Installing the Advanced Single Server Edition using iPlanet Web Server Enterprise Edition on HP-UX--Custom Installation

The steps that follow describe how to install a configuration of WebSphere Application Server that uses the following--

- HP-UX 11.0
- Java 2 Software Development Kit (SDK) 1.3 (version supplied with WebSphere Application Server)
- iPlanet Web Server Enterprise Edition 4.1
- A single node

See the WebSphere Application Server Supported Hardware, Software, and APIs Web site at www.ibm.com/software/webservers/appserv/doc/latest/prereq.html to learn which products and fix levels are supported for your level of WebSphere Application Server.

Steps for installation

Deciding which steps to follow

First, check the WebSphere Application Server Supported Hardware, Software, and APIs Web site at www.ibm.com/software/webservers/appserv/doc/latest/prereq.html to ensure that you have the correct prerequisites, including operating system patches. If you have not already done so, change kernel parameters as needed and install the Web server. Then, obtain the product CD-ROM for WebSphere Application Server or download the product from the Web site www.ibm.com/software/webservers/appserv/download.html. WebSphere Application Server comes with the Java 2 SDK. Instructions for installation follow:

1. Setting kernel parameters, as needed
2. Installing iPlanet Web Server Enterprise Edition 4.1
3. Installing WebSphere Application Server--**Custom Installation** option
4. Testing the installation
5. Testing with an enterprise bean

Setting kernel parameters

This article describes how to change particular operating system kernel parameters on an HP machine to make WebSphere Application Server run effectively. To set kernel parameters, perform the following steps:

1. Ensure that you are logged into the host machine with superuser (root) privileges.
2. Determine the machine's physical memory by doing the following. You will need this value when configuring kernel parameters:
    a. Start the HP-UX System Administration Manager (SAM) utility.
    b. Select **Performance Monitors**, then **System Properties**.
    c. Click the **Memory** tab and note the value for **Physical Memory**.
    d. Click **OK** and exit from the SAM utility.
3. In order to set the maxfiles and maxfiles_lim parameters to at least 4096, you must first edit the file /usr/conf/master.d/core-hpux to allow values greater than 2048 to be set by using the SAM utility. Do the following:
    a. Open the file /usr/conf/master.d/core-hpux in a text editor.

b. Change the line

```
*range maxfiles<=2048
```

to

```
*range maxfiles<=60000
```

c. Change the line

```
*range maxfiles_lim<=2048
```

to

```
*range maxfiles_lim<=60000
```

d. Save these changes and close the file. The old values for these parameters might still be stored in the file /var/sam/boot.config. To force the SAM utility to create a new boot.config file, do the following:

1. Move the existing version of the boot.config file located in the directory /var/sam to another location (the /tmp directory, for instance).
2. Start the SAM utility.
3. Select **Kernel Configuration**, then **Configurable Parameters**. When the Kernel Configuration window opens, a new boot.config file exists.

   Alternatively, you can enter the following command to rebuild the boot.config file:

   ```
   # /usr/sam/lbin/getkinfo -b
   ```

4. Set the parameters listed in Table 1 to the values listed by doing the following:
   a. Start the SAM utility.
   b. Select **Kernel Configuration**, then **Configurable Parameters**.
   c. Highlight a parameter that you want to change and select **Actions**, then **Modify Configurable Parameter**.
   d. Type the new value for the parameter in the **Formula/Value** field and click **OK**.
   e. Repeat these steps for each of the parameters listed in Table 1 .
   f. After you have set all of the parameters, select **Actions**, then **Process New Kernel**.
   g. An information window opens, confirming your decision to restart the machine. Click **Yes**.

   If other information windows open, requesting information particular to your installation, follow the on-screen instructions to restart your machine and to enable the new settings to take effect.

   Alternatively, use the **HPjconfig** configuration utility available from the Java products for HP-UX Web site at www.hp.com/go/java. This pure Java application provides kernel parameter recommendations tailored to your specific Java enterprise services and HP-UX hardware platform. It supports only selected machine types, however. Refer to the information on this Web site to verify that your machine is suppported and for instructions on downloading and installing the utility.

