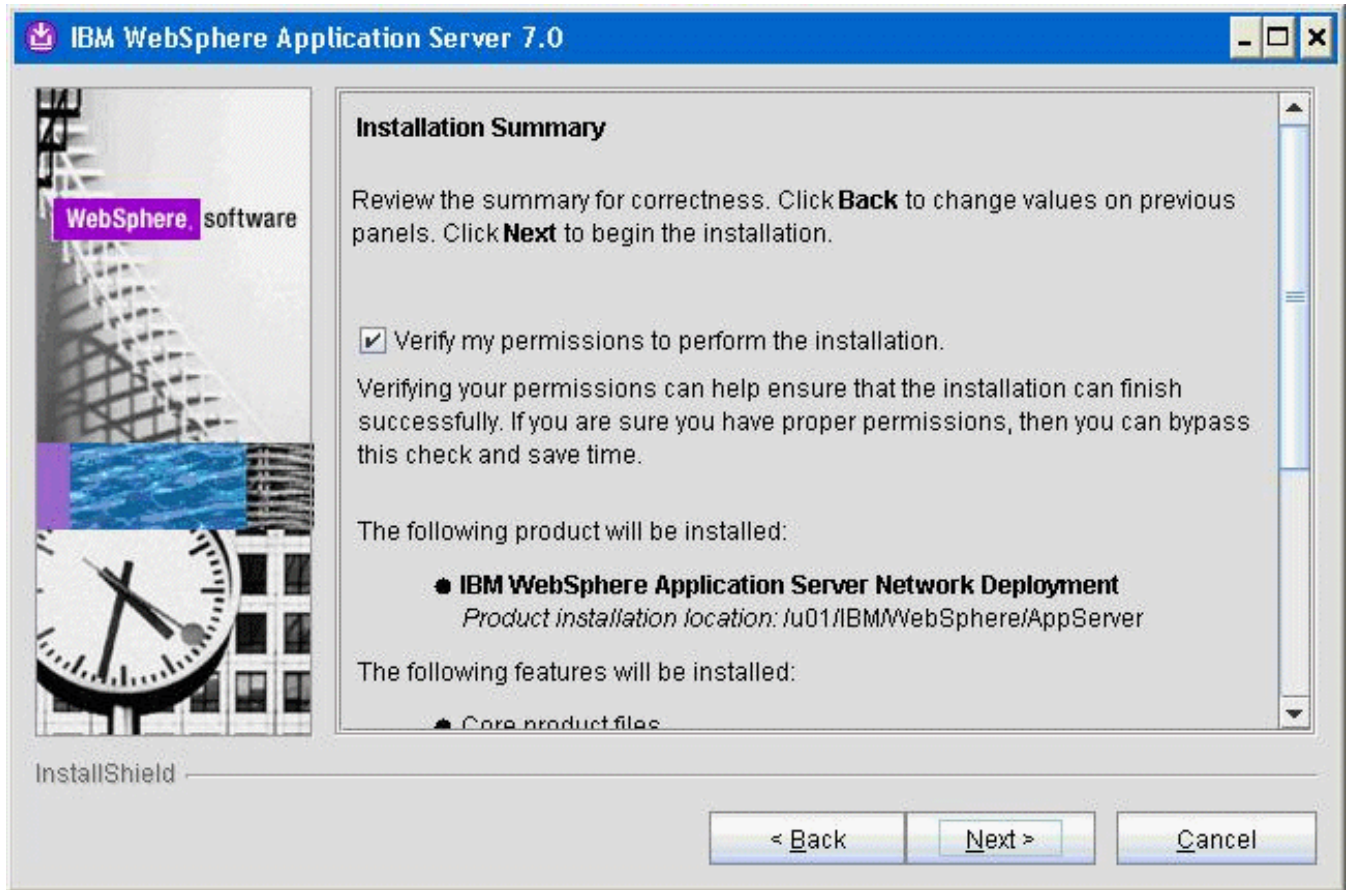
15. On Enable Administrative Security, the check box for the application server profile is checked by default. You can choose either to:
- Clear the check box for **Enable administrative security** to disable server administrative security, or
 - If the check box is enabled for **Enable administrative security**, server administration security will be enabled and you must enter the User ID and Password

When you enable the check box the fields on this screen are enabled and you must enter valid credentials for the WebSphere administrator for this installation.

Tip: *JD Edwards EnterpriseOne Business Services Server.* If you are using these instructions to install a JD Edwards EnterpriseOne Business Services Server into this WebSphere instance, you must enable administrative security.

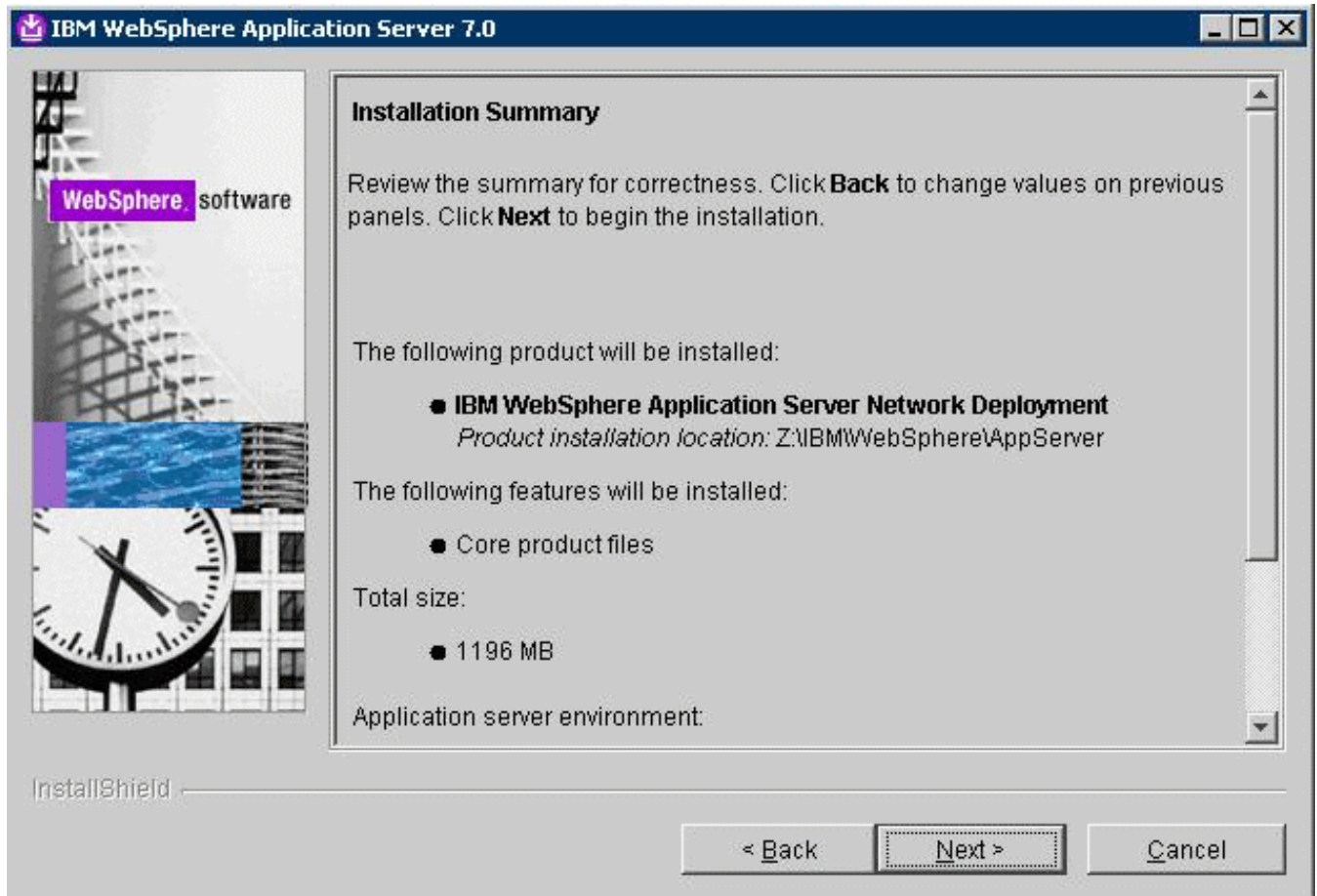
16. Click the **Next** button to continue.

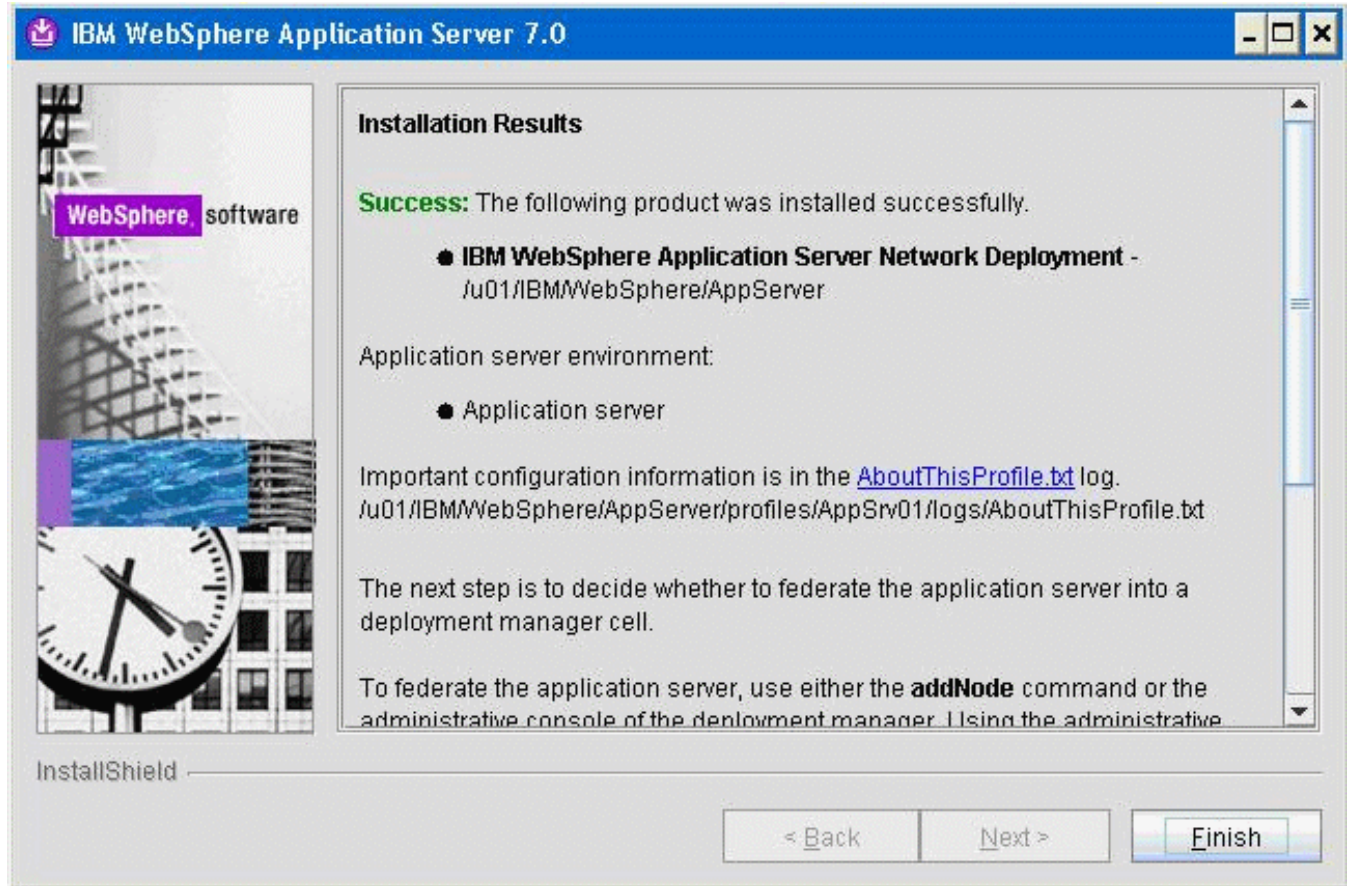




17. On Installation Summary, review the information and click the **Next** button to begin the installation of WebSphere Application Server Network Deployment.

Note: You should enable the check box for **Verify my permissions to perform the installation** in order for the installer to validate the permissions required for installation of the product.

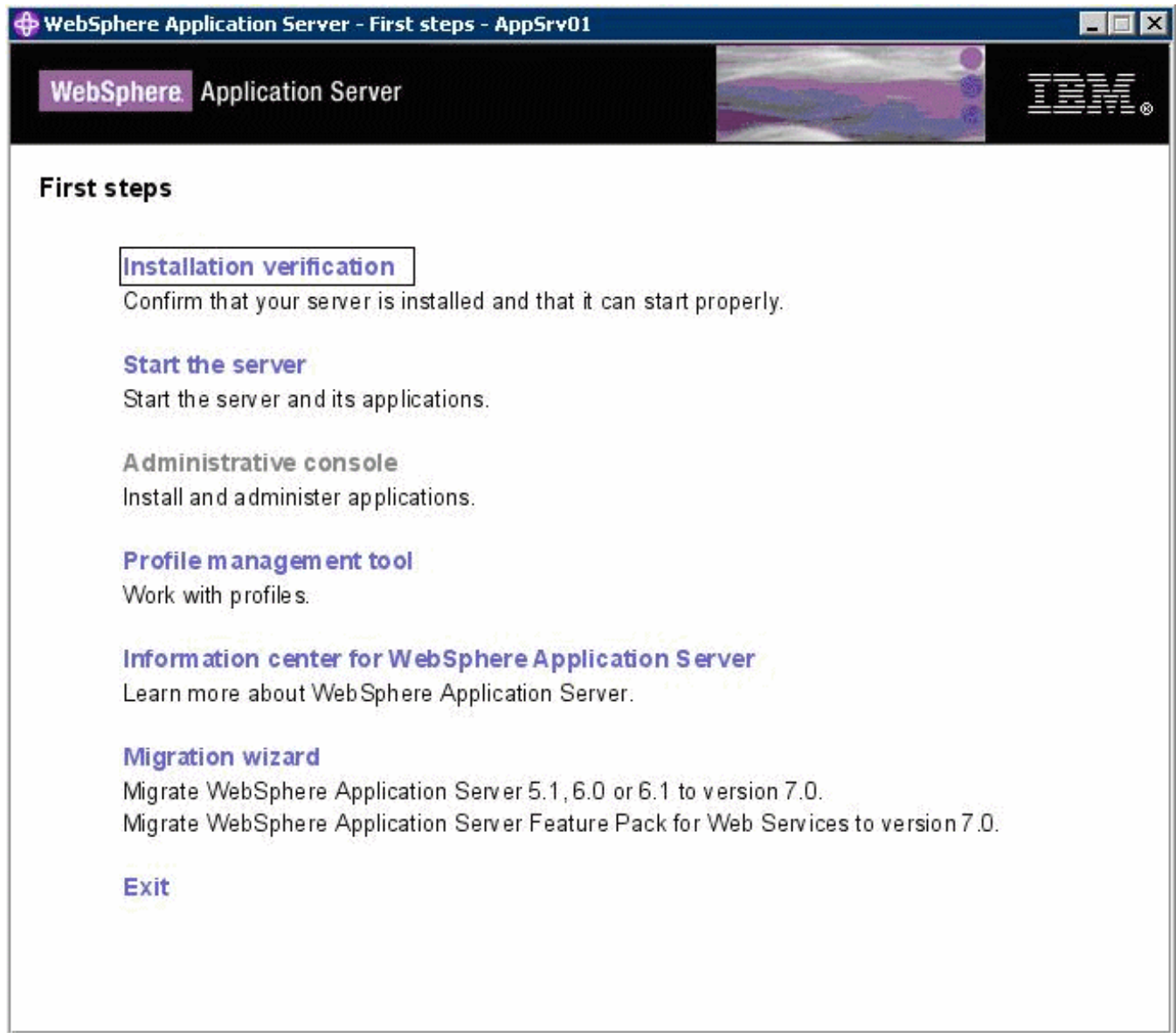




Note: On Installation Results, you can click on the **AboutThisProfile.txt** link to see the port assignment for this profile. Note the Administrative console port on which AppSrv01 will be running (for example, 9060). You can use **Profile Management Tool** to create as many profiles as you like. Each profile is a separate instance of the WebSphere running on a different set of ports. A sample of the contents of the `AboutThisProfile.txt` file is shown below:

```
-----1-----2-----3-----4-----5-----6-----
1 Application server environment to create: Application server
2 Location: Z:\IBM\WebSphere\AppServer\profiles\AppSrv01
3 Disk space required: 200 MB
4 Profile name: AppSrv01
5 Make this profile the default: True
6 Node name: denicint2Node01
7 Host name: denicint2.mlab.jdedwards.com
8 Enable administrative security (recommended): False
9 Administrative console port: 9060
10 Administrative console secure port: 9043
11 HTTP transport port: 9080
12 HTTPS transport port: 9443
13 Bootstrap port: 2809
14 SOAP connector port: 8880
15 Run application server as a service: True
16 Create a Web server definition: False
17
```

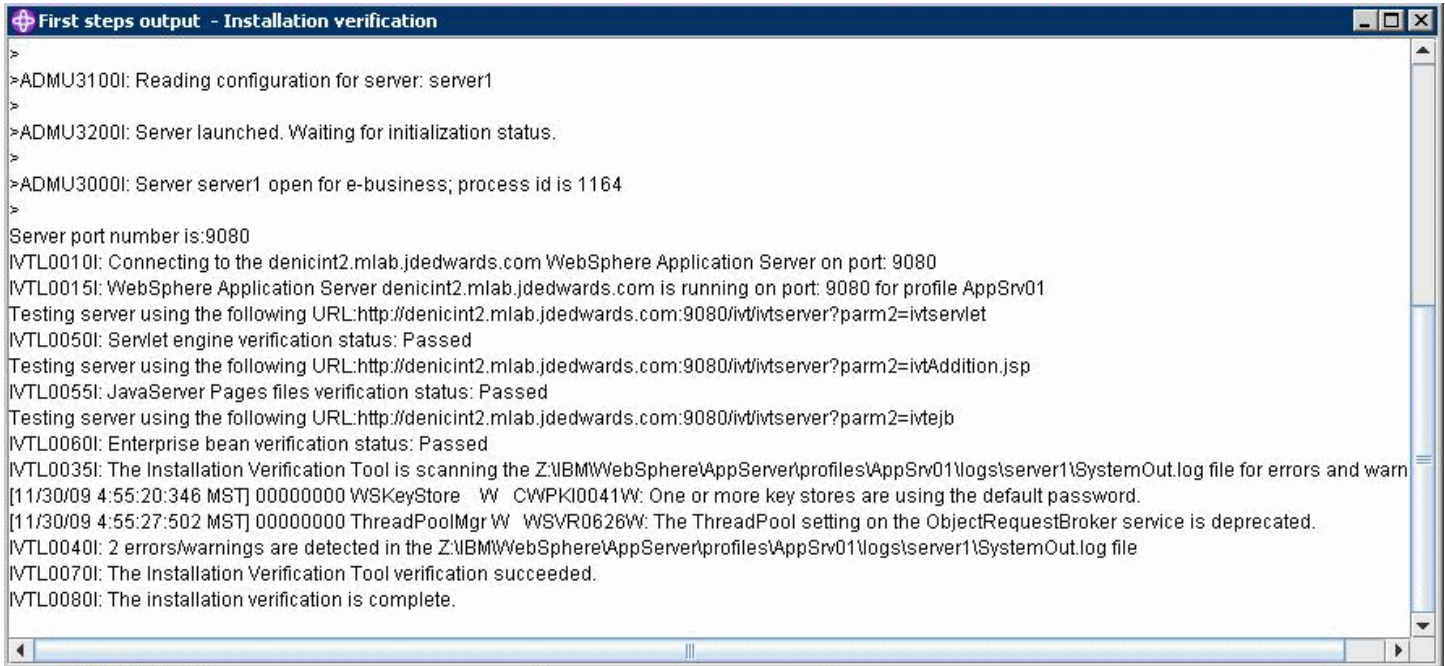
18. On Installation Results, click the **Finish** button.



The First steps menu is launched.

19. On the First steps menu, click *Installation verification* to verify the installation.

After you click *Installation verification*, you can verify the success of the installation by reviewing the contents of the resulting display. For example:



```
>
>ADMU3100I: Reading configuration for server: server1
>
>ADMU3200I: Server launched. Waiting for initialization status.
>
>ADMU3000I: Server server1 open for e-business; process id is 1164
>
Server port number is:9080
IVTL0010I: Connecting to the denicint2.mlab.jdedwards.com WebSphere Application Server on port: 9080
IVTL0015I: WebSphere Application Server denicint2.mlab.jdedwards.com is running on port: 9080 for profile AppSrv01
Testing server using the following URL:http://denicint2.mlab.jdedwards.com:9080/ivt/ivtserver?parm2=ivtserverlet
IVTL0050I: Servlet engine verification status: Passed
Testing server using the following URL:http://denicint2.mlab.jdedwards.com:9080/ivt/ivtserver?parm2=ivtAddition.jsp
IVTL0055I: JavaServer Pages files verification status: Passed
Testing server using the following URL:http://denicint2.mlab.jdedwards.com:9080/ivt/ivtserver?parm2=ivtejb
IVTL0060I: Enterprise bean verification status: Passed
IVTL0035I: The Installation Verification Tool is scanning the Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\logs\server1\SystemOut.log file for errors and warn
[11/30/09 4:55:20:346 MST] 00000000 WSKeystore W CWPkI0041W: One or more key stores are using the default password.
[11/30/09 4:55:27:502 MST] 00000000 ThreadPooMgr W WSVR0626W: The ThreadPool setting on the ObjectRequestBroker service is deprecated.
IVTL0040I: 2 errors/warnings are detected in the Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\logs\server1\SystemOut.log file
IVTL0070I: The Installation Verification Tool verification succeeded.
IVTL0080I: The installation verification is complete.
```


First steps output - Installation verification

```
Server name is:server1
Profile name is:AppSrv01
Profile home is:/u01/IBM/WebSphere/AppServer/profiles/AppSrv01
Profile type is:default
Cell name is:densun30Node01Cell
Node name is:densun30Node01
Current encoding is:ISO646-US
Start running the following command:/u01/IBM/WebSphere/AppServer/profiles/AppSrv01/bin/startServer.sh server1 -profileName AppSrv01
>ADMU0116I: Tool information is being logged in file
> /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/startServer.log
>ADMU0128I: Starting tool with the AppSrv01 profile
>ADMU3100I: Reading configuration for server: server1
>ADMU3200I: Server launched. Waiting for initialization status.
>ADMU3000I: Server server1 open for e-business; process id is 19674
Server port number is:9080
IVTL0010I: Connecting to the densun30 WebSphere Application Server on port: 9080
IVTL0015I: WebSphere Application Server densun30 is running on port: 9080 for profile AppSrv01
Testing server using the following URL:http://densun30:9080/iv/ivtserver?parm2=ivtserverlet
IVTL0050I: Servlet engine verification status: Passed
Testing server using the following URL:http://densun30:9080/iv/ivtserver?parm2=ivtAddition.jsp
IVTL0055I: JavaServer Pages files verification status: Passed
Testing server using the following URL:http://densun30:9080/iv/ivtserver?parm2=ivtejb
IVTL0060I: Enterprise bean verification status: Passed
IVTL0035I: The Installation Verification Tool is scanning the /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/SystemOut.log file for errors and warnings.
[7/6/09 19:03:07:618 MDT] 0000000a WSKeystore W CWPki0041W: One or more key stores are using the default password.
[7/6/09 19:03:17:456 MDT] 0000000a ThreadPooMgr W WSVR0626W: The ThreadPool setting on the ObjectRequestBroker service is deprecated.
IVTL0040I: 2 errors/warnings are detected in the /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/SystemOut.log file
IVTL0070I: The Installation Verification Tool verification succeeded.
IVTL0080I: The installation verification is complete.
```

20. Ensure that the Installation Verification utility completes with a success message.
21. Close the First steps output and click *Exit* on the First steps screen.

This completes the profile creation activity.

Installing the IBM HTTP Server 7.0

Note: If you are planning to use Microsoft Internet Information Services (IIS), you can skip this section and continue to *Installing IBM HTTP Server Plug-ins for WebSphere Application Server*.

Note: Although the IBM HTTP Server is integrated into the WebSphere Application Server, the installation is a separate process.

To install the IBM HTTP Server:

1. Insert the WebSphere Application Server Supplement CD, Version 7.0 (32-bit) or extract the downloaded image (if you haven't done so already).

2. Run the install executable that is located in the IHS directory from the extracted location by typically using these commands:

```
cd x:\dump\was7_windows\sup1\IHS
```

```
x:\dump\was7_windows\sup1\IHS > install.exe
```

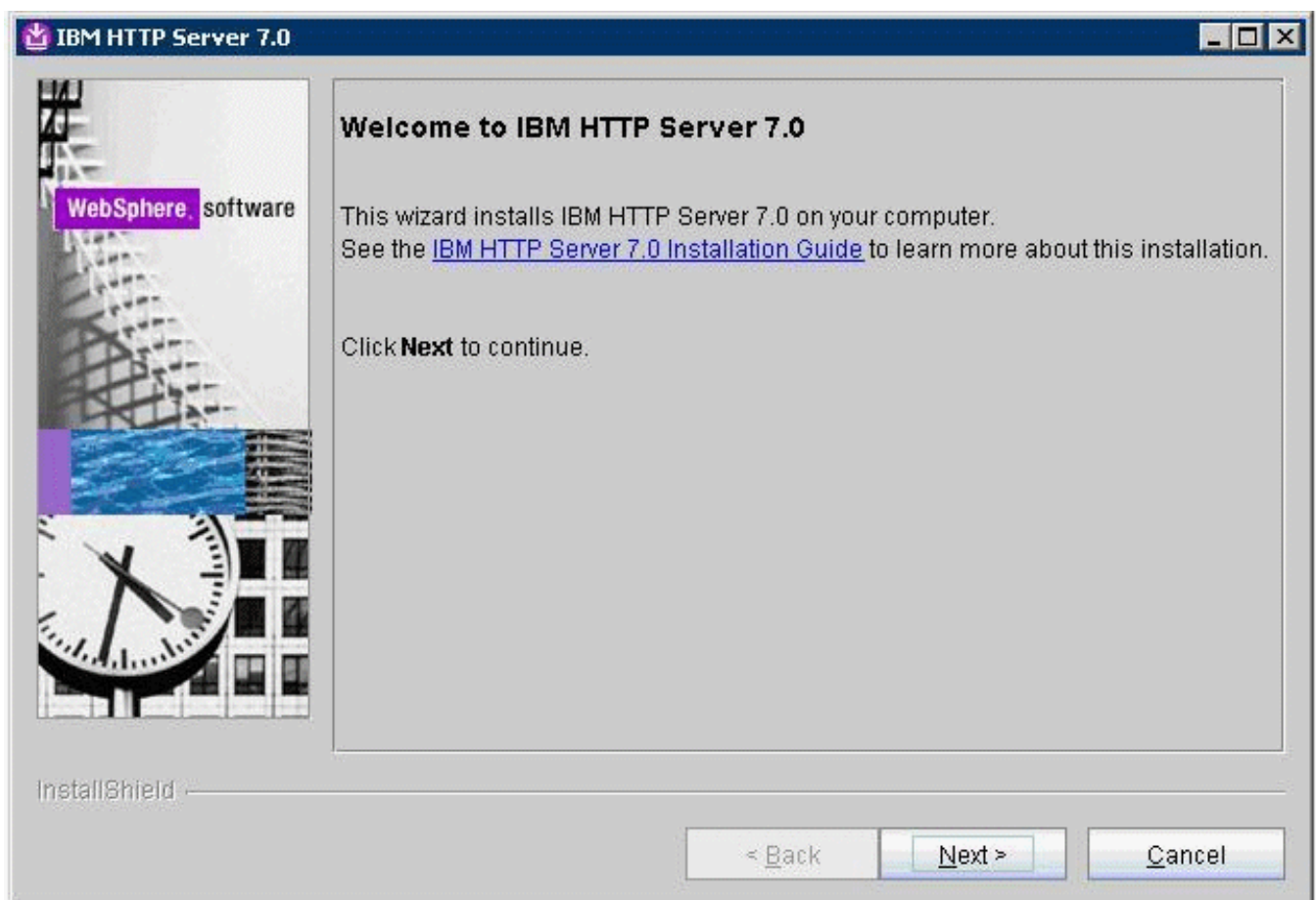
where **x:** is the drive on which you downloaded the WebSphere 7.0 image.

```
mount /cdrom
```

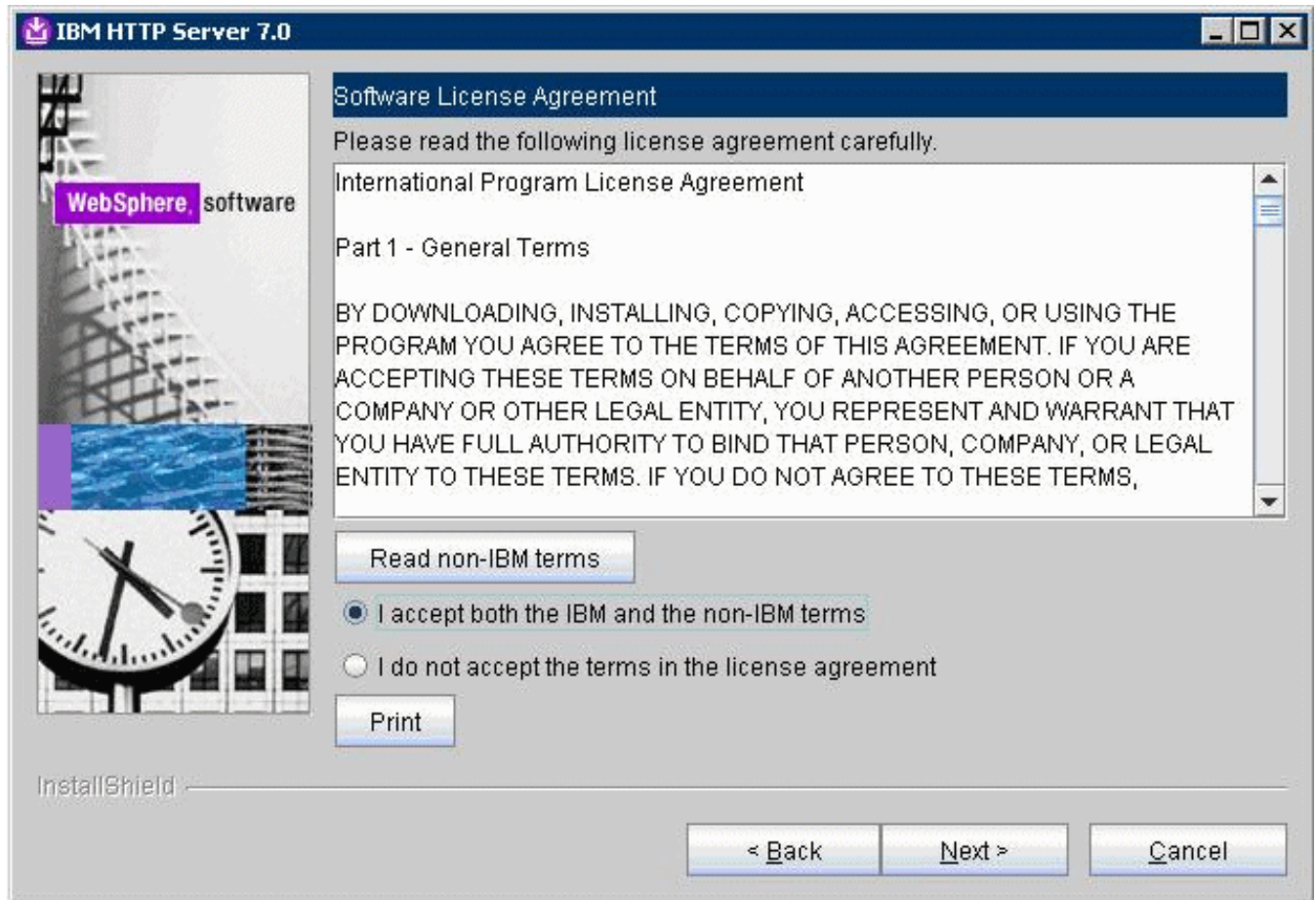
```
cd /cdrom
```

```
./IHS/install.sh
```

Note: The syntax of the mount command can vary by platform, and is not required for Sun platforms.

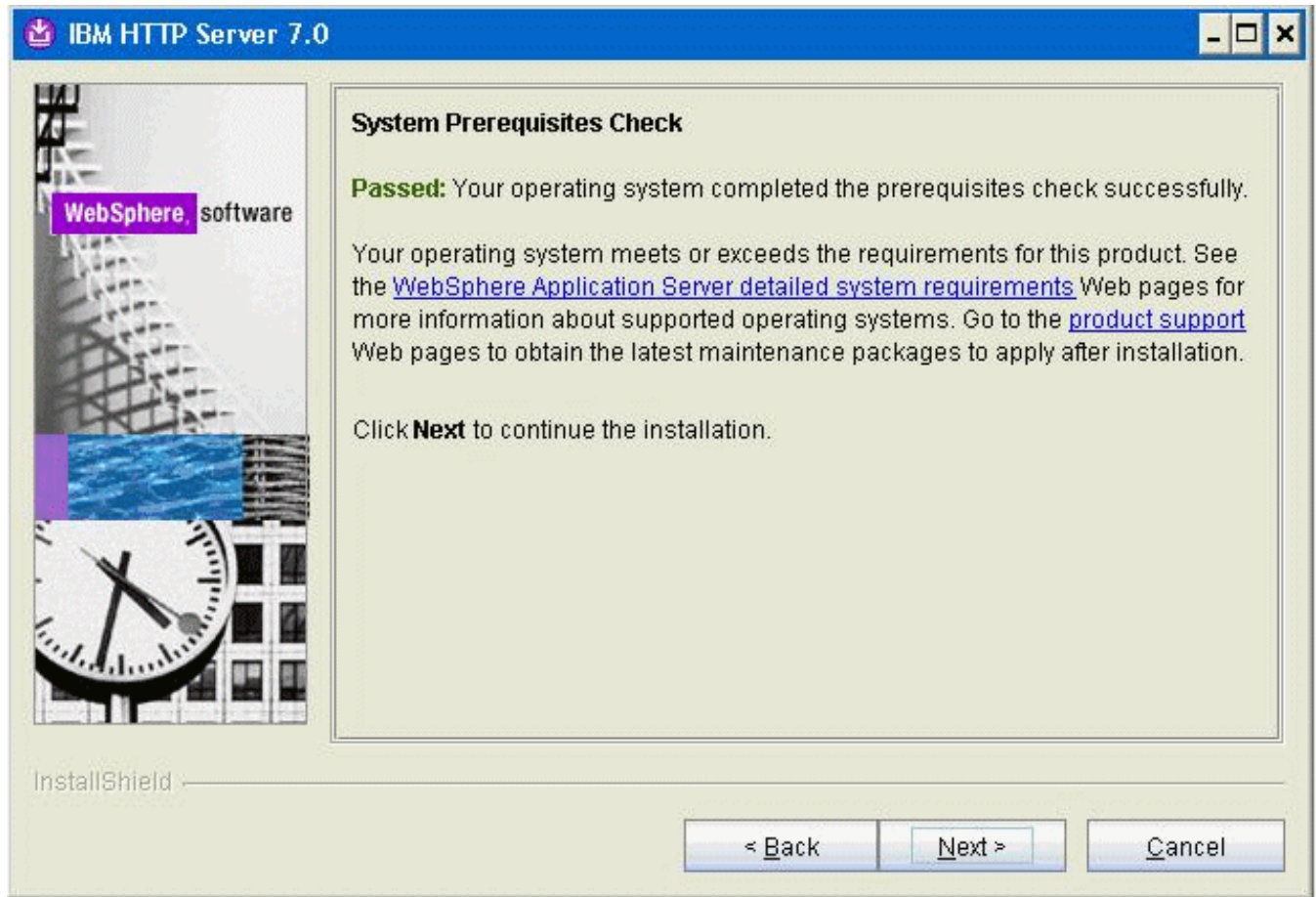


3. On Welcome, click the *Next* button to continue.

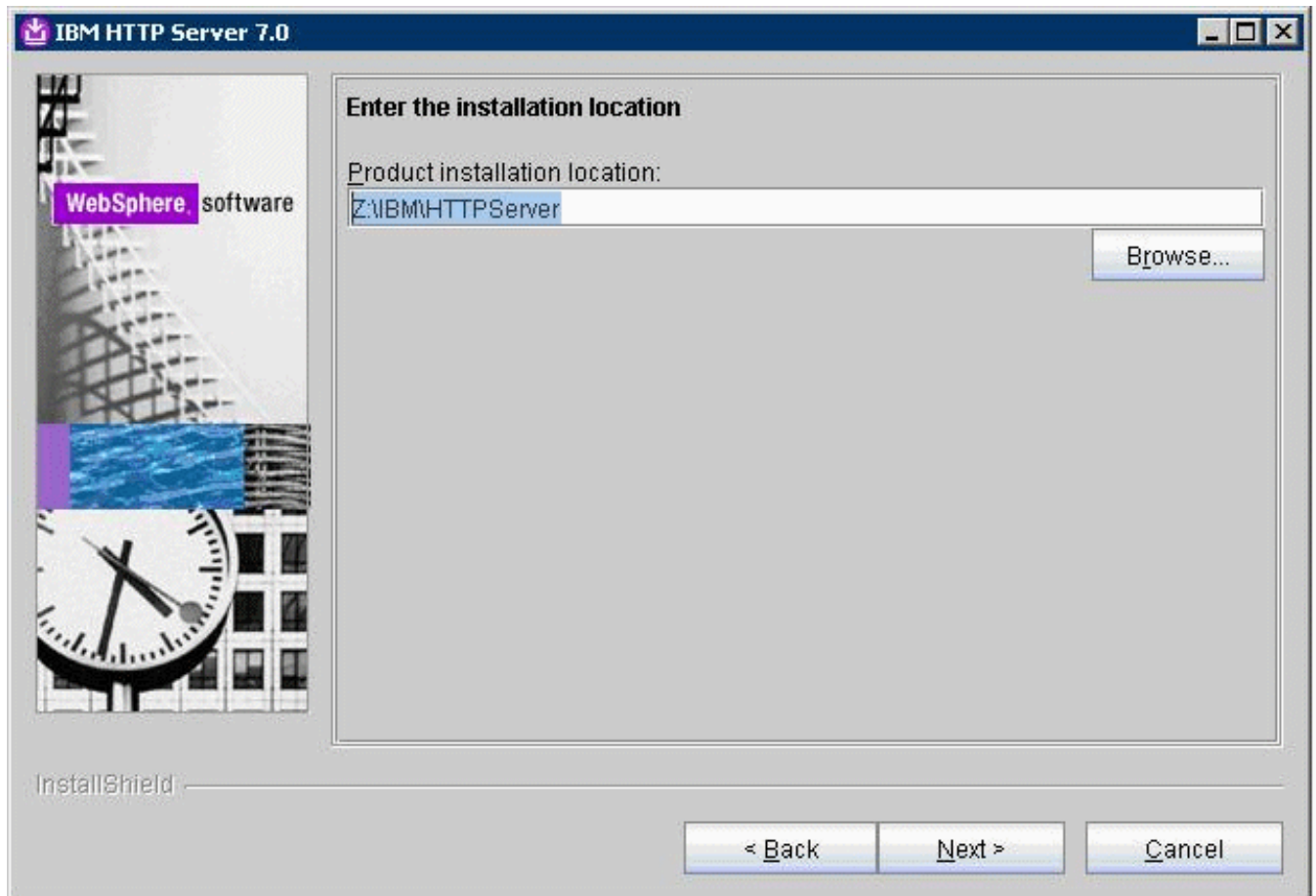


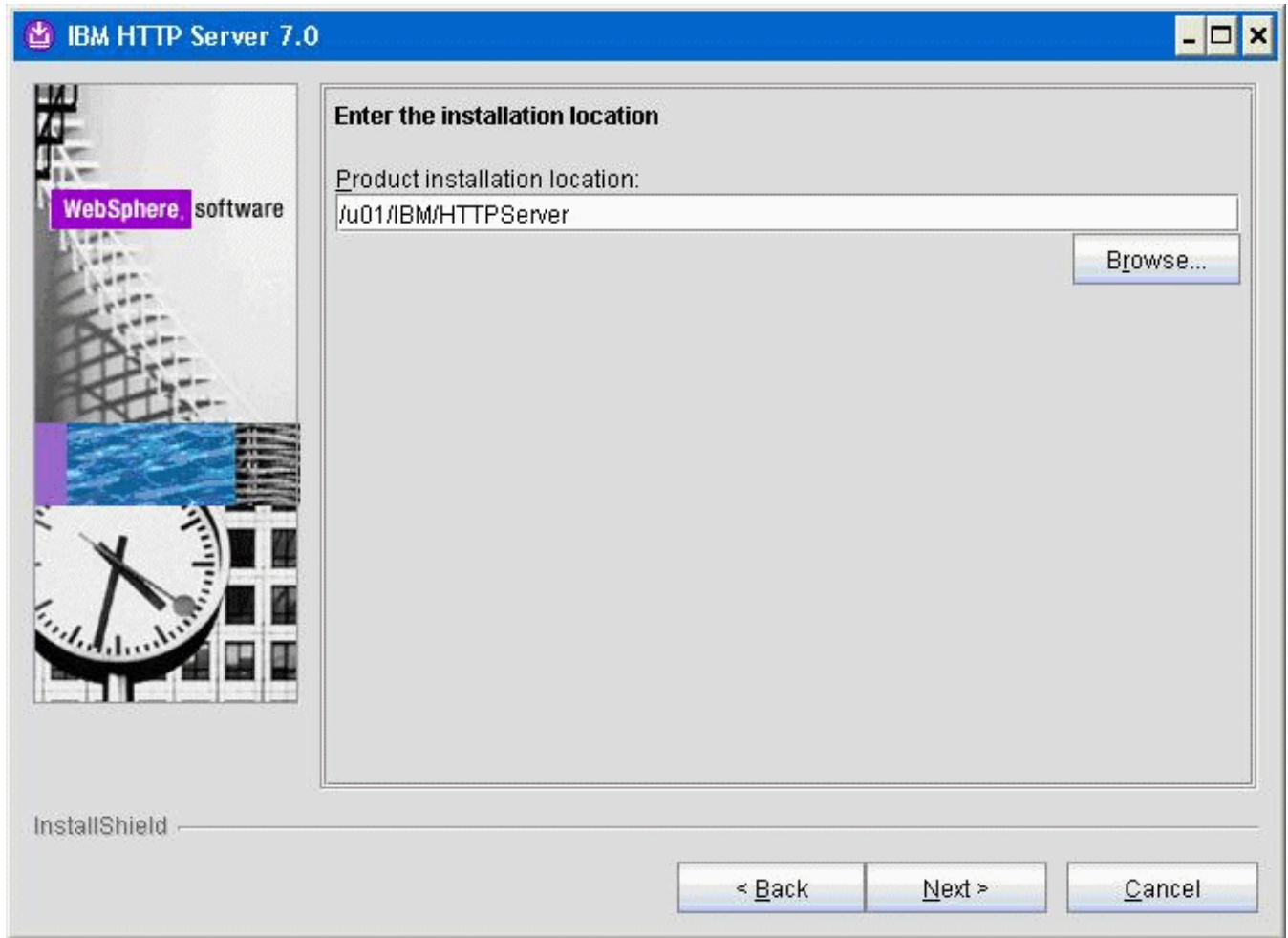
4. On Software License Agreement, review the License Agreement and choose an option to accept or decline.

5. Click the *Next* button to continue.



6. On System Prerequisites Check, the installer performs a quick system requirements check on the server. Once the check is complete and successful, click the *Next* button to continue.



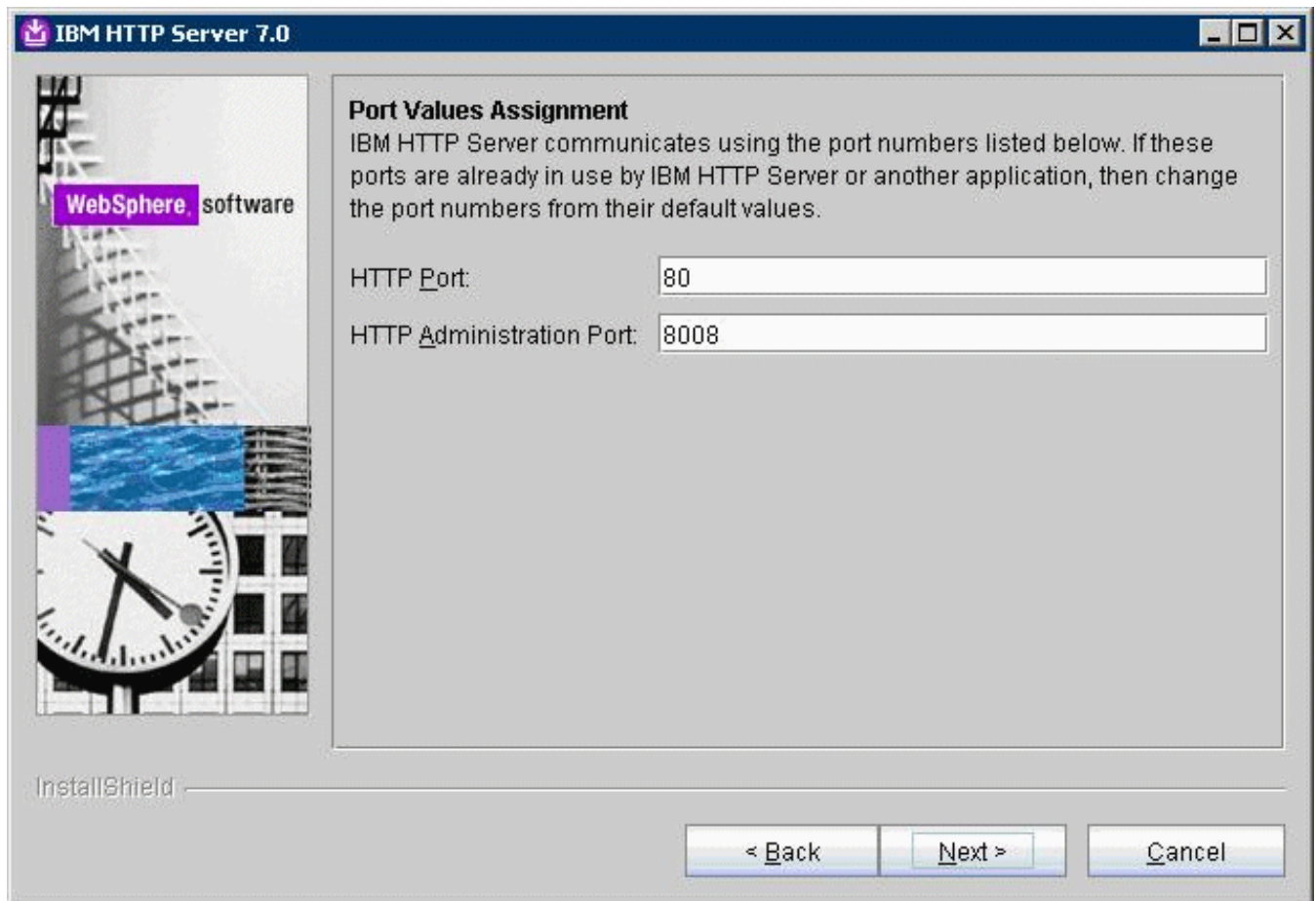


7. For the install location, enter a valid value for your IBM HTTP Server installation directory (opt/IBM/HTTPServer). Use a value such as:

`z:\IBM\HTTPServer`

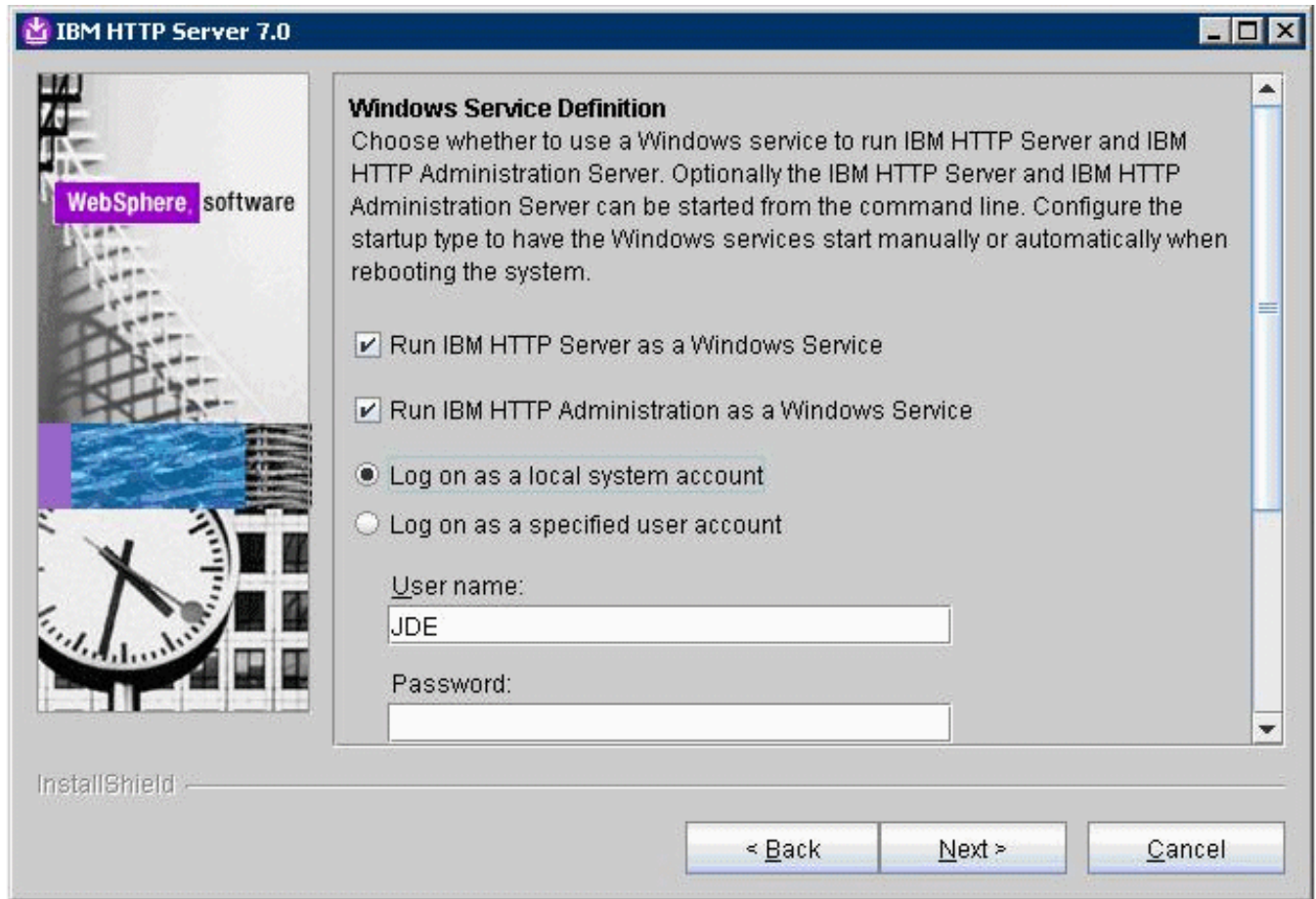
`/u01/IBM/HTTPServer`

8. Click the *Next* button to continue.



9. On Port Values Assignment, use the default port or enter different ports.

- Click the *Next* button to continue.

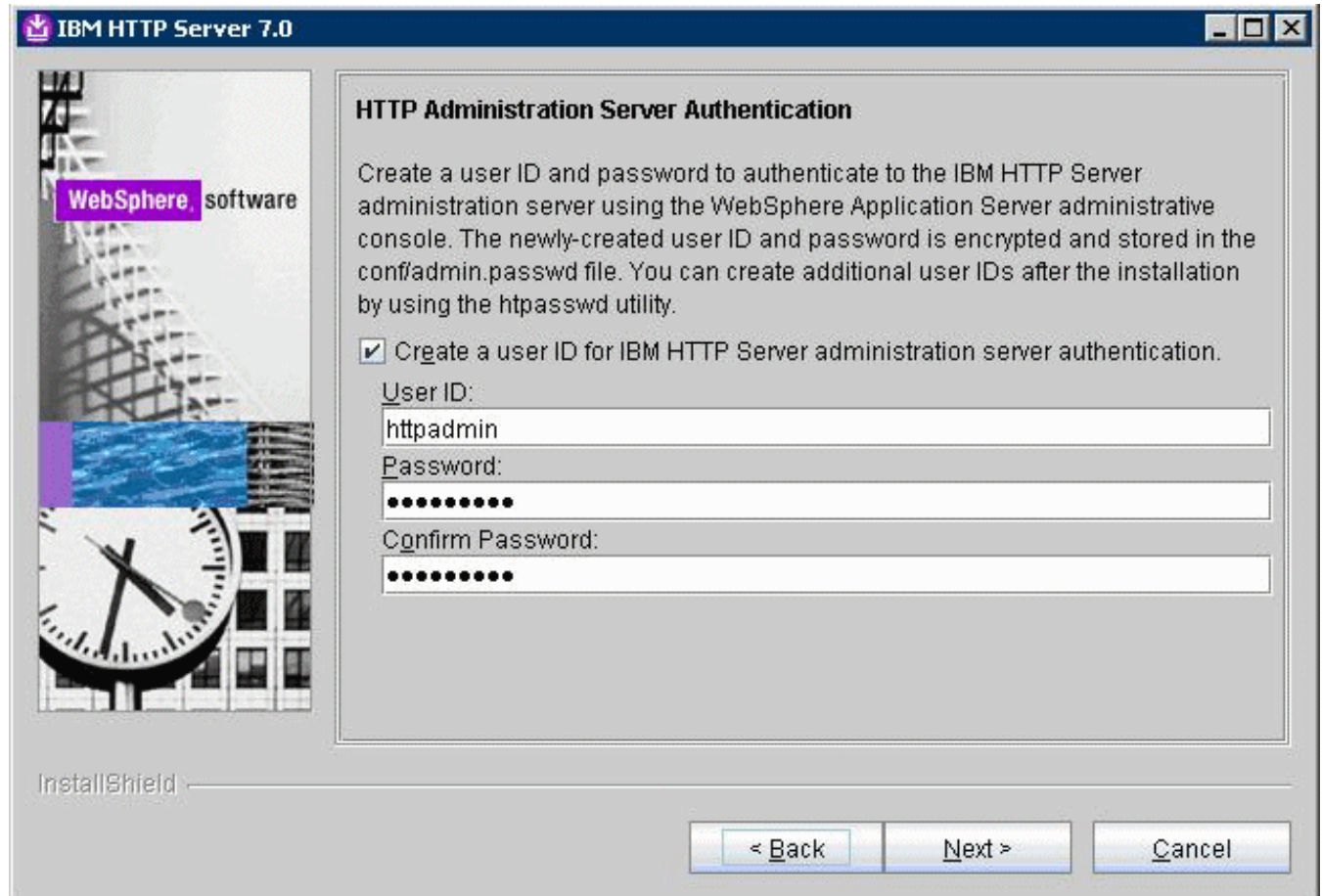


- On Windows Service, complete these fields:

Field	Value
Run IBM HTTP Server as a Windows Service	Checked
Run the Application Server process as a Windows Service	Checked
Log on as a local system account	Selected

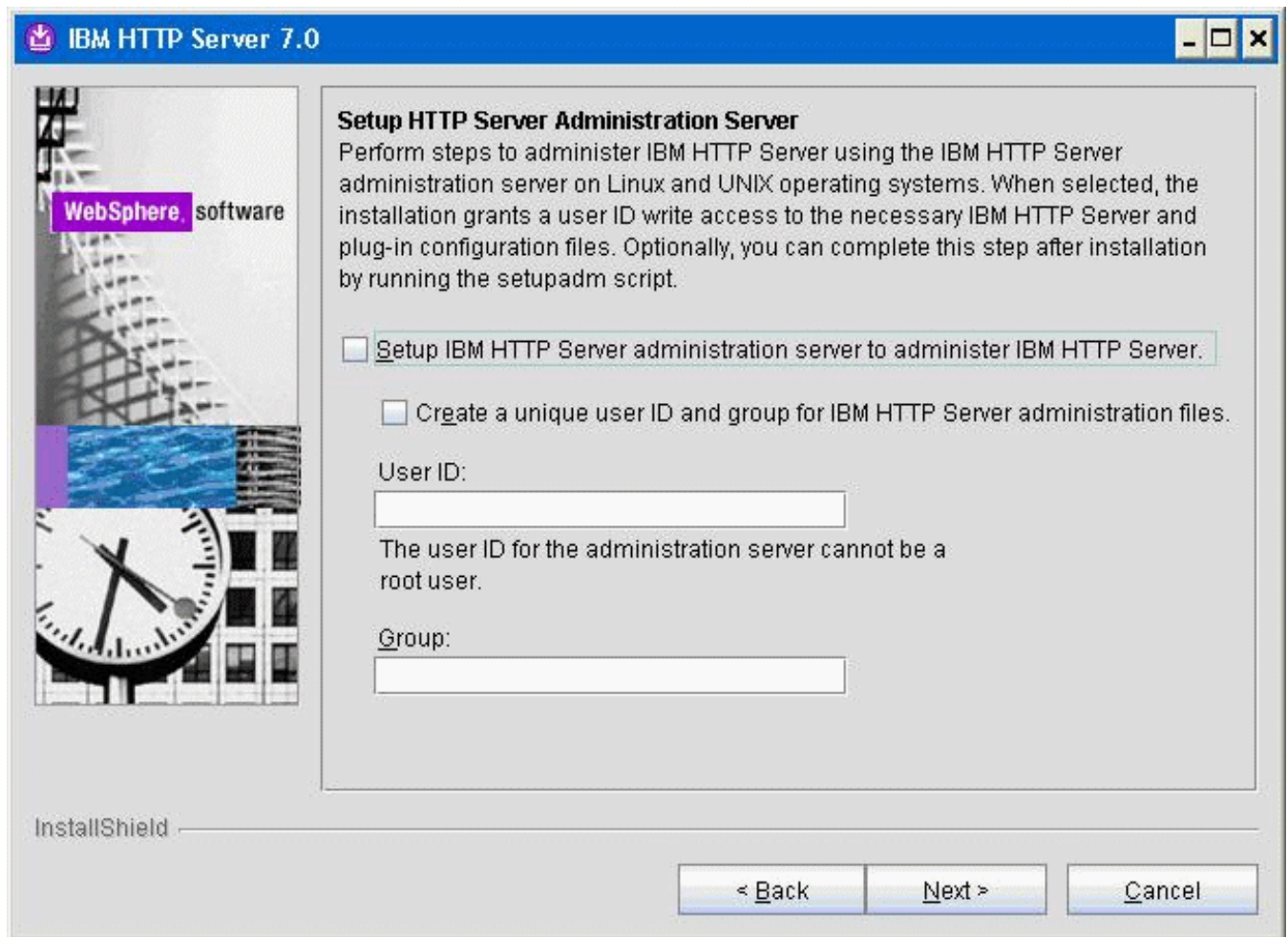
Field	Value
Startup Type	Use the pull-down to choose either manual or automatic.

12. Click the *Next* button to continue.



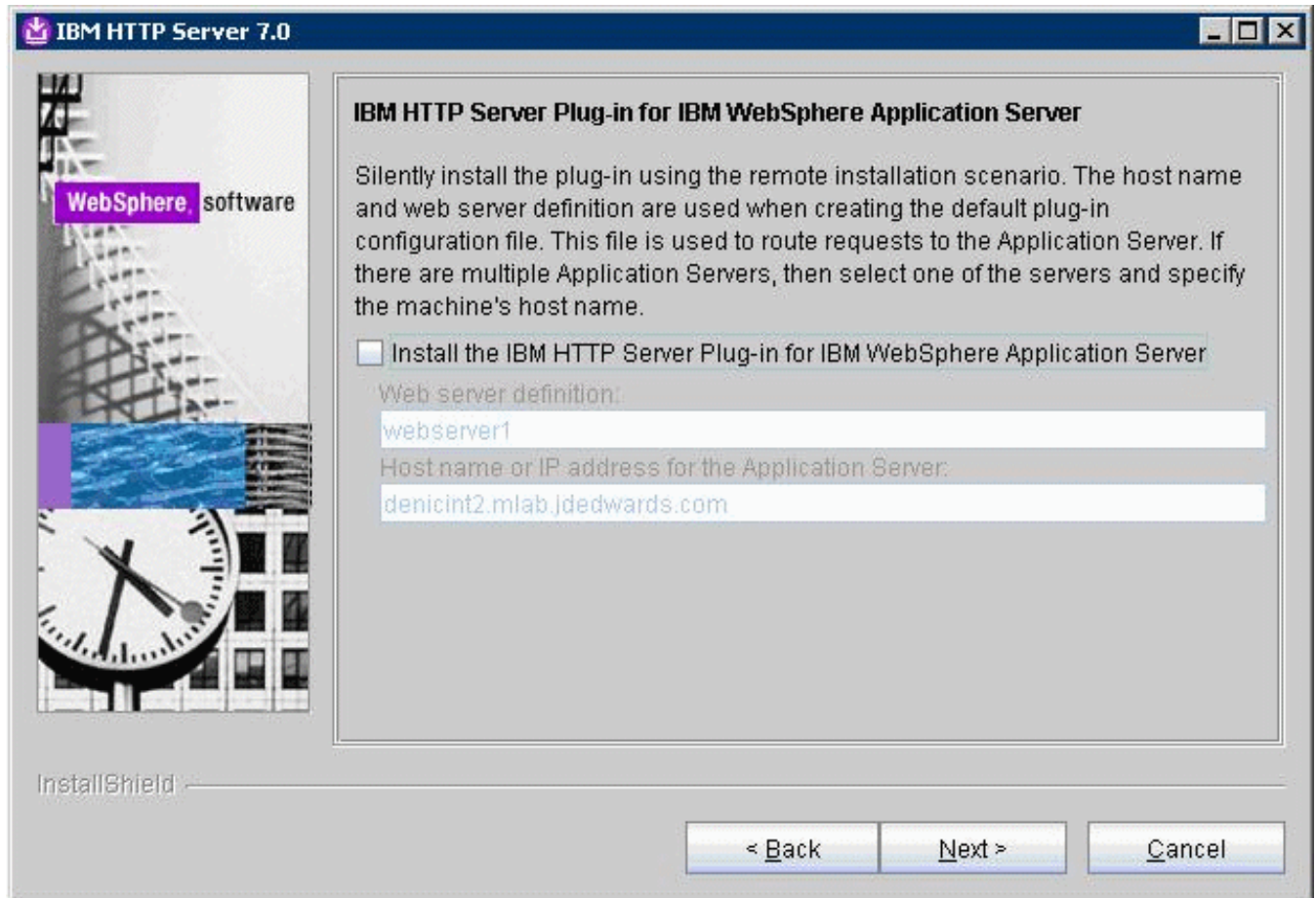
13. On HTTP Administration Server Authentication, the check box enabling HTTP server administration security is checked by default. You can choose either to:
- o Clear the check box for *Create a user ID for IBM HTTP administration server authentication* to disable HTTP server administration security, or
 - o If the check box is enabled for *Create a user ID for IBM HTTP administration server authentication*, HTTP server administration security will be enabled and you must enter the User ID and Password

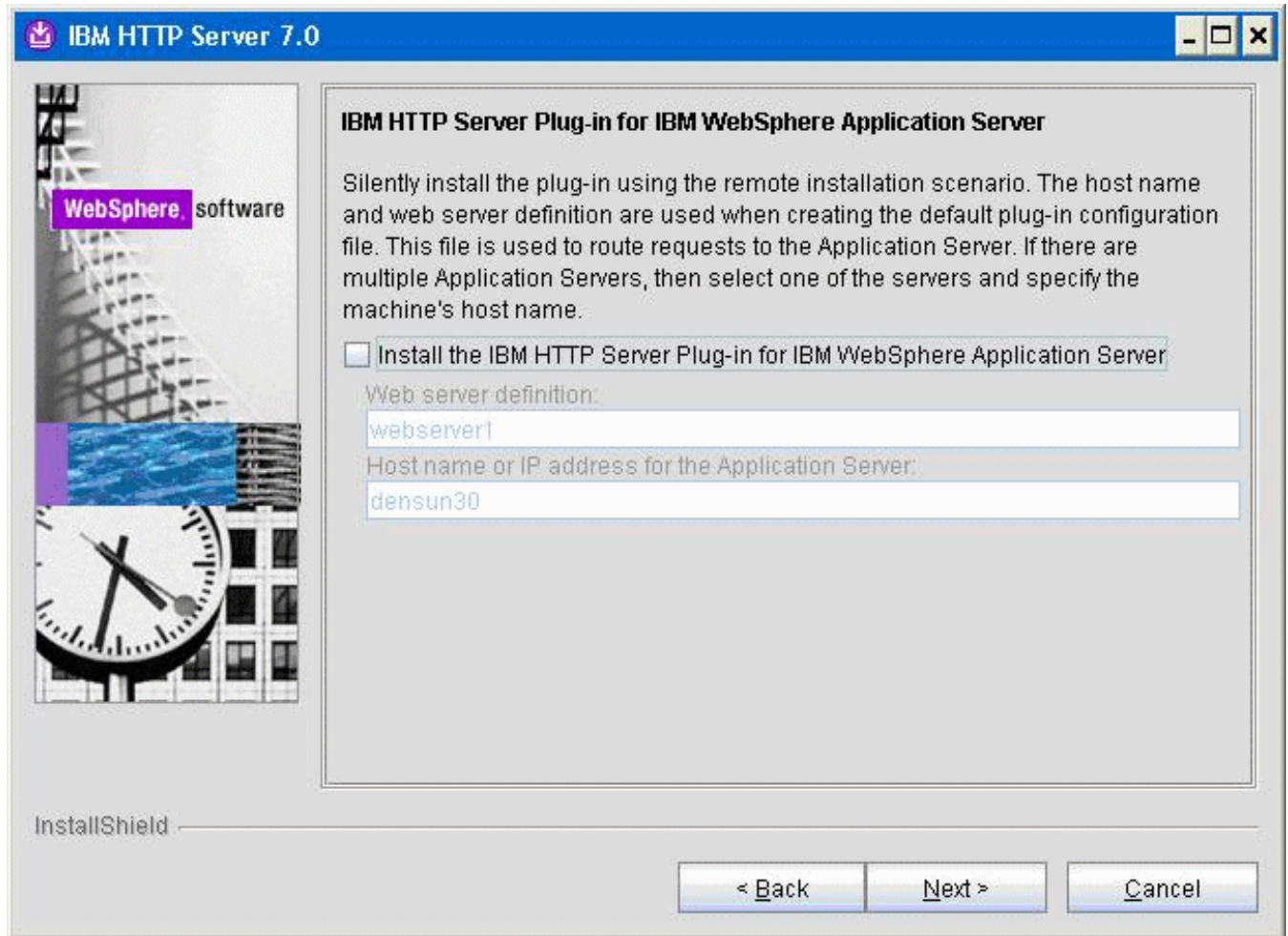
14. Click the *Next* button to continue.



