Release Notes

This CD-ROM contains programs provided by IBM and other program suppliers. Each program is licensed under the terms and conditions of that specific program. These terms and conditions may vary depending on the specific program or the program supplier. Specific information on the content of this media or the terms and conditions under which these programs are licensed are contained in a readme file on Volume 1 of the media.

To obtain the Content and Terms and Conditions Information, do the following:

1. Log in as the root user.
2. Insert the Volume 1 CD-ROM into the CD-ROM drive. If your CD-ROM drive is not /dev/cd0, substitute the correct device name and type the following mount command:
   ```
   mount -v cdrfs -o ro /dev/cd0 /mnt
   cp /mnt/README* /tmp
   unmount /mnt
   ```

   The /tmp/README and /tmp/README.html files contain the content of this media or the terms and conditions under which these programs are licensed. View this information using your Web browser or the more or pg commands as in the following examples:
   ```
   more /tmp/README
   ```
   or
   ```
   netscape /tmp/README.html
   ```
Release Notes
Note
Before using this information and the product it supports, read the information in "Notices," on page 19.
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Chapter 1. AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack

Note: To view the most current version of these Release Notes, go to the following Web site:

Where to Find AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack Documentation

The AIX 5L for POWER Bonus Pack and Expansion Pack is shipped with AIX 5L for POWER Version 5.1 as a vehicle for delivering new IBM and non-IBM products. Most Bonus Pack and Expansion Pack products are installed using normal installation methods. Because some Bonus Pack and Expansion Pack products cannot be installed using normal installation methods, their installation procedures are provided under their product descriptions.

The AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack may include products that contain a cryptographic function that is subject to special export-licensing requirements by the U.S. Department of Commerce. Import restrictions may also apply to certain countries. Different packages of the AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack accommodate varying country export or import restrictions. Refer to Ordering Information located in the Bonus Pack announcement to determine the appropriate package. Contact your IBM representative or IBM Business Partner to determine what encryption you are entitled to receive.

The contents of the Bonus Pack and Expansion Pack vary over time. New software products can be added, changes to existing software products can occur, or products can be removed. Changes to the content of the AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack are announced either as part of an AIX 5L for POWER announcement or independently.

Softcopy documentation for each product is included with the product. This Release Notes document supplements the product documentation by outlining the steps for getting started and pointing you to additional product information.

Unless otherwise indicated, products can be installed from the CD using the Web-based System Manager or SMIT. For detailed instructions, see the AIX 5L Version 5.1 Installation Guide. The AIX 5L Version 5.1 Installation Guide is available through the Information Center.

Information Center
The @server pSeries Information Center is an information portal for AIX and pSeries customers. From this site, you can access the following:
• AIX 4.3, AIX 5.1, and AIX 5.2 documentation
• Hardware documentation
• Message database for 7-digit error codes, LEDS, and error identifiers
• AIX 5.2 How-to's and FAQs
• Links to Redbooks, White Papers, and related products

To access the Information Center, go to the following Web site:

AIX 5L for POWER Version 5.1 Documentation
AIX documentation is also contained on the AIX documentation CD. The documentation is made accessible by loading the documentation CD onto the hard disk or by mounting the CD in the CD-ROM drive.
The documentation contained on the CD may not be as current as the documentation on the Information Center Web site.

The following publications describe AIX 5L Version 5.1 installation:

- **AIX 5L Version 5.1 Installation Guide**, available online and in printed hardcopy
- **AIX 5L Version 5.1 Network Installation Management Guide and Reference**, available online

To order the **AIX Version 5.1 Installation Guide**, contact your point of sale, or, in the U.S., call IBM Customer Publication Support at 1-800-879-2755. Specify order number SC23-4374.

---

**To List and Preview Installation Software**

You can list the available software products, packages, and filesets on AIX media. This media can be a CD-ROM, tape, diskette, or directory. The output lists the available packages and filesets on the media. Descriptions are provided at the fileset level.

You can choose to do a preview installation before doing the actual installation. A preview installation provides the preinstallation information that occurs during a regular installation, except that no software will be installed.

When you select a package or fileset to be installed with the preview installation process, you will see a list that contains all the requisite packages and filesets required by the selected package or fileset to be successfully installed.