Table 1

Parameter	Value
maxfiles	4096
maxfiles_lim	4096
max_thread_proc	1024
maxuprc	512
nproc	1024

nflocks	8192
ninode	2048
nfile	4 * *ninode* value
msgseg	32767 (or less)
msgmnb	65 535
msgmax	65 535
msgtql	1024
msgmap	258
msgmni	256
msgssz	16
semmni	512
semmap	514
semmns	1024
semmnu	1020 (*nproc* value minus 4)
shmmax	483 183 821 (Ensure that this parameter is set to 483 183 821 or 90% of the physical memory (in bytes), whichever is higher. For example, if you have 512 MB of physical memory in your system, set shmmax to 483 183 821 (512 * 0.9 * 1024 * 1024).
shmseg	16
shmmni	300

5. If you plan to redirect displays to non-HP machines, do the following before running applications that have a graphical user interface, such as the WebSphere Application Server applications that are started with the scripts **install.sh** or **adminclient.sh**:
   a. Enter the following command to obtain information on all public locales accessible to your application:

      ```
      # locale -a
      ```

   b. Choose a value for your system from the output that is displayed and set the LANG environment variable to this value. Here is an example command that sets the value of LANG to `en_US.iso88591`:

      ```
      # export LANG=en_US.iso88591
      ```

Installing iPlanet Web Server Enterprise Edition 4.1

This article describes how to perform the following procedures on an HP-UX machine from files downloaded from the iPlanet Web site at www.iplanet.com/downloads/download/:

- Install iPlanet Web Server Enterprise Edition
- Test the installation
- Start and stop the Web server and Servlet Engine

It is recommended that you install iPlanet Web Server before installing WebSphere Application Server. The WebSphere Application Server installation process changes a Web server's configuration so that the Web server directs certain requests (such as servlet requests) to WebSphere Application Server. If the Web server is not installed before WebSphere Application Server, WebSphere Application Server might function incorrectly.

These instructions assume the following:

- You do not have a previous version of iPlanet Web Server already installed on your machine. If you do have a previous version of iPlanet Web Server installed, you might need to perform migration tasks based on the version installed. In this case, do not follow these instructions. Instead, refer to iPlanet product documentation on the iPlanet

Web Server Documentation Web site at docs.iplanet.com/docs/manuals/.

- Your machine has enough memory and disk space for your installation. See the iPlanet product documentation on the iPlanet Documentation Web site at docs.iplanet.com/docs/manuals/ for the necessary requirements.
- You have checked the WebSphere Application Server Supported Hardware, Software, and APIs Web site at www.ibm.com/software/webservers/appserv/doc/latest/prereq.html to learn what level of iPlanet Web Server you need to download.
- You have downloaded the appropriate version of iPlanet Web Server and any required patches from the iPlanet Web site at www.iplanet.com/downloads/download/ by following the steps given on that Web site.

Installing iPlanet Web Server Enterprise Edition

To install iPlanet Web Server, perform the following steps:

1. Ensure that you are logged into the host machine with superuser (root) privileges.
2. Move to the directory containing the downloaded file.
3. Unzip and extract the files.
4. Start the installation program by typing the following command:

   ```
   # ./setup
   ```

   A welcome window opens.

5. Press Enter to close the welcome window and continue installation.
6. Type `Yes` to accept the software licensing agreement and press Enter.
7. A warning window might appear that alerts you to any potential installation problems and asks if you want to continue with the installation. If you want to resolve any problems, type `No` and press Enter to exit from the installation program. If you want to proceed with the installation, type `Yes` and press Enter to close the warning window.
8. Choose the type of installation you require by typing the appropriate number and pressing Enter. For this example, type `2` for **Typical installation**.
9. Type the directory path for the location where the server files and directory structure are to be installed or accept the default location `/usr/netscape/server4`, and press Enter.
10. Choose the **iPlanet Web Server, Enterprise Edition** option and indicate that you want to select from all of its components by typing `All` and pressing Enter.
11. Choose the components you want to install by typing the number of each, separating each entry from the next with a comma. Press Enter. (To accept the default installation of all components except **WAI Support**, press Enter.)

    Note: See the iPlanet Web Server documentation for descriptions of each component. If you do not install a component and later decide that you need it, you can run the installer again and install just the missing component; however, you cannot uninstall individual components after they are installed.
12. If the default *host_name* (the name of your host machine) shown in brackets ([]) is correct, press Enter. If your *host_name* differs from the one shown in brackets, type the correct *host_name* and press Enter.
13. Type the UNIX user name to use when running the default instance of iPlanet Web Server. For this example, accept the default user name of `nobody` and press Enter.