15. On Setup HTTP Administration Server, clear the Setup IBM HTTP administration server to administer IBM HTTP Server or enter an User ID and Group to Setup IBM HTTP administration server.

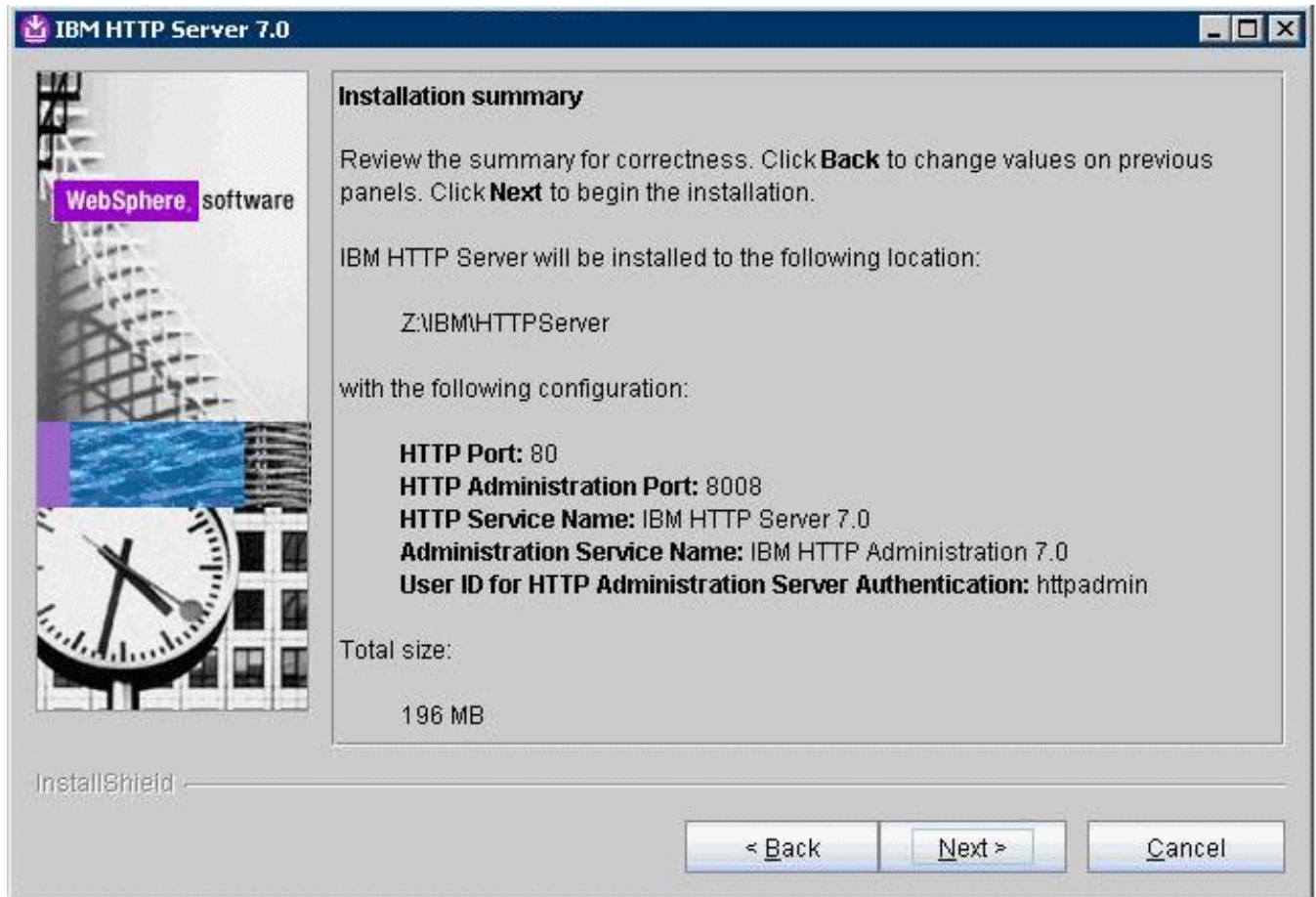
16. Click the *Next* button to continue.

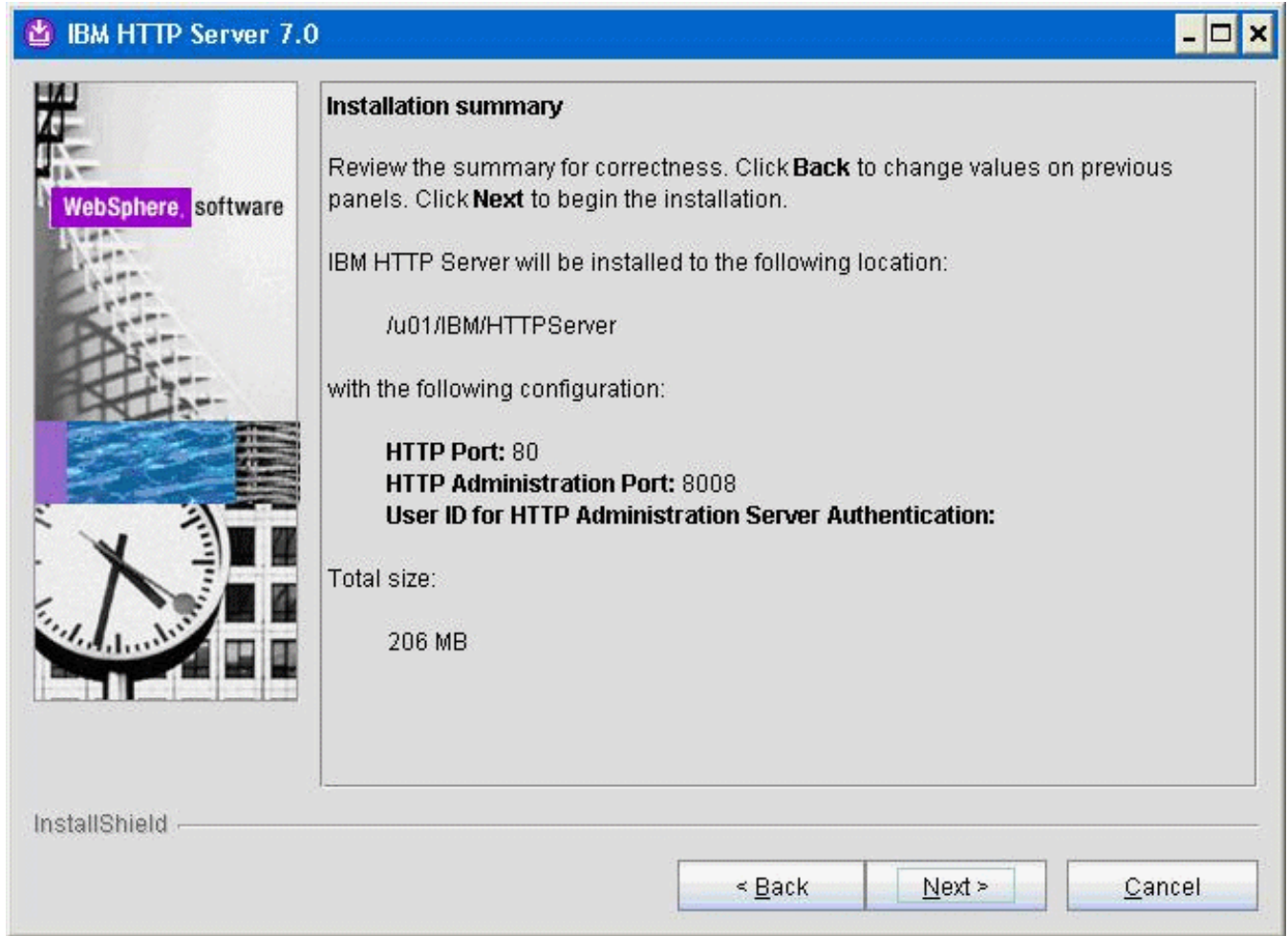




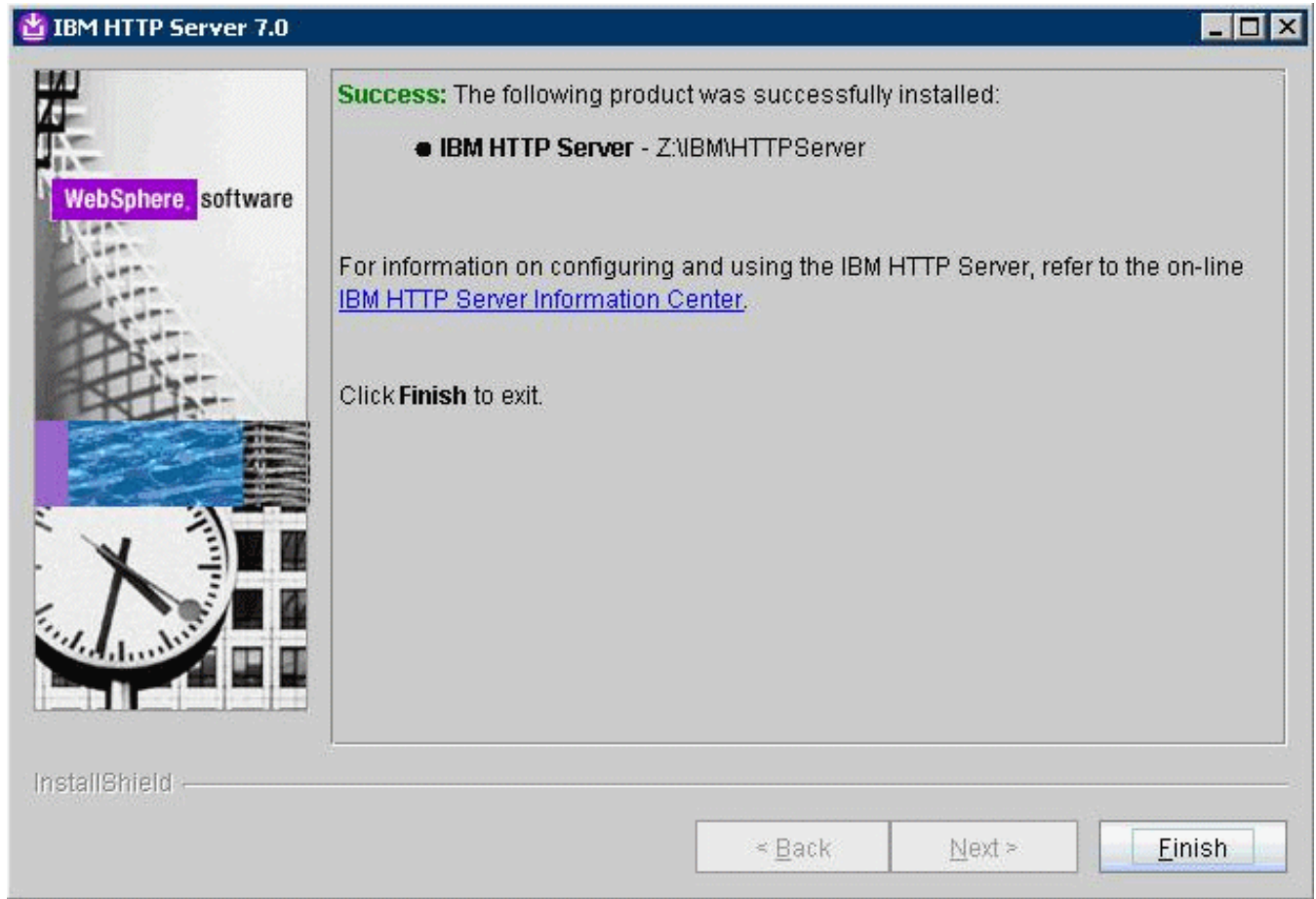
17. On IBM HTTP Administration Server Plug-in For IBM WebSphere Application Server, clear the check box for *Install the IBM HTTP Server Plug-in for IBM WebSphere Application Server* to disable the silent install of the plug-in at this time. The installation of IBM HTTP Server Plug-in for IBM WebSphere Application Server will be described in the section *Installing IBM HTTP Server Plug-ins for WebSphere Application Server*.

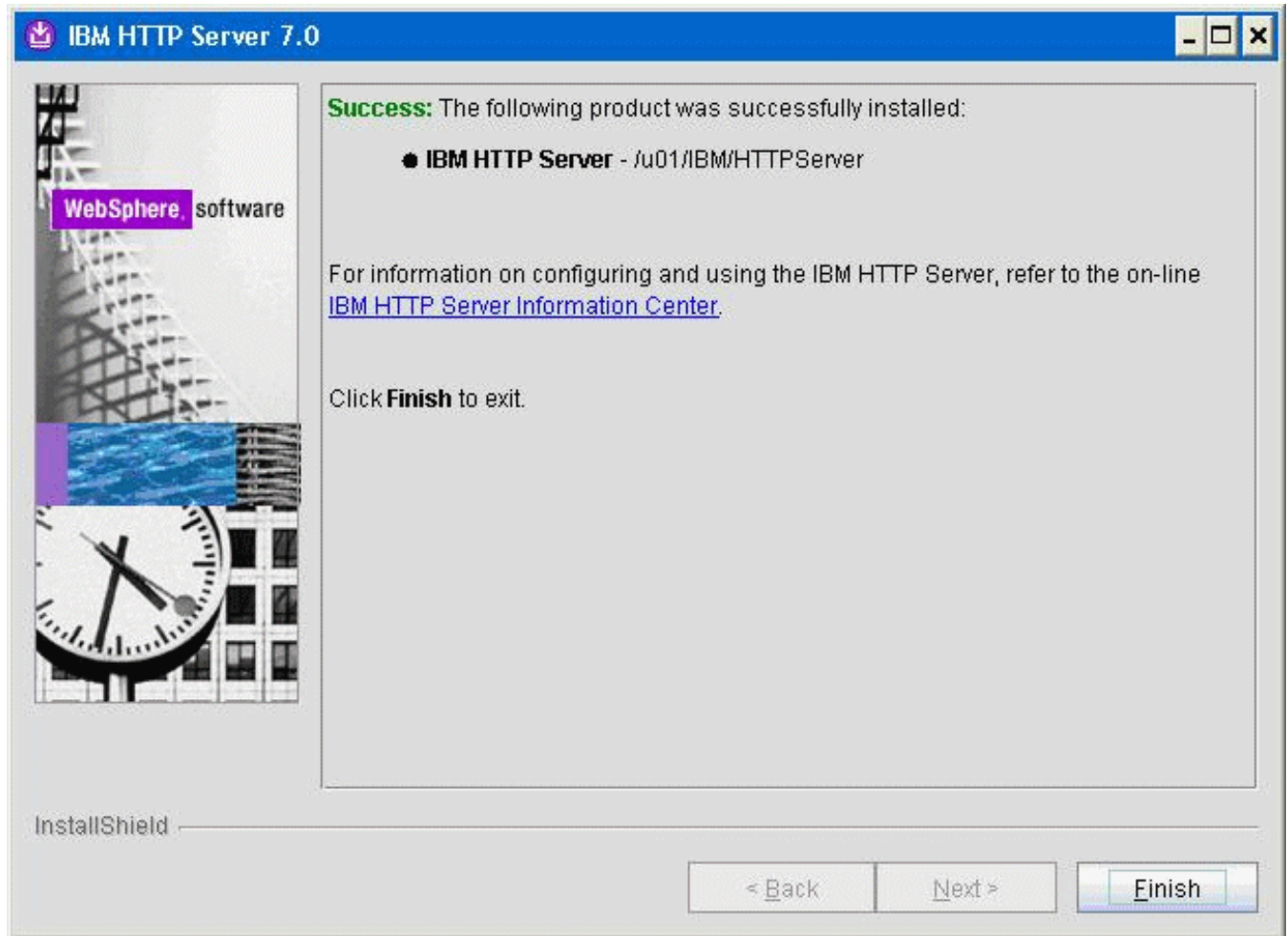
18. Click the *Next* button to continue.





19. On the summary screen, click the *Next* button to begin the installation.





20. On the successfully installed screen, click Finish.

Installing IBM HTTP Server Plug-ins for WebSphere Application Server

With the IBM HTTP Server or Microsoft Internet Information Services (IIS) successfully installed, the final portion of the WebSphere Application Server installation is to install WebSphere Plug-ins.

Prior to installing WebSphere Plug-ins, it is recommended to ensure the IBM HTTP Server services (Apache) or Microsoft IIS services are not already running.

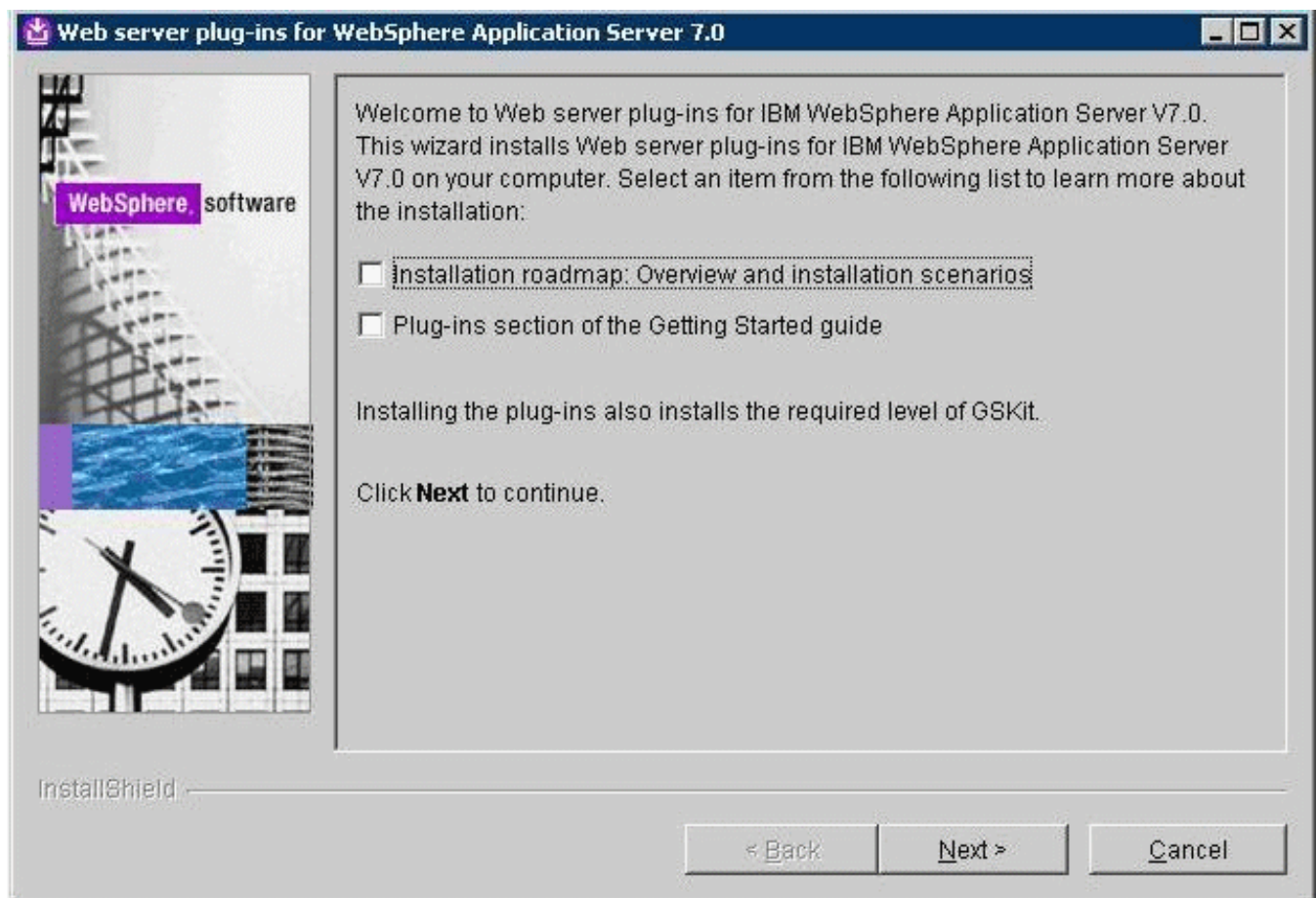
To install WebSphere Plug-ins:

1. Insert the WebSphere Application Server Supplement CD, Version 7.0 (32-bit) or extract the downloaded image (if you haven't done so already).
2. Run the install executable in the plugin directory. For example:

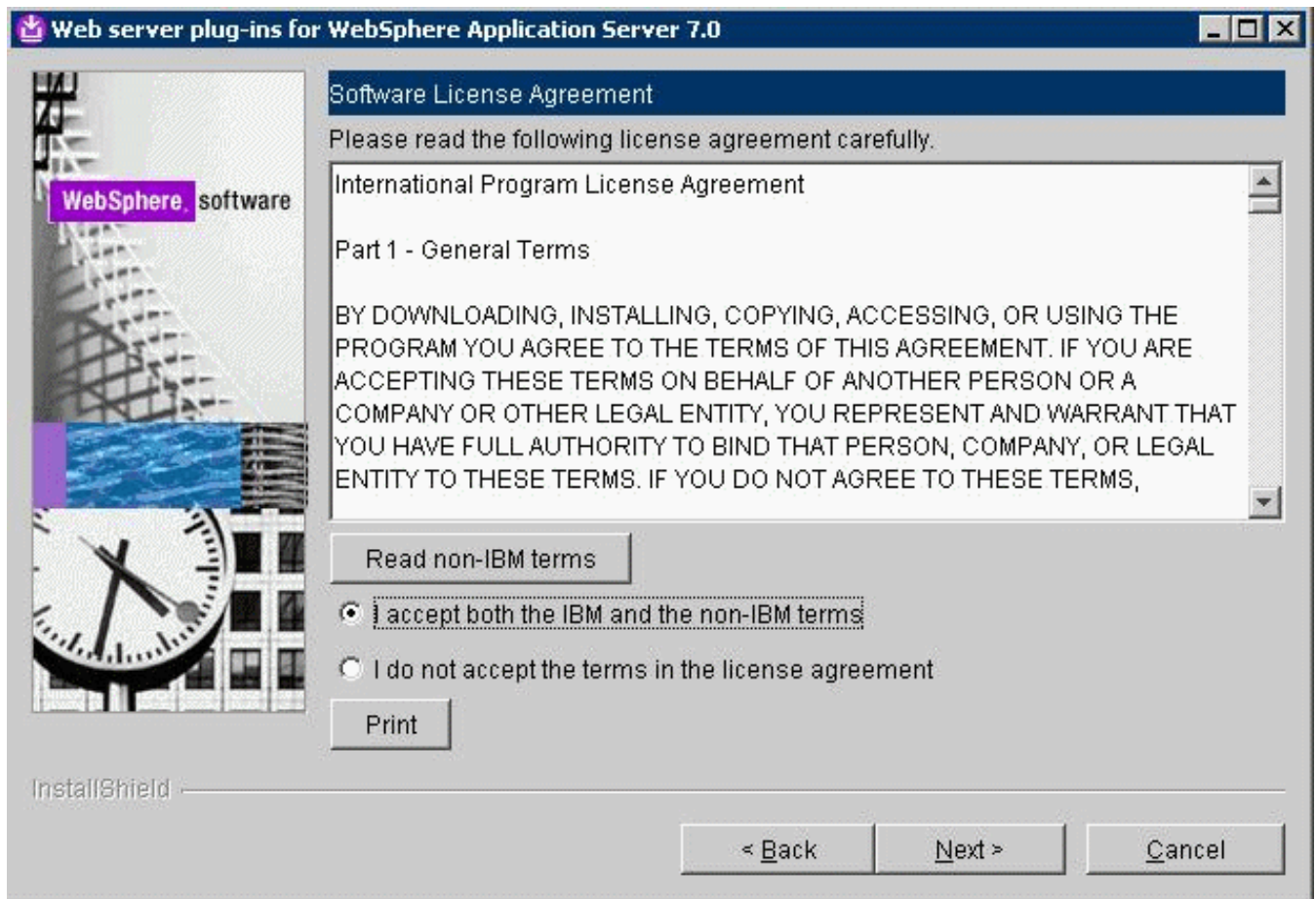
```
cd Z:\dump\was7_windows\sup1\plugin
Z:\dump\was7_windows\sup1\plugin > install.exe

mount /cdrom
cd /cdrom
./plugin/install.sh
```

Note: The syntax of the mount command can vary by platform, and is not required for Sun platforms.

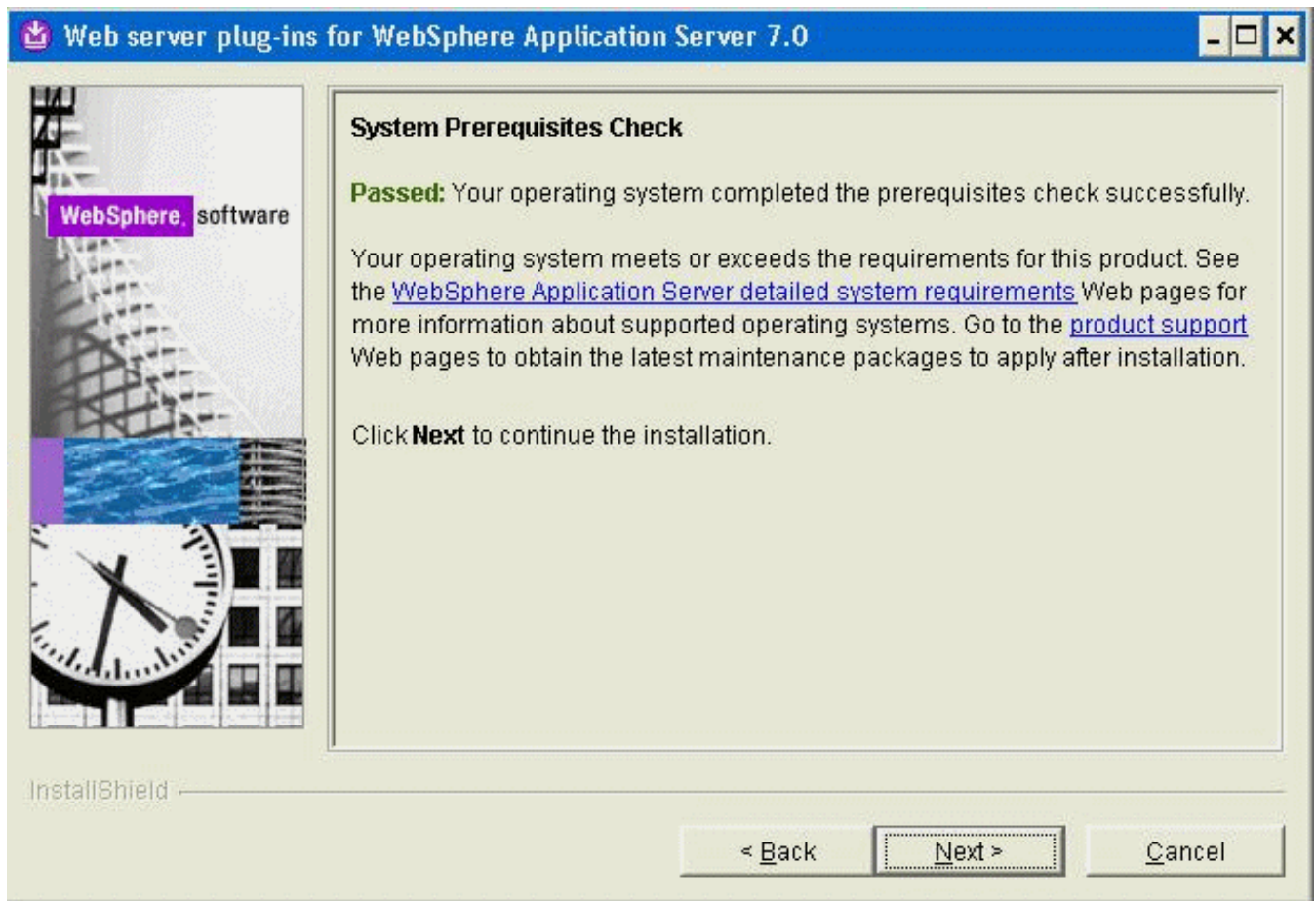


3. On the Welcome screen, you can deselect all "learning" options and click the *Next* button to begin the wizard.



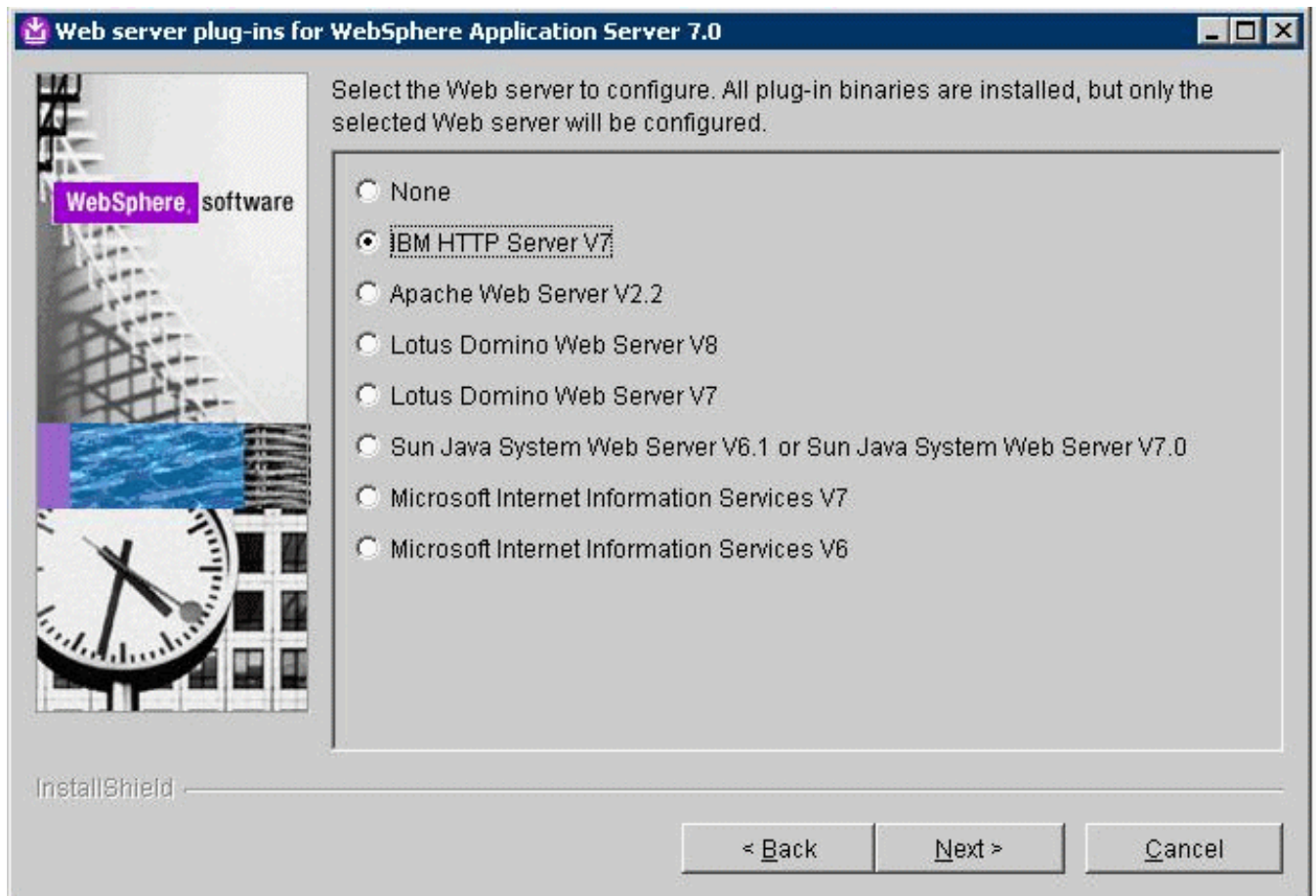
4. On Software License Agreement, review the License Agreement and choose an option to accept or decline.

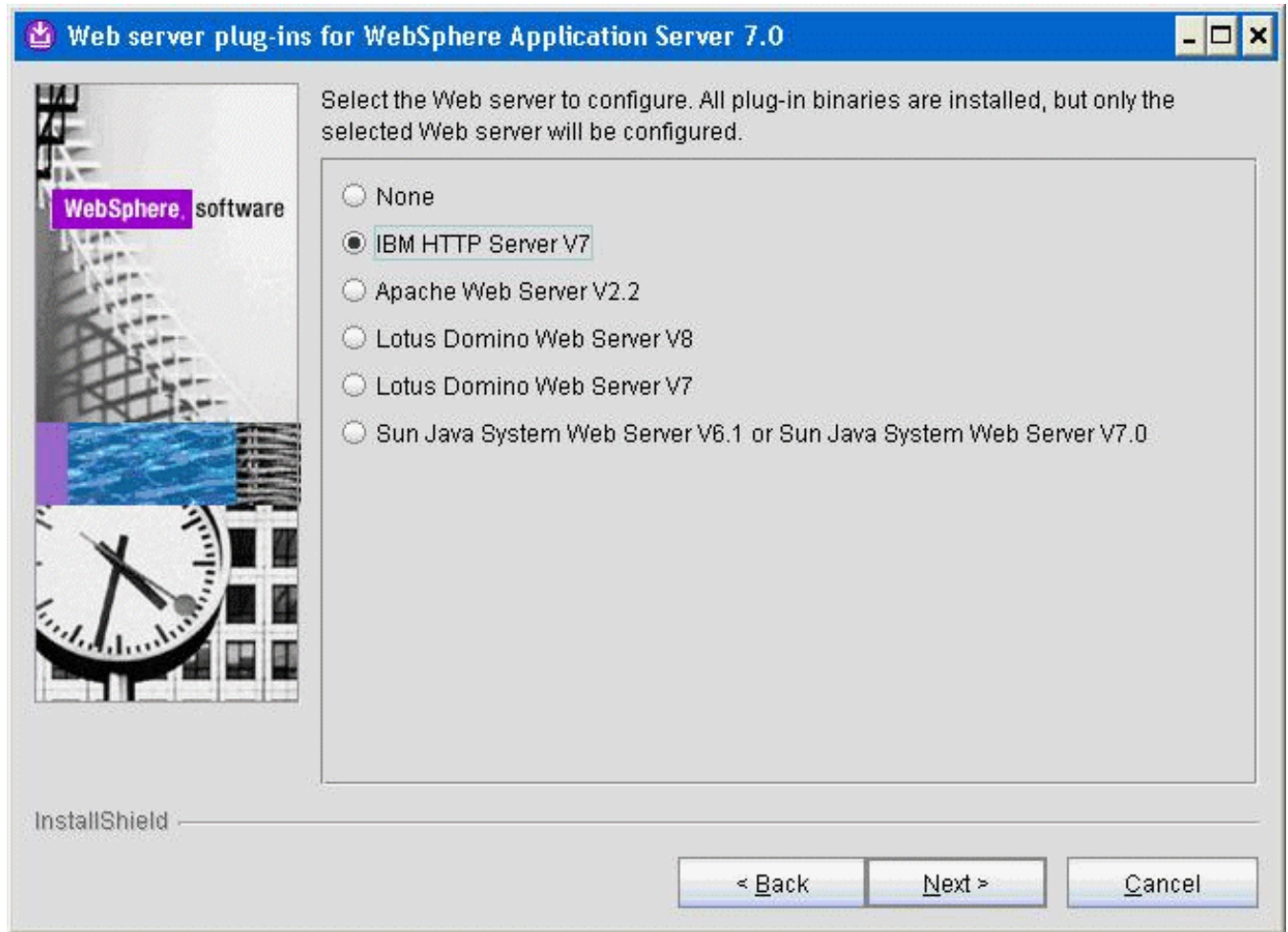
5. Click the *Next* button to continue (not available if license agreement is not accepted).



6. On System Prerequisites Check, the installer performs a verification of system requirements.

After the installer indicates the check was successful, click the *Next* button to continue.





7. On Select the Web server to configure, select *only one* of the following radio buttons:

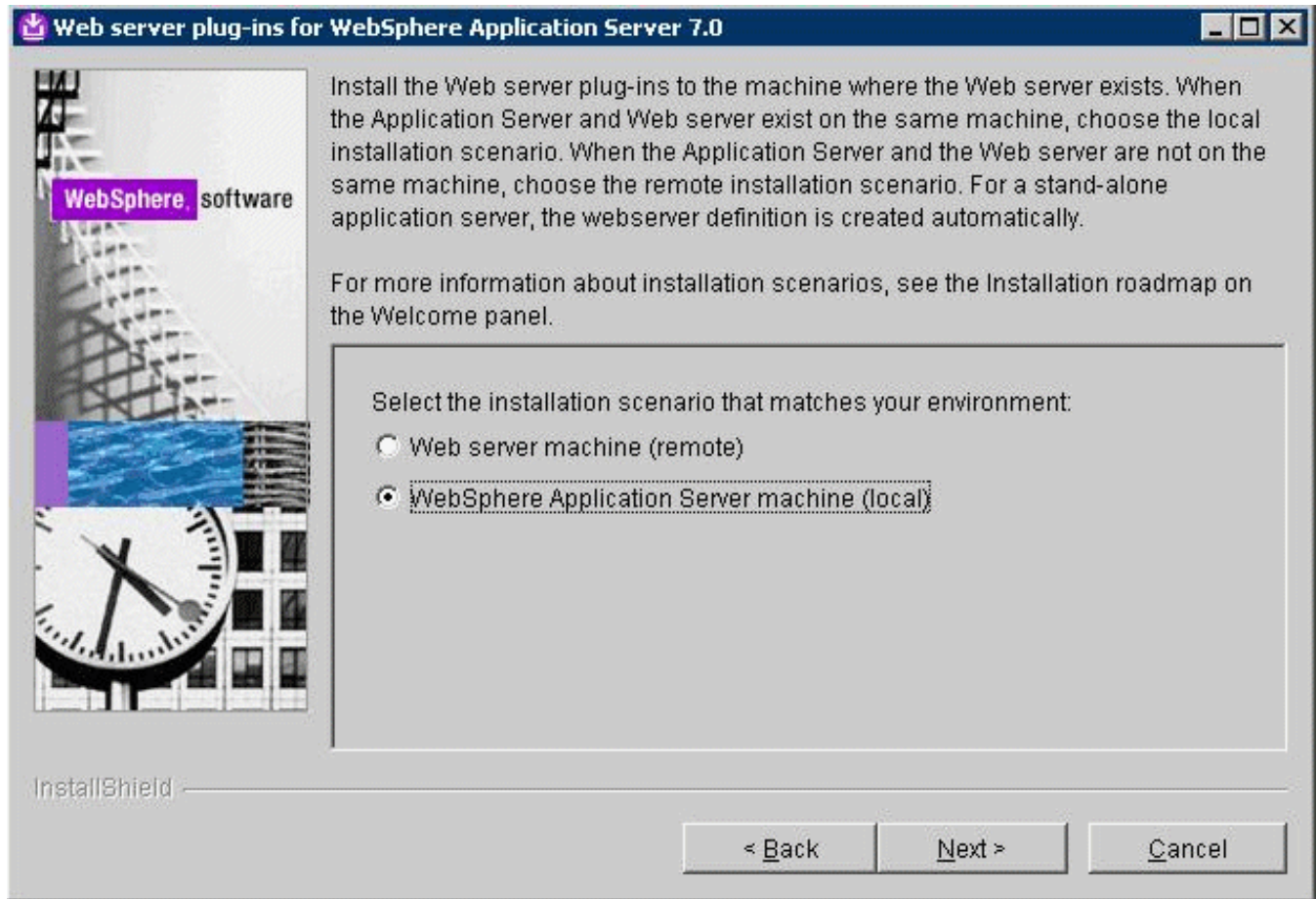
IBM HTTP Server V7

Miscrosoft Internet Information Service V7

Miscrosoft Internet Information Service V6

Note: All plug-in binaries are installed, but only the selected Web server will be configured.

8. Click the *Next* button to continue.



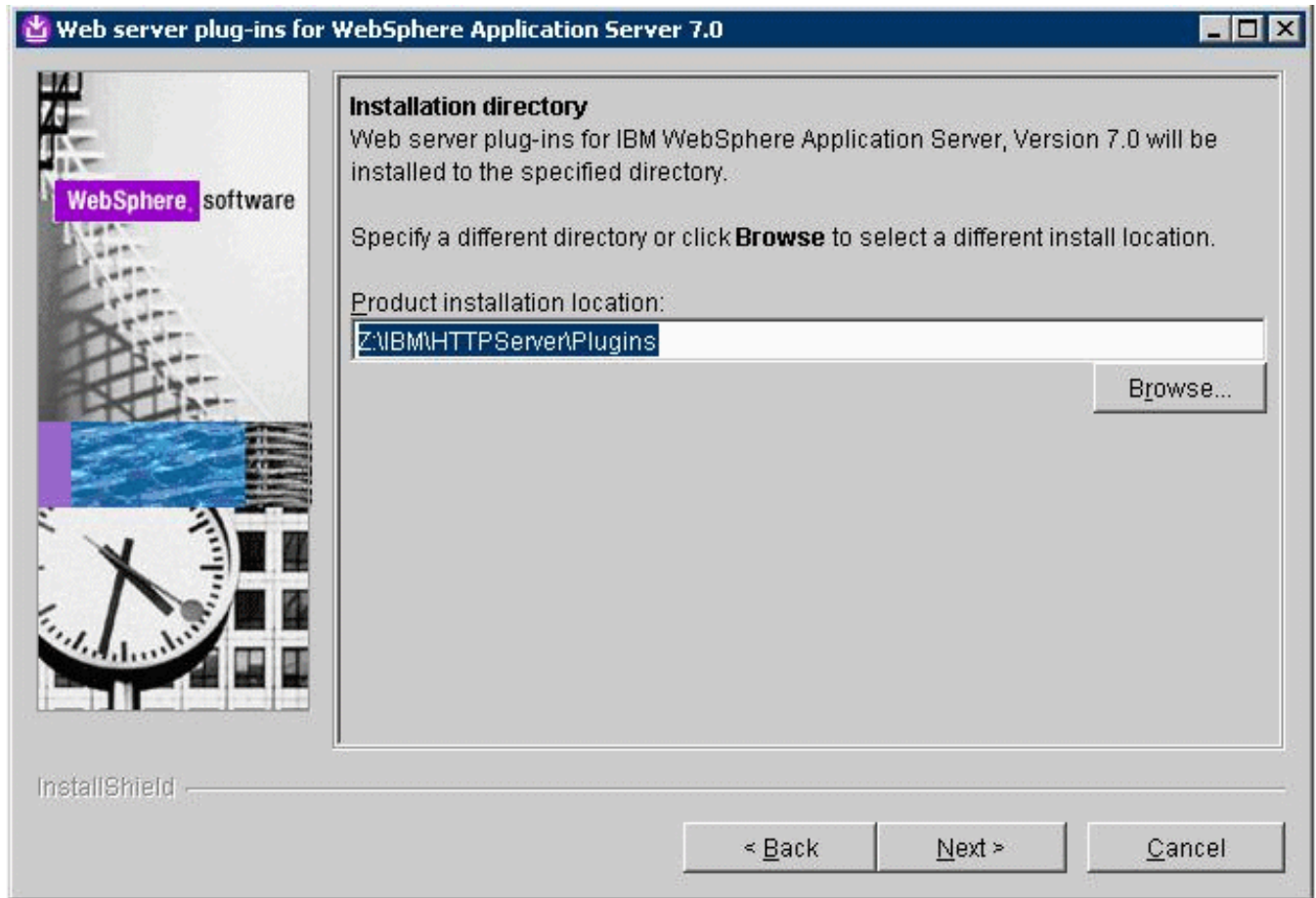
9. On Select installation scenario, if your WAS server is located on the same machine on which you are installing, select this radio button:

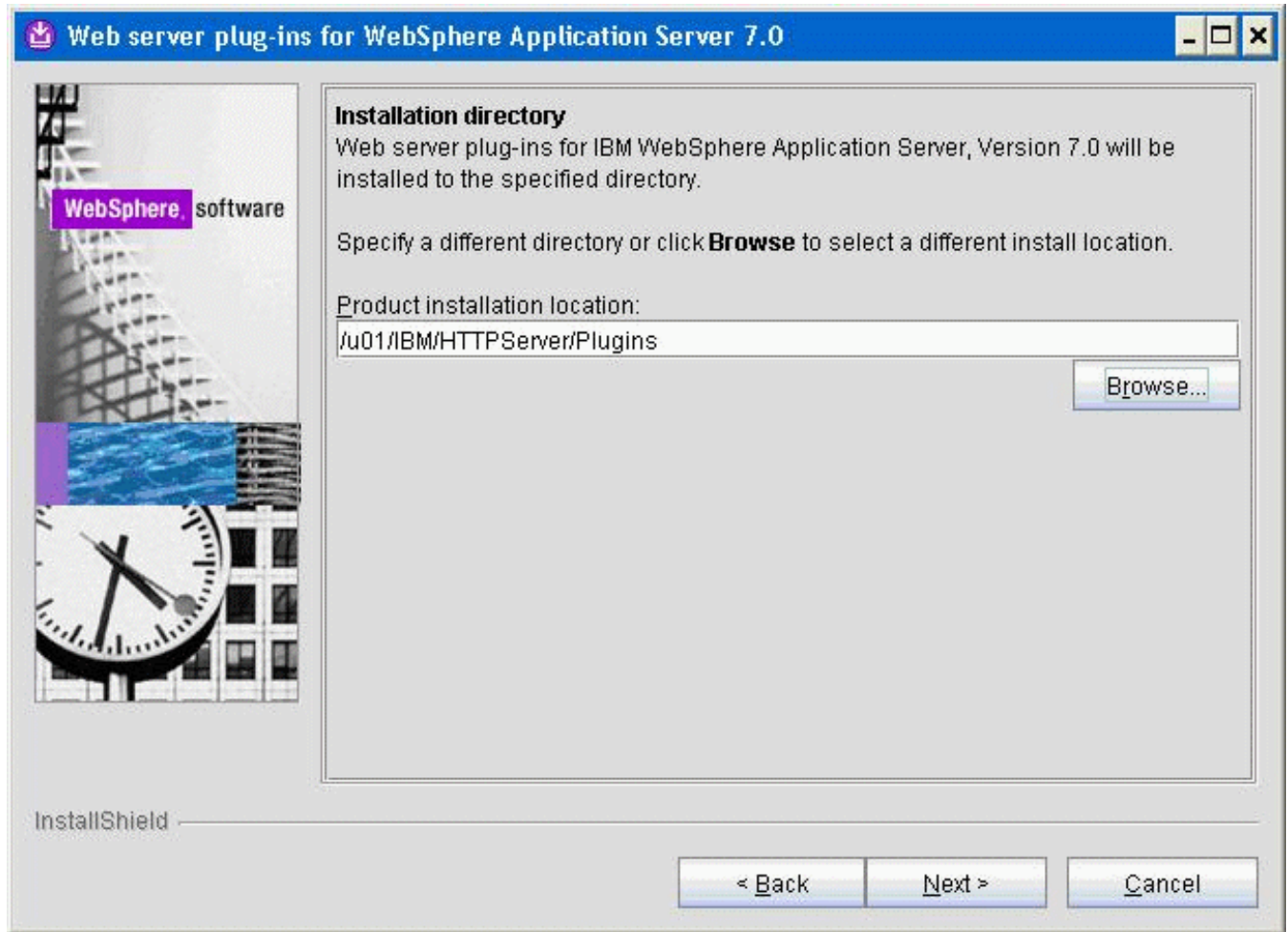
WebSphere Application Server machine (local)

If your WAS server is located on a different machine than the one on which you are running the installer, select this radio button:

Web server machine (remote)

10. Click the *Next* button to continue.





11. On Web server plug-ins installation location, enter a directory. The default directory is:

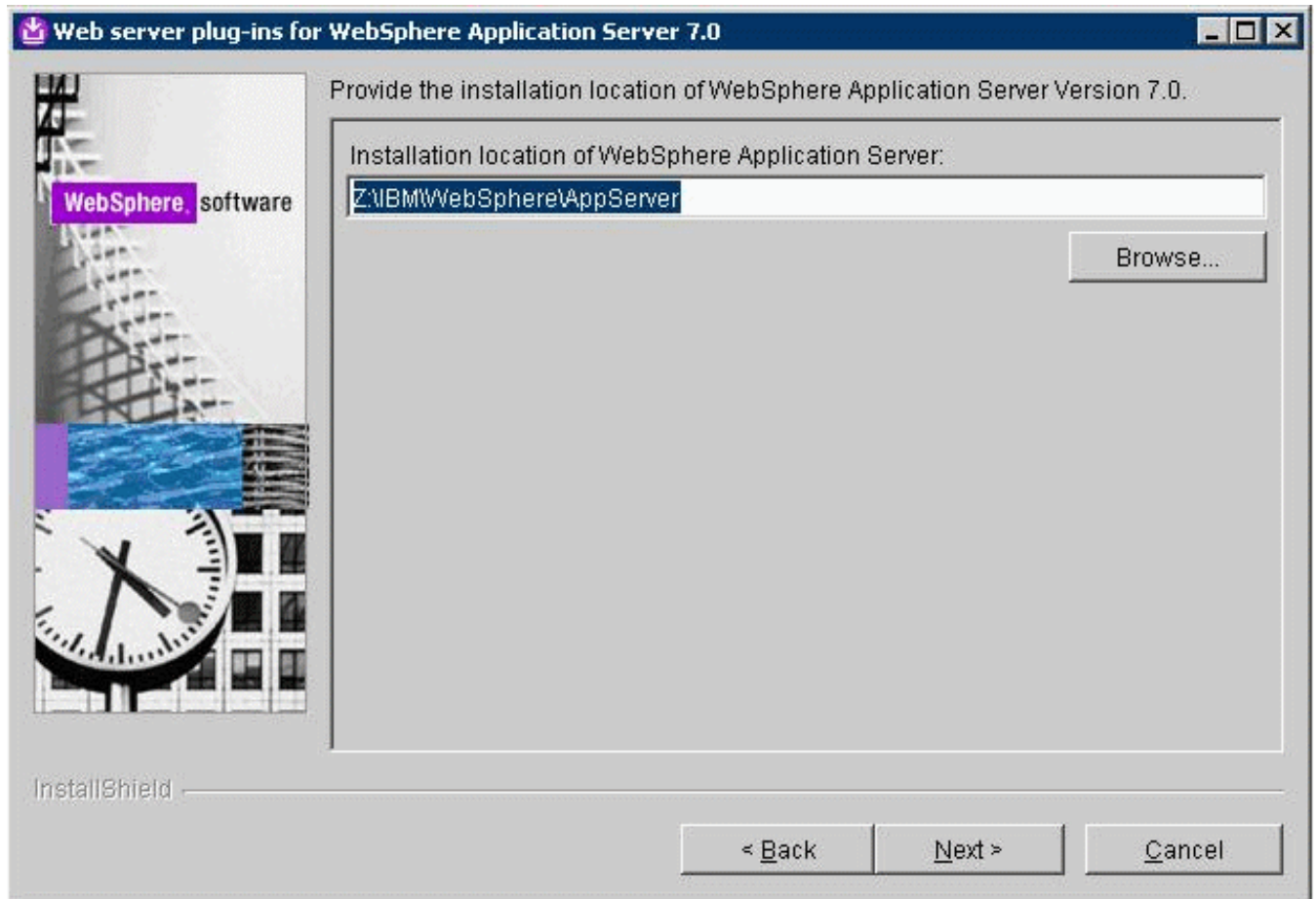
```
z:\IBM\HTTPServer\Plugins
```

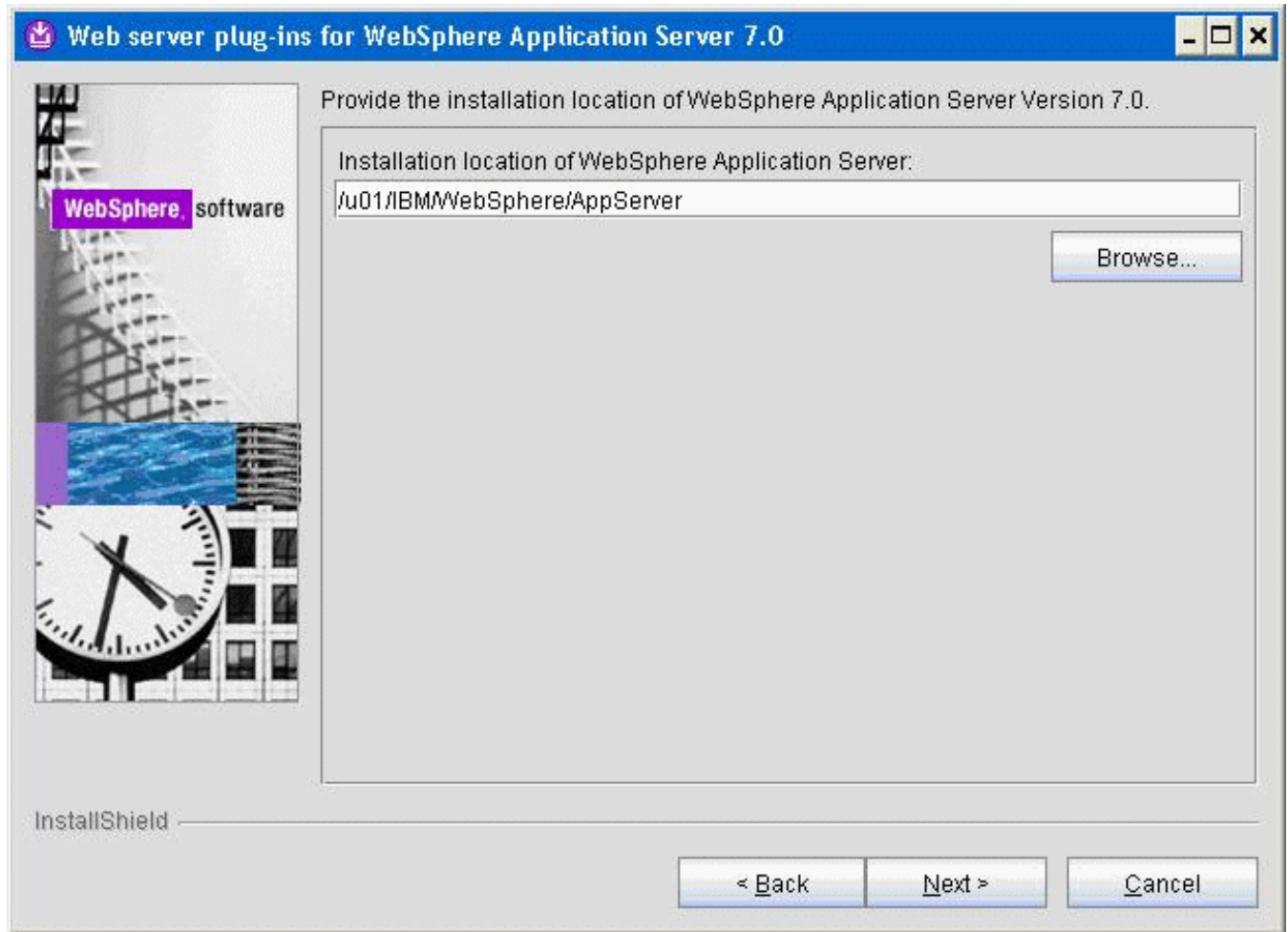
```
/opt/IBM/HTTPServer/Plugins
```

For example:

```
/u01/IBM/HTTPServer/Plugins
```

12. Click the *Next* button to continue.



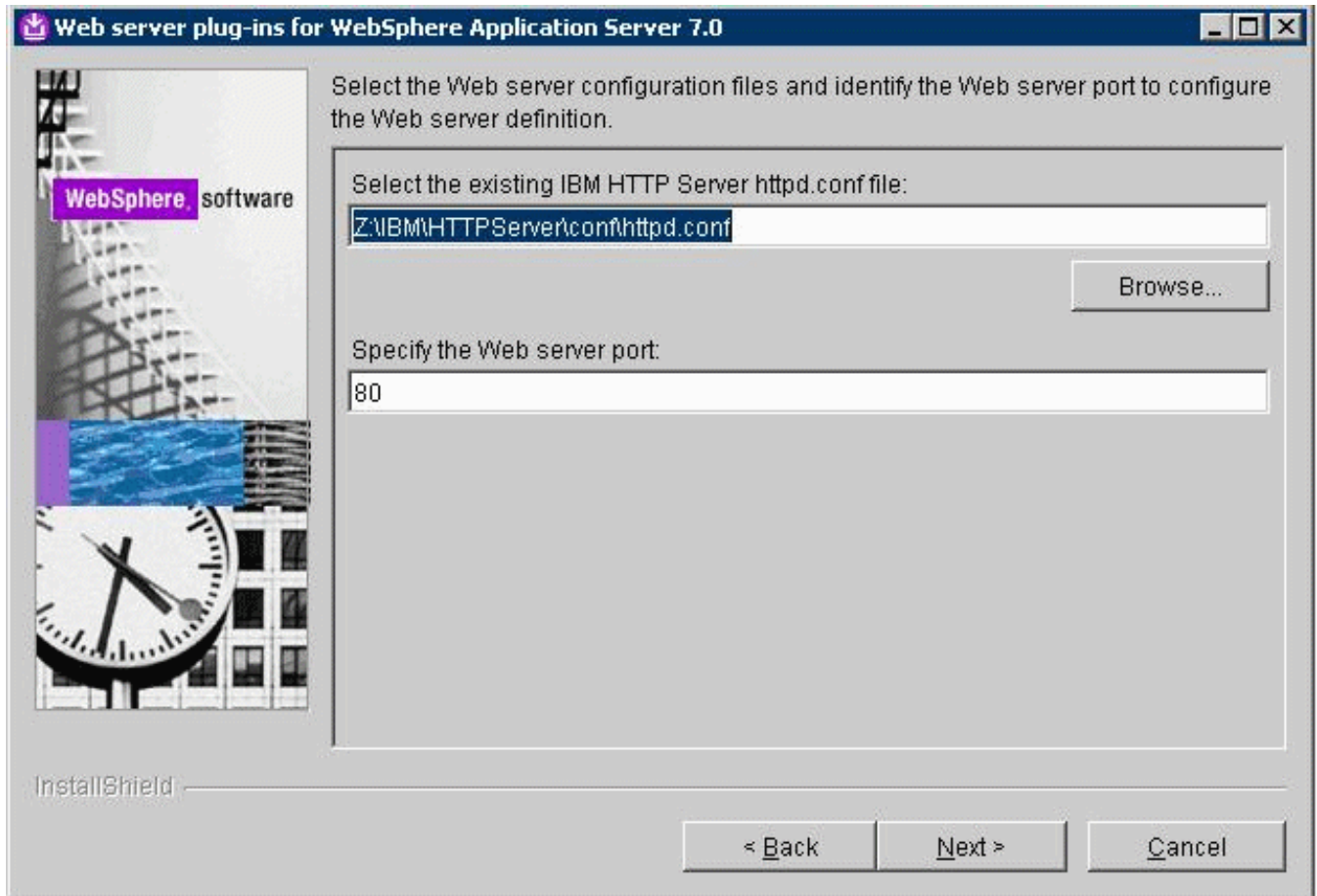


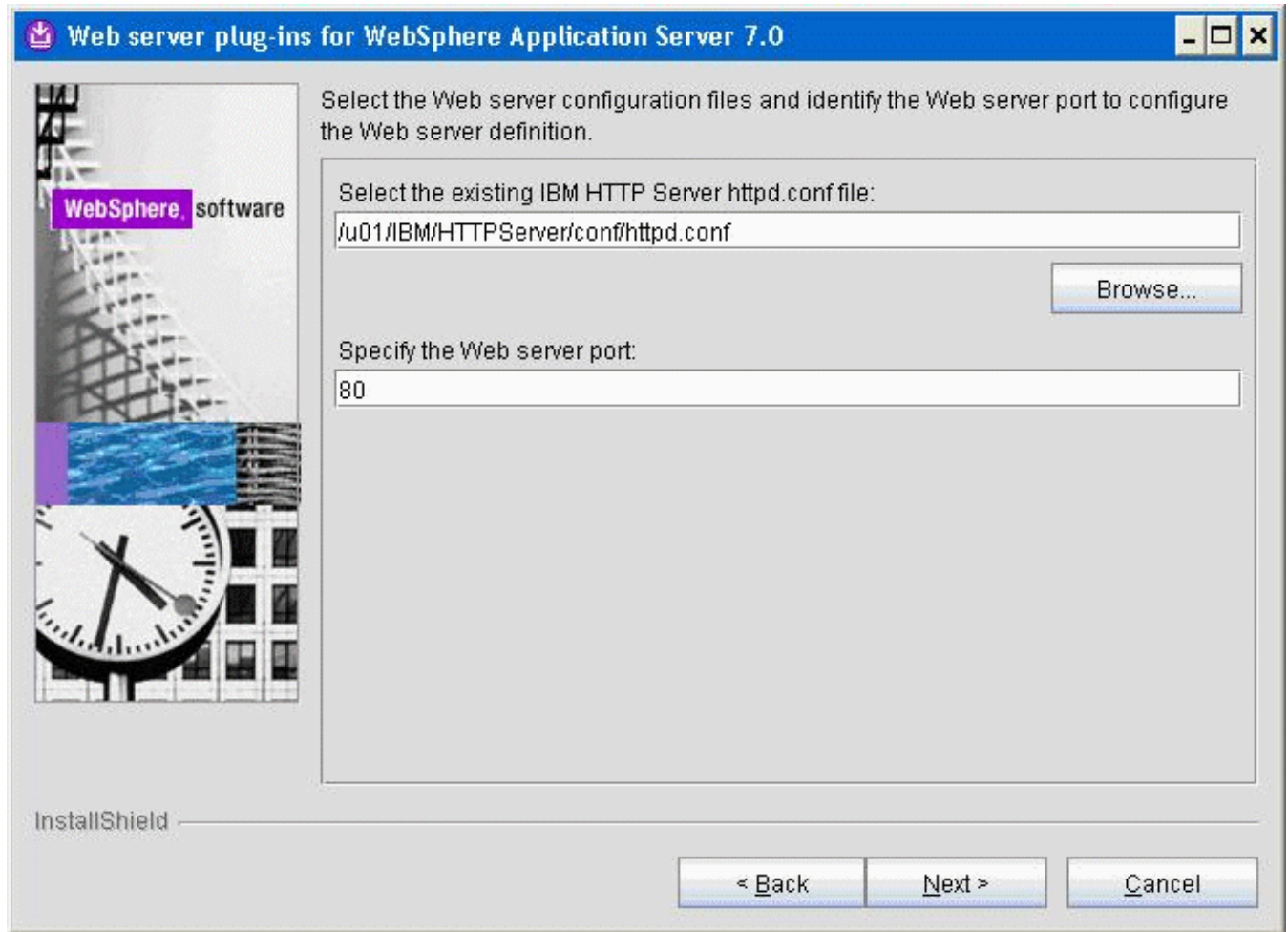
13. On Installation location of WebSphere Application Server V7.0, enter a directory. For example:

