

# WebSphere 6.0 Installation Guide

Version 5.1.0

February 2009

Oracle® Insurance Insight

WebSphere 6.0 Installation Guide

Version 5.1.0

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## About this Guide

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Welcome to the *WebSphere 6.0 Installation Guide*. This guide describes how to install and configure the WebSphere Application Server 6.0 to use as the application server for Insight V5.1.0.

This document is intended for experienced systems administrator.

**NOTE**

Also, this installation will show how to install and utilize the IBM HTTP Server as the Web Server. It is possible to use Microsoft IIS server as the Web Server in conjunction with WebSphere but that is out of scope for this document. Make sure that Microsoft IIS is uninstalled or at least turned off before attempting to install and use the IBM HTTP Server as explained in this document.

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# Chapter 1

## Installation Roadmap

Step	Action	Go to Chapter...
Step 1: Prepare to Install WebSphere	<ol style="list-style-type: none"> <li>1. Obtain ID/password for your Local Administrator account</li> <li>2. Verify system software/hardware requirements</li> </ol>	Chapter 2: System Information
Step 2: Install WebSphere	<ol style="list-style-type: none"> <li>1. Install the WebSphere Application Server</li> <li>2. Install the IBM HTTP Server</li> <li>3. Start WebSphere services as Windows services</li> <li>4. Configure the Java Virtual Machine</li> </ol>	Chapter 3: Installing WebSphere
Step 3: Install WebSphere 6.0 Fixpacks	<ol style="list-style-type: none"> <li>1. Download the fixpacks</li> <li>2. Install the fixpacks                             <ol style="list-style-type: none"> <li>a. Install Refresh Pack 2</li> <li>b. Install Fixpack 21</li> <li>c. Install JDK Cumulative Fixpack</li> </ol> </li> <li>3. Recycle the WebSphere services</li> </ol>	Chapter 4: Installing the WebSphere 6.0 Fixpacks
Step 4: Increase the HTTP Timeout Period	Edit the IBMHttpServer\conf directory\httpd.conf to increase the HTTP Timeout period	Chapter 5: Increasing the HTTP Timeout Period

## Chapter 2

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# System Information

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## Installation Prerequisites

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Prior to installing WebSphere Application Server 6.0 you will need to know the password for the local Administrator account. Please have this information ready before starting.

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## System Requirements

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Skywire Software recommends the following as the minimum requirements for Insight.

***Operating Environment:***

- Windows Server 2003

***Database Platform:***

- Microsoft SQL Server 2005 Service Pack 2, Enterprise Edition

\* Insight requires this version to enable specific features such as:  
Table Storage Partitions and VarDecimal Storage Format

***Application Server Environment:***

- IBM WebSphere Application Server Version 5.1, V6.0

\* Contact Skywire Software for other J2EE environments

**NOTE**

Netscape® and Mac® OS browsers are unable to fully support Insight.

***End-user Workstation Requirements:***

- P3 500 MHz processor or faster
- 512 MB of RAM or greater
- 20 MB of free disk space
- Microsoft Windows 2000 or XP
- Microsoft Internet Explorer Version 6.0 and later
- Adobe Acrobat Reader 5.0 and later

## Chapter 3

# Installing WebSphere 6.0

## Step 1: Install the WebSphere Application Server

1. Locate your IBM WebSphere 6.0 setup files and double-click on **launchpad.bat** to launch the WebSphere Installation Wizard. If you are installing from a CD, the Wizard launches automatically when you insert the CD into the CD drive.

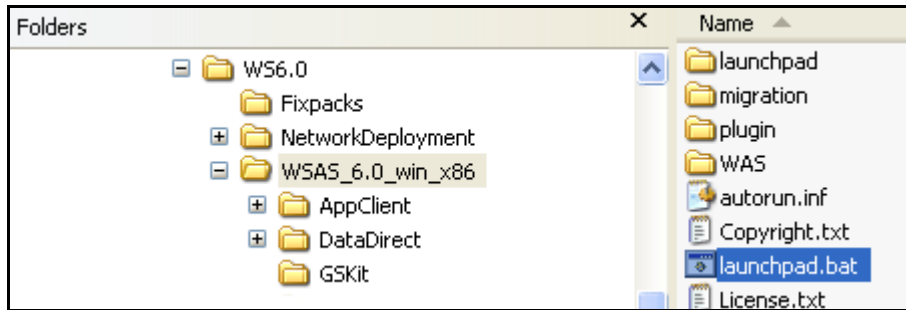


Figure 1: launchpad.bat

The **Launchpad** screen appears.

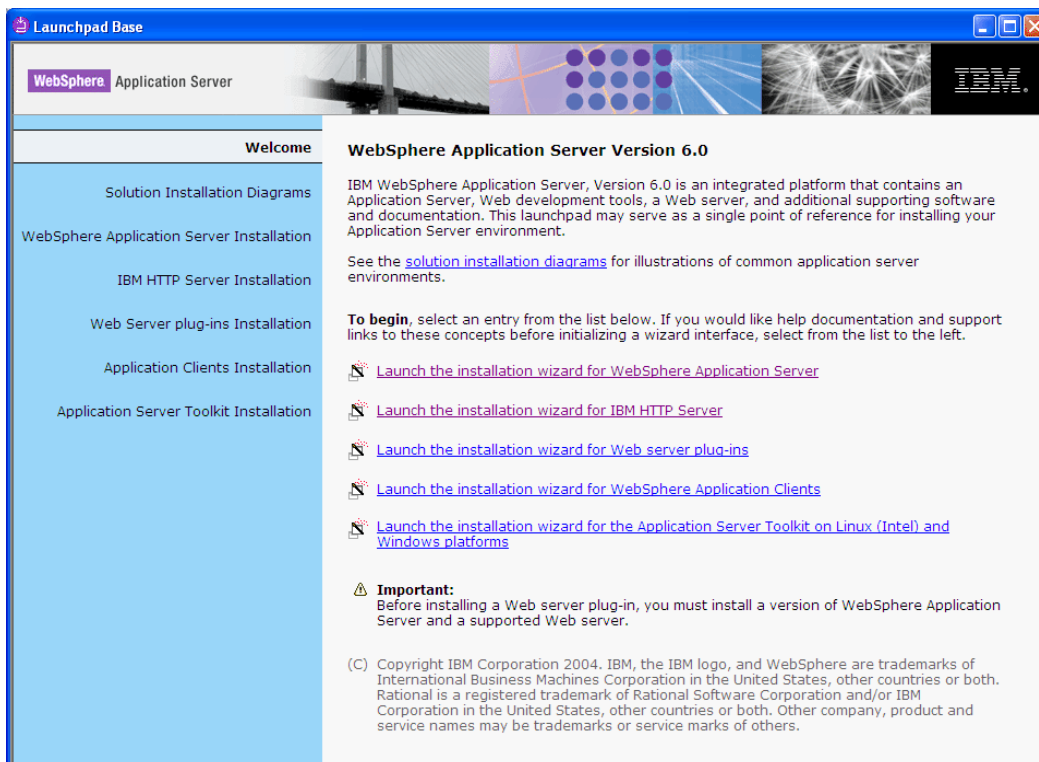
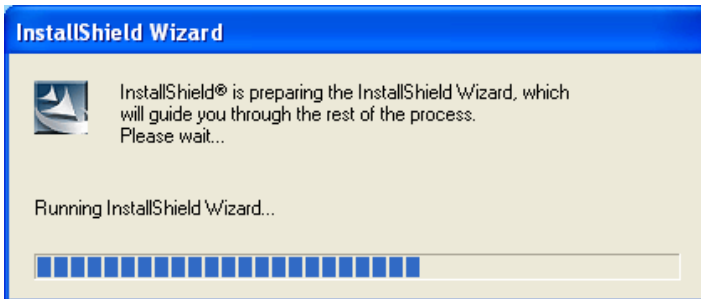


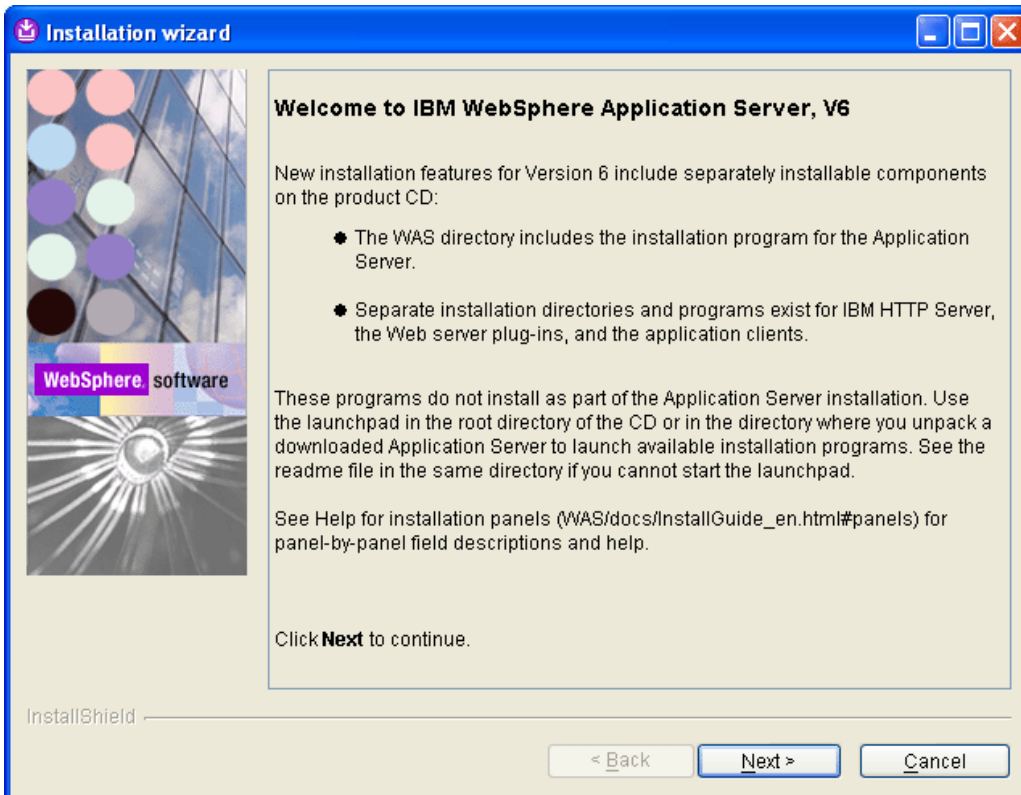
Figure 2: WebSphere Launchpad Screen

NOTE	<p>In this guide, we are separately installing the following components:</p> <ul style="list-style-type: none"> <li>• the WebSphere Application Server</li> <li>• the IBM HTTP Server, and</li> <li>• the Web server plug-in for these two components.</li> </ul> <p>These components will all be installed on the same server machine. It is possible to have each installed on separate machines but that is beyond the scope of this document.</p>
------	---

- Click on the [Launch the installation Wizard for WebSphere Application Server](#) link to launch the installation Wizard:



The WebSphere installation Wizard welcome screen appears:



**Figure 3: WebSphere Installation Wizard Welcome Screen**

- Click **Next>**. The software license agreement screen appears.



Figure 4: Software License Agreement

4. Accept the terms and click **Next>**. The System prerequisites screen appears.

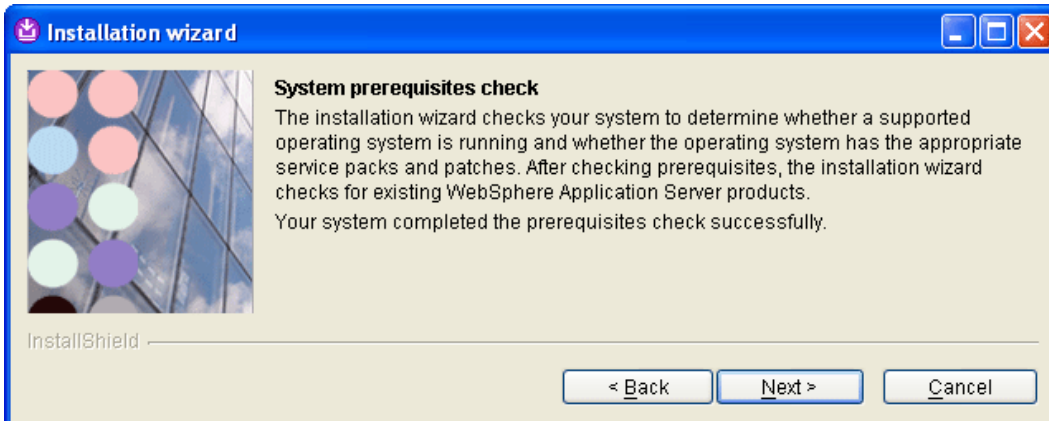


Figure 5: System Prerequisites Check

5. Click **Next>**. The Wizard asks you to specify an installation directory.

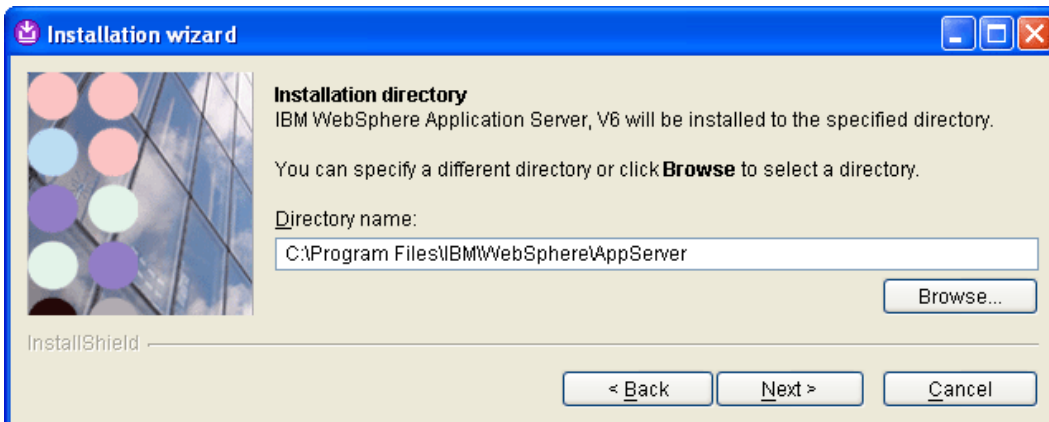
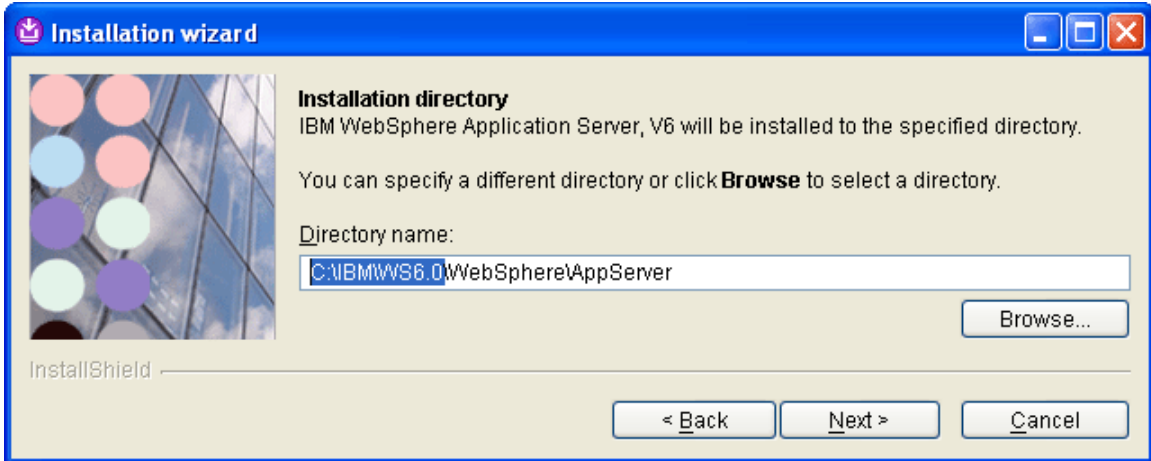


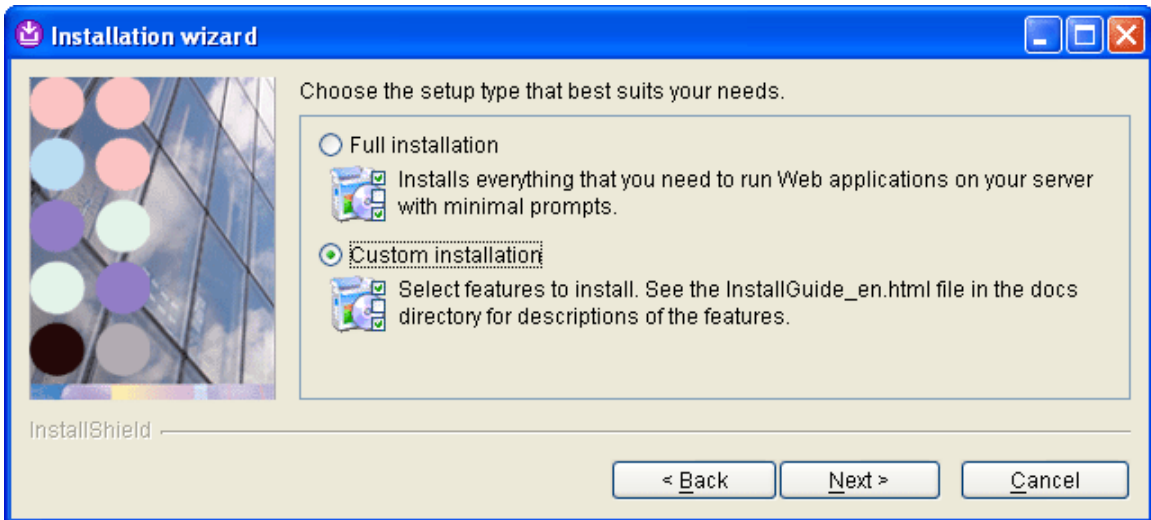
Figure 6: Default Installation Directory

6. Either accept the default locations or specify your own. If you plan to install more than one version of WebSphere, it's a good idea to use something like **C:\IBMWS6.0** as the base location where WS6.0 represents the version of WebSphere. For example:



**Figure 7: Customized Installation Directory**

7. Click **Next>**. The Wizard asks you to choose either a **Full** or **Custom** setup type. Performing a Custom installation allows you to avoid installation of all the sample applications and saves some time.



**Figure 8: Select Custom Installation**

8. Choose **Custom installation** and click **Next>**. A list of available features to install appears.

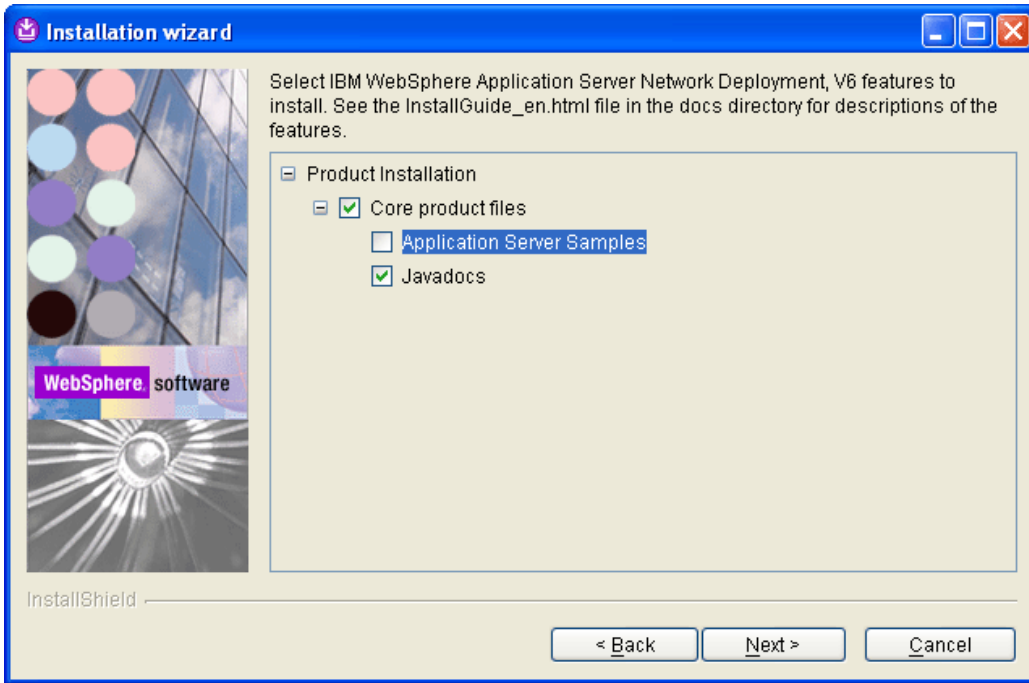


Figure 9: Select Features to Install

9. Unselect the **Application Server Samples** and click **Next>**. A list of ports appears.

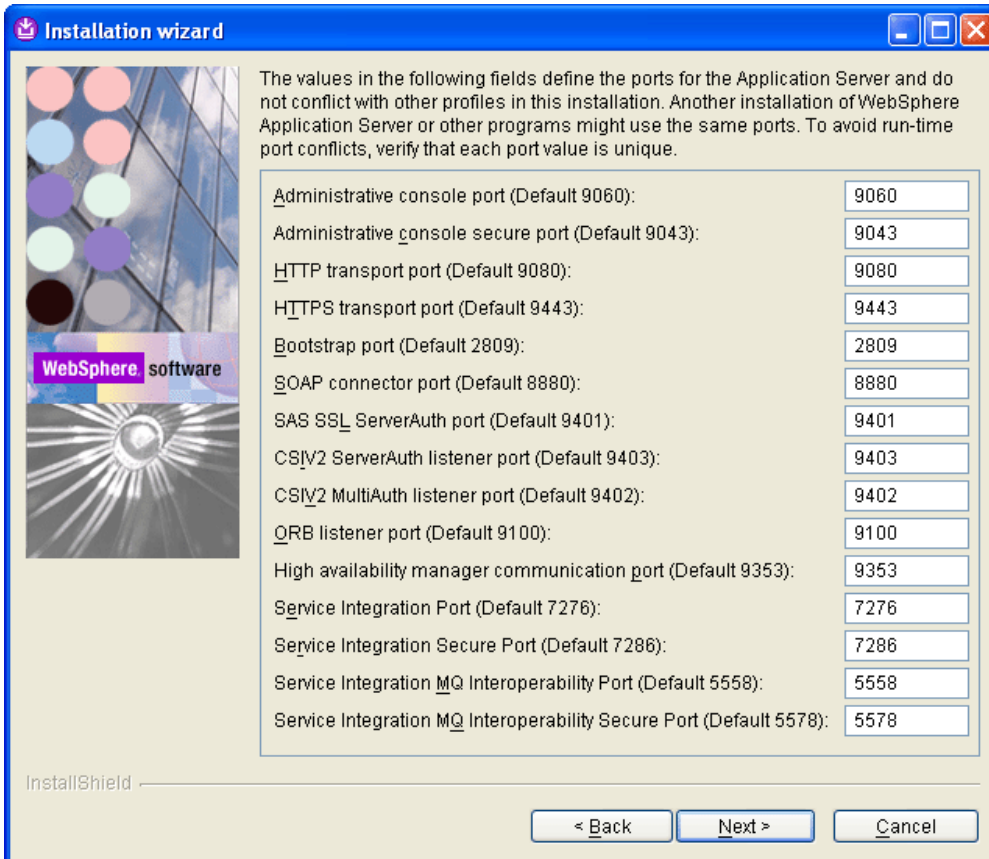


Figure 10: List of Ports



10. Click **Next>**. The Wizard asks you for the node name and hostname.



Figure 11: Node and Host Name

11. Accept the defaults and click **Next>**. The Wizard asks you choose whether to run WebSphere as a Windows service.

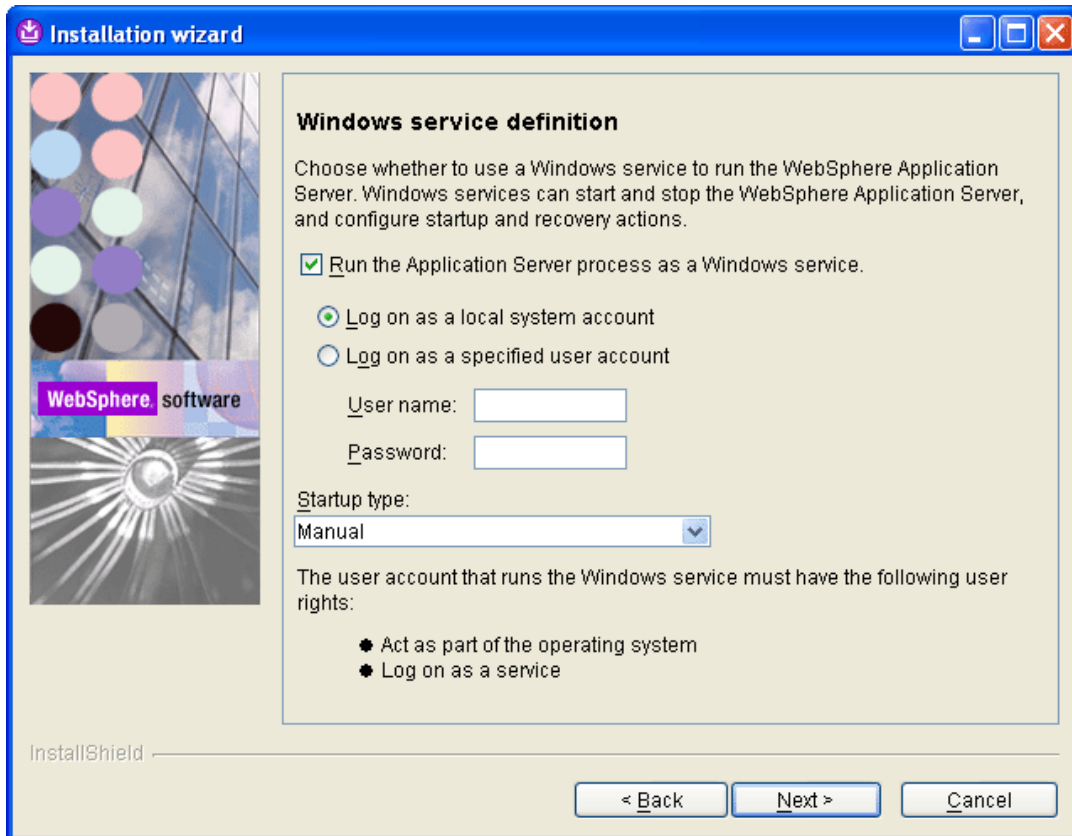
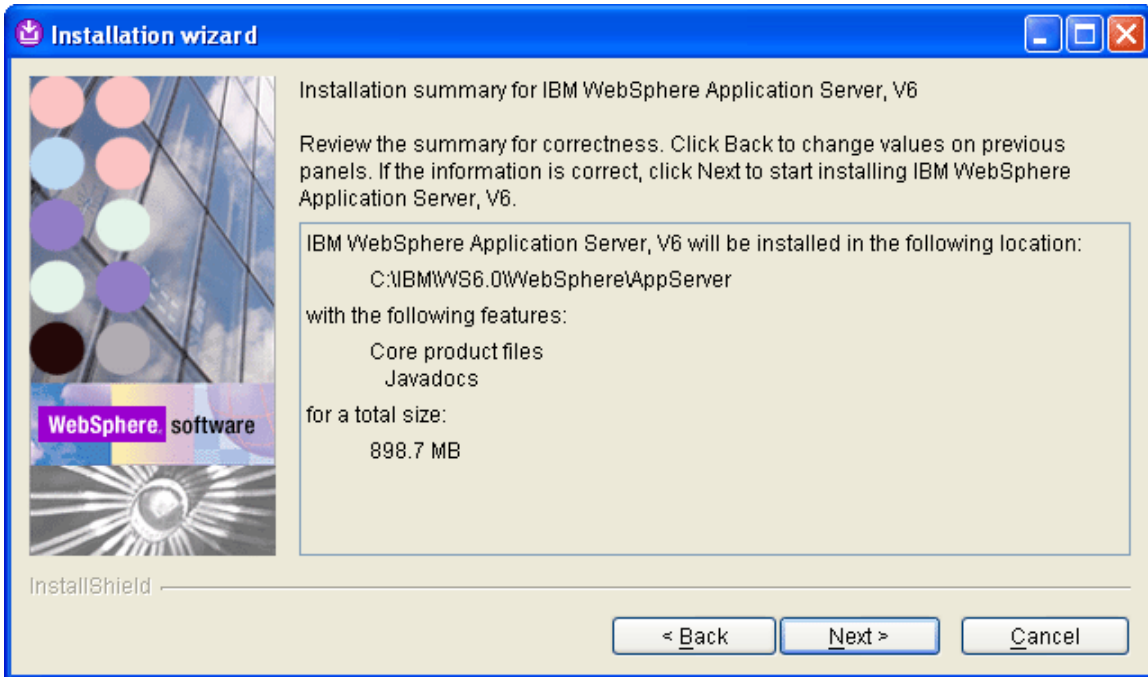