    Note: If the user `nobody` has a user ID of less than 0 (zero), the setup program issues the following warning:

    ```
    ERROR: The system will not allow you to run the
           iPlanet servers as "nobody". Choose another user.
    ```

    See the iPlanet Enterprise Server documentation for information on setting up a dedicated user account to use with iPlanet Web Server.
14. Type the UNIX group name to use when running the default instance of iPlanet Web Server. For this example, accept the default group name of `nobody` and press Enter.
15. Type the UNIX user name to use when running the Administration Server. In most cases, this is `root`. Press Enter.
16. Type the Administration Server user name to use for authentication. For this example, type the default name `admin` and press Enter. (This user is not a UNIX user, but a user name set up in the iPlanet environment.)
17. Type the Administration Server password to use for authentication. For this example, type the default name `admin` and press Enter. (This password is not a UNIX password, but a password set up in the iPlanet environment.)
18. Retype the Administration Server password and press Enter.

19. Type a number between 1024 and 65535 for the port on which to run the Administration Server, or accept the default of `8888` and press Enter. Note this number for later reference.

    Note: If you want to use a port number lower than 1024, you must be logged in as root to start the
20. Type a number for the port on which to run the iPlanet Web Server and press Enter. For this example, accept the default of `80`. Note this number for later reference.

    Note: If you want to use a port number lower than 1024, you must be logged in as root to start the server. If you choose a port number other than 80, the Uniform Resource Locator (URL) used to gain access to your home page changes. For instance, if your host is called `www.`*`host_name`*`.com` and you choose port `9753`, your server's URL becomes `http://www.`*`host_name`*`.com:9753/`.
21. Specify whether or not you are using a Lightweight Directory Access Protocol (LDAP)-based directory server. For this example, accept the default `No` and press Enter.
22. Type the path for the root directory where your server's content files are to reside or accept the default of *`server_root`*`/docs`, where *`server_root`* refers to the directory path to the location of the server files that you specified in Step 9. Press Enter.
23. Type `Yes` to indicate that you want to use your own Java 2 Software Development Kit (SDK) and press Enter.
24. Type the absolute path to the directory on your system where the SDK is installed and press Enter.
25. A window can appear that lets you specify a path name to your SDK libraries if they are not found in the /jre/lib subdirectory of the SDK directory. For this example, press Enter.
26. A window can appear that lets you specify a path name to your SDK library classes if they are not found in the /lib subdirectory of the SDK directory. For this example, press Enter.
27. After the installation program extracts and installs the iPlanet Web Server components, a message is displayed, indicating that installation is complete. Press Enter.

Testing installation of iPlanet Web Server Enterprise Edition and starting the server

To demonstrate that iPlanet Web Server is operating correctly, perform the following steps:

1. Go to the directory that stores the server files (the directory that you specified in Step 9 in the previous section. In this example, the directory is `/usr/netscape/server4`.
2. Start iPlanet Web Server Enterprise Edition by entering the following command:

   ```
   # ./startconsole
   ```

   The **startconsole** command starts the iPlanet Web Server processes and starts a Netscape Navigator session to the Enterprise Administration Server administration page. **Note:** The **startconsole** command requires that Netscape Navigator is installed on the host machine and that the **netscape** executable file is accessible via the PATH environment variable. For Netscape Navigator to run, the TERM and DISPLAY environment variables must be set to the correct values for your terminal type and display name, respectively.
3. In the Netscape:Password window, type the Administration Server user name and password that you specified in Step 16 and Step 17 in the previous section (in this example, `admin`). Click **OK**.
4. In the iPlanet Web Server Administration Server window, select the server by clicking the server name button beside the field **Select a Server**.
5. Click **Manage** beside the server name button.
6. In the iPlanet Web Server Server Manager window, click **Server On**.
7. The Netscape:Security Warning window informs you that the information you are about to submit is insecure and could be observed by a third party while in transit. For this example, click **Continue Submission**.
8. The Netscape:Question window confirms that the server has started successfully. Click **OK**.
9. Open a browser window and type the Web address `http://`*`host_name`*`/`, where *`host_name`* is the host name you specified in Step 12 in the previous section. A default page provided by the iPlanet installation is displayed.
10. Type the Web address `http://`*`host_name`*`:`*`administration_port_number`*`/`, where *`administration_port_number`* is the port number that you defined in Step 19 in the previous section. You might be prompted for the Administration Server user name and password.

