

AIX 5L Version 5.2 Expansion Pack



Release Notes

AIX 5L Version 5.2 Expansion Pack



Release Notes

Note

Before using this information and the product it supports, read the information in "Notices," on page 15.

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Chapter 1. About This Release

Note: This software might contain errors that could result in critical business impact. Install the latest available fixes prior to using this software. Fixes can be obtained from IBM System p support at the following Web site:

<http://www.ibm.com/servers/eserver/support/unixservers/aixfixes.html>

This CD or DVD 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 can vary depending on the specific program or the program supplier. Specific information on the content of this CD or DVD and the terms and conditions under which these programs are licensed are contained in a readme file on Volume 1 of the CD or DVD.

To obtain the Content and Terms and Conditions information:

1. Log in as the root user.
2. Insert the *Volume 1* CD or DVD into the media drive. If your media drive is not **/dev/cd0**, substitute the correct device name and type the following commands:

```
mount -v cdrfs -o ro /dev/cd0 /mnt
cp /mnt/README* /tmp
umount /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** command.

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.

Chapter 2. Installation, Migration, Upgrade, and Configuration Information

The AIX 5L Version 5.2 Expansion Pack release notes include information that helps you install the products that are included on the AIX 5L Version 5.2 Expansion Pack. To view the most current version of the release notes, go to the online Release Notes in the **System p and AIX Information Center**. The information center is located at the following Web site:

http://publib16.boulder.ibm.com/pseries/en_US/infocenter/base/52relnotes.htm

The AIX 5L Version 5.2 Expansion Pack is shipped with AIX 5L Version 5.2 as a vehicle for delivering new IBM and non-IBM products. Most Expansion Pack products are installed using normal installation methods. Because some Expansion Pack products cannot be installed using normal installation methods, their installation procedures are provided under their product descriptions.

The AIX 5L Version 5.2 Expansion Pack might include products that contain a cryptographic function that is subject to special export-licensing requirements by the U.S. Department of Commerce. Import restrictions can also apply to certain countries. Different packages of the AIX 5L Version 5.2 Expansion Pack accommodate varying country export or import restrictions. Refer to "Ordering Information" located in the Expansion Pack announcement to determine which package is appropriate for you. Contact your IBM representative or IBM Business Partner to determine what encryption you are entitled to receive.

The contents of the Expansion Pack vary over time. New software products can be added, changed, or removed. Changes to the content of the AIX 5L Version 5.2 Expansion Pack are announced either as part of an AIX 5L announcement or independently of the release announcement.

Unless otherwise indicated, products can be installed from the CD or DVD using the Web-based System Manager or System Management Interface Tool (SMIT). For detailed instructions, see *AIX 5L Version 5.2 Installation Guide and Reference*, available through the **System p and AIX Information Center**.

To List and Preview Installation Software

You can list the available software products, packages, and filesets on AIX media, which can be a CD, DVD, tape, diskette, or directory. The output shows the available packages and filesets on the media. The descriptions are provided at the fileset level.

You can perform a preview installation before doing the actual installation. A preview installation provides the pre-installation information that occurs during a regular installation, except that no software is installed.

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

Other information generated during the pre-installation process concerns file system-size checking. The file systems are checked to ensure that there is enough free space available to install the selected package or fileset.

You can list the software and use the 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. To list the software on the first CD or DVD, insert the *Volume 1* disk in the media drive, and type:

```
installp -ld/dev/cd0 | pg
```

A list similar to the following is displayed:

```
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 perform 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, type:

```
installp -aXgq -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.

To List and Preview Software from the ASCII SMIT Interface

1. Log in as the root user.
2. Use 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 the following 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. The descriptions for the software product are provided 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 on the plus sign (+) to the left of the client you want to manage.
4. Select the **Software** icon by clicking once on the plus sign (+) to the left of the **Software** icon. This action expands the **Software** tree.
5. Click 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 check mark to the left of the fileset description.

12. Select the package or fileset you want to install by clicking the package or fileset.
 - You can select multiple packages or filesets by holding down the left mouse button 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/>

IBM AIX Developer Kit, Java 2 Technology Edition, Version 1.3.1, 32-bit version

IBM AIX Developer Kit, Java 2 Technology Edition, Version 1.3.1, 32-bit version is released in **Java131.*** filesets. For more information, see the **/usr/java131/README.HTML** file. To see if a more recent service refresh is available:

1. Go to the developerWorks Web site at <http://www.ibm.com/developerworks/java/jdk/aix>.
2. Select the **Download and service information** link.
3. Select the