Figure 12: Windows Service Definition

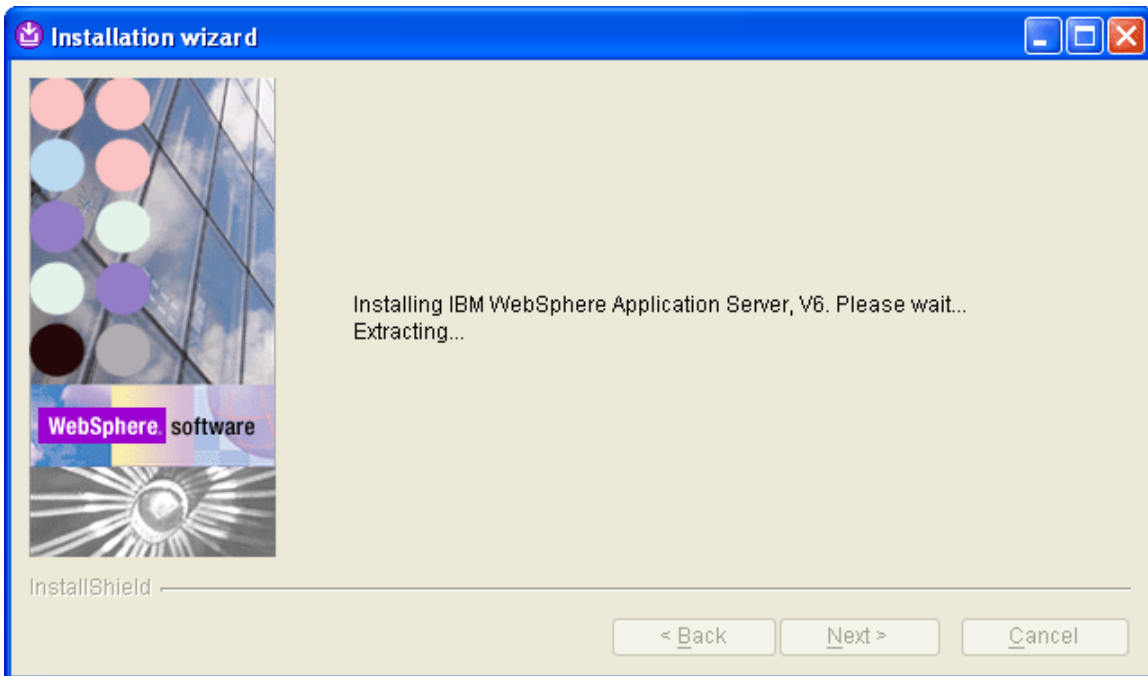


- Accept the defaults and click **Next>**. A summary of features that will be installed appears on the screen.



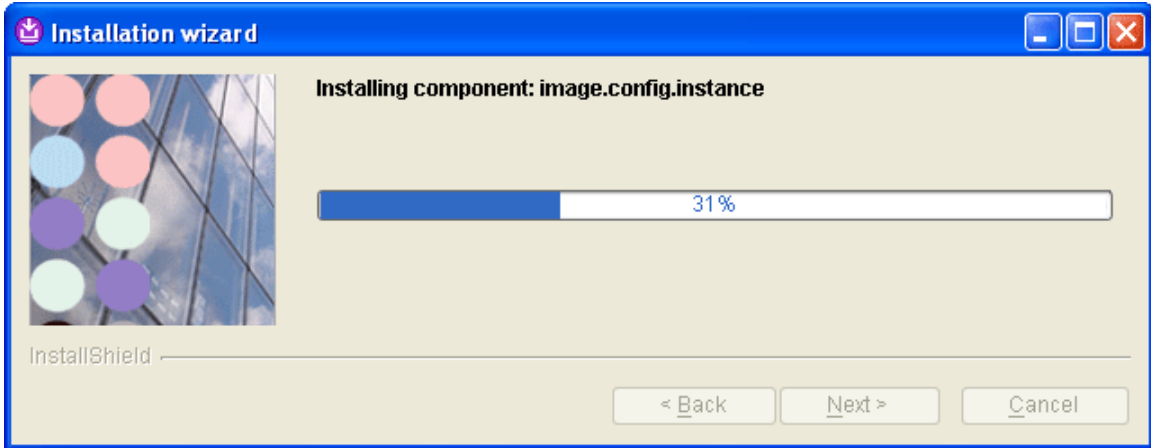
**Figure 13: Summary Screen**

- Review the installation summary and click **Next>**. The installation begins:



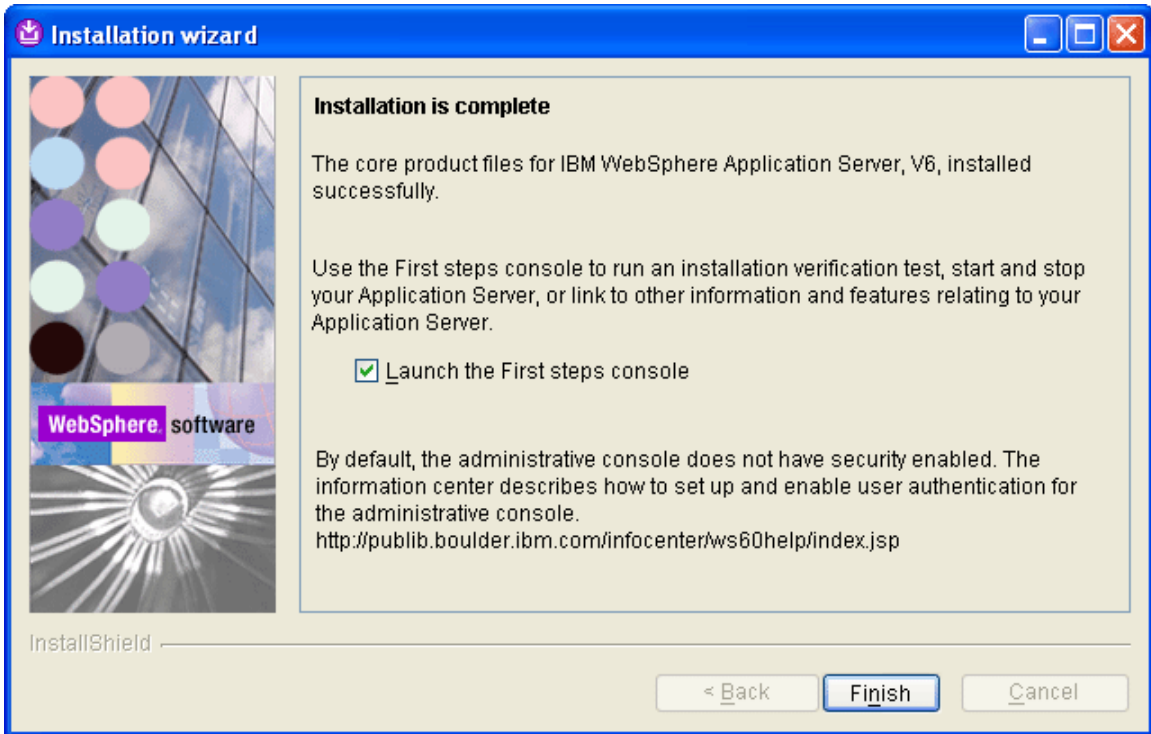
**Figure 14: Installation in Progress**

...and the core components will be installed



**Figure 15: Installing Core Components**

When the installation has completed the following screen appears.



**Figure 16: Installation Successfully Completed**

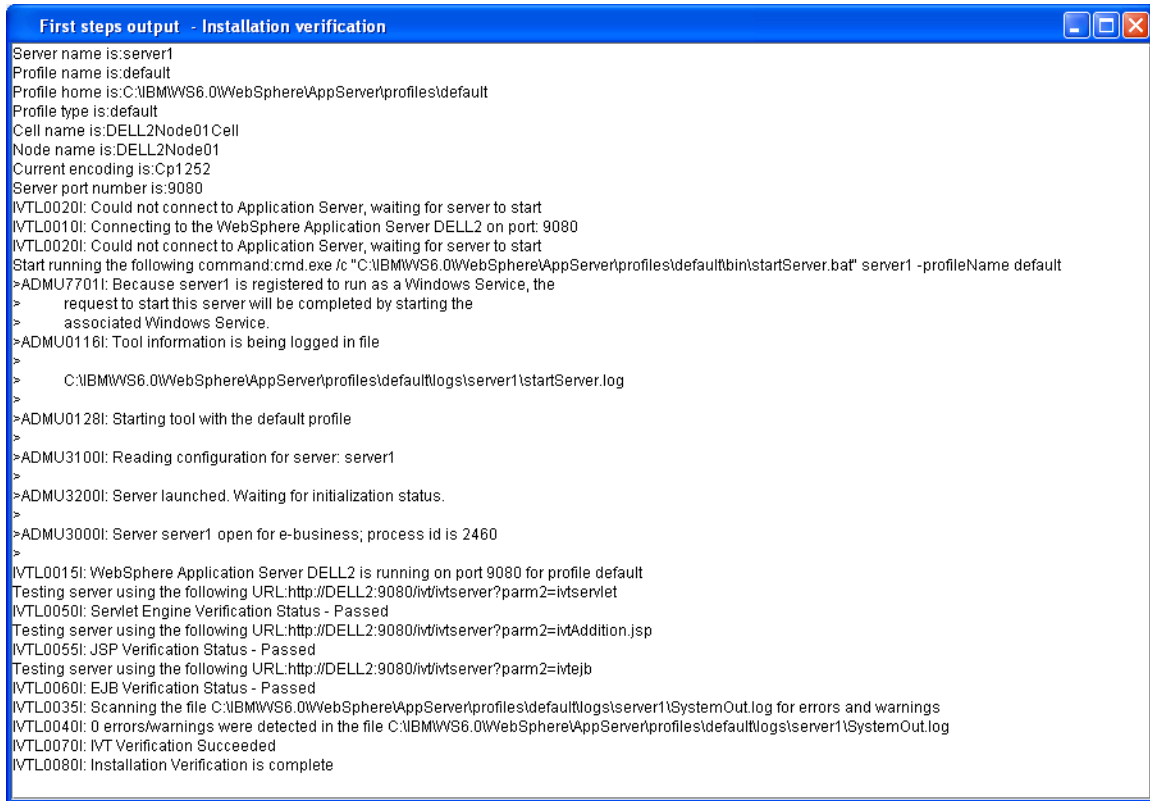
14. Click **Finish** to close this screen and open the First Steps console.



**Figure 17: First Steps Screen**

15. Click [Installation verification](#) to test the installation.

A separate window appears displaying a list of diagnosis messages.



```

First steps output - Installation verification
Server name is:server1
Profile name is:default
Profile home is:C:\IBMWS6.0\WebSphere\AppServer\profiles\default
Profile type is:default
Cell name is:DELL2Node01Cell
Node name is:DELL2Node01
Current encoding is:Cp1252
Server port number is:9080
IVTL0020I: Could not connect to Application Server, waiting for server to start
IVTL0010I: Connecting to the WebSphere Application Server DELL2 on port: 9080
IVTL0020I: Could not connect to Application Server, waiting for server to start
Start running the following command:cmd.exe /c "C:\IBMWS6.0\WebSphere\AppServer\profiles\default\bin\startServer.bat" server1 -profileName default
>ADMU7701I: Because server1 is registered to run as a Windows Service, the
> request to start this server will be completed by starting the
> associated Windows Service.
>ADMU0116I: Tool information is being logged in file
>
> C:\IBMWS6.0\WebSphere\AppServer\profiles\default\logs\server1\startServer.log
>
>ADMU0128I: Starting tool with the default profile
>ADMU3100I: Reading configuration for server: server1
>
>ADMU3200I: Server launched. Waiting for initialization status.
>
>ADMU3000I: Server server1 open for e-business; process id is 2460
>
IVTL0015I: WebSphere Application Server DELL2 is running on port 9080 for profile default
Testing server using the following URL:http://DELL2:9080/ivtserver?parm2=ivtserverlet
IVTL0050I: Servlet Engine Verification Status - Passed
Testing server using the following URL:http://DELL2:9080/ivtserver?parm2=ivtAddition.jsp
IVTL0055I: JSP Verification Status - Passed
Testing server using the following URL:http://DELL2:9080/ivtserver?parm2=ivtejb
IVTL0060I: EJB Verification Status - Passed
IVTL0035I: Scanning the file C:\IBMWS6.0\WebSphere\AppServer\profiles\default\logs\server1\SystemOut.log for errors and warnings
IVTL0040I: 0 errors/warnings were detected in the file C:\IBMWS6.0\WebSphere\AppServer\profiles\default\logs\server1\SystemOut.log
IVTL0070I: IVT Verification Succeeded
IVTL0080I: Installation Verification is complete
  
```

**Figure 18: Validating the Installation**

When the following message appears then the installation is complete:

Installation verification is complete

16. Click the [Exit](#) link to exit the First Steps screen and return to the Launchpad screen.

## Step 2: Install the IBM HTTP Server

1. Click on the [Launch the installation Wizard for IBM HTTP Server](#) link on the Launchpad screen to start the installation Wizard:

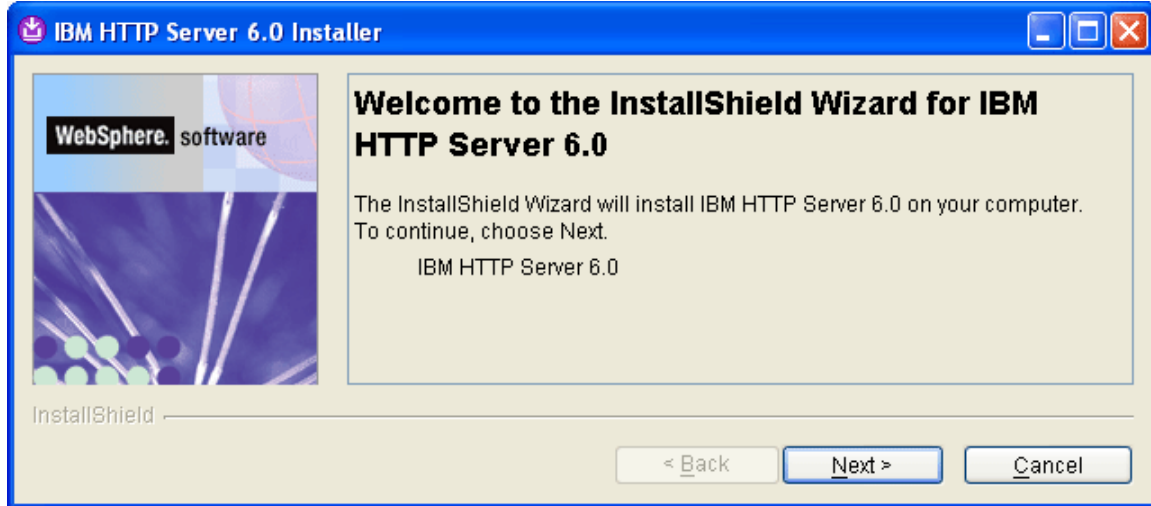


Figure 19: InstallShield Wizard for the IBM HTTP Server

2. Click **Next>**. The license agreement appears.

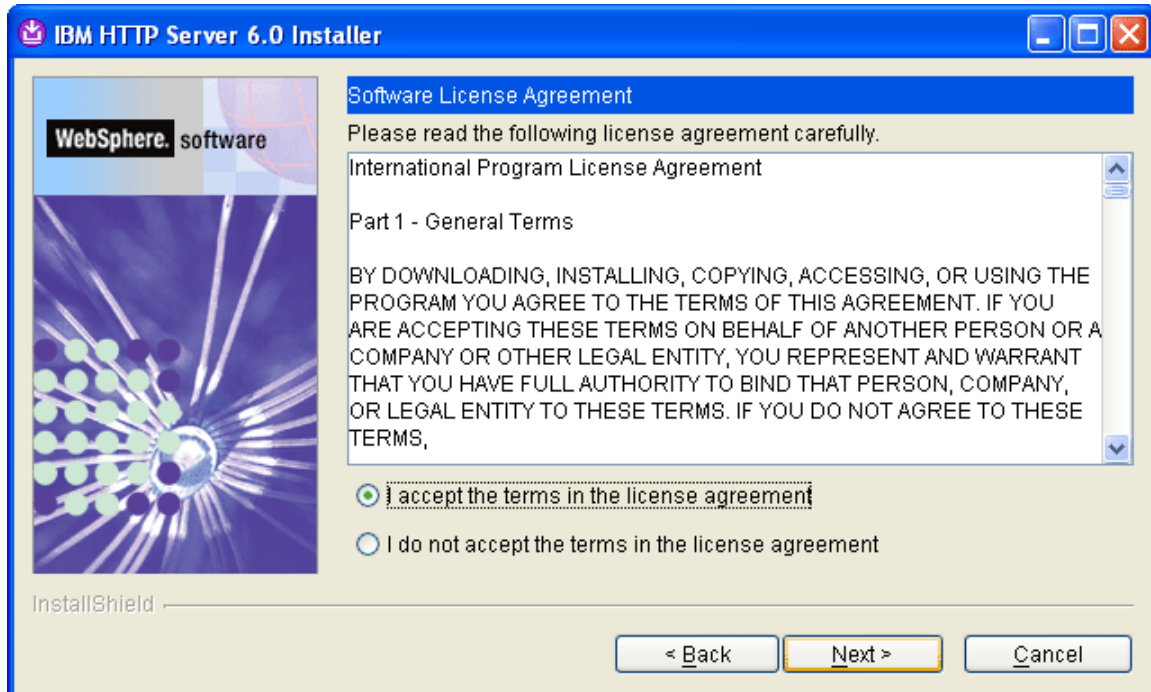
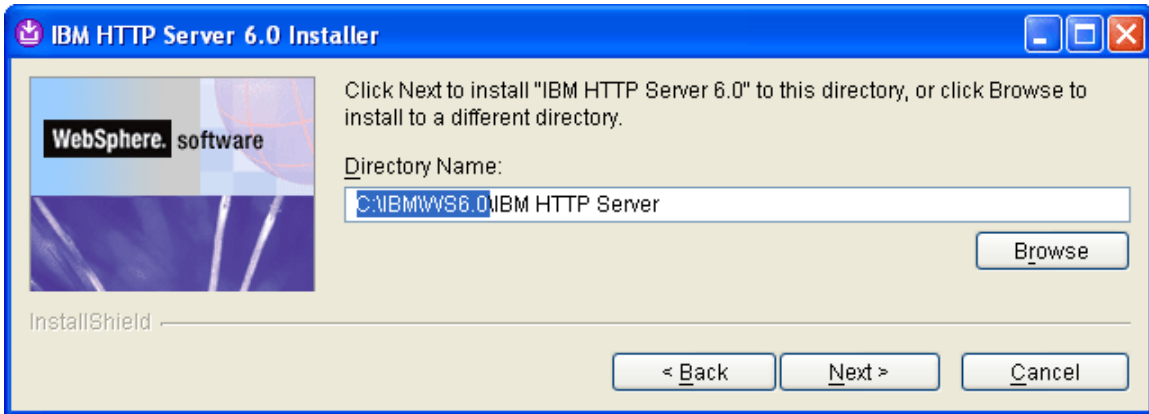


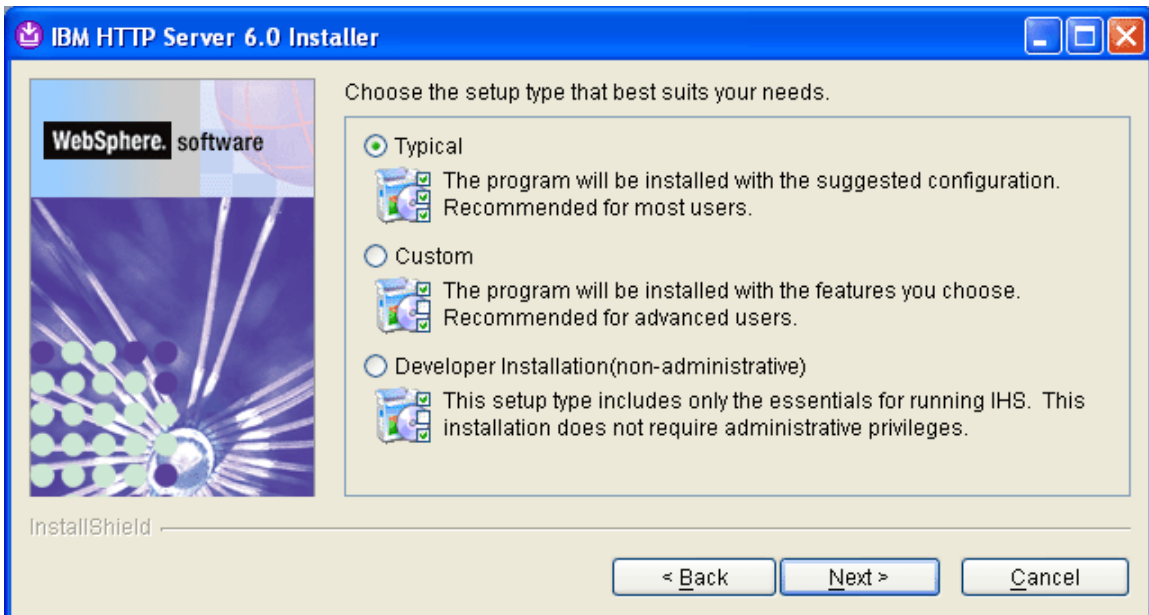
Figure 20: License Agreement Screen

3. Accept the terms and click **Next>**. The Wizard asks you for an installation directory.



**Figure 21: Installation Directory**

4. Select the base directory that you used for the Application Server (i.e., **C:\IBMWS6.0**) and click **Next>**. The Wizard asks you for the installation setup type.



**Figure 22: Installation Setup Type**

5. Select the **Typical** setup and click **Next>**. The Wizard asks whether to run the IBM HTTP Server as a Windows Service.



Figure 23: Run IBM HTTP Server as a Windows Services

6. Select **Log on as Local System account** and click **Next>**. A summary of the components to be installed appears on the screen.