`z:\IBM\WebSphere\AppServer`

`/u01/IBM/WebSphere/AppServer`

14. Click the *Next* button to continue.





15. On Select the existing IBM HTTP Server httpd.conf file, enter a directory path. For example:

```
z:\IBM\HTTPServer\conf\httpd.conf
```

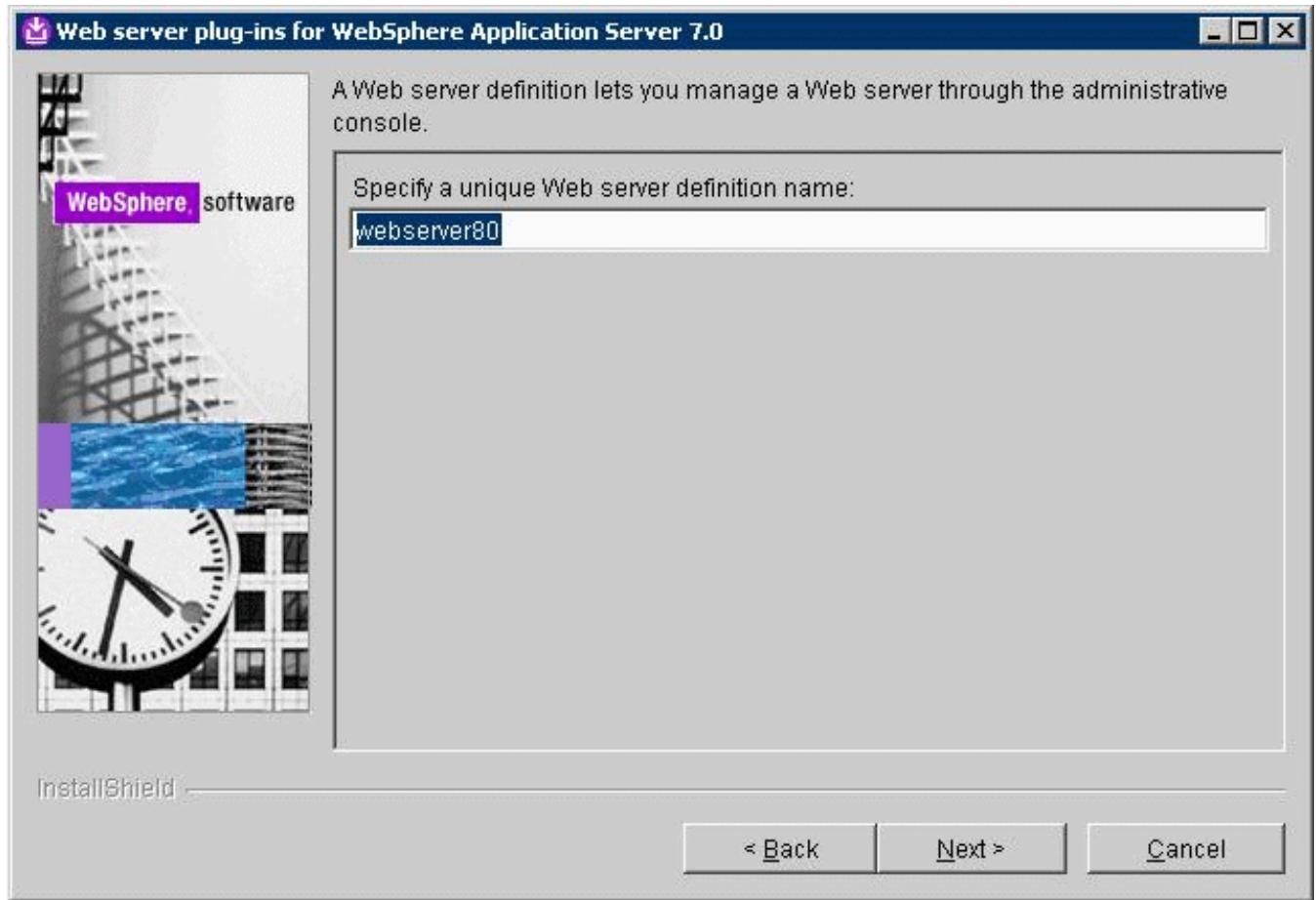
```
/u01/IBM/HTTPServer/conf/httpd.conf
```

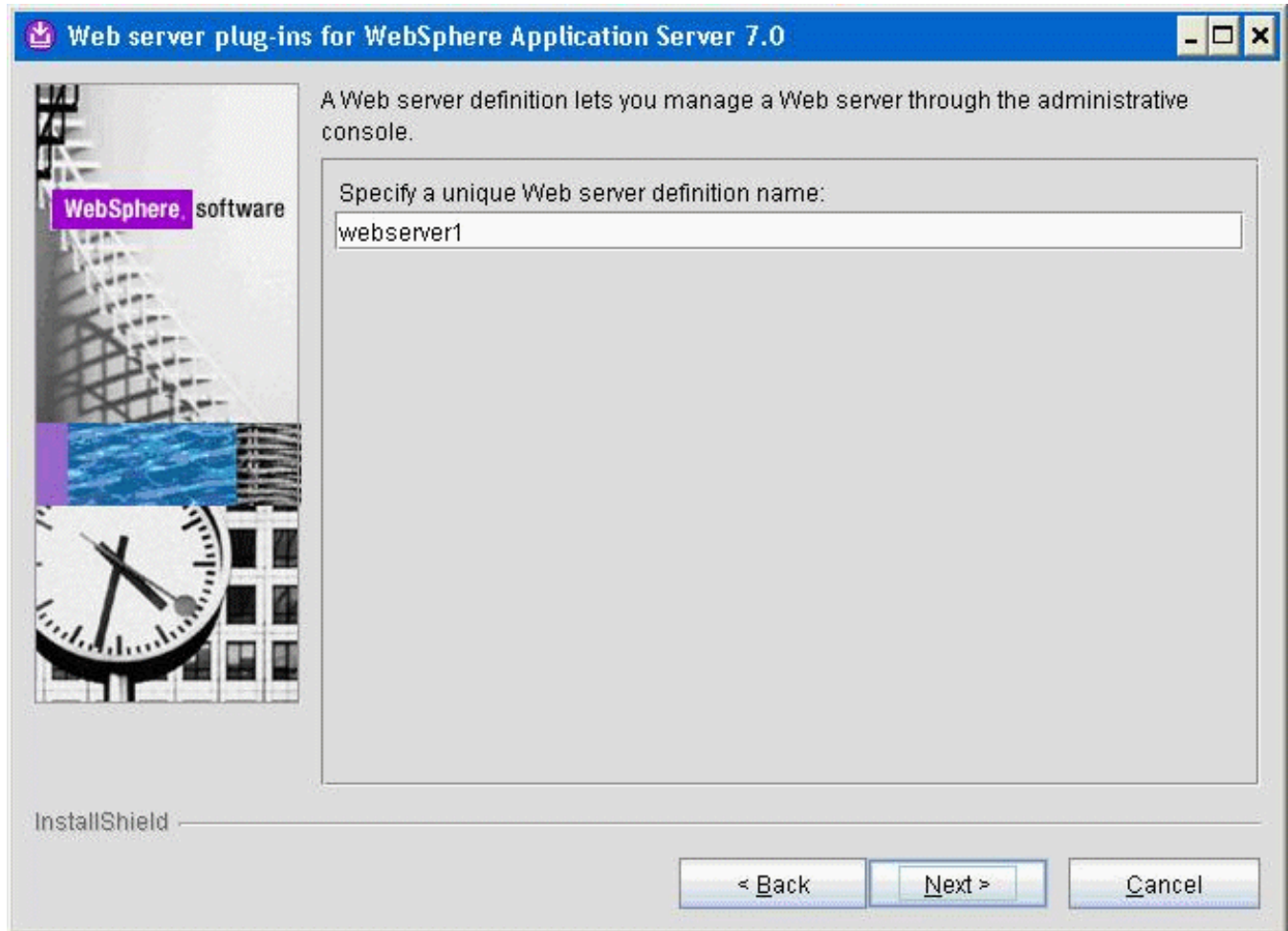
Note: This field is not available for IIS.

You must also specify the Web Server port. Typically you can accept the default value of 80 for the both the IBM HTTP and Microsoft IIS servers.

Note: The plug-ins installer directly modifies the IBM HTTP Server configuration file with the information you specify on this screen.

16. Click the *Next* button to continue.





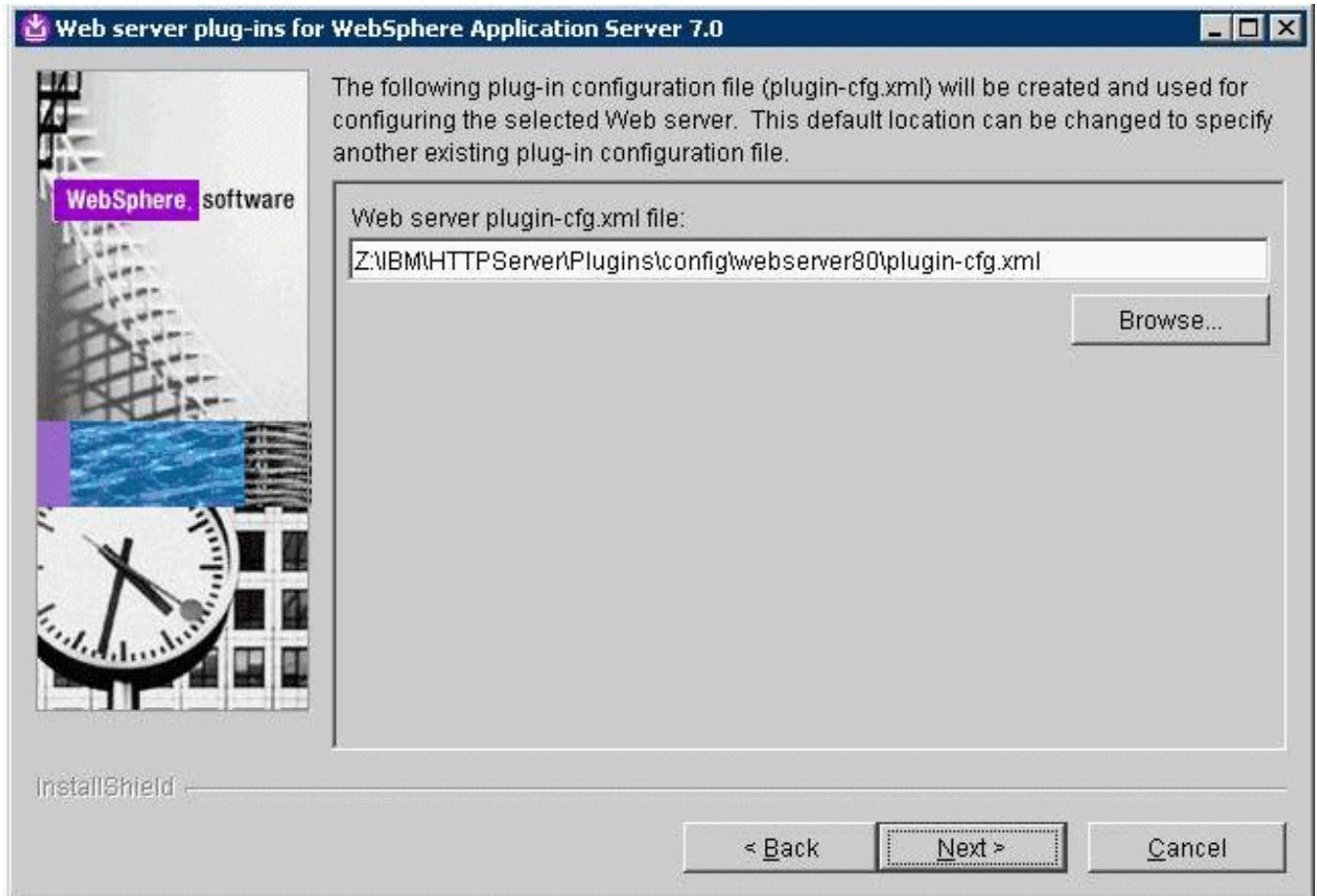
17. On Specify a unique Web Server definition name, enter the name of your IBM HTTP or Microsoft IIS Server to allow the WebSphere Administration Console to administer the IBM HTTP or Microsoft IIS Server configuration and status.

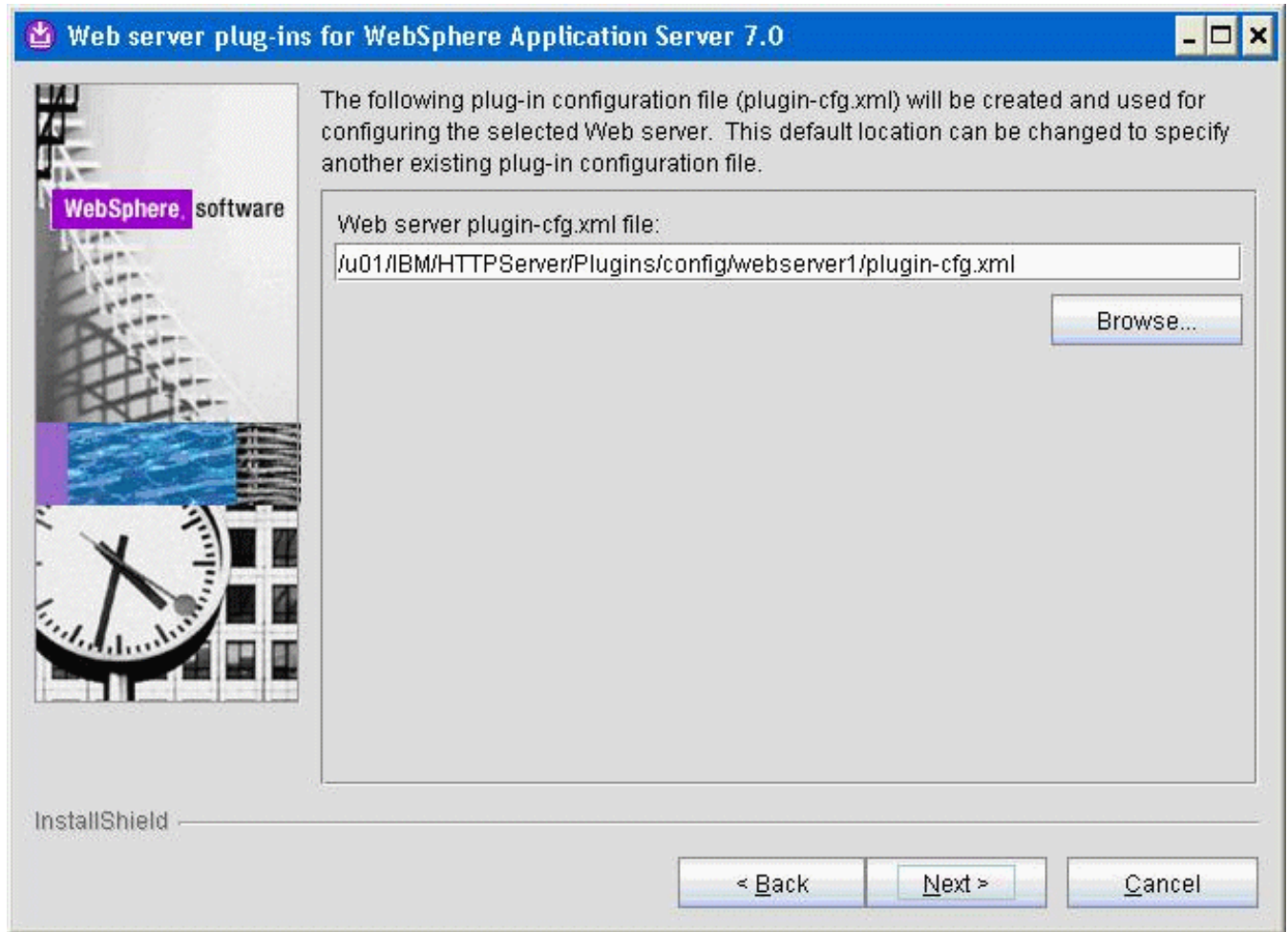
On Specify a unique Web Server definition name, enter the name of your IBM HTTP to allow the WebSphere Administration Console to administer the IBM HTTP configuration and status.

Typically you can accept the default value of *webserv1*.

Tip: In order to avoid confusion in installations with multiple web servers on multiple ports, it is good practice to use the following naming convention: *webserv1<port_number>* For example, the name *webserv180* indicates the webserver is on port 80.

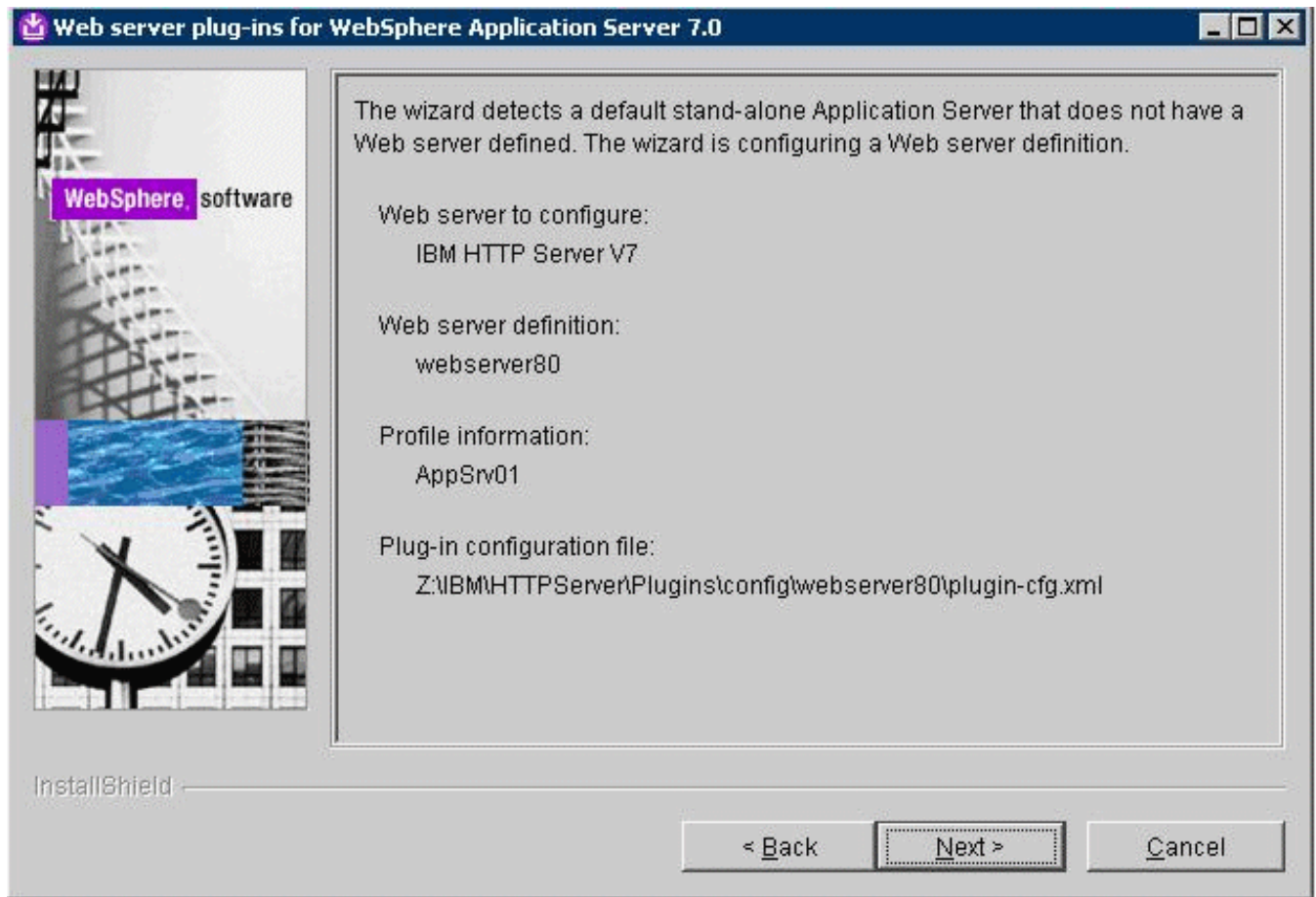
18. Click the *Next* button to continue.

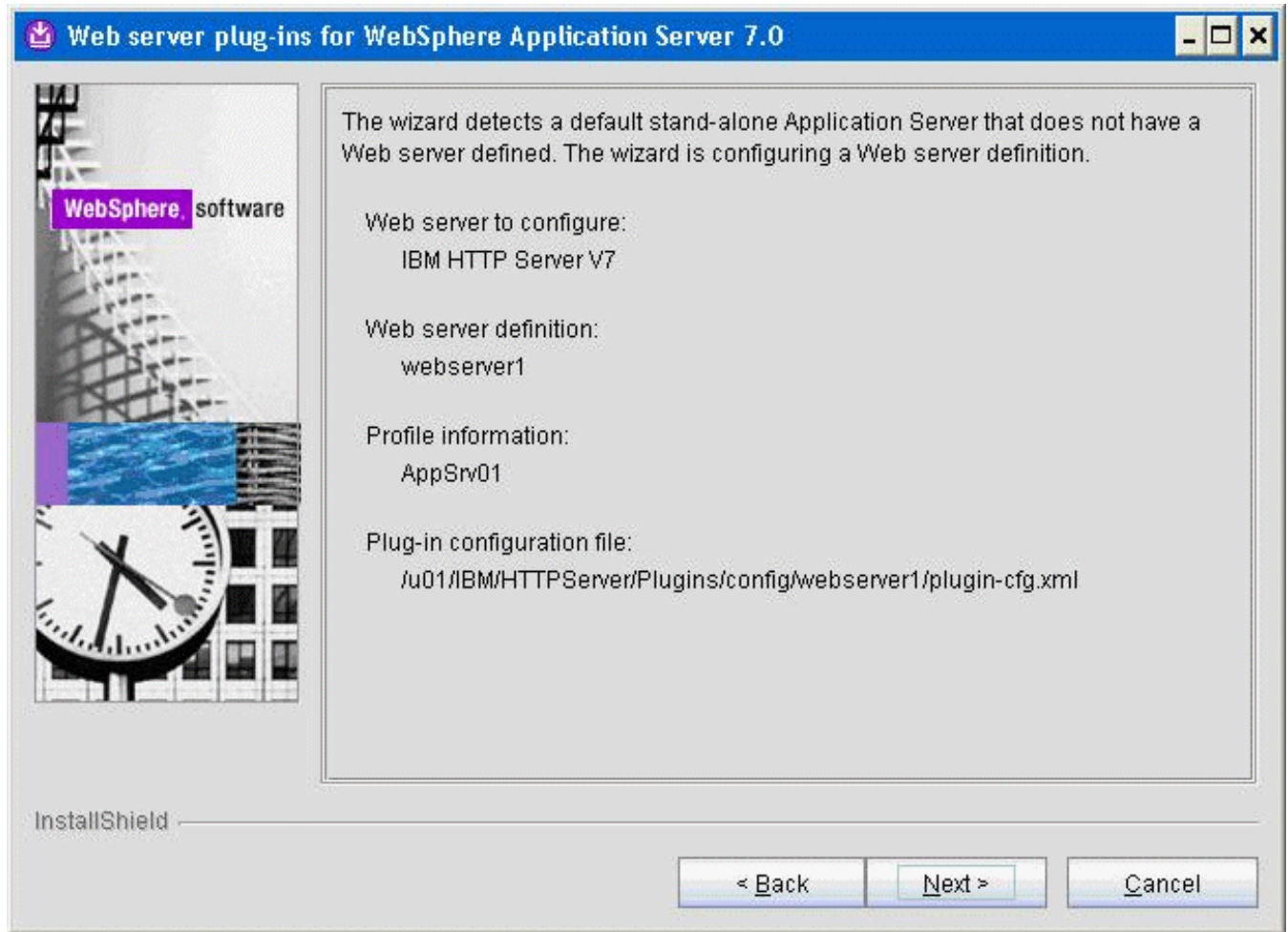




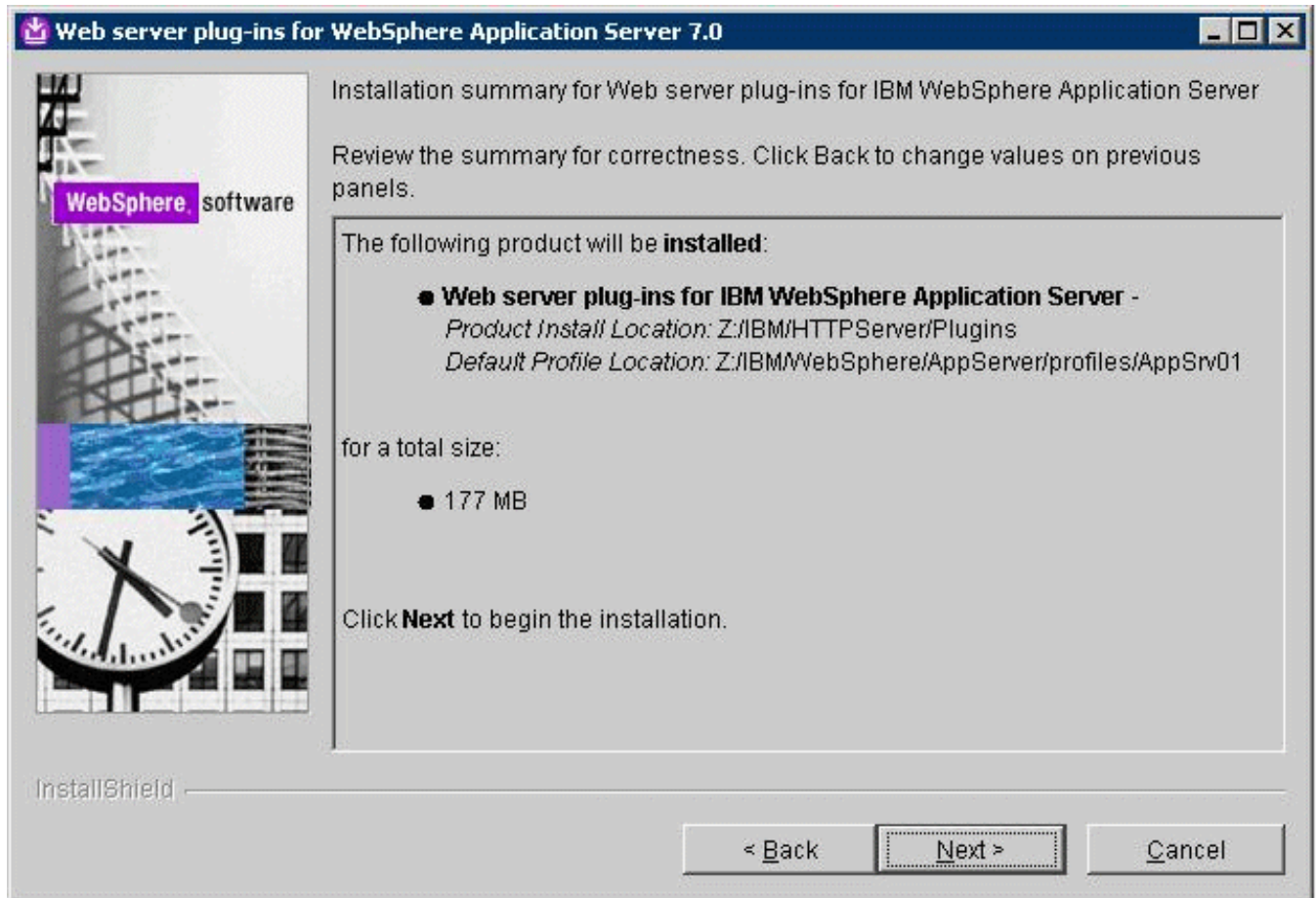
19. On Web Server plugin-cfg.xml file, you can accept the default location for the `plugin-cfg.xml` file.

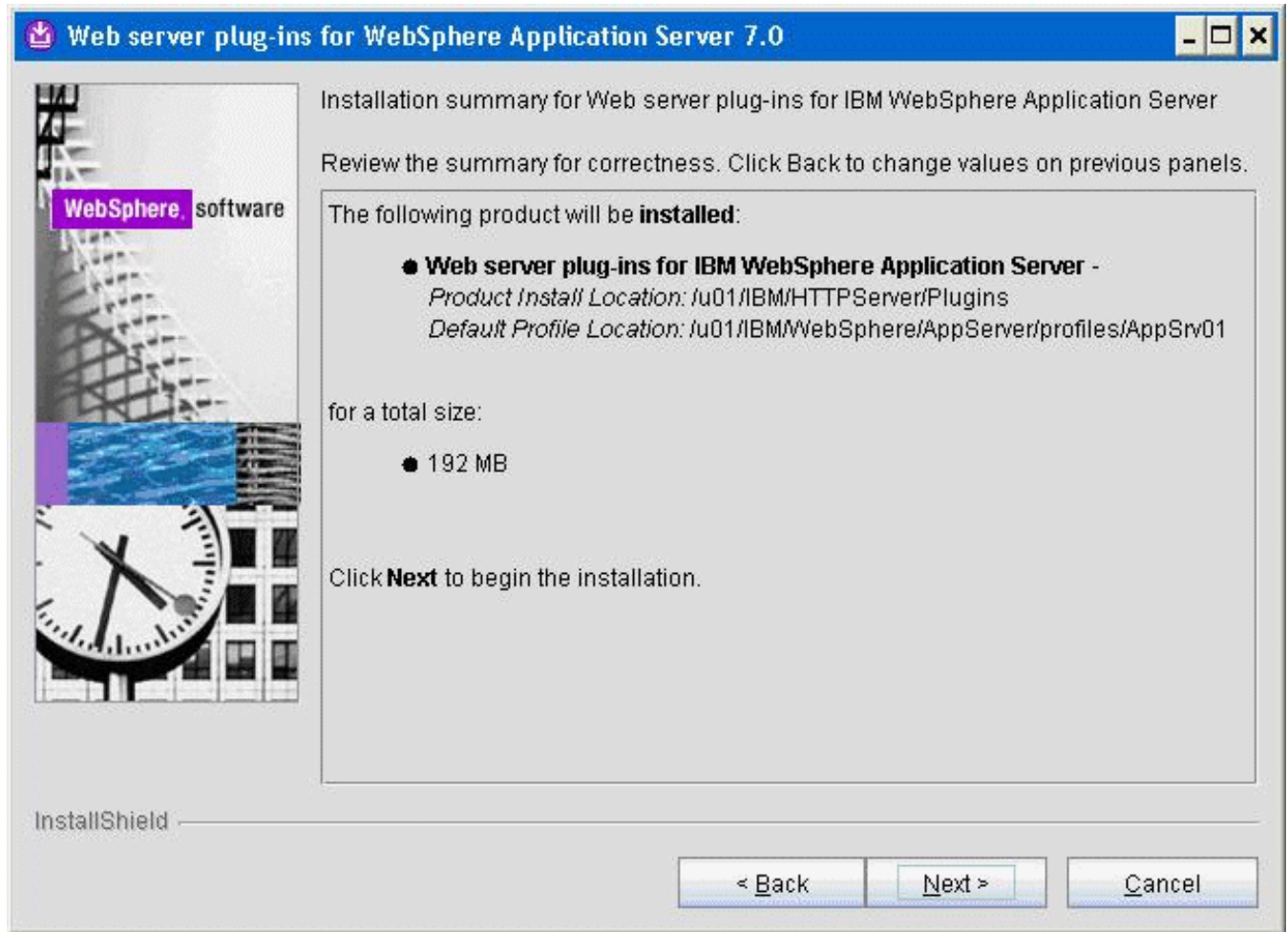
20. Click the *Next* button to continue.



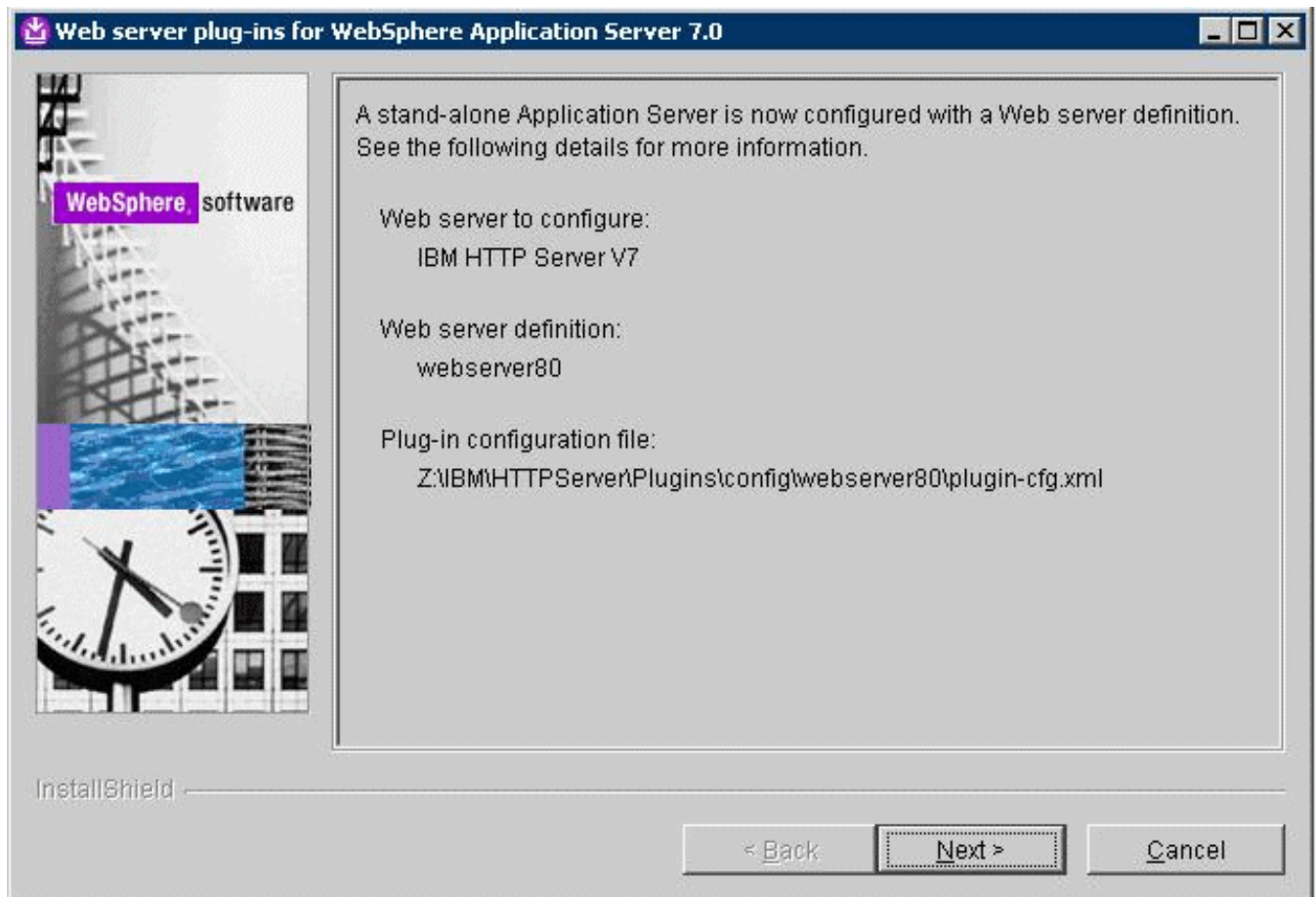


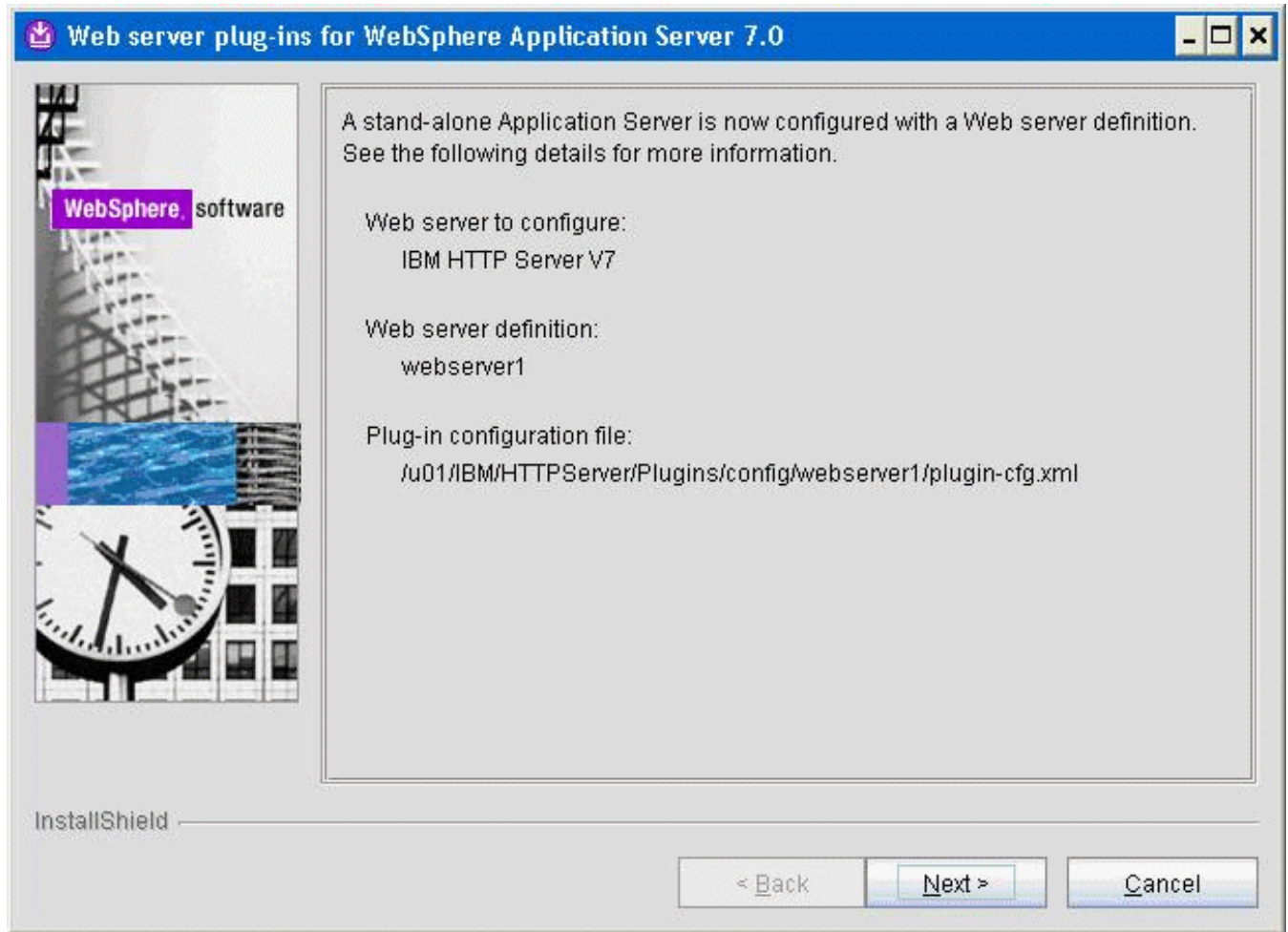
21. The installation wizard detects the default profile (such as AppSrv01) that does not have a Web server defined. Click the **Next** button to continue.





22. On the Summary screen, click the *Next* button to begin the installation.

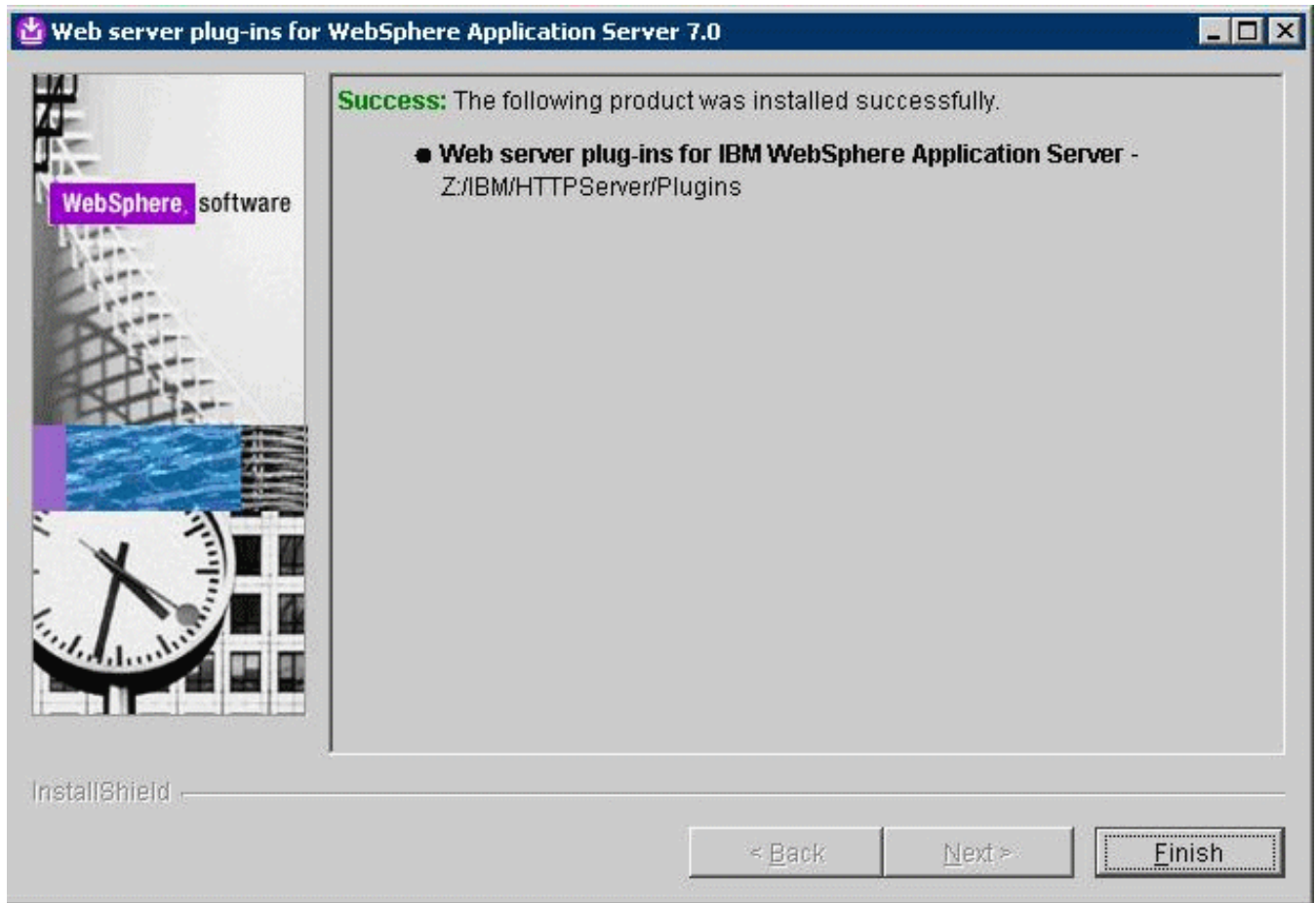


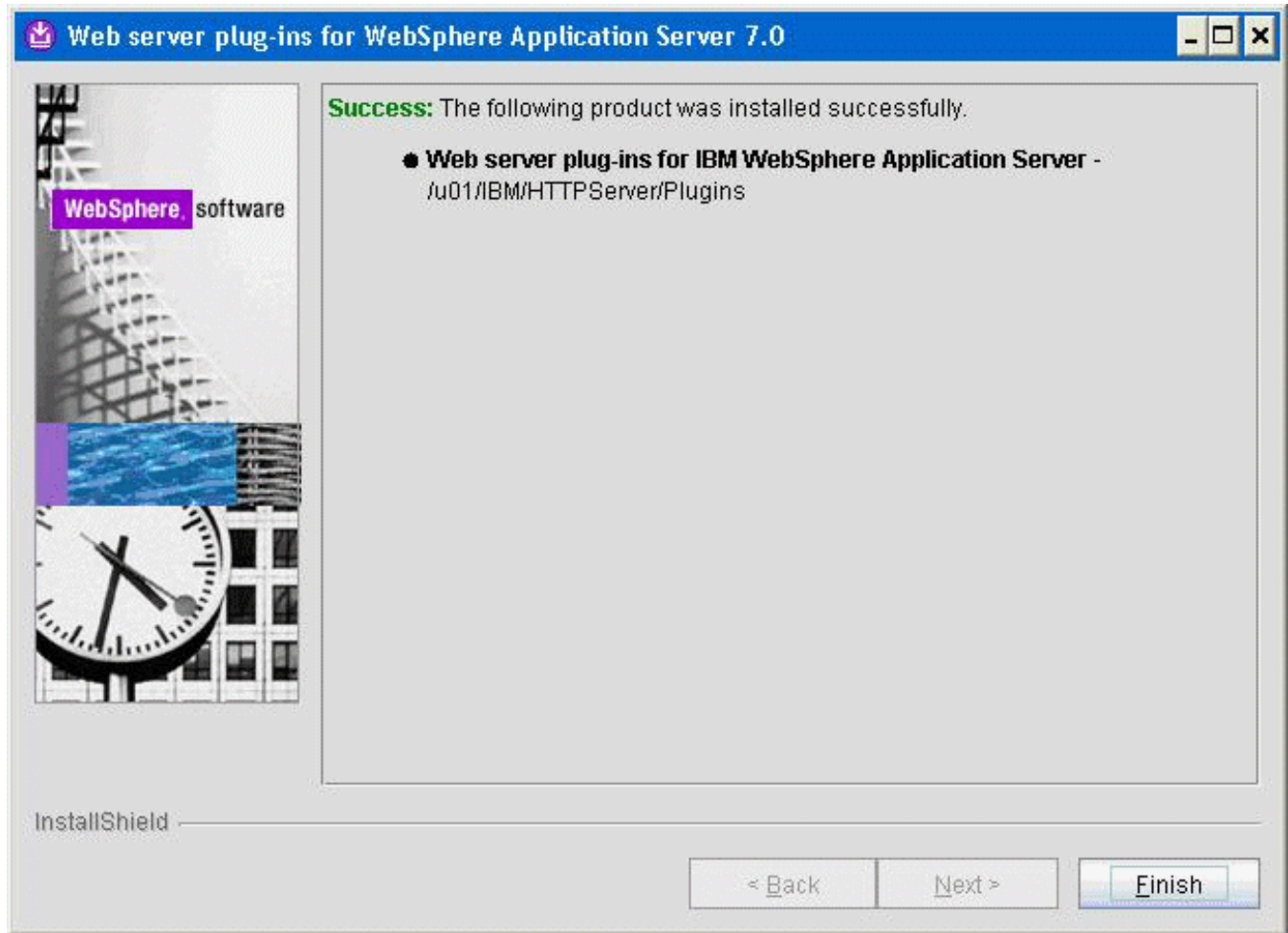


23. The installation wizard shows that a Web server definition is created for the default Application server profile (such as AppSrv01).

24. Click the *Next* button to proceed.

The installation wizard launches a web browser with more detailed information about the Plug-ins road map. You can close the browser at any time or return to the installation wizard.





25. On the completion screen, click Finish to exit the WebSphere Plug-ins installation wizard.

Installing the WebSphere Update Installer

The Update Installer for WebSphere Software includes a new installation program for IBM WebSphere Version 7.0, Installation Wizard starting with Fix Pack 7. The Update Installer is backwards compatible. You should download the Update Installer that match with your WebSphere product. You can use a single installation of the Update Installer to install maintenance packs on all the WebSphere software products such as WebSphere Application Server, Java SDK, IBM HTTP Server, and Web server plug-ins.

Before you can install Refresh or Fix pack for WebSphere software, you need to install the Update Installer engine as described in this procedure.

Note: Make sure all WebSphere processes including IBM HTTP Server V7 are not running before starting Update Installer installation.

This document uses Fix Pack 29 (7.0.0.29) to describe the process of installing WebSphere Fix Pack. Check the Certification for the latest supported WebSphere Fix Pack for the JD Edwards EnterpriseOne HTML Web Server (refer to [Accessing Certifications](#)).

To install the WebSphere update installer:

1. Download the Update Installer software from IBM web site.
2. Enter these commands:

```
mount /cdrom
```

```
cd /cdrom
```

3. Extract the downloaded image.

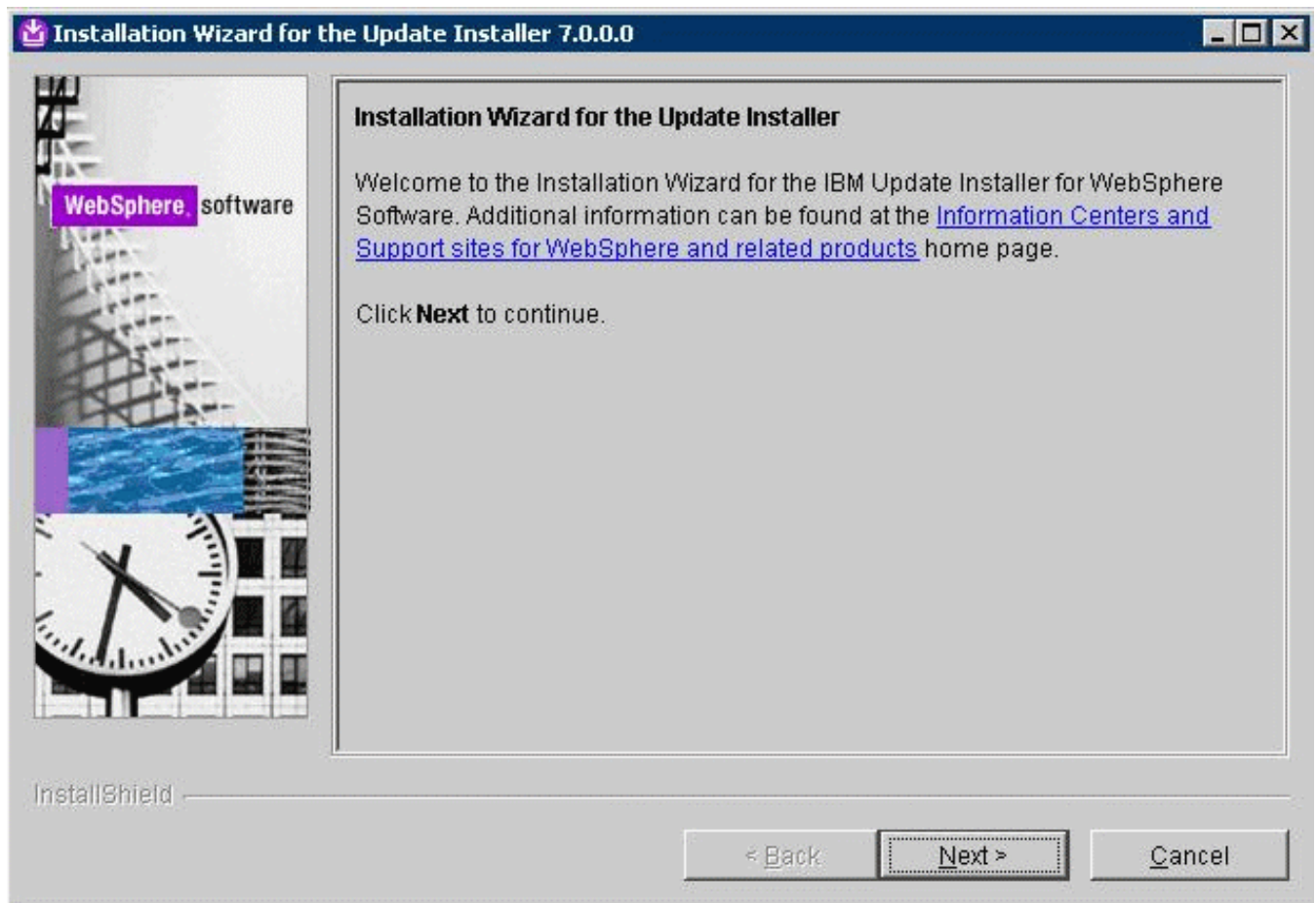
4. From the downloaded image run the install executable using these commands this command:

```
cd x:\dump\was7_windows\sup1\UpdateInstaller
```

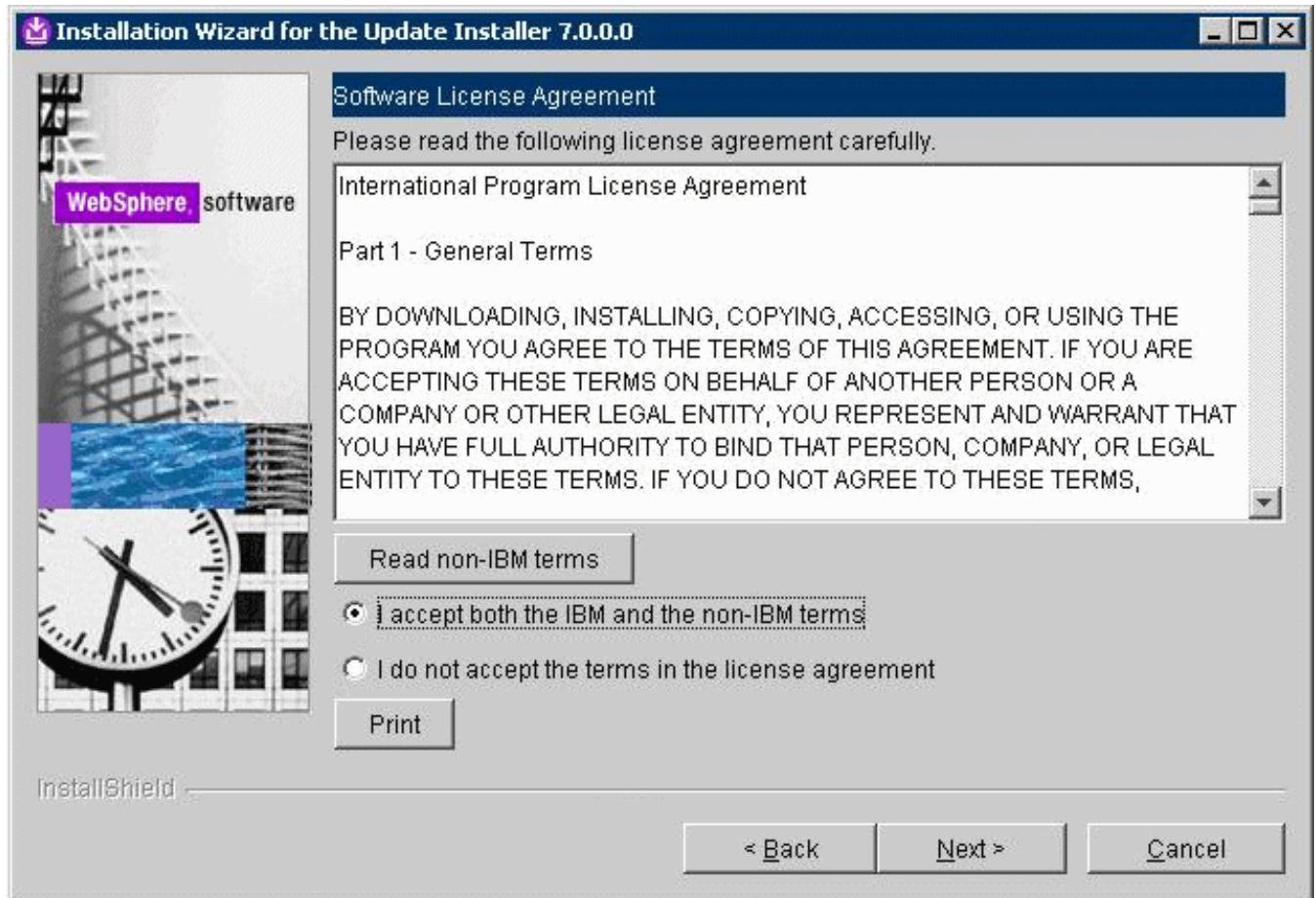
```
x:\dump\was7_windows\sup1\UpdateInstaller > install.exe
```

where **x:** is the drive where you downloaded the Update Installer.

```
./UpdateInstaller/install
```

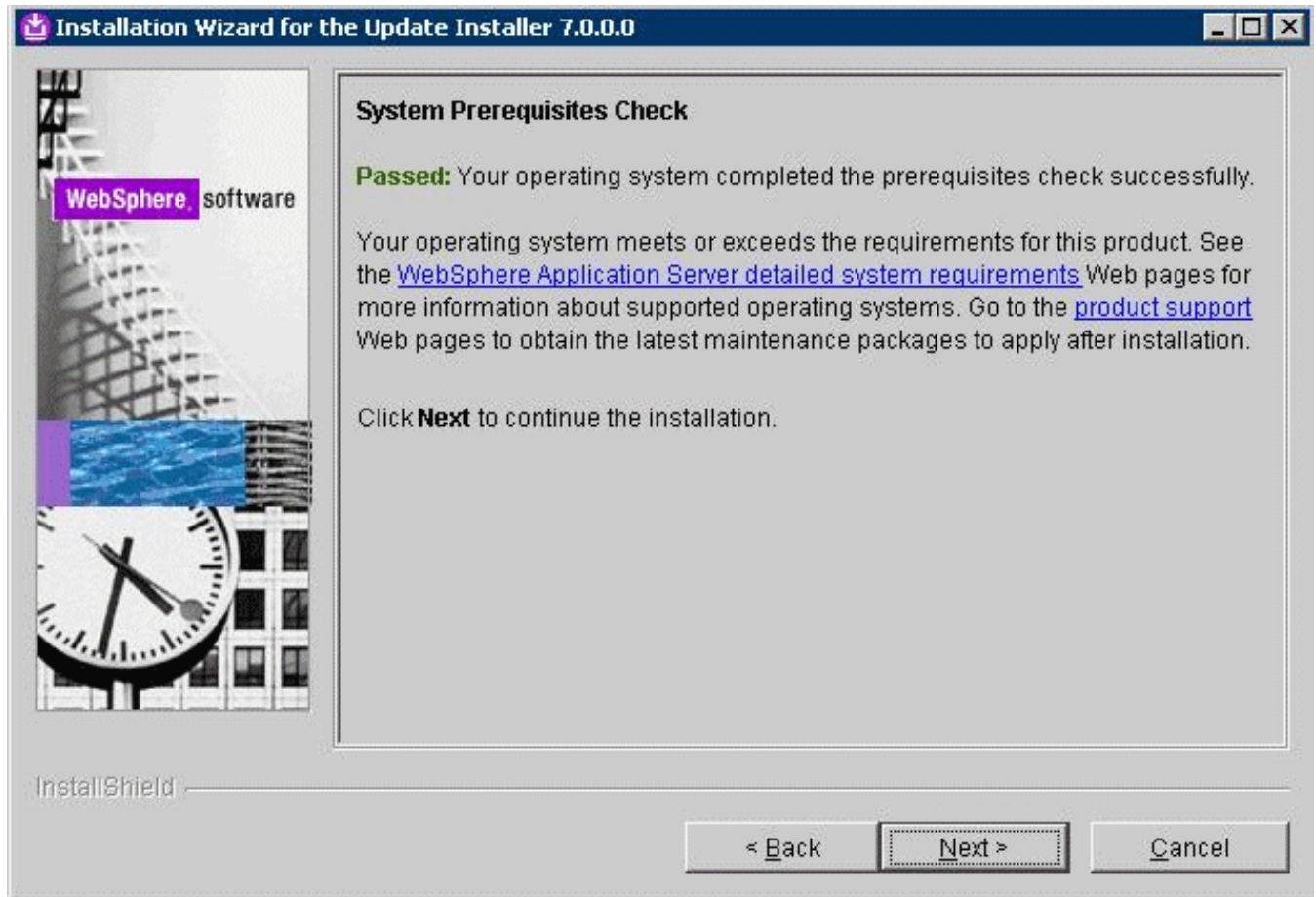


5. On the Welcome screen, click the *Next* button to begin the wizard.



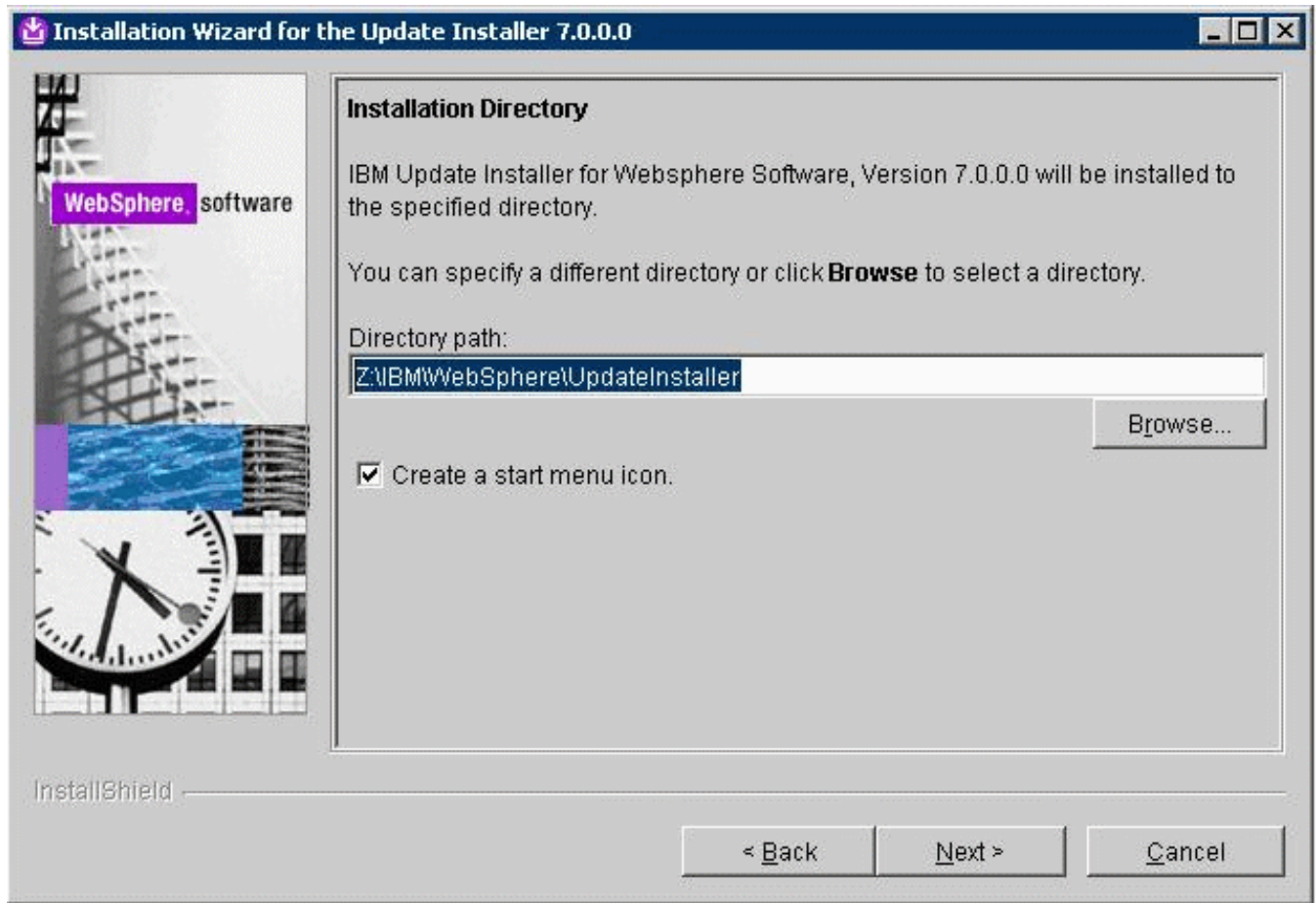
6. On Software License Agreement, review the License Agreement and choose an option to accept or decline.