The other information generated during the preinstallation process concerns file system-size checking. The file systems are checked to make sure there is enough free space available to install the selected package or fileset.

You can run the list software and previewing software functions from the command line, the SMIT interface, or the Web-based System Manager interface.

**To List and Preview Software from the Command Line**

1. Log in as the root user.

2. Use the `installp -ld device` command to list the available software on the media. For example, to list the software on the first CD of the base media, insert the Volume 1 CD in the first CD drive. Then type the following:
   ```bash
   installp -ld/dev/cd0 | pg
   The following displays:
   Fileset Name  Level
   -------------------------------
   IMNSearch.bld.DBCS  2.3.1.0
   # NetQuestion DBCS Buildtime Modules
   IMNSearch.bld.SBCS  2.3.1.0
   # NetQuestion SBCS Buildtime Modules
   ...
   ```

3. To do a preview installation at the command line, use the `-p` flag with the `installp` command. For example, to preview the installation of the `IMNSearch.bld.DBCS` fileset, enter:
   ```bash
   installp -aXq -p -d/dev/cd0 IMNSearch.bld.DBCS
   ```
   The preview option shows the filesets selected to be installed, the filesets that are pulled in by requisites, and the system resources that are used by the `installp` operation.
To List and Preview Software from the ASCII SMIT Interface

1. Log in as the root user.
2. List the available software on the media by using the `smitty install_update` fast path.
3. Select **Install Software**.
4. Press the F4 key to list the available input devices and select the appropriate one, or type the input device name in the blank field. Press Enter to continue.
5. To list all available software on the selected media, press the F4 key at the **SOFTWARE to Install** field.
6. Scroll through the list of software by using the arrow keys or the Page Up or Page Down keys.

**Note:** The software shown in this listing are the available packages and filesets for that software product. For example, in the following output example, the software product is IMNSearch.

```
IMNSearch.bld
  + 2.3.1.0 NetQuestion DBCS Buildtime Modules
  + 2.3.1.0 NetQuestion SBCS Buildtime Modules

IMNSearch.rte.httpdlite
  @ 2.0.0.2 Lite NetQuestion Local Web Server
```

The two packages are IMNSearch.bld and IMNSearch.rte.httpdlite. The filesets in the IMNSearch.bld package are the NetQuestion DBCS Buildtime Modules fileset and the NetQuestion SBCS Buildtime Modules fileset. Both filesets are at the 2.3.1.0 level. Notice that the descriptions for the software product are described at the fileset level.

If the fileset is preceded by a plus sign (+), then it is available to be installed. If the fileset is preceded by an at sign (@), then the fileset is already installed.

7. Select the package or fileset you want to install by scrolling to that package or fileset and press the F7 key to make the selection. Press enter to continue.
8. To preview the installation of the package or fileset that you selected, press the Tab key to select **yes** in the **PREVIEW only?** field. Press Enter.

**Note:** To obtain detailed information about the installation, select **yes** in the **DETAILED output?** field. The filesets being installed are displayed in parentheses.

To List and Preview Software Using the Web-based System Manager Interface

1. Log in as the root user.
2. To initialize the environment, type `wsm &` at the command prompt.
3. In the **Navigation Area**, click the plus sign (+) to the left of the client you want to manage.
4. Click the plus sign (+) to the left of the **Software** icon. This action expands the **Software** tree.
5. Highlight the **Installed Software** icon.
6. At the top of the Web-based System Manager window in the menu bar, click **Software** to display the **Software** menu.
7. Click **New Software (Install/Update)**.
8. Click **Install Additional Software**.
9. Click **Advanced Method**.
10. Specify or select a software source.
11. To list available software, click **Browse** to display a tree view of all the software on the media. The tree can be expanded by clicking the plus sign (+) to the left of the icon.
**Note:** If the software is already installed, you will see a small checkmark to the left of the fileset description.

12. Select the package or fileset you want to install by highlighting the package or fileset.

**Note:** You can select multiple consecutive packages or filesets by holding down the left mouse button while on one selection and dragging the mouse pointer up or down.

You can also use the Ctrl key or the Shift key to select multiple items. To choose nonconsecutive selections, hold the Ctrl key while making your selections with the left mouse button. To choose consecutive selections, hold the Shift key while making your selections with the left mouse button.