When these steps are complete, iPlanet Web Server is installed and operating correctly. If you are going to install Websphere Application Server, you must stop iPlanet Web Server and the iPlanet Servlet Engine.

Stopping iPlanet Web Server Enterprise Edition and the iPlanet Servlet Engine

Before installing WebSphere Application Server, stop the Web Server and Servlet Engine by performing the following steps. (At several points in this process, the Netscape:Security window might open to inform you that the information you are about to submit is insecure and might be observed by a third party while in transit. For this example, click **Continue Submission** in each case.)

1. In the iPlanet Web Server Server Manager window, click **Server Off**.
2. The Netscape:Question window confirms that the server has stopped successfully. Click **OK**.
3. In the iPlanet Web Server Server Manager window, click the **Servlets** tab. The Enable Servlets window opens.
4. Under the **Activate the Servlet Engine?** field, click the radio button beside the **No** option and then click **OK**.
5. The Save and Apply Changes window appears. Click **Save and Apply**.
6. The Netscape:Question window confirms that your changes are saved and applied. Click **OK**.

Installing WebSphere Application Server 4.0--Custom Installation option

This article describes how to install WebSphere Application Server on a local HP machine. These instructions assume the following:

- Your machine has enough memory and disk space for your installation. See the WebSphere Application Server Supported Hardware, Software, and APIs Web site at www.ibm.com/software/webservers/appserv/doc/latest/prereq.html for the requirements.
- You do not have a previous version of WebSphere Application Server already installed. If you do have a previous version of WebSphere Application Server installed, do not follow these instructions. Instead, refer to the article "Migration overview."
- If you are using IBM HTTP Server as your Web server, you will install it at the same time and onto the same node as you install WebSphere Application Server. If you are using another supported Web server with WebSphere Application Server, you have already installed it onto the same node as WebSphere Application Server.

  Note: You must purchase and install any Web server except IBM HTTP Server *before* you install WebSphere Application Server. IBM HTTP Server is supplied with WebSphere Application Server and can be installed automatically during installation of WebSphere Application Server.

To install WebSphere Application Server, do the following:

1. Ensure that you are logged onto the host machine with superuser (root) privileges.
2. Ensure that the **swagentd** daemon is running by entering the following command:

   ```
   # ps -ef | grep swagentd
   ```

   - If the **swagentd** daemon is running, output similar to the following is displayed:

     ```
     root   10431   10128   0   10:43:33 pts/0   0:00   grep swagentd
     root    1391       1   0    May  9  ?       0:00   /usr/sbin/swagentd -r
     ```

   - If the **swagentd** daemon is not running, start it by entering the following command:

     ```
     # swagentd -r
     ```

3. If a preexisting Web server on your system is running, stop the Web server. If you plan to install IBM HTTP Server 1.3.19 as part of the WebSphere Application Server installation and a version of IBM HTTP Server prior to 1.3.19 is already installed on your system, you must uninstall it in order for the WebSphere Application Server installation program to successfully install IBM HTTP Server 1.3.19.
4. Insert the WebSphere Application Server CD-ROM into the CD-ROM drive.
5. Mount the CD-ROM by following the instructions in the file "Mounting a CD-ROM on HP-UX." The following steps assume that the CD-ROM drive is mounted at /cdrom.
6. Navigate to the correct directory on the WebSphere Application Server CD-ROM by entering the following command:

```
# cd /cdrom/hp
```

7. If the supported Web server you plan to use with WebSphere Application Server is newer than the version currently required by WebSphere Application Server, you must update the prereq.properties file or disable the prerequisite checking functionality before installing WebSphere Application Server.

   To obtain an updated prereq.properties file, download the latest version from the WebSphere Application Server Tools Web site at www.ibm.com/software/webservers/appserv/tools.html. Ensure that the updated prereq.properties file is downloaded or copied into the local /tmp directory.

   To disable the prerequisite checking functionality, perform the following steps:
   a. Copy the prereq.properties file from the /cdrom/hp directory to the /tmp directory on the machine on which you plan to install WebSphere Application Server.
   b. Open the prereq.properties file in a text editor and disable prerequisite checking for an individual component by changing the value of the specific key from `1` to `0`.
   c. Save the edited prereq.properties file.