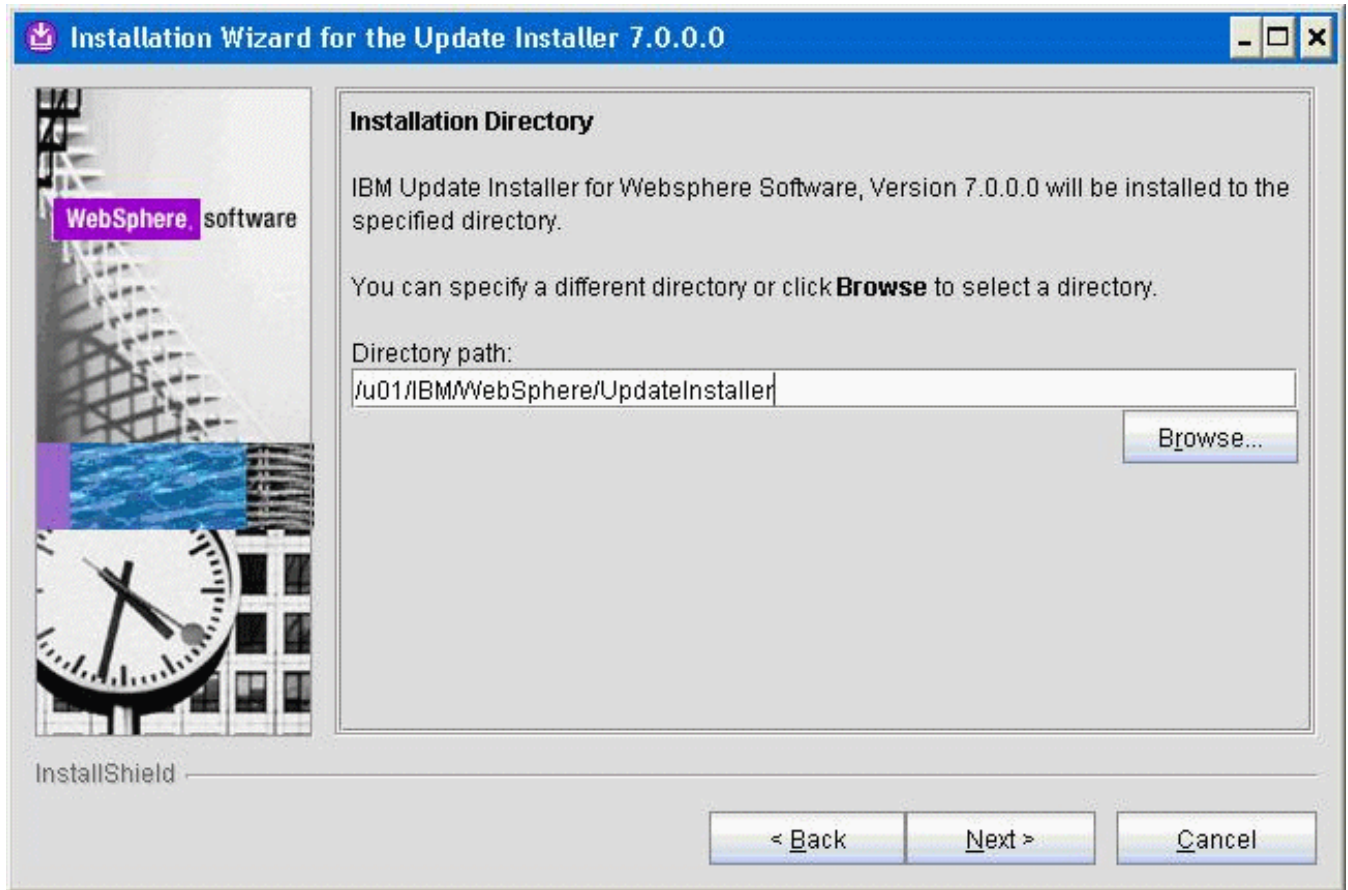
7. Click the *Next* button to continue.



8. On System Prerequisites Check, the Installer performs a verification of system requirements.

9. After the Installer indicates the check was successful, click the **Next** button to continue.





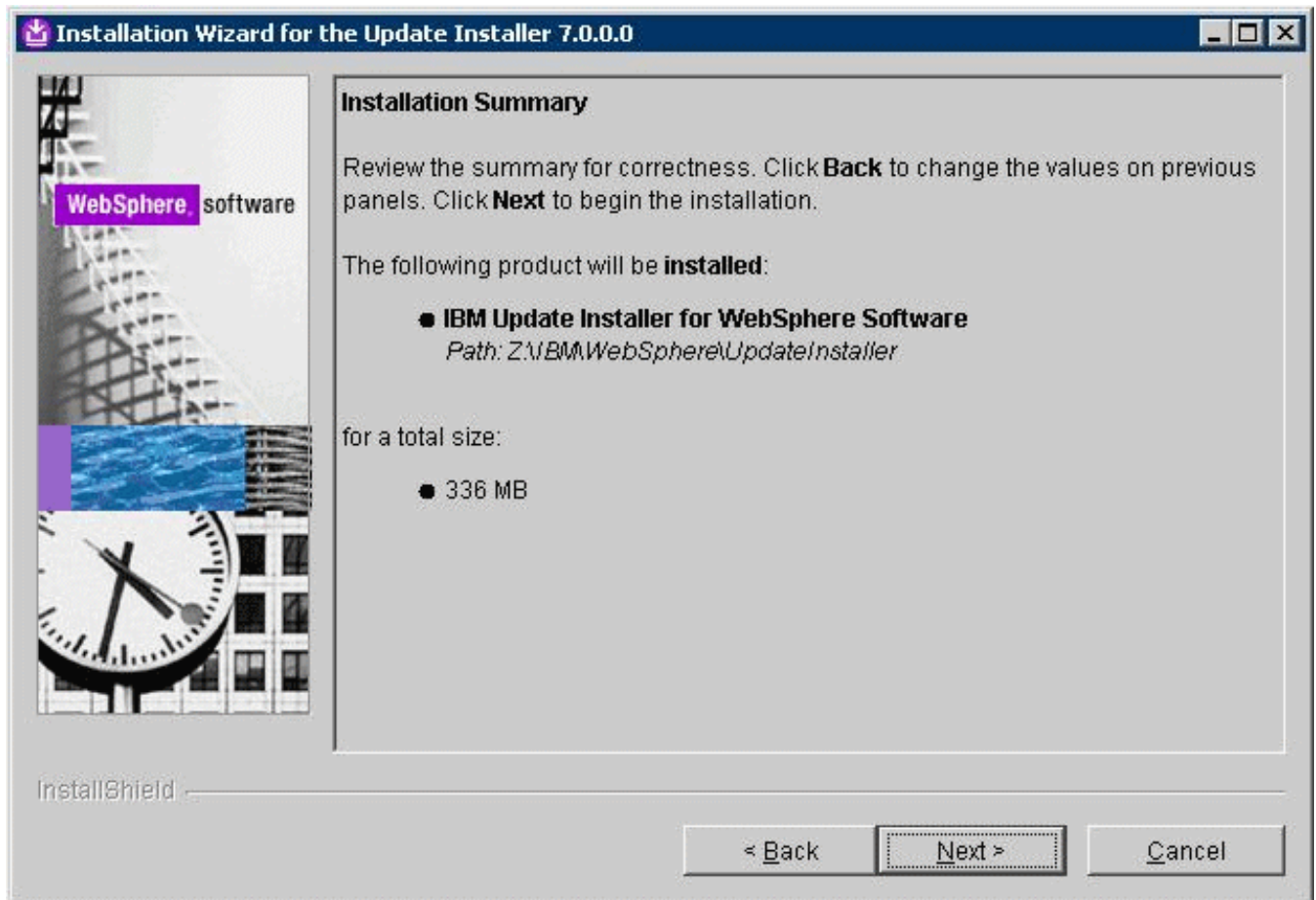
10. On Directory Name, enter a valid value for the Update Installer installation directory. For example:

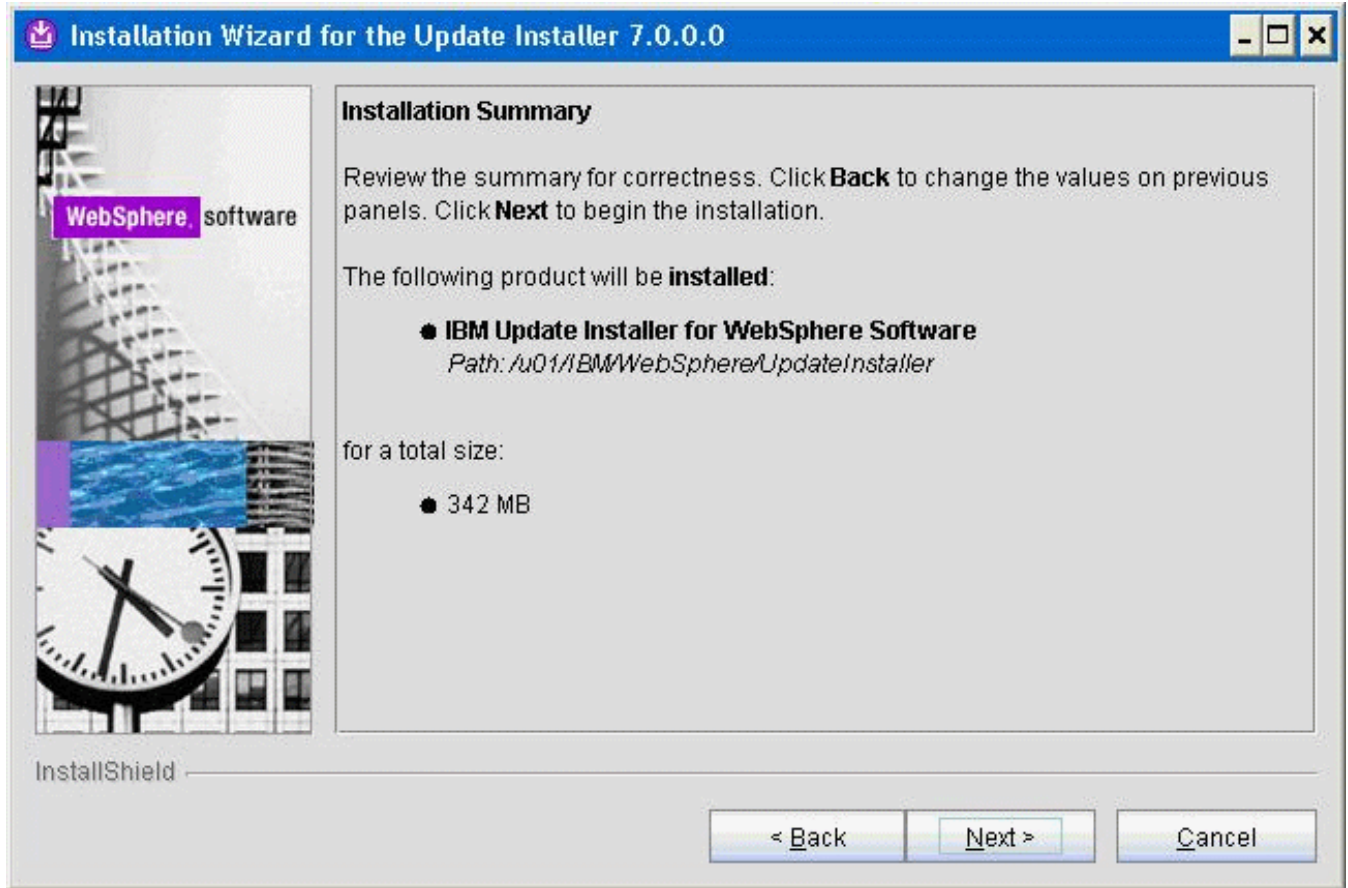
`z:\IBM\WebSphere\UpdateInstaller`

`/u01/IBM/WebSphere/UpdateInstaller`

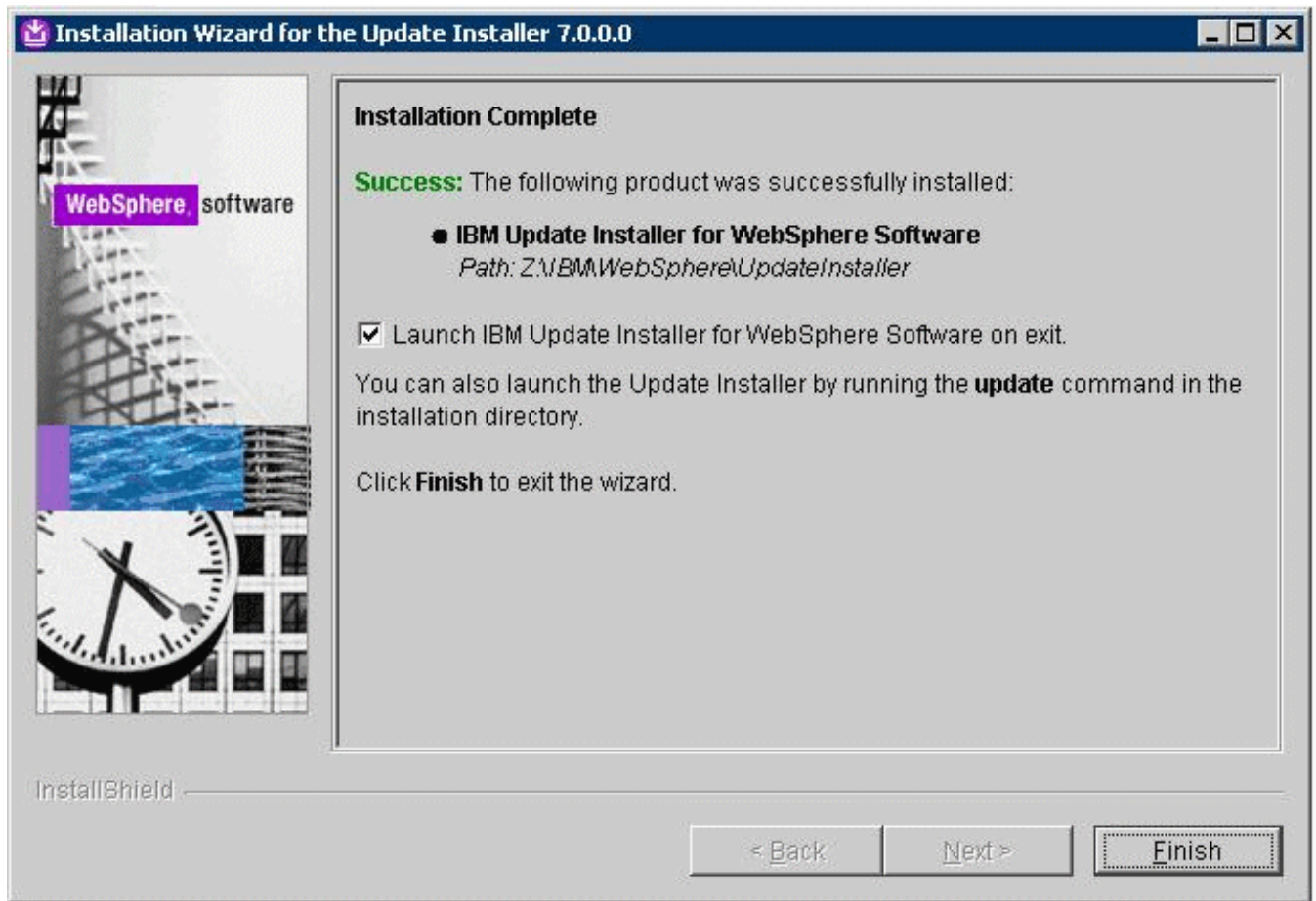
Note: To facilitate maintenance, it is recommended that you install the Update Installer under the WebSphere root directory. For example: `z:\IBM\WebSphere\UpdateInstaller /u01/IBM/WebSphere/UpdateInstaller`

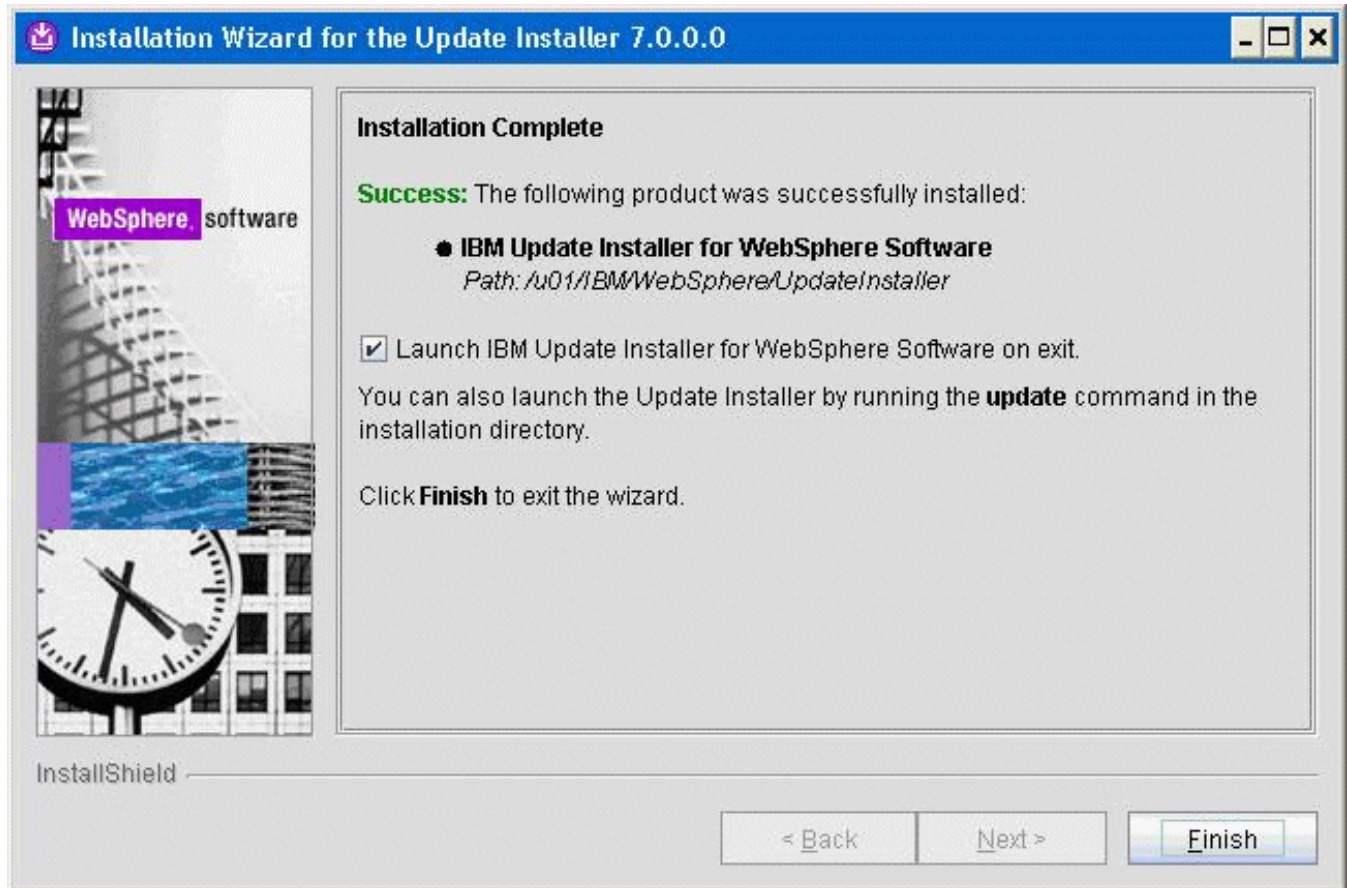
11. Click the *Next* button to continue.





12. On Installation Summary, click the *Next* button to begin the installation.





13. On Installation Complete, deselect the check box for *Launch IBM Update Installer for WebSphere software on exit*.
14. Click the *Finish* button.

Installing WebSphere 7.0 Fix Pack 29

Note: This document uses Fix Pack 29 (7.0.0.29) to describe the process of installing WebSphere Fix Pack. Check the Certification for the latest supported WebSphere Fix Pack for the JD Edwards EnterpriseOne HTML Web Server (refer to [Accessing Certifications](#)).

To install the WebSphere 7.0 Fix Pack:

1. Ensure that all WebSphere and HTTP Services are stopped prior to updating the software.

2. Download all the fix pack files to the "maintenance" directory under the installation directory of the Update Installer, such as: `z:\IBM\WebSphere\UpdateInstaller\maintenance /u01/IBM/WebSphere/UpdateInstaller/maintenance`

For example:

`7.0.0-WS-WAS-WinX32-FP0000005.pak`

For example, on Solaris the files are named:

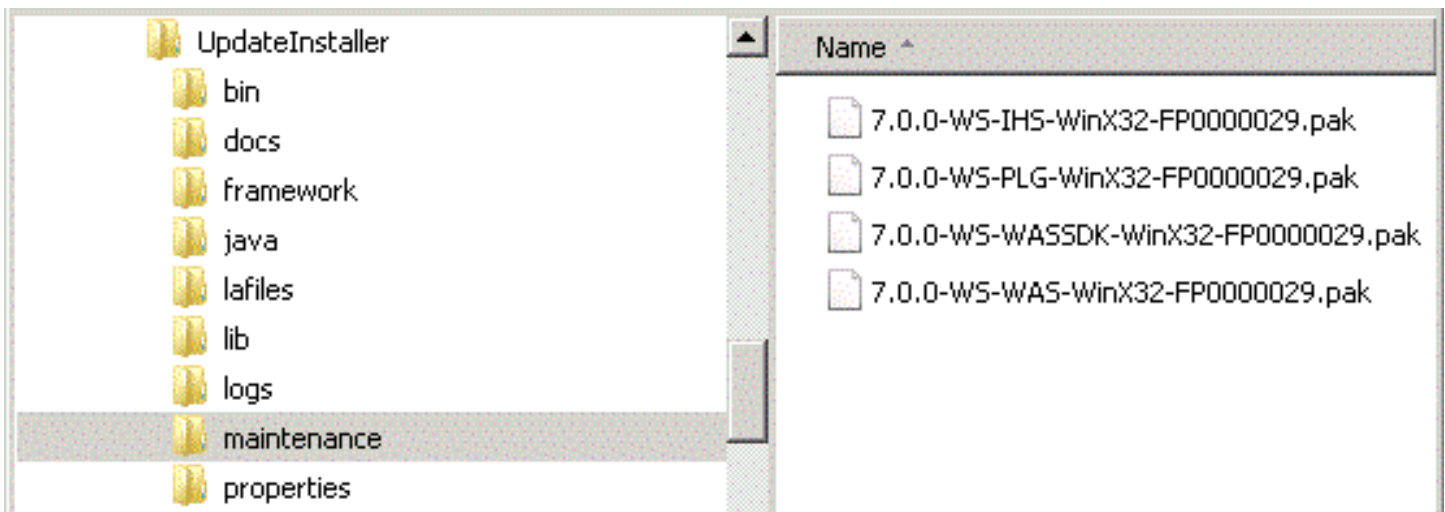
`7.0.0-WS-WAS-SolarisSparc-FP0000005.pak`

`7.0.0-WS-WASSDK-SolarisSparc-FP0000005.pak`

`7.0.0-WS-IHS-SolarisSparc-FP0000005.pak`

`7.0.0-WS-PLG-SolarisSparc-FP0000005.pak`

The complete list of WebSphere 7.0 Fix Pack 29 (7.0.0.29) files is shown in the screen sample below:



Note: The example filename for the .pak file is specific to Solaris. Other versions of UNIX will have their own unique filenames. You do not need to untar these files, just put them in the `\UpdateInstaller\maintenance` directory.

Note: You do not need to uncompress these files, just put them in the "maintenance" directory.

3. Run the `update` executable from the `updateInstaller` directory using these commands:

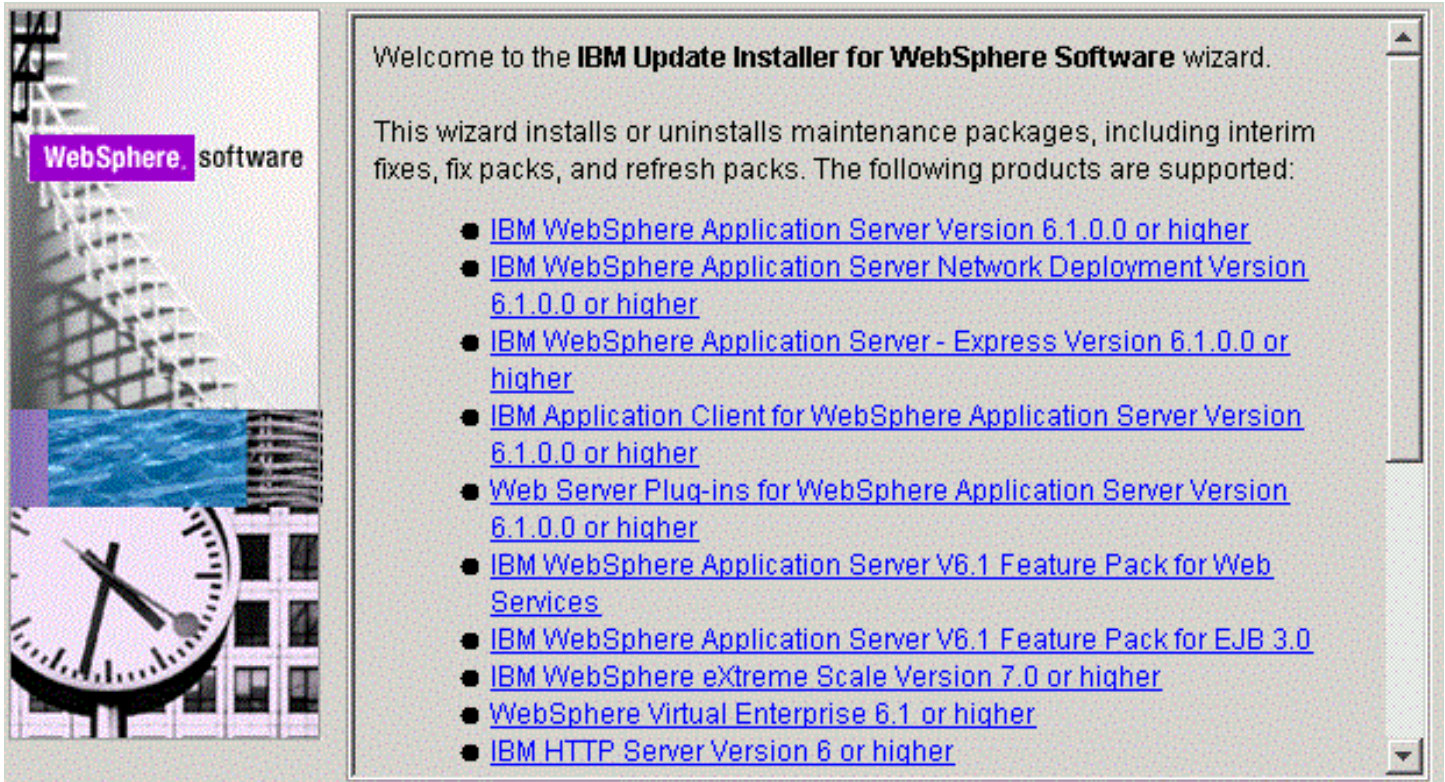
```
cd x:\IBM\WebSphere\UpdateInstaller
```

```
x:\IBM\WebSphere\UpdateInstaller > update.exe
```

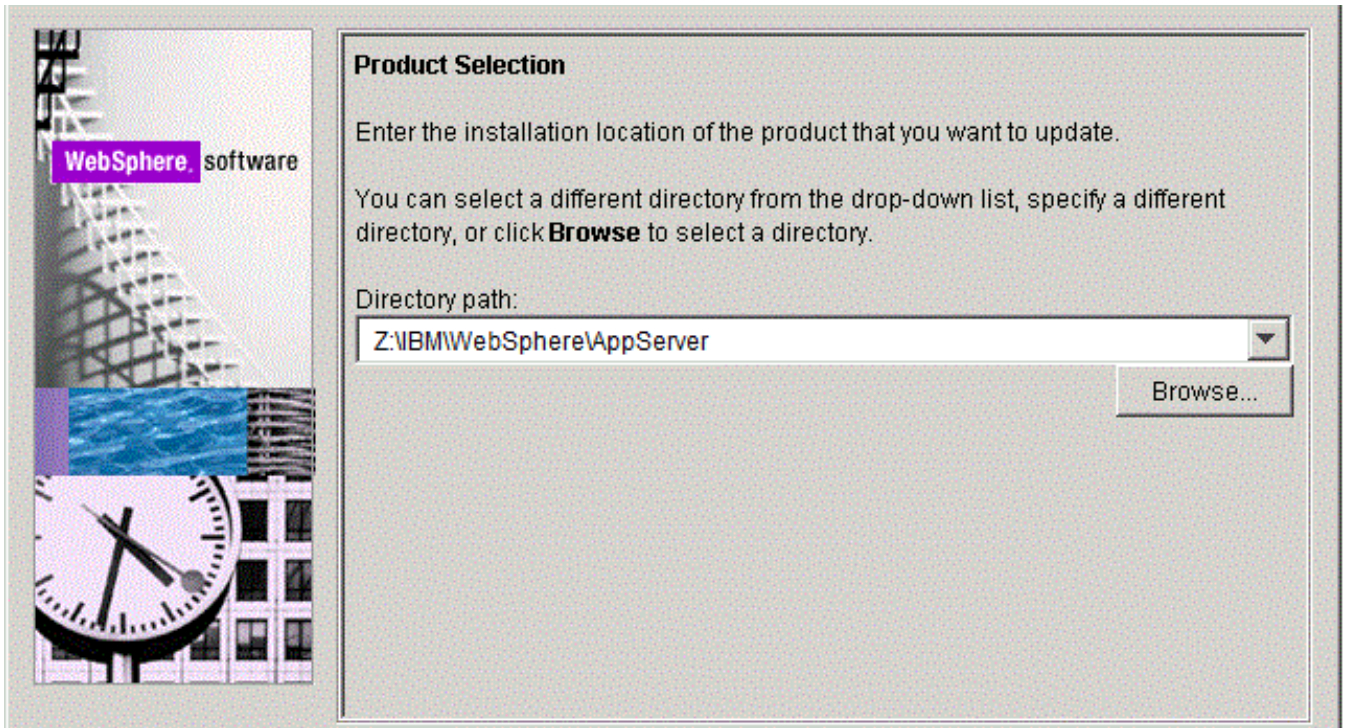
where `x:` is the drive on which you downloaded the Update Installer.

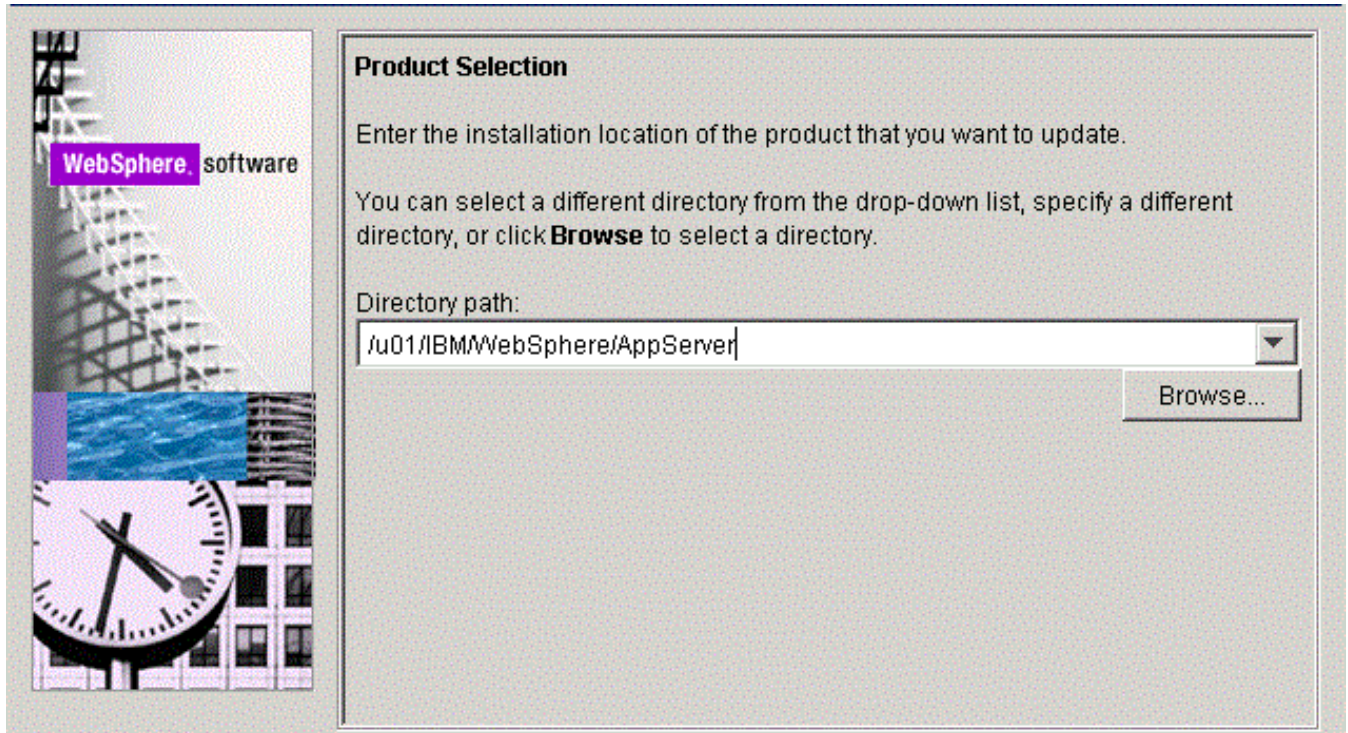
```
cd /u01/IBM/WebSphere/UpdateInstaller
```

```
./update.sh
```



4. Click the *Next* button to continue.



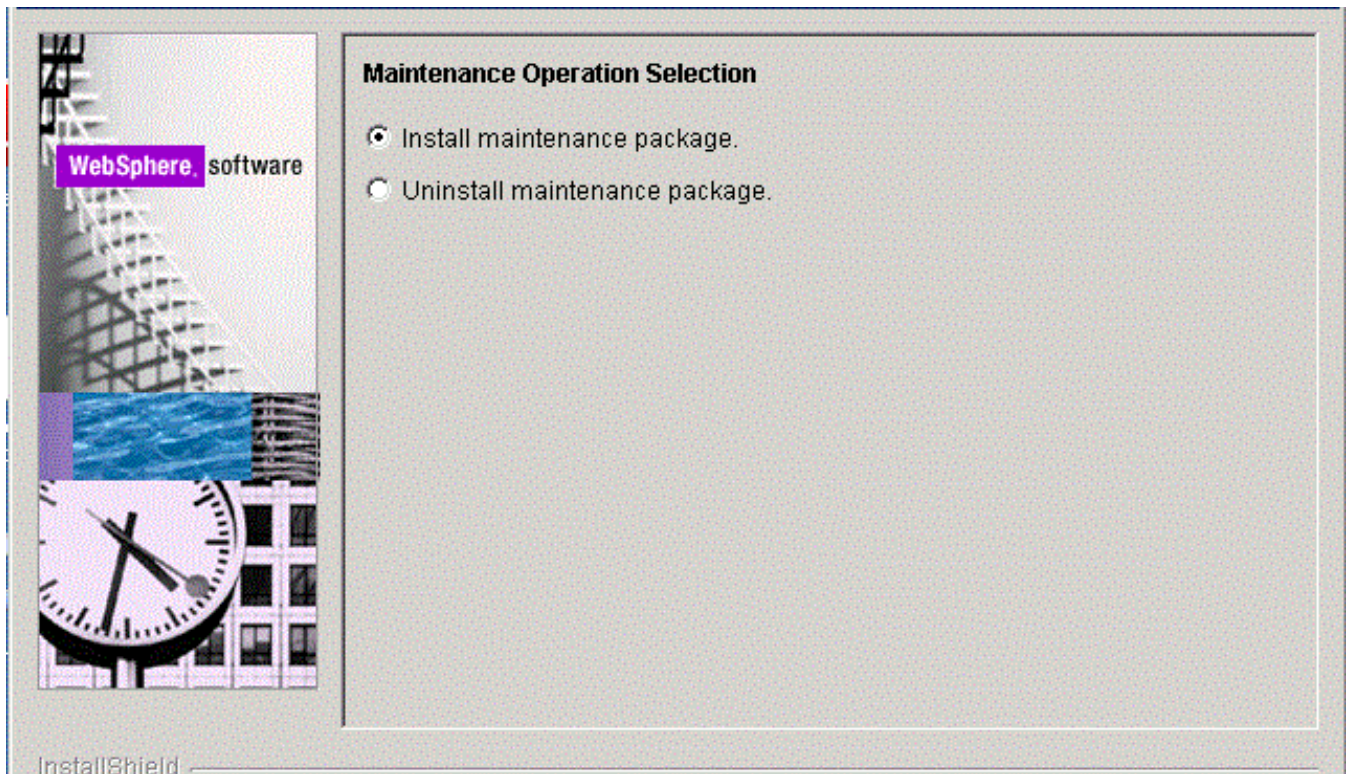


5. On the Product selection screen, use the drop down to select the installation location of the WebSphere Application Server. For example:

`z:\IBM\WebSphere\AppServer`

`/u01/IBM/WebSphere/AppServer`

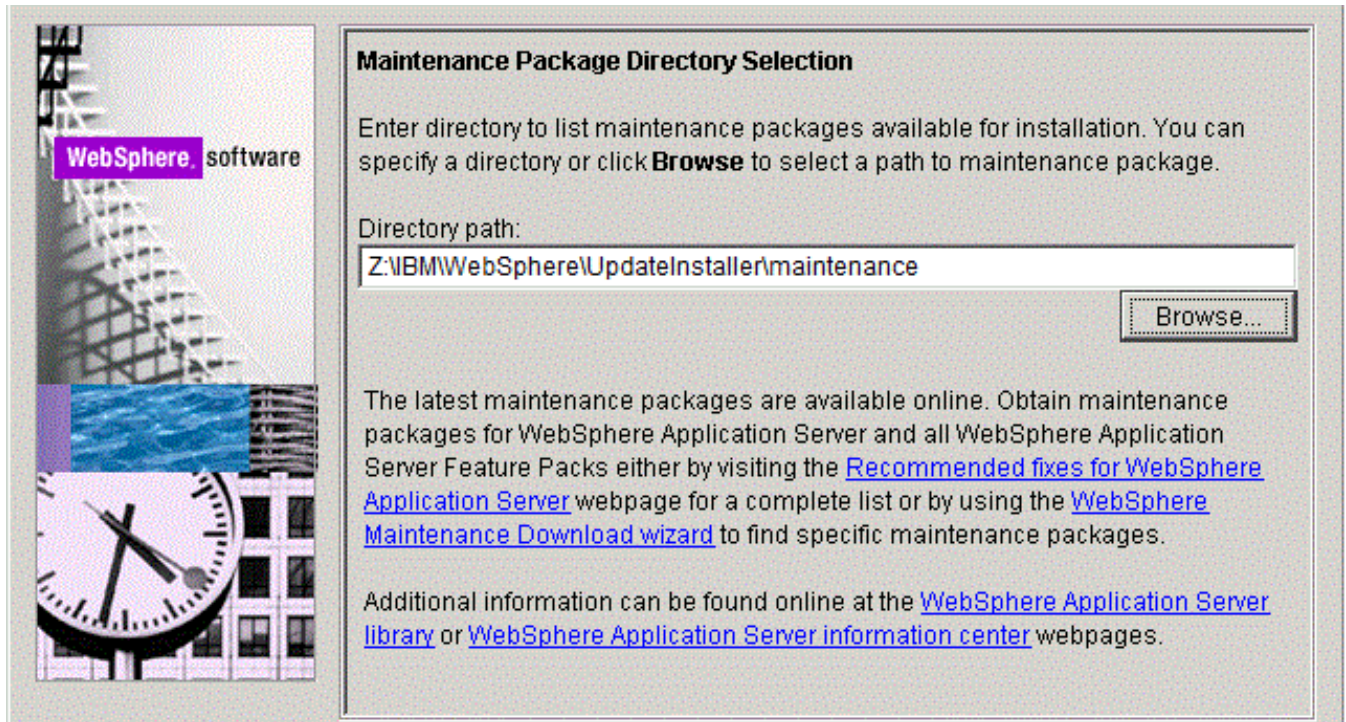
6. Click the *Next* button to continue.

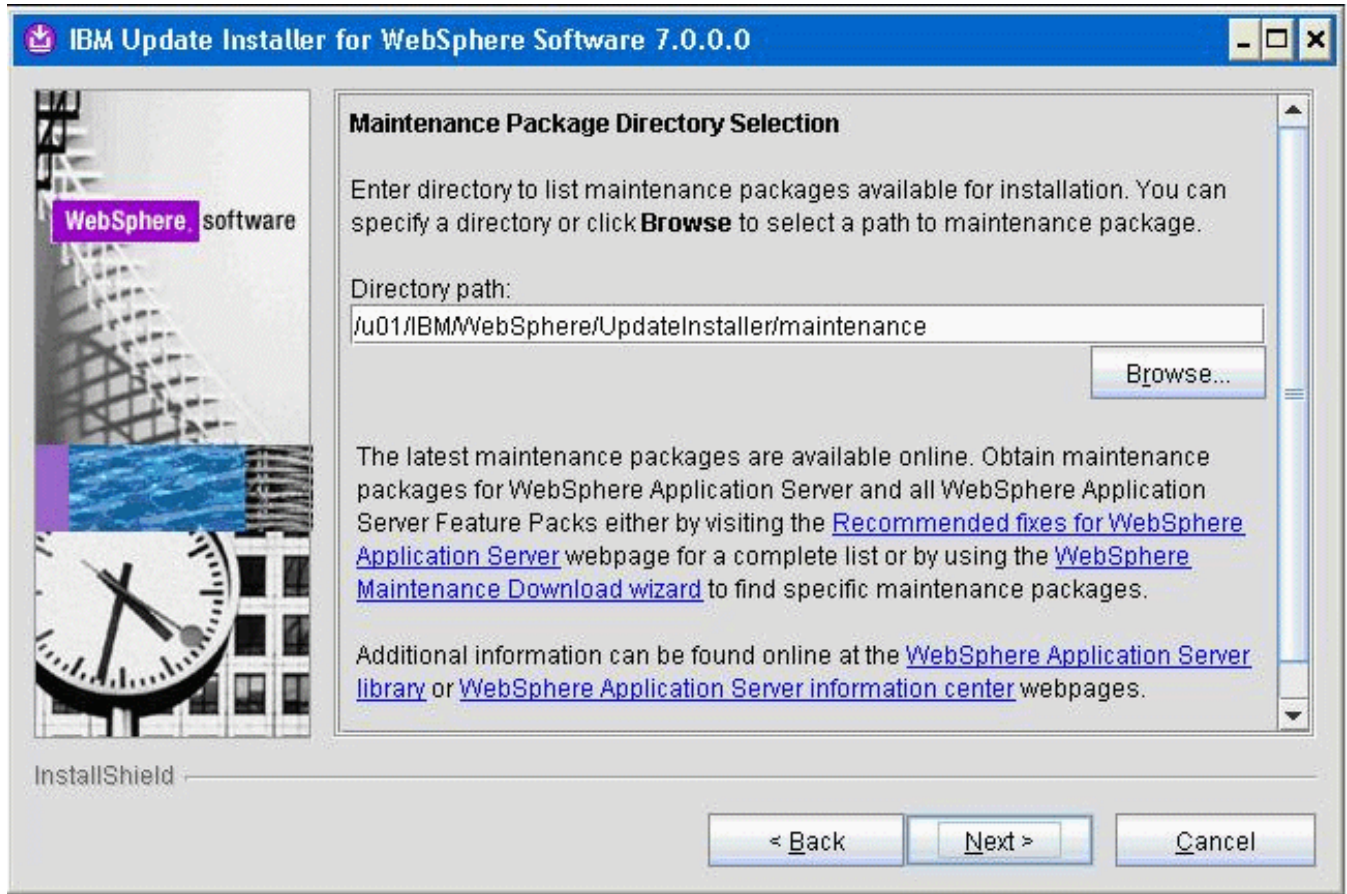


7. On Maintenance Operation Selection, select the following radio button:
Install maintenance package

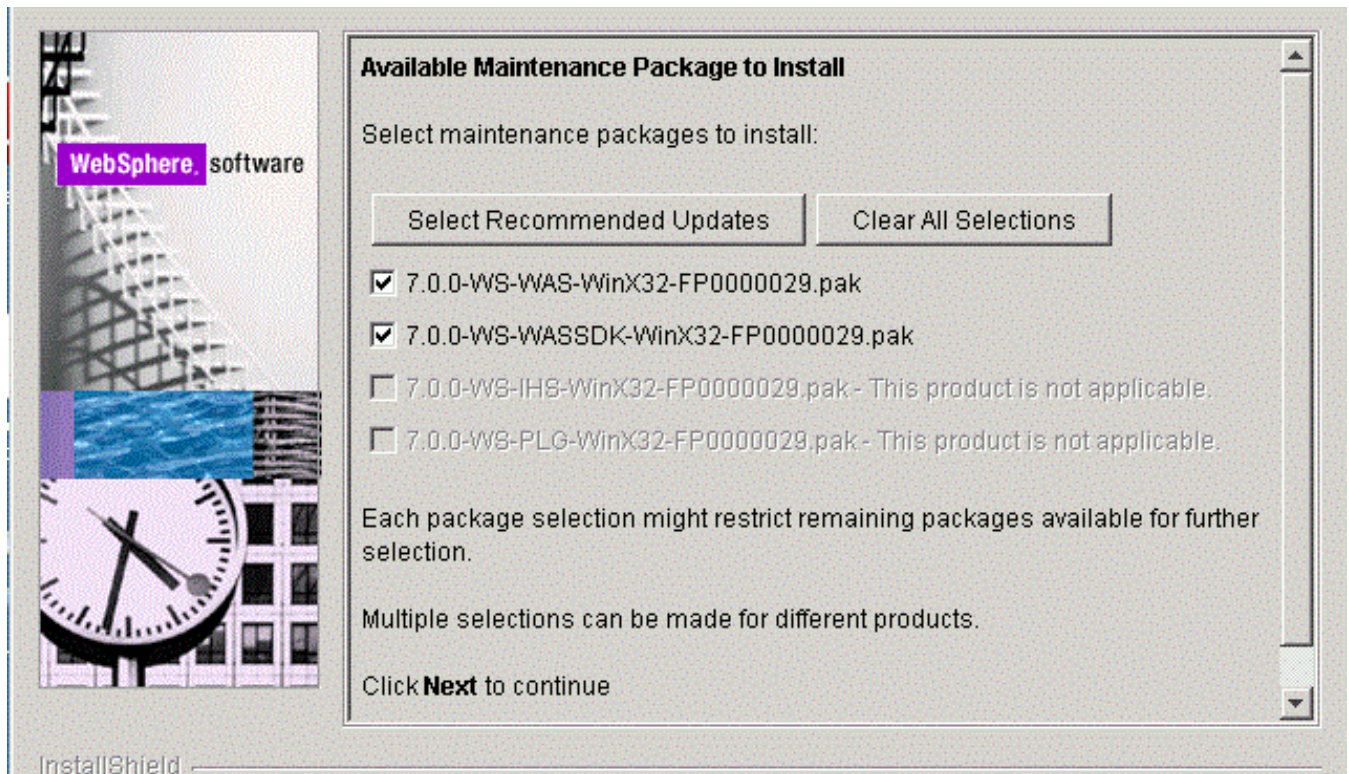
8. Click the *Next* button to continue.

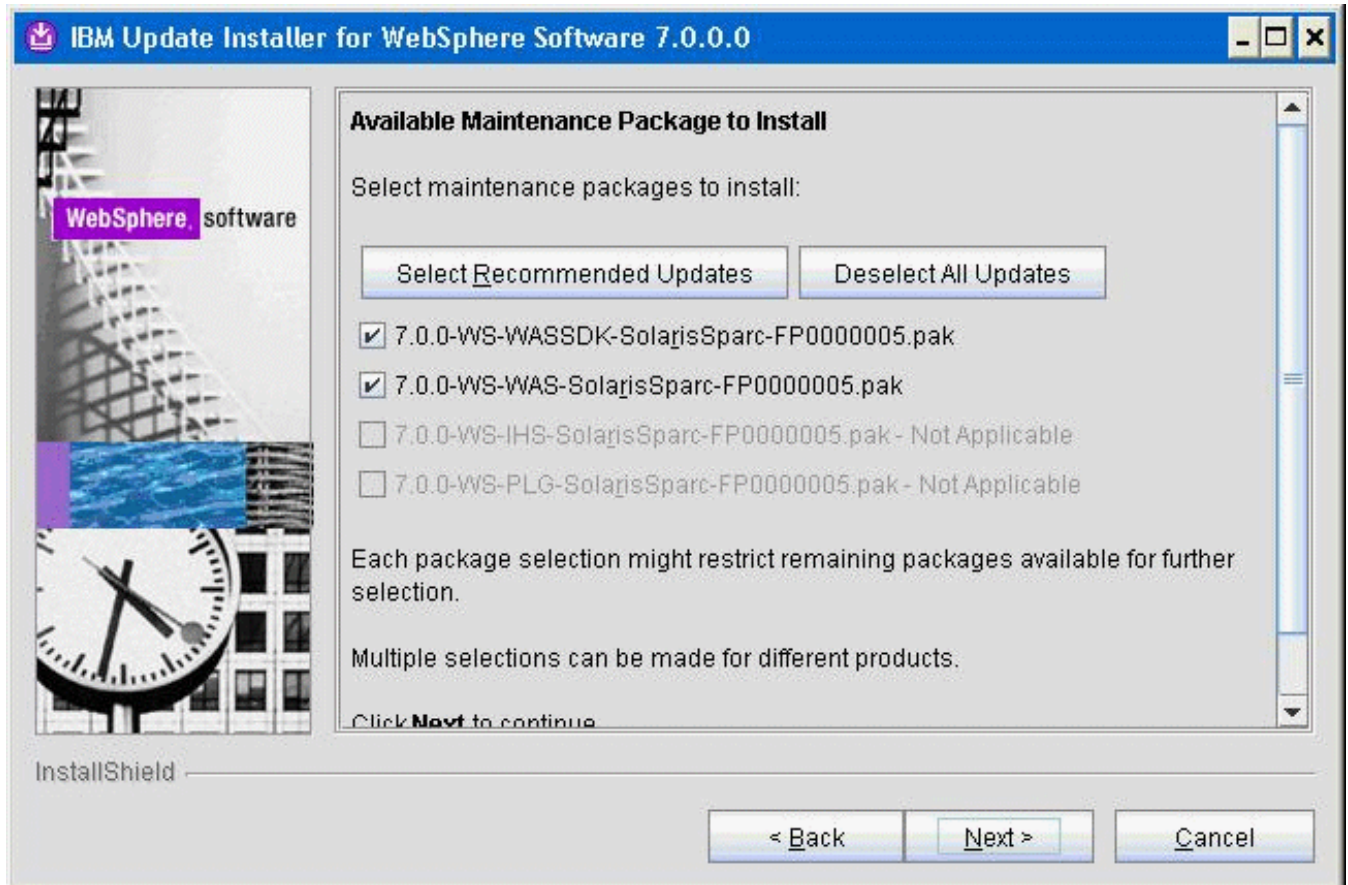
The installer inspects the `updateInstaller` directory for maintenance packages (.pak files); specifically in the `maintenance` sub-directory.





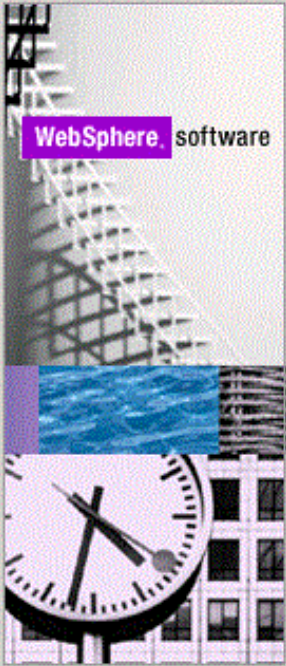
9. On Maintenance Package Selection, validate the directory name that was located by the Installer wizard.





10. On Available Maintenance Package to Install, check the WAS and WASSDK fix pack files since the WebSphere Application Server components are being updated.

11. Click the *Next* button to continue.



WebSphere software

Installation Summary

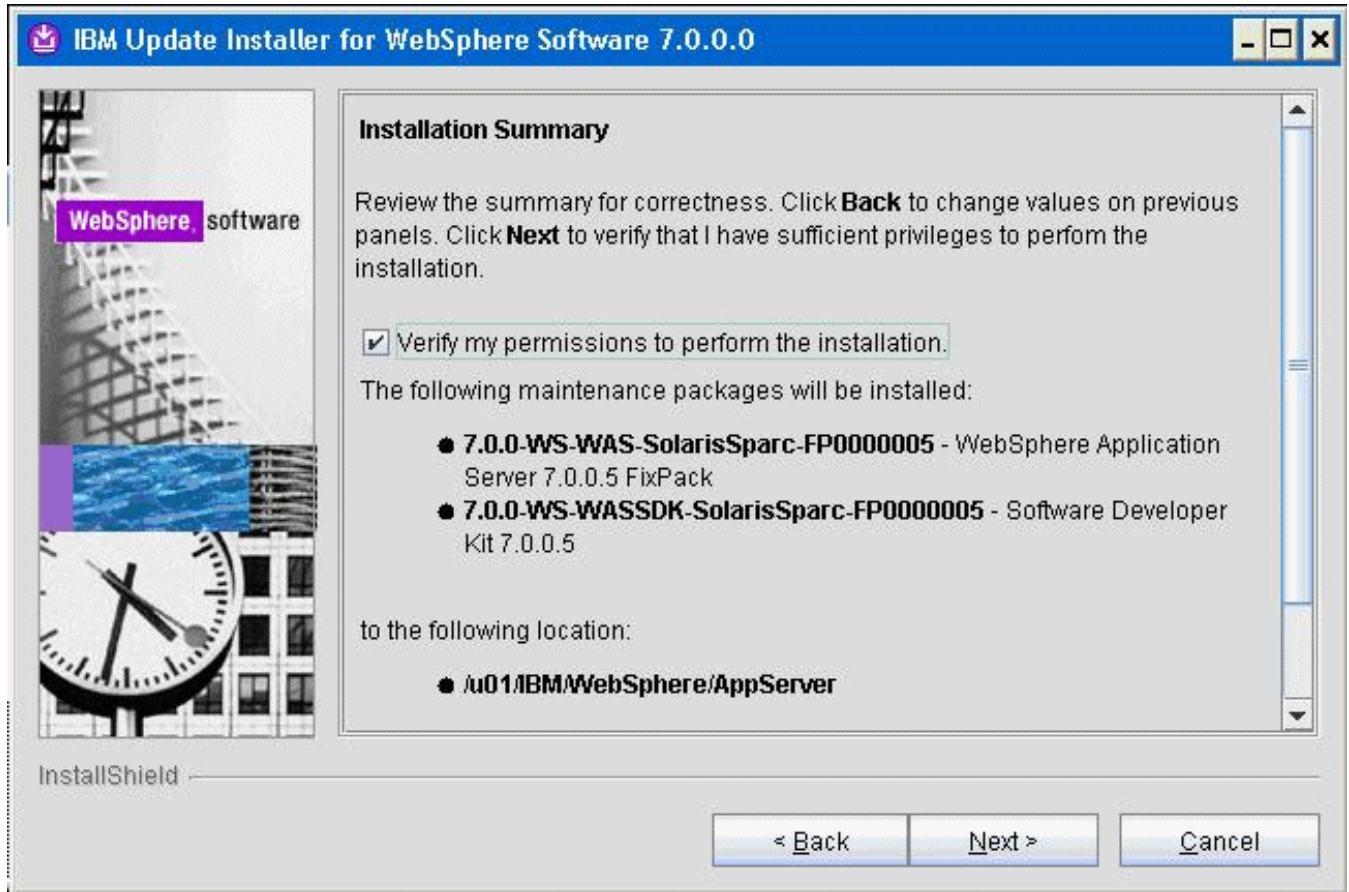
The following maintenance packages will be installed:

- **7.0.0-WS-WAS-WinX32-FP0000029** - WebSphere Application Server 7.0.0.29 FixPack
- **7.0.0-WS-WASSDK-WinX32-FP0000029** - Software Developer Kit 7.0.0.29

to the following location:

- **Z:\IBM\WebSphere\App Server**

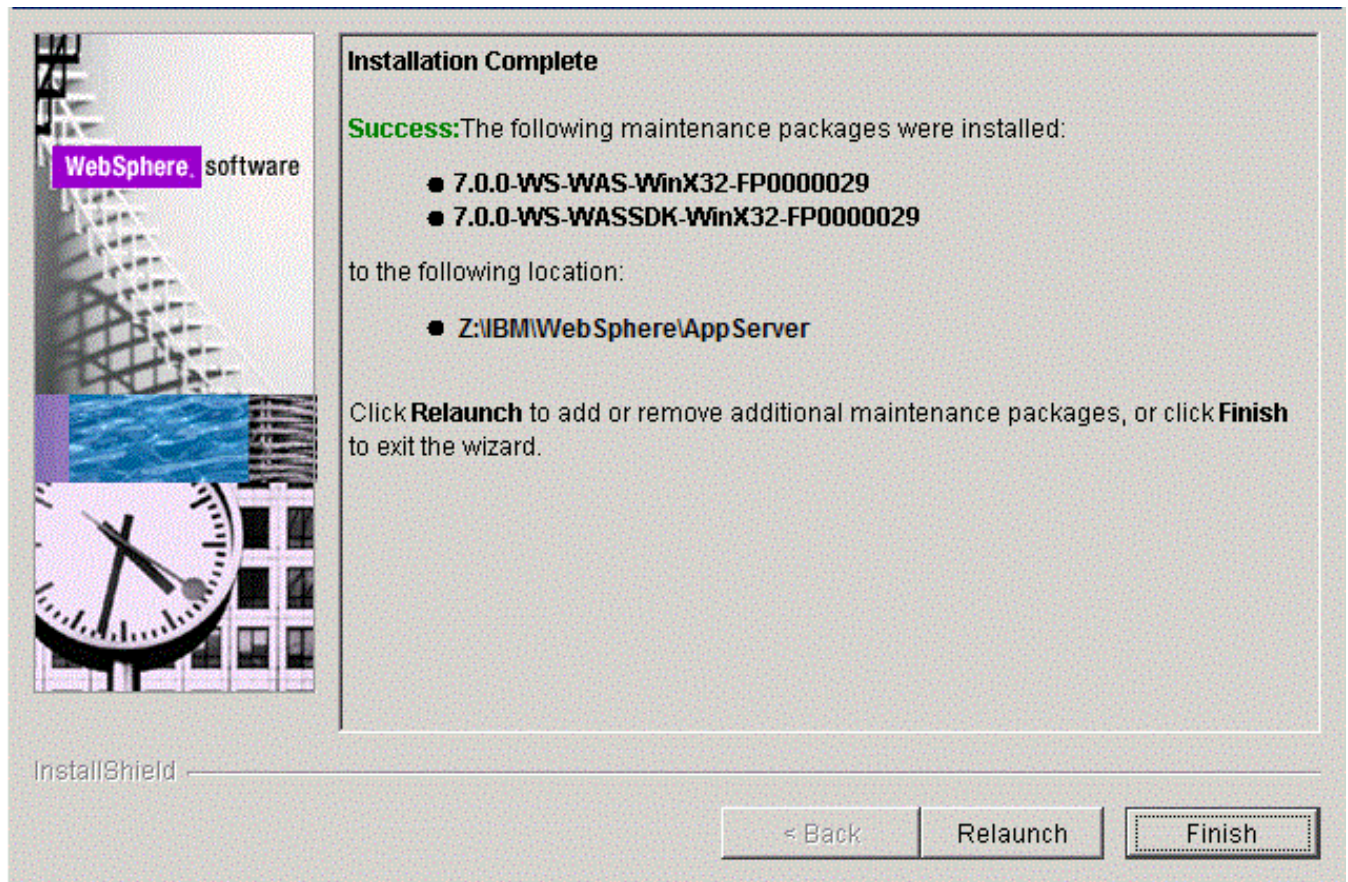
Click **Next** to begin the installation.