13. To preview the installation of the selected package or fileset, press the **Preview** button.

Additional information about AIX-supported products is available from the following Web site:

http://www.ibm.com/servers/aix/products/ibmsw/list/
Chapter 2. AIX 5L for POWER Version 5.1 Bonus Pack

IBM 32-bit SDK for AIX, Java™ 2 Technology Edition, Version 1.4.1

IBM 32-bit SDK for AIX, Java™ 2 Technology Edition, Version 1.4.1 is released in Java14.* filesets. The code on the Bonus Pack corresponds to the code that was released in May, 2003. To see if a more recent service refresh is available, select the How and where to get fixes link from the Java 1.4.1 download page (click on the Download link on [http://www.ibm.com/developerworks/java/jdk/aix](http://www.ibm.com/developerworks/java/jdk/aix) then select the 1.4.1 32-bit link).

IBM 64-bit SDK for AIX, Java™ 2 Technology Edition, Version 1.4.1

IBM 64-bit SDK for AIX, Java™ 2 Technology Edition, Version 1.4.1 is released in Java14_64.* filesets. The code on the Bonus Pack corresponds to the code that was released in May, 2003. To see if a more recent service refresh is available, select the How and where to get fixes link from the Java 1.4.1 download page (click on the Download link on [http://www.ibm.com/developerworks/java/jdk/aix](http://www.ibm.com/developerworks/java/jdk/aix) then select the 1.4.1 64-bit link).

Adobe Acrobat Reader 5.0.6 and Asian Font Packs

Adobe Acrobat Reader 5.0.6 is part of the Adobe Acrobat family of software, which lets you view, navigate, browse, and print documents in Portable Document Format (PDF).

Using the fonts installed with the Asian Font Packs, Adobe Acrobat Reader 5.0.6 can be used to display PDF files that contain text in Chinese Simplified, Chinese Traditional, and Korean.

To install Adobe Acrobat Reader 5.0.6 or any of the Asian Font Packs, you must first create a CD-ROM file system and mount the Bonus Pack CD-ROM using the following steps:
1. Log in as root user.
2. Insert the Bonus Pack CD-ROM into the CD-ROM drive, and type the following command:

   ```
   Note: If your CD-ROM drive is not /dev/cd0, substitute the correct device name in the command.
   
   mount -v cdrfs -o ro /dev/cd0 /mnt
   ```

When the `mount` command completes, go to the `/mnt/other/Adobe/AIX_ReadMe_for_Acrobat_Reader` file for the Adobe Acrobat Reader 5.0.6 installation instructions.

Before you can install any of the Asian Font Packs, you must install Adobe Acrobat Reader 5.0.6 from this CD-ROM or from some other media (for example, download the reader from the Adobe Web site). After Adobe Acrobat Reader 5.0.6 is installed, go to the `/mnt/other/Adobe/AIX_ReadMe_for_Asian_Font_Packs` file for the Asian Font Packs installation instructions.

You can copy the following readme files from the CD-ROM to your system. To copy these files to the Adobe Acrobat Reader default installation directory, type the following commands:

```
cp /mnt/other/Adobe/AIX_ReadMe_for_Acrobat_Reader /usr/lpp/Acrobat5
cp /mnt/other/Adobe/AIX_ReadMe_for_Asian_Font_Packs /usr/lpp/Acrobat5
```

Japanese fonts can be downloaded from the following Web site:

Additional Information

For information about the Asian Font Packs, see the following Web site:


For support information, see the following Web site:

http://www.adobe.com/support/main.html

For newer versions of the products that may be available for downloading, see the following Web site:


Geodesic Systems Great Circle 6.0.1.5

Geodesic Systems Great Circle 6.0.1.5 is an advanced testing and diagnostic tool that allows software engineers to identify and resolve performance and reliability problems in C and C++ application software.

Additional product information can be found at:

http://www.geodesic.com/products/greatcircle.html

To install Geodesic Systems Great Circle 6.0.1.5 for AIX 5.1, you must first create a CD-ROM file system and mount the Bonus Pack CD-ROM using the following steps:

1. Log in as the root user.
2. Insert the Bonus Pack CD-ROM into the CD-ROM drive, and type the following command:

   mount -v cdrfs -o ro /dev/cd0 /mnt

   When the mount command completes, go to the /mnt/other/greatcircle/readme.txt file for installation instructions.