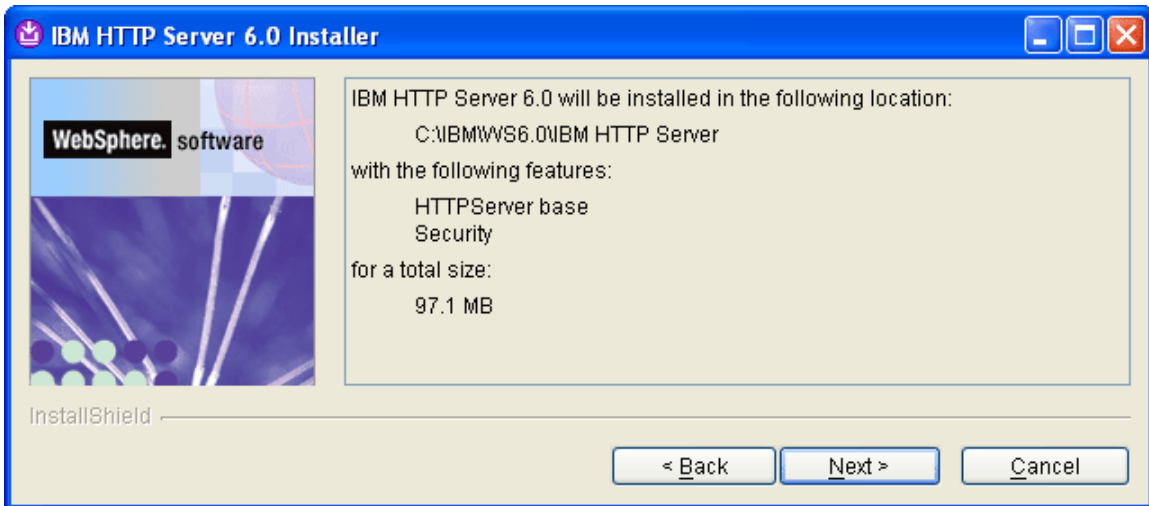
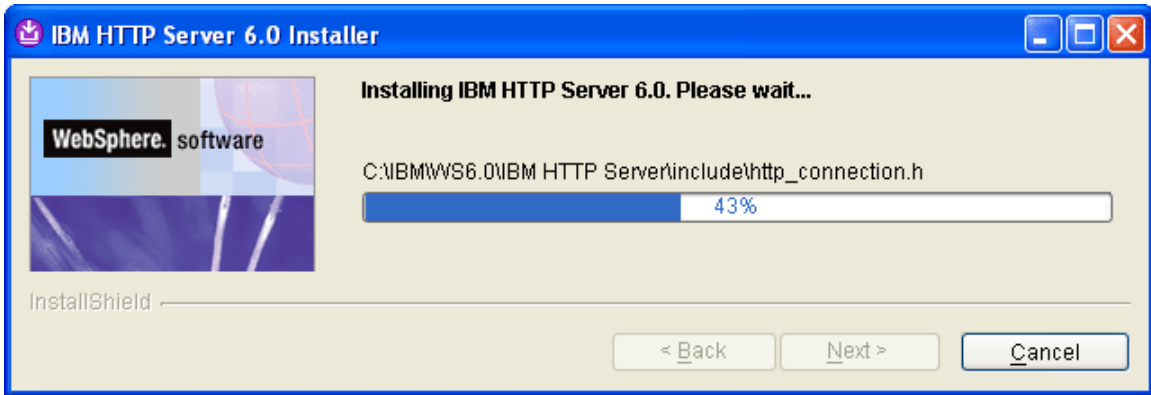


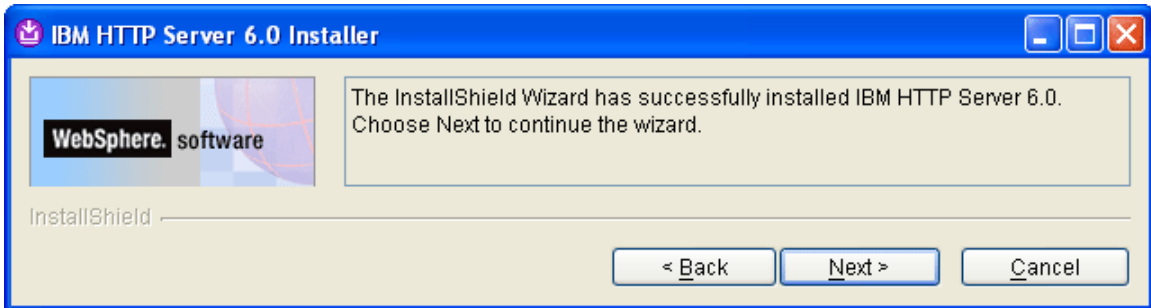
Figure 24: Installation Summary Screen

- Click **Next>**. The installation begins:



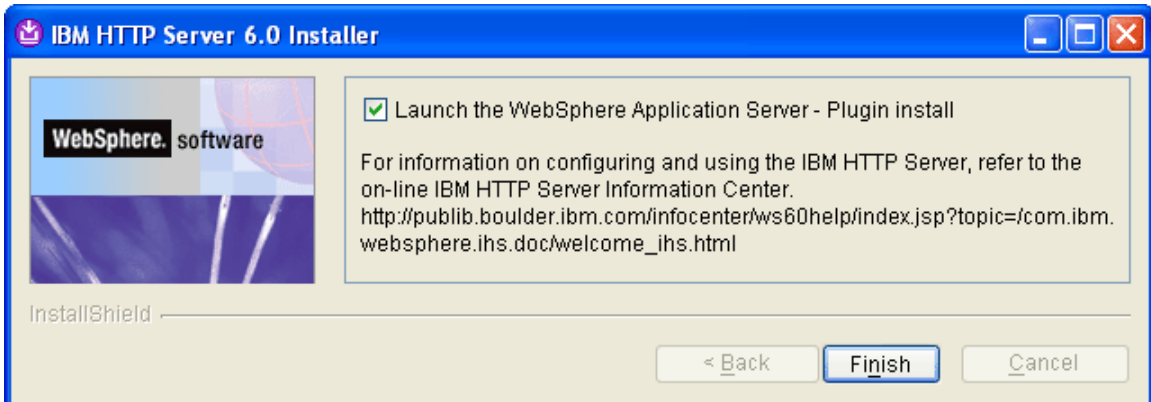
**Figure 25: Installing IBM HTTP Server**

This screen appears upon the successful completion of the installation:



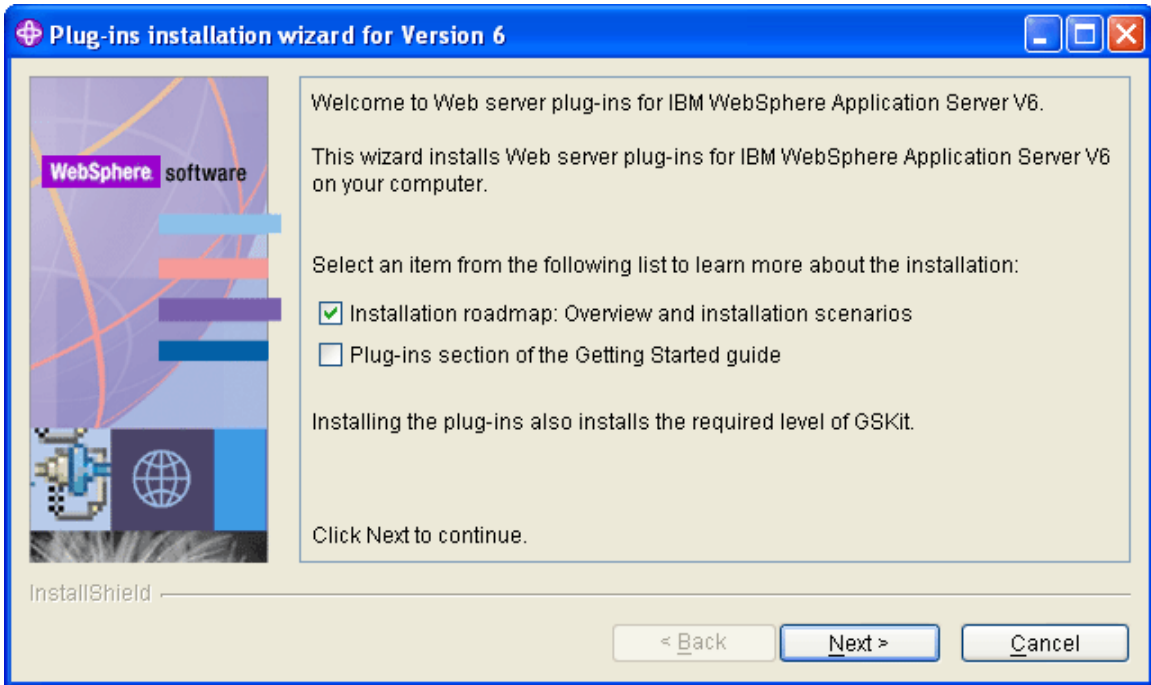
**Figure 26: Installation Completed**

- Click **Next>**. The following screen appears. This screen asks you to install the WebSphere plug-ins.



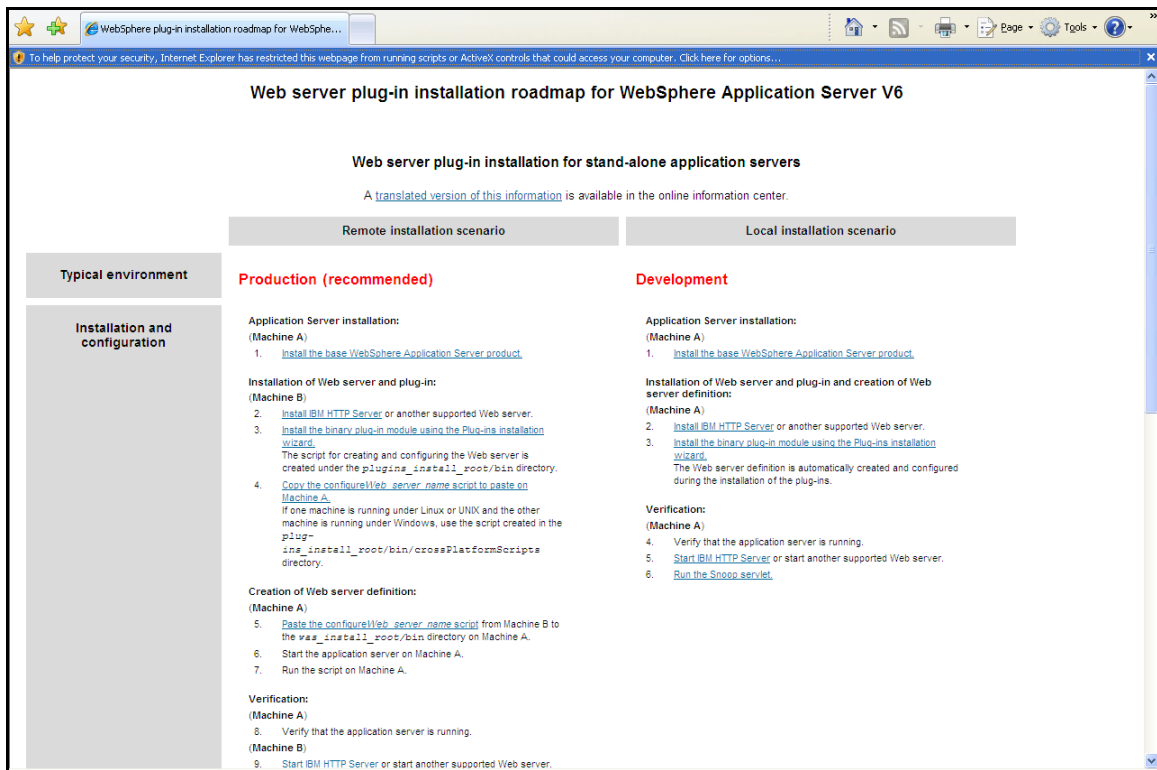


- Click **Finish**. The welcome screen for the plug-in installation Wizard appears.



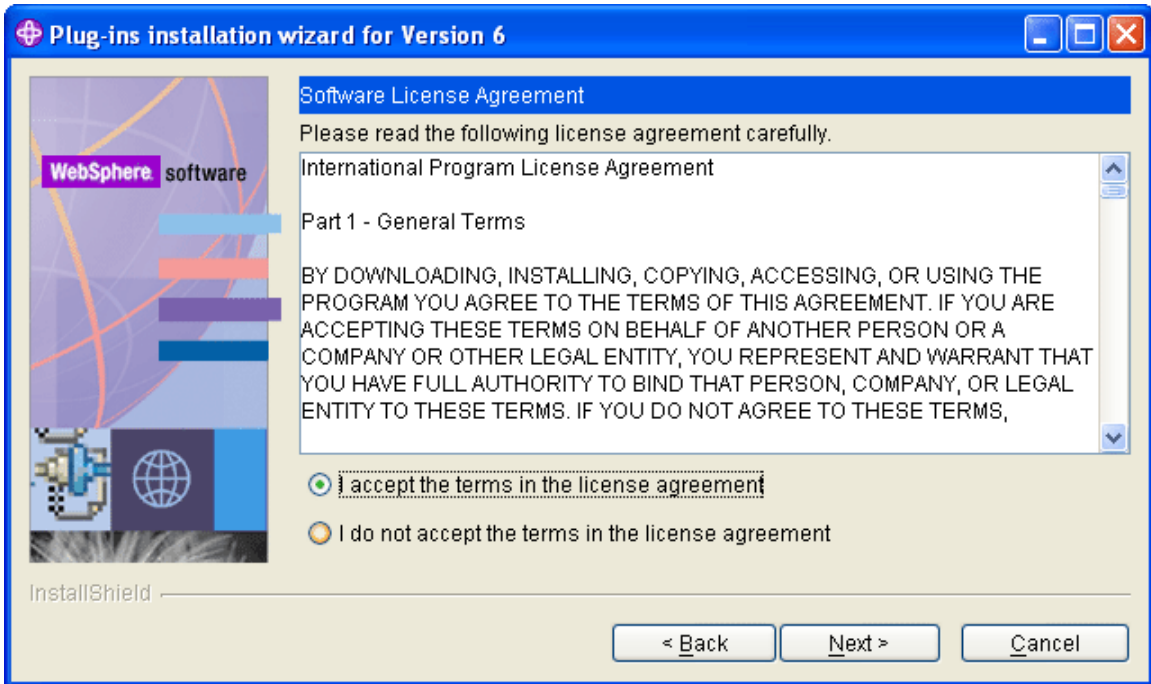
**Figure 27: Plugin Installation Wizard Welcome Screen**

- To learn more about the plug-in installation, check a box and click the **Next>** button. When you do you, your browser is launched and you are transferred to WebSphere’s support site.



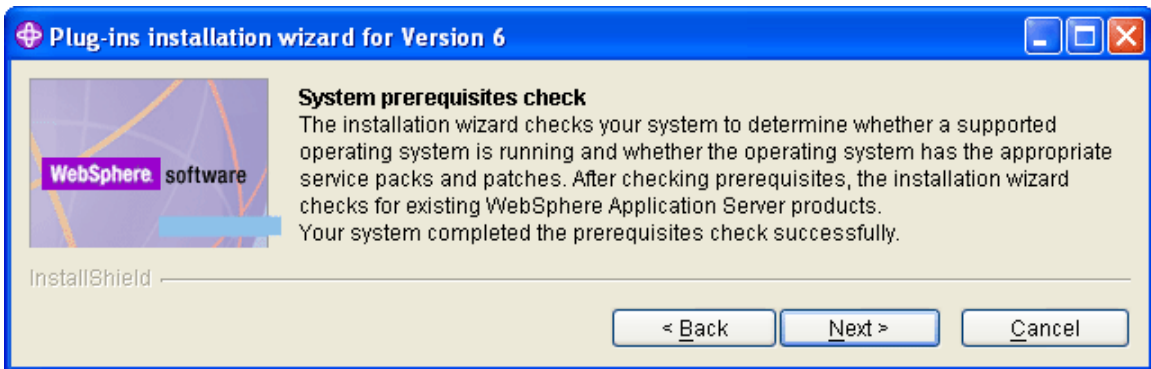
**Figure 28: WebSphere Support Site**

- To continue with the installation without viewing the documentation, unselect the box and click the **Next>** button. The software license agreement for the plug-ins appears.



**Figure 29: Software License Agreement**

10. Accept the terms and click **Next>**. The Wizard will run a prerequisite check of your system.



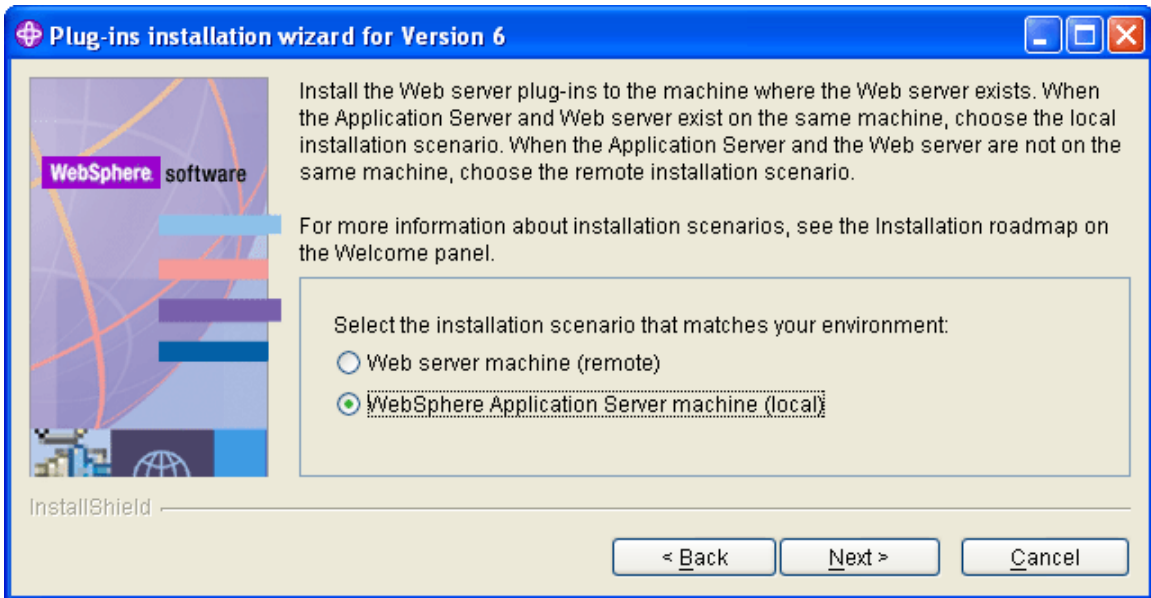
**Figure 30: System Prerequisites Check**

11. Click **Next>**. The system asks you to select the server to configure.



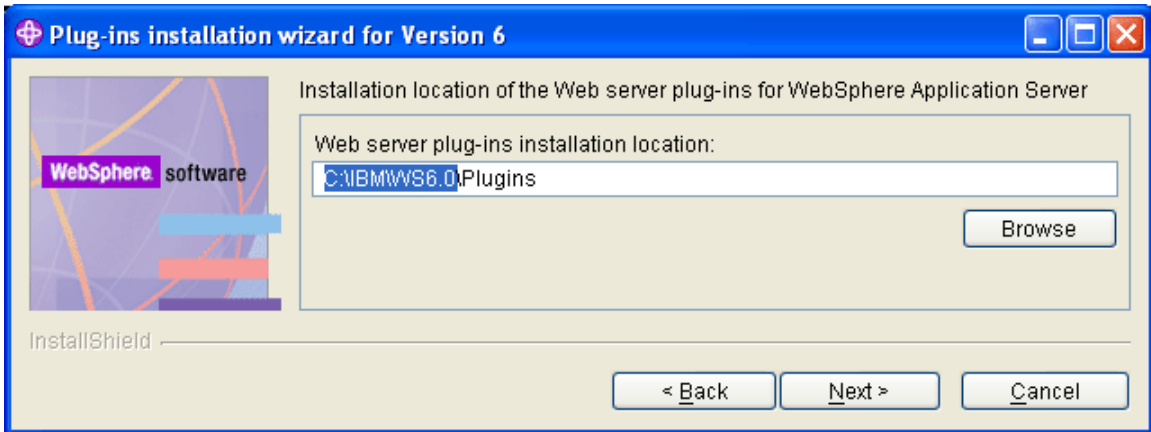
**Figure 31: Select Web Server to Configure**

12. Select **IBM HTTP Server V6** and click **Next>**. The Wizard asks you for the location of the server.



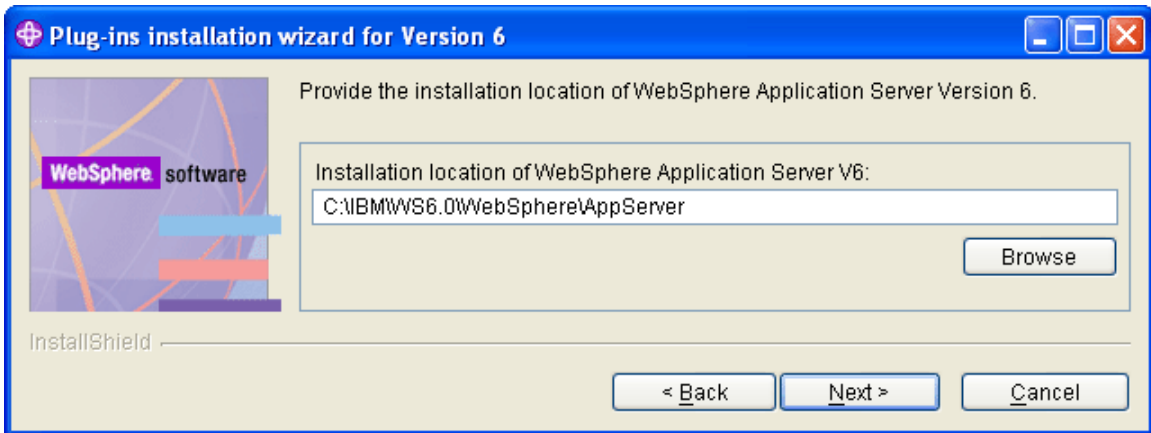
**Figure 32: Select a Local Installation**

- Choose the local installation scenario and click **Next>**. The Wizard asks you for the plug-in installation directory.



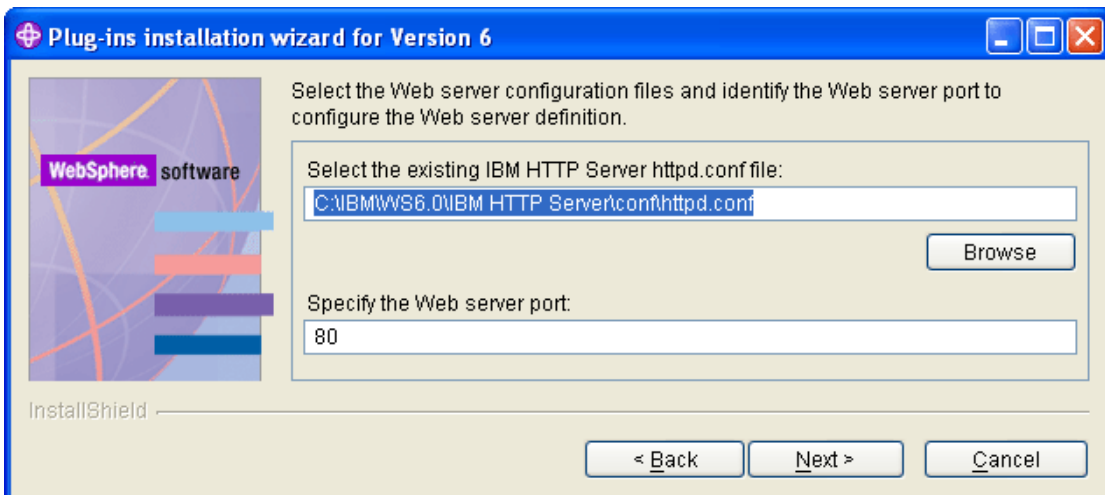
**Figure 33: Specify the Target Directory for the Plug-ins**

- Select the target directory and click **Next>**. The Wizard asks you for the location of the server.



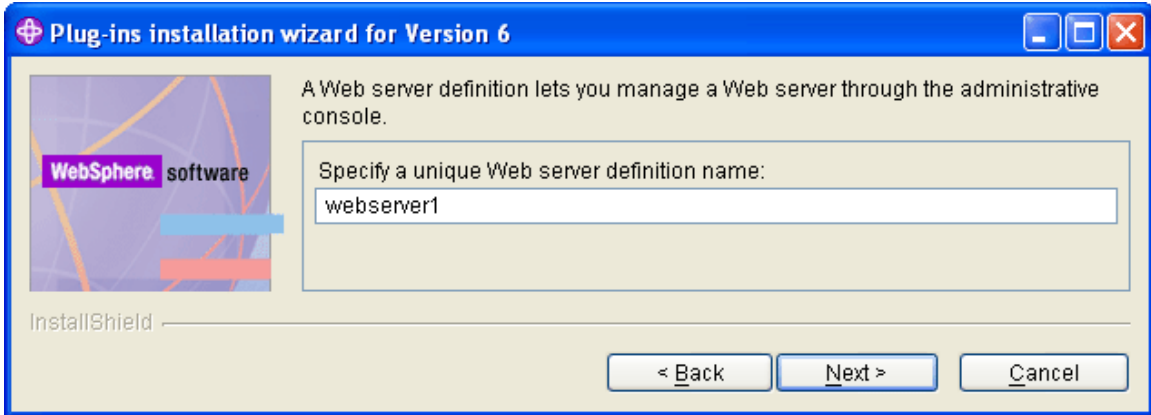
**Figure 34: Specify the Server Location**

- Verify the location of the application server and click **Next>**. The Wizard asks you for the location of the **httpd.conf** file and the Web server port.



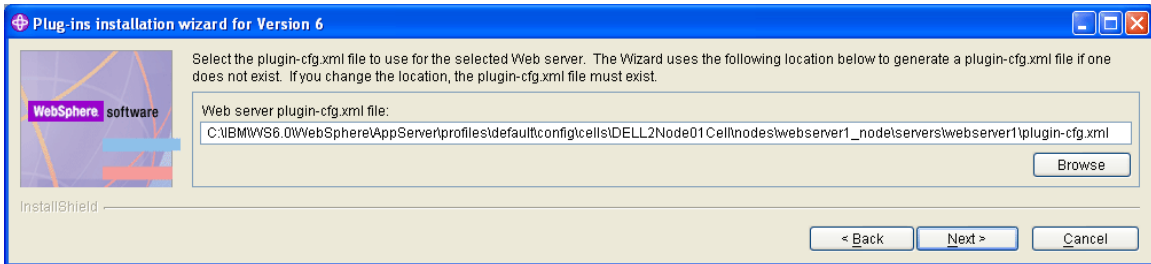
**Figure 35: Specify the httpd.conf File and the Web Server Port**

- Browse to the **httpd.conf** file location and specify the Web server port, and click **Next>**. The Wizard asks you for a Web Server definition name.