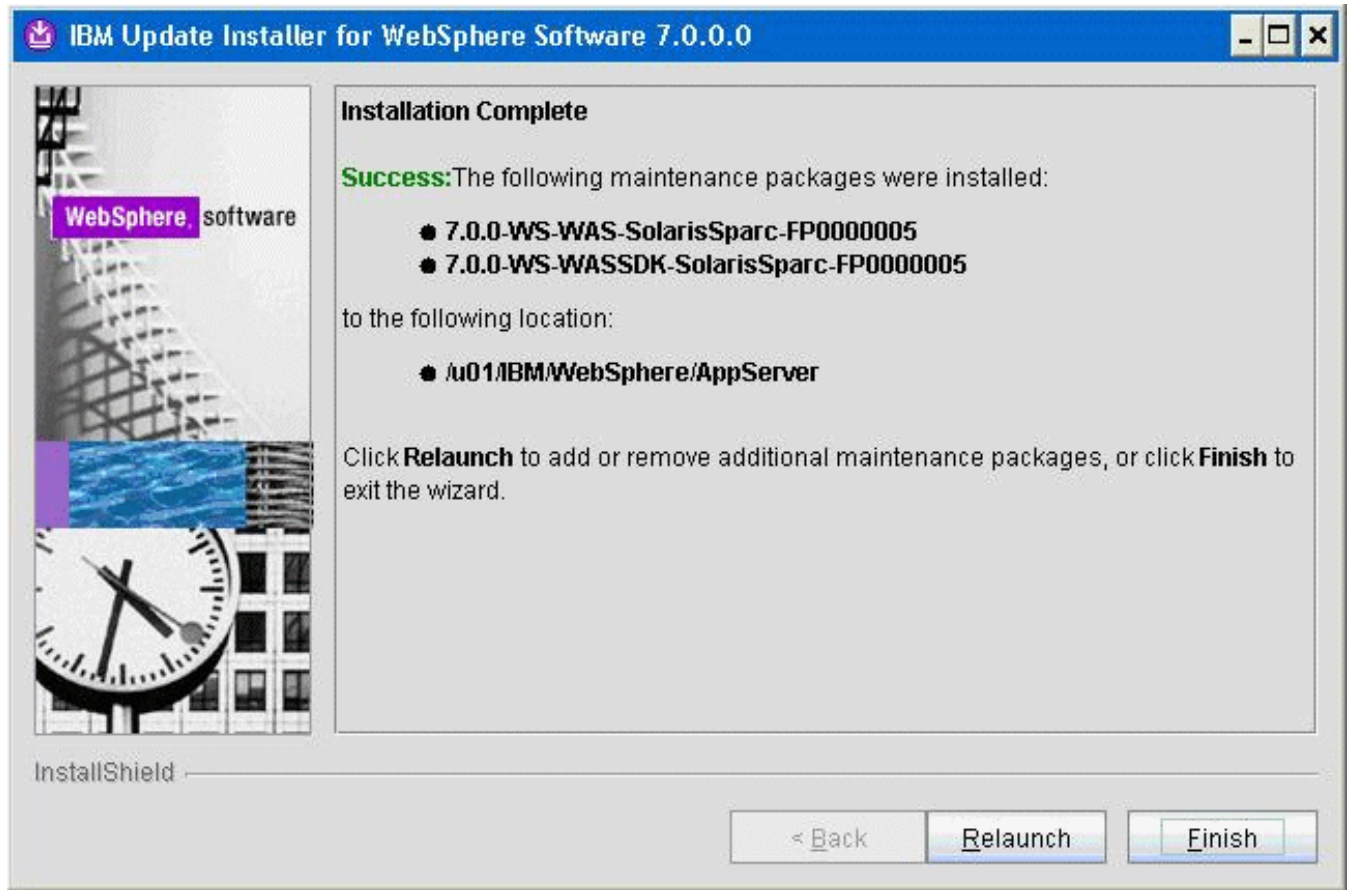


12. On Installation Summary, review the information and click the *Next* button to begin the installation.

Note: You should check the **Verify my permissions to perform the installation check box** in order for the installer to validate the permissions required for installation of the product.

13. Click the *Next* button to continue.





14. On Installation Complete, Success, click the *Relaunch* button to relaunch the wizard and install the HTTP server components.

Installing the IBM HTTP Server Fix Pack

Note: If you are planning to use Microsoft Internet Information Services (IIS), you can skip this section and continue to *Installing the WebSphere 7.0 Plug-ins Fix Pack*.

To install the IBM HTTP Server Fix Pack:

1. Ensure that all WebSphere and HTTP Services are stopped prior to updating the software.

2. Download and uncompress copy the fix pack file for the IBM HTTP Server to the `\updateInstaller\maintenance` directory.

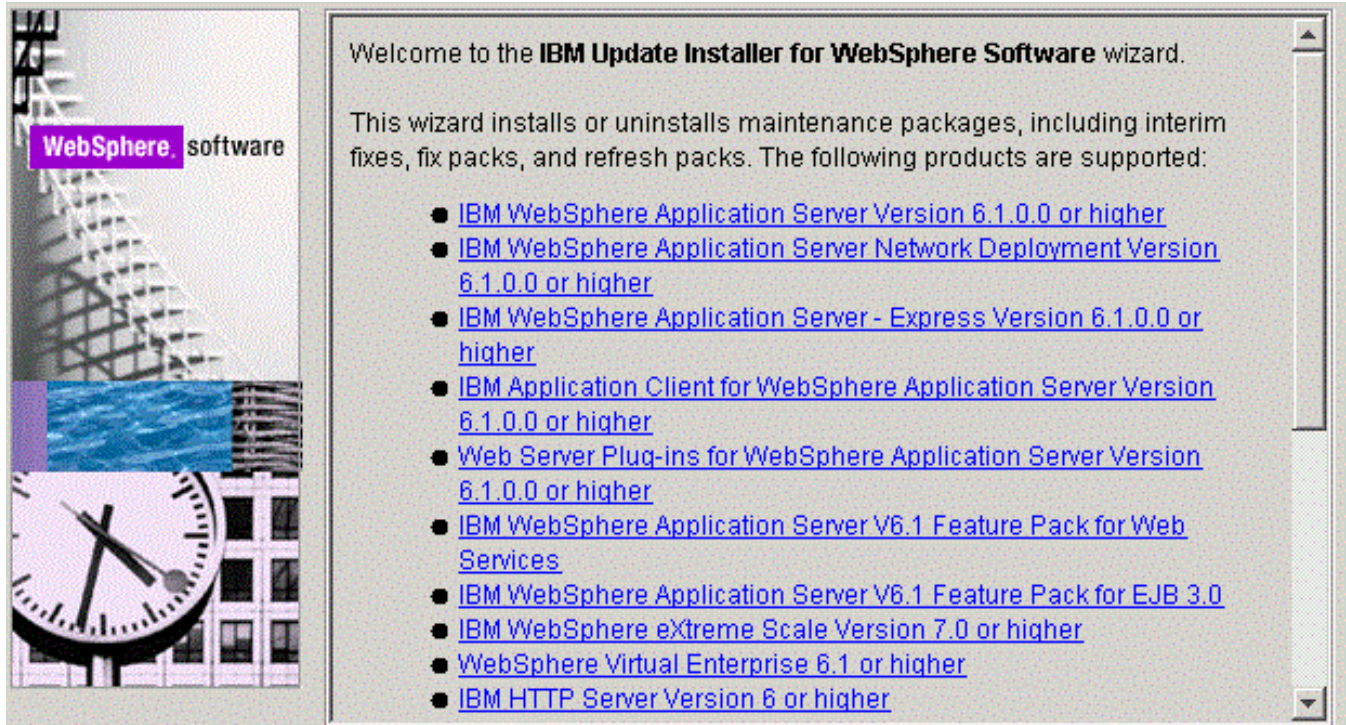
For example:

`7.0.0-WS-IHS-WinX32-FP00000029.pak`

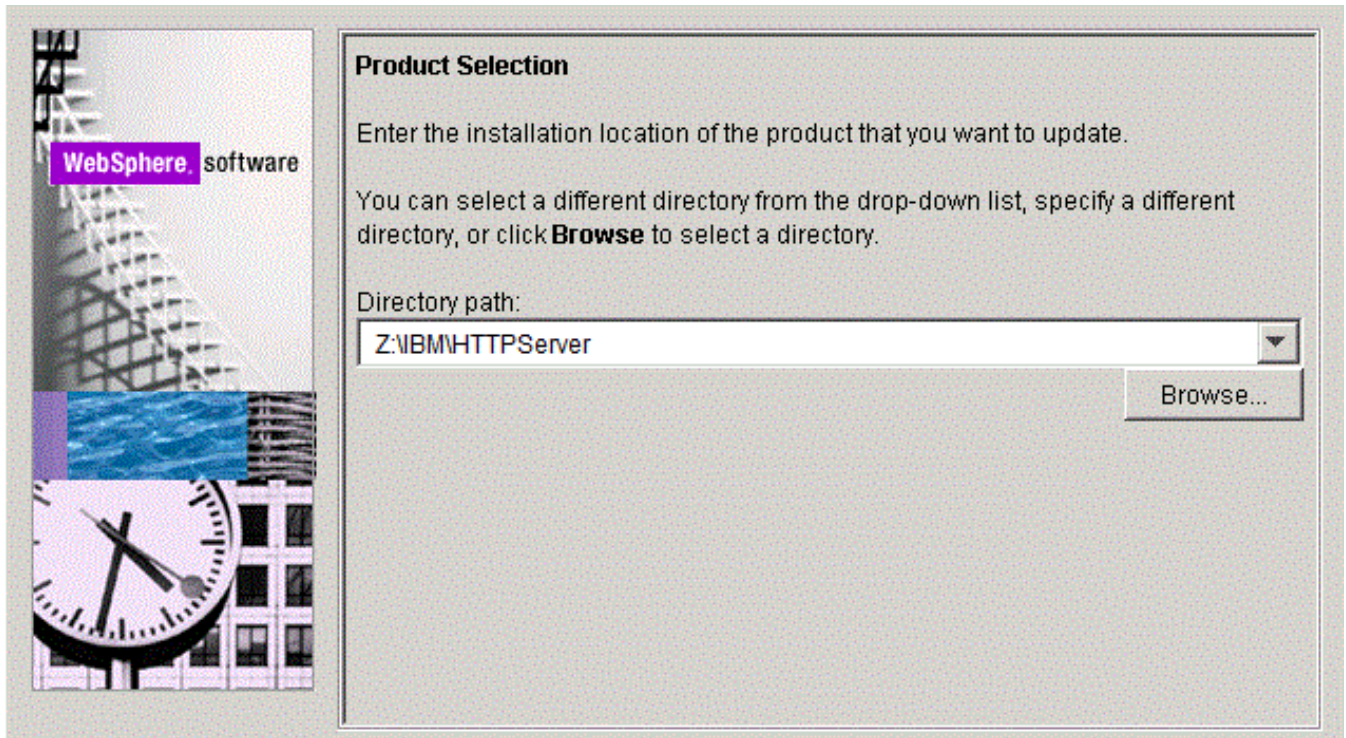
For example, on Solaris the file is named:

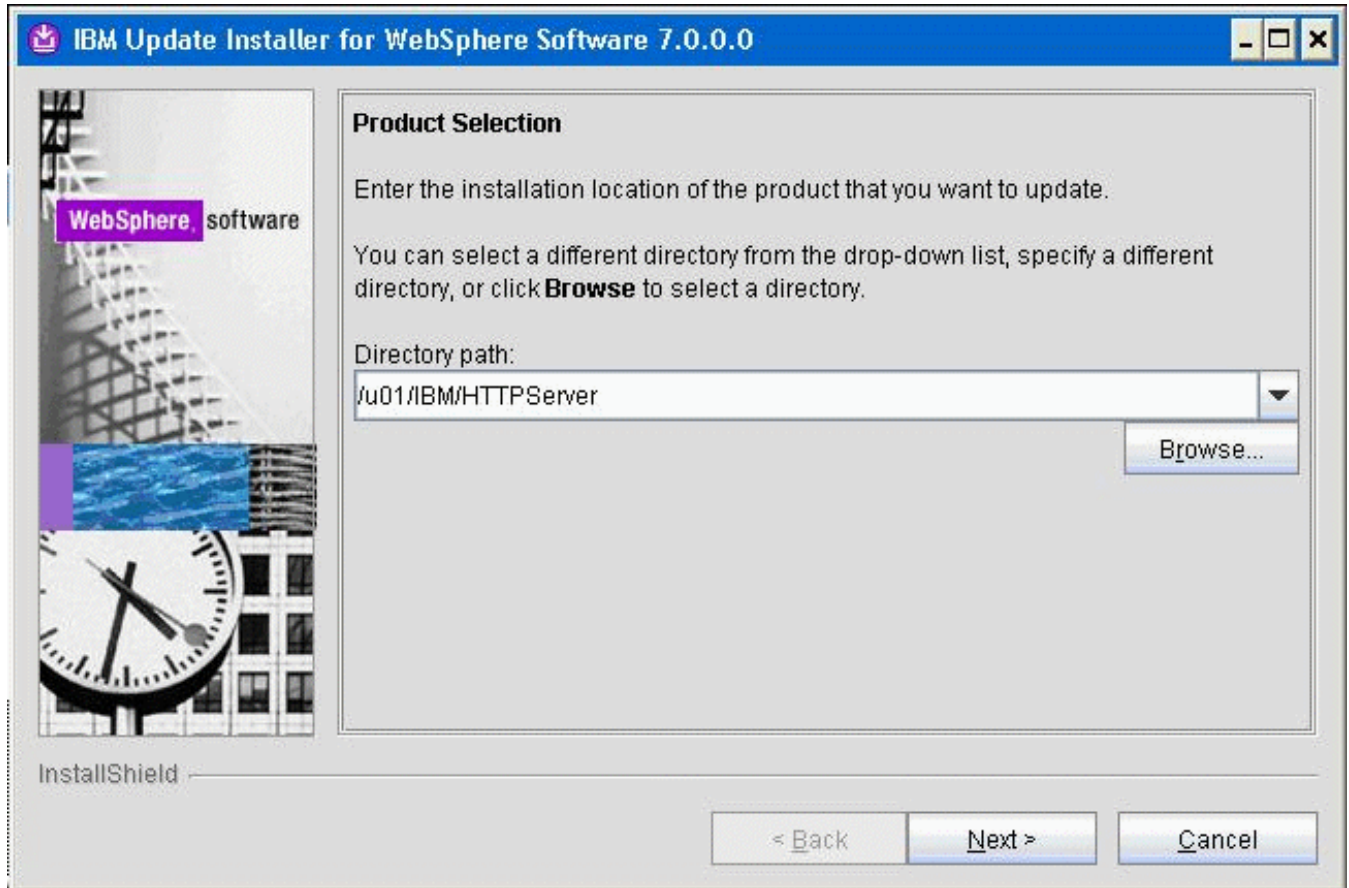
`7.0.0-WS-IHS-SolarisSparc-FP00000005.pak`

3. Once the wizard has restarted, select the HTTP server components.



4. On the Welcome screen, click the *Next* button to begin the Update Installer wizard.



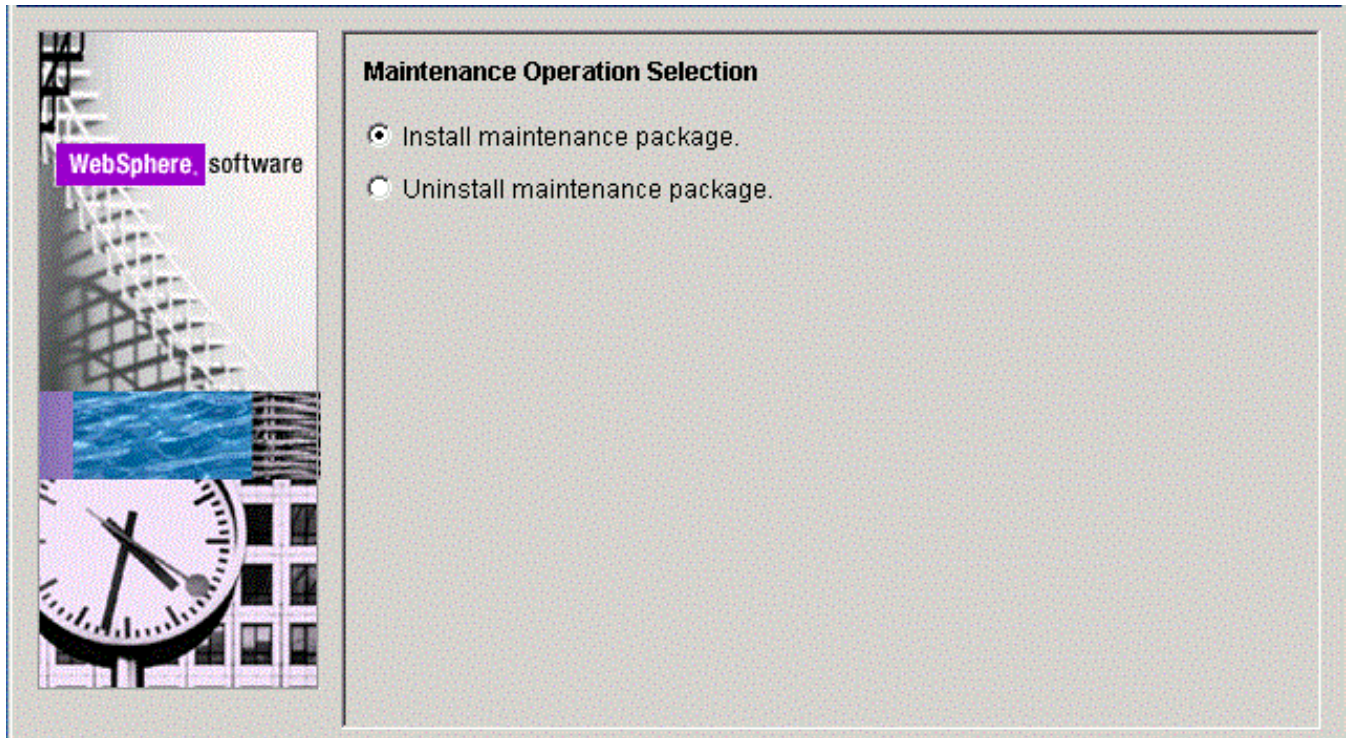


5. On Product Selection, use the drop down to select the installation location of the IBM HTTP Server. For example:

`Z:\IBM\HTTPServer`

`/u01/IBM/HTTPServer`

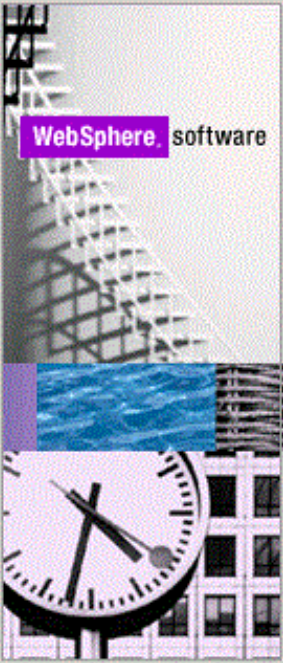
6. Click the *Next* button to continue.



7. On Maintenance Operation Selection, select this radio button:

Install maintenance package

8. Click the *Next* button to continue.



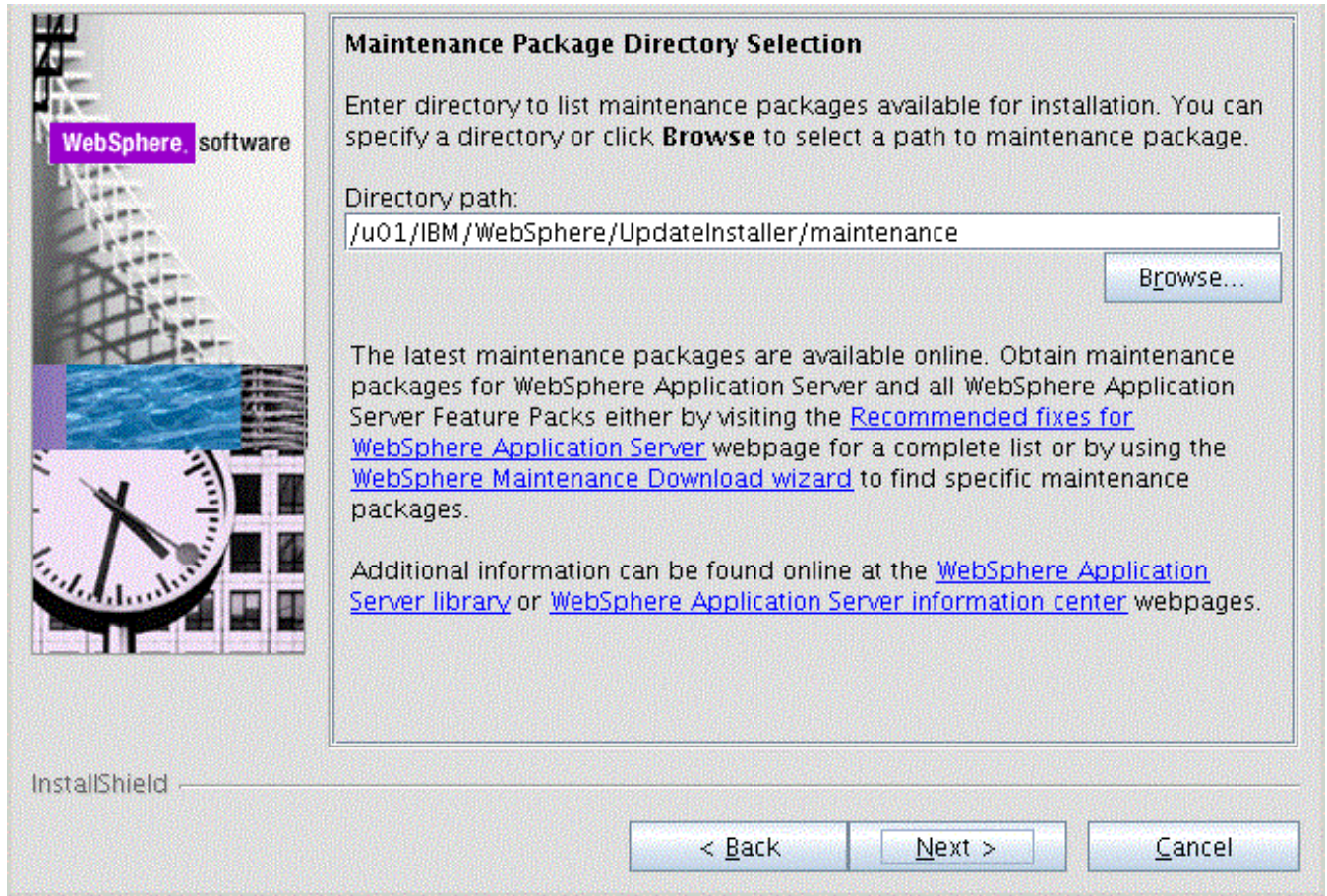
Maintenance Package Directory Selection

Enter directory to list maintenance packages available for installation. You can specify a directory or click **Browse** to select a path to maintenance package.

Directory path:

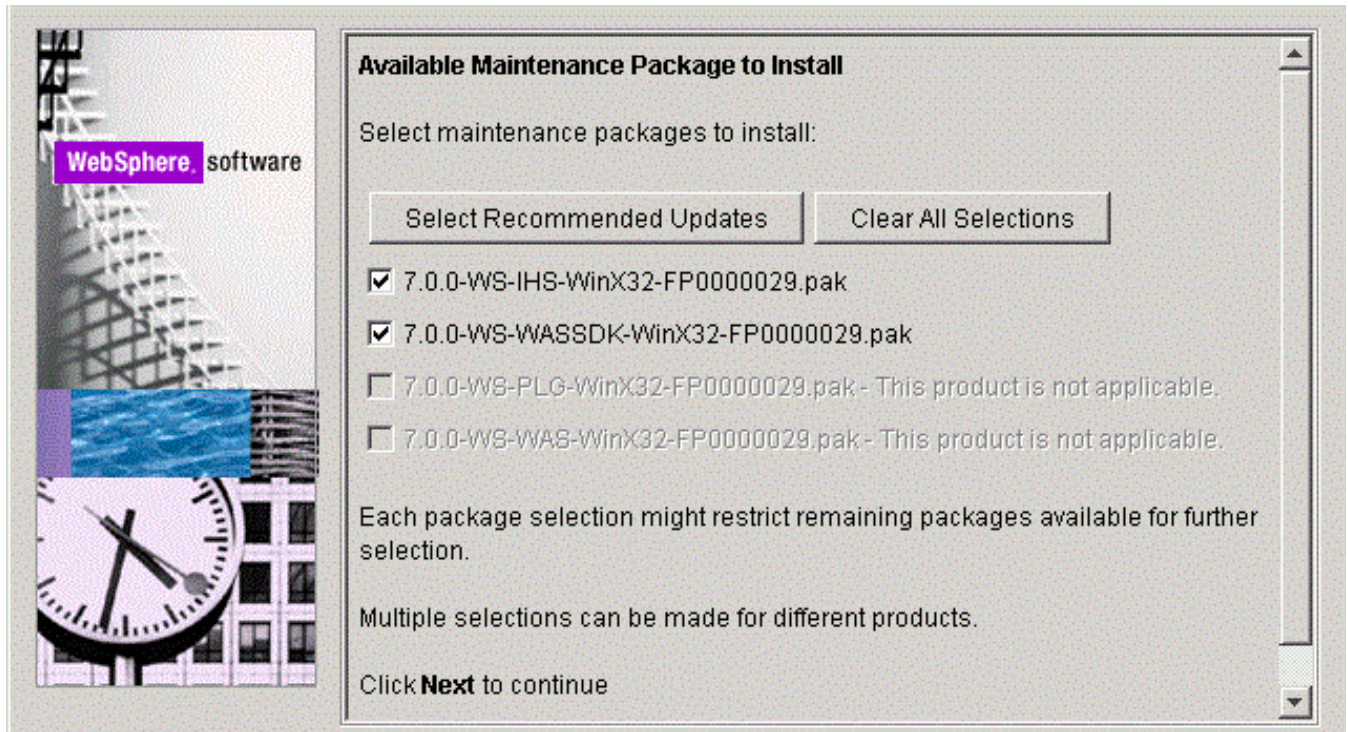
The latest maintenance packages are available online. Obtain maintenance packages for WebSphere Application Server and all WebSphere Application Server Feature Packs either by visiting the [Recommended fixes for WebSphere Application Server](#) webpage for a complete list or by using the [WebSphere Maintenance Download wizard](#) to find specific maintenance packages.

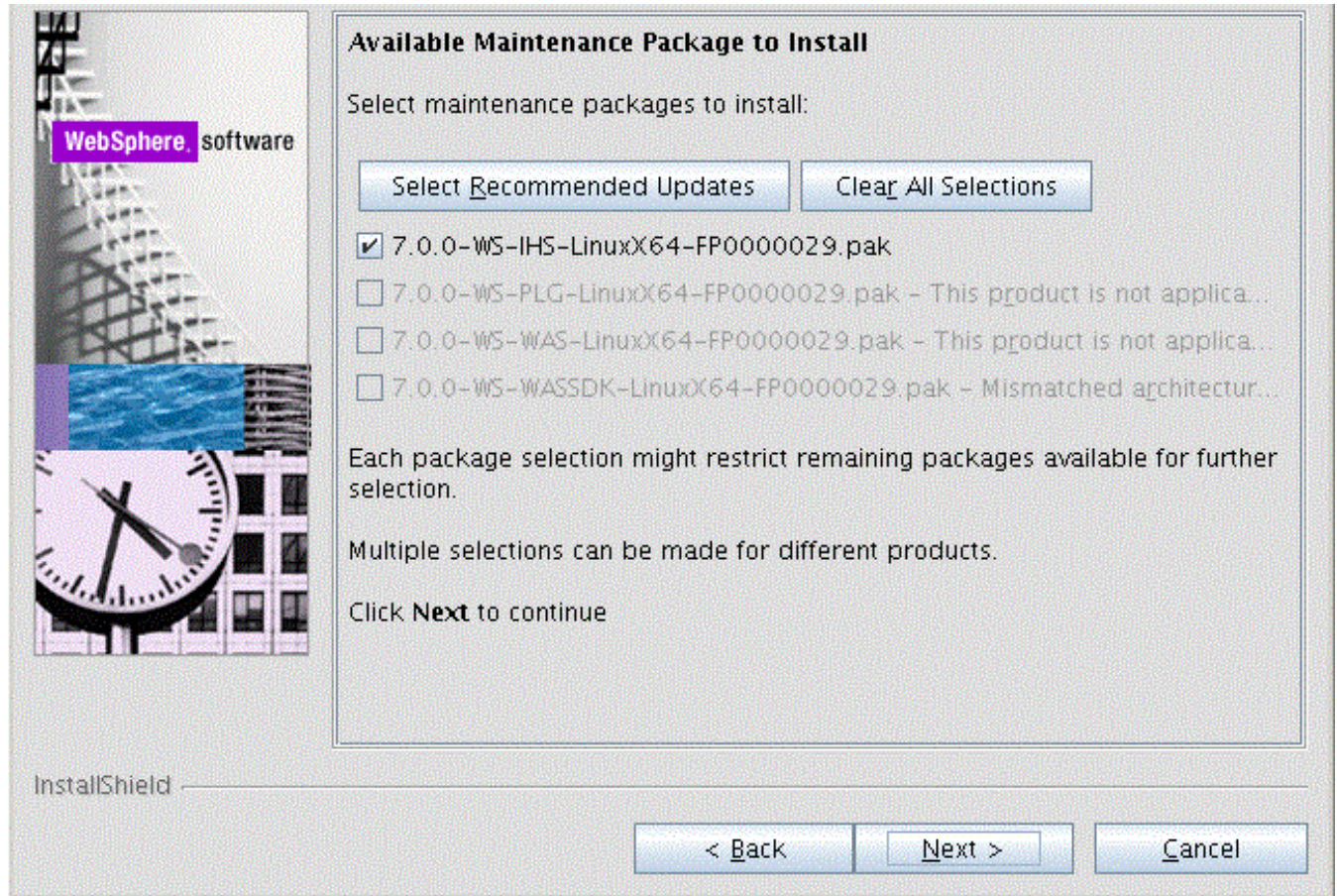
Additional information can be found online at the [WebSphere Application Server library](#) or [WebSphere Application Server information center](#) webpages.



9. On Maintenance Package Directory Selection, validate the directory path that was located by the Installer wizard.

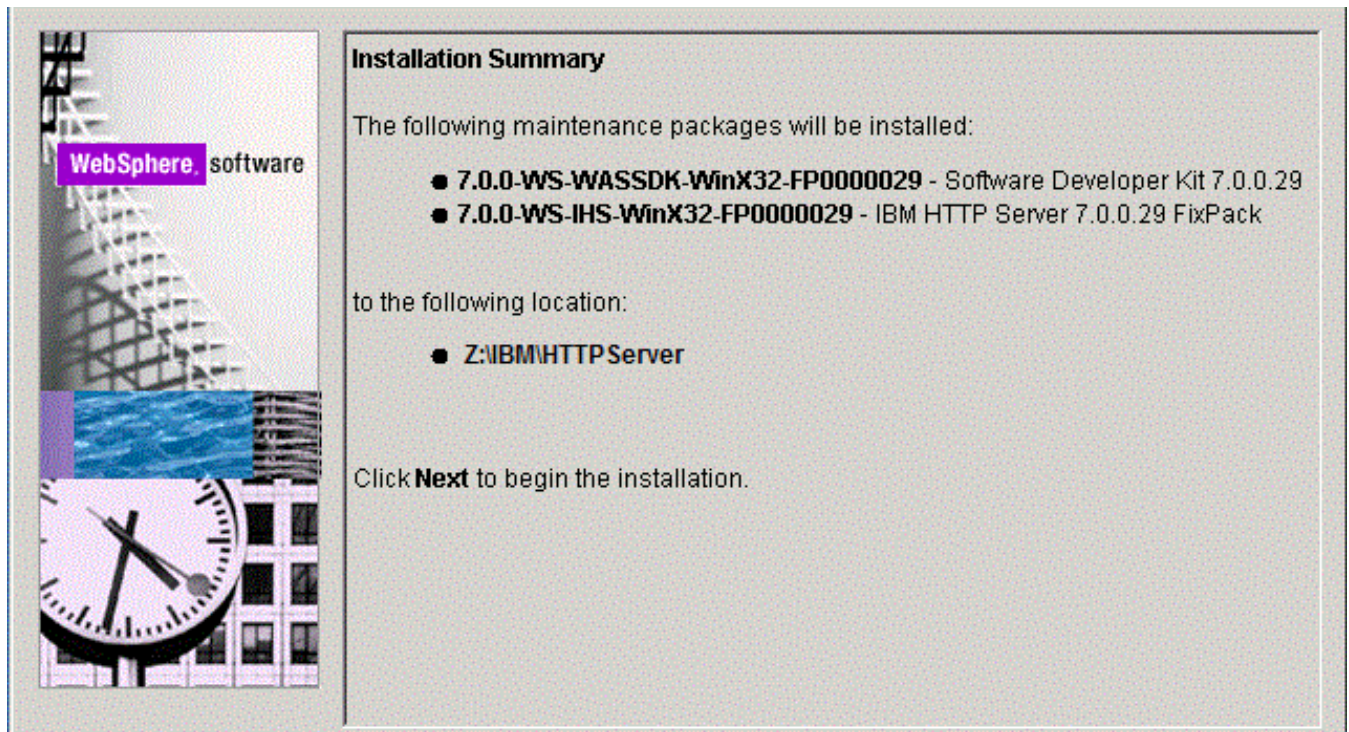
10. Click the *Next* button to continue.

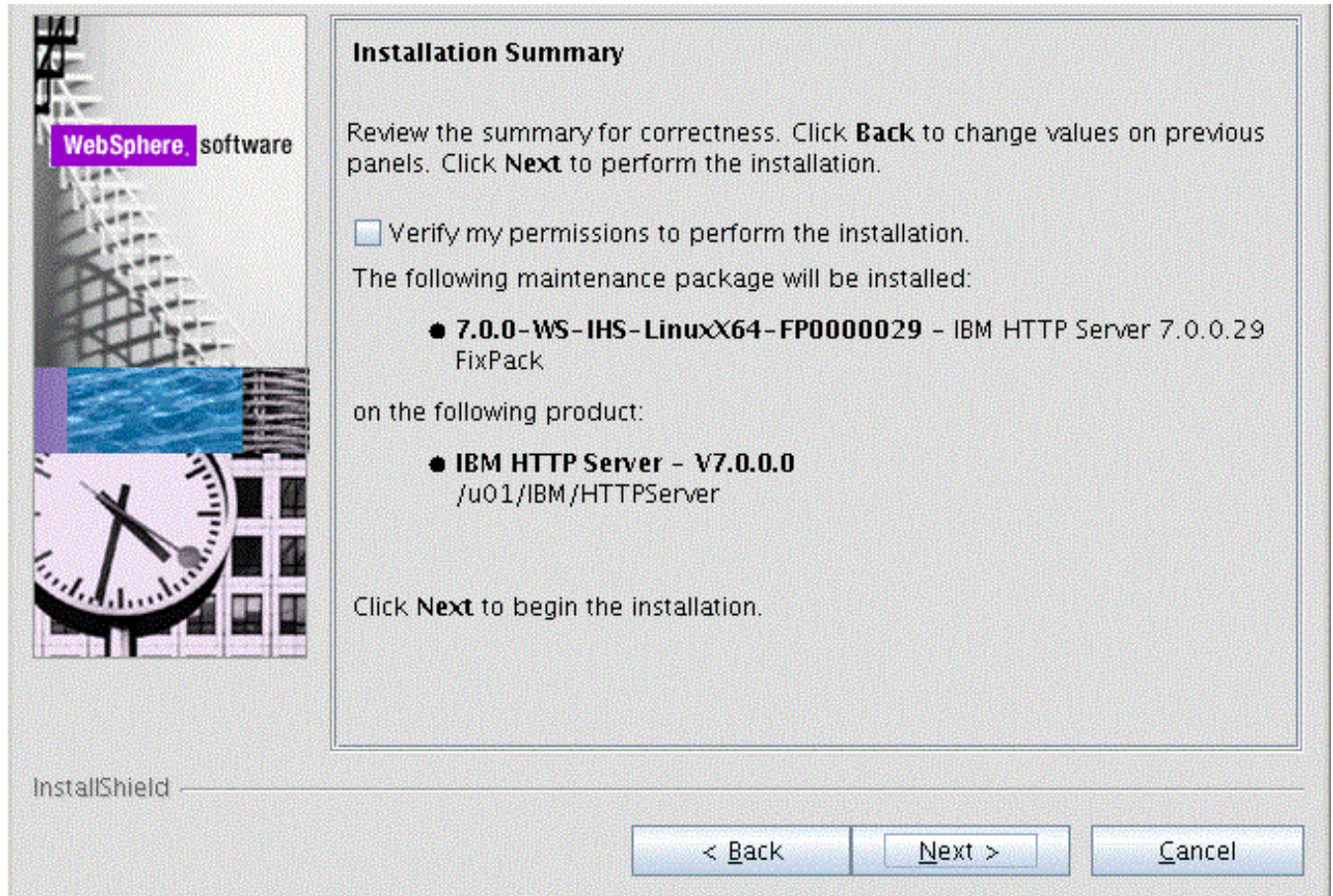




11. On Available Maintenance Package to Install, ensure that the available IHS and WASSDK fix pack files are checked since the IBM HTTP Server components are being updated.

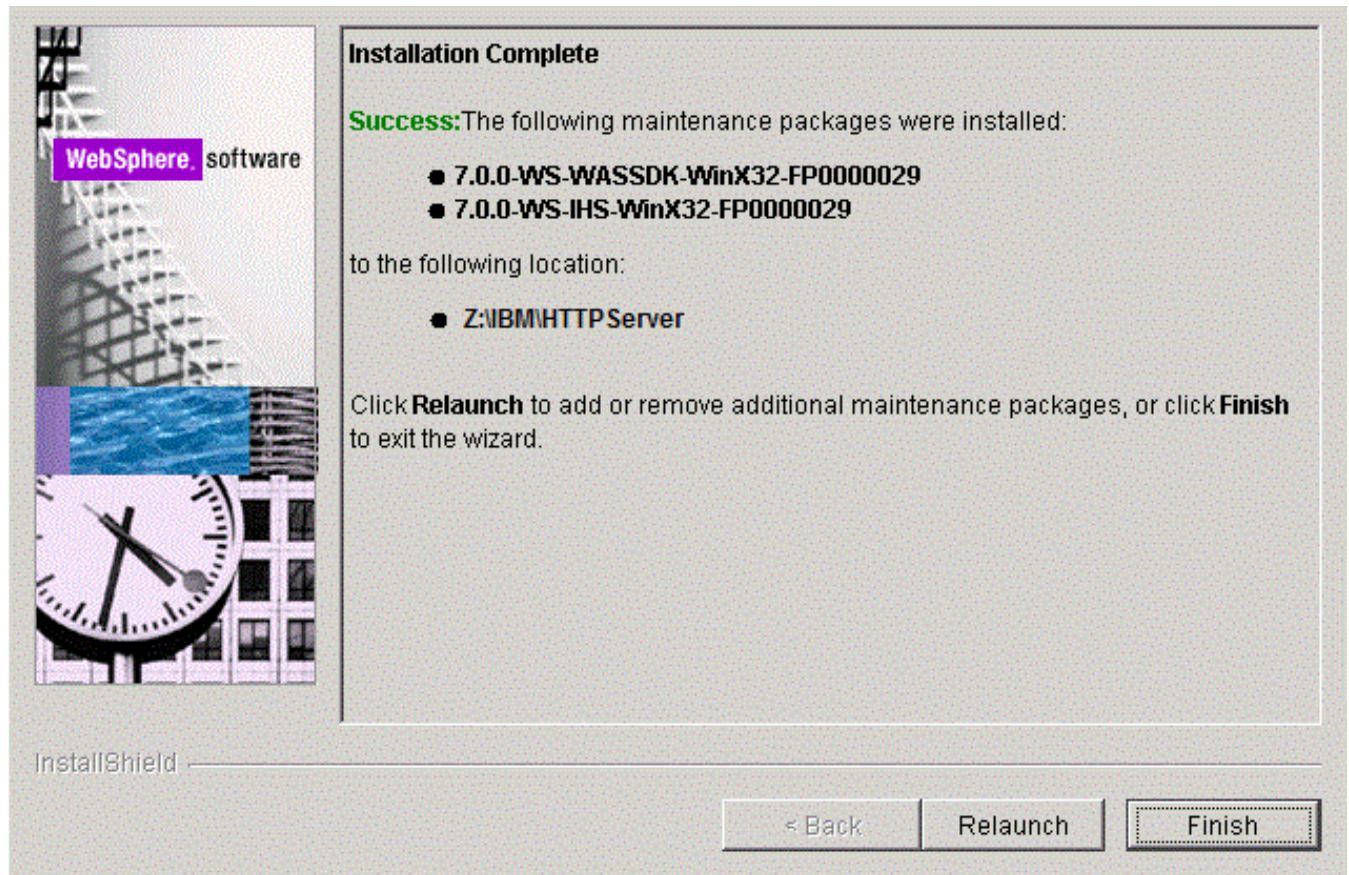
12. Click the *Next* button to continue.

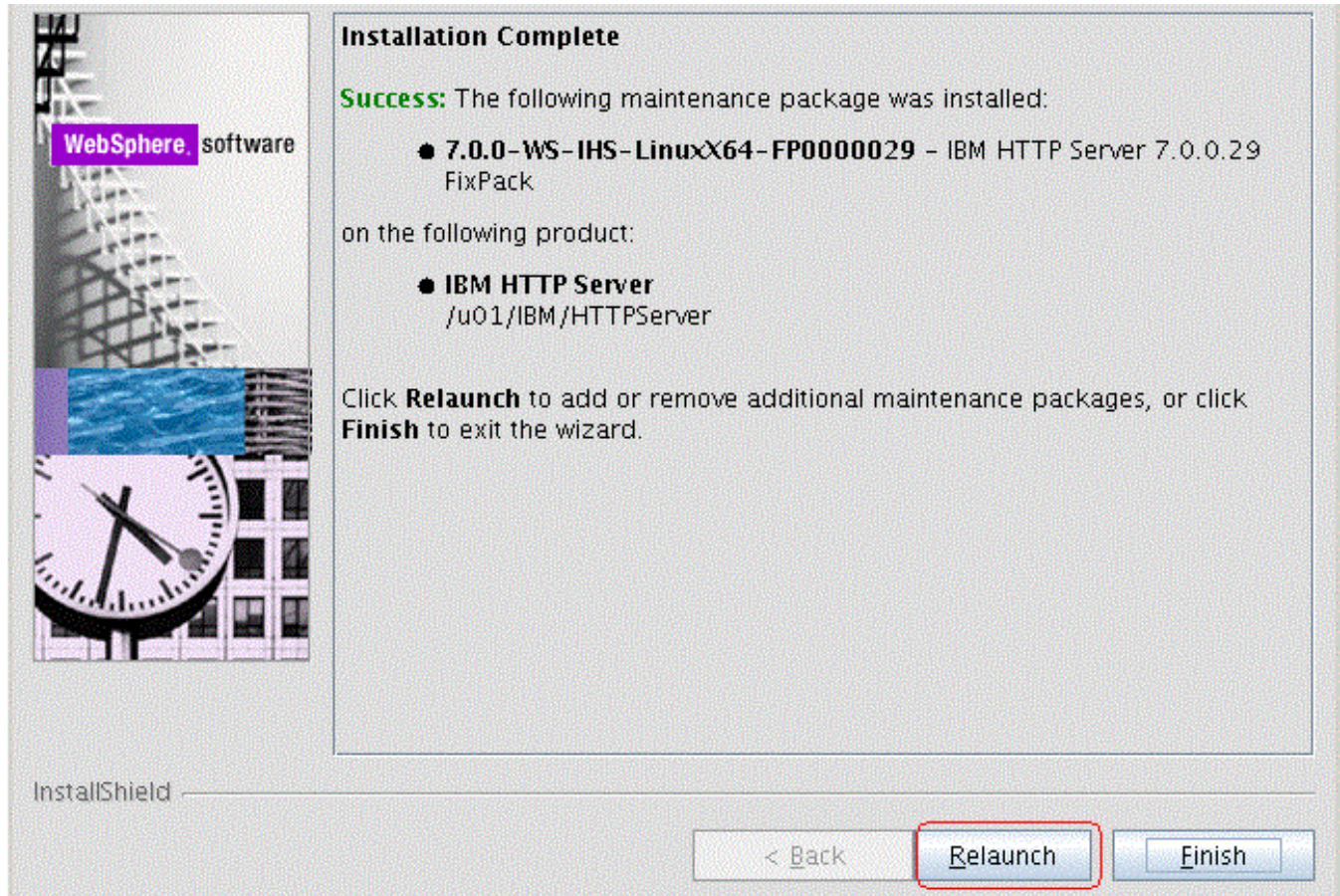




13. On Installation Summary, click the *Next* button to begin the installation.

Note: You should check the **Verify my permissions to perform the installation check box** in order for the installer to validate the permissions required for installation of the product.





14. On Installation Complete, verify that the proper maintenance packages for the IBM HTTP Server were successfully installed.
15. Click the *Relaunch* button and continue to the next section to install WebSphere Plug-ins Fix Pack.

Installing the WebSphere 7.0 Plug-ins Fix Pack

Note: It is very important to following the exact sequence of steps in this procedure.

To install the WebSphere 7.0 Plug-ins Fix Pack:

1. Ensure that all WebSphere and IBM HTTP or Microsoft IIS Services are stopped prior to updating the software. Ensure that all WebSphere and IBM HTTP Services are stopped prior to updating the software.
2. Download and copy the fix pack file for the WebSphere Plug-ins to the `\updateInstaller\maintenance` directory.

For example:

```
7.0.0-WS-PLG-WinX32-FP00000029.pak
```

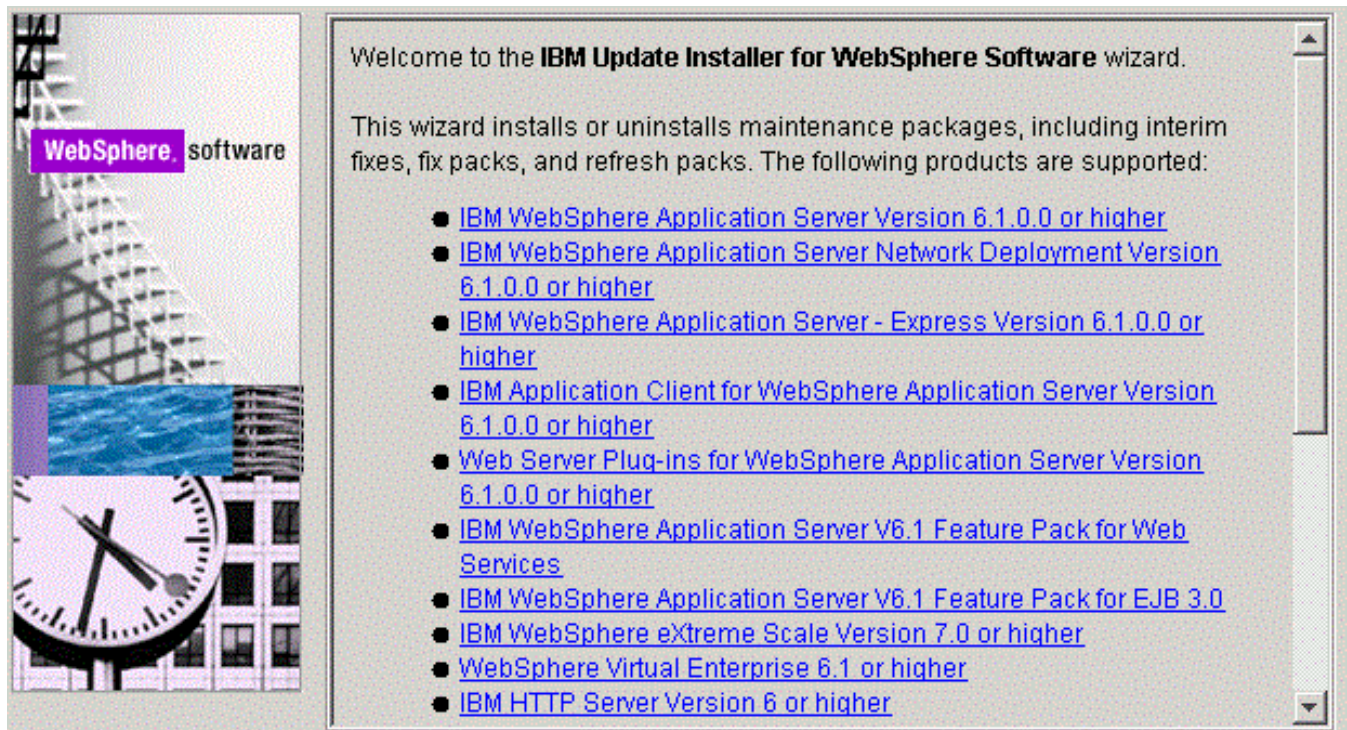
For example, on Solaris:

```
7.0.0-WS-PLG-SolarisSparc-FP00000005.pak
```

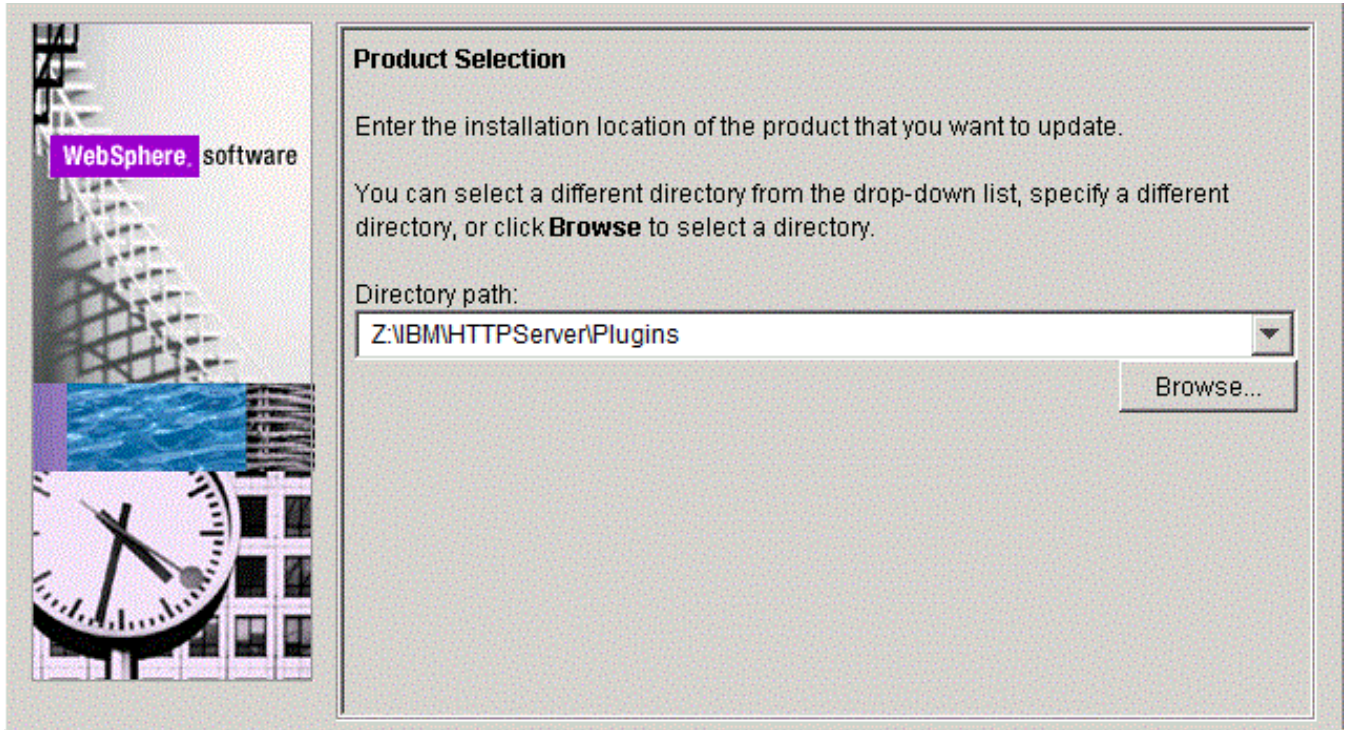
Note: The example filename is specific to Solaris. Other versions of UNIX with have their own unique filenames.

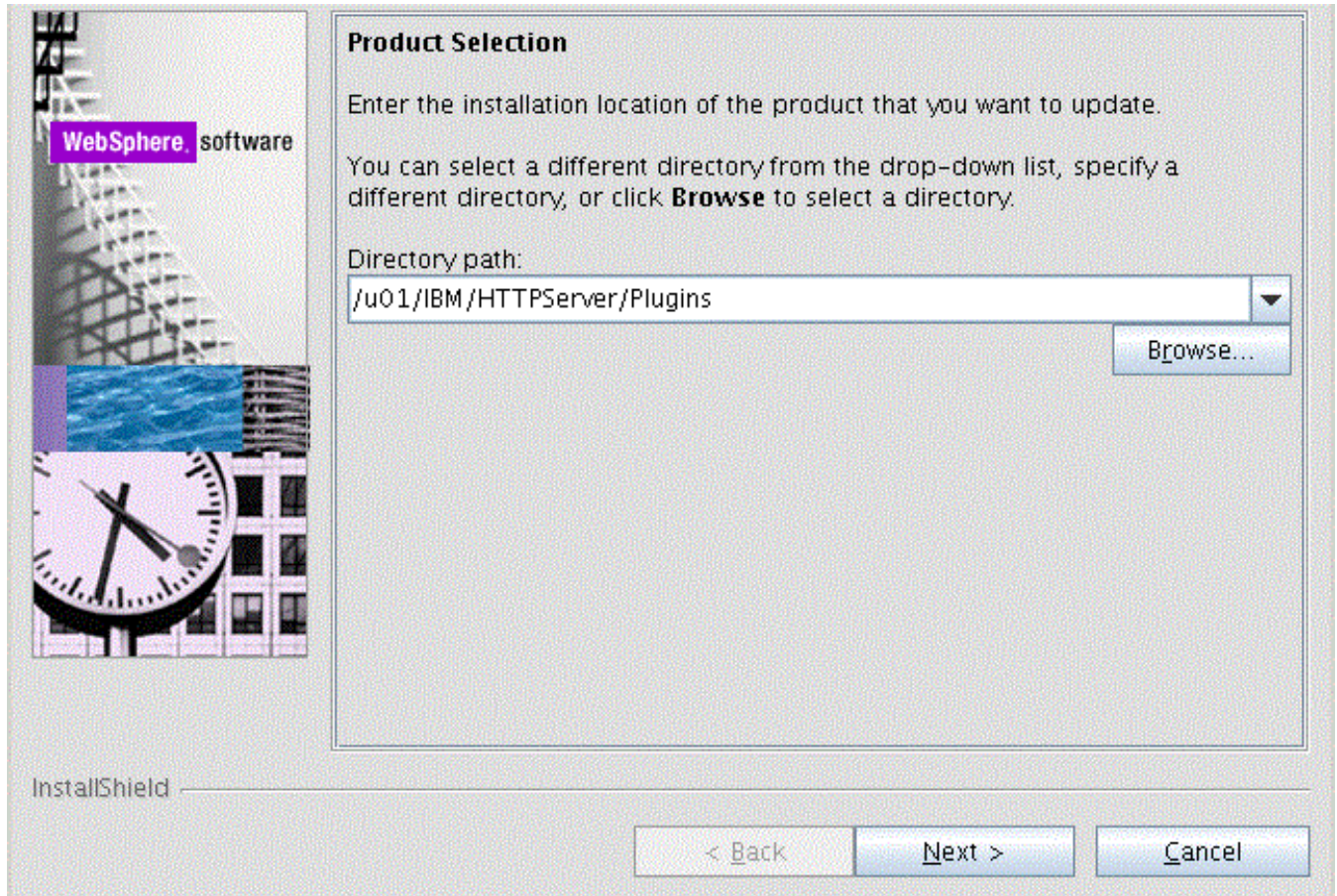
3. Run the `update` executable from the copied `UpdateInstaller` directory using these commands:

```
cd Z:\IBM\WebSphere\UpdateInstaller  
  
Z:\IBM\WebSphere\UpdateInstaller > update.exe  
  
cd /u01/IBM/WebSphere/UpdateInstaller  
  
./update.sh
```



4. Once is wizard is restarted, select the Plugins component.



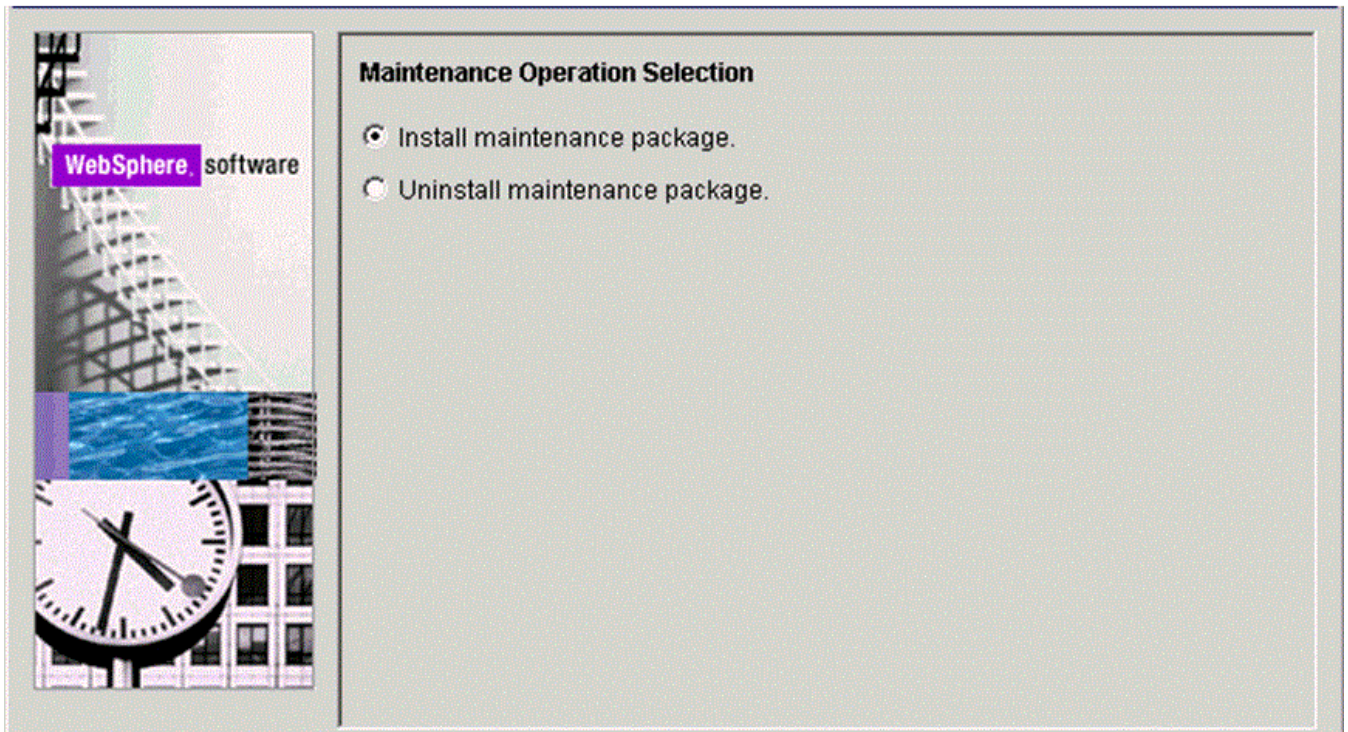


5. On Product Selection, use the drop down to select the installation location of the Web server plugin. For example:

`z:\IBM\HTTPServer\Plugins`

`/u01/IBM/HTTPServer/Plugins`

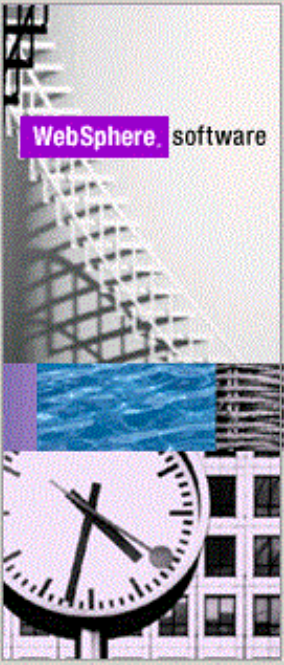
6. Click the *Next* button to continue.



7. On Maintenance Operation Selection, select the following radio button:

Install maintenance package

8. Click the *Next* button to continue.



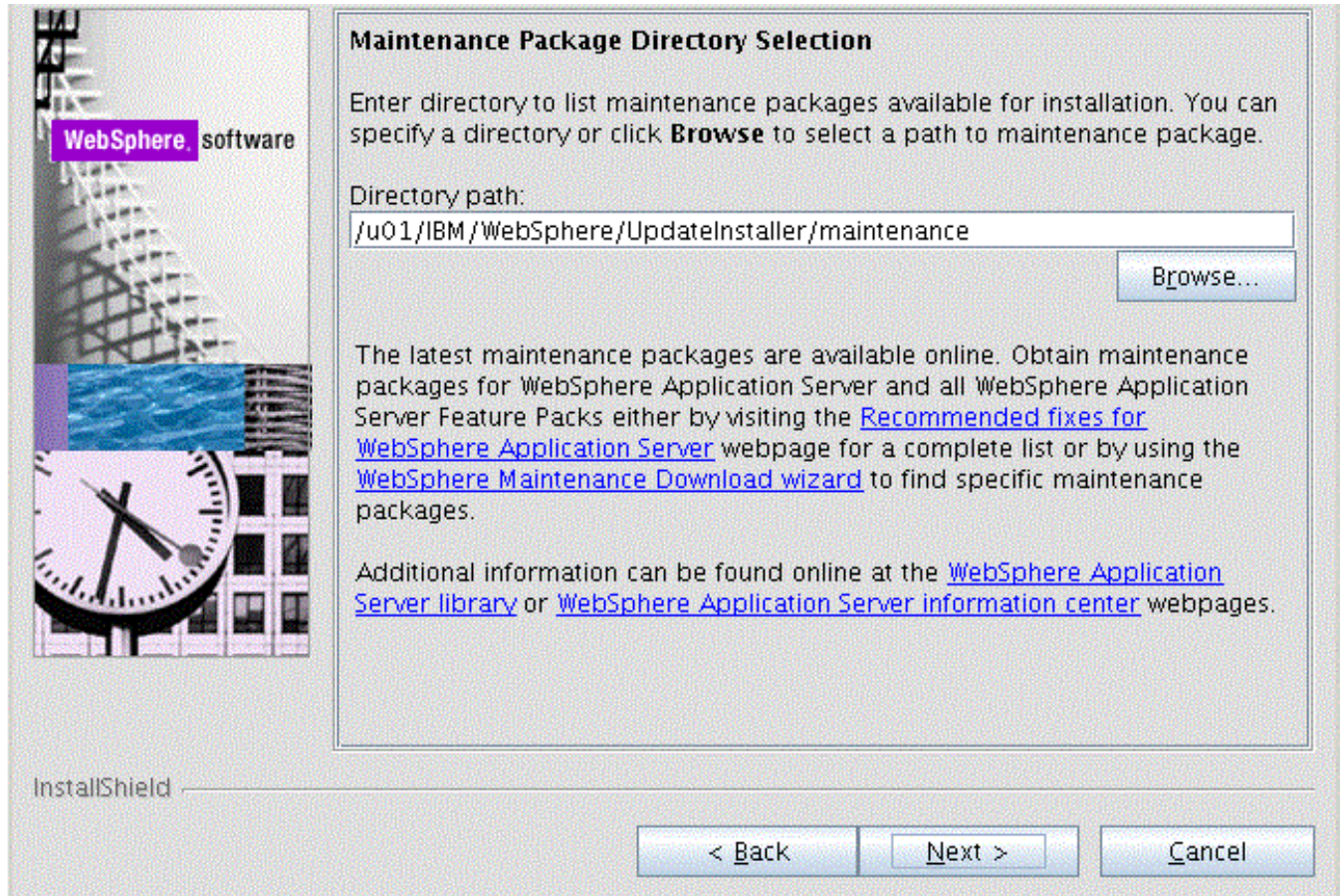
Maintenance Package Directory Selection

Enter directory to list maintenance packages available for installation. You can specify a directory or click **Browse** to select a path to maintenance package.