   Copy the following files from the CD-ROM to your system. To copy these files to the default installation directory, type the following commands:

   cp/mnt/other/greatcircle/readme.txt /usr/greatcircle/readme.txt
   cp/mnt/other/greatcircle/greatcircle.tar.Z /usr/greatcircle/greatcircle.tar.Z

   The following files on the CD will give you more information about Great Circle before you extract the product. These files are all contained in the greatcircle.tar.Z file:
   - license.txt: Great Circle license information
   - greatcircle.pdf: Great Circle documentation

IBM Directory (LDAP)

To access the latest IBM Directory Version 5.1.0.0 product information, go to the following Web site:

http://www.software.ibm.com/network/directory

Installation and Configuration

For information specific to IBM Directory installation and configuration, go to the following Web site:


From this Web site, read the following documents:
- IBM Directory Version 5.1.0.0 for AIX Installation and Configuration Guide
IBM Directory Version 5.1.0.0 Server Readme

IBM Directory Version 5.1.0.0 Client Readme

IBM Directory Version 5.1.0.0 Readme Addendum

If you are using DB2 7.2, before starting ldapxcfg, verify that the following links exist, with the following commands:

```
/usr/ldap/db2 -> /usr/lpp/db2_07_01
/usr/ldap/lib/libdb2.a -> /usr/lpp/db2_07_01/lib/libdb2.a
```

If you are using DB2 8.1, you must enable asynchronous I/O before you begin the configuration. To enable asynchronous I/O, type the following at the command prompt:

```
smitty aio
```

There is a size underestimation with ldap.server.com. This underestimation is less than 1MB, but it can cause the installation to fail if enough space is not allocated.

If these links are not present, create the links as follows:

```
ln -s -f /usr/lpp/db2_07_01/lib/libdb2.a /usr/ldap/lib/libdb2.a
ln -s -f /usr/lpp/db2_07_01 /usr/ldap/db2
```

**Installing DB2 UDB7.2**

If you are reinstalling, force installing, or installing an update to the DB2 UDB 7.2 db2_07_01.msg.Ja_JP fileseset, you should first remove the db2_07_01.msg.Ja_JP and db2_07_01.msg.ja_JP filesesets.

**Administration**

After installation of the ldap.client package is complete, create the following link:

```
ln -s -f /usr/ldap/lib/aix5/libldapiconv64.a /usr/lib/libldapiconv64.a
```

**IBM Directory with Ja_JP Locale**

In the Japanese environment, it is strongly recommended that you use IBM Directory in the Ja_JP locale. In other Japanese locales, the Server Administration GUI doesn't work properly.

---

**Open Secure Shell (OpenSSH) 3.6.0**

OpenSSH requires Open Secure Sockets Layer (OpenSSL) Version 0.9.6e for encryption. The OpenSSL package is available on the AIX Toolbox for Linux Applications CD. The package, name is openssl-0.9.6g-3.aix4.3.ppc.rpm, and can be installed using SMIT. OpenSSL must be installed prior to installing OpenSSH.

After installation, the OpenSSH readme can be found in the /usr/openssh/README file.

**Note:** OpenSSH installation uses the AIX electronic license feature. When installing through SMIT, you will need to view and accept the license text provided with OpenSSH.

---

**IBM Tivoli Storage Manager Version 5.1.5 (Server) and 5.1.6 (Client) Evaluation Software**

IBM Tivoli Storage Manager (TSM) protects data from hardware failures and other errors by storing backup and archive copies of data on offline storage. Optional modules allow business-critical applications that must run continually to utilize TSM's centralized data protection with no interruption to their service.

TSM Publications, including installation instructions, can be found at the following Web site:

```
http://publib.boulder.ibm.com/tividd/td/IBMStorageManagerforAIX5.2.html
```
Visit the following Web site to select a participating and authorized IBM Tivoli Storage Manager business partner for free assistance with installation and configuration:

Tivoli Storage Manager server for AIX supports both 32-bit and 64-bit environments for AIX Version 5.1 and later.

If your system is using the 32-bit kernel, you must install the 32-bit version of the TSM server, tivoli.tsm.server.rte. If your system is using the 64-bit kernel, you must install the 64-bit version of the TSM server, tivoli.tsm.server.aix5.rte64.