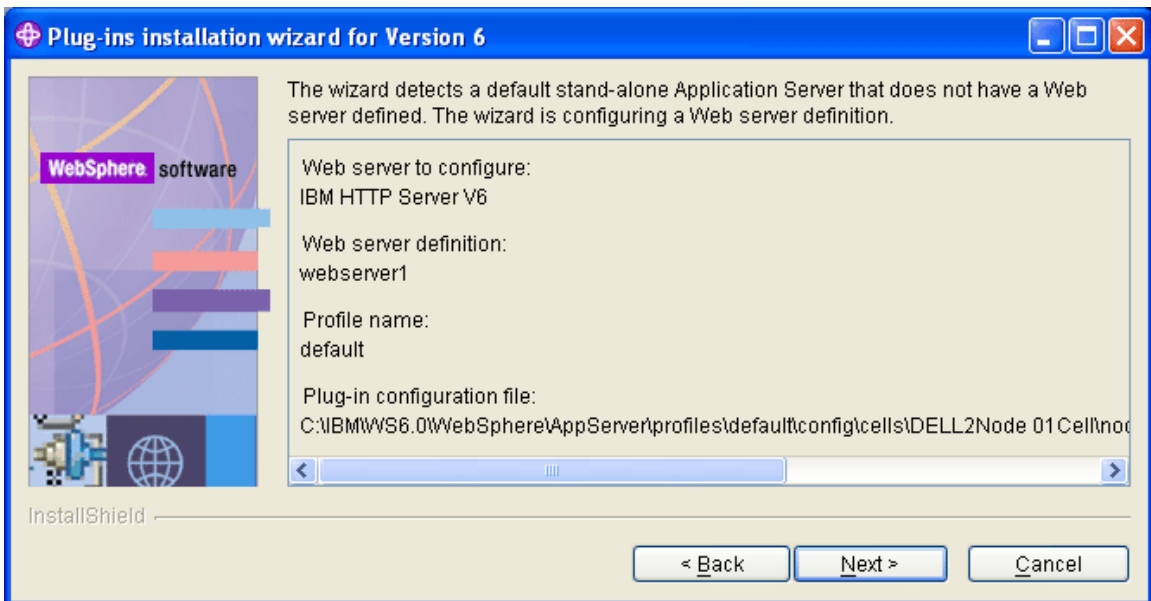
**Figure 36: Specify the Web Server Definition Name**

- Enter a name and click **Next>**. The Wizard asks you to confirm the path to the **plug-in-cfg.xml** file.



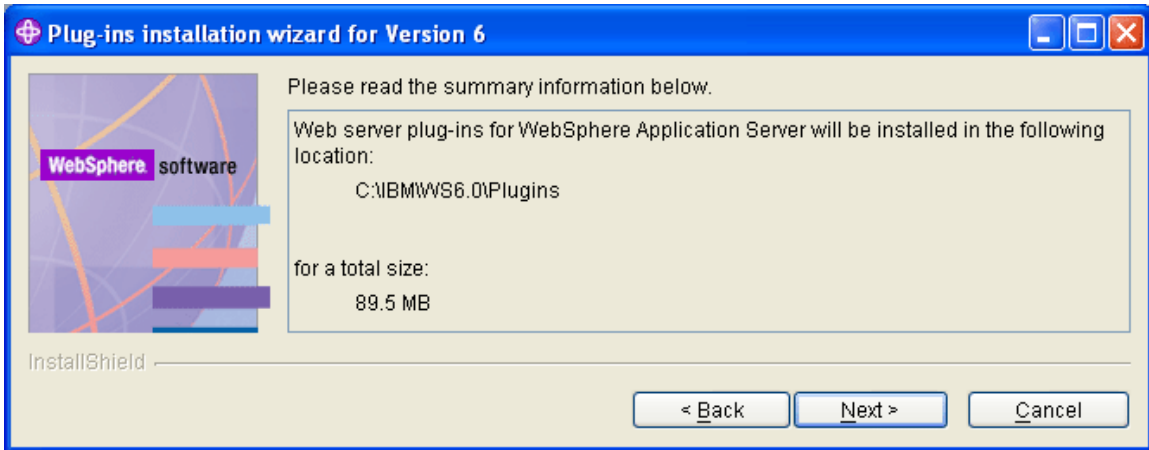
**Figure 37: Specify Path to plug-in-cfg.xml File**

- Click **Next>**. The Wizard displays the first summary screen of the configuration.



**Figure 38: Installation Summary Screen 1 of 2**

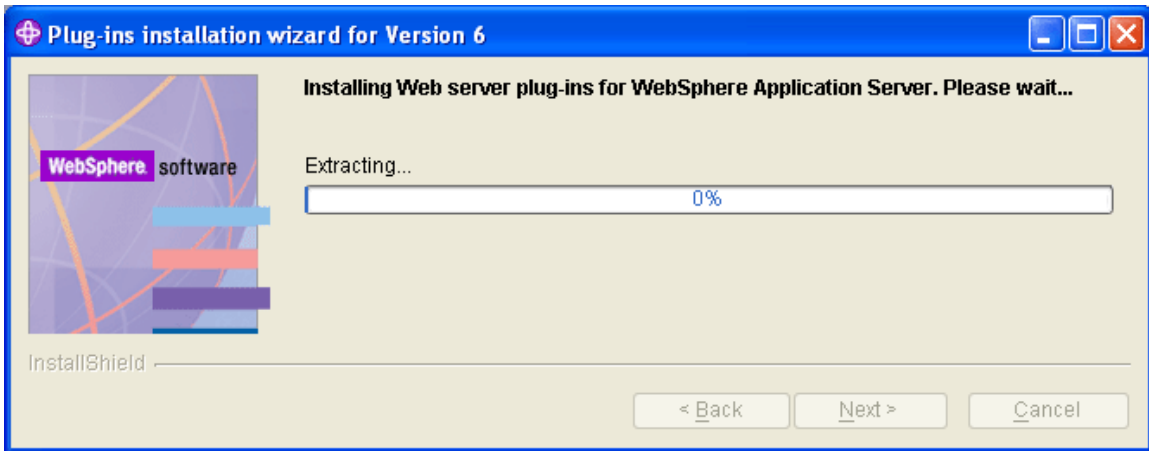
19. Click **Next>**. The Wizard displays the second summary screen of the configuration.



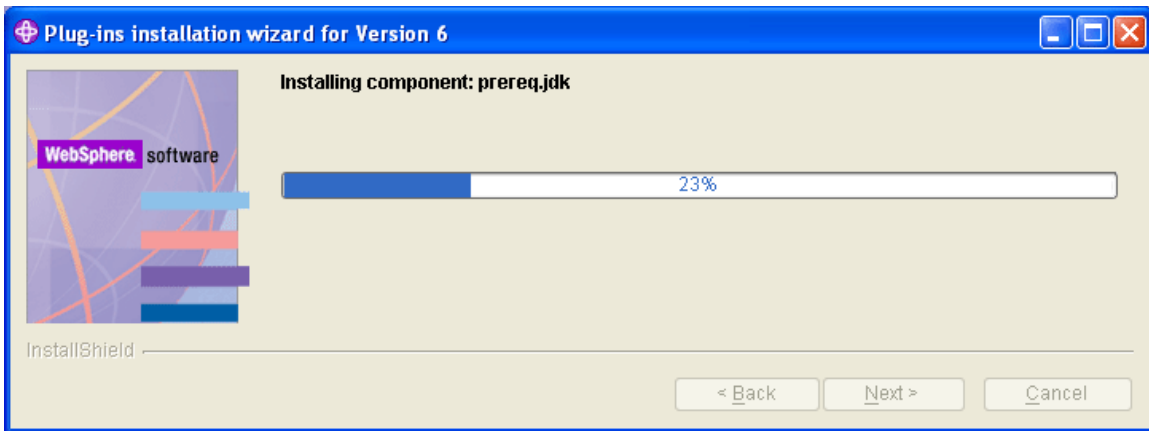
**Figure 39: Installation Summary Screen 2 of 2**

20. Click **Next>**. The installation begins.

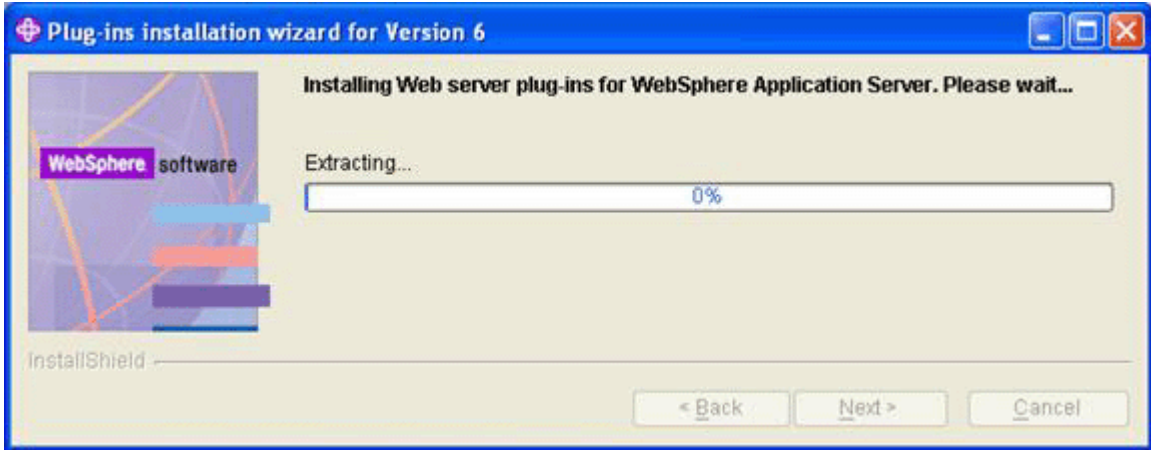
Several screens will appear to allow you to follow the progress of the installation.



**Figure 40: Installation Progress Screen 1 of 3**

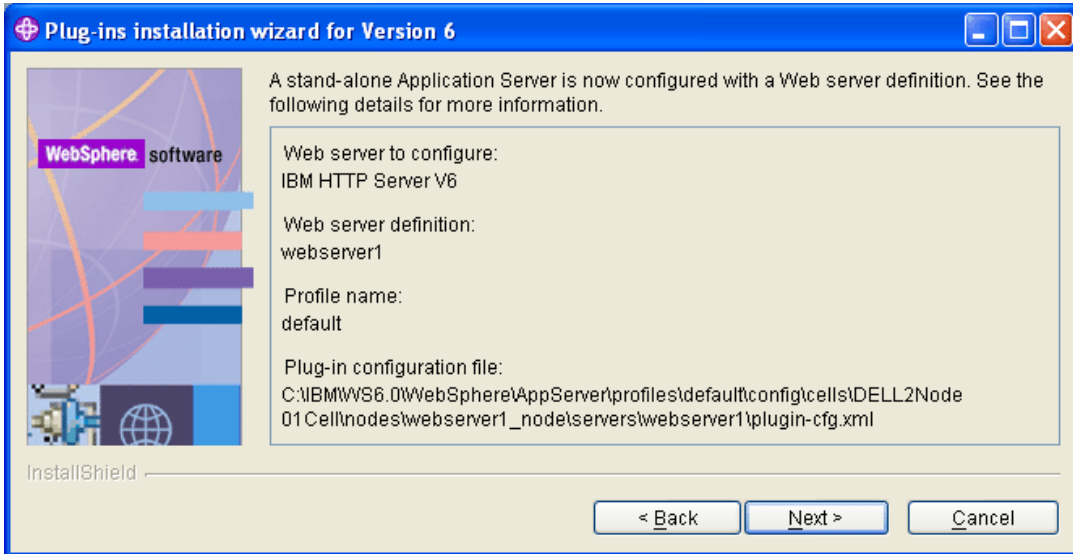


**Figure 41: Installation Progress Screen 2 of 3**



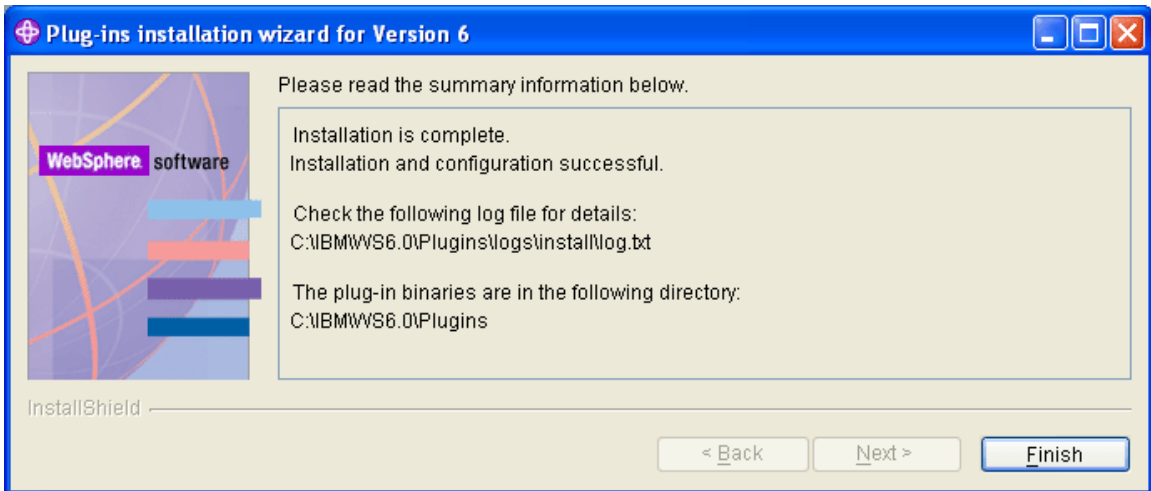
**Figure 42: Installation Progress Screen 3 of 3**

When the installation finishes the following summary screen appears:



**Figure 43: Installation Summary Screen 1 of 2**

21. Click **Next>**. The summary information below appears.



**Figure 44: Installation Summary Screen 2 of 2**



22. Click **Finish**. You will be returned to the Launchpad screen.

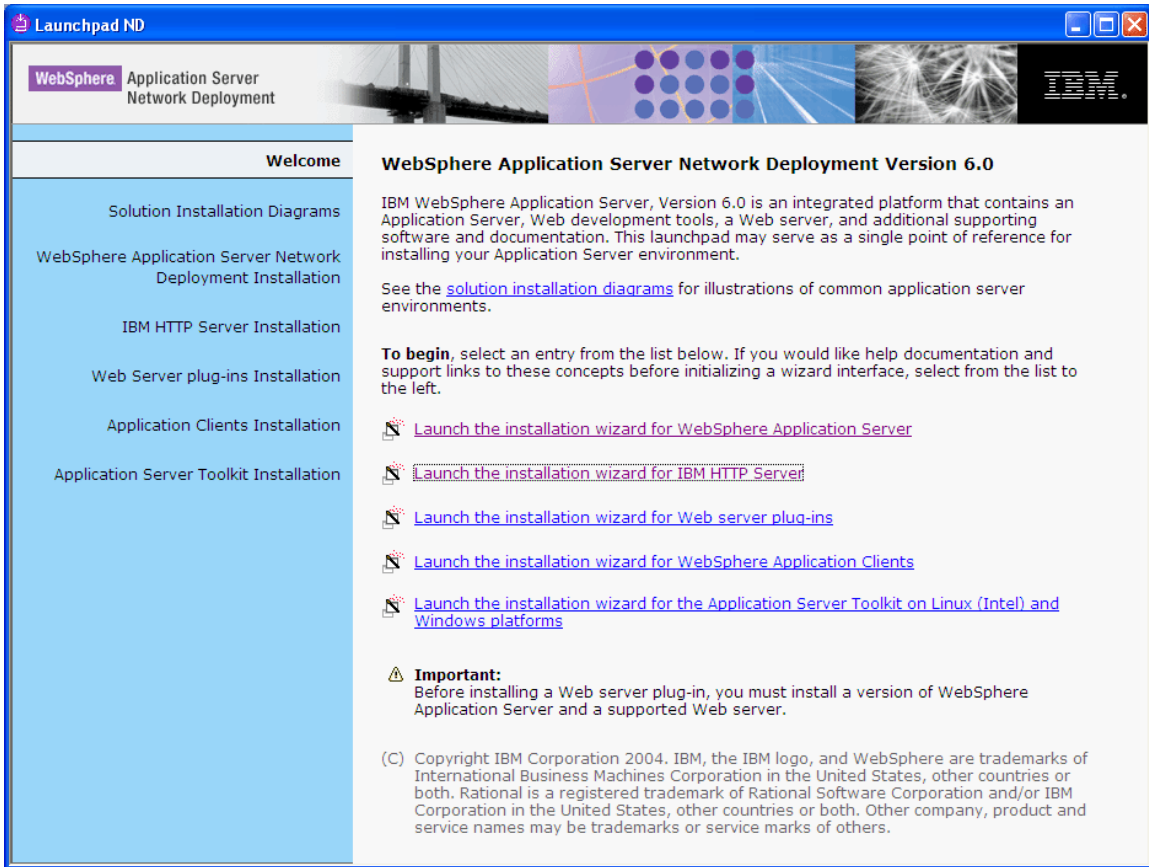


Figure 45: Return to Launchpad Base Screen

23. Close this window.

24. Open Services under the Control Panel to see the new IBM services and verify that WebSphere is running. You can also make it Automatic so that it will start when the machine is rebooted. See the next section to automate the startup process.

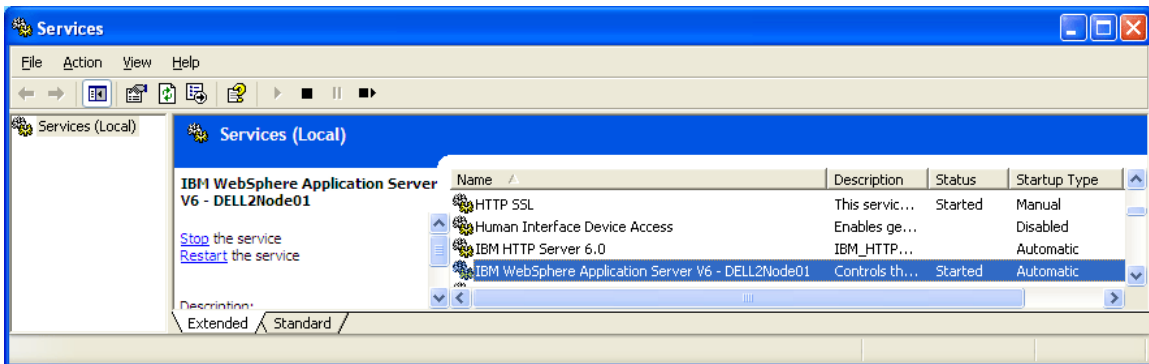


Figure 46: WebSphere Services in the Control Panel



## Step 3: Start WebSphere Services as Windows Services

Starting the WebSphere Server from the **First Steps** screen or from the Windows Menu runs the service within the scope of the current user. This means that when the current user logs out of windows, the service stops.

To run WebSphere services outside of the scope of the current user session, use the Windows Services that were implemented during this installation.

1. Open **Services** under your machine's **Control Panel**.

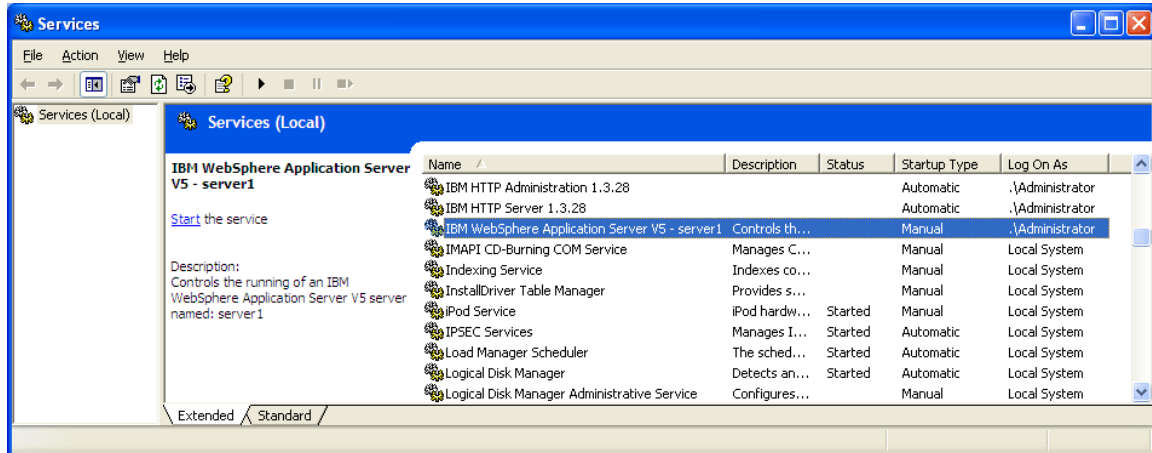


Figure 47: IBM WebSphere Services

2. Change the **Log On As** for each service from **.\Administrator** to **Local System**.
3. Turn off the **IBM HTTP Administration service** (this is only used for administration of the http server which is not needed).
4. Set the “IBM WebSphere Application Server v6 – server1” **Startup Type** to **Automatic**.

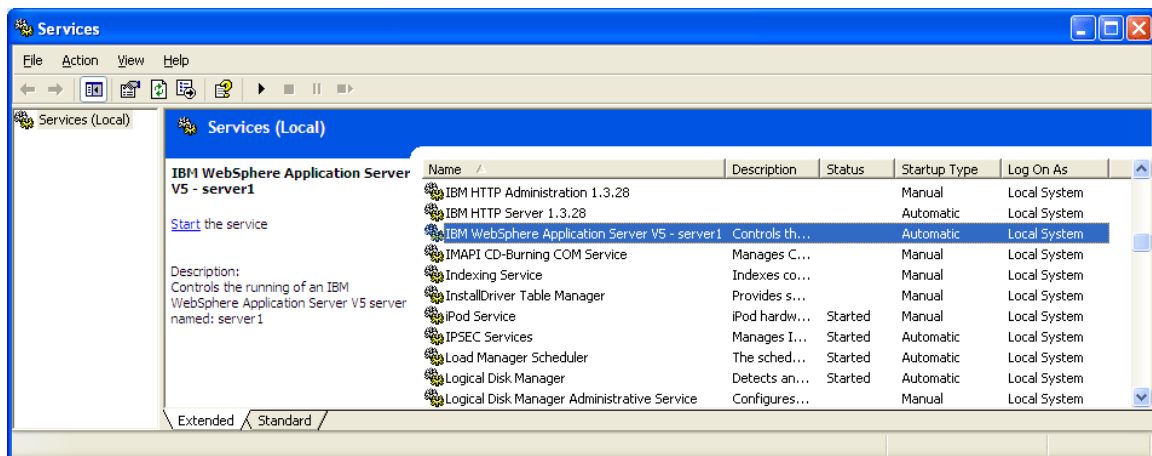


Figure 48: Set WebSphere Startup Type to Automatic

5. Start the **IBM HTTP Server** and **IBM WebSphere Application Server V6 – server1**.

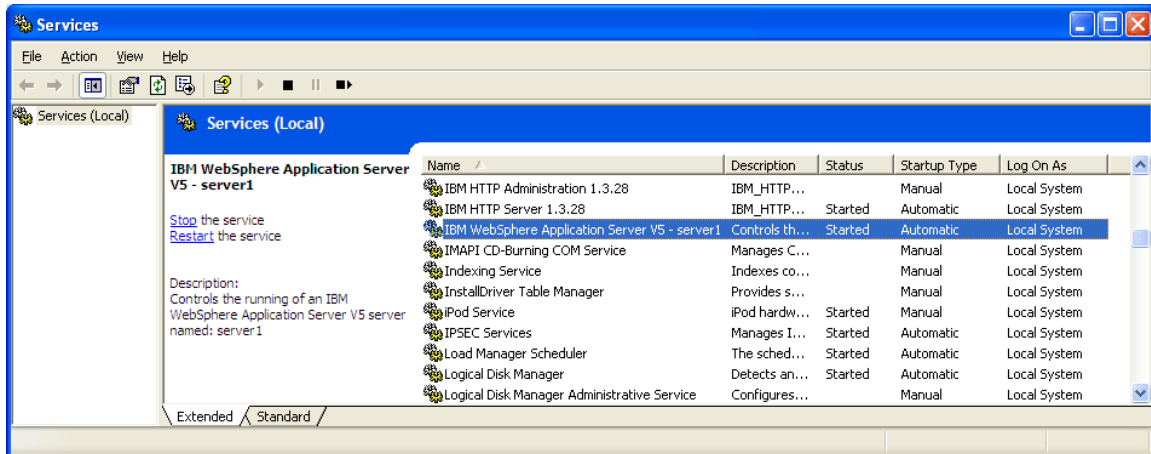
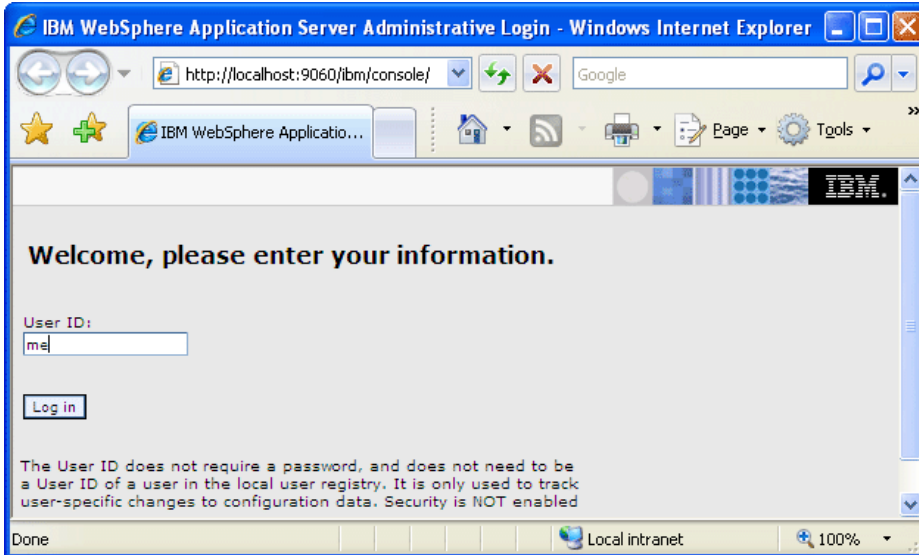


Figure 49: Start IBM HTTP Server and IBM WebSphere Application Server V6 – server1

## Step 4: Configure the Java Virtual Machine

1. Open the WebSphere Administrative Console from the Start menu:

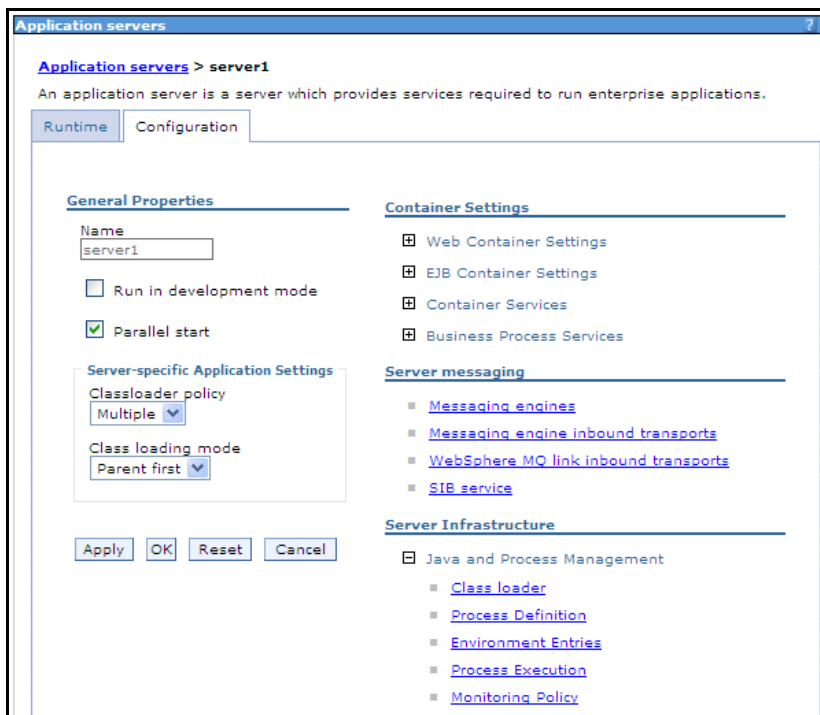
**Start>Programs>IBM WebSphere Application Server>Administrative Console**



**Figure 50: WebSphere Administrative Console Login Screen**

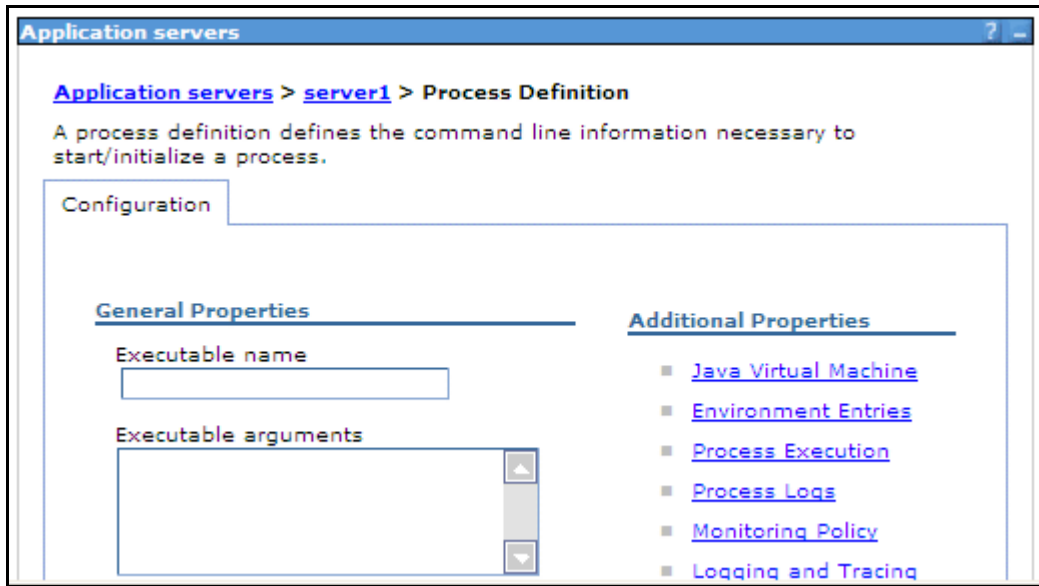
2. Enter anything for the User ID and click on the **Log in** button (the Administrative Console uses this to keep track of any edits that are made within the session).
3. From the menu in the left frame select [Servers->Application Servers->server1](#).