8. If you have *not* downloaded a new prereq.properties file or disabled the prerequisite checking functionality as detailed in Step 7, run the installation script file by entering the following command:

   ```
   # /cdrom/hp/install.sh
   ```

   If you *have* downloaded a new prereq.properties file or disabled the prerequisite checking functionality as detailed in Step 7, run the installation script file by entering the following command:

   ```
   # /cdrom/hp/install.sh -prereqfile /tmp/prereq.properties
   ```

9. Click **Next** to pass the introductory page.
10. The Install Options window opens. Select **Custom Installation** and then click **Next**.
11. The Choose Application Server Components window opens. Select the components you want to install and deselect the components you do not want to install. Note the following information:
    - The Java 2 Software Development Kit (SDK) is installed by default.
    - The **Server**, **Samples**, **Application Assembly and Deployment Tools**, **IBM HTTP Server 1.3.19**, and **WebServer Plugins** components are selected for installation by default.
    - If you plan to use WebSphere Application Server with IBM HTTP Server, ensure that the **IBM HTTP Server 1.3.19** and **Web Server Plugins** options are selected.
    - If you plan to use WebSphere Application Server with a different supported Web server, ensure that the **Web Server Plugins** option is selected.

      Note: No plug-ins are required to launch the Application Server. However, for production applications, you will not be able to serve servlets without having installed a supported Web server and corresponding Web server plug-in. For non-production applications, you can use the internal HTTP transport system to serve servlets without installing a Web server plug-in by using the internal HTTP transport port `9080`. For example, to serve the sample snoop servlet by using the internal HTTP transport, enter the URL

      `http://`*`machine_name`*`:9080/servlet/snoop`

      In this command, *machine_name* represents the name of the machine on which WebSphere Application Server is running. The internal HTTP transport mechanism is not designed for use in a production environment.

    - If you plan to install the Web server plug-in for IBM HTTP Server, you must select the **IBM HTTP Server 1.3.19** option, or have it already installed on the machine.
    - These instructions assume that you are installing all of the components.

   Click **Next** to continue.

12. A window opens that lets you select the plug-in. In this window, do the following:

a. Select the plug-in option for your Web server.
b. Click **Next**.

Only IBM HTTP Server 1.3.19 is provided with WebSphere Application Server. You must separately purchase and install the other supported Web servers.

13. The Select Destination Directory window opens. Specify the directory into which you want to install WebSphere Application Server. You can either accept the default destination directory or specify a different one by typing the full pathname or by clicking **Browse**. Note that if you've selected IBM HTTP Server for installation, you cannot modify its destination directory. Click **Next** to continue.
14. A window opens that lists the options you have selected to install. Click **Install** to begin the installation.
15. If you are installing IBM HTTP Server automatically at the same time as you install WebSphere Application Server, a window opens, prompting you for the full pathname and file name of the configuration file for the IBM HTTP Server, httpd.conf. Type the location of this file and click **OK**.
16. The Setup Complete window opens. To view the ReadMe file, ensure that **Yes, I want to view the ReadMe File** is selected and click **Finish**; the ReadMe file is displayed in a default browser window. To view the ReadMe file at a later time, deselect **Yes, I want to view the ReadMe File** and click **Finish** to exit from the WebSphere Application Server installation program.
17. The WebSphere Application Server - First Steps window opens. You can use the GUI to access product information in the InfoCenter, start or stop the application server, run samples within your application server environment, launch the administrative console, or launch the application assembly tool. Because you must first start and possibly configure your Web server, close this window for now. If you later want to access the First Steps window, do the following:
    a. Navigate to the directory containing the **firststeps.sh** script (by default, /opt/WebSphere/AppServer/bin) by using the **cd** command, as follows:

    ```
    # cd /opt/WebSphere/AppServer/bin
    ```

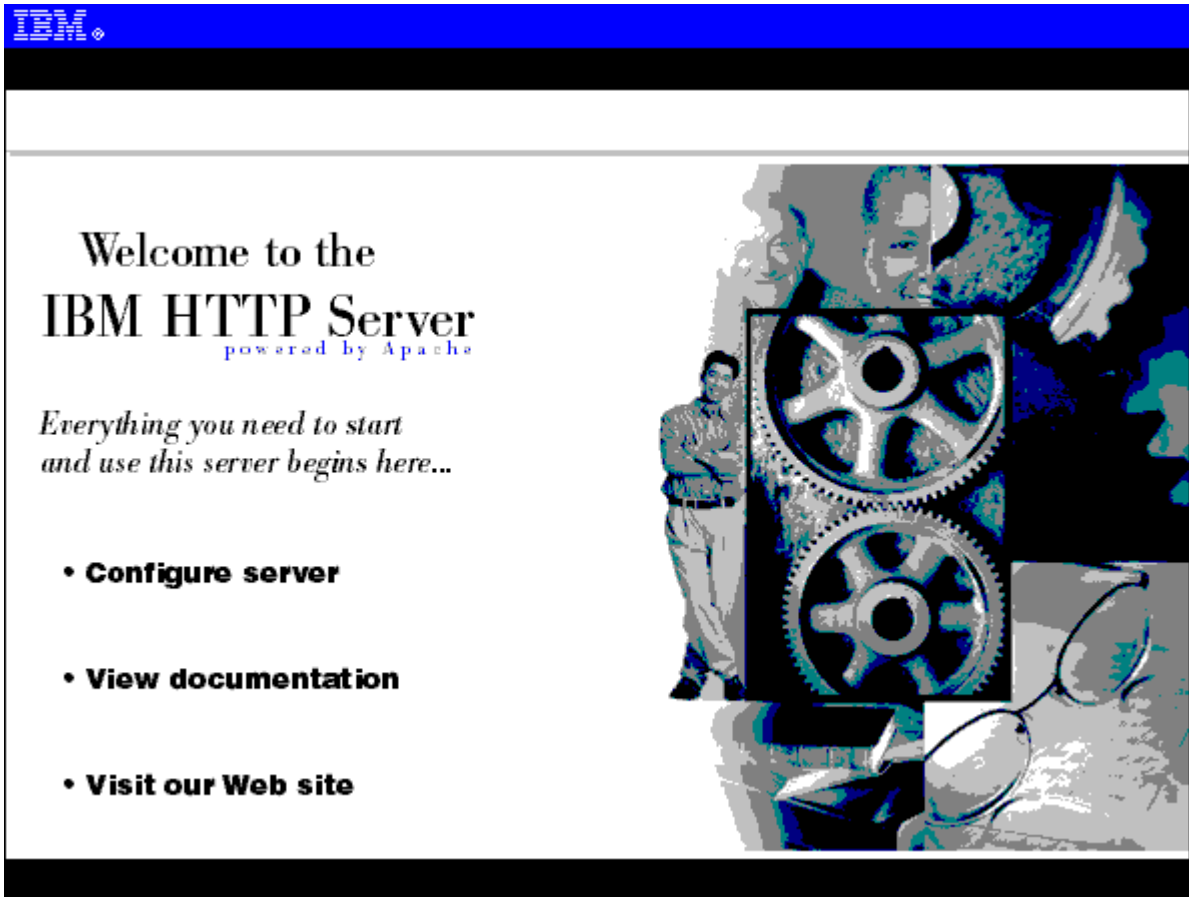
    b. Execute the **firststeps.sh** script, as follows:

    ```
    # ./firststeps.sh
    ```

18. Unmount the CD-ROM before removing it from the CD-ROM drive by following the instructions in the file "Mounting a CD-ROM on HP-UX."
19. If you are using a Web server other than IBM HTTP Server, start the server. If you installed IBM HTTP Server as part of the WebSphere Application Server installation, you might need to configure it. Perform the following steps to verify that the IBM HTTP Server is installed correctly:
    a. Ensure that the Web server is running or start it by entering the following command:

    ```
    # /opt/HTTPServer/bin/apachectl start
    ```

    b. Open a Web browser window and type the name of the host machine as the URL (http://*host_machine* or *localhost*). If you see the Welcome to the IBM HTTP Server page, the server has been installed correctly.



Note that you might need to make configuration adjustments to the server in order to run it successfully on your system. See the IBM HTTP Server documentation at www.ibm.com/software/webservers/httpservers/library.html for more information.

To enable the Secure Sockets Layer (SSL) on IBM HTTP Server, see the IBM HTTP Server documentation at www.ibm.com/software/webservers/httpservers/doc/v1319/9atstart.htm for more information.