**Note:** In either case, you must install the common functions, samples, and so on. They are delivered in the tivoli.tsm.server.com fileset. If you decide to switch environments, you must uninstall Tivoli Storage Manager and reinstall the correct version for your new environment.

When you are installing the clients in a non-English locale, the corresponding locale message filesets are required to be selected to install along with the clients from **Install and Update from ALL Available Software.** Refer to the product readme for additional information.

TSM does not support installation on Diskless and Dataless AIX machines.

TSM creates a /usr/tivoli/tsm/tivinv/TSMSACAIX05_01.SIG signature file for error logging with default world-writable permissions (777). If error logging functions are not required, modify the file permission to 755 in order to avoid potential security problems.

The V5.1.6 TSM hierarchical storage management (HSM) client for JFS can, under rare circumstances, cause a system crash with JFS2 filesystems. While the V5.1.6 TSM Backup/Archive client can backup both JFS and JFS2 filesystems, the V5.1.6 HSM client can manage only JFS filesystems.

In rare cases, the V5.1.6 HSM client causes a system crash if only JFS2 file systems are present on the machine. This problem is documented by APAR IC36034.

If you plan to install and try TSM HSM on your system, make sure that no JFS2 file systems are present. If you already have JFS2 file systems on your system, make sure that you have mounted at least one JFS file system on your system.

---

**IBM Tivoli Storage Resource Manager Version 1.2 Evaluation Software**

IBM Tivoli Storage Resource Manager Version 1.2 Evaluation Software (TSRM) supports both 32-bit and 64-bit environments for AIX Version 5.1.

**Installing TSRM**

When you are installing TSRM, you should perform the following steps:

1. Mount the TSRM CD by typing the following:
   ```
   mount -oro -vcdfs /dev/cd0 /mnt
   cd /mnt
   ```

2. Read the readme_en.txt file. You can view the readme_en.txt file by typing the following:
   ```
   pg readme/readme_en.txt
   ```

   **Note:** Pay particular attention to the Overview section. Also notice that section II.1 lists information about how to obtain the try-buy license necessary for installation. You might want to request the license well in advance of beginning your installation.

3. Enable your system to run the graphical user interface (GUI) installer.
The TSRM installation utilizes a GUI. If you are working from a system console other than the one connected directly to the system on which you're installing TSRM, you will need to set the DISPLAY environment variable to refer to your console. To do this run the following command from the system on which you're installing TSRM:

```
export DISPLAY=your_system:0.0
```

Replace the `your_system` parameter with your system's hostname. You may also need to enable your system to display the GUI by running the following command:

```
xhost +
```

4. Begin the TSRM installation by typing the following command:

```
aix/setup.sh -g
```

**Note:** After you run the above command, a message is displayed saying that further output is directed to an output file. It may take a while for the GUI installer to display. To monitor installation status, check the output file for warnings or errors.

Once installation has started, the following tasks must be done in order to complete the installation:

1. Select **Install IBM Tivoli SRM**.
2. Agree to the license agreement.
3. Select **The Tivoli SRM Server and Agent on this machine**.
4. On the License Key Entry screen, enter the IBM Tivoli SRM license. Obtain the IBM Tivoli SRM license by following the method described in the `readme_en.txt` file. See 2 on page 8.
5. Unless you already have one of the other database software packages installed, select the **Cloudscape** database option.
6. Accept the default Tivoli SRM Parameters.
7. On the NAS Discovery Parameter screen, you do not have to enter a user name and password. Click **Next** to continue.
8. Click **Next** on the Space Requirements screen.
9. Continue to click **Next** until the actual installation begins.
10. Once the installation has completed, click **Done**. This will terminate the GUI installer.

**Uninstalling TSRM**

To uninstall TSRM, you must do the following:

1. Mount the TSRM CD by typing the following:

   ```
   mount -oro -vcdrfs /dev/cd0 /mnt
cd /mnt
   ```

2. Run the following command:

   ```
aix/setup.sh -g
   ```

**VERITAS Foundation Suite and VERITAS Foundation Suite High Availability**

Foundation Suite includes the following:

- VERITAS Volume Manager
- VERITAS File System

Foundation Suite High Availability (HA) includes the following:

- VERITAS Volume Manager
- VERITAS File System
- VERITAS Cluster Server
AIX Operating System Levels Required

If the operating system is at base level AIX 5.1, you must upgrade your system to AIX 5L for POWER Version 5.1 with the 5100-01 Recommended Maintenance package and the appropriate APARs, or AIX 5L for POWER Version 5.1 with the 5100-02 Recommended Maintenance package and appropriate APARs.