Directory path:

The latest maintenance packages are available online. Obtain maintenance packages for WebSphere Application Server and all WebSphere Application Server Feature Packs either by visiting the [Recommended fixes for WebSphere Application Server](#) webpage for a complete list or by using the [WebSphere Maintenance Download wizard](#) to find specific maintenance packages.

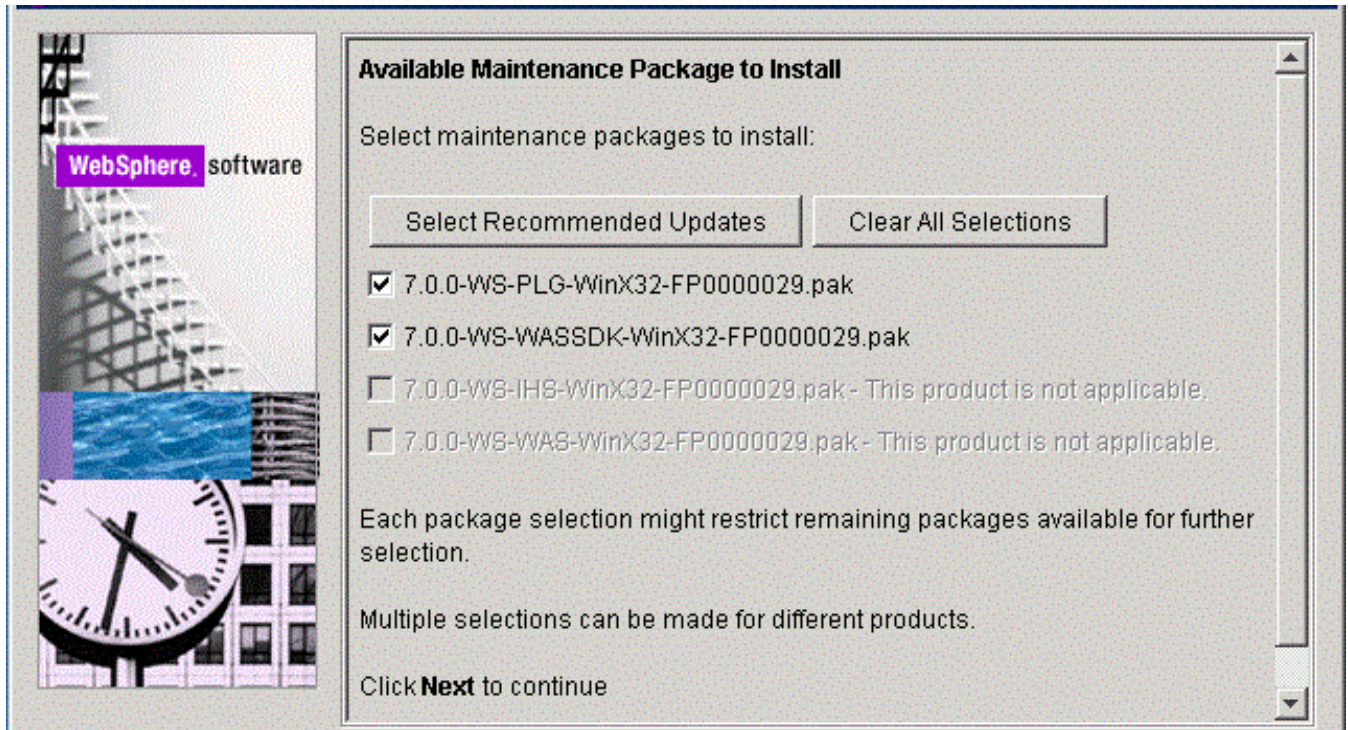
Additional information can be found online at the [WebSphere Application Server library](#) or [WebSphere Application Server information center](#) webpages.

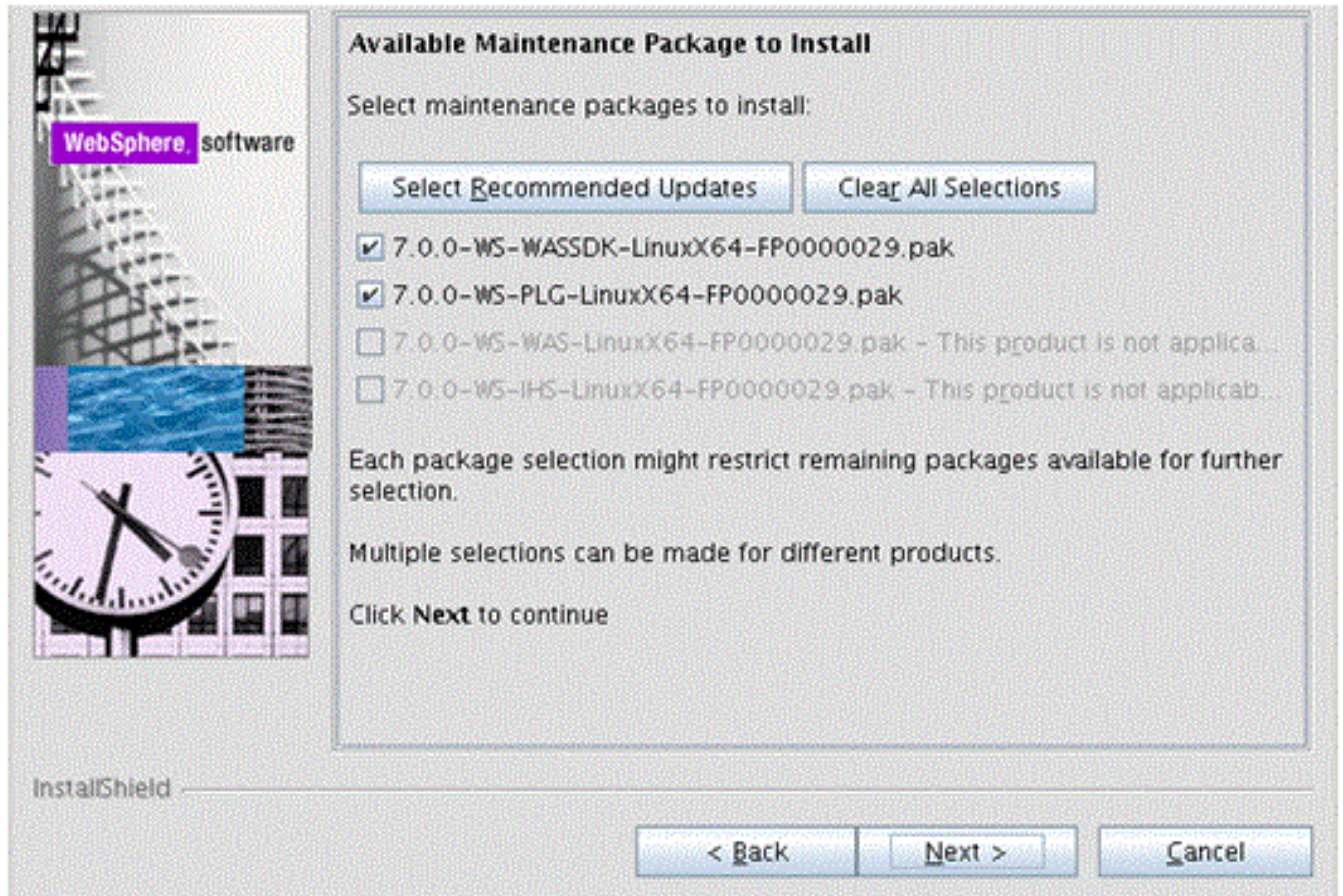


9. On Maintenance Package Directory Selection, validate the directory path that was located by the Installer wizard.

Note: The installer inspects the `\UpdateInstaller\maintenance` directory for maintenance packages (`.pak` files).

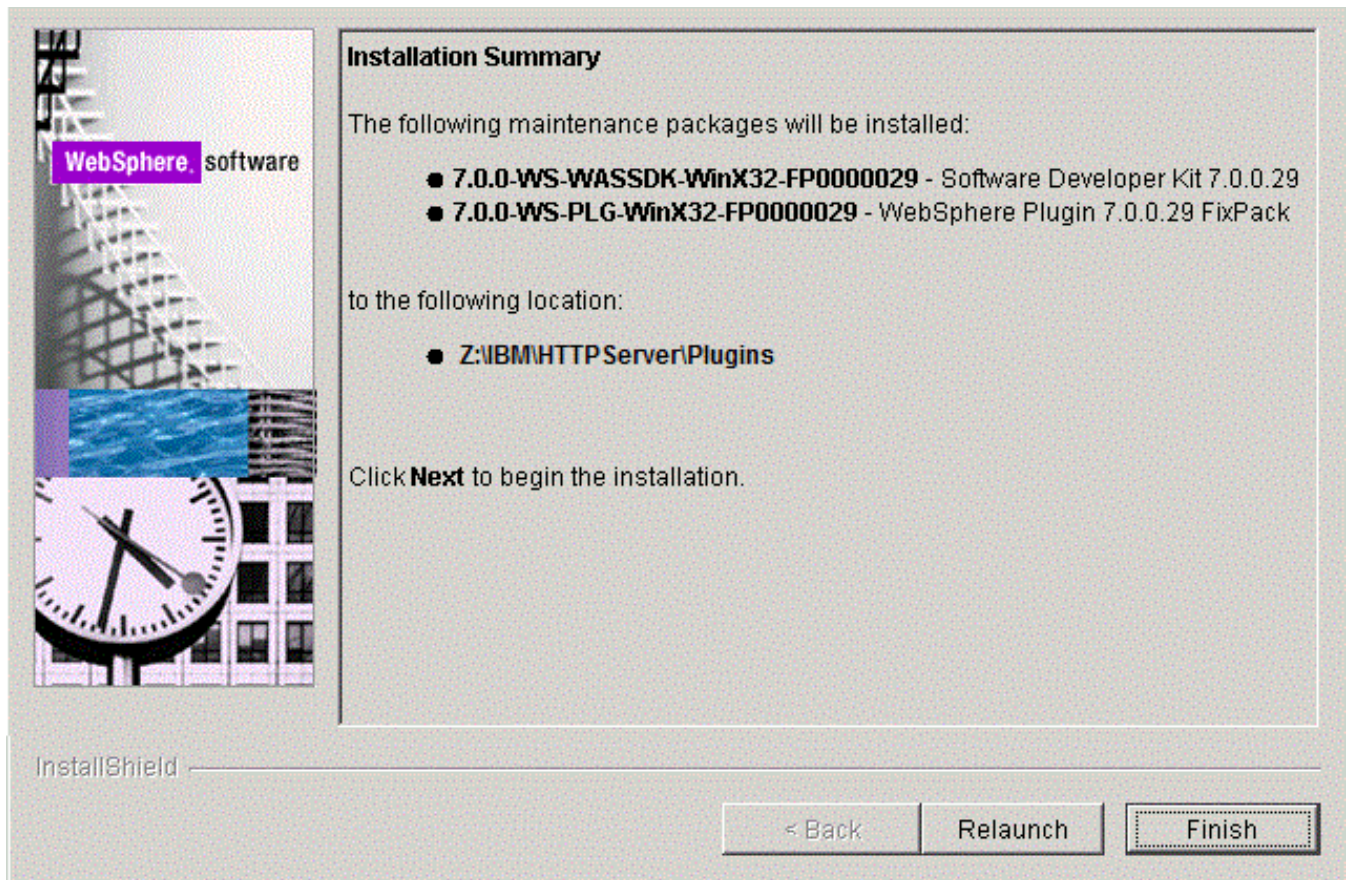
10. Click the *Next* button to continue.

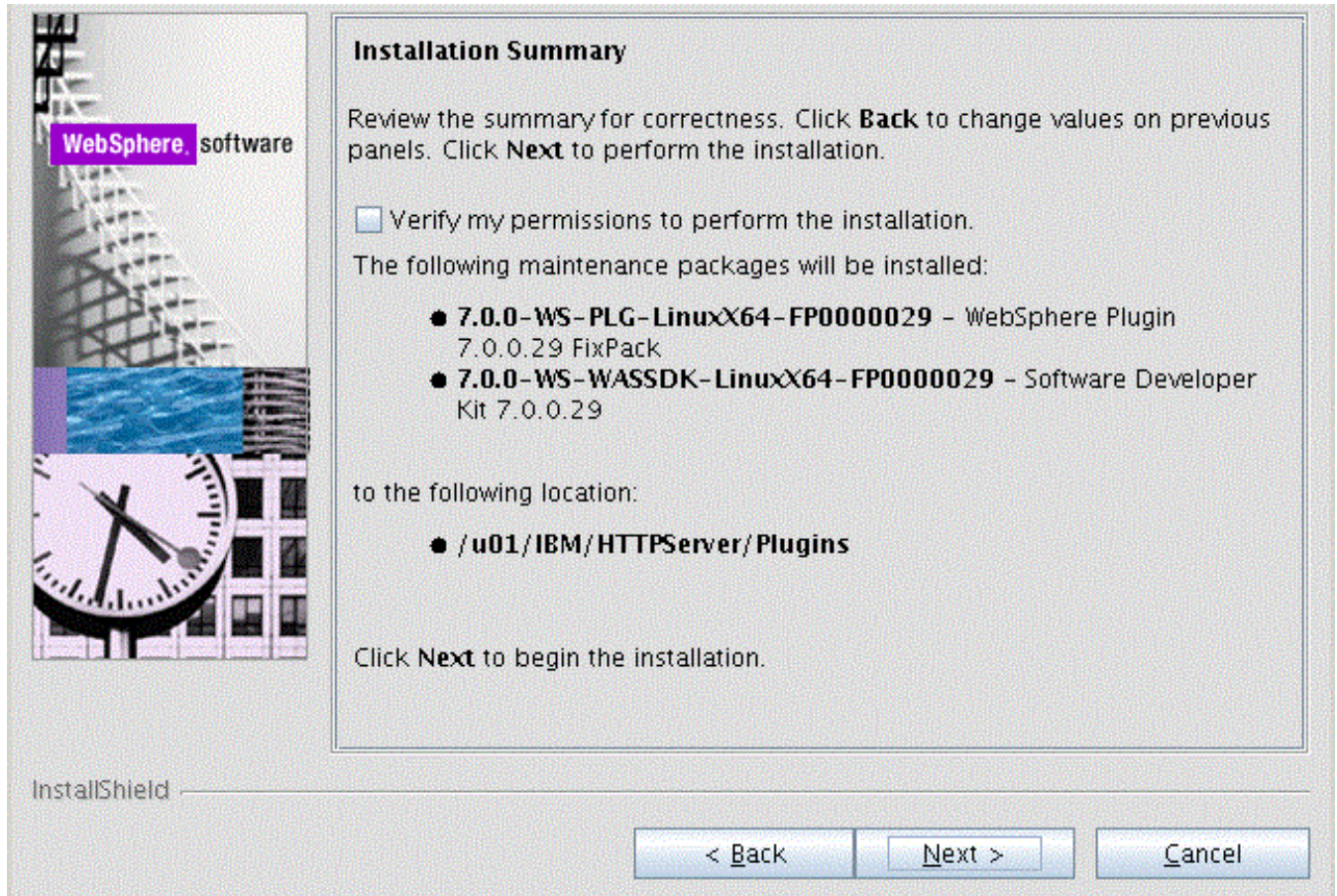




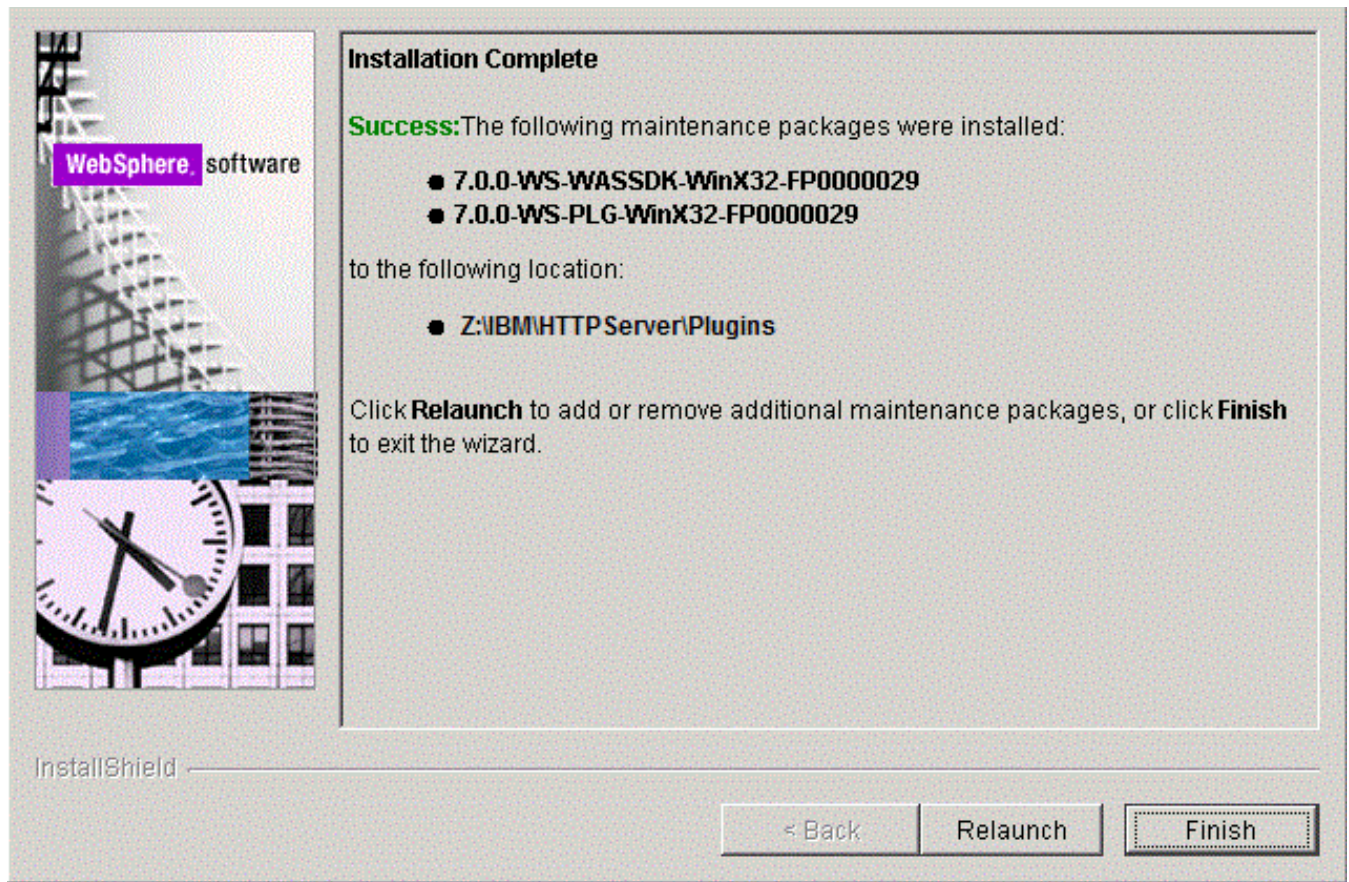
11. On Available Maintenance Package to Install, ensure that the PLG and WASSDK fix pack files are checked since the WebSphere Plugin components are being updated.

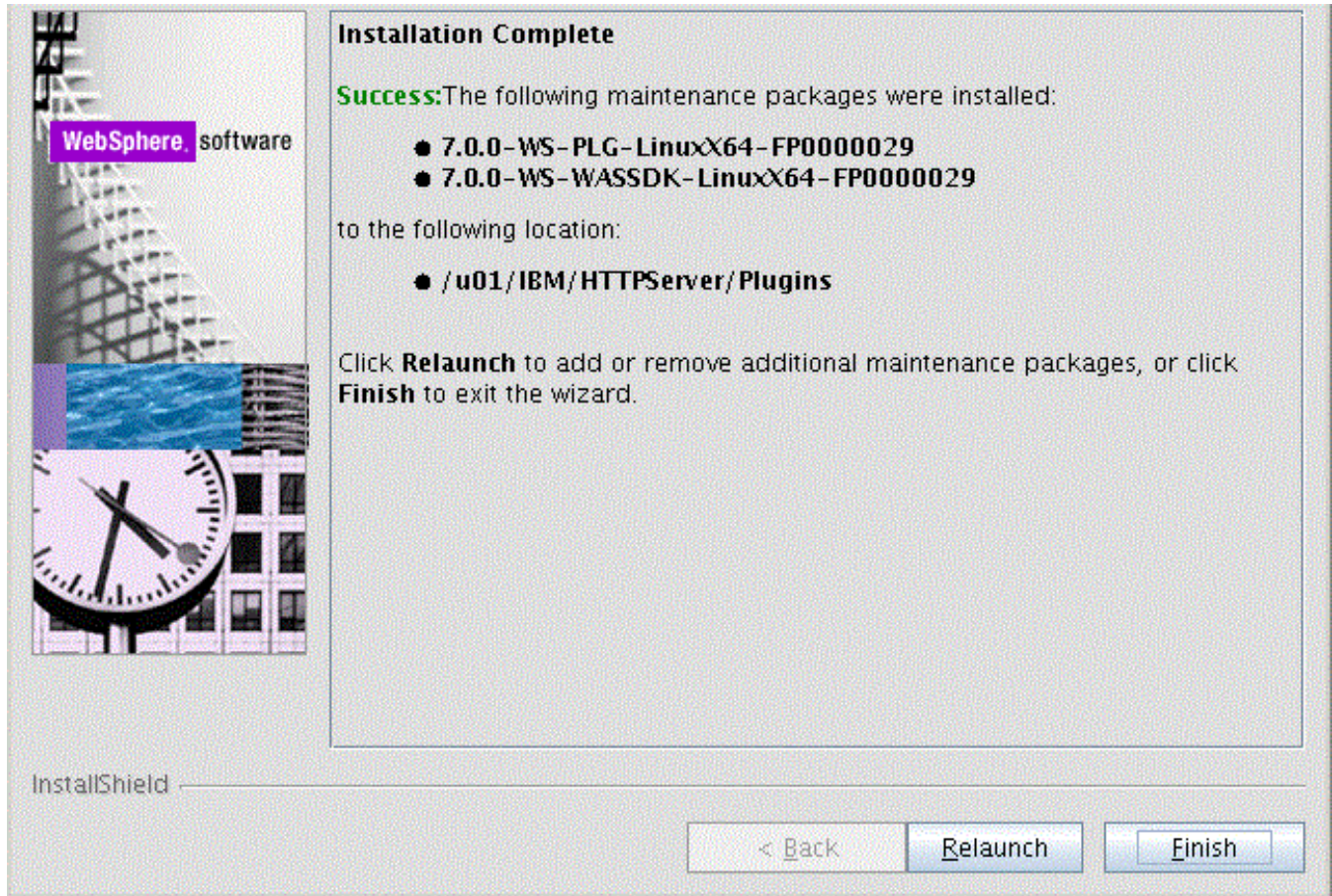
12. Click the *Next* button to continue the update for the WebSphere Plug-ins.





13. On the Installation Summary screen, review the information and click the *Next* button to begin the installation.





14. After the Plug-ins update is complete, the Success screen indicates the status of the maintenance package installation.
15. Click the *Finish* button to exit the Update Installer wizard.

Verifying the Versions of Installed WebSphere Products

This section describes how to verify the versions of these installed WebSphere products:

- WebSphere Application Server
- IBM HTTP Server
- WebSphere Plugins for IBM WebSphere Application Server

WebSphere Application Server

Use this procedure to verify the version of the IBM WebSphere Application Server.

1. Open a Windows Command window
2. Navigate to this folder:

`z:\IBM\WebSphere\AppServer\bin`
3. From the above folder, execute this batch file:

```
versionInfo.bat
```

Verify the installed version of the IBM WebSphere Application Server is 7.0.0.29 as shown in the example below:

Product List	
ND	installed
Installed Product	
Name	IBM WebSphere Application Server - ND
Version	7.0.0.29
ID	ND
Build Level	cf291321.01
Build Date	5/26/13
Architecture	Intel (32 bit)

```
xterm
# pwd
/u01/IBM/WebSphere/AppServer/properties/version
# cat WAS.product
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE product SYSTEM "product.dtd">
<product name="IBM WebSphere Application Server - ND">
  <id>ND</id>
  <version>7.0.0.5</version>
  <build-info
    date="7/2/09"
    level="cf050926.18" />
</product>
#
```

Alternatively, you can execute `versionInfo.sh` from the `<was_home>/bin` directory as shown in the screen sample below.

```
Product List
-----
ND                installed

Installed Product
-----
Name              IBM WebSphere Application Server - ND
Version           7.0.0.5
ID               ND
Build Level       cf050926.18
Build Date        7/2/09
Architecture      SPARC (32 bit)

End Installation Status Report
-----
# █
```

IBM HTTP Server

Use this procedure to verify the version of the IBM HTTP Server.

1. Open a Windows Command window
2. Navigate to this folder:

z:\IBM\WebSphere\AppServer\bin
3. From the above folder, execute this batch file:

```
versionInfo.bat
```

Verify the installed version of the IBM HTTP Server is 7.0.0.29 as shown in the example below:

```
Product List
-----
IHS                installed

Installed Product
-----
Name              IBM HTTP Server
Version           7.0.0.29
ID               IHS
Build Level       cf291321.01
Build Date        5/26/13
Architecture      Intel (32 bit)
```



```
xterm
# pwd
/u01/IBM/HTTPServer
# cat version.signature
IBM HTTP Server 7.0.0.5#
```

WebSphere Plugins for IBM WebSphere Application Server

Use this procedure to verify the version of the IBM HTTP Server.

1. Open a Windows Command window
2. To verify the Web server plugins for IBM WebSphere Application Server, navigate to this folder:

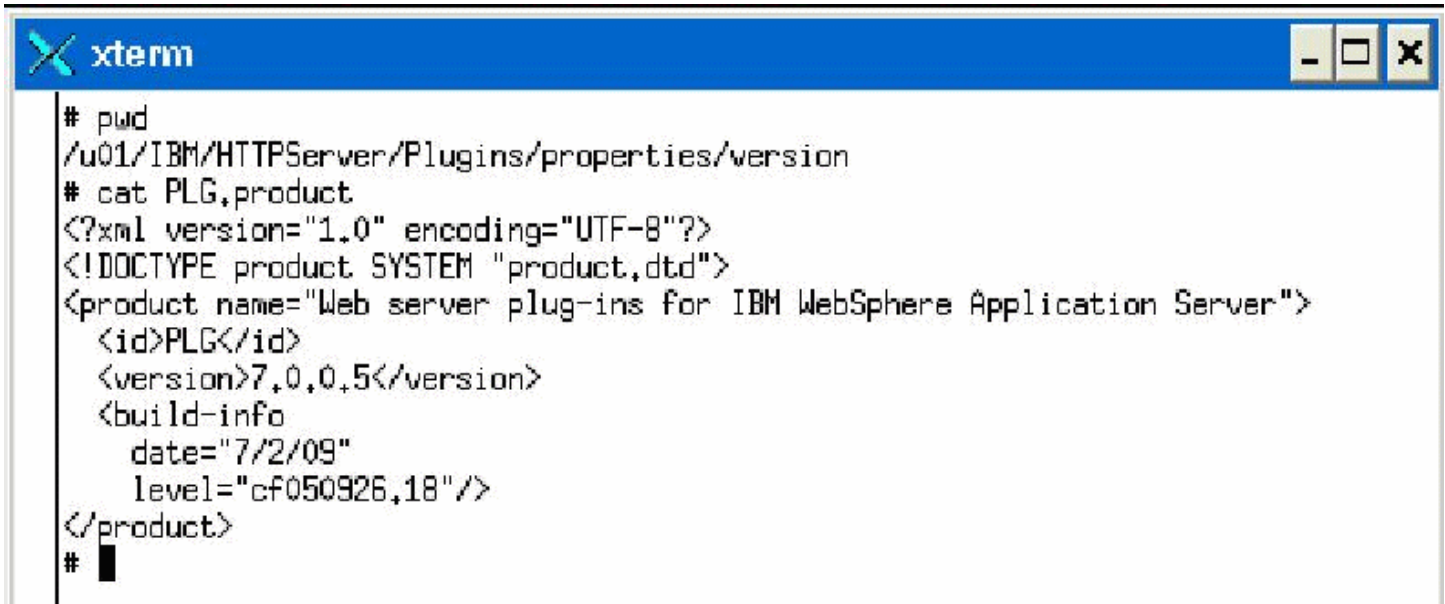
```
z:\IBM\HTTPServer\Plugins\bin
```

3. From the above folder, execute this batch file:

```
versionInfo.bat
```

Verify the installed version of the Web server plugins for IBM WebSphere Application Server is 7.0.0.29 as shown in the example below:

Product List	
PLG	installed
Installed Product	
Name	Web server plug-ins for IBM WebSphere Application Server
Version	7.0.0.29
ID	PLG
Build Level	cf291321.01
Build Date	5/26/13
Architecture	Intel (32 bit)



```
xterm
# pwd
/u01/IBM/HTTPServer/Plugins/properties/version
# cat PLG,product
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE product SYSTEM "product.dtd">
<product name="Web server plug-ins for IBM WebSphere Application Server">
  <id>PLG</id>
  <version>7.0.0.5</version>
  <build-info
    date="7/2/09"
    level="cf050926,18"/>
</product>
#
```

Starting the WebSphere Application Server

Note: By default, WebSphere Application Server 7.0 creates and configures a default server named `server1` during installation. If you named your server something other than the default value, then substitute that name for `server1` in the following steps.

To start the WebSphere Application Server:

1. Start a command prompt.
2. Navigate to the `<websphere_install_dir>\AppServer\profiles\profile_name\bin` WebSphere/AppServer/profiles/profile_name/bin directory. For example:

```
cd Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin
```

```
cd /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/bin
```

3. Issue the command `startServer` followed by the Application Server name. For example:

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin > startServer server1
```

```
./startServer.sh server1
```

This command is case sensitive.

Tip: The Application Server can also be started through the Windows Services Applet. Each profile that you configured will have a corresponding service that is automatically created when you created the profile.

Note: Starting with Tools Release 8.97, you can use the Server Manager to start the WebSphere process.

Stopping the WebSphere Application Server

Note: By default, WebSphere Application Server 7.0 creates and configures a default server named `server1` during installation. If you named your server something other than the default value, then substitute that name for `server1` in the following steps.

To stop the WebSphere Application Server:

1. Start a command prompt.
2. Navigate to the `<websphere_install_dir>\AppServer\profiles\profile_name\bin` WebSphere/AppServer/profiles/profile_name/bin directory. For example:

```
cd z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin
```

```
cd /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/bin
```

3. Issue the command `stopServer` followed by the Application Server name. For example:

```
stopServer server1
```

```
./stopServer.sh server1
```

This command is case sensitive.

Note: If administrative security has been enabled for the WebSphere Application Server profile then use the following command to stop the servers: `z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin > stopServer server1 user <admin_user_name> -password <admin_user_password>`

Tip: The Application Server can also be stopped through the Windows Services Applet. Each profile that you configured will have a corresponding service that is automatically created when you created the profile.

Note: Starting with Tools Release 8.97, you can use the Server Manager to stop the WebSphere process.

Determining the Name and Status of the WebSphere Application Server

To determine the name and status of any or all WebSphere Application servers:

1. Start a command prompt.
2. Navigate to the `<websphere_install_dir>\AppServer\profiles\profile_name\bin` WebSphere/AppServer/profiles/profile_name/bin directory. For example:

```
cd Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin
```

```
cd /u01/IBM/WebSphere/AppServer/profiles/AppSrv01/bin
```

3. Issue the command `serverStatus` followed by the Application Server name (or with the `all` option to view the status of all the servers in the profile). For example, to view the status of all Application Servers:

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin > serverStatus -all
```

Note: If administrative security has been enabled for the WebSphere Application Server profile, you must use the following command to check the status of the servers: `Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\bin > serverStatus all user <admin_user_name> -password <admin_user_password>`

```
./serverStatus.sh -all
```

Starting the IBM HTTP Server

To start the IBM HTTP Server:

1. Start a command prompt.
2. Navigate to the `<ibm_http_server_location>\bin` <ibm_http_server_location>/bin directory and issue the start command with the `-k` option. For example:

```
cd Z:\IBM\HTTPServer\bin
```

```
apache.exe -k start
```

```
cd /u01/IBM/HTTPServer/bin
```

```
./apachectl -k start
```

This command is case sensitive.

Tip: The IBM HTTP Server can also be started through the Windows Services Applet.

Note: Starting with Tools Release 8.97, you can use the Server Manager to start the IBM HTTP Server process.

Stopping the IBM HTTP Server

To stop the IBM HTTP Server:

1. Start a command prompt.
2. Navigate to the `<ibm_http_server_location>\bin <ibm_http_server_location>/bin` directory and issue the stop command with the `-k` option. For example:

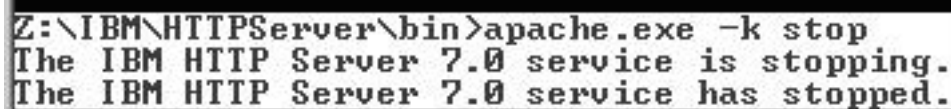
```
cd Z:\IBM\HTTPServer\bin
apache -k stop
cd /u01/IBM/HTTPServer/bin
./apache -k stop
```

This command is case sensitive.

Tip: The IBM HTTP Server can also be stopped through the Windows Services Applet.

Note: Starting with Tools Release 8.97, you can use the Server Manager to stop the IBM HTTP Server process.

Note: Below is an example of the console indicating that the IBM HTTP Server is successfully stopped:



```
Z:\IBM\HTTPServer\bin>apache.exe -k stop
The IBM HTTP Server 7.0 service is stopping.
The IBM HTTP Server 7.0 service has stopped.
```

Accessing the WebSphere Administration Console

The WebSphere Administration Console is completely web-based and can be accessed from any supported web browser. The default URL is:

```
http://<machinename>:<profile_port>/admin
```

where `machine_name` is the name of the machine on which WebSphere Application Server has been installed, and

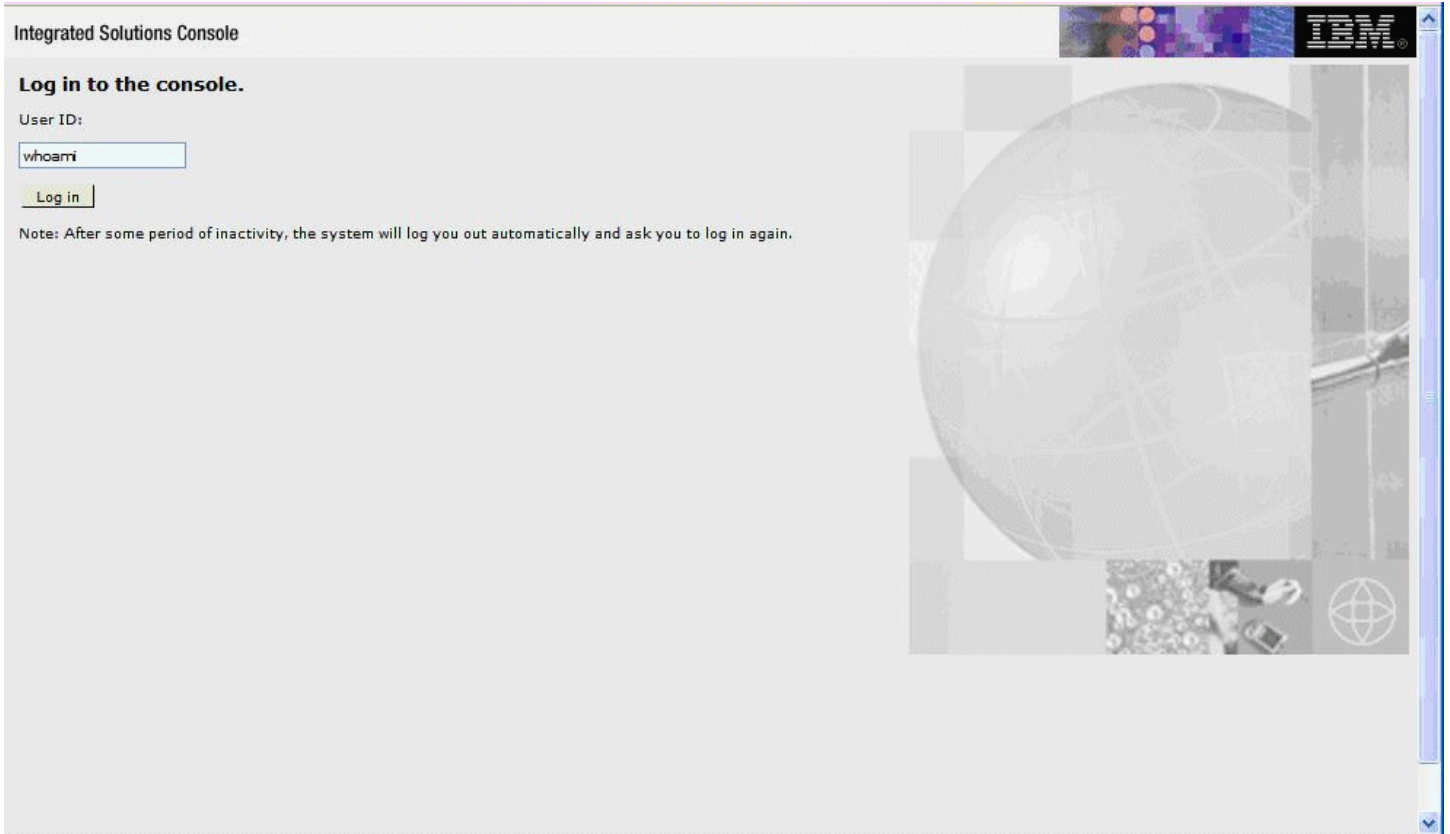
where `profile_port` was defined during the profile creation in the profile creation wizard. For the first profile created, the default value is usually 9060.

To access the WebSphere Administration Console on the installed machine:

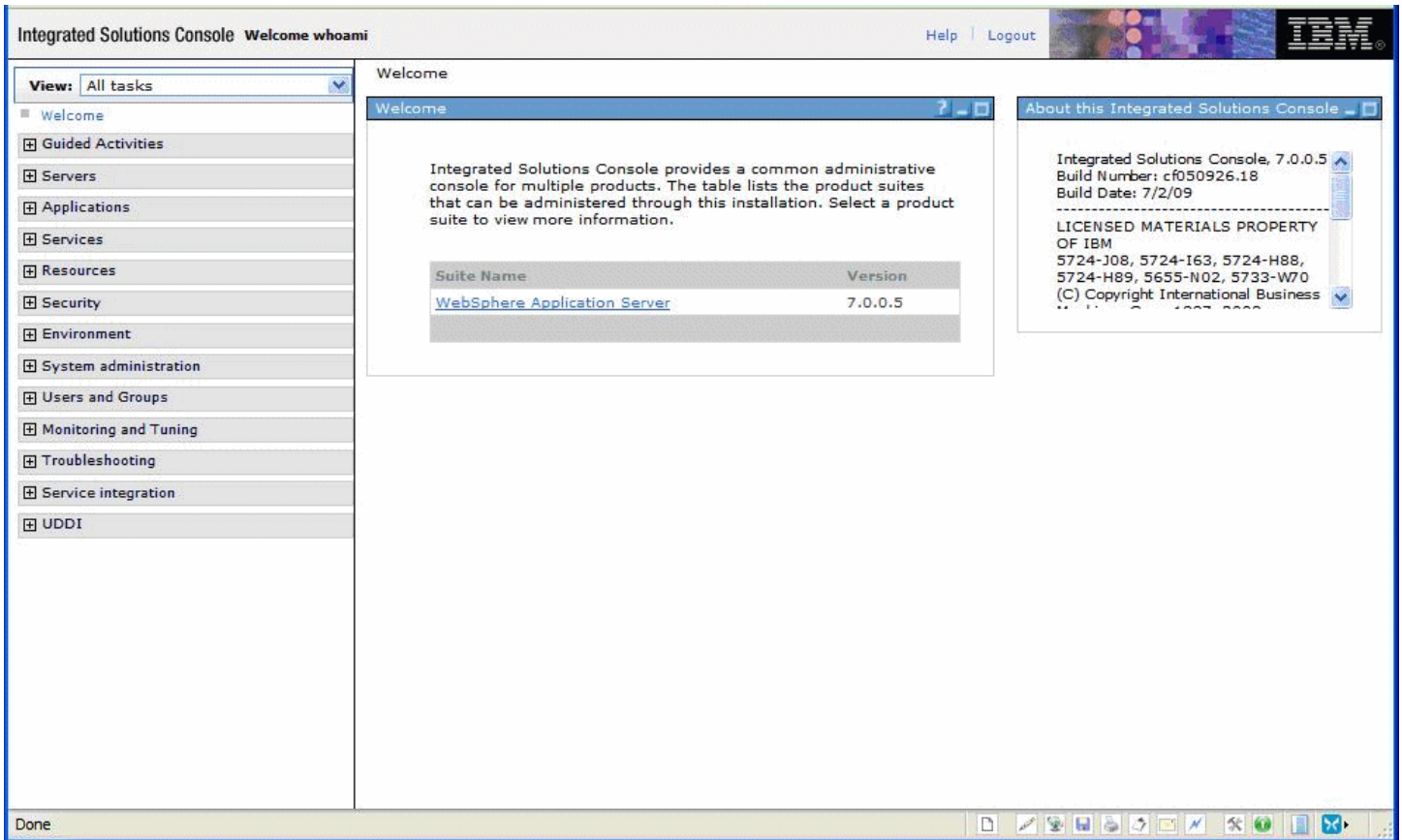
1. Ensure that the WebSphere Application Server (default name is `server1`) is started.
2. Start a web browser.
3. Enter this URL to access the WebSphere Administration Console:

```
http://localhost:9060/admin
```

Tip: If the port number is unknown and the default port is not working, the `AboutThisProfile.txt` file contains the key `Administrative console port`, which typically lists the assigned admin port number. Typically this file is located in this directory: `<websphere_installation_root>\AppServer\profiles\<profile_name>\logs\AboutThisProfile.txt` `/u01/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/AboutThisProfile.txt`



4. On the Log in to the console screen, enter a valid or new user.



Upon successful logon, the WebSphere Application Server welcome screen is displayed. You can use this application to manage your WebSphere servers and related machines.

Testing the WebSphere and IBM HTTP Server Installation

To test the WebSphere Administration Console:

1. Ensure that the WebSphere Application Server (default name is `server1`) is started.
2. Ensure that the IBM HTTP Server is started.
3. Start a web browser.

4. Enter this URL to test the WebSphere Administration Console:

```
http://<machine_name>:<http_port>/snoop
```

where `machine_name` is your server, and

where `http_port` is the port of your IBM HTTP Server. The default value is 80.

For example:

```
http://localhost:80/snoop
```



Snoop Servlet - Request/Client Information

Requested URL:

http://denicint2.mlabs.jdedwards.com/snoop

Servlet Name:

Snoop Servlet

Request Information:

Request method	GET
Request URI	/snoop
Request protocol	HTTP/1.1
Servlet path	/snoop
Path info	<none>
Path translated	<none>
Character encoding	<none>

Upon successful execution, the resulting page should display information similar to the above. This indicates that your WebSphere Application Server is successfully installed and functioning.

Generating and Propagating WebSphere Plug-ins (optional)

Note: This section is informational only and is not required before you install the Oracle JD Edwards EnterpriseOne HTML Web server.

Whenever you install new enterprise applications, or create new virtual hosts, you must regenerate Web Server plug-ins. If your WebSphere installation is on a single machine, you can generate plug-ins from the WebSphere Administrative console. However, your configuration is across multiple machines, you might need to manually generate plug-ins.

This section describes these topics:

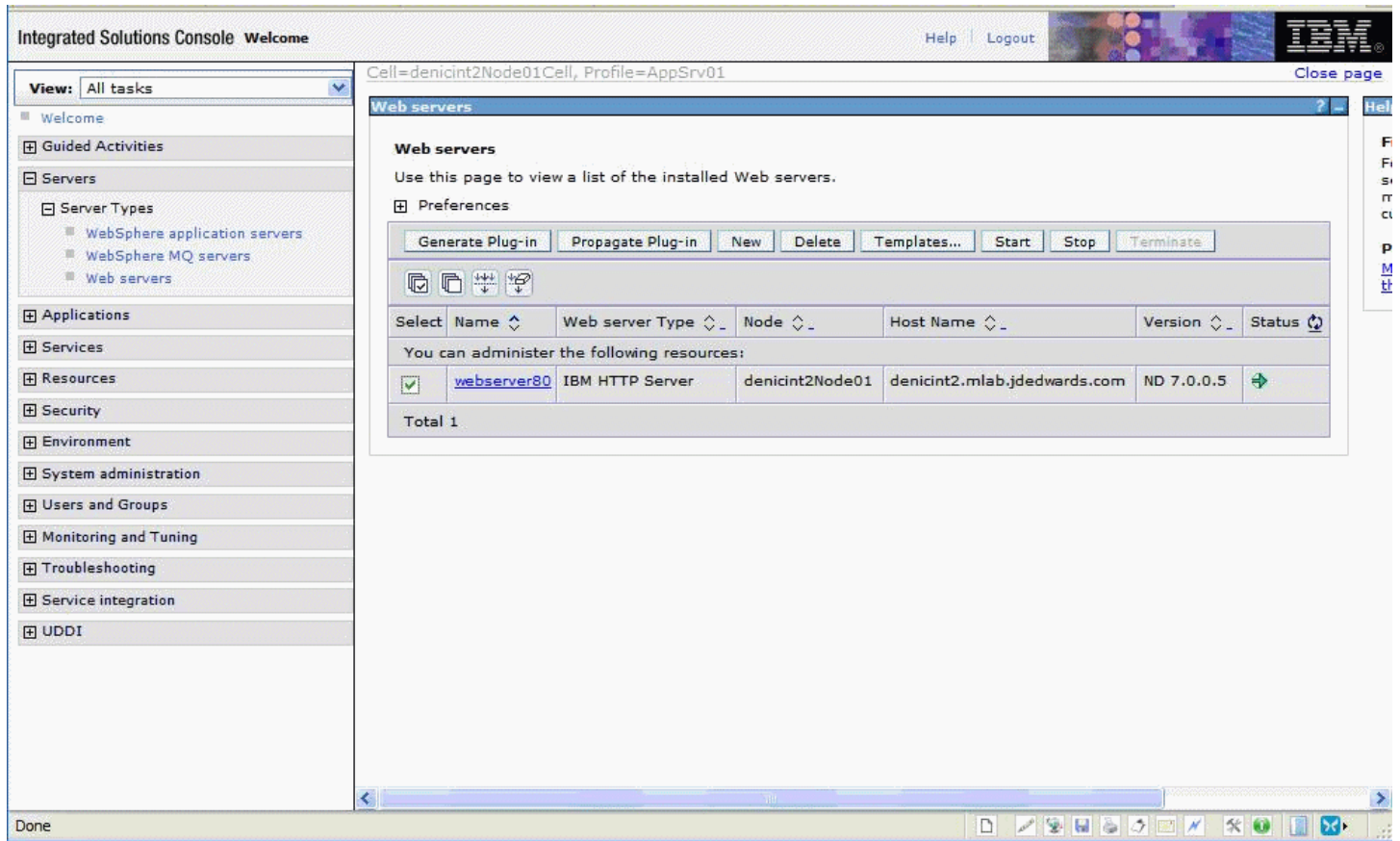
- [Generating WebSphere Plug-ins](#)
- [Propagating WebSphere Plug-ins](#)

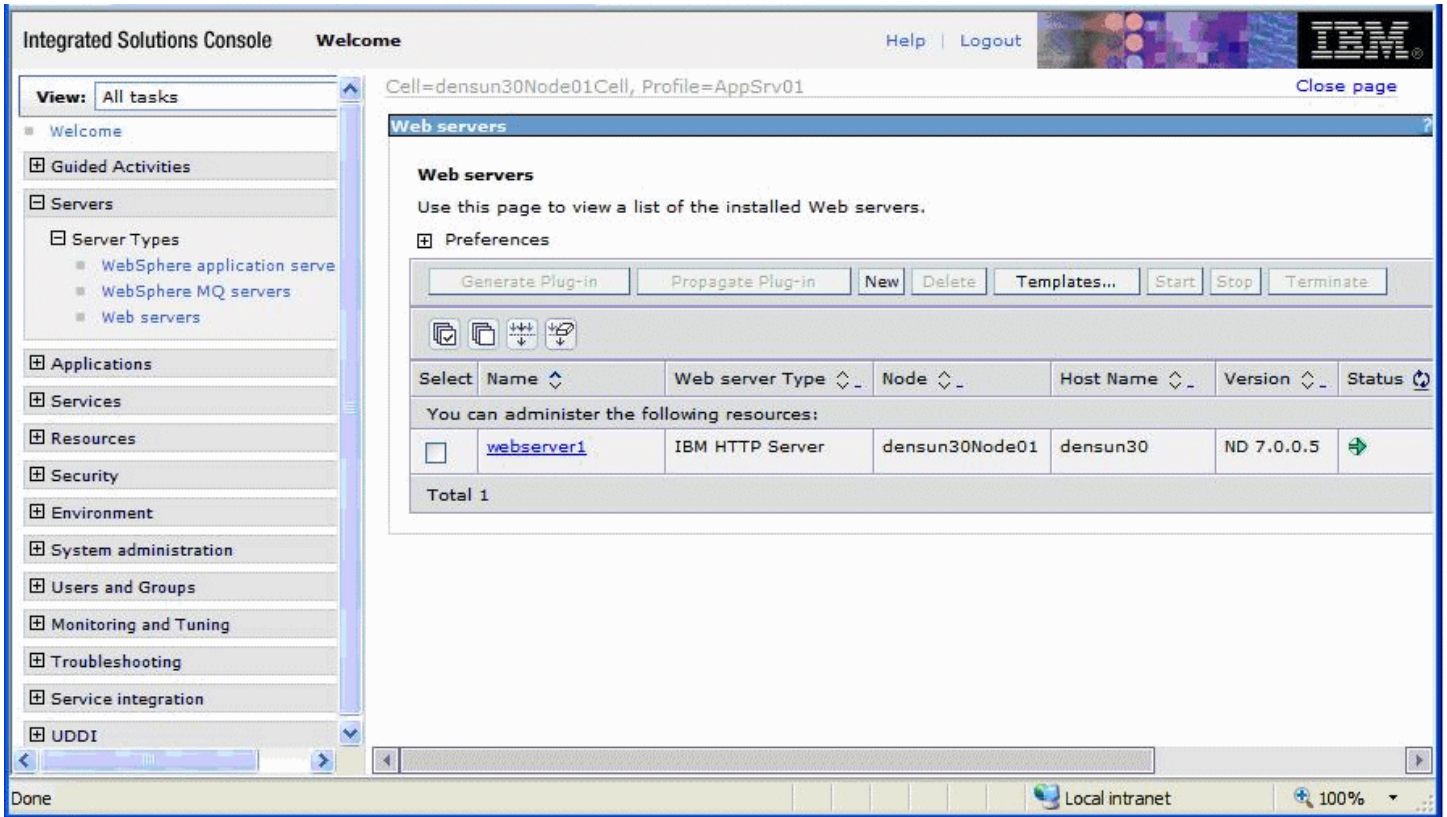
Generating WebSphere Plug-ins

To generate WebSphere plug-ins:

1. Log on to the WebSphere Administrative console as described in [Accessing the WebSphere Administration Console](#).

2. On the left hand navigation pane, select Servers > Server Types > Web servers





3. Click the check box next to the webserver definition for which you want to regenerate plug-ins.

4. To generate plug-ins, click the *Generate Plug-in* button, which is located above the webserver definition.

The Plug-in file `plugin-cfg.xml` is regenerated in place, typically at this location:

```
Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\config\cells\denicint2Node01Cell\nodes\  
denicint2Node01\servers\webserver80
```

```
/u01/IBM/WebSphere/AppServer/profiles/AppSrv01/config/cells/ densun30Node01Cell/nodes/densun30Node01/  
servers/webserver1
```

A status message will display under the Web servers section.

Integrated Solutions Console Welcome

Cell=denicint2Node01Cell, Profile=AppSrv01

View: All tasks

Web servers

Messages

- PLGC00051: Plug-in configuration file = Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\config\cells\denicint2Node01Cell\nodes\denicint2Node01\servers\webserver80\plugin-cfg.xml
- PLGC00521: Plug-in configuration file generation is complete for the Web server. denicint2Node01Cell.denicint2Node01.webserver80.

Web servers

Use this page to view a list of the installed Web servers.

Preferences

Generate Plug-in Propagate Plug-in New Delete Templates... Start Stop Terminate

Select	Name	Web server Type	Node	Host Name	Version	Status
<input type="checkbox"/>	webserver80	IBM HTTP Server	denicint2Node01	denicint2.mlalab.jdedwards.com	ND 7.0.0.5	
Total 1						

5. You must restart the IBM HTTP or Microsoft IIS Server for any plug-in changes to take effect.

Propagating WebSphere Plug-ins

To propagate the generated WebSphere plug-ins:

1. Log on to the WebSphere Administrative console as described in [Accessing the WebSphere Administration Console](#).
2. On the left hand navigation pane, select Servers > Server Types > WebServers.
3. Click the check box next to the webserver definition for which you want to propagate plug-ins.

4. To generate plug-ins, click the *Propagate Plug-in* button, which is located above the webserver definition.

The Plug-in file `plugin-cfg.xml` is propagated in place, typically at this location:

```
x:\IBM\HTTPServer\Plugins\config\webserver80\plugin-cfg.xml
```

where `x:` is the drive on which the IBM HTTP Server is installed.

```
/u01/IBM/HTTPServer/Plugins/config/webserver1/plugin-cfg.xml
```

A status message displays under the Web servers section as indicated in this screenshot sample:

Integrated Solutions Console Welcome Help | Logout

Cell=denicint2Node01Cell, Profile=AppSrv01 Close page

View: All tasks

- Welcome
- ▣ Guided Activities
- ▣ Servers
 - ▣ Server Types
 - WebSphere application servers
 - WebSphere MQ servers
 - Web servers
- ▣ Applications
- ▣ Services
- ▣ Resources
- ▣ Security
- ▣ Environment
- ▣ System administration
- ▣ Users and Groups
- ▣ Monitoring and Tuning
- ▣ Troubleshooting
- ▣ Service integration
- ▣ UDDI

Web servers

Use this page to view a list of the installed Web servers.

▣ Preferences

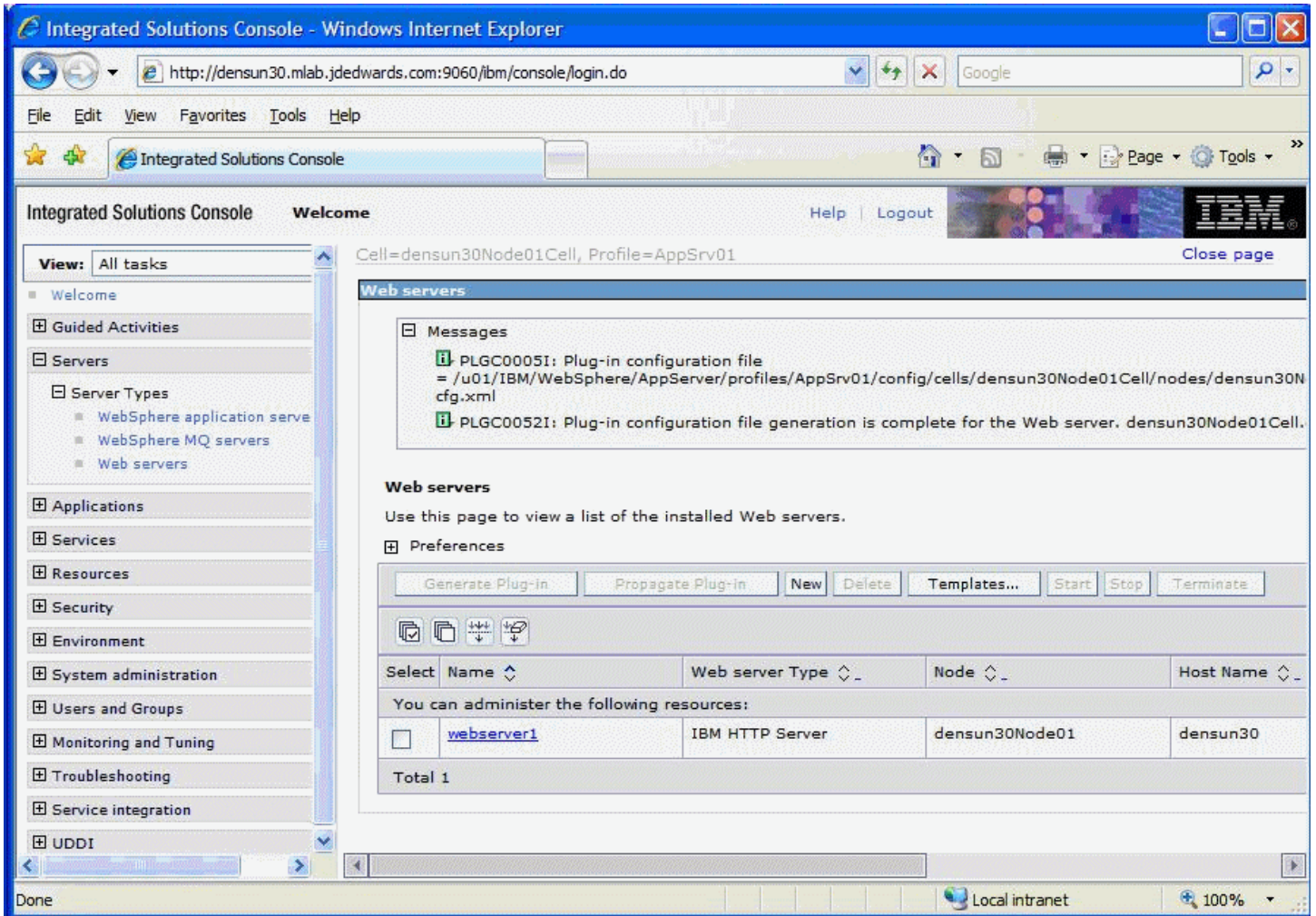
Generate Plug-in Propagate Plug-in New Delete Templates... Start Stop Terminate

Select	Name	Web server Type	Node	Host Name	Version	Status
<input type="checkbox"/>	webserver80	IBM HTTP Server	denicint2Node01	denicint2.mlab.jdedwards.com	ND 7.0.0.5	

Total 1

Messages

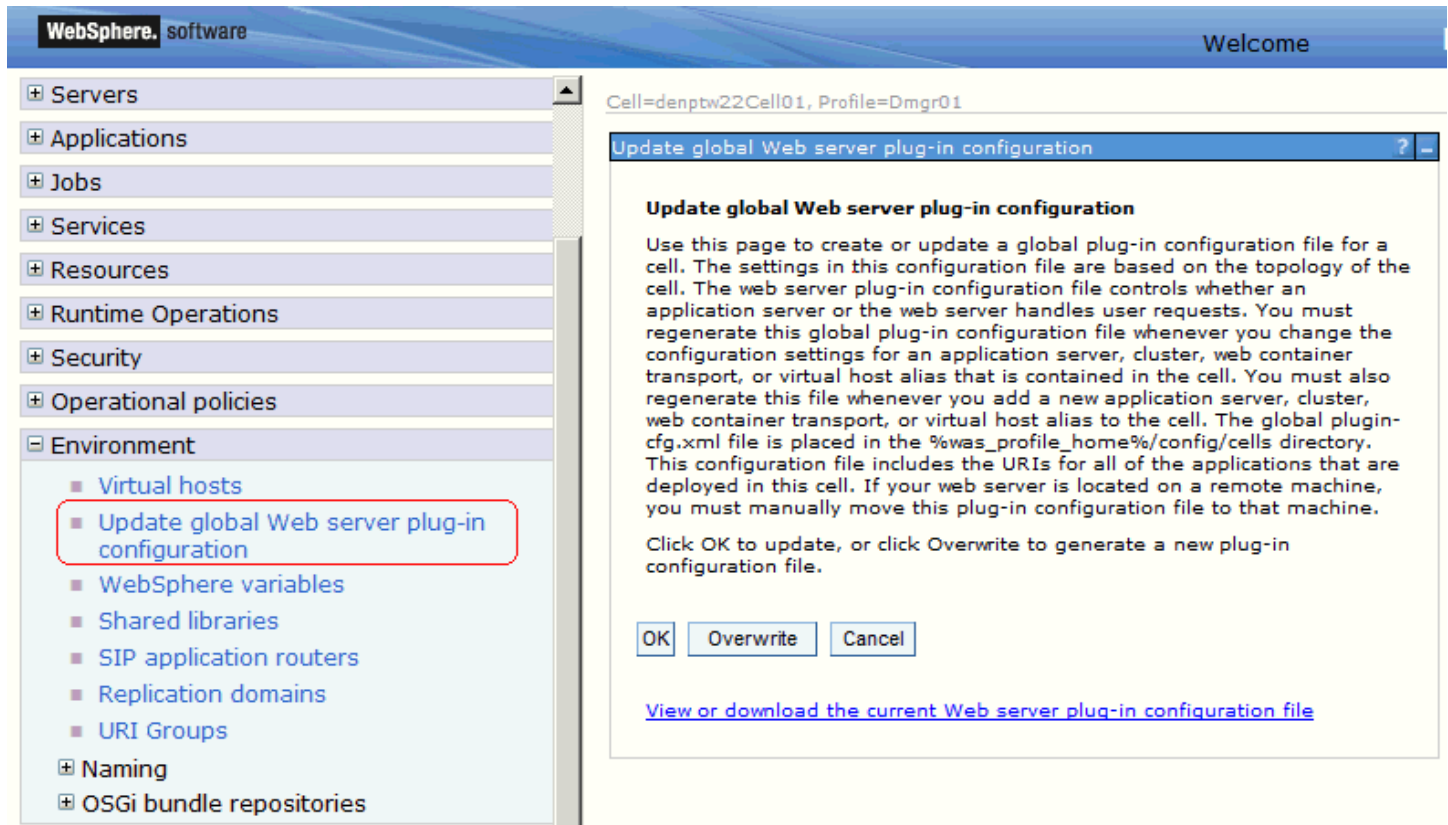
- PLGC0062I: The plug-in configuration file is propagated from Z:\IBM\WebSphere\AppServer\profiles\AppSrv01\config\cells\denicint2Node01Cell\nodes\denicint2Node01\servers\webserver80\plugin-cfg.xml to Z:\IBM\HTTPServer\Plugins/config/webserver80/plugin-cfg.xml on the Web server computer.
- PLGC0048I: The propagation of the plug-in configuration file is complete for the Web server. denicint2Node01Cell.denicint2Node01.webserver80.