Testing the installation

This article describes how to test your installation and configuration of WebSphere Application Server. These instructions assume that you have installed a supported Web server and WebSphere Application Server. Perform the following steps to test your WebSphere Application Server installation:

1. Ensure that you are logged into the host machine with superuser (root) privileges.
2. Navigate to the directory containing the **startServer.sh** script (located by default in the /opt/WebSphere/AppServer/bin directory) by using the **cd** command, as follows:

   ```
   # cd /opt/WebSphere/AppServer/bin
   ```

3. Start the server by entering the following command:

   ```
   # ./startServer.sh
   ```

   Ensure that the server has started successfully by checking the file named default_server_stdout.log located in the /opt/WebSphere/AppServer/logs directory. The message `...open for e-business` appears in this file when the server has started successfully.

4. Open a Web browser window and enter the following URL:

   `http://localhost:9090/admin`

5. The Login window opens and prompts you to enter a user ID to which your configuration changes will be saved. Enter a user ID and click **Submit**. If you do not care to save changes using your user ID, click **Submit** without entering an ID and your changes will be saved using the default user ID `User`.

   If the user ID you choose is already in use and in session, you are prompted to do one of the following:
   - Force the existing user ID out of session. The configuration file that was being used by the existing user ID will be saved in a temporary storage area. You will be prompted to load the saved file; choosing not to do so will delete it from the temporary storage area.
   - Wait for the existing user ID to log out or time out of the session.
   - Select a different user ID.

6. Administer the application server by doing the following:
   a. When the console opens, a tree view is displayed. Click the plus sign (+) next to the **Nodes** entry to expand the view.
   b. Find your host name and expand the view of that node.
   c. Click the plus sign (+) next to the **Application Servers** entry to expand the view.
   d. Select the **Default Server** entry and view the information displayed in the right panel. If the value for the **Execution State** field is `STOP`, click the drop-down menu and select `START`.

      After the default server is started initially, it will start automatically if it stops or if you restart the machine.

   e. Click **OK**.
7. Test the server by doing the following:
   a. Ensure that the Web Server is running. If the Web server is not running, start it.
   b. Open a Web browser window and enter the URL for the snoop servlet, which is a standard sample servlet installed by default, as follows:

      `http://machine_name/servlet/snoop`

      In this command, *machine_name* represents the name of the machine on which WebSphere Application Server is running. Information on /servlet/snoop is displayed.
8. To stop the console, close the browser. Ensure that you save any changes that you want to keep. Unless you save the changes, they will be lost when you close the browser.

Testing with an enterprise bean

This article describes how to test your WebSphere Application Server installation by using an enterprise bean and the Increment sample. These instructions assume that you have installed and tested your WebSphere Application Server system. Perform the following steps:

1. Ensure that you are logged into the host machine with superuser (root) privileges.
2. Navigate to the directory containing the **startServer.sh** script (located by default in the /opt/WebSphere/AppServer/bin directory) by using the **cd** command, as follows:

   ```
   # cd /opt/WebSphere/AppServer/bin
   ```

3. Start the server by entering the following command:

   ```
   # ./startServer.sh
   ```

   Ensure that the server has started successfully by checking the file named default_server_stdout.log located in the /opt/WebSphere/AppServer/logs directory. The message `...open for e-business` appears in this file when the server has started successfully.

4. Open a Web browser window and enter the following URL:

   `http://localhost:9090/admin`

5. The Login window opens and prompts you to enter a user ID to which your configuration changes will be saved. Enter a user ID and click **Submit**. If you do not care to save changes using your user ID, click **Submit** without entering an ID and your changes will be saved using the default user ID `User`.

   If the user ID you choose is already in use and in session, you are prompted to do one of the following:
   - Force the existing user ID out of session. The configuration file that was being used by the existing user ID will be saved in a temporary storage area. You will be prompted to load the saved file; choosing not to do so will delete it from the temporary storage area.
   - Wait for the existing user ID to log out or time out of the session.
   - Select a different user ID.

6. Ensure that the **Default Server** is started by doing the following:
   a. When the console opens, a tree view is displayed. Click the plus sign (+) next to the **Nodes** entry to expand the view.
   b. Find your host name and expand the view of that node.
   c. Click the plus sign (+) next to the **Application Servers** entry to expand the view.
   d. Select the **Default Server** entry and view the information displayed in the right panel. If the value for the **Execution State** field is `STOP`, click the drop-down menu and select `START`.