At AIX 5L for POWER Version 5.1 with the 5100-01 Recommended Maintenance package, the APARs to install are as follows:

- IY24856
- IY28392
- IY28484
- IY29731
- IY29813

At AIX 5L for POWER Version 5.1 with the 5100-02 Recommended Maintenance package, the APARs to install are as follows:

- IY29731
- IY29813

At AIX 5L for POWER Version 5.1 with the 5100-03 Recommended Maintenance package, the APAR to install is as follows:

- IY32749

For additional installation information on Foundation Suite and Foundation Suite High Availability component products, and instructions on obtaining the latest AIX APARs, review the following TechNote on the VERITAS Technical Support Web site:

http://seer.support.veritas.com/docs/245873.htm

Installation Instructions for Foundation Suite 3.4 and Foundation Suite HA 3.4

To install Foundation Suite 3.4 and Foundation Suite HA 3.4, do the following:

1. Log in as root user.
2. Insert the Bonus Pack software CD into a CD-ROM drive connected to your system.
3. Create a directory to use as a mount point, as follows:
   
   # mkdir -d /cdrom

4. Mount the CD on the mount point, as follows:

   # mount -V cdrfs -o ro /dev/cd0 /cdrom

5. To install Foundation Suite, run the `/cdrom/other/VRTSFST/pkgs/VRTSinstall` script. To install Foundation Suite HA, run the `/cdrom/other/VRTSVCS/installvcs` script.

The release notes for the Foundation Suite and the Foundation Suite HA are in the `/cdrom/other/VRTSFST/release_notes/` and `/cdrom/other/VRTSVCS/release_notes/` directories, respectively.

The VERITAS Foundation Suite and HA documentation is on the CD-ROM in the `/cdrom/other/VRTSFST/docs` and `/cdrom/other/VRTSVCS/docs` directories, respectively.
WebSphere Application Server Version 5, Trial Program

Installation of IBM WebSphere Application Server on AIX 5L

**Note:** Instructions on how to install WebSphere can be found in the README.TXT readme. The README.TXT readme is located in the /other/IBMWebAS directory.

After IBM WebSphere Application Server on AIX 5L or later is installed, there are several errors returned when the lppchk command is run on an AIX system. These errors are inconsequential to the system and can be cleaned up by copying the /other/IBMWebAS/clean_up_was script to the system and then running it when you are logged in as the root user. Running this script will clean up the majority of the error messages from the lppchk command.

**Note:** If you install WebSphere Application Server, fixpack2 you do not need to run the above script.

No-charge Trial Program support is available for 60 days. For more information, go to the following Web site:

http://www.software.ibm.com/wsdd/downloads/WASsupport.html#support

In order to maximize your trial experience, if your AIX system runs with Trusted Computing Base (TCB) disabled, it is recommended that you install Fix Pack 2 and take advantage of the no-charge Trial Program support. Fix Pack 2 can be obtained from the following Web site:

http://www.ibm.com/support/all_download_drivers.html

At the Web site, do the following:
1. Enter websphere application server in the box marked **enter search terms**.
2. Select **Updates (code fixes)** in the box marked **Select the download type**.
3. On the results screen, type AIX in the box marked **Limit by platform or operating system**.
4. Type 5.0.2 in the box marked **Limit by version**.

For additional information on supported configurations, go to the following Web site:

Chapter 3. AIX 5L for POWER Version 5.1 Expansion Pack

IBM HTTP Server for AIX, Version 1.3.19.4

This section provides a brief product overview and information about installing the IBM HTTP Server (IHS) and its documentation.

Product Overview

IHS is a Web server. It is based on the Apache Web server developed by the Apache Group. IBM HTTP Server Version 1.3.19.4 is similar to the Apache version, but the IBM version contains additional patches from the Apache development tree.