Note: Federated (Clustered) Web Servers. If you are using WebSphere Application Server and running JD Edwards EnterpriseOne as part of a federated (or clustered) web server, you may need to regenerate the WebSphere global plugin configuration after deploying the newest tools release. This is required when new servlets have been added to the tools release you are deploying. To update (regenerate) plugins, refer to the following procedure.

To update (regenerate) and propagate the global web server plugin configuration:

1. Log on to the Deployment Manager Administration Console using the Dmgr01 profile.



2. Expand the Environment node and select **Update global Web server plug-in configuration**.
3. Review the content in the right-hand pane and note the location of the plug-in file in the description. For example, the description might say:

The global plugin-cfg.xml file is placed in the %was_profile_home%/config/cells directory.

4. Click the **OK** button.

Creating a New Application Server Profile (optional)

Note: This section is informational only and is not required before you install Oracle JD Edwards EnterpriseOne HTML Web server.

To create a new application server profile:

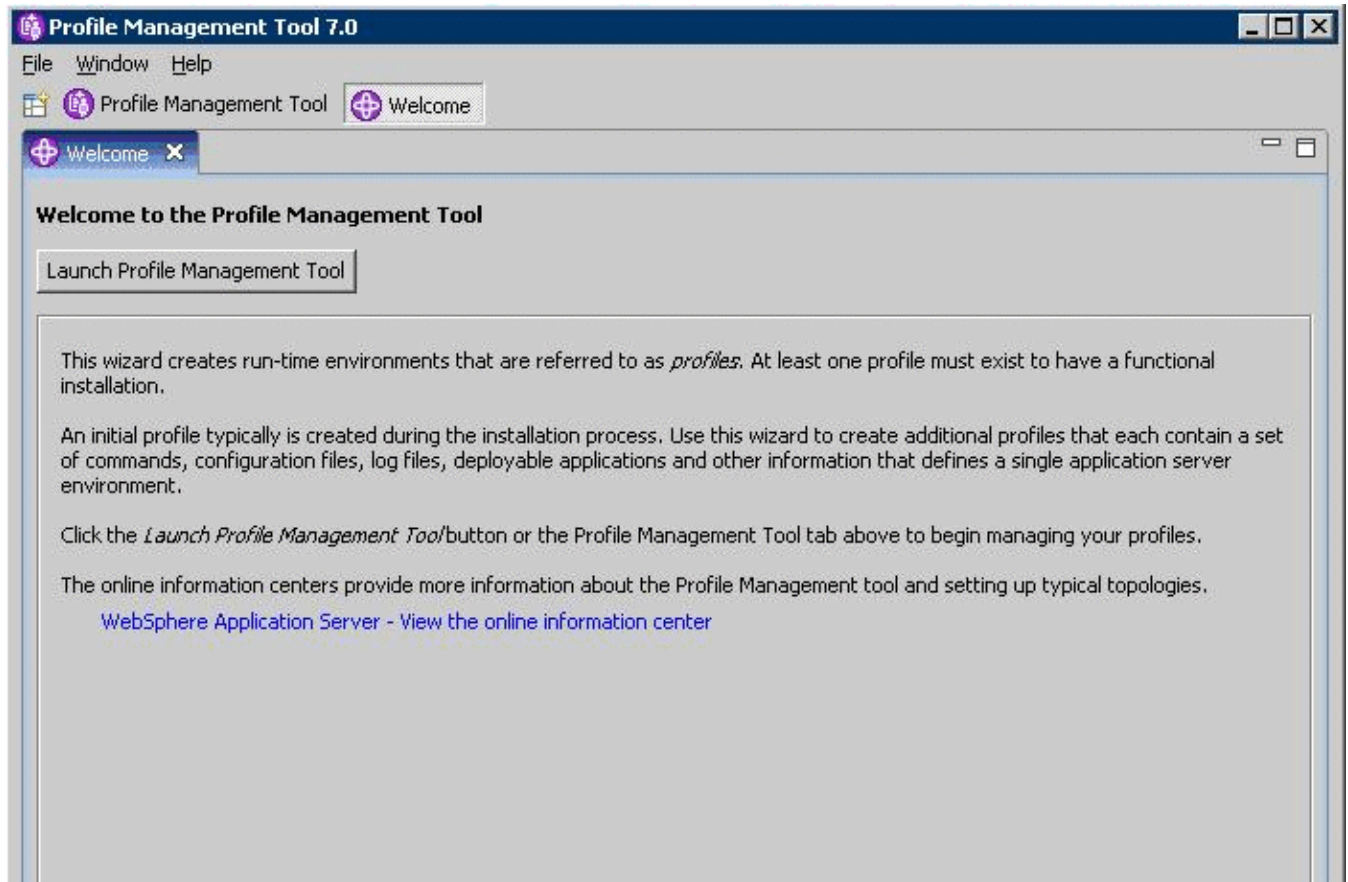
1. Launch the profile creation wizard. For example:

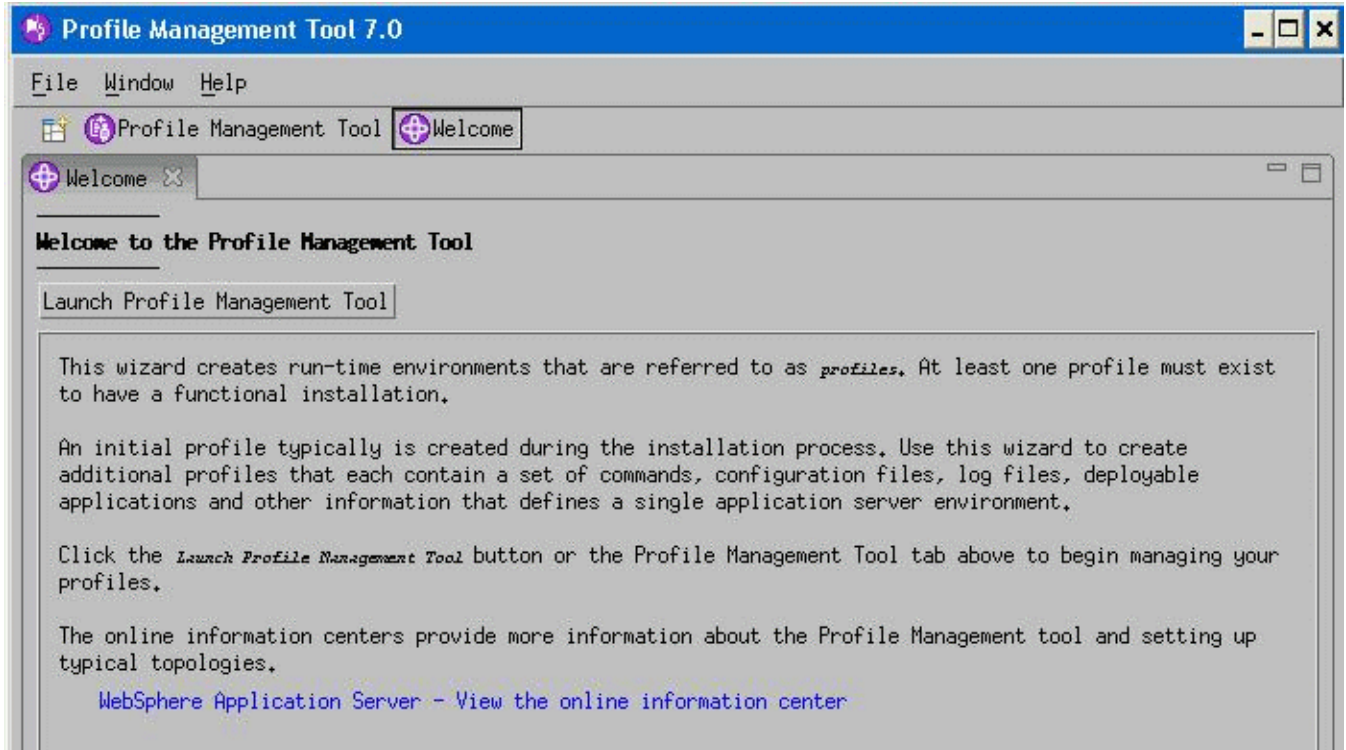
```
cd Z:\IBM\WebSphere\AppServer\bin\ProfileManagement

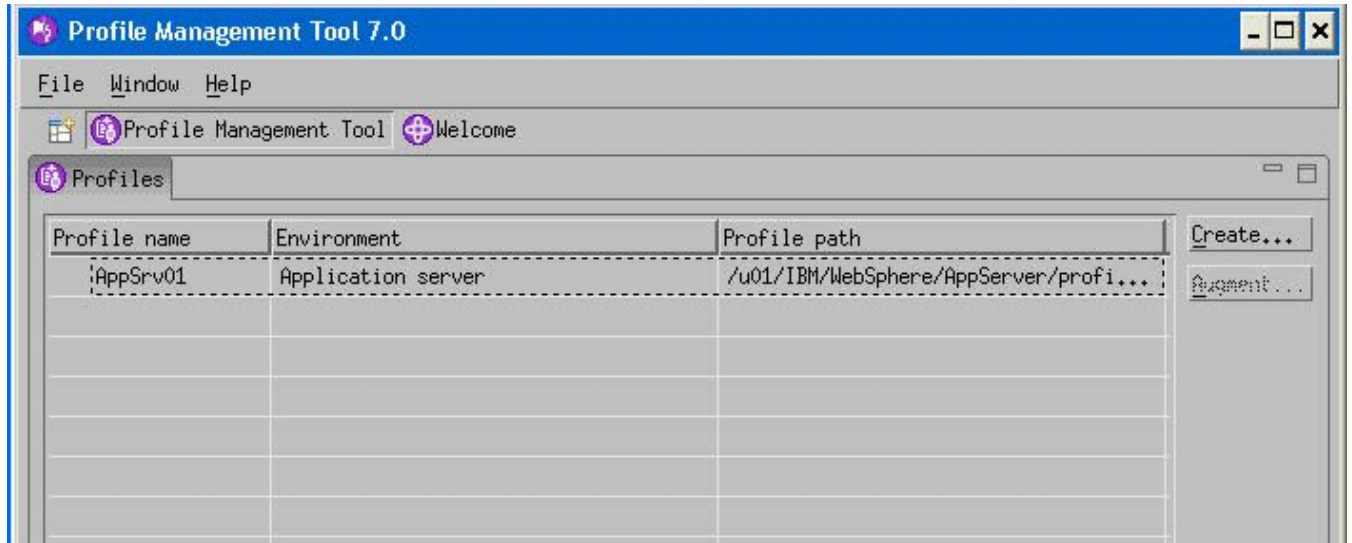
Z:\IBM\WebSphere\AppServer\bin\ProfileManagement > pmt.bat

cd /u01/IBM/WebSphere/AppServer/bin/ProfileManagement

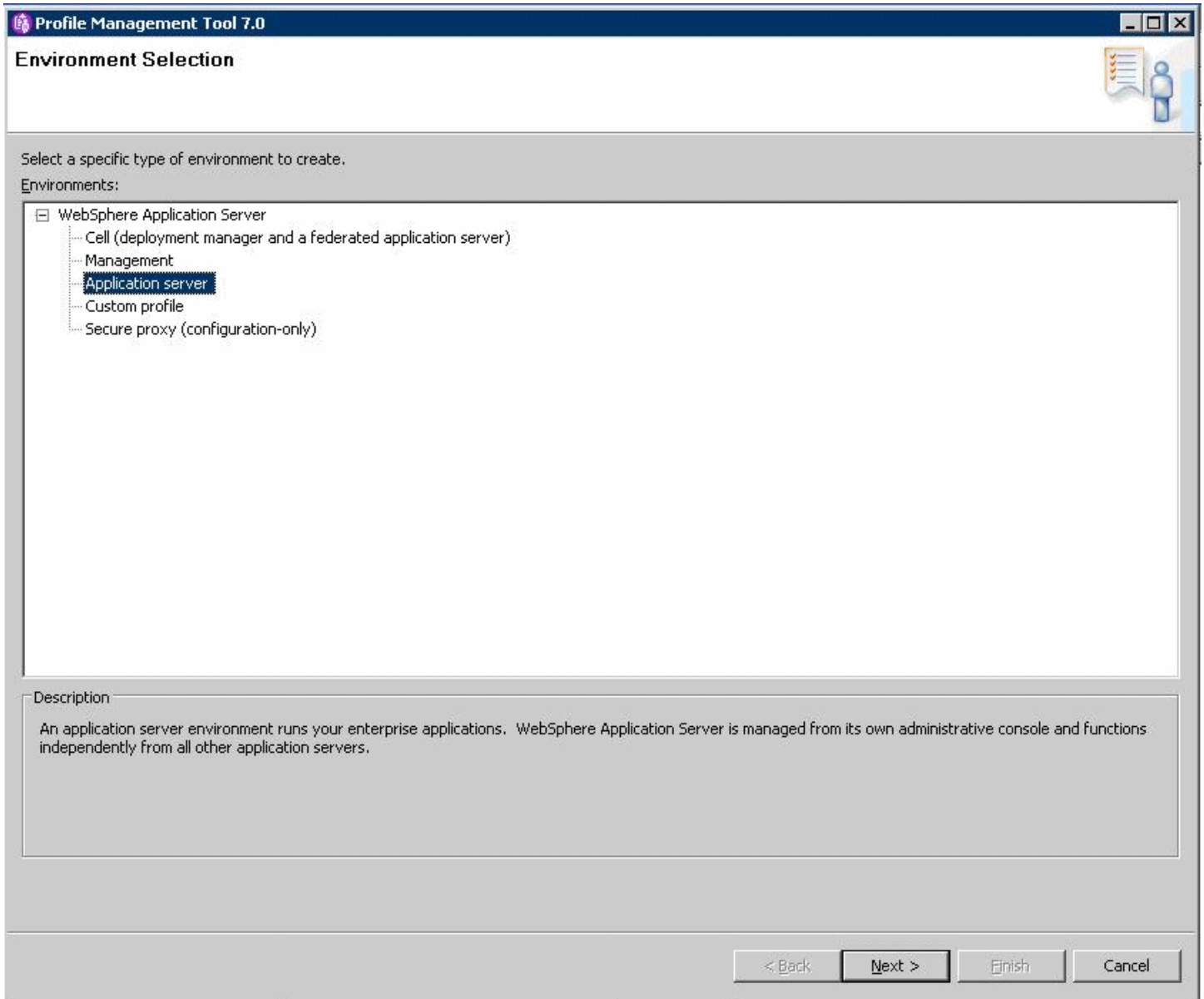
./pmt.sh
```

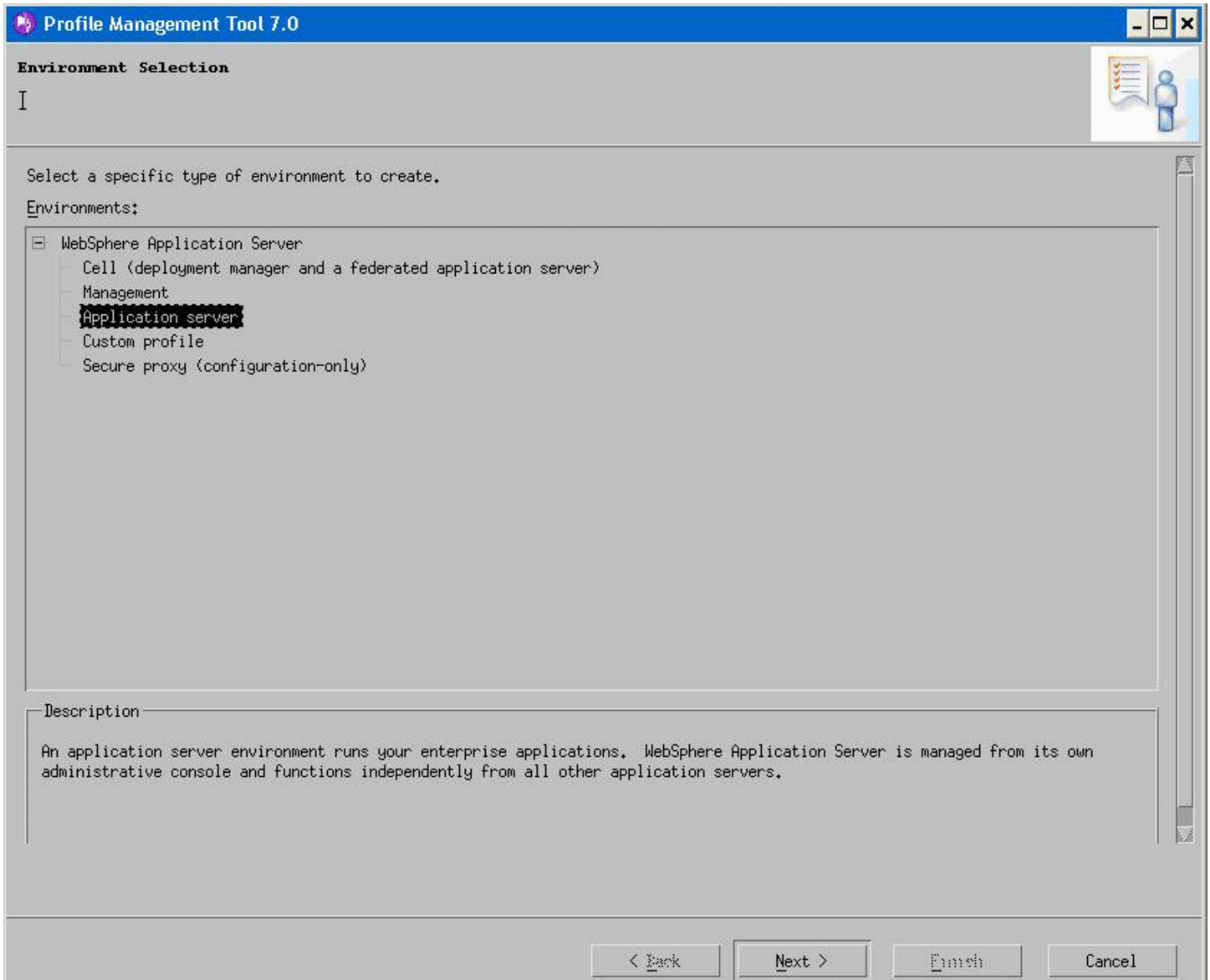






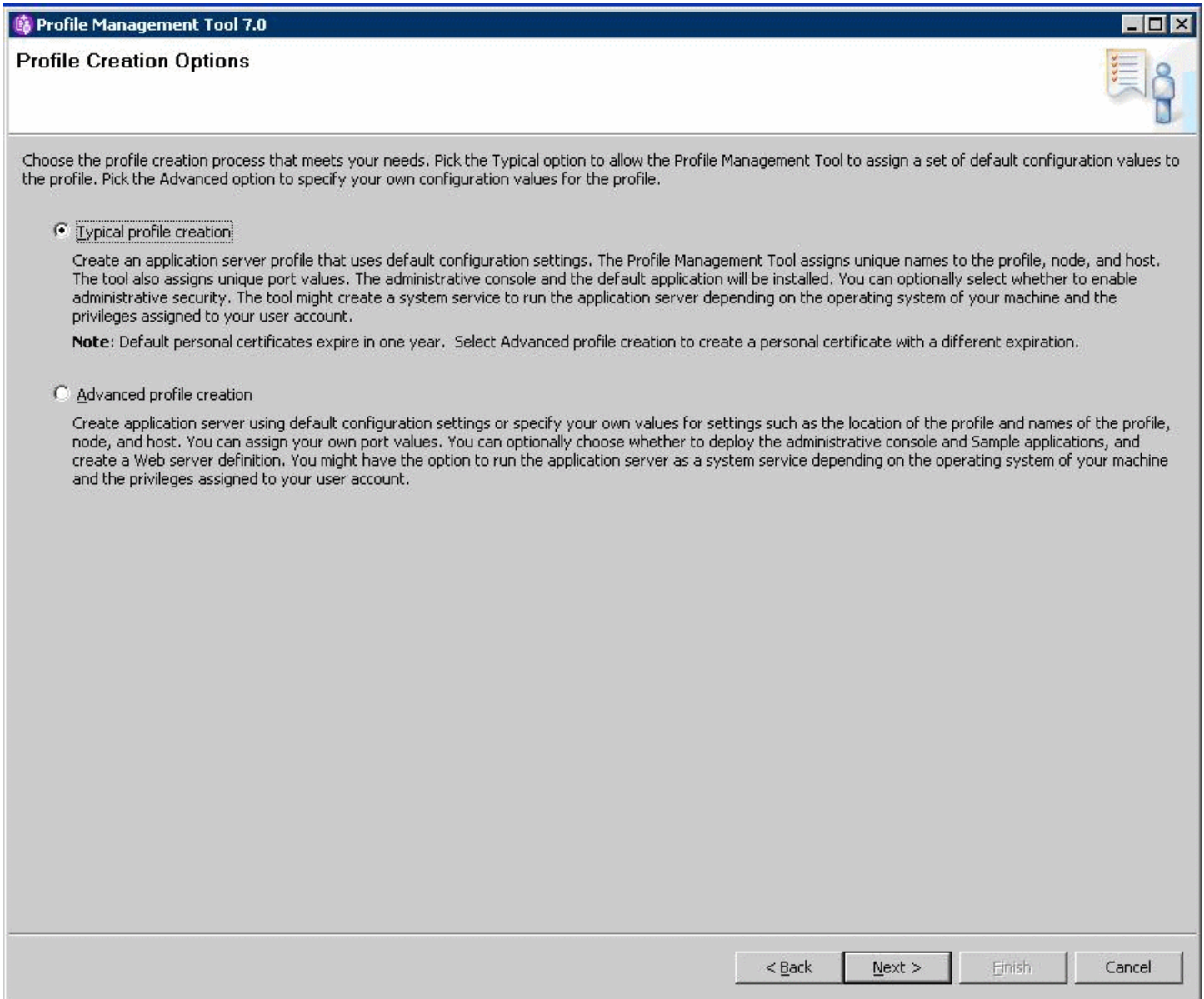
3. On Profile Management Tool, click the *Create* button to begin the profile configuration.

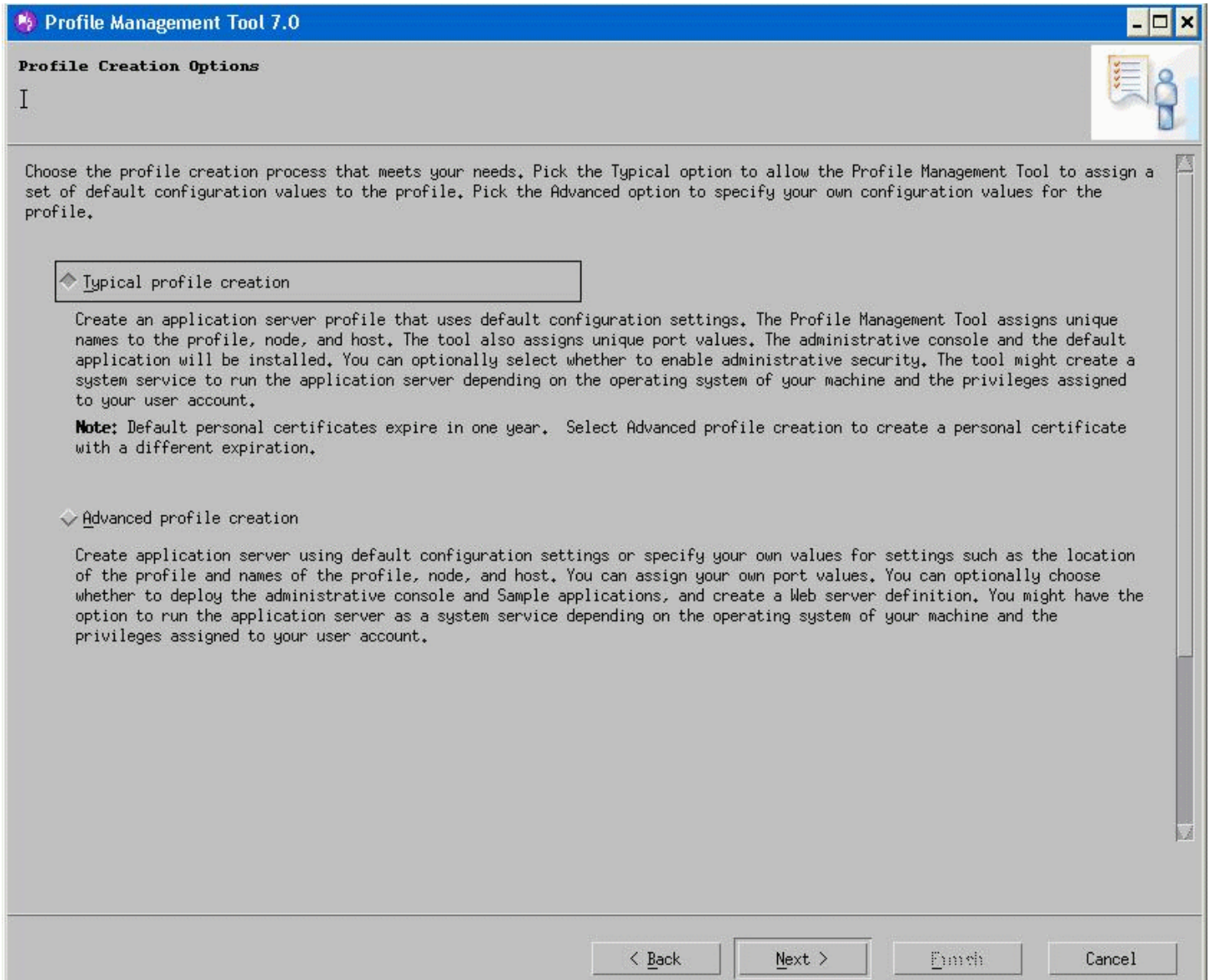




4. On Environment Selection, select *Application Server* as the type of environment to create.

5. Click the *Next* button to continue.





6. On Profile Creation Options, select the **Typical profile creation** radio button.

7. Click the *Next* button to continue.

The screenshot shows a window titled "Profile Management Tool 7.0" with a sub-header "Administrative Security". The window contains a checkbox labeled "Enable administrative security" which is checked. Below this are three text input fields: "User name:" containing "wasadmin", "Password:" containing eight dots, and "Confirm password:" containing eight dots. A link "View the online information center" is present below the fields. At the bottom right, there are four buttons: "< Back", "Next >", "Finish", and "Cancel".

Profile Management Tool 7.0

Administrative Security

Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users, groups, or external repositories.

Enable administrative security

User name:
wasadmin

Password:
●●●●●●●●

Confirm password:
●●●●●●●●

See the information center for more information about administrative security.
[View the online information center](#)

< Back Next > Finish Cancel

The screenshot shows a window titled "Profile Management Tool 7.0" with a sub-header "Administrative Security". The main content area contains the following text and form elements:

Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users, groups, or external repositories.

Enable administrative security

User name:
wasadmin

Password:

Confirm password:

See the information center for more information about administrative security.
[View the online information center](#)

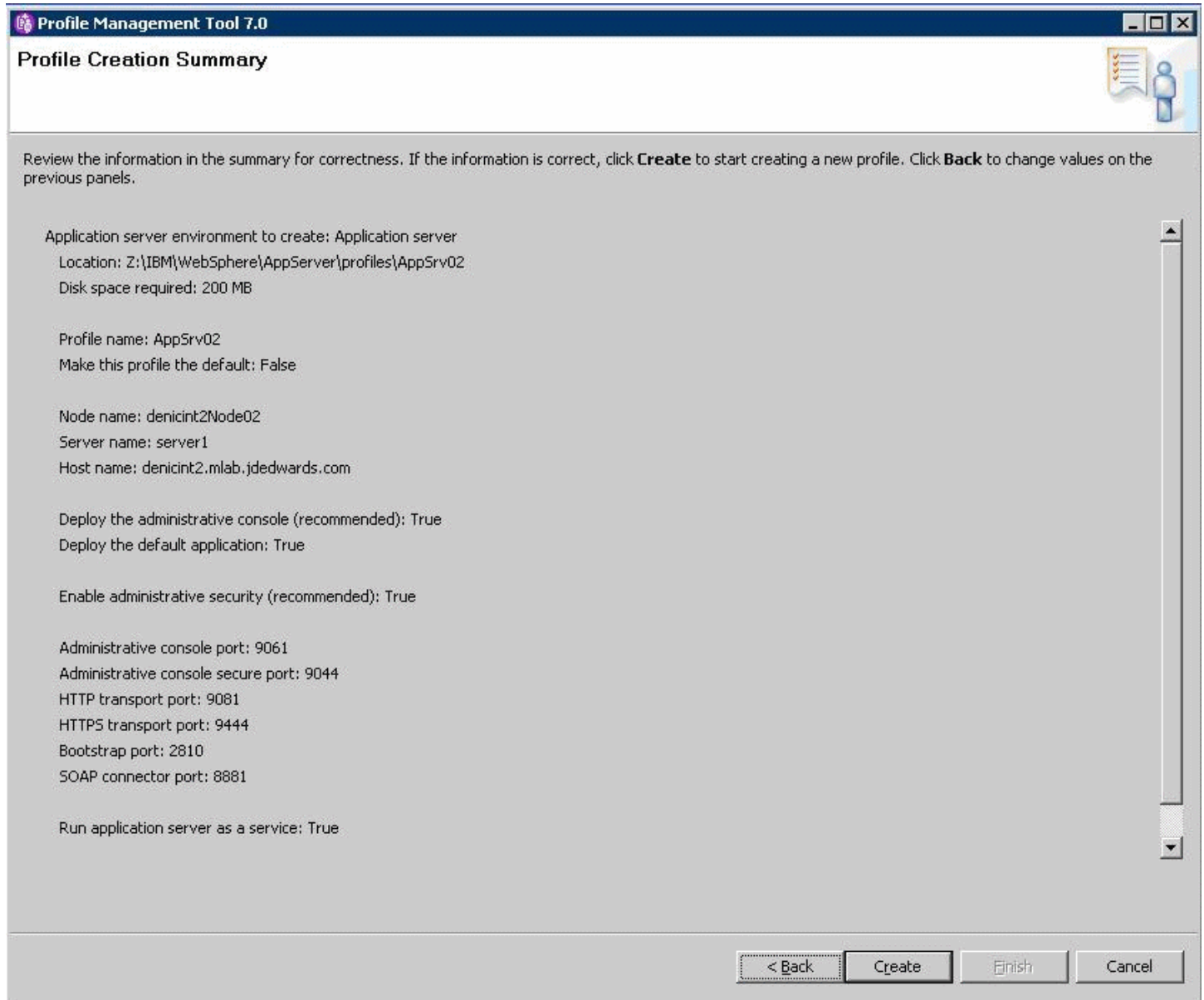
At the bottom of the window, there are four buttons: "< Back", "Next >", "Finish", and "Cancel".

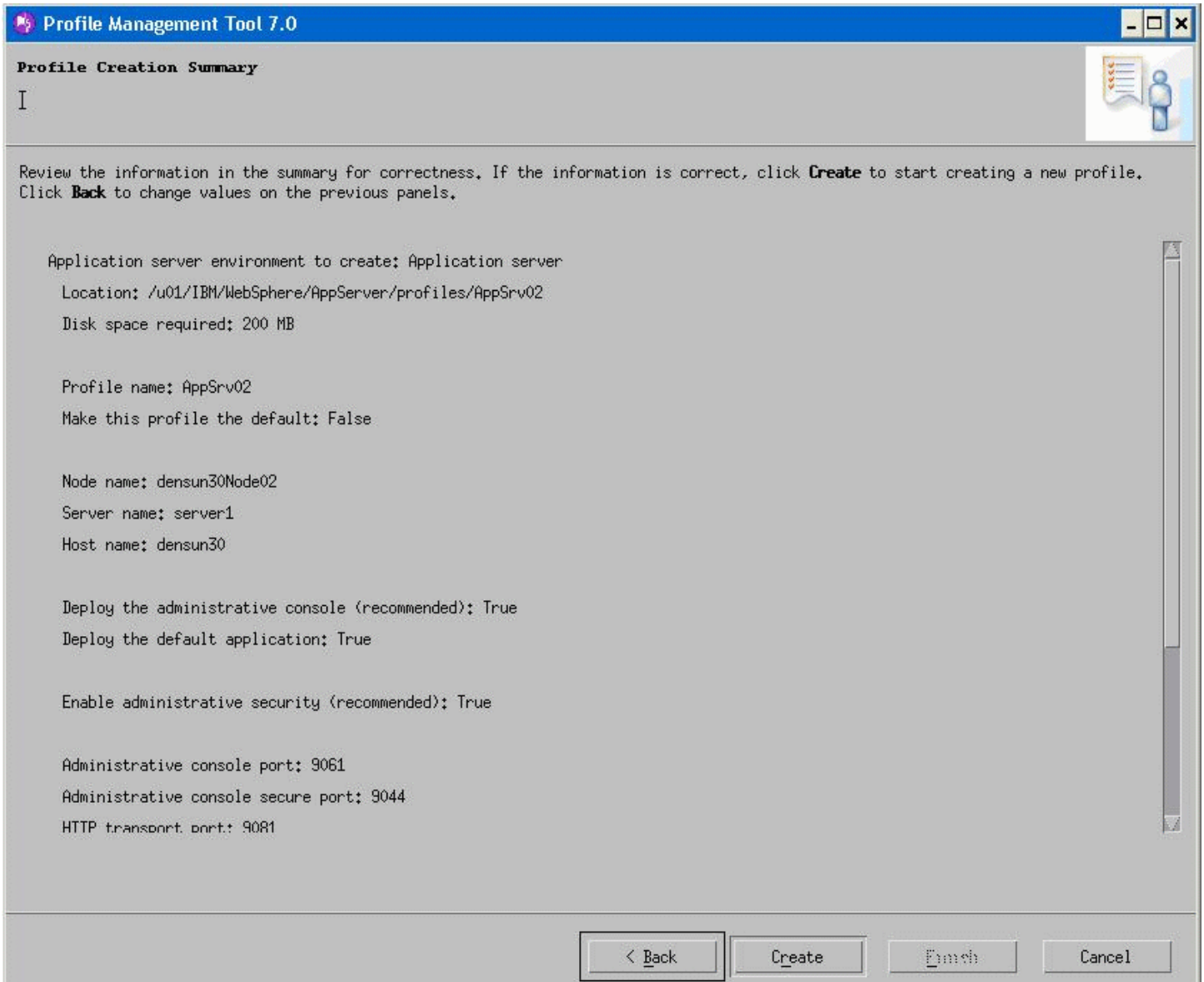
8. Administrative security is enabled for the profile by default. Clear the check box to disable administrative security or enter the user name and password.

On Enable Administrative Security, the check box for the application server profile is checked by default. You can choose either to:

- o Clear the check box for **Enable administrative security** to disable server administrative security, or
- o If the check box is enabled for **Enable administrative security**, server administration security will be enabled and you must enter the User ID and Password

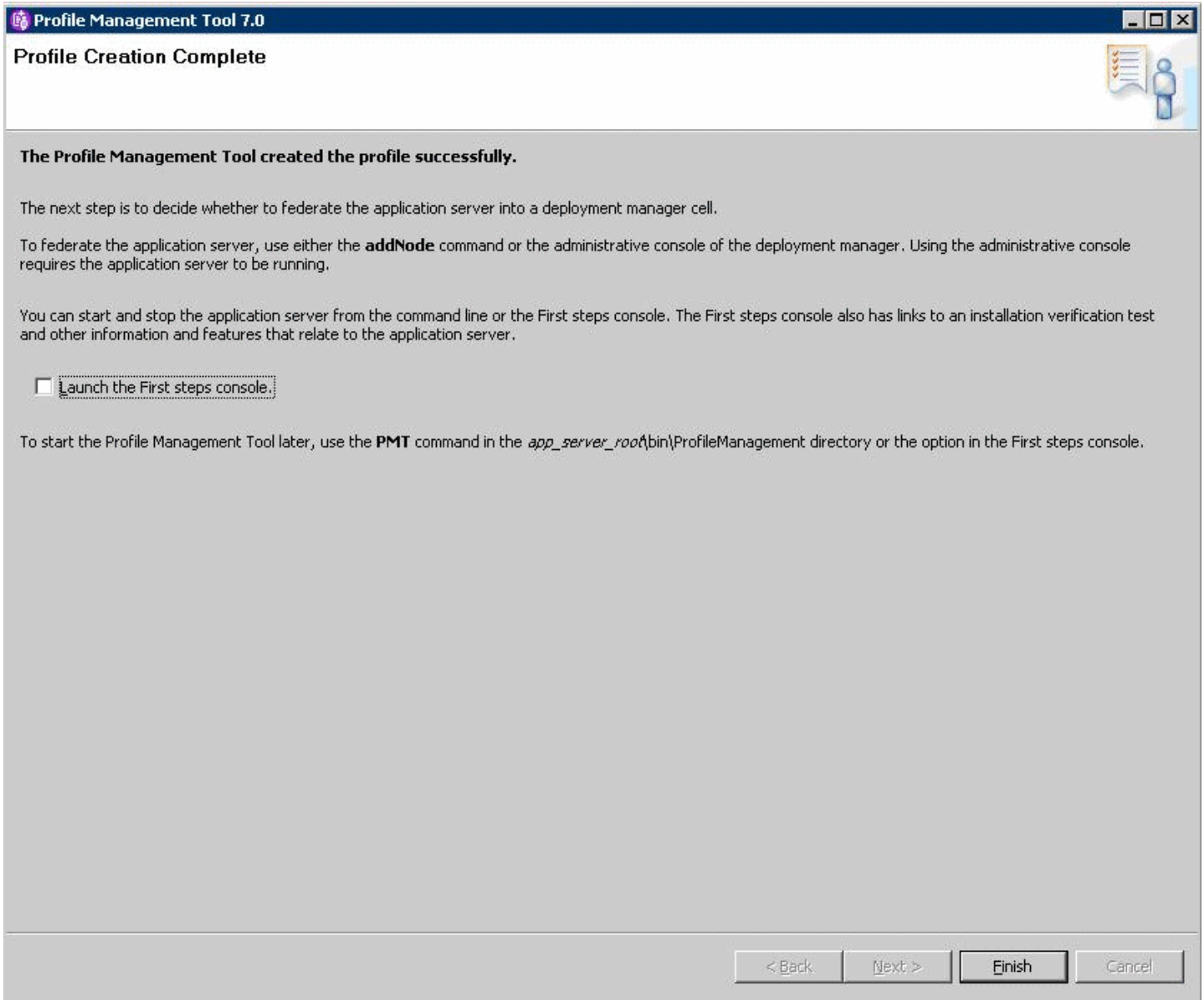
9. Click the *Next* button to continue.

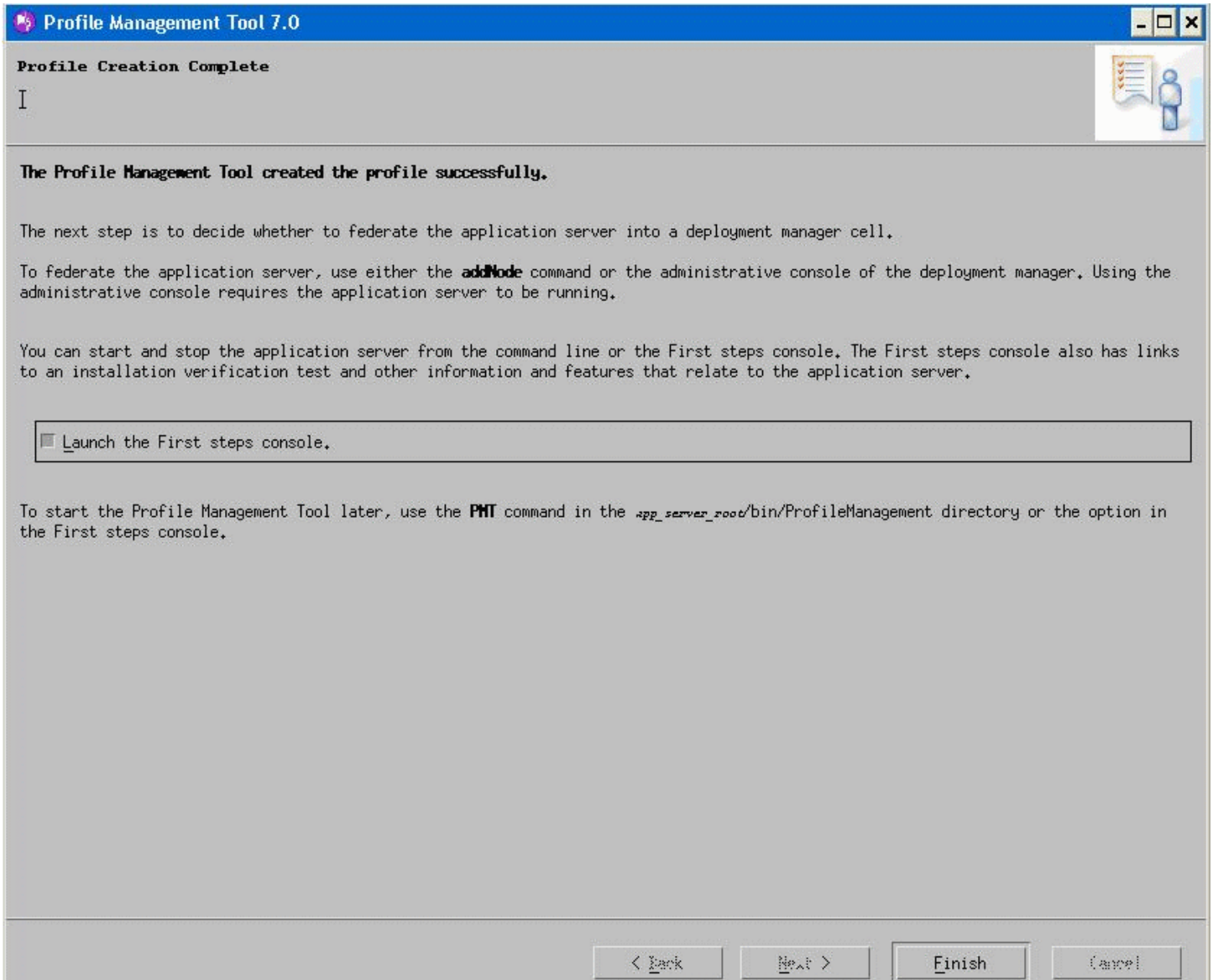




10. On Profile summary, review your selections.

11. Click the *Create* button to start the profile creation.





Deleting a Profile (optional)

This section is provided as reference in case you need to delete a WebSphere base or Network Deployment profile.

1. From a command prompt, change to this directory:

```
cd Z:\IBM\WebSphere\AppServer\bin
```

```
cd /u01/IBM/WebSphere/AppServer/bin
```

2. To delete a profile, issue this command:

```
manageprofiles delete profileName <profile_name>
```

```
./manageprofiles.sh delete profileName profile_name
```

where `profile_name` is the name of the profile to be deleted.

If the `profile_name` is valid, and the command successfully executed, the system returns this message:

```
INSTCONFSUCCESS: Success: The profile no longer exists.
```

When you delete a profile, the profile and its directory are deleted, except for the logs directory. You must manually delete the logs directory and then delete the profile directory.

Adding a New Web Server for a New Profile (optional)

Each profile should be associated with a Web Server. The EnterpriseOne HTML Web Server install fails if it does not find a webserver associated with the profile specified during the install. If the newly created profile is an ND profile, you can create the Web Server by using the button *Create a New Web Server* from the Web Servers page on the WebSphere Administrator Console. However, if the newly created profile is not an ND profile, the option to *Create a New Web Server* is not available. Instead, you must create a new web server must be created from the command line.

To add a new web server for a new profile from the command line:

1. Locate a copy of this Web Server configuration file which is typically located in this directory with this name:

```
x:\IBM\HTTPServer\Plugins\bin\configurewebserver<webserver_port>.bat
```

where `x:` is the drive on which you installed the IBM HTTP Server, and

where `<webserver_port>` is the port on which the IBM HTTP Server is installed.

```
/u01/IBM/HTTPServer/Plugins/bin
```

2. Make a copy of the `configurewebserver<webserver_port>.bat` file assigning a new port value to the copy. For example, assuming you have changed directory to `x:\IBM\HTTPServer\Plugins\bin /u01/IBM/HTTPServer/Plugins/bin`:

```
copy configurewebserver80.bat configurewebserver81.bat
```

```
cp configurewebserver1.sh configurewebserver2.sh
```


Do not manually copy the `configurewebserver1.bat` `configurewebserver1.sh` file to the specific profile directory.

3. Edit the new configuration file (`configurewebserver81.bat` `configurewebserver2.sh`) file that resides in the `x:\IBM\HTTPServer\Plugins\bin` (`/u01/IBM/HTTPServer/Plugins/bin`) directory to change the settings to be unique to and specific to your newly created profile.

Change the settings to be unique to and specific to your newly created profile.

A sample file is provided below where:

the newly created profile is called `AppSrv02`, and

the new webserver will be called `webserver81`, and

the name of the node that we specified for our new profile is `SERVERNode02`, and

the name of the server itself is `SERVER.yourdomain.com`.

The above is illustrated by the bolded settings in this sample file:

```
"Z:/IBM/WebSphere/AppServer/profiles/AppSrv02/bin/wsadmin.bat"
%PROFILE_NAME_PARAMETER% %WSADMIN_USERID_PARAMETER%
%WSADMIN_PASSWORD_PARAMETER% -conntype NONE -f
"Z:\IBM\WebSphere\AppServer\bin\configureWebserverDefinition.jacl"
webserver81 IHS "Z:\\IBM\\HTTPServer"
"Z:\\IBM\\HTTPServer\\conf\\httpd.conf" 81 MAP_ALL
"Z:\\IBM\\HTTPServer\\Plugins" managed denicint2Node02
denexample.mlab.examplecompany.com windows

/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/bin/wsadmin.sh
$PRO-FILE_NAME_PARAMETER
$WSADMIN_USERID_PARAMETER
$WSADMIN_PASSWORD_PARAMETER
-conntype NONE -f
'/u01/IBM/WebSphere/AppServer/bin/configureWebserverDefinition.jacl'
web-server2 IHS '/u01/IBM/HTTPServer'
'/u01/IBM/HTTPServer/conf/httpd.conf' 81
MAP_ALL '/u01/IBM/HTTPServer/Plugins' managed
denexample den-example.mlab.examplecompany.com solaris
```

Note: Where the original settings for these bolded entries were probably something similar to these:

- o `AppSrv01`
- o `webserver80`
- o `web-server1`
- o `80`
- o `SERVERNode01`

4. Save the file.
5. From the directory where the batch file shell script exists, execute it using this command:

```
configurewebserver81.bat
```

where `x:` is the drive on which your plugins are installed.

```
./configurewebserver2.sh
```

The console displays these messages when the batch file shell script is running and finishes:

```
Z:\IBM\HTTPServer\Plugins\bin>configurewebserver81.bat
WASX7357I: By request, this scripting client is not connected to any server proc
ess. Certain configuration and application operations will be available in local
mode.
WASX7303I: The following options are passed to the scripting environment and are
available as arguments that are stored in the argv variable: "[webserver81, IHS
, Z:\IBM\HTTPServer, Z:\IBM\HTTPServer\conf\httpd.conf, 81, MAP_ALL, Z:\I
BM\HTTPServer\Plugins, managed, denicint2Node02, denicint2.mlab.jdedwards.com,
windows]"

Input parameters:

Web server name           - webserver81
Web server type           - IHS
Web server install location - Z:\IBM\HTTPServer
Web server config location - Z:\IBM\HTTPServer\conf\httpd.conf
Web server port           - 81
Map Applications          - MAP_ALL
Plugin install location   - Z:\IBM\HTTPServer\Plugins
Web server node type      - managed
Web server node name      - denicint2Node02
IHS Admin port           - 8008
IHS Admin user ID        - ""
IHS Admin password       - ""
IHS service name         - ""

Creating the web server definition for webserver81.
Parameters for administering IHS web server can also be updated using wsadmin sc
ript or admin console.
Step ServerConfigStep successful for Web server definition webserver81
Step RemoteServerConfigStep successful for Web server definition webserver81
Web server definition for webserver81 is created.

Start computing the plugin properties ID.
Plugin properties ID is computed.

Start updating the plugin install location.
Plugin install location is updated.

Start updating the plugin log file location.
Plugin log file location is updated.

Start updating the RemoteConfigFilename location.
Plugin remote config file location is updated.

Start updating the RemoteKeyRingFileName location.
Plugin remote keyring file location is updated.

Start saving the configuration.
Configuration save is complete.

Computed the list of installed applications.

Processing the application DefaultApplication.
Get the current target mapping for the application DefaultApplication.

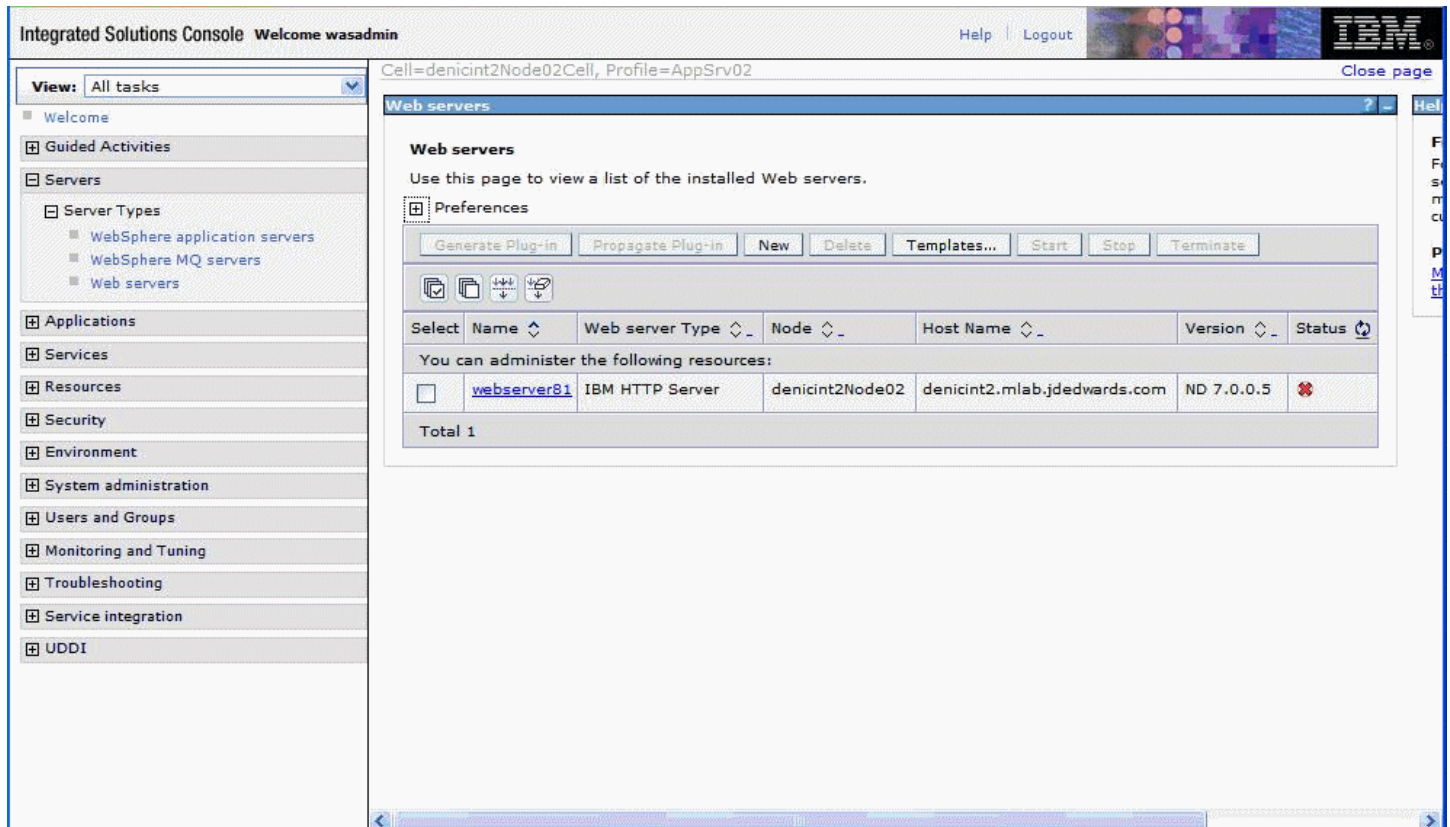
Computed the current target mapping for the application DefaultApplication.
Start updating the target mappings for the application DefaultApplication.
Target mapping is updated for the application DefaultApplication.

Processing the application ivtApp.
Get the current target mapping for the application ivtApp.
```

```
Computed the current target mapping for the application ivtApp.  
Start updating the target mappings for the application ivtApp.  
Target mapping is updated for the application ivtApp.  
  
Processing the application query.  
Get the current target mapping for the application query.  
Computed the current target mapping for the application query.  
Start updating the target mappings for the application query.  
Target mapping is updated for the application query.  
  
Start saving the configuration.  
Configuration save is complete.  
Z:\IBM\HTTPServer\Plugins\bin>
```

```
Creating the web server definition for webserver2.  
Parameters for administering IHS web server can also be updated using wsadmin script or admin console.  
Step ServerConfigStep successful for Web server definition webserver2  
Step RemoteServerConfigStep successful for Web server definition webserver2  
Web server definition for webserver2 is created.  
  
Start computing the plugin properties ID.  
Plugin properties ID is computed.  
  
Start updating the plugin install location.  
Plugin install location is updated.  
  
Start updating the plugin log file location.  
Plugin log file location is updated.  
  
Start updating the RemoteConfigFilename location.  
Plugin remote config file location is updated.  
  
Start updating the RemoteKeyRingFileName location.  
Plugin remote keyring file location is updated.  
  
Start saving the configuration.  
Configuration save is complete.  
  
Computed the list of installed applications.  
  
Processing the application DefaultApplication.  
Get the current target mapping for the application DefaultApplication.  
  
Computed the current target mapping for the application DefaultApplication.  
Start updating the target mappings for the application DefaultApplication.  
Target mapping is updated for the application DefaultApplication.  
  
Processing the application ivtApp.  
Get the current target mapping for the application ivtApp.  
  
Computed the current target mapping for the application ivtApp.  
Start updating the target mappings for the application ivtApp.  
Target mapping is updated for the application ivtApp.  
  
Processing the application query.  
Get the current target mapping for the application query.  
Computed the current target mapping for the application query.  
Start updating the target mappings for the application query.  
Target mapping is updated for the application query.  
  
Start saving the configuration.  
Configuration save is complete.  
* ■
```


6. Verify your newly created Web Server is created by logging into the WebSphere Admin Console and clicking on Web Servers. For example:



The screenshot shows the Integrated Solutions Console interface. The left sidebar contains a navigation tree with categories like 'Servers', 'Applications', 'Services', 'Resources', 'Security', 'Environment', 'System administration', 'Users and Groups', 'Monitoring and Tuning', 'Troubleshooting', 'Service integration', and 'UDDI'. The main content area is titled 'Web servers' and includes a 'Preferences' section with buttons for 'Generate Plug-in', 'Propagate Plug-in', 'New', 'Delete', 'Templates...', 'Start', 'Stop', and 'Terminate'. Below this is a table of installed web servers.

Select	Name	Web server Type	Node	Host Name	Version	Status
<input type="checkbox"/>	webserver2	IBM HTTP Server	densun30Node02	densun30	ND 7.0.0.5	

Total 1

5 Running the HTML Server

Running the HTML Server

Tip: In order to enable any modifications, you should always stop and restart the Application Server any time you modify the configuration.

Note: Beginning with Tools Release 8.97, many administrative tasks (such as starting and stopping services) for both the HTTP server and the JD Edwards EnterpriseOne HTML Web server can be performed through the Server Manager Console.

Starting the HTML Server

The *JD Edwards EnterpriseOne HTML Server* is installed in the instance of the application server that you defined when you installed the Web Server (for example, AS_JS_81). Complete this task to start the server.

To start the *HTML Server* :

1. Start the Server Manager console.
2. Select the Server and Instance you want to start.
3. Select the *Start* button.
4. If you are using the 64-bit instance of DB2 8.1, 8.2, 9.1 on a 64-bit kernel, open the `startServer.sh` script and verify that the environment variable is correct for your platform.

Note: This step does not apply to the Linux platform, since JD Edwards EnterpriseOne is not supported on 64-bit db2 on Intel 32 hardware.

Note that `<DB2_Instance_Home>/sqllib/lib32` must be in the path. If the path to lib32 is missing, add the path as shown in these examples:

- o For AIX:

```
LIBPATH="$WAS_LIBPATH":<DB2_Instance_Home>/sqllib/lib32:$LIBPATH
```

- o For Solaris:

```
LD_LIBRARY_PATH="$WAS_LIBPATH":<DB2_Instance_Home>/sqllib/lib32:
```

```
$LD_LIBRARY_PATH
```

- o For HP-UX:

```
SHLIB_PATH="$WAS_LIBPATH":<DB2_Instance_Home>/sqllib/lib32:$SHLIB_PATH
```

Stopping the HTML Server

The *JD Edwards EnterpriseOne HTML Server* is installed in an instance of the application server that you defined when you installed the Web Server (for example, AS_JS_81). Complete this task to stop the server.

To Stop the *HTML Server* :

1. Start the Server Manager console.
2. Select the Server and Instance you want to stop.
3. Select the *Stop* button.

Accessing the HTML Server

You can access the *HTML Server* from any web browser connected to your network.

To access the *HTML Server* :

1. Open the *JD Edwards HTML* client by opening a browser and entering this URL:

```
http://<web_server_name>:<port_number>/jde/owhtml OR
```

```
http://<web_server_name>:<port_number>/jde/E1Menu.maf
```

For example:

```
http://jdewebs1.myserver.com:81/jde/owhtml OR
```

```
http://jdewebs1.myserver.com:81/jde/E1Menu.maf
```

Generating Serialized Objects for the HTML Server

Starting with application release 8.12, *JD Edwards EnterpriseOne* specs are delivered in XML format, which allows for on-demand generation of serialized Java objects from these XML specs. Objects are now automatically generated when the first user accesses an application, and the only objects not automatically generated are FDA-created portlets.

Configuring the HTML Server for Non-Western European Languages

If you are setting up the *HTML Server* to run Non-Western European Languages, complete this task to ensure that the Application Server is properly configured for Unicode.

To configure the *HTML Server* for Non-Western European Languages:

1. Open the WebSphere Administrative Console, and select the Application Server for the *JD Edwards HTML Server* .
2. Using Server Manager, verify this code page parameter and setting:

`codePage=1252`

- Using Server Manager, verify this UBE queue parameter and setting:

`UBEQueue= QB900`

Enabling the Browser Side Debugging Feature on the Web Client

In past releases, a user working on a form in the web client could press the Ctrl+D keys to display GUI elements at the bottom of the page that are used for browser side debugging. Starting with release 8.96, this feature is disabled in the default mode, and the web client no longer displays this debugging feature when Ctrl+D is pressed. To enable this feature for developers and support personnel, the system administrator must modify the `JDEDTA.js` file as described in this task.

To enable the browser side debugging feature:

- On the *HTML Server*, navigate to the `webclient.war/js/` directory, and open the `JDEDTA.js` file in a text editor.
- Search for the following line:

```
var allowDebug=false;
```

and change the value to `true`.

- Save the file.

You do not need to restart the server to activate the change.

- Open the browser, and press the **Refresh** button to reload the page.

This action refreshes the `.js` files cached in the browser to activate the Ctrl-D feature.

Setting Up Quick Links for Pervasive Device Support

JD Edwards EnterpriseOne offers support for Pervasive Devices. Developers can write custom applications for PocketPC 2003 devices using the EnterpriseOne toolset. However, *JD Edwards EnterpriseOne* menus are not supported on Pervasive Device clients, so a new XML file (`PervasiveAppQuickLinks.xml`) was added to the *HTML Server* that allows a system administrator define the list of applications that can be executed on the Pervasive Device client. This file can be edited to add, modify, or delete *JD Edwards EnterpriseOne* applications that are accessible to Pervasive Device clients. Each application listed in this file is defined by a quick-link tag that describes the application, form, and version of the object, and includes a description. A sample quick-link tag is shown below:

```
<quick-links>
```

```
<quick-link launchAction="launchForm"
  appID="P0411"
  formID="W0411G"
  version="ZJDE0001"
  description="3 G0411 - Standard Voucher Entry
  (P0411_W0411G_ZJDE0001)"/>
```

```
</quick-links>
```

Quick-link tags can include the following attributes:

Attribute	Required?	Description
launchAction	yes	Specifies the action that occurs when users click on the quick-link. Valid values are: <ul style="list-style-type: none"> launchForm Launch the form directly. promptForValue Request values for the processing options. promptForVersion Request which version of the form to open.
appID	yes	Program number of the application. For UBE type objects, the AppID is the UBE name.
appType	Required for promptForVersion action.	Type of application. Valid values are: <ul style="list-style-type: none"> APP UBE
formID	Required for launchForm and promptForValue actions. Also required with the appType attribute.	Number of the specific form within the application.
version	No	Version number of the form.
description	Yes	Description of the form. This description appears in the list displayed on the Pervasive Device client.

To edit the PervasiveAppQuickLinks.xml file

1. On the *HTML Server*, navigate to this directory: `<JAS_Home>/installedApps/<node_name>/EA_JS_81.ear/webclient.war/classes`.
Open the `PervasiveAppQuickLinks.xml` file in a text editor.
2. Add quick-link tags for each of the *JD Edwards EnterpriseOne* applications you want to make accessible to Pervasive Devices.
You can also delete or modify existing tags to remove or change the forms that Pervasive Device clients can access. When clients access *JD Edwards EnterpriseOne* from a Pervasive Device, the forms are listed as links in the same order they appear in the `PervasiveAppQuickLinks.xml` file.

Save and exit the file.

Below is an example of the `PervasiveAppQuickLinks.xml` file:

```
<?xml version="1.0" encoding="UTF-8" ?>
<quick-links>
```

```

<quick-link launchAction="launchForm" appID="P0411" formID="W0411G"
version="ZJDE0001" description="3 G0411 - Standard Voucher Entry
(P0411_W0411G_ZJDE0001)" />
<quick-link launchAction="launchForm" appID="P01012"
formID="W01012B" version="ZJDE0001" description="P01012_W01012B" />
<quick-link launchAction="promptForValue" appID="P01012"
formID="W01012B" version="ZJDE0001" mode="1" appType="APP"
description="Prompt for Values(P01012_W01012B,ZJDE0001,1,APP)" />
<quick-link launchAction="promptForValue" appID="P4210"
formID="W4210E" description="Prompt for Values(P4210_W4210E)" />
<quick-link launchAction="promptForVersion" appID="P01012"
formID="W01012A" appType="APP" description="Prompt for
Version(P01012_W01012A)" />
<quick-link launchAction="promptForVersion" appID="R0006P"
appType="UBE" description="Prompt for Version(R0006P)" />
<quick-link launchAction="launchForm" appID="P98TREE"
formID="W98TREEA" description="P98TREE_W98TREEA" />
<quick-link launchAction="launchForm" appID="P98SYSGR"
formID="W98SYSGRB" description="P98SYSGR_W98SYSGRB" />
<quick-link launchAction="launchForm" appID="P98CTRL"
formID="W98CTRLA" description="P98CTRL_W98CTRLA" />
<quick-link launchAction="launchForm" appID="P98RUNPC"
formID="W98RUNPCM" description="P98RUNPC_W98RUNPCM" />
<quick-link launchAction="launchForm" appID="P98SYSFM"
formID="W98SYSFMA" description="P98SYSFM_W98SYSFMA" />
<quick-link launchAction="launchForm" appID="P98SYSFM"
formID="W98SYSFMB" description="P98SYSFM_W98SYSFMB" />
<quick-link launchAction="launchForm" appID="P98FRMFL"
formID="W98FRMFLA" description="P98FRMFL_W98FRMFLA" />
<quick-link launchAction="launchForm" appID="P98MEDIA"
formID="W98MEDIAA" description="P98MEDIA_W98MEDIAA" />
<quick-link launchAction="launchForm" appID="P90CB050"
formID="W90CB050A" description="P90CB050_W90CB050A" />
<quick-link launchAction="launchForm" appID="P55SFRU1"
formID="W55SFRU1A" description="P55SFRU1_W55SFRU1A" />
<quick-link launchAction="launchForm" appID="P99WIZ01"
formID="W99WIZ01B" description="P99WIZ01_W99WIZ01B" />
<quick-link launchAction="launchForm" appID="P99WIZ03"
formID="W99WIZ03A" description="P99WIZ03_W99WIZ03A" />
<quick-link launchAction="launchForm" appID="PMODAL"
formID="WMODALA" description="PMODAL_WMODALA" />
<quick-link launchAction="launchForm" appID="P42101"
formID="W42101C" description="New Sales Order Application" />
</quick-links>

```

Clearing File Attachments from the Browser Cache

In a typical environment, file attachments (such as Media Object attachments and *JD Edwards EnterpriseOne* reports) are automatically cached into the `\Temporary Internet Files` directory on web-based client machines when these attachments are opened from a browser. This situation allows copies of confidential documents, such as Media Objects, images, and web pages, to proliferate across workstations on which these objects are opened.