      After the default server is started initially, it will start automatically if it stops or if you restart the machine.

   e. Click **OK**.
7. Start a Web browser and specify the following URL:

   `http://machine_name/webapp/examples/HitCount`

   In this command, *machine_name* represents the name of the machine on which WebSphere Application Server is running. When the Web page opens, several selection options are displayed.
8. Under the heading **Generate hit count using**, click the radio button beside the option **Enterprise Java Bean**.
9. Under the heading **Transaction Type**, click the radio button beside the option **None**.
10. Click **Increment**.

    If the number of hits is displayed, WebSphere Application Server is operating properly.

Mounting a CD-ROM on HP-UX

This article describes how to mount and unmount a CD-ROM on HP-UX. To mount a CD-ROM, as the user root, perform the following steps one time:

1. Determine the device address for the CD-ROM by entering the following command:

   ```
   # ioscan -C disk -f -n
   ```

   Output similar to the following is displayed. This output example indicates that the CD-ROM device file is /dev/dsk/c1t2d0:

   ```
   Class I H/W Path      Driver  S/W State  H/W Type  Description
   ===========================================================================
   disk  0 8/0/19/0.6.0  sdisk   CLAIMED    DEVICE    IBM     DDRS-39130WS
                         /dev/dsk/c0t6d0   /dev/rdsk/c0t6d0
   disk  1 8/16/5.2.0    sdisk   CLAIMED    DEVICE    TOSHIBA CD-ROM XM-6201TA
                         /dev/dsk/c1t2d0   /dev/rdsk/c1t2d0
   ```

2. Create a new directory called /cdrom at the root of the file system. This directory becomes the CD-ROM mount point; all CD-ROM files appear under this directory.
3. Determine whether the **pfs** daemon is running by entering the following command:

   ```
   # ps -ef | grep pfs
   ```

   If the **pfs** daemon is running, output similar to the following is displayed:

   ```
   root  1681  1651  0 11:39:20 pts/ta    0:00 /usr/sbin/pfs_mountd
   root  1682  1681  0 11:39:20 pts/ta    0:00 pfs_mountd.rpc
   ```

   If the **pfs** daemon is running, go to Step 6. If the **pfs** daemon is not running, complete Step 4 and Step 5 before trying to complete Step 6.

4. Edit the file /etc/pfs_fstab by adding a line similar to the following to indicate the hardware path for the CD-ROM:

   ```
   /dev/dsk/c0t6d0 /cdrom pfs-rrip xlat=unix 0 0
   ```

5. Enter the following commands. You must reenter these commands any time that you restart your system.

   ```
   # nohup /usr/sbin/pfs_mountd &
   # nohup /usr/sbin/pfsd &
   ```

6. To physically mount the CD-ROM, place the CD-ROM in the machine and enter the following command:

   ```
   # /usr/sbin/pfs_mount /cdrom
   ```

Unmounting a CD-ROM

After you finish using the CD-ROM, enter the following command to unmount it:

```
# /usr/sbin/pfs_umount /cdrom
```

You can now eject the CD-ROM.

Uninstalling WebSphere Application Server

Perform the following steps to uninstall WebSphere Application Server from a UNIX machine:

1. Ensure that you are logged into the machine with superuser (root) privileges.
2. If IBM HTTP Server or another Web server is running on your system, stop the Web server.

   Note: Although IBM HTTP Server can be installed using the WebSphere Application Server installation program, it is not uninstalled when you uninstall WebSphere Application Server. It must be uninstalled separately. See the IBM HTTP Server Library Web site at www.ibm.com/software/webservers/httpservers/library.html for more information.

3. Ensure that your DISPLAY and TERM environment variables are set properly.
4. Navigate to the root installation directory (/opt/WebSphere/AppServer on HP-UX, Linux, and Solaris; /usr/WebSphere/AppServer on AIX) and execute the **uninstall.sh** script as follows:

   ```
   # ./uninstall.sh
   ```

5. The uninstallation program starts and the Uninstall dialog box opens. Click **Uninstall** to remove WebSphere Application Server from the machine.
6. To ensure that subsequent installations of WebSphere Application Server do not conflict with files left on the machine from a previous installation, use the **rm -r** command to remove the WebSphere directory structure. Use caution when

executing this command to prevent the unintentional removal of portions of the file system.