The screen below appears:



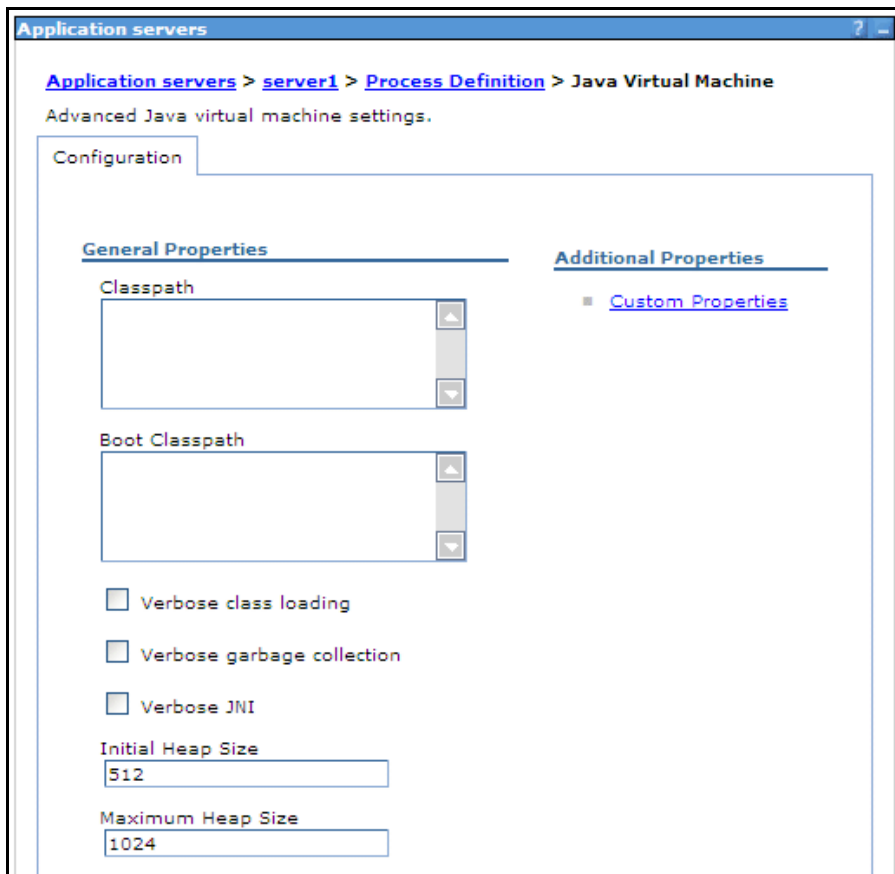
**Figure 51: Application Servers > server1**

- Click on **Java and Process Management->Process Definition** under **Server Infrastructure**. The screen below appears:



**Figure 52: Application Servers > server1 > Process Definition**

- Click on **Java Virtual Machine** under **Additional Properties**. The screen below appears:



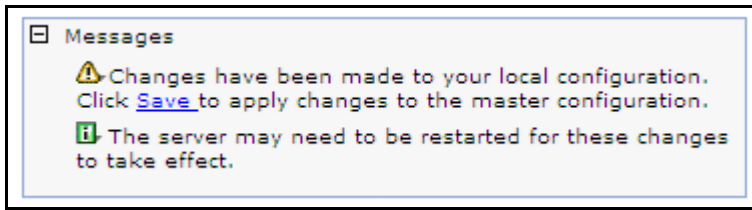
**Figure 53: Java Virtual Machine**

- For a stand alone WebSphere installation, adjust the **Maximum Heap Size** to be 1 half of the memory on the machine and the **Initial Heap Size** to be 1 half of that. So for a server with 2 GB of RAM, set the **Maximum Heap Size** to 1024 and **Initial Heap Size** to 512.

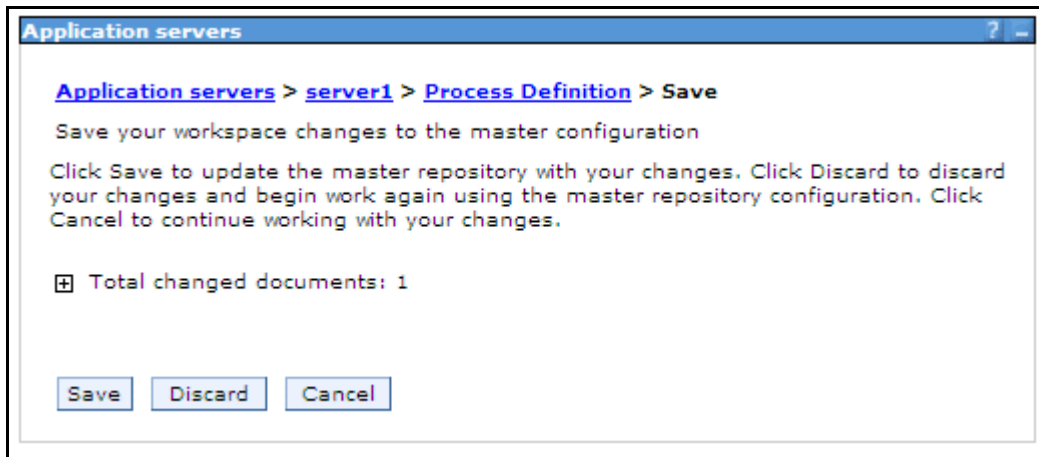
A screenshot of a configuration window with two input fields. The first field is labeled "Initial Heap Size" and contains the value "512". The second field is labeled "Maximum Heap Size" and contains the value "1024".

**Figure 54: Set Initial and Maximum Heap Size**

- Click the **OK** button at the bottom of the window to submit the changes.



- Click the [Save](#) link to apply changes to the master configuration. You will be transferred to a final page to allow you to review your workspace changes.



- Click on the **Save** button to update the master configuration with your changes.

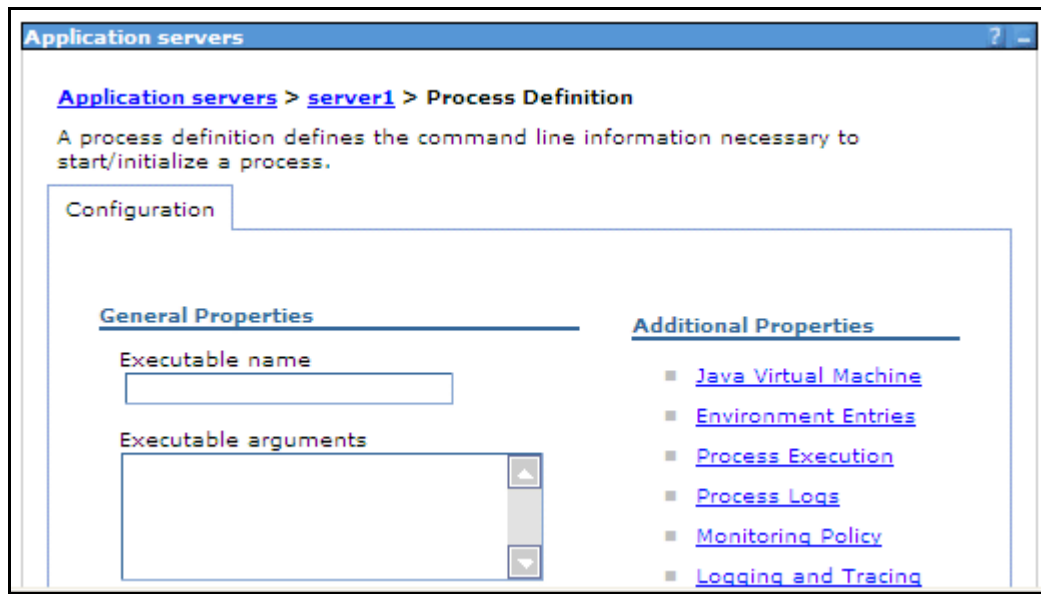


Figure 55: Return to the Process Definition Screen

- Click on **Logout** to end your session.

## Chapter 4

# Installing the WebSphere 6.0 Fixpacks

Once you have tested the installation you need to download and install the following fixes from the IBM WebSphere support site:

- Refresh Pack 2
- Fix Pack 21 (or most current)
- V6.0.2.21(onward) and V6.1 Update Installer
- V6.0.2: SDK 1.4.2 Cumulative Fix

### Step 1: Download the Fixes

1. Enter the following URL in your browser to review recommended fixes for WebSphere Application Server:

<http://www-1.ibm.com/support/docview.wss?rs=180&uid=swg27004980>

#### NOTE

You can also get here by using Google to search for WebSphere Fixpacks.

The following web page appears:



Figure 56: Recommended WebSphere Fixes

2. Click [Version 6.0](#).

This link displays a list of fixes for Version 6.0.

Version 6.0			
Fix	Level	Released	Comments
Fix Pack 23	6.0.2.23	12 OCT 2007	The date is an estimated future release date.  Future fix packs will be released every 12 weeks.
Fix Pack 21 <ul style="list-style-type: none"> <li>• <a href="#">AIX</a></li> <li>• <a href="#">HP-UX</a></li> <li>• <a href="#">Linux</a></li> <li>• <a href="#">OS/400@</a></li> <li>• <a href="#">Solaris</a></li> <li>• <a href="#">Windows</a></li> </ul> → <a href="#">Maintenance Download Wizard</a>	6.0.2.21	20 JUL 2007	<a href="#">Readme for multiplatforms</a>  <b>New:</b> Maintenance Download Wizard: See the Tools section below for more details.
<a href="#">Interim Fix PK44764</a>		23 May 2007	Any "Save" operation fails with ServletException: Missing message for key ""ChangesFound.?" using the Administrative Console when running on a non-English locale operating system. See the <a href="#">Flash</a> for more details.
<a href="#">Interim Fix PK45268</a>		21 May 2007	Every time an application (not Version 4.0) that is using a standard data source (using the IBM Relational Resource Adapter) does a JNDI lookup to get a data source object, error message DSRA9010E appears in the SystemOut.log. See the <a href="#">Flash</a> for more details.
<a href="#">Interim Fix PK41446</a>		11 May 2007	In some scenarios after a closed connection error the webcontainer may corrupt a buffer being used to send a response.
Refresh Pack 2 <ul style="list-style-type: none"> <li>• <a href="#">AIX</a></li> <li>• <a href="#">HP-UX</a></li> <li>• <a href="#">Linux</a></li> <li>• <a href="#">OS/400</a></li> <li>• <a href="#">Solaris</a></li> <li>• <a href="#">Windows</a></li> </ul>	6.0.2	18 JUL 2005	<a href="#">Readme for multiplatforms</a> <a href="#">Readme for OS/400</a>  Version V6.0.1 for Windows Server 2003 x64 edition is available from <a href="#">Passport Advantage</a> .
<a href="#">Release 6.0</a>	6.0.0.1	10 DEC 2004	You can download the version V6.0 (V6.0.0.1) release from <a href="#">Passport Advantage</a> .  <a href="#">Release Notes</a>

Figure 57: Recommended Fixes for WebSphere 6.0



3. Scroll down to the section on the table labeled: "Other V6.0 tools and fixes".

Other V6.0 tools and fixes	Released	Comments
<a href="#">V6.0 Maintenance Download Wizard</a>	20 JUL 2007	The wizard will step you through a series of selection panels to identify, and help you download, the recommended maintenance packages for your WebSphere Application Server V6.0 environment.
<a href="#">V6.0 Installation Factory</a>	13 OCT 2006	See the <a href="#">Flash</a> for more details.
<a href="#">V6.0.2.21(onward) and V6.1Update Installer</a>	07 SEP 2007	<a href="#">Install instructions</a> Starting with Fix Pack 6.0.2.21, Update Installer is no longer packaged with the Fix Pack. You <b>MUST</b> use <a href="#">this Update Installer</a> for V6.0.2.21 (onward) and V6.1 fix pack updates.
<a href="#">V6.0 Update Installer</a>	14 AUG 2006	<a href="#">Readme for Multiplatforms</a> <a href="#">Readme for OS/400</a>
<a href="#">V6.0.2: SDK 1.4.2 Cumulative Fix</a>	20 JUL 2007	<a href="#">Readme</a>

Figure 58: Fix Packs for WebSphere 6.0

You need to download the following files for Windows:

- Refresh Pack 2
- Fix Pack 21 (or most current)
- V6.0.2.21 (onward) and V6.1 Update Installer
- V6.0.2: SDK 1.4.2 Cumulative Fix

4. Use FTP or IBM's Download Director (DD) to download the files to your system.

<b>NOTE</b>	For the WebSphere 6.0 release you can download the files using standard FTP or IBM's Download Director (DD). Download Director provides a GUI for downloading files. It is faster and more intuitive than the FTP method.
-------------	---

After downloading, you should have the following files or similar on your system.

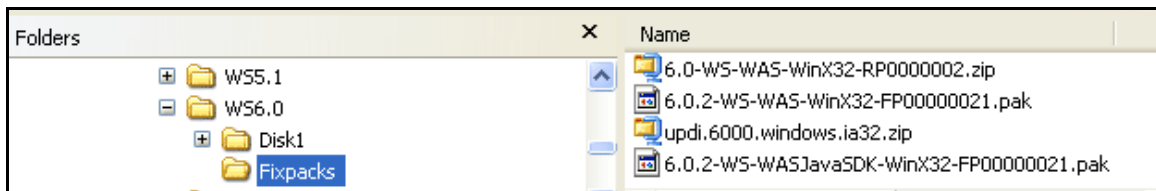


Figure 59: Downloaded Fix Pack Files

## Step 2: Install the Fix Packs

### Before installing the fix packs:

Open **Control Panel->Services** and make sure that all WebSphere services are turned OFF.

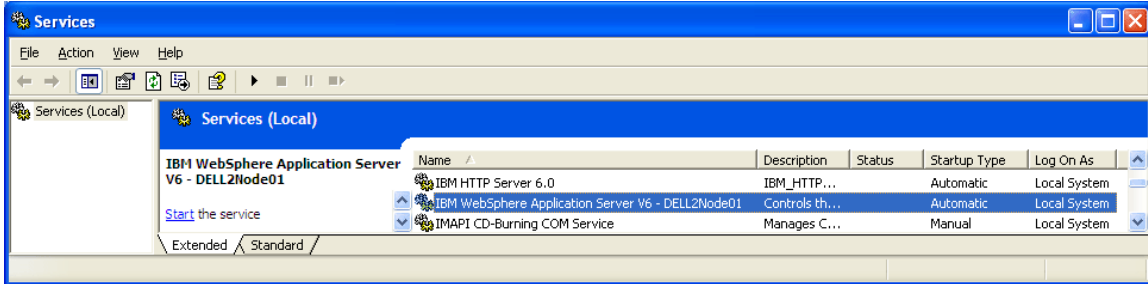


Figure 60: Turn off WebSphere Services

## Installing Refresh Pack 2

The first step is to install refresh pack 2 (i.e., **6.0-WS-WAS-WinX32-RP0000002.zip**).

1. Go to the directory where you downloaded the fix packs and extract the contents of **6.0-WS-WAS-WinX32-RP0000002.zip** into the **WebSphere\AppServer** directory (this is the root directory where you installed WebSphere). This file's contents are written to the **WebSphere\AppServer\updateinstaller\** directory.

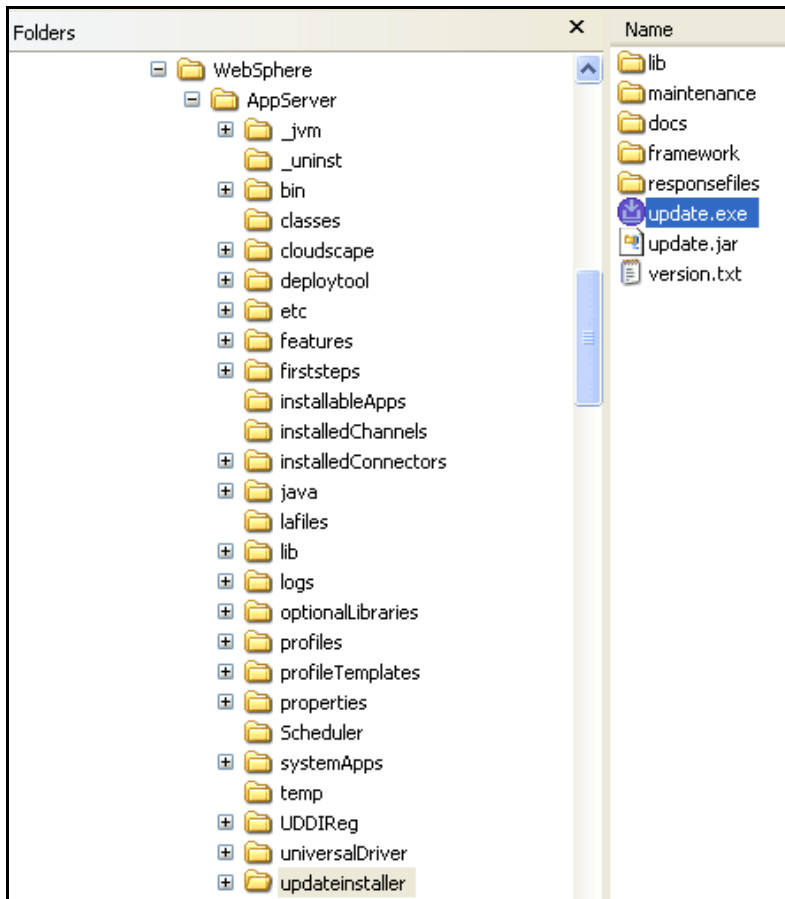


Figure 61: WebSphere\AppServer\updateinstaller\ directory

2. Double click on **update.exe**. The Update Installer Welcome screen appears.

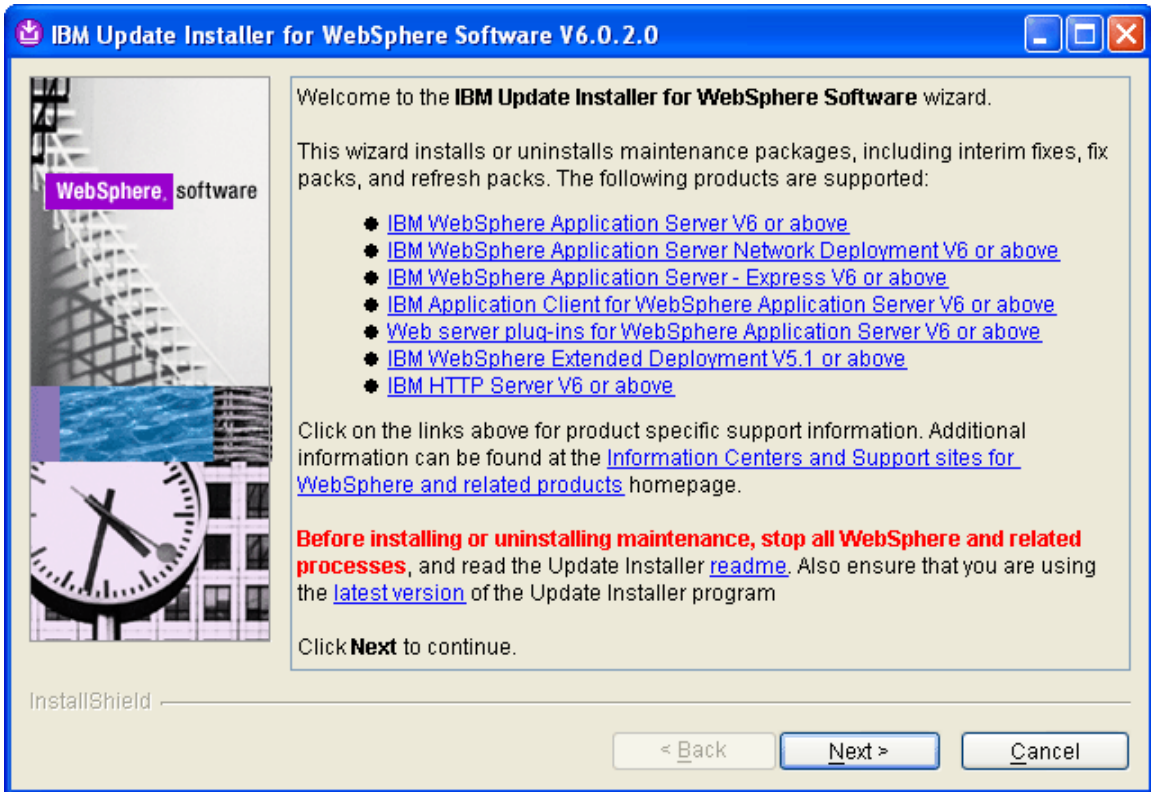


Figure 62: Update Installer Welcome Screen

3. Click **Next>**. The Wizard asks you for the WebSphere installation directory.

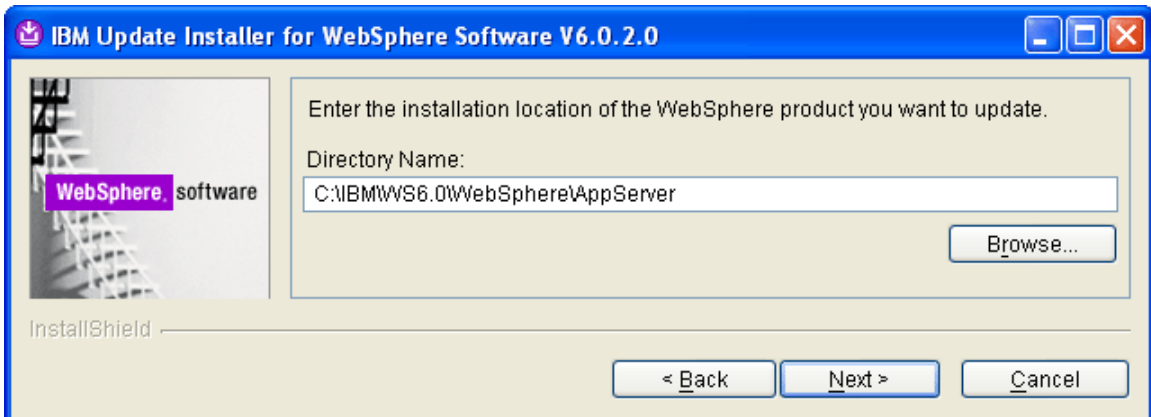


Figure 63: Confirm Installation Directory

- Confirm the target location and click **Next>**. The Wizard asks you to confirm the maintenance operation.