IHS includes support for SSL secure connections, which is not available in the Apache Web server developed by the Apache Group. The addition of this feature required modifications to several of the base Apache source code files. Therefore, it is not possible to rebuild the entire IBM binary distribution with the given source due to legal restrictions on the SSL technology. However, the Apache source (from which the IHS is based) is included, and an Apache module can be written to run with the IHS.

Limitations

The license restriction for IBM HTTP Server Version 1.3.19.4 states that when used outside of WebSphere Application Server (WAS), IHS can only be used in conjunction with AIX Web-based System Manager and Documentation Library (DocSearch) in order to receive support.

IBM HTTP Server Version 1.3.19.4 does not support the Fast Response Cache Accelerator function on AIX 5L for POWER Version 5.1. However, there may be other Web servers that support the Fast Response Cache Accelerator function on AIX 5L for POWER Version 5.1.

Documentation

The IHS product Web site contains the latest version of the documentation and installation instructions. Go to the following Web site frequently to get the most up-to-date information:


From this Web site, click on User Assistance for the IBM HTTP Server documentation and other information.

Documentation is also available in the /usr/HTTPServer/htdocs/locale/manual/ibm/ directory, where locale is your country locale.

Installation Instructions

Due to the license restrictions for IBM HTTP Server 1.3.19.4 when used outside a WAS environment, the following installation instructions pertain only to the use of IHS with Web-based System Manager and DocSearch.

1. Back up your Web server configuration files in the conf directories, and back up the Web site created under the htdocs directory.
2. Uninstall any previous versions of the server by doing the following:
   a. Log in as the root user.
   b. Stop the server by changing the directory to /usr/HTTPServer/bin, and then type the following:
      ./apachectl stop
   c. Type smitty.
   d. Select Software Installation and Maintenance.
   e. Select Software Maintenance and Utilities.
f. Select Remove Installed Software.

g. Click List under Software Name.

h. Select the following filesets from the list:
   - http_server.admin
   - http_server.base.rte
   - http_server.base.source
   - http_server.frca
   - http_server.html.en_US
   - http_server.modules.fcgi
   - http_server.modules.ldap
   - http_server.modules.ldap.128
   - http_server.modules.mt
   - http_server.modules.snmp
   - http_server.msg.xx_XX.admin
   - http_server.html.xx
   - http_server.msg.xx.ssl.core
   - http_server.base.source
   - server.en_US.SSL.core
   - server.ssl.128.source

   Note: The variable xx_XX is the country that was installed.

i. Click OK.

j. Change the Preview only option to No.

k. Click OK.

3. Web-based System Manager and DocSearch only require two filesets from IBM HTTP Server Version 1.3.19.4 in order to provide remote document or file service. They are:
   - http_server.base.rte (HTTP Server Base Run-Time)
   - http_server.base.source (HTTPServer Source Code)

4. Log in as root user.

5. Type smitty.


7. Select Install and Update Software.

8. Select Install Software Bundle.

9. At the INPUT device/directory for software field, click List and select the CD-ROM or DVD-RAM drive (per the system configuration).

10. In the Select a Fileset Bundle list, choose the wsm_remote bundle and press Enter.

11. Press Enter twice to complete the installation and the remote configuration for Web-based System Manager and Doc Search.

   Note: Additional message filesets for the supported country codes are available on the media.

   The /usr/HTTPServer path is used as the base directory. Documents and files are served from the /usr/HTTPServer/htdocs directory.

12. Click OK.

13. Answer yes to the confirmation messages. The /usr/HTTPServer path is used as the base directory.

14. To start the IHS, either reboot the system so that the HTTP Server will be automatically started through the system's /etc/inittab file, or type the following from the AIX command line:
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Netscape Communicator Version 4.8.0.0

The Expansion Pack includes the Netscape Web browser product, Communicator, Version 4.8.0.0, which includes the following features:

• Navigator, Messenger, Composer, and Newsgroups
• Message and help filesets for Brazilian Portuguese, Catalan, Czech, English, French, German, Hungarian, Italian, Japanese, Korean, Polish, Russian, Slovakian, Spanish, Simplified Chinese, and Traditional Chinese languages
• Initial unicode (UTF-8) implementation for all languages listed above for AIX Version 4.3.3 and later
• Bidirectional support for Hebrew and Arabic locales
• Java support, JVM 1.1.5 and AWT 1.1

Installation Information

The Expansion Pack CD contains the 128-bit encrypted version of Netscape Communicator (the U.S. package).