To prevent these objects from persisting in the internet cache, administrators should configure the browsers to automatically clear the cache when the client closes the browser. This protection is particularly important in a kiosk environment. The procedure for clearing the cache depends on the type of browser. Refer to the relevant task below to secure the browser used in your system.

In addition to securing the browser cache, Media Object Security was added in 8.96 to ensure that media objects can be secured within the application. For more information on this topic, see *"Managing Media Object Security" in the JD Edwards EnterpriseOne Tools Security Administration Guide* .

This section describes these tasks:

- *Securing Internet Explorer*
- *Securing Safari*
- *Securing Mozilla Firefox*
- *Securing Chrome*
- *Securing Edge*

Securing Internet Explorer

Complete this task to automatically clear the cache in Internet Explorer.

1. In Internet Explorer, select **Tools, Internet Options** from the drop down menu.
2. Click the **Advanced** tab.
3. In the "**Settings**" box, scroll down to the section labeled "**Security**," and select the check box next to **Empty Temporary Internet Files folder when browser is closed.**
4. Click **OK** to save the change.

This option does not delete cookies, but will clear your cache of other files when you close the browser.

Securing Safari

Activate the Private Browsing feature of Safaris to secure the browser. When activated, no web addresses, personal information, or pages are saved or cached on the browser, and no trace of any activity is recorded.

Securing Mozilla Firefox

Activate the Clear Private Data tool to secure Firefox. This tool allows you to delete all personal data, including browsing history, cookies, Web form entries and passwords with a single click. Mozilla Firefox can also be configured to automatically clear this information when you close the browser.

Securing Chrome

To secure Chrome:

1. Open Chrome.
2. Click the button with three stacked dots in the upper-right corner of the page.
3. Click More tools and Clear browsing data.
4. Choose a time range toward the top of the page.
5. Select the check boxes next to **Cookies and other site data** and **Cached images and files.**
6. Click the Clear data button.

Securing Edge

To secure Edge:

1. Open Edge.
2. Click the button with three stacked dots in the upper-right corner of the page.
3. Select Settings/Privacy, search, and services.
4. Click the **Choose what to clear** button under the section Clear browsing data.

5. Turn on the checkboxes next to **Browsing history, Cookies and other site data**, and **Cached images and files**.
6. Click the Clear now button.

6 Understanding EnterpriseOne HTML Server Package Discovery

Overview of EnterpriseOne HTML Server Package Discovery

Starting with *JD Edwards EnterpriseOne* release 8.12, EnterpriseOne specs are delivered in XML format. The new format enables the specs to be stored in database tables instead of the TAM files, and is called Shared Object Configuration. In this configuration, both Enterprise Servers and *HTML Server*s access the same database for the same set of specs.

Before release 8.12, whenever a new package was deployed to the Enterprise Server, you had to install the package on a development client and manually generate serialized objects for the *HTML Server*. With release 8.12, however, manual generation is now optional. Instead, the *JD Edwards EnterpriseOne* now automatically generates objects on the fly if they do not exist in the serialized object tables.

When you deploy a package to the Enterprise Server, the *HTML Server* automatically discovers the new package and purges all serialized records impacted by the package. If a full package is deployed, the *HTML Server* deletes all serialized object records. If an update package is deployed, the *HTML Server* deletes only those records that are included in the update package. It also removes the impacted objects from in-memory cache. After the package deployment is complete, when a user accesses an EnterpriseOne object, this object is generated on the fly using the new specs delivered in the package.

To ensure the integrity of the specs, the *HTML Server* must be configured so that:

- Each EnterpriseOne JAS instance includes only one path code and one package within the path code.
- All users accessing a *JD Edwards EnterpriseOne HTML Server* instance access only one package.
- Serialized object databases are not shared among multiple EnterpriseOne JAS instances, unless all these instances run on the same path code and same package.

Impacts to End Users

During package deployment, the *HTML Server* stops responding to user requests until the package is deployed and serialized objects are purged. During this process, user will not be able to log in. Users that are already logged in prior to the package deployment will not be able to launch new forms until the package deployment is complete.

Understanding the Manifest

Each package now contains a package manifest. The manifest is a record in a new table that is created every time a package is built. The package manifest contains a date/time stamp for the package build and information about the package content. For update packages, it also contains a list of objects included in the package.

Each serialized object table now contains a serialized object manifest. This manifest indicates what specs are used to generate the serialized objects. For example, the manifest includes the name of the package used to generate the serialized objects. To ensure the integrity of the system, all serialized objects are generated from the same package.

When the *HTML Server* detects a package deployment, it compares the package manifest with the serialized object manifest. If a new package is deployed, the package manifest will be different than the serialized object manifest. The *HTML Server* purges the serialized objects table of objects listed in the package manifest. The *HTML Server* then updates the serialized object manifest so it is consistent with the package manifest. This entire process is automatic and does not need administrator involvement.

7 Appendix A - Configuring Secure Socket Layer with the HTML Server

Configuring Secure Socket Layer with the HTML Server

The chapter describes how to configure Secure Socket Layer (SSL) with the *HTML Server*.

Configuring SSL on the IBM HTTP Server

SSL requires a Signed Personal Certificate. You can either request a CA-Signed Personal Certificate directly from IBM, or you can generate a Self-Signed Certificate yourself. This task describes how to generate and use a Self-Signed Certificate. For production environments, we recommend you request one from CA. For instructions to request a CA-Signed Personal Certificate, refer to the IBM Info Center.

1. Create a folder named `keys` in the HTTP Server installation directory.
2. Start the Key Management Utility by navigating the following path:

Start > Programs > IBM HTTP Server > Start Key Management Utility

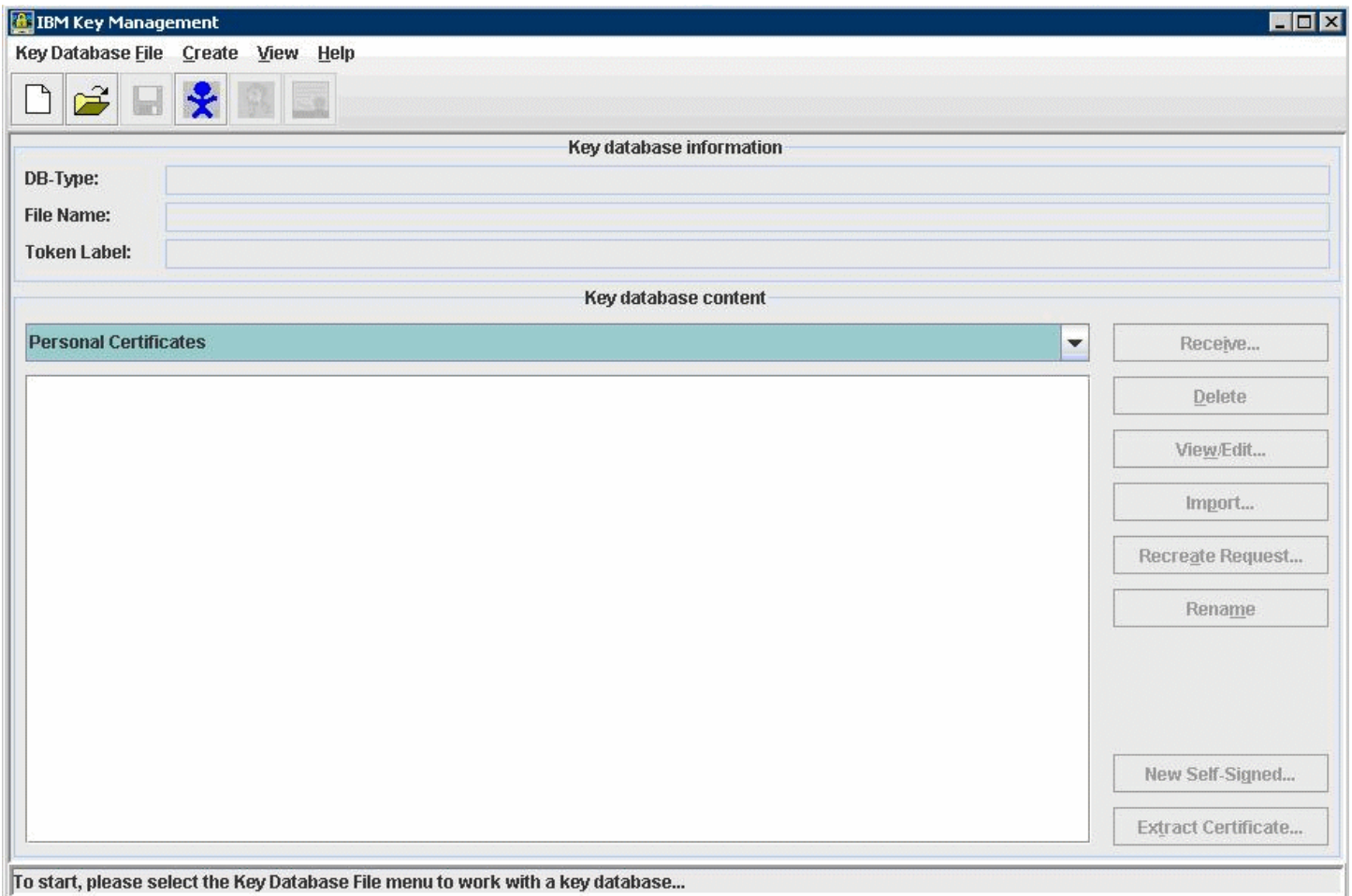
Alternately you can use a script found in this directory

```
z:\IBM\HTTPServer\bin
```

3. Start the `ikeyMan` utility which is located in the bin directory of your HTTP Server. For example:

```
/u01/IBM/WebSphere/AppServer/bin
```

4. In the IBM Key Management ikeyMan utility, create a *Key Database File* by navigating *Key Database File > New*.



5. At the prompt, enter the following information:

- Key Database Type = CMS

Only CMS is supported with the IBM HTTP Server.

- File Name = serverkey.kdb

- Location = `x:\IBM\HTTPServer\keys /u01/IBM/HTTPServer/keys`

where `x`: is the drive on which you installed the IBM HTTP Server.

6. Enter the password (for example, "serverkey") and select the option *stash the password file*.

7. Click the *OK* button.

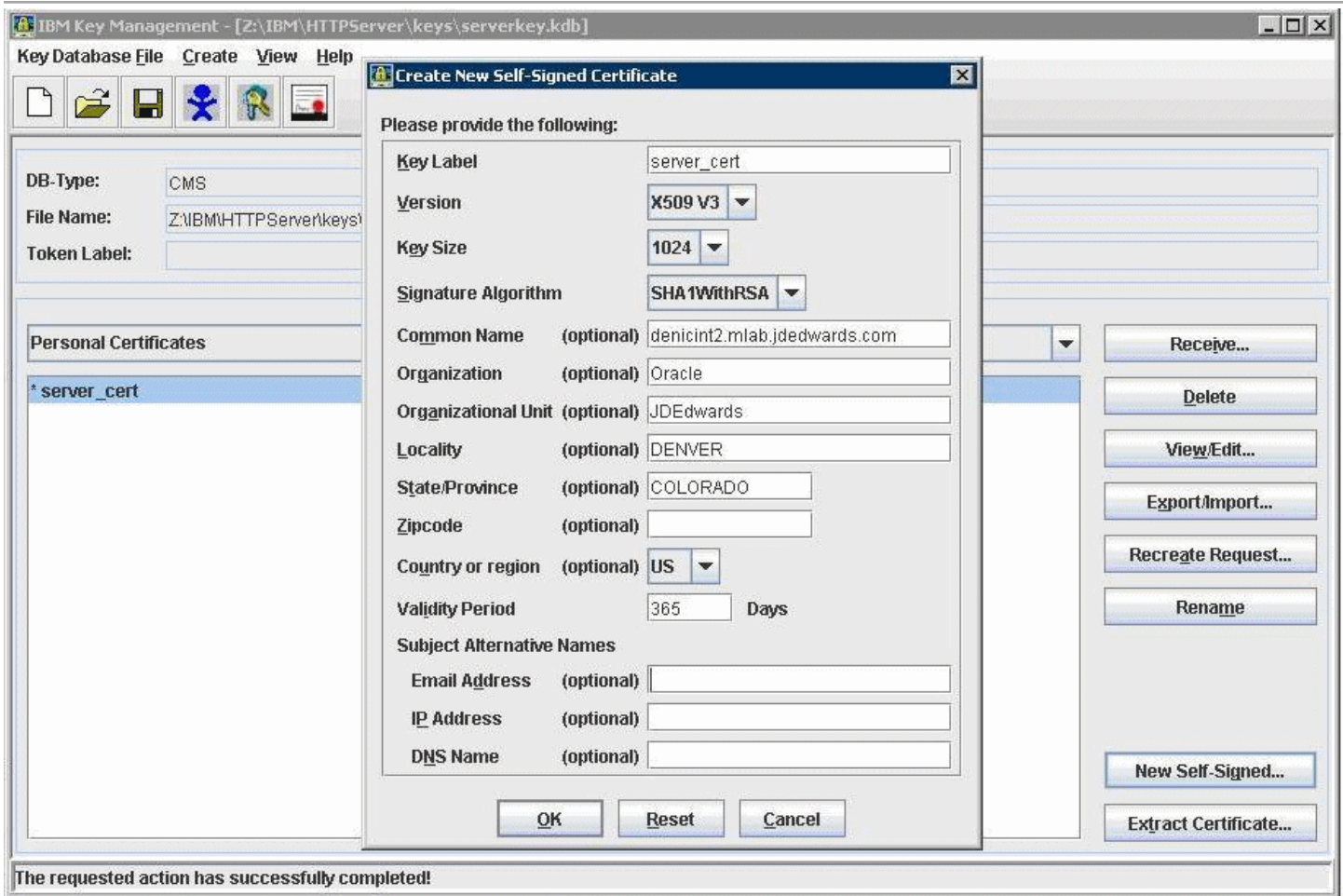
8. From the drop down box, select *Personal Certificates*.

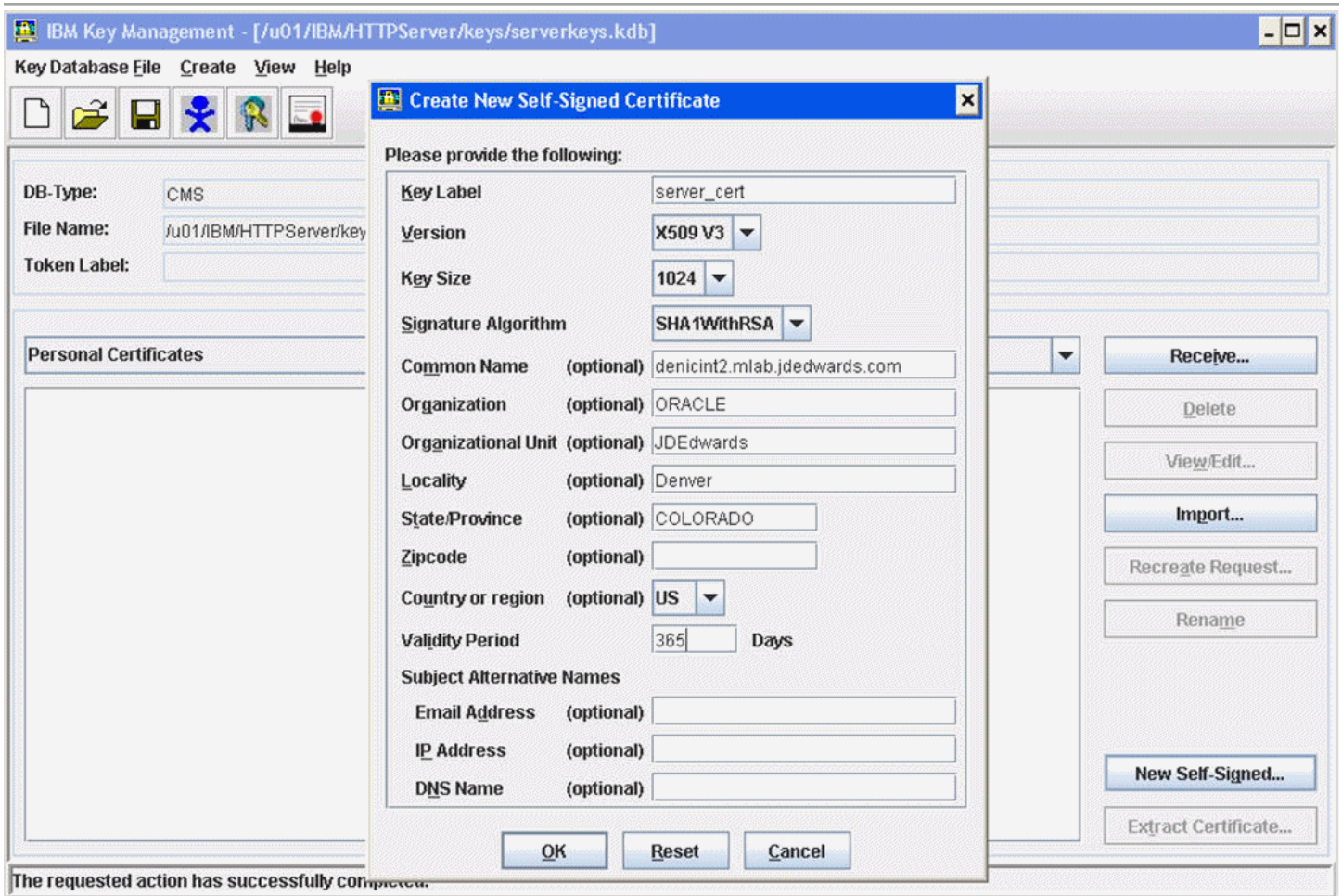
9. Click *New Self-Signed*.

10. Enter following information on the screen that appears:

- Key Label= Enter any label (for example, server_cert)
- Version= X509V3
- Key Size = 1024
- Common Name = Fully Qualified Server Name (for example, denicint2.mlab.jdedwards.com)
- Organization = your organization name (for example, Oracle).
- Country or region = US
- Validity Period = 365 days

A sample screen shot is provided below:





11. On Create New Self-Signed Certificate, after the fields are complete click the OK button.

The program displays your certificate in the list.

12. Delete all the other certificates.
13. Open the `httpd.conf` file in a text editor, and add the following virtual host definition.

Note: The text in the `httpd.conf` is case sensitive; type the host definition exactly as shown.

If you have already configured a port on the HTTP Server (for example, port 91), the file will include an Alias. Use the same alias under your Virtual Host definition as described here.

ServerKey

For version 8.5.x. make the changes listed below:

```
# Example SSL configuration which supports SSLv3 and TLSv1
# To enable this support:
# 1) Create a key database with ikeyman
# 2) Update the KeyFile directive below to point to that key database
# 3) Uncomment the directives up through the end of the example
# Note: The IPv6 Listen directive must only be uncommented if
# IPv6 networking is enabled.
#
# uncomment below line to enable ssl
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
Listen 0.0.0.0:443
# IPv6 support:
# Listen [::]:443
<VirtualHost *:443>
Alias /jde "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war"
SSLEnable
SSLProtocolDisable SSLv2
</VirtualHost>
<Directory "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war/WEB_INF">
Order Deny,Allow
Deny from All
</Directory>
<Directory "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war">
Order Deny,Allow
Allow from All
</Directory>
</IfModule>
KeyFile /u01/IBM/HTTPServer/keys/WebServerKeys.kdb
SSLDisable
# End of example SSL configuration
```

ServerKey

For version 8.5.x. make the changes listed below:

```
# Example SSL configuration which supports SSLv3 and TLSv1
# To enable this support:
# 1) Create a key database with ikeyman
# 2) Update the KeyFile directive below to point to that key database
```



```
# 3) Uncomment the directives up through the end of the example
# Note: The IPv6 Listen directive must only be uncommented if
# IPv6 networking is enabled.
#
# uncomment below line to enable ssl
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
Listen 0.0.0.0:443
# IPv6 support:
# Listen [::]:443
<VirtualHost *:443>
Alias /jde "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war"
SSLEnable
SSLProtocolDisable SSLv2
</VirtualHost>
<Directory "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war\WEB_INF">
Order Deny,Allow
Deny from All
</Directory>
<Directory "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war">
Order Deny,Allow
Allow from All
</Directory>
</IfModule>
KeyFile Z:\IBM\HTTPServer\keys\WebServerKeys.kdb
SSLDisable
# End of example SSL configuration
```

For version 9.x onward make the changes listed below:

```
# Example SSL configuration
# To enable this support:
# 1) Create a key database with ikeyman
# 2) Update the KeyFile directive below to point to that key database
# 3) Uncomment the directives up through the end of the example
# Note: The IPv6 Listen directive must only be uncommented if
# IPv6 networking is enabled.
#
# uncomment below line to enable ssl
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
# IPv6 support:
Listen 0.0.0.0:443
<VirtualHost *:443>
Alias /jde "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war"
SSLEnable
</VirtualHost>
<Directory "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war/WEB_INF">
Require all denied
</Directory>
<Directory "/u01/IBM/WebSphere/AppServer/profiles/AppSrv02/installedApps/
denicint2Node01Cell/EA_JS_9x.ear/webclient.war">
Require all granted
</Directory>
</IfModule>
```

```
SSLDisable
KeyFile /u01/IBM/HTTPServer/keys/ServerKey.kdb
# End of example SSL configuration
```

For version 9.x onward make the changes listed below:

```
# Example SSL configuration
# To enable this support:
# 1) Create a key database with ikeyman
# 2) Update the KeyFile directive below to point to that key database
# 3) Uncomment the directives up through the end of the example
# Note: The IPv6 Listen directive must only be uncommented if
# IPv6 networking is enabled.
#
# uncomment below line to enable ssl
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
# IPv6 support:
Listen 0.0.0.0:443
<VirtualHost *:443>
Alias /jde "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war"
SSLEnable
</VirtualHost>
<Directory "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war\WEB_INF">
Require all denied
</Directory>
<Directory "Z:\IBM\WebSphere\AppServer\profiles\AppSrv02\installedApps
\denicint2Node01Cell\EA_JS_9x.ear\webclient.war">
Require all granted
</Directory>
SSLDisable
KeyFile Z:\IBM\HTTPServer\keys\WebServerKeys.kdb
# End of example SSL configuration
```

Configuring AIS Server over SSL on WebSphere Server (Release 9.2.4)

During the promotion of the AIS server port, the scf_<Managed_Instance_Name>.conf file is regenerated at the ../IBM/HTTPServer/conf location. If the SSL entries have been previously configured, the manually configured SSL changes will not be preserved as part of the promotion. Therefore, you must configure the SSL entries as a post-promotion step.

To add the SSL section to the AIS server related scf_<Managed_Instance_Name>.conf file.

1. Promote the AIS port using the Server Manager Console.
2. Take a backup of the existing scf_<Managed_Instance_Name>.conf file.

Typically, the scf_<Managed_Instance_Name>.conf file is located on the machine where the Websphere Application Server is installed at ../IBM/HTTPServer/conf.

3. Open the `scf_<Managed_Instance_Name>.conf` file using an editor and modify the section by adding the SSL port details and the `SSLEnable`, `SSLDisable`, and `KeyFile` details as shown below.

In this context, the actual non-ssl port is 26065.

```
Listen 0.0.0.0:26066
<VirtualHost *:26066>
Alias /studio "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war"
Alias /jderest "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/JDERestProxy.war"
SSLEnable
</VirtualHost>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war/WEB_INF">
Require all denied
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war">
Require all granted
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/JDERestProxy.war/WEB_INF">
Require all denied
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/JDERestProxy.war">
Require all granted
</Directory>
KeyFile /slot/ems2882/appmgr/IBM/HTTPServer/oracacert/den02iegkey.kdb
SSLDisable
```

After adding the SSL section, the overall content of the `scf_<Managed_Instance_Name>.conf` file should look like this:

```
Listen 0.0.0.0:26065
<VirtualHost *:26065>
Alias /studio "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war"
Alias /jderest "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/JDERestProxy.war"
</VirtualHost>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war/WEB_INF">
Require all denied
</Directory>
```

```
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war">
Require all granted
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/
JDERestProxy.war/WEB_INF">
Require all denied
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/
JDERestProxy.war">
Require all granted
</Directory>

Listen 0.0.0.0:26066
<VirtualHost *:26066>
Alias /studio "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war"
Alias /jderest "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/
AppSrv01/installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/
JDERestProxy.war"
SSLEnable
</VirtualHost>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war/
WEB_INF">
Require all denied
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/Studio.war">
Require all granted
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/
JDERestProxy.war/WEB_INF">
Require all denied
</Directory>
<Directory "/slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/
installedApps/den02iegNode01Cell/tqa_923_aix_ais_den02ieg_26065.ear/
JDERestProxy.war">
Require all granted
</Directory>
KeyFile /slot/ems2882/appmgr/IBM/HTTPServer/oracacert/den02iegkey.kdb
SSLDisable
```

4. Save the file.

Ensure that the httpd.conf file at the same location has the **include** entry for the scf_<Managed_Instance_Name>.conf file as shown:

```
include "/slot/ems2882/appmgr/IBM/HTTPServer/conf/scf_tqa_923_aix_ais_den02ieg_26065.conf"
```

5. Login to WebSphere Admin Console and redirect to the virtual hosts section in the Environment menu.

6. Click `vh_<Managed_Instance_Name>`.

Select	Name
You can administer the following resources:	
<input type="checkbox"/>	admin_host
<input type="checkbox"/>	default_host
<input type="checkbox"/>	vh_AIS_2
<input type="checkbox"/>	vh_tqa_923_aix_ais_den02ieg_26061
<input type="checkbox"/>	vh_tqa_923_aix_ais_den02ieg_26063
<input type="checkbox"/>	vh_tqa_923_aix_ais_den02ieg_26065
<input type="checkbox"/>	vh_tqa_923_aix_jas_den02ieg_25051
<input type="checkbox"/>	vh_tqa_923_aix_jas_den02ieg_25053
<input type="checkbox"/>	vh_tqa_923_aix_jas_den02ieg_25055

7. Click the Host Aliases link.

[Virtual Hosts](#) > `vh_tqa_923_aix_ais_den02ieg_26065`

Use this page to create a virtual host with a unique set of web access ports. Such a configuration lets a single host manage multiple machines. Each virtual host has a logical name and a list of one or more domain name system (DNS) aliases by which it can be accessed.

Configuration

General Properties

* Name

Additional Properties

- [Host Aliases](#)
- [MIME Types](#)

- If you do not see the SSL port under Host Aliases, add it by clicking the NEW button and then save the configuration.

+ Preferences

Select	Host Name	Port
<input type="checkbox"/>	*	26065
<input type="checkbox"/>	*	26066

Total 2

- Navigate to Servers, Server Types, Web servers, and select the related web server.

Select	Name	Web server Type	Node	Host Name	Version	Status
<input checked="" type="checkbox"/>	webserver1	IBM HTTP Server	den02iegNode01	den02ieg.us.oracle.com	ND 9.0.0.11	

Total 1

- Click the Generate Plug-in button.

Select	Name	Web server Type	Node	Host Name	Version	Status
<input checked="" type="checkbox"/>	webserver1	IBM HTTP Server	den02iegNode01	den02ieg.us.oracle.com	ND 9.0.0.11	

Total 1

11. After the Plug-in is generated, click the Propagate Plug-in button.

Messages

- PLGC0005I: Plug-in configuration file = /slot/ems2882/appmgr/IBM/WebSphere/AppServer/profiles/AppSrv01/config/cells/den02iegNode01Cell/nodes/den02iegNode01/servers/webserver1/plugin-cfg.xml
- PLGC0052I: Plug-in configuration file generation is complete for the Web server. den02iegNode01Cell.den02iegNode01.webserver1.

Web servers

Use this page to view a list of the installed web servers.

Preferences

Generate Plug-in Propagate Plug-in New... Delete Templates... Start Stop Terminate

Select	Name	Web server Type	Node	Host Name	Version	Status
You can administer the following resources:						
<input checked="" type="checkbox"/>	webserver1	IBM HTTP Server	den02iegNode01	den02ieg.us.oracle.com	ND 9.0.0.11	
Total 1						

12. Bounce the corresponding AIS server port using the Server Manager Console.
13. Verify that the correct location of plugin-cfg.xml file is referenced in the httpd.conf file.
14. Restart the IBM HTTP server.

Configuring SSL on IBM WebSphere

1. Log on to your WebSphere Admin Console.
2. Navigate to **Environment Virtual Hosts**.
3. Select your virtual host.

For example, if you initially installed your application on port 91, then the virtual host should be VH_EA_JS_9x.

4. Under the virtual host, select **Additional Properties HostAliases**.

5. Under Host Aliases, click **New**.

A sample screen shot is provided below:

The screenshot displays the Integrated Solutions Console interface. On the left is a navigation tree with categories like 'Welcome', 'Servers', 'Applications', 'Services', 'Resources', 'Security', 'Environment', 'Naming', 'System administration', 'Users and Groups', 'Monitoring and Tuning', and 'Troubleshooting'. The 'Environment' section is expanded to show 'Virtual hosts'. The main content area is titled 'Virtual Hosts' and shows the configuration for 'vh_EA_JS_91' under 'Host Aliases'. The configuration includes a 'General Properties' section with fields for 'Host Name' (set to '*') and 'Port' (set to '443'). Below these fields are buttons for 'Apply', 'OK', 'Reset', and 'Cancel'. To the right of the configuration is a 'Help' panel with 'Field help' and 'Page help' sections. The 'Field help' explains that the asterisk (*) allows for any IP address, domain name, or port number. The 'Page help' provides a link to 'More information about this page'. The top of the console shows 'Welcome', 'Help | Logout', and the IBM logo. The breadcrumb path is 'Cell=denicint2Node01Cell, Profile=AppSrv02'.

6. Create a new host alias using the fully qualified name of the server and a port number of 443.
 - o Host: *
 - o port: 443 (Default SSL Port)
7. Regenerate and propagate the HTTP Server plug-in file and restart your HTTP Server.
8. Select your particular webserver.
9. Select Plug-in properties.
10. Click on **Copy to Web server key store directory**.

[Web servers](#) > [IHS_SSL_3009](#) > **Plug-in properties**

Use this page to configure a web server plug-in. The plug-in passes HTTP requests from a web server to WebSphere(R) application servers.

Runtime Configuration

Plug-in properties **Additional Properties**

Ignore DNS failures during Web server startup

+ Refresh configuration interval
60 seconds

Repository copy of Web server plug-in files:

+ Plug-in configuration file name
plugin-cfg.xml

Automatically generate the plug-in configuration file

Automatically propagate plug-in configuration file

+ Plug-in key store file name
plugin-key.kdb

Web server copy of Web server plug-in files:

+ Web server copy of Web server plug-in files:
C:\Program Files\IBM\WebSphere\Plugins3\config\IHS_SSL_3009\plugin-cfg.xml

+ Plug-in key store directory and file name
C:\Program Files\IBM\WebSphere\Plugins3\config\IHS_SSL_3009\plugin-key.kdb

[Request and Response](#)
[Caching](#)
[Request Routing](#)
[Custom Properties](#)

11. Restart the Application Server.

You should be able to login to the following URL:

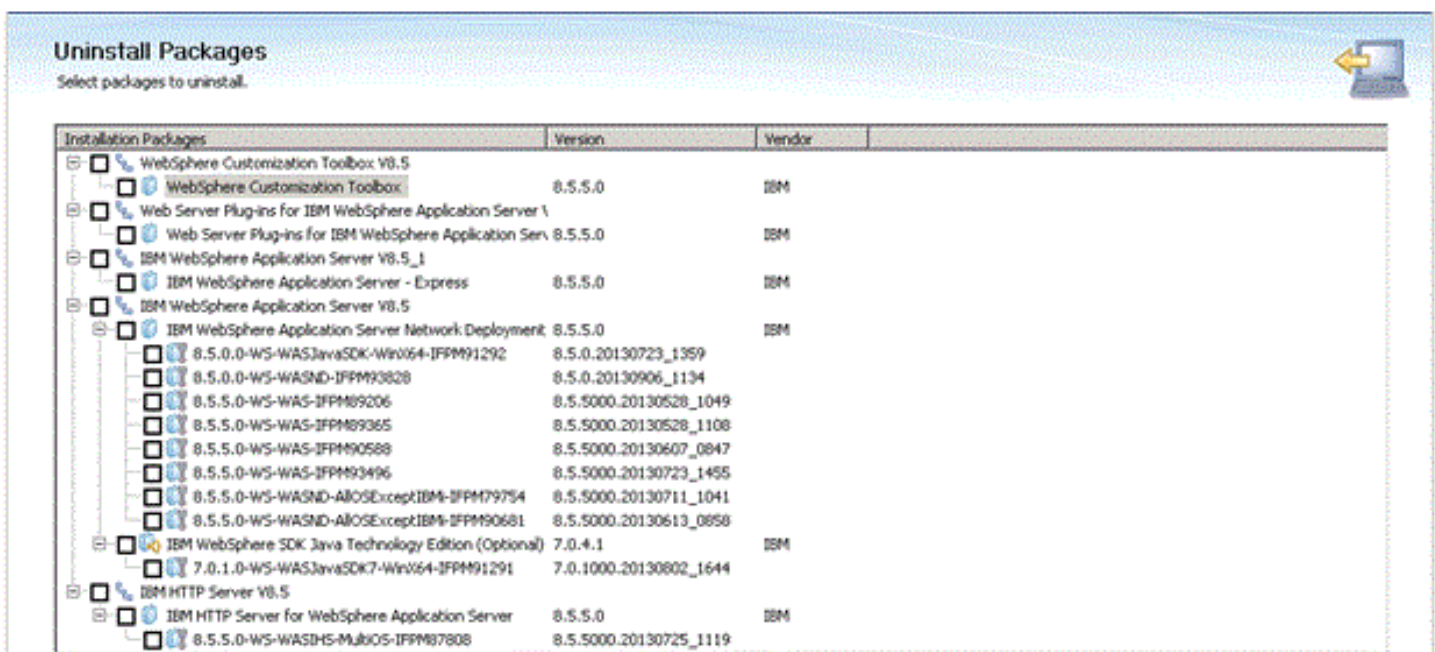
`https://fully_qualified_server_name/jde/E1Menu.maf`

8 Appendix B - Uninstalling a WebSphere 8.5.x/9.0 Fix Pack

Uninstalling a WebSphere 8.5.x/9.0 Fix Pack

To uninstall a WebSphere fix pack:

1. Launch the Update Installer wizard.
2. Select the Uninstall option.



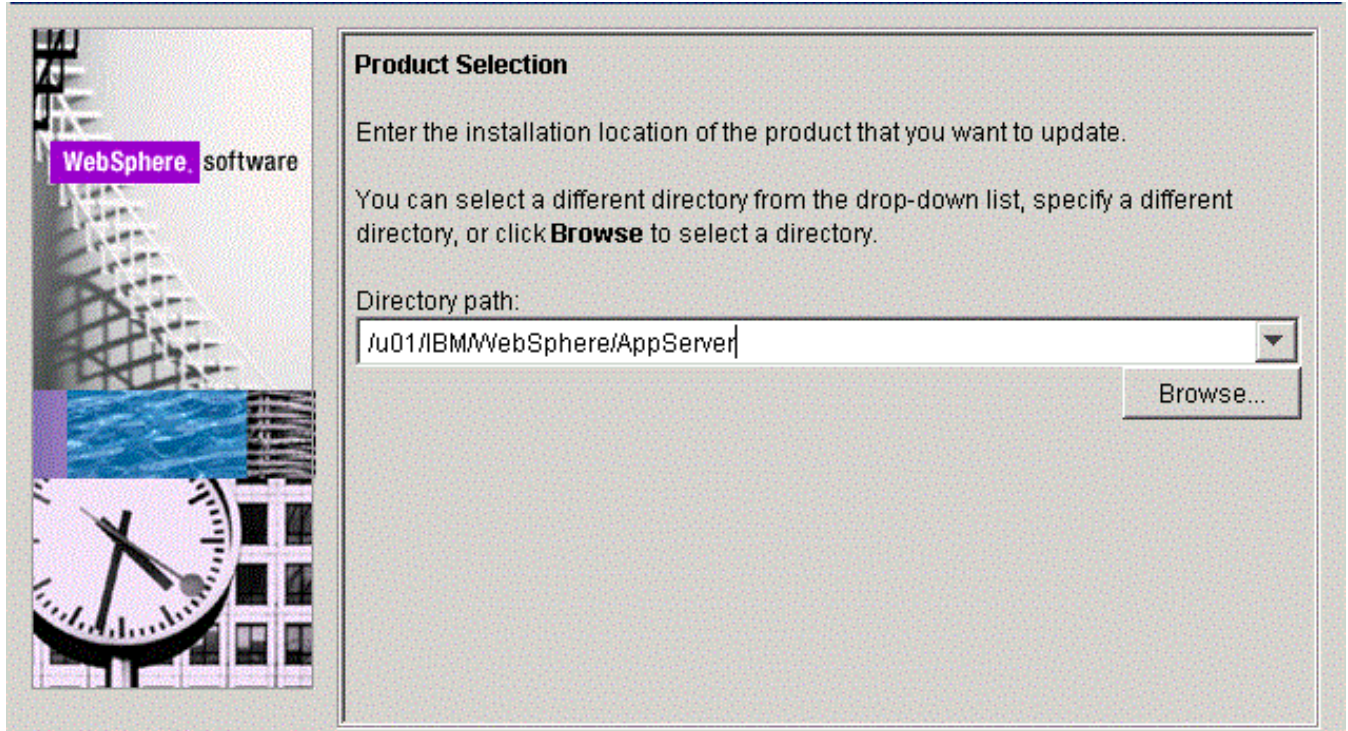
3. On Uninstall Packages, use the checkboxes to select the Installation Package that you want to uninstall
4. Click the Uninstall button.

Uninstalling a WebSphere 7.0 Fix Pack

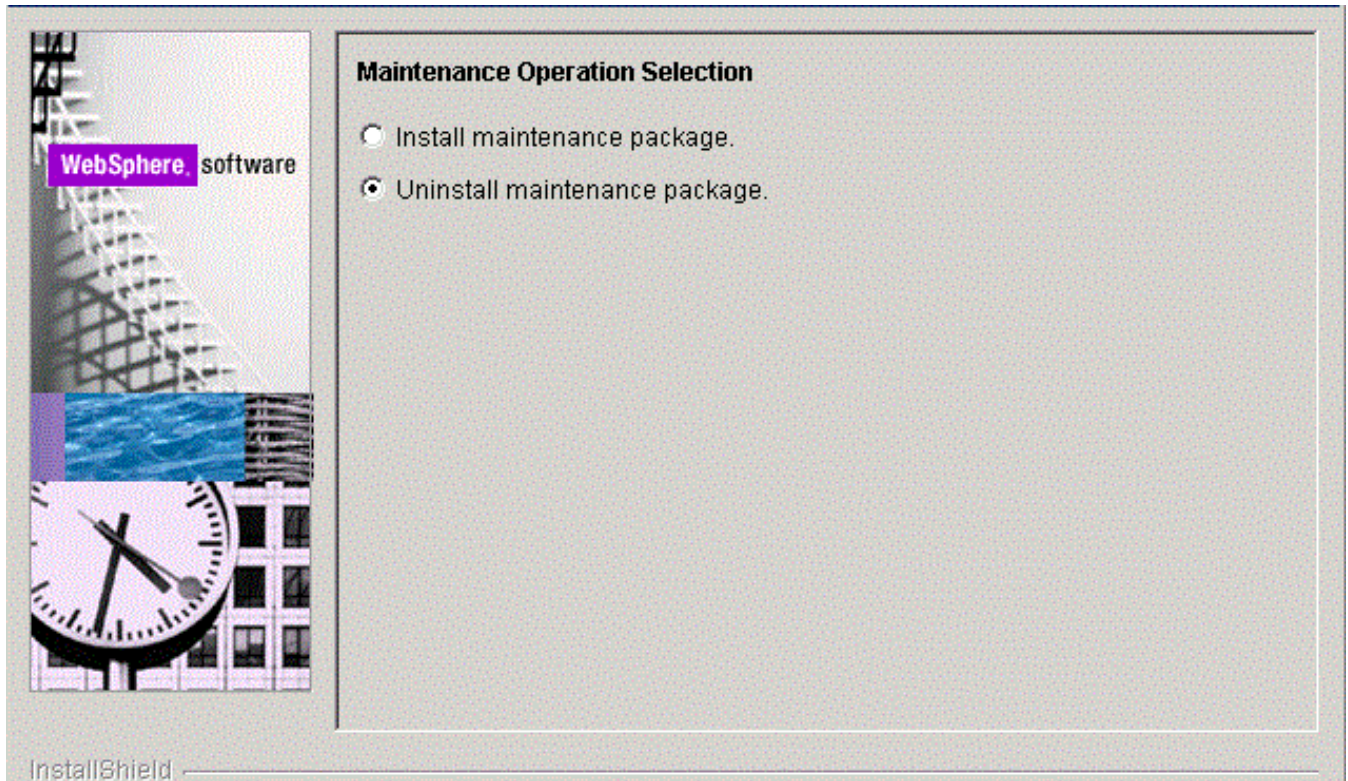
To uninstall a WebSphere 7.0 fix pack:

1. Launch the Update Installer wizard.

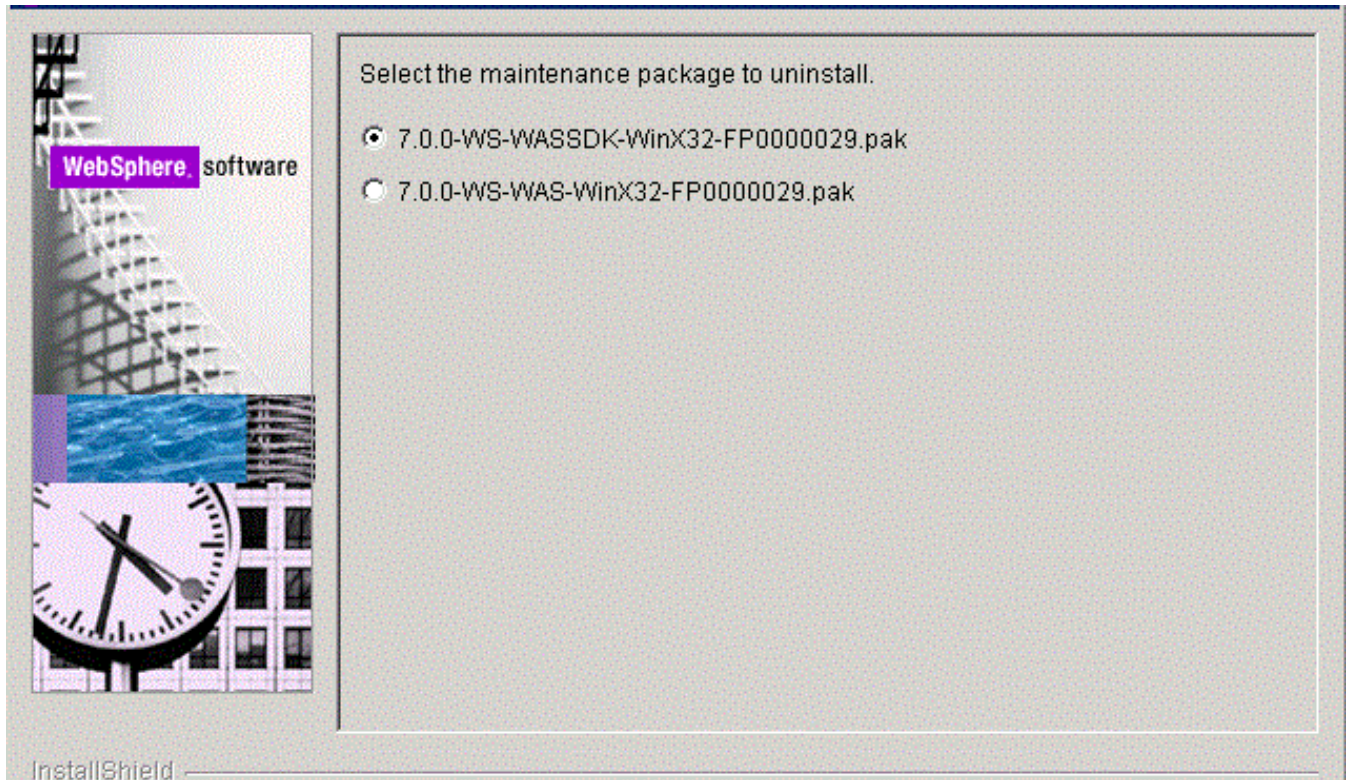


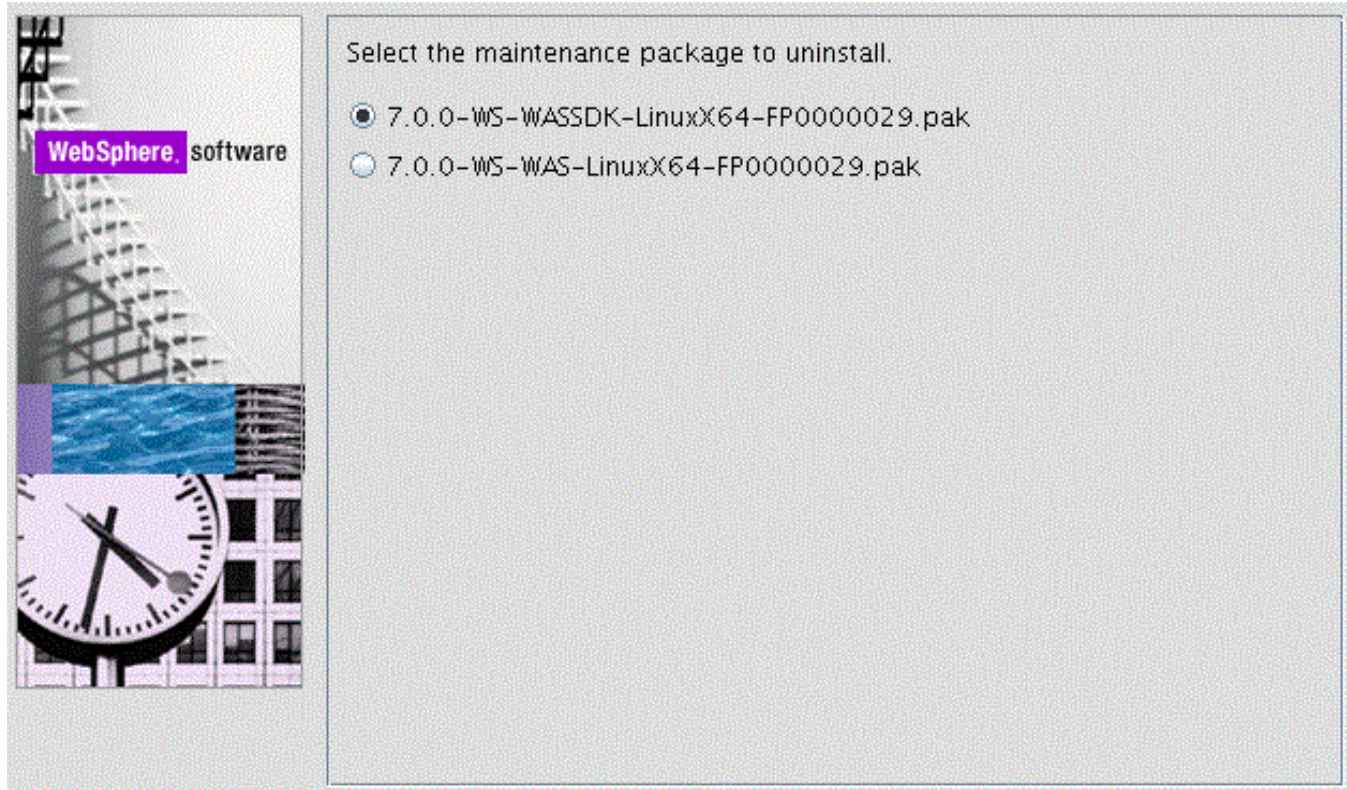


2. On Product Selection, use the pulldown to select the directory path for the component that you wish to uninstall.



3. On Maintenance Operation Selection, choose the radio button for **Uninstall maintenance package**.





4. On the maintenance package to uninstall screen, select the radio button associated with an available package to uninstall and click Next.

Repeat the same process for other packages as necessary.

9 Appendix C - Understanding Media Objects on the Web Server

Understanding Media Objects on the Web Server

This section provides an overview of `jas.ini` settings required to access Media Objects on the *HTML Server*, and the process by which the web server accesses these objects from the network. The last section describes how to secure Media Objects on web-based client machines.

Required `jas.ini` Settings

Ensure that these parameters are set in the `[OWWEB]` section of the `jas.ini` file.

[OWWEB]

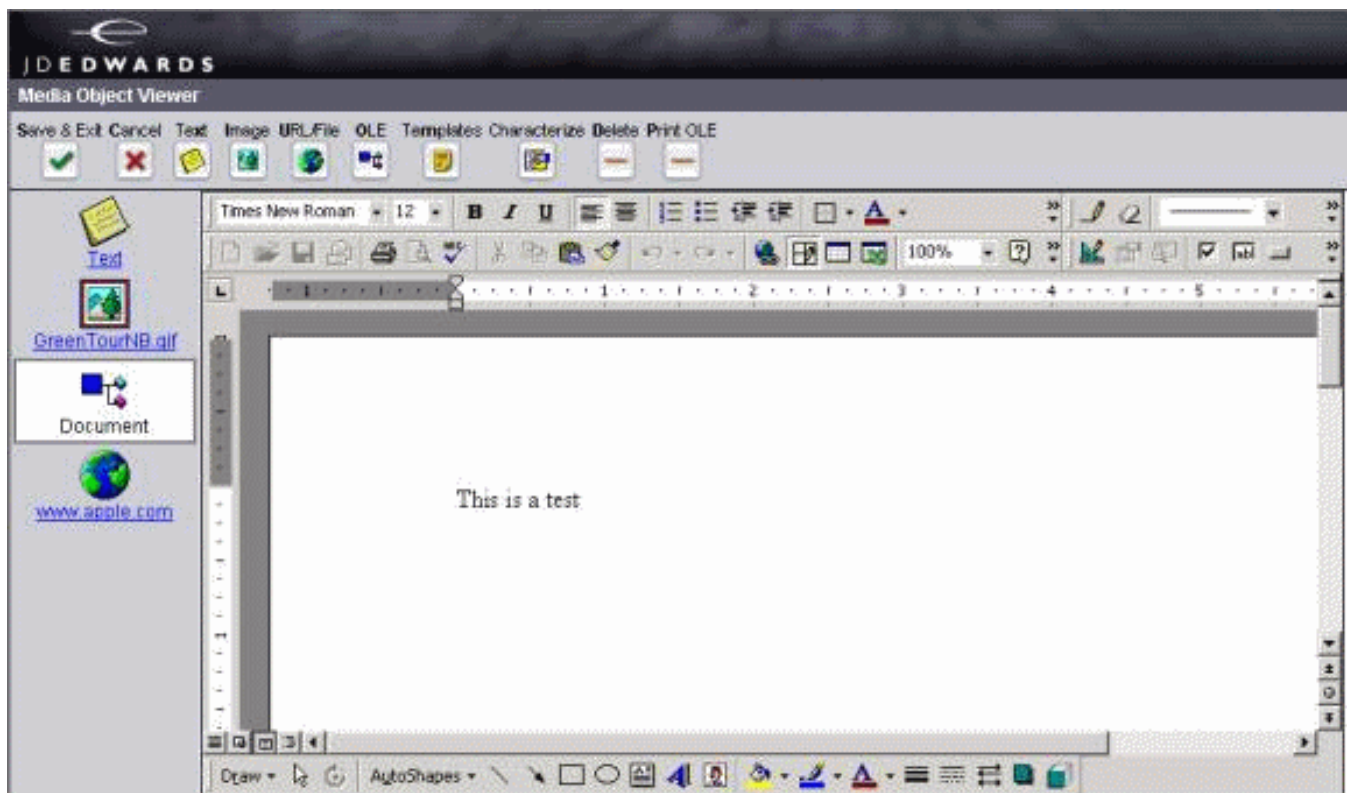
Parameter	Recommended Setting	Description
<code>MO QUEUE=</code>	Site-dependent path	Identifies the media object directory location on your <i>HTML Server</i> . This path must translate into virtual path <code>/jde/moqueue/</code> for the web browser.
<code>FtpPort=</code>	21	Specifies the default port to be used for FTP.
<code>FtpUsr=</code>	anonymous	Specifies the user id to be used for FTP access to the media Object File Server.
<code>FtpPwd=</code>	anonymous	Specifies the password to be used for FTP access to the media Object File Server.
<code>UseMOWinNTShare=</code>	TRUE FALSE	<p>Specifies that the web server use the Microsoft Windows file sharing mechanism for fetching Media Object files from their location into the cached location of the web server.</p> <p>Specifies that the web server does not use Microsoft Windows file sharing mechanism and uses FTP access instead.</p> <p>Note: If this setting is TRUE, media object queue paths set in <code>P98MOQUE</code> must be accessible by the owner of the application server from the application server machine (the application server is the server program hosting web servlets). To test the accessibility of a media object queue path, log in as the owner of the application server, open Windows Explorer, and paste the path to the media object queue into the address field. The path should be accessible without entering a user ID and password.</p>

Parameter	Recommended Setting	Description
		If this path is not accessible, you can change the media object queue setting to a path accessible by the owner of the application server. For example, you can specify a path on the application server machine as the media object queues directory.

How Media Objects are Displayed by the HTML Server

This section explains how Media Objects are sent to the HTML client by the *HTML Server*.

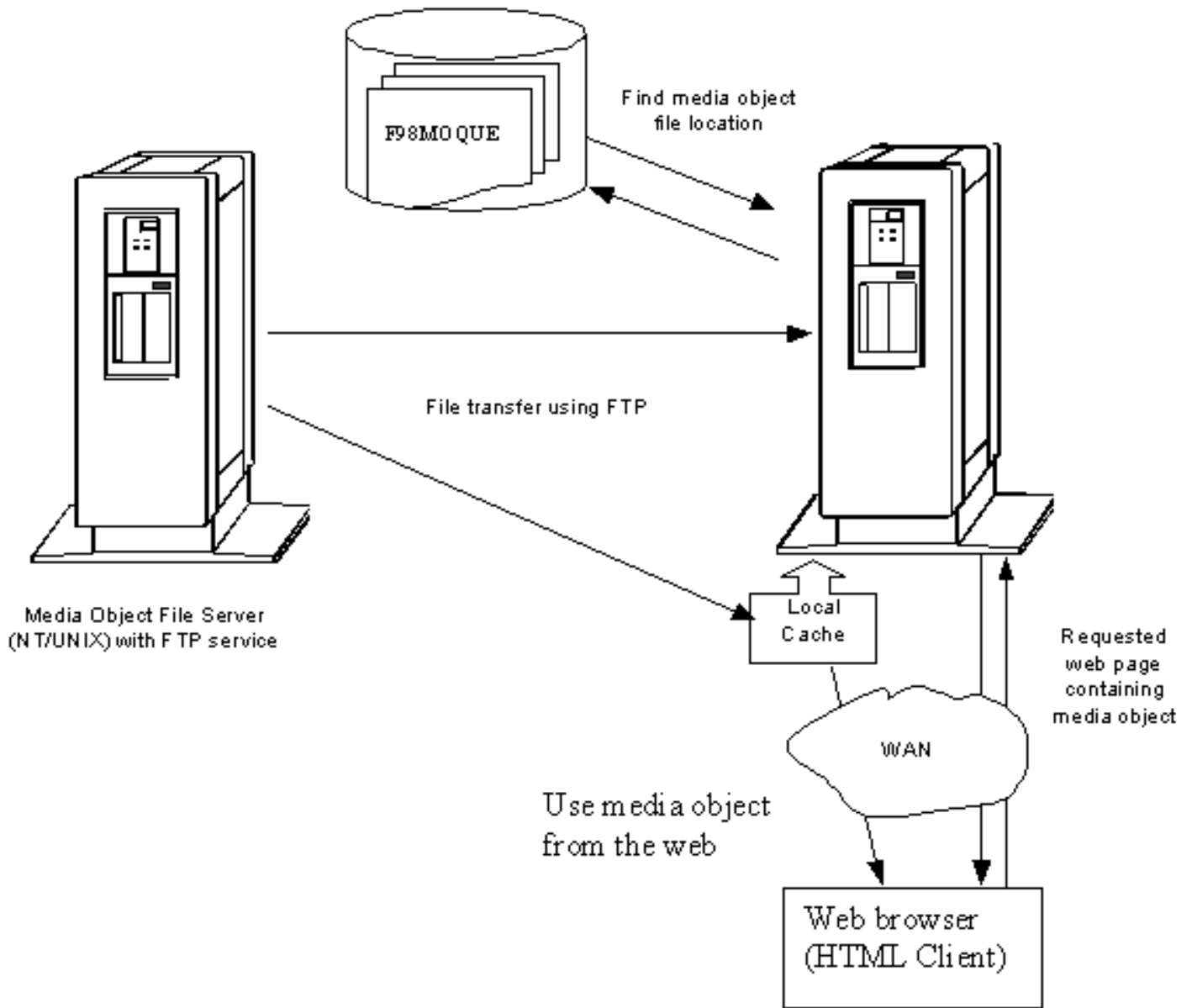
1. A user selects attachments on an application which has support for media objects.
2. The Media Object window displays the image, file, or OLE objects, and the user selects one of these objects.



3. The request goes to the web server.
4. The web server reads the location of the object from the Media Object queue table (F98MOQUE), finds the file, and caches it in the location specified by the MO QUEUE path.

If UseMOWinNTShare is TRUE, files are transferred using Microsoft Windows file sharing mechanism, otherwise Files are transferred using FTP protocol.

This diagram illustrates the process:



10 Appendix D - Enabling Compression on IBM HTTP Server

Enabling Compression on IBM HTTP Server

You can set the `mod_deflate` directive within the `httpd.conf` file to enable the IBM HTTP Server to compress output files and log the compression ratios. `mod_deflate` is an Apache module in the `httpd.conf` file that compresses content sent from the web server to the client browser.

Understanding Compression

Regular text and most non-image content are well suited for compression. Text files can typically be compressed by 70% or more. Compression can save significant bandwidth and enable faster browser response times. The effect is negligible in most high speed LAN environments, but is quite noticeable for users on slow WAN connections.

Compression is not recommended for files that are already compressed. A partial list includes these types of files:

- zip
- PDF
- exe
- image files

Compressing these file types using `mod_deflate` can actually increase their size or corrupt the files.

There are 9 levels of compression available when using `mod_deflate`. The difference between the default level (6) and the maximum compression level (9) is minimal, and the cost in extra CPU time necessary to process the higher compression level is significant and ultimately not beneficial. For this reason, you should use the default compression level.

Configuring the `mod_deflate` directive

For specific instructions to configure the `mod_deflate` directive, access the Apache documentation on this web page, <http://httpd.apache.org/docs/2.0/>, and click on the link for <http://httpd.apache.org/docs/2.0/mod/directives.html>. Refer to this web page for instructions to configure each of the parameters discussed below. Also refer to the sample `mod_deflate` module at the end of this appendix.

To enable compression, open the `httpd.conf` file, and verify that the `LoadModule deflate_module` is uncommented (see the example below). You can configure `mod_deflate` to compress documents in one of two ways (both of which are specified in the `httpd.conf` file):

- Explicit exclusion of files by extension

This method lists the file types that should NOT be compressed by the http server.

- Explicit inclusion of files by MIME type.

This method lists file types that should always be compressed by the http server.

Logging Compression Results

The following three directives can be added to the `httpd.conf` file to enable the writing of compression statistics to a log file. These directives will record the bytes before compression (Input), the bytes after compression (Output), and calculate the compression ratio:

```
DeflateFilterNote Input instream
DeflateFilterNote Output outstream
DeflateFilterNote Ratio ratio
```

The following line defines a new logging format to be used for the compression log. The format is named "deflate." The second line below specifies the path and file name of the log file (`deflate.log`) where the output is written.

```
LogFormat '"%r" %{outstream}n/%{instream}n (%{ratio}n%%)' deflate
CustomLog Z:\IBM\HTTPServer\logs\deflate.log
           /u01/IBM/HTTPServer/logs/deflate.log deflate
```

Example: Configuring mod_deflate for EnterpriseOne

The following load module line enables compression for EnterpriseOne. Verify that the line is uncommented in the `httpd.conf` file.

```
LoadModule deflate_module modules/mod_deflate.so
```

In the `httpd.conf` file, add the following lines under the existing `<IfModule mod_deflate.c>` section. Note that the compression method used in this example is explicit exclusion.

For specific instructions to configure the `mod_deflate` directive, access the Apache documentation on this web page, <http://httpd.apache.org/docs/2.0/>, and click on the link for <http://httpd.apache.org/docs/2.0/mod/directives.html>.

```
<IfModule mod_deflate.c>
DeflateFilterNote Input instream
DeflateFilterNote Output outstream
DeflateFilterNote Ratio ratio
LogFormat '"%r" %{outstream}n/%{instream}n (%{ratio}n%%)' deflate
CustomLog Z:\IBM\HTTPServer\logs\deflate.log/u01/IBM/HTTPServer/logs/deflate.logdeflate
<Location / >
# Insert filter
SetOutputFilter DEFLATE
# Don't compress images or binaries
SetEnvIfNoCase Request_URI \
\.(?:gif|[jm]pe?g|png|t?gz|bz2*|zip|exe|iso|avi)$ no-gzip dont-vary
</Location>
</IfModule>
```

11 Appendix E - Generating JD Edwards EnterpriseOne Serialized Objects

Generating JD Edwards EnterpriseOne Serialized Objects

Note: Important: Beginning with JD Edwards EnterpriseOne Tools Release 9.2.6, the previously imbedded tool called eGenerator is no longer available. This functionality to generate serialized objects for JD Edwards EnterpriseOne is replaced by an automated and configurable process of Server Manager. For additional details on usage and configuration of the auto-gen process for serialized objects, refer to the *JD Edwards EnterpriseOne Server Manager Guide* in the chapter entitled: ***Automatic Pre-Generation of Serialized Objects (Release 9.2.6)*** .

