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
   ```
Before using this information and the product it supports, read the information in "Notices," on page 19.
## Contents

**Chapter 1. AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack**
- Where to Find AIX 5L for POWER Version 5.1 Bonus Pack and Expansion Pack Documentation ........................................................................................................ 1
- Information Center .......................................................................................................................... 1
- To List and Preview Installation Software ...................................................................................... 2
  - To List and Preview Software from the Command Line .............................................................. 2
  - To List and Preview Software from the ASCII SMIT Interface .................................................. 3
  - To List and Preview Software Using the Web-based System Manager Interface ......................... 3

**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 .................................................. 5
- IBM 64-bit SDK for AIX, Java™ 2 Technology Edition, Version 1.4.1 ........................................... 5
- Adobe Acrobat Reader 5.0.6 and Asian Font Packs ............................................................................. 5
- Additional Information ....................................................................................................................... 6
- Geodesic Systems Great Circle 6.0.1.5 ............................................................................................... 6
- IBM Directory (LDAP) ....................................................................................................................... 6
- Installation and Configuration ........................................................................................................... 6
- Administration ................................................................................................................................. 7
- IBM Directory with Ja_JP Locale ....................................................................................................... 7
- Open Secure Shell (OpenSSH) 3.6.1 ................................................................................................. 7
- IBM Tivoli Storage Manager Version 5.2.0 Evaluation Software .................................................... 7
- IBM Tivoli Storage Resource Manager Version 1.2 Evaluation Software ......................................... 8
- Installing TSRM ............................................................................................................................... 9
- Uninstalling TSRM ............................................................................................................................ 9
- VERITAS Foundation Suite and VERITAS Foundation Suite High Availability ............................. 10
  - AIX Operating System Levels Required .................................................................................. 10
  - Installation Instructions for Foundation Suite 3.4 and Foundation Suite HA 3.4 ................. 10
- WebSphere Application Server Version 5, Trial Program ............................................................. 11
  - Installation of IBM WebSphere Application Server on AIX 5L ................................................. 11

**Chapter 3. AIX 5L for POWER Version 5.1 Expansion Pack**
- IBM HTTP Server for AIX, Version 1.3.19.4 .................................................................................... 13
- Product Overview ............................................................................................................................. 13
- Limitations ......................................................................................................................................... 13
- Documentation ................................................................................................................................. 13
- Installation Instructions .................................................................................................................... 13
- Third-Party License Terms and Conditions, Notices and Information ........................................... 15
- Netscape Communicator Version 4.8.0.10 ....................................................................................... 15
  - Installation Information .............................................................................................................. 15
  - Migration Information ............................................................................................................... 15
  - AIX Web Browsers Site .............................................................................................................. 15
  - More Information ....................................................................................................................... 16
- IBM Network Authentication Service Version 1.3 for AIX ............................................................ 16
  - Documentation ............................................................................................................................ 16
  - Installation and Configuration ...................................................................................................... 17
- DES Encryption Kernel Extension 64-bit Support ........................................................................... 17

**Appendix. Notices**
- Trademarks ....................................................................................................................................... 19
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.
Note: 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:
   
   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:

   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; 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; 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
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 fileset, you should first remove the db2_07_01.msg.Ja_JP and db2_07_01.msg.ja_JP filesets.

**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) 3.6.1**

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 5.2.0 Evaluation Software**

IBM Tivoli Storage Manager (TSM) publications, including installation instructions, can be found at the following Web site:

```
http://publib.boulder.ibm.com/tividd/td/tdprodlist.html
```

Visit the following Web site to select a participating and authorized TSM business partner for free assistance with installation and configuration:

```
```
TSM server for AIX supports both 32-bit and 64-bit environments for AIX 5.1 and later. If your system is using the 32-bit kernel, you must install the 32-bit version of the TSM server (the \texttt{tivoli.tsm.server.rte} fileset). If your system is using the 64-bit kernel, you must install the 64-bit version of the TSM server (the \texttt{tivoli.tsm.server.aix5.rte64} fileset).

**Note:** In either case, you must install the common functions and samples delivered in the \texttt{tivoli.tsm.server.com} fileset. If you decide to switch environments, you must uninstall TSM and reinstall it to the correct version for your new environment.

When installing the clients in a non-English locale, you must install the corresponding locale message filesets with the clients from the \texttt{Install and Update from ALL Available Software} menu option. See the product readme for additional information. During the installation of locale-specific versions, an \texttt{Unable to open message file} message might be displayed. This message is informational only and notes that the English message file will be used.

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

TSM client error logging file permission defaults allow read and write access to all system users. To avoid potential security problems, modify the file permission to \texttt{rwxr-xr-x} (755).

Some of the TSM server configuration scripts in the \texttt{liblpp.a} fileset archive have permission default settings that allow read and write access to all system users as shown in the following:

```
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/inst_root/tivoli.tsm.server.rte.config
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/inst_root/tivoli.tsm.server.rte.unconfig
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/productid
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.config
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.copyright
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.namelist
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.pre_rm
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.rm_inv
< -rwxrwxrx /usr/lpp/tivoli.tsm.server.rte/tivoli.tsm.server.rte.unconfig
```

To avoid potential security problems, alter the setting to \texttt{rwxrwx---} (770).

During TSM Hierarchical Storage Manager (HSM) client installation, a log file is created with default settings that allow read and write access to all system users as shown in the following example fileset:

```
< -rw-rw-rw- /usr/lpp/tivoli.tsm.client.hsm.jfs.64bit/inst_root/dsmerror.log
```

To avoid potential security problems, alter the setting to \texttt{rwxrwx---} (770).

The TSM Version 5.2.0 HSM client for JFS can, under rare circumstances, cause a system crash with JFS2 file systems. The TSM Version 5.2.0 Backup/Archive client can backup both JFS and JFS2 file systems, but the HSM Version 5.2.0 client can only manage JFS file systems. In rare cases, the HSM Version 5.2.0 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 -vcdrfs /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.
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
   ```

   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 /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:


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:


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.html.xx`
   - `http_server.html.en_US`
   - `http_server.html.xx`
Third-Party License Terms and Conditions, Notices and Information

The license agreement for this product refers you to this file, or to a file referenced by this file, for details concerning terms and conditions applicable to third-party software code included in this product, and for certain notices and other information that IBM must provide to you under its license to certain software code. The relevant terms and conditions, notices, and other information are provided in a license file located in the /usr/HTTPServer/license directory. Any non-English version of the information in this file is unofficial and is provided to you for your convenience only. The English version of the file is the official version.

Netscape Communicator Version 4.8.0.10

The Expansion Pack includes the Netscape Communicator Web browser product, Version 4.8.0.10. It 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
- 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 filesets are the following:

- Netscape.communicator.com 4.8.0.10
- Netscape.communicator.us 4.8.0.0
- Netscape.msg.nn_NN.communicator.rte 4.8.0.0
- Netscape.help.nn_NN.communicator.rte 4.8.0.0

Netscape Communicator 4.8.0.10 runs on the following:

- AIX 5L for POWER Version 5.1 with the 5100-04 Recommended Maintenance package (APAR IY39794). It is specifically required if APAR IY43971 (the bos.rte.libc 5.1.0.52 fileset) is installed.

Migration Information

If you are planning to migrate your AIX system to AIX 5.1, you must install Netscape Communicator 4.8.0.10 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, see Web Browsers for AIX at the following Web site:

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

This Web site provides downloads for the latest Netscape Communicator and Mozilla for AIX the installp images.

In addition, Mozilla Version 1.4 for AIX is available on the Mozilla for AIX Web Browser and Application Suite CD which can be ordered through feature 0976 of the AIX System Program Order (SPO).

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

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

For more information, refer to the /usr/netscape/communicator/README.html file.

For information on how to receive a browser update if Web download is not possible, refer to the /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 README.lang file for IBM Network Authentication Service Version 1.3 before configuring or using the program, where lang specifies one of the following language locales:

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

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

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

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

The documentation is in both HTML and PDF formats. Install the krb5.doc.lang.html fileset for HTML and the 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
  /usr/lpp/krb5/doc/html/lang/ADMINGD
- PDF
  /usr/lpp/krb5/doc/pdf/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.

**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` fileset on the AIX Expansion Pack.
Appendix. Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user’s responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
Dept. LRAS/Bldg. 003
11400 Burnet Road
Austin, TX 78758-3498
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:
IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:
(c) (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. (c) Copyright IBM Corp. _enter the year or years_. All rights reserved.

**Trademarks**

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

- AIX
- AIX 5L
- Cloudscape
- @server
- IBM
- pSeries
- RS/6000
- SecureWay
- Tivoli
- WebSphere

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.
Part Number: 16R1703

Printed in the USA.