The Netscape Communicator files are installed in the /usr/netscape/communicator directory and the /usr/netscape/communicator/us directory.

Installation of messages and helps for Netscape Communicator creates several subdirectories. The files are contained in the /usr/lpp/X11/lib/X11/$LANG/communicator directory.

Note: The locale fileset should be installed prior to installing the corresponding Netscape message fileset.

Migration Information

If you are planning to migrate your AIX system to AIX 5.1, you must install Netscape Communicator, Version 4.8.0.0, prior to migrating AIX. Previous versions of Netscape Communicator will not run on AIX 5.1.

AIX Web Browsers Site

For information about Web browsers on AIX, including the latest Netscape Communicator installp images, see the following Web Browsers for AIX site:

http://www.ibm.com/servers/aix/browsers/

For the latest Netscape Communicator fixes, see the following Web site:

http://aix.software.ibm.com/aix/efixes/netscape

Due to the 128-bit encryption in Netscape Communicator, there is no site available that can be reached through the command line ftp. If you have an earlier version of the AIX Expansion Pack and you do not have Web access, you may request a current Expansion Pack by contacting your IBM Representative,
Where to find Additional Information
For more information, refer to the \texttt{/usr/netscape/communicator/README.html} file.

For information on how to receive a browser update if a Web download is not possible, refer to the \texttt{/usr/netscape/communicator/README} file.

**IBM Network Authentication Service Version 1.3 for AIX**

IBM Network Authentication Service Version 1.3 for AIX is a network authentication protocol based on the IETF RFC 1510 standards protocol for the Kerberos V5 IBM Network Authentication Service. It includes the Generic Security Service Application Programming Interface (GSS-API), the key distribution center server (KDC), and the server. IBM Network Authentication Service allows AIX middleware and external application writers to use authenticated and optionally encrypted message flow between their respective components.

**Documentation**

Read the \texttt{README.lang} file for IBM Network Authentication Service Version 1.3 before configuring or using the program, where \texttt{lang} specifies one of the following language locales:

- Chinese (Simplified)
- Chinese (Traditional)
- English
- French
- Korean
- Portuguese (Brazilian)
- Spanish

The \texttt{README.lang} file for AIX is in the \texttt{/usr/lpp/krb5} directory after the \texttt{krb5.client.rte} fileset is installed from the \texttt{krb5.client} client installation package. The \texttt{README.lang} file can also be viewed using the SMIT \texttt{list_media_info} command to list supplemental fileset information on the installation media for the \texttt{krb5.client.rte} fileset.

Documentation for IBM Network Authentication Service is available in the \texttt{krb5.doc.lang} installation packages, where \texttt{lang} specifies one of the following language locales:

- \texttt{en_US} (U.S. English)
- \texttt{Ja_JP} (Japanese)
- \texttt{es_ES} (Spanish)
- \texttt{fr_FR} (French)
- \texttt{ko_KR} (Korean)
- \texttt{zh_CN} (Simplified Chinese)

The documentation is in both HTML and PDF formats. Install the \texttt{krb5.doc.lang.html} fileset for HTML and the \texttt{krb5.doc.lang.pdf} fileset for PDF.

*The IBM Network Authentication Service Version 1.3 Administrator's and User's Guide* is installed in the following directories:

- HTML
  \texttt{/usr/lpp/krb5/doc/html/lang/ADMINGD}
The IBM Network Authentication Service Version 1.3 Application Development Reference is installed in the following directories:

- HTML
  /usr/lpp/krb5/doc/html/lang/APDEVREF
- PDF
  /usr/lpp/krb5/doc/pdf/lang/APDEVREF

**Installation and Configuration**

The IBM Network Authentication Service Version 1.3 Administrator's and User's Guide explains how to install and configure the product.

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**DES Encryption Kernel Extension 64-bit Support**

The DES encryption kernel extension (nfs_kdes_full.ext) now includes support for 64-bit kernels. This extension is used to enable Secure NFS by encrypting time stamps sent between client and server that allow each RPC message to be authenticated. For more details, see the [Network File Systems (NFS) Security](#) article in the AIX 5L Version 5.2 Security Guide.

The DES encryption kernel extension is available from the des filesset on the AIX Expansion Pack.
Appendix. Notices

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