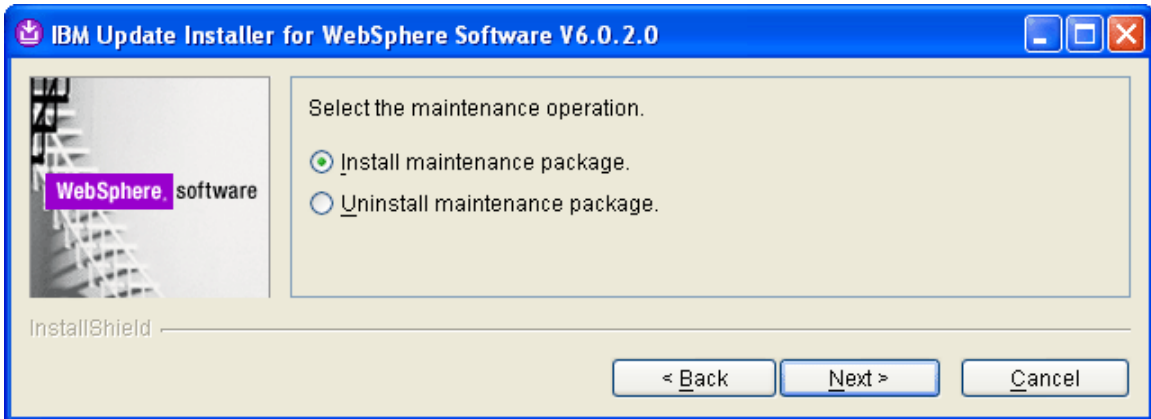


Figure 64: Install Maintenance Package

- Select "Install maintenance package" and click **Next>**. The Wizard displays the name of the maintenance package is to be installed.

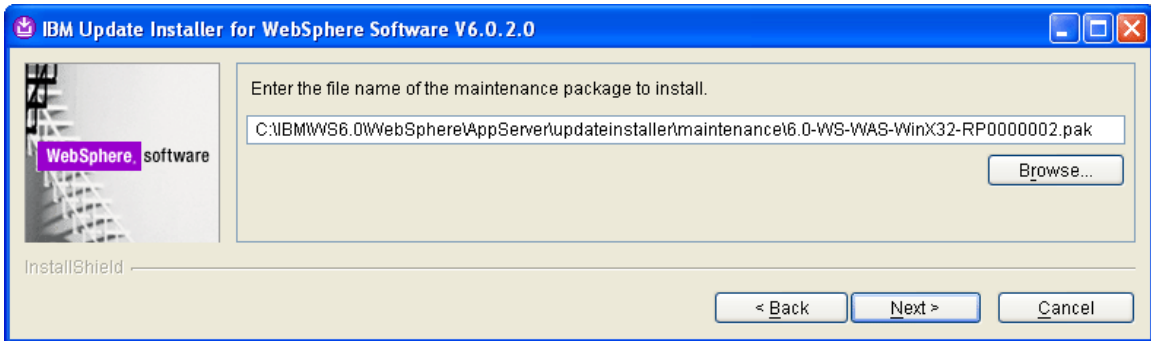


Figure 65: Maintenance Package Name

- Click **Next>**. At this point the Wizard checks your system to see if it needs to update the installed JDK. If it must update the JDK then the screen below appears.

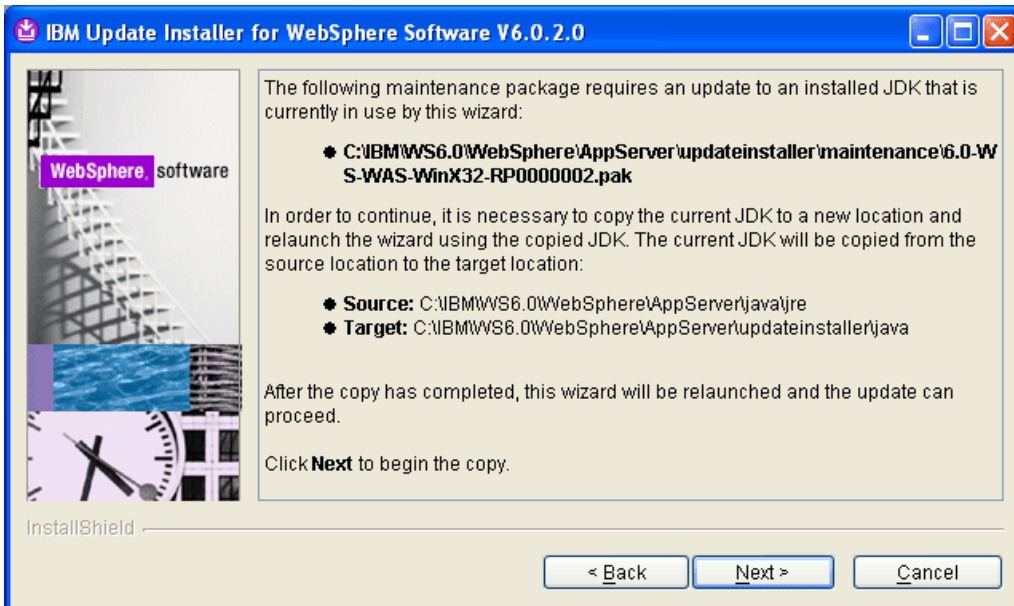


Figure 66: Update the JDK

7. Click **Next>**. The Wizard will update the JDK files.

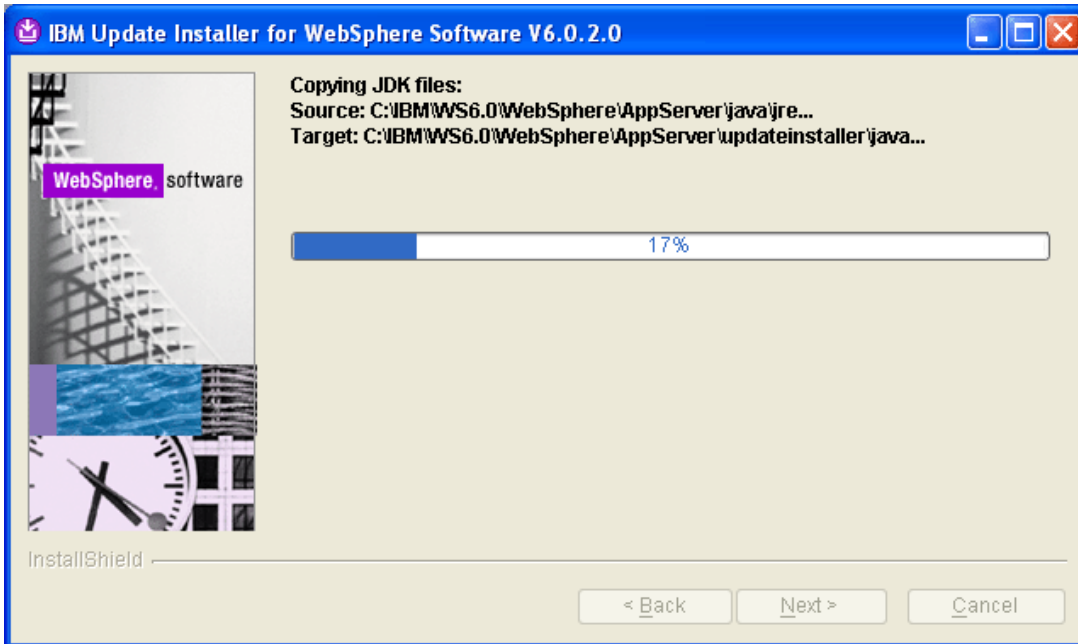


Figure 67: Update the JDK Files

The Wizard informs you when the JDK installation is finished.

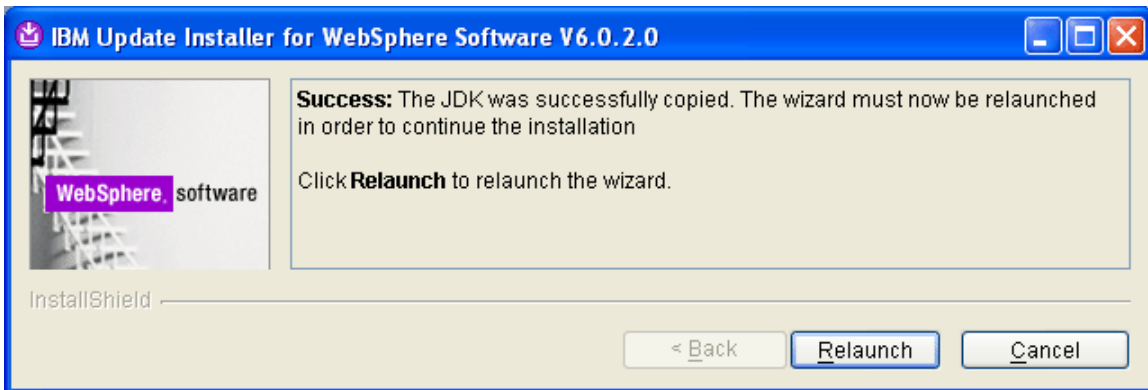


Figure 68: Relaunch the Update Wizard

- Click **Relaunch** to continue with the update. Again, the Wizard asks you to select the maintenance operation.

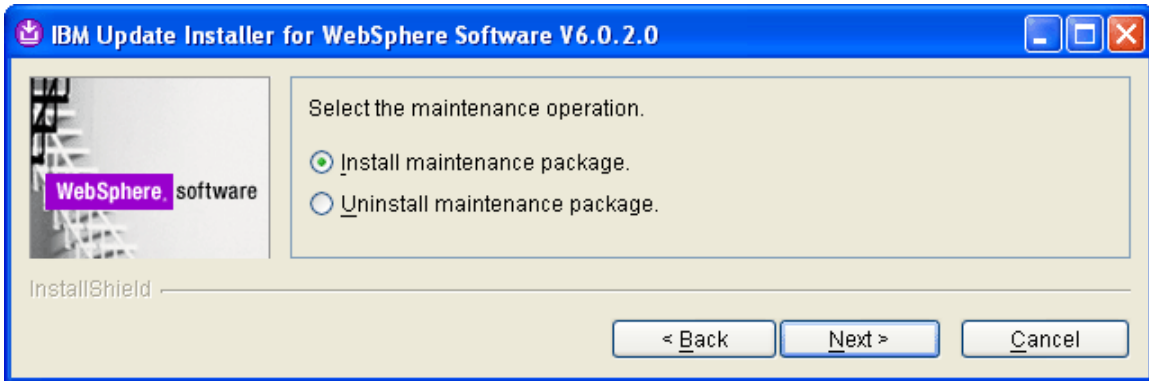


Figure 69: Install Maintenance Package

- Select “Install maintenance package” and click **Next>**. The Wizard displays the target location where the maintenance package is to be installed.

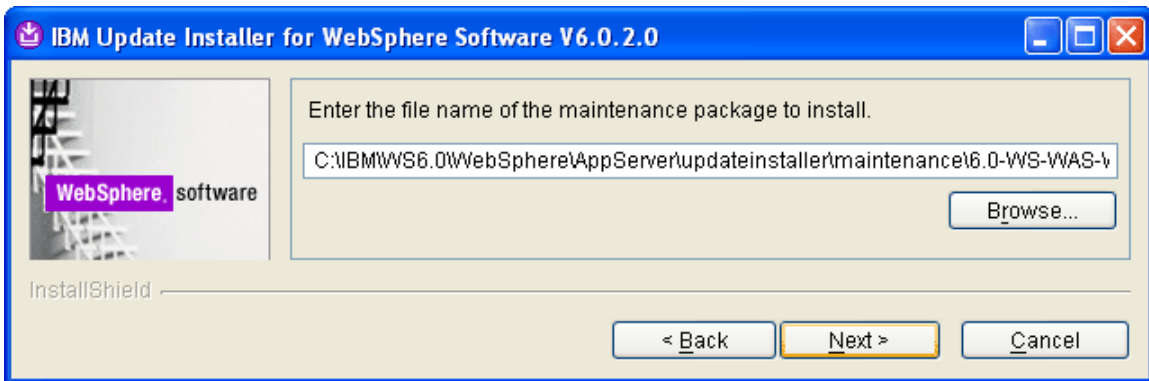


Figure 70: Enter Maintenance Package Name

- Click **Next>**. The following summary screen appears.

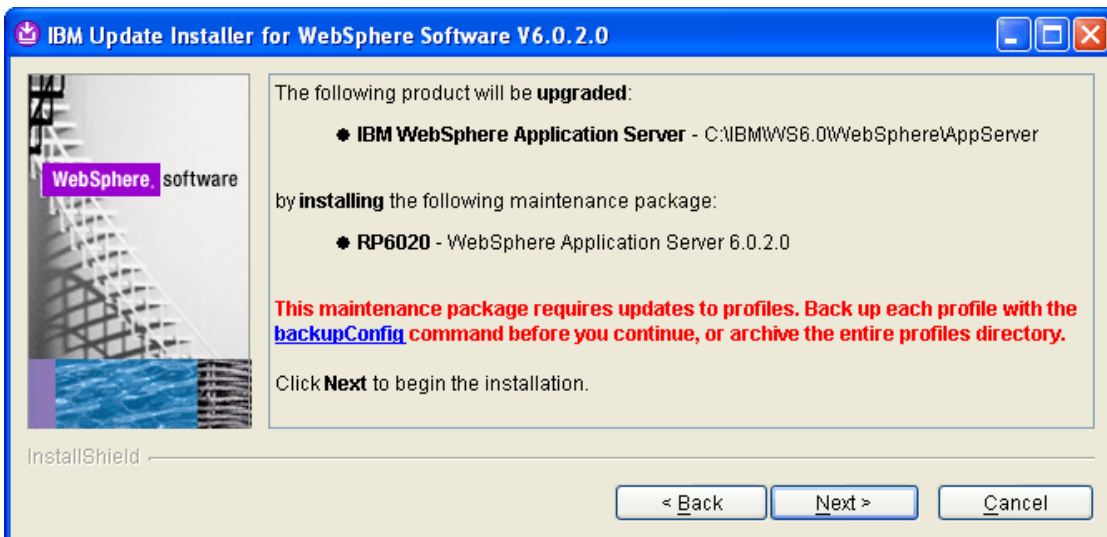
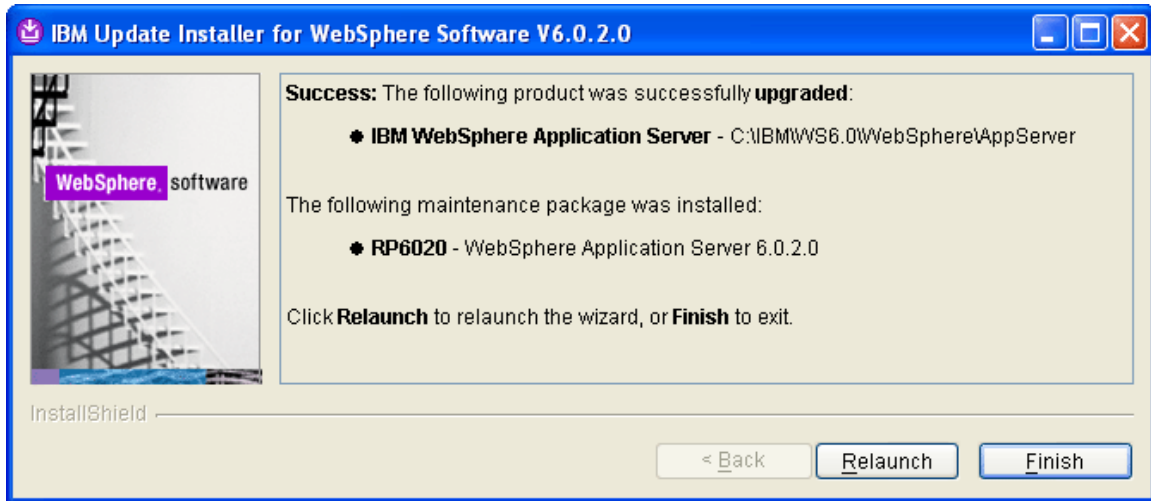


Figure 71: Update Summary Screen

11. Click **N**ext> to begin the installation. When the installation finishes, this screen appears:



**Figure 72: Upgrade Successful**

12. Click **F**inish.

## Installing Fix Pack 21

1. Delete the contents of the **WebSphere\AppServer\updateinstaller** directory. We will replace this with a newer update installer component.
2. Go to the temporary directory where you downloaded the fixpacks and extract the file containing the newer Update Installer component, **updi.6000.windows.ia32.zip**, to the **WebSphere\AppServer\updateinstaller** directory.

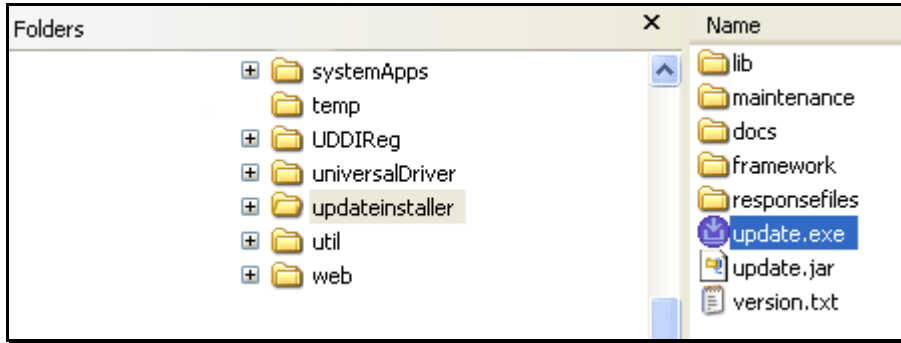


Figure 73: New WebSphere\AppServer\updateinstaller Directory

3. Return to the directory where you downloaded the fixpacks and copy the **6.0.2-WS-WAS-WinX32-FP00000021.pak** file over to the **WebSphere\AppServer\updateinstaller\maintenance** sub-directory.

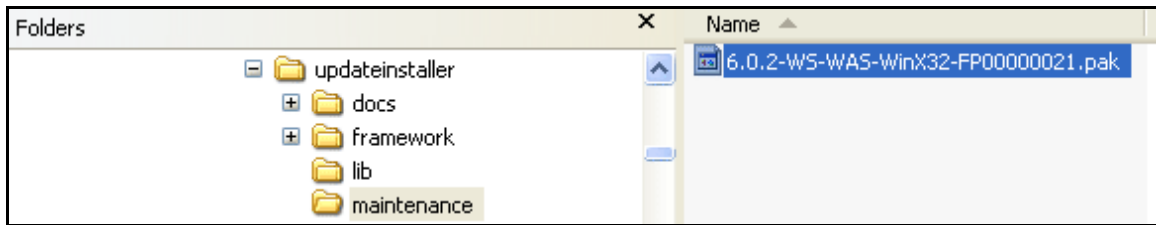


Figure 74: 6.0.2-WS-WAS-WinX32-FP00000021.pak

4. Go to the **WebSphere\AppServer\updateinstaller** directory and double-click **update.exe** to launch the update Wizard.

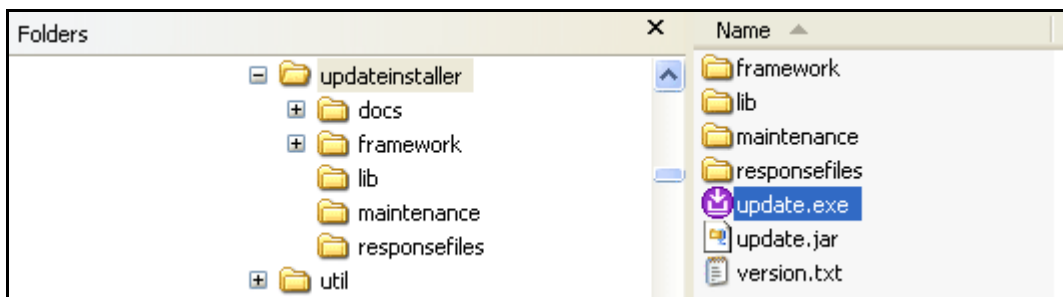


Figure 75: Click update.exe to Launch the Installation Wizard



The Update Installer welcome screen appears:

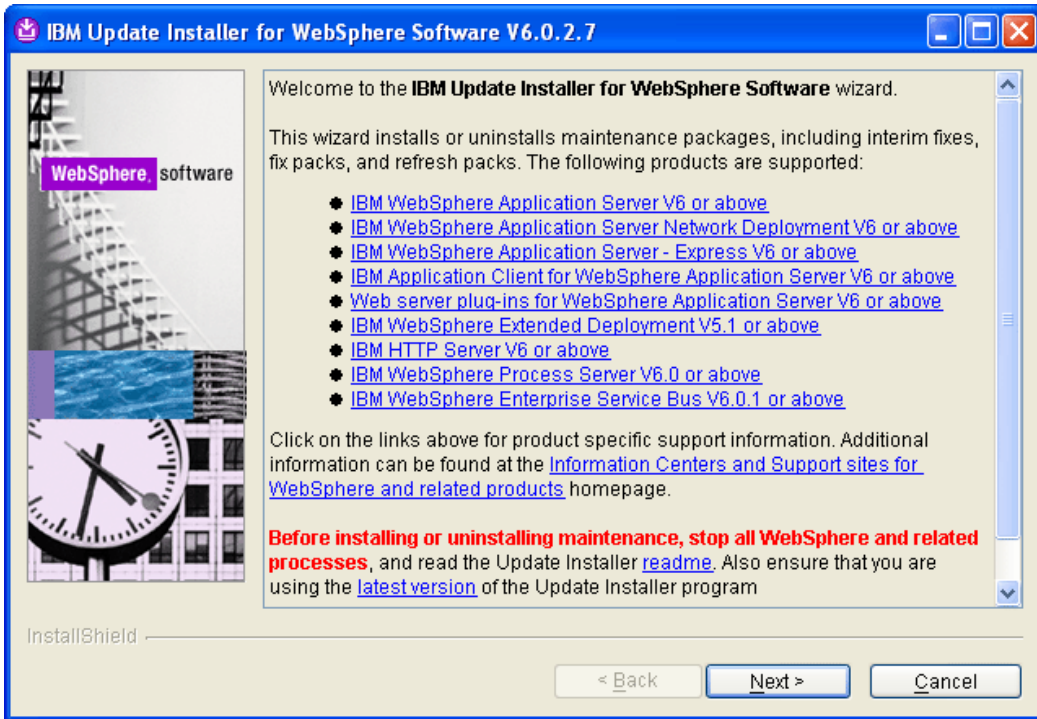


Figure 76: Installation Wizard Welcome Screen

5. Click **N**ext>. The Wizard asks you for the target installation directory.

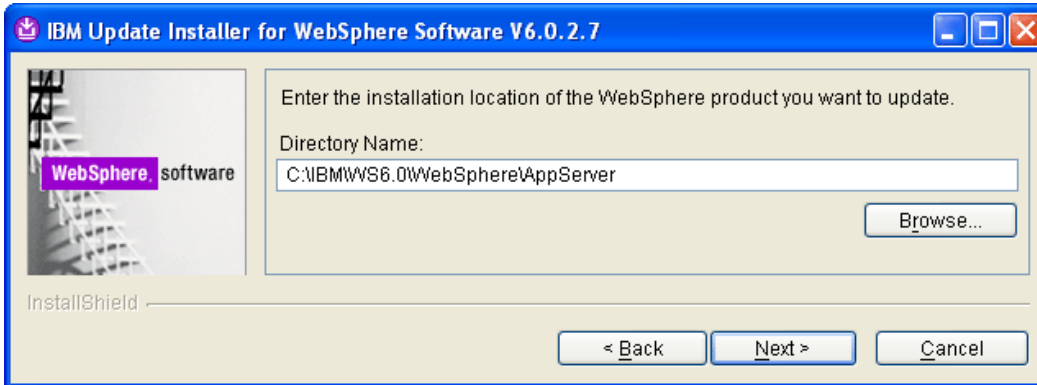
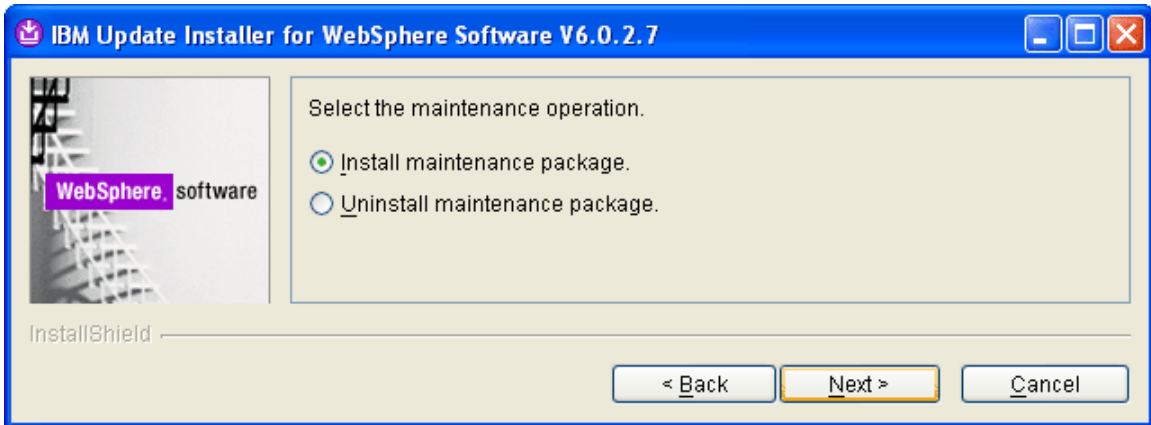


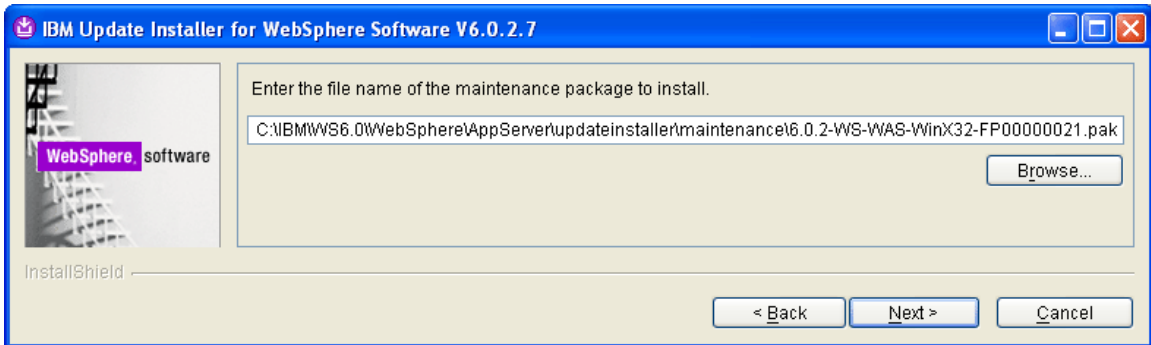
Figure 77: Installation Directory

- Click **Next>**. The Wizard asks you to select the maintenance operation.



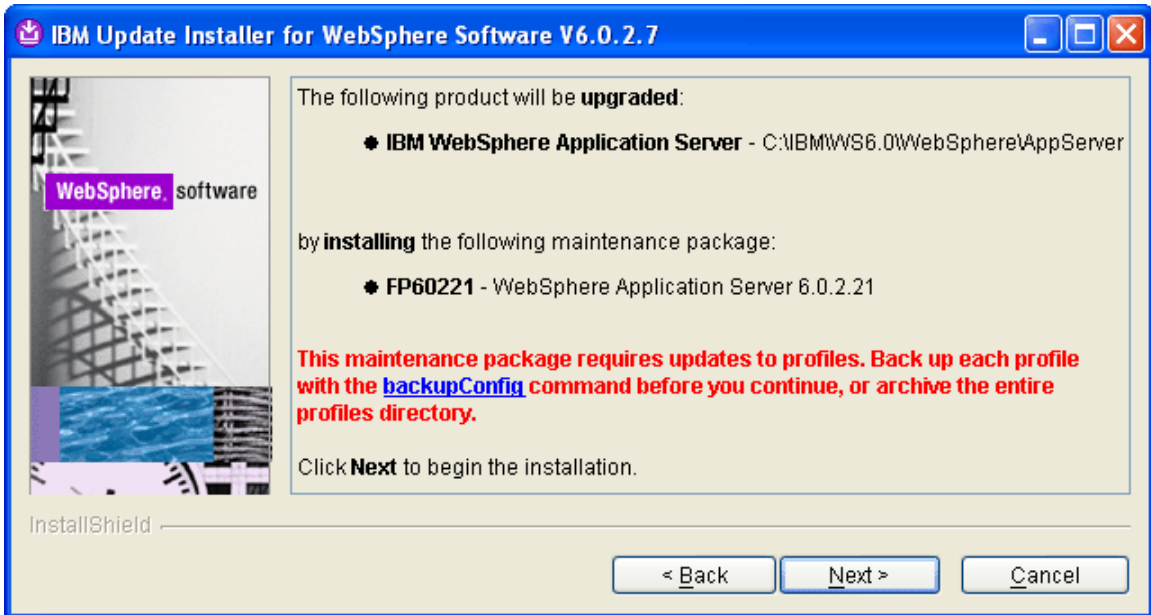
**Figure 78: Select Install Maintenance Package**

- Confirm "Install maintenance package" and click **Next>**. The Wizard asks you for the name of the maintenance package.



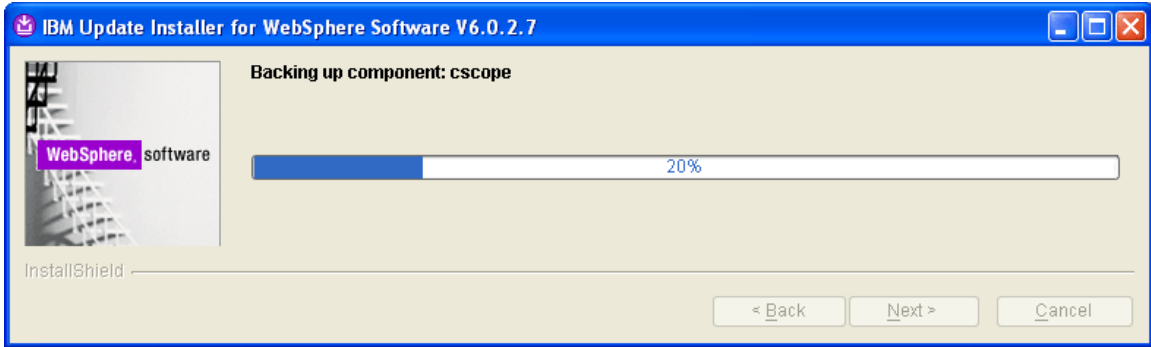
**Figure 79: Confirm Maintenance Package Name**

- Confirm the name and click **Next>**. The Wizard displays a summary screen for the installation.



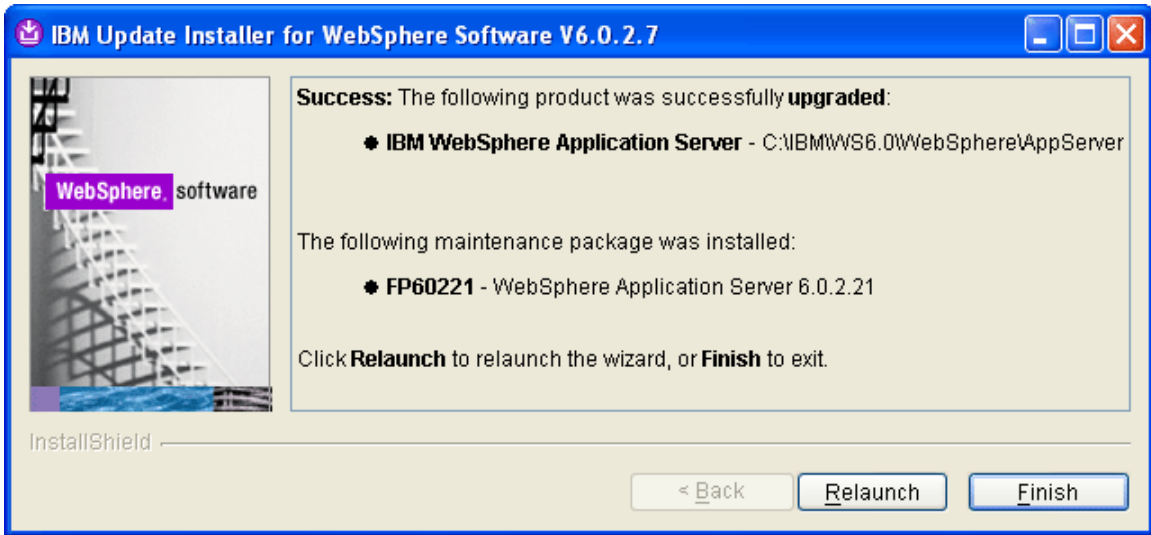
**Figure 80: Installation Summary Screen**

9. Click **Next>** to begin the installation.



**Figure 81: Installing the Package**

The following screen appears once the installation has finished.



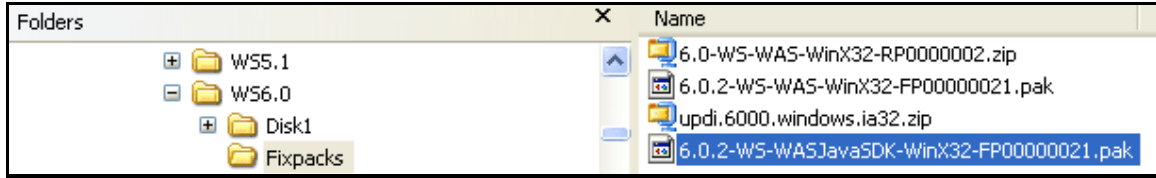
**Figure 82: Installation Complete**

10. Click **Finish** to exit the Wizard.

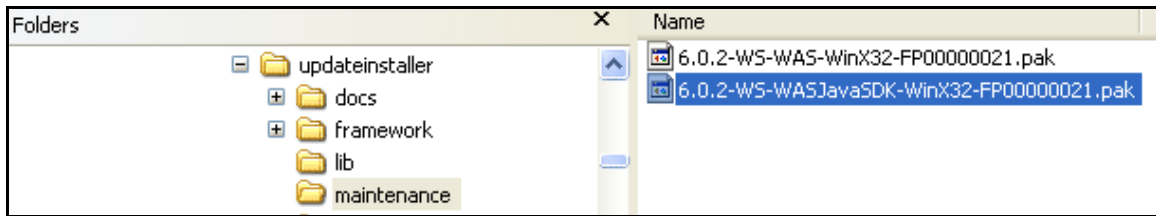
### Installing the SDK 1.4.2 Cumulative Fix

This step requires you to install the SDK 1.4.2 Cumulative Fix Pack (6.0.2-WS-WASJavaSDK-WinX32-FP00000021).

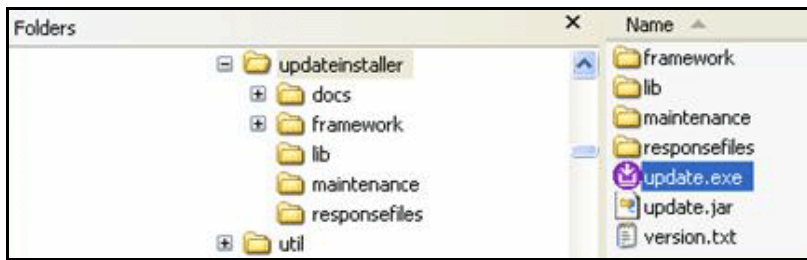
1. Return to the directory where you downloaded the Fixpacks.



2. Copy the 6.0.2-WS-WASJavaSDK-WinX32-FP00000021.pak file to the WebSphere\AppServer\updateinstaller\maintenance\ directory.



3. Double-click WebSphere\AppServer\updateinstaller\update.exe to start the Wizard.



The installation Wizard opens.

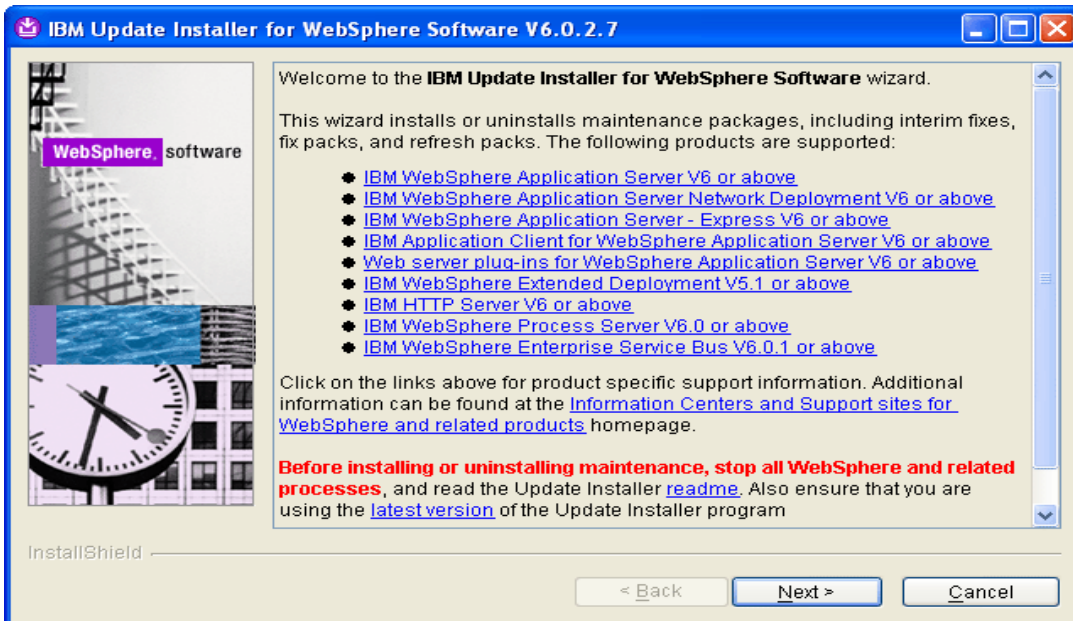
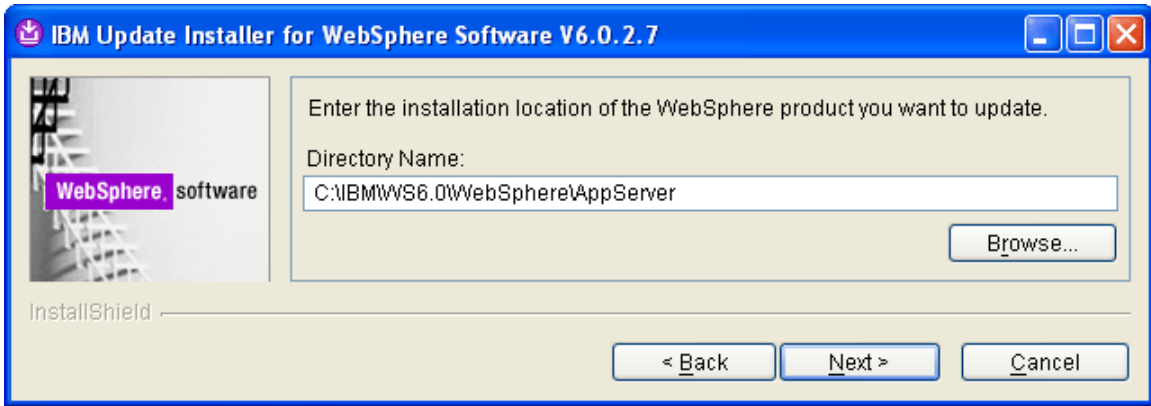


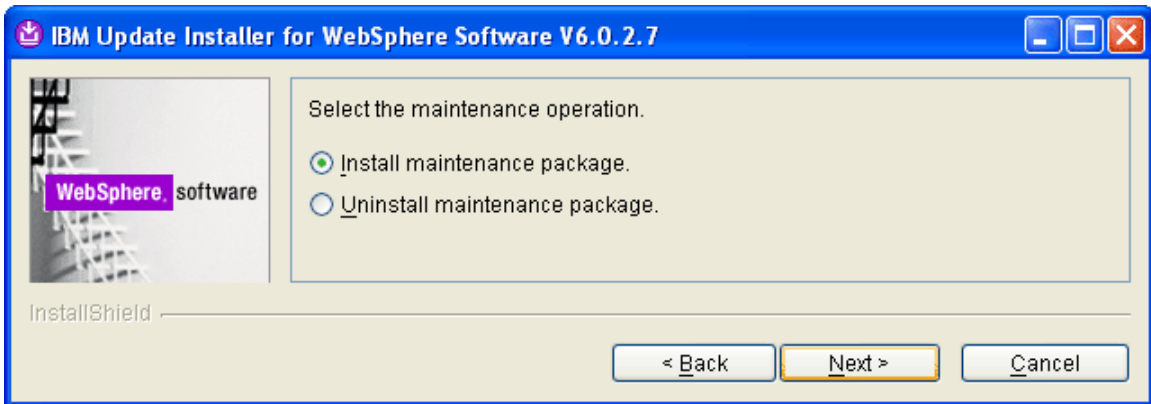
Figure 83: Installation Wizard Welcome Screen

- Click **Next>**. The Wizard asks you for the target installation directory.



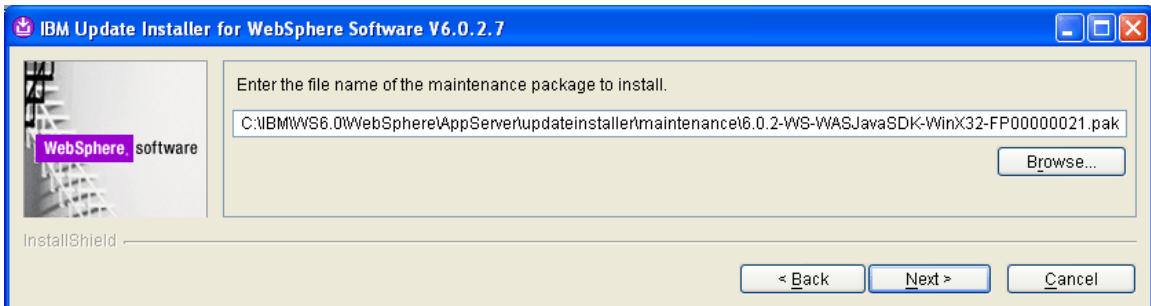
**Figure 84: Select Target Installation Directory**

- Click **Next>**. The Wizard asks you to select the maintenance operation.



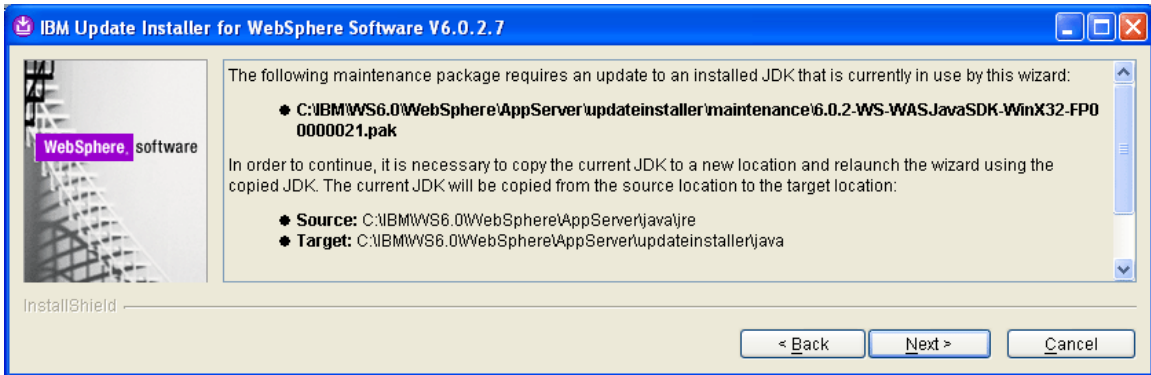
**Figure 85: Select Install Maintenance Package**

- Confirm “Install maintenance package” and click **Next>**. The Wizard asks you for the name of the maintenance package.



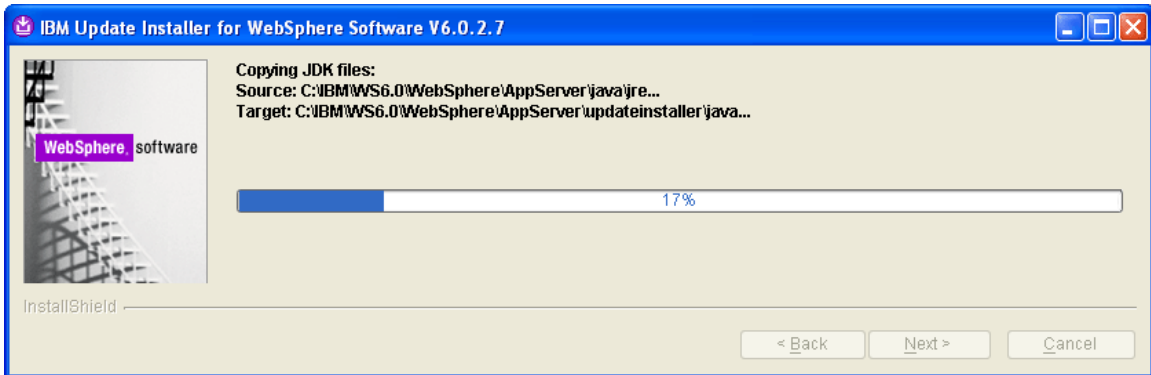
**Figure 86: Confirm Maintenance Package Name**

- Click **Next>**. The Wizard checks to see if the JDK requires an update. If it does, the following screen appears.



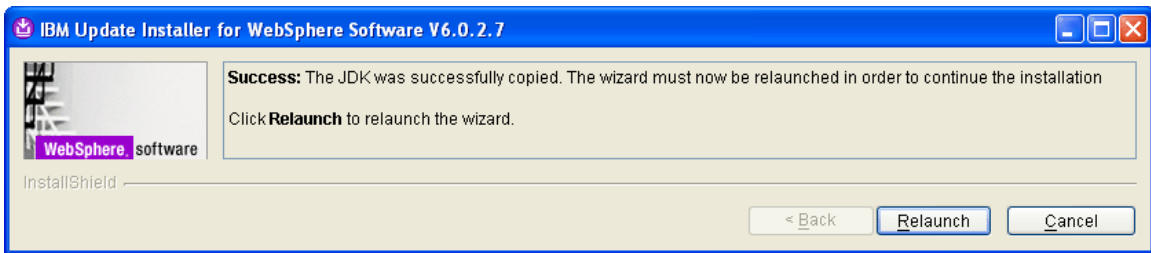
**Figure 87: Update JDK Message**

- Click **Next>**. The Wizard updates the JDK.



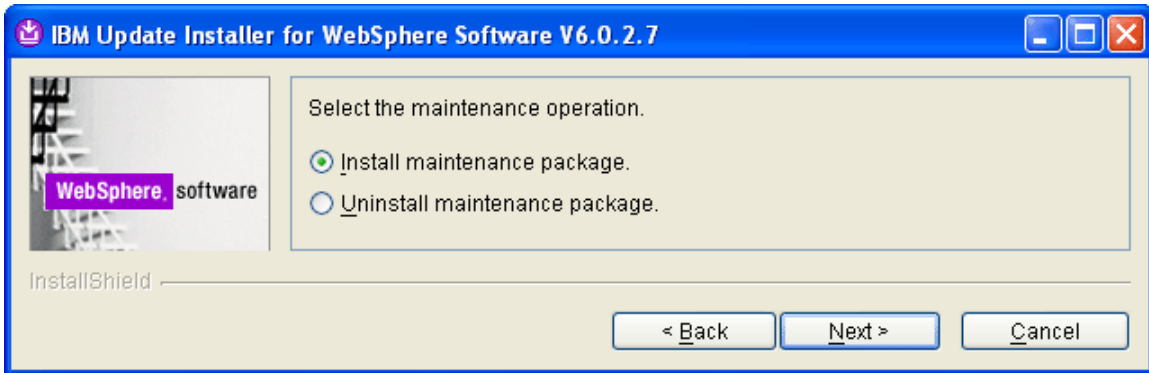
**Figure 88: Updating JDK**

This message appears once the update is complete.



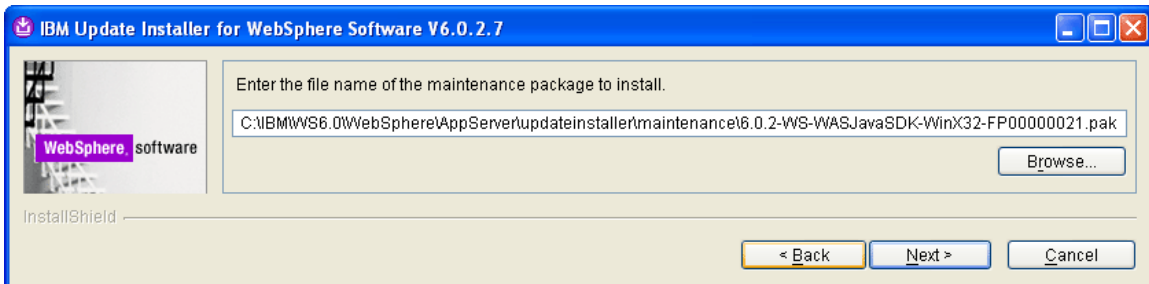
**Figure 89: JDK Update Complete**

- Click **Relaunch** to continue with the installation. Again, the Wizard asks you to select the maintenance operation.



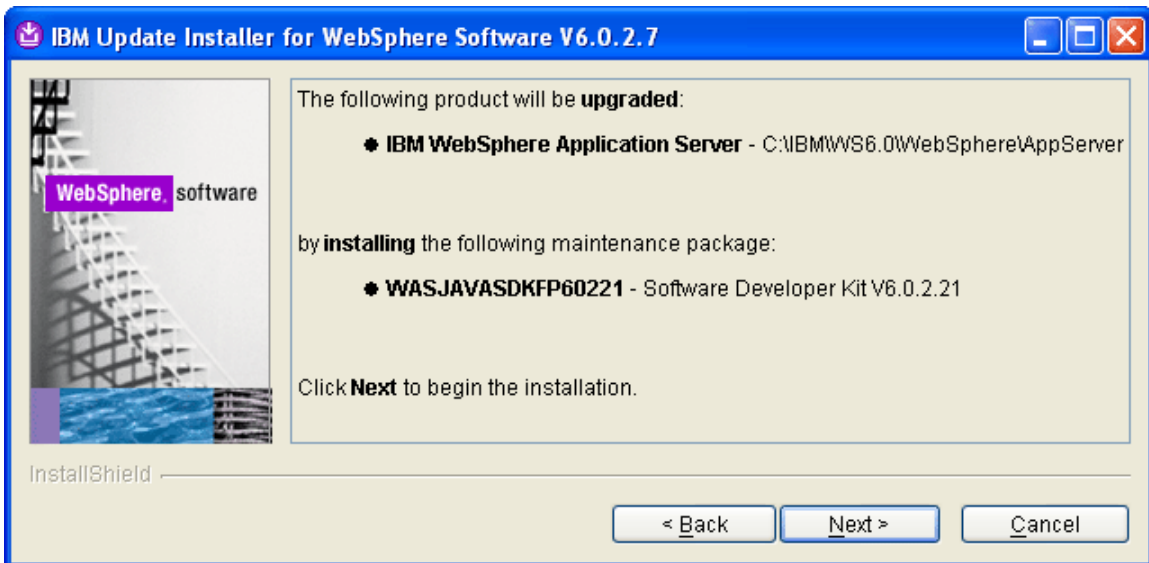
**Figure 90: Select “Install Maintenance Package”**

- Select **Next>**. The Wizard asks you for the name of the maintenance package.



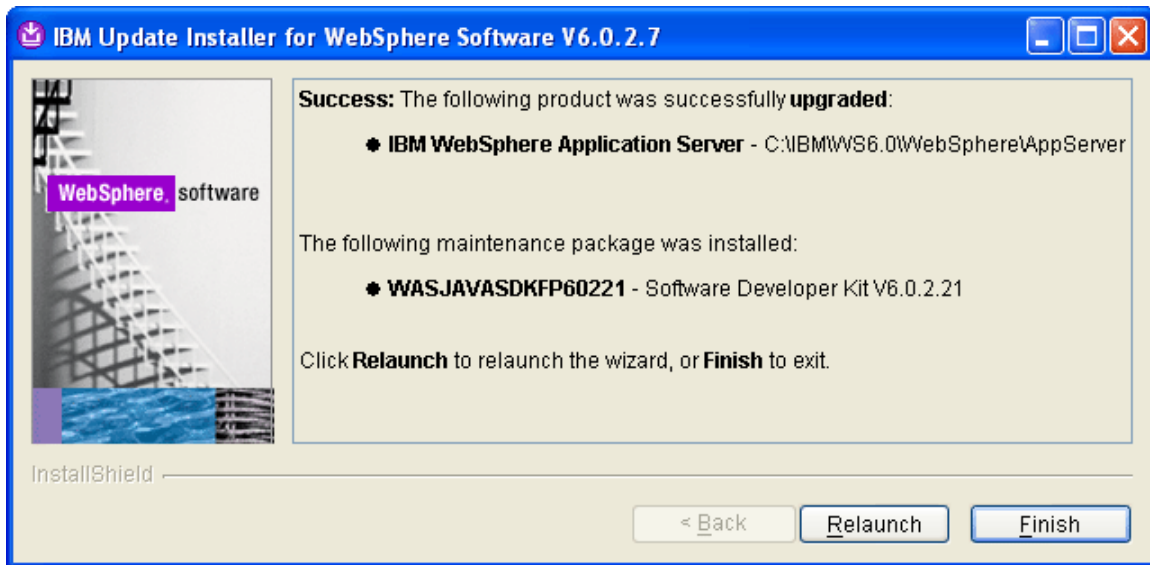
**Figure 91: Confirm Maintenance Package Name**

- Confirm the name and click **Next>**. The installation summary screen appears.



**Figure 92: Pre-Installation Information Screen**

- Click **Next>** to start the installation. When the installation finishes, the following message appears.



**Figure 93: Post-Installation Information Screen**

- Click **Finish**.
- Restart the WebSphere Services again.



## Step 3: Recycle the WebSphere Services

Once you finish installing the fixes you must restart the WebSphere services from the Windows Services in order for the updates to take affect.

### Recycling the IBM HTTP Server

1. Click on the **IBM HTTP Server** and click on the [Restart](#) link.

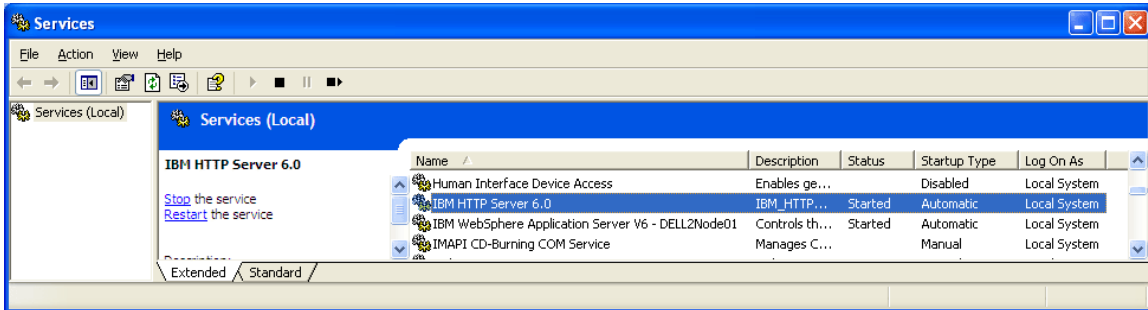
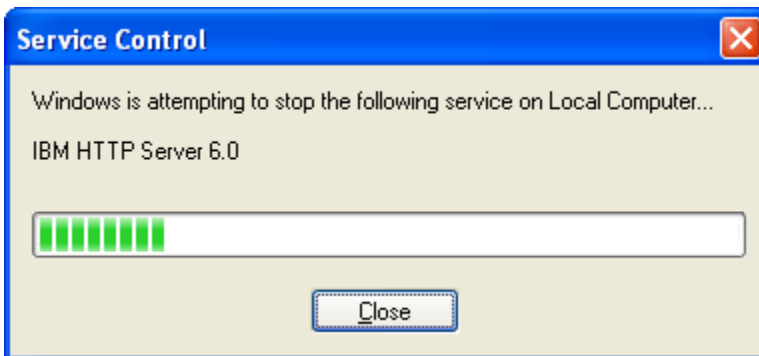
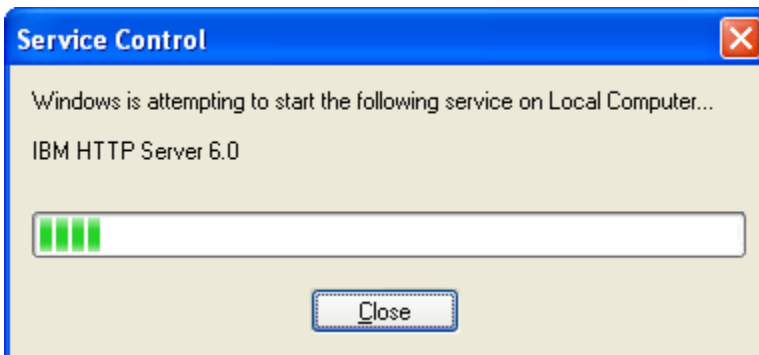


Figure 94: Restart IBM HTTP Server

The selected service will stop:



And then restart...



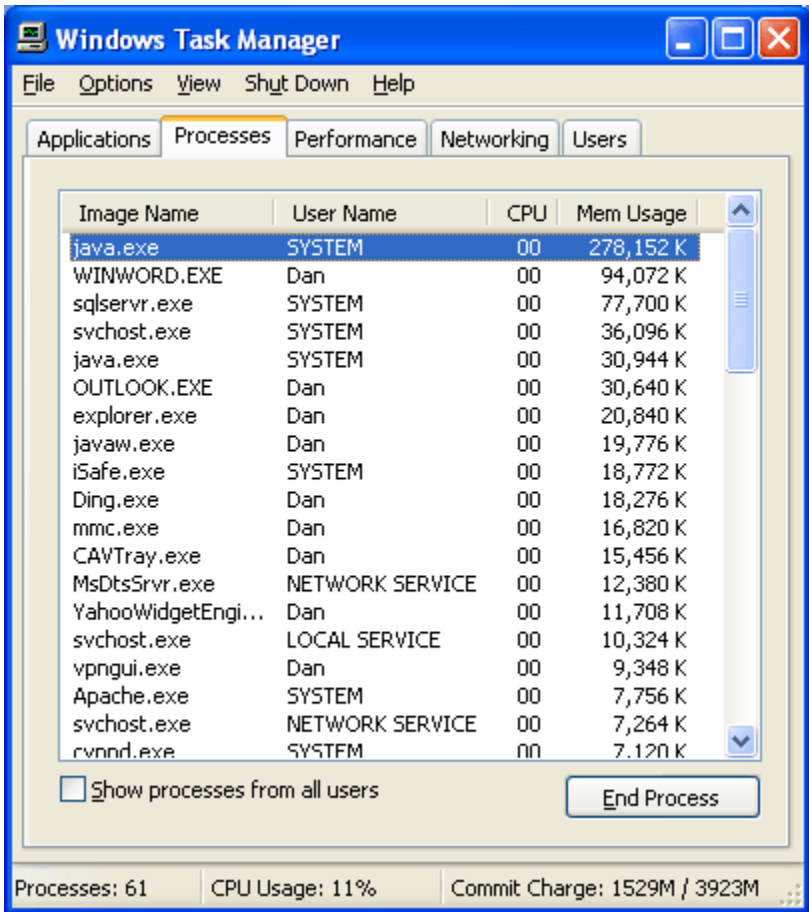
<b>NOTE</b>	The <b>IBM WebSphere Application Server V6 – (node)</b> service should not be recycled in this fashion.
	The main reason is that this approach does not allow enough time for the system to free up all of the WebSphere resources after stop before it automatically turns around and begins the startup process.

Once you issue the stop command there are two files in particular which you can use to monitor WebSphere’s resources to ensure that all resources have been released:

- **java.exe**
- **server1.pid**

**java.exe**

The Windows Task Manager displays one **java.exe** process per WebSphere server instance. After WebSphere has completed the shutdown process, this file disappears from the Windows Task Manager. Usually this process is the one that is using the most memory on the system. Sort the processes by **Mem Usage** in descending order to quickly locate this process.



**Figure 95: java.exe Process**

**server1.pid**

While the WebSphere service is running, the **WebSphere\AppServer\logs\server1** directory contains a **server1.pid** file. After WebSphere has completed the shutdown process, this file disappears from the directory.

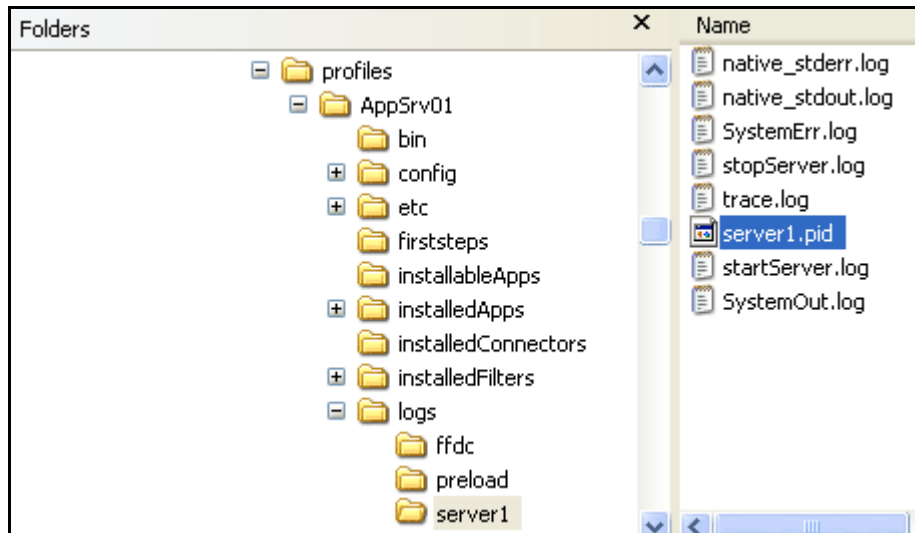


Figure 96: WebSphere\AppServer\logs\server1\server1.pid

## Recycling the WebSphere Application Server

1. Select the WebSphere Application Server service and click on the [Stop](#) link.

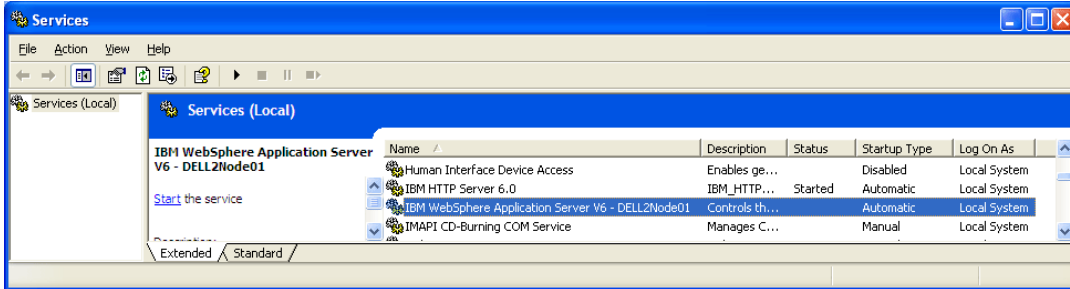
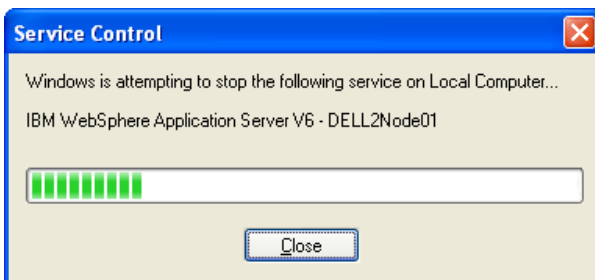


Figure 97: Stop WebSphere Application Server

The following dialog box appears:



2. After shutdown, open the Windows Task Manager and verify that the **java.exe** file associated with WebSphere has been removed from the process view.

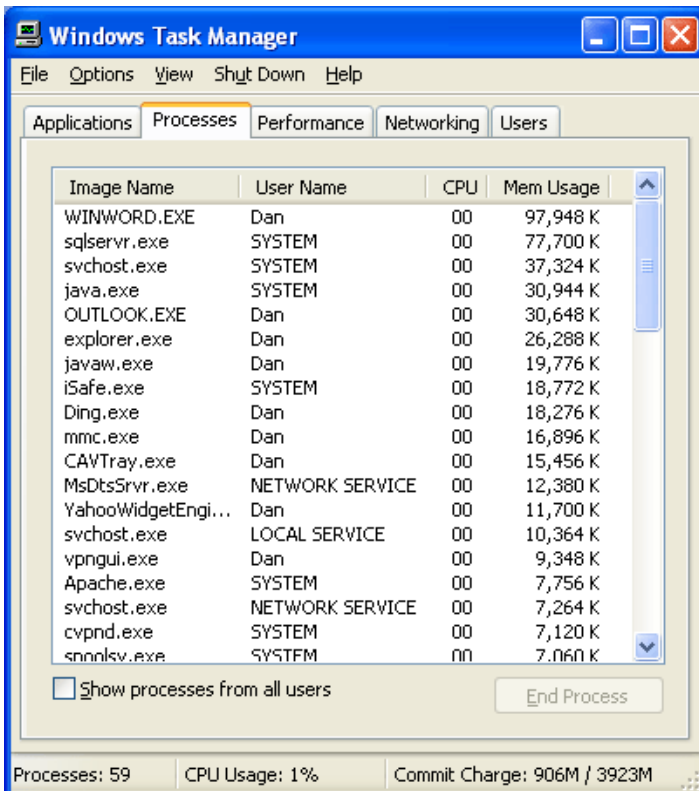
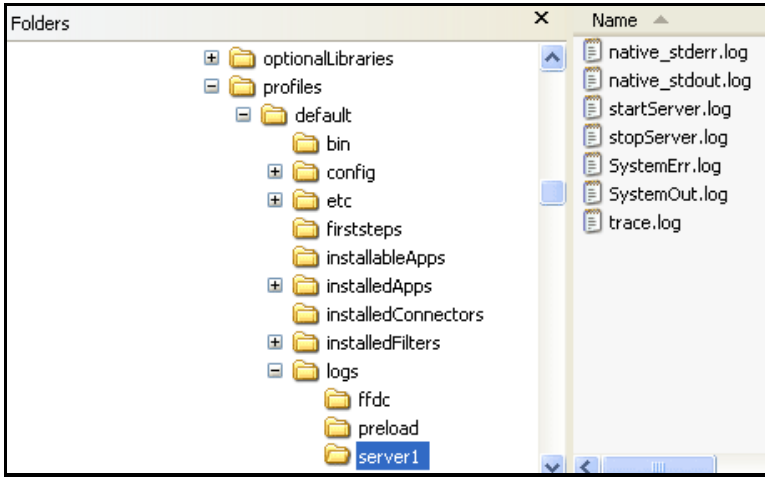


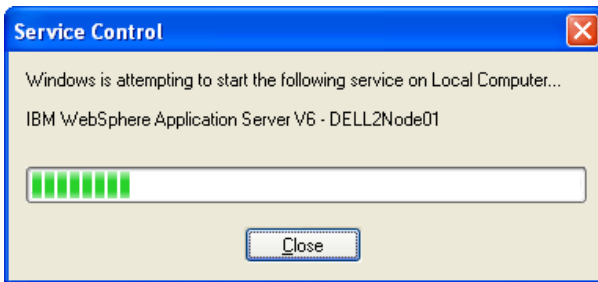
Figure 98: No java.exe Process Indicates WebSphere Stopped

Go to the **WebSphere\AppServer\logs\server1** folder and look for the **server1.pid** file. When this file disappears, WebSphere has completed the shutdown process.



**Figure 99: No server1.pid Indicates WebSphere Stopped**

3. Return to **Control Panel->Services** and select the WebSphere Application Server.
4. Click on the [Start](#) link. The following message box appears:



- Open the Task Manager and look for the **java.exe** process. The **Mem Usage** rises for the **java.exe** process during the startup.

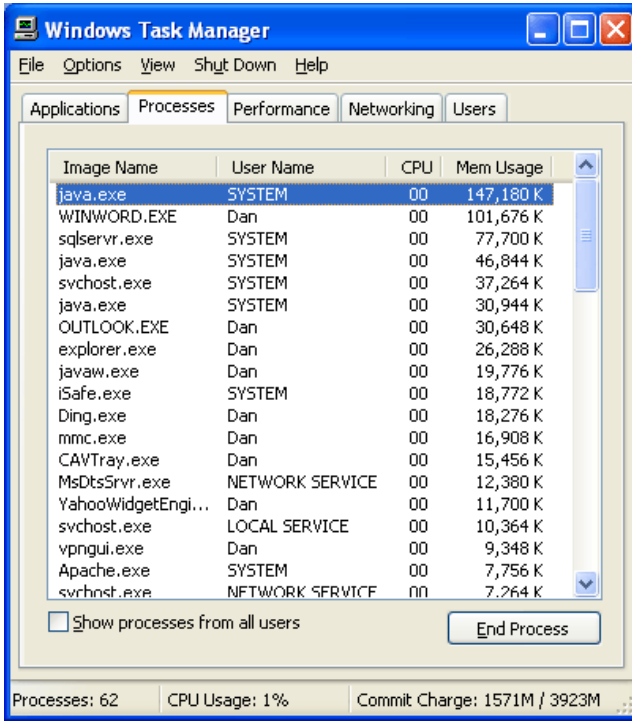


Figure 100: java.exe Verifies WebSphere Startup

- Click on the **Performance** tab. The Performance view shows a busy CPU until the service has completed the startup process. When the CPU goes to low usage, WebSphere is ready to use again.

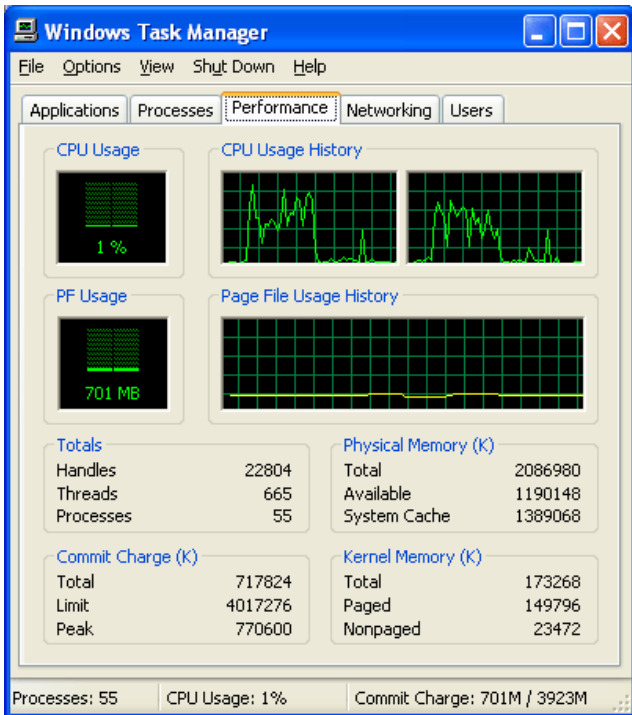


Figure 101: Low CPU Usage indicates WebSphere Starting

## Chapter 5

### Increasing the HTTP Timeout Period

The HTTP Timeout Period for IBM HTTP server defaults to 300 seconds (5 minutes). If you want to give the user control over what they want to do with long running query requests without the http requests timing out, this needs to be bumped. The recommended new value is 3000 which equals 50 minutes. This should provide adequate time for any query to return results.

To increase the timeout period, follow these steps:

1. Go to the IBMHttpServer\conf directory and locate the **httpd.conf** file.

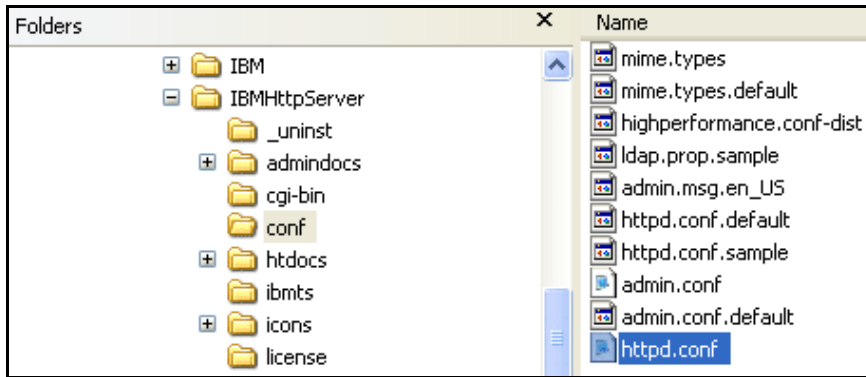


Figure 102: httpd.conf file

2. Open httpd.conf file in a text editor such as Notepad.
3. Locate the Timeout period value.

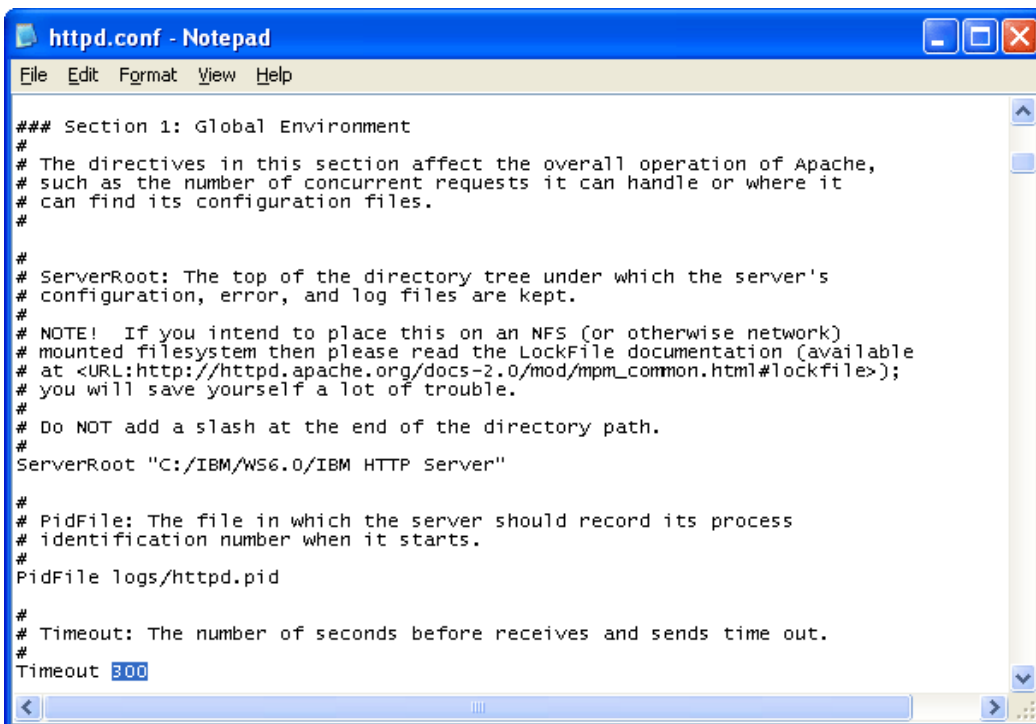
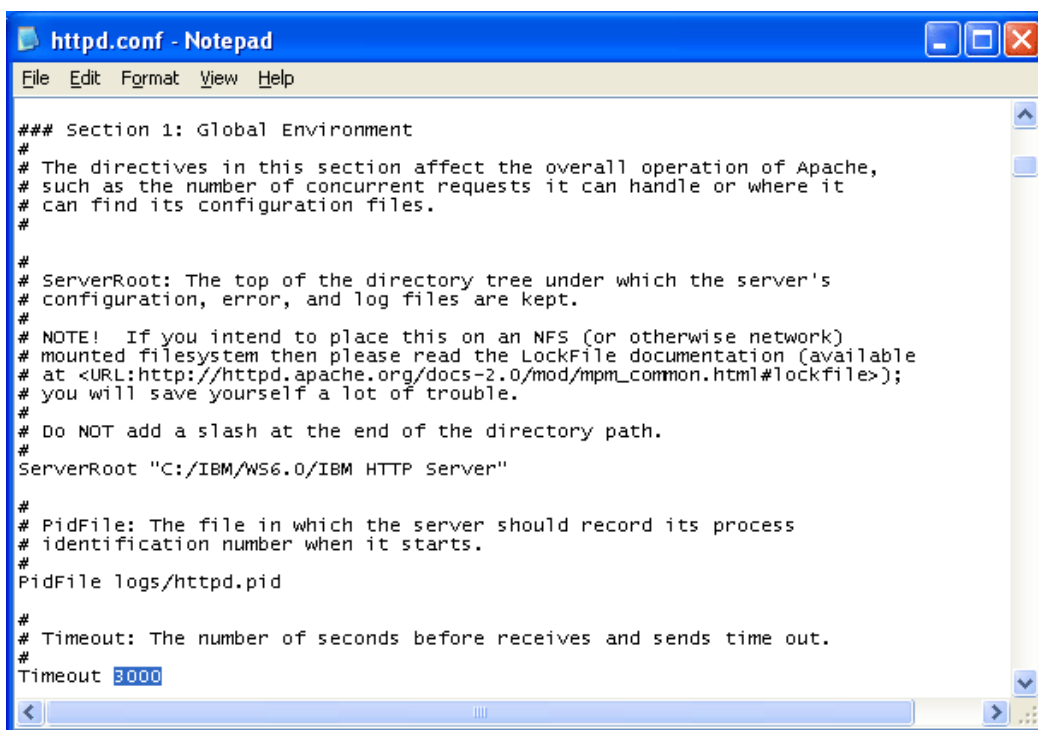


Figure 103: Default Timeout Period = 300

4. Change the value to 3000.



The screenshot shows a Notepad window titled "httpd.conf - Notepad". The window contains the following text:

```
### Section 1: Global Environment
#
# The directives in this section affect the overall operation of Apache,
# such as the number of concurrent requests it can handle or where it
# can find its configuration files.
#
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# NOTE! If you intend to place this on an NFS (or otherwise network)
# mounted filesystem then please read the LockFile documentation (available
# at <URL:http://httpd.apache.org/docs-2.0/mod/mpm_common.html#lockfile>;
# you will save yourself a lot of trouble.
#
# Do NOT add a slash at the end of the directory path.
#
ServerRoot "C:/IBM/WS6.0/IBM HTTP Server"
#
# PidFile: The file in which the server should record its process
# identification number when it starts.
#
PidFile logs/httpd.pid
#
# Timeout: The number of seconds before receives and sends time out.
#
Timeout 3000
```

**Figure 104: Updated Timeout Period = 3000**

5. Save and close the **httpd.conf** file.
6. Open **Control Panel->Services** and recycle the **IBM HTTP Server** for this new setting to take effect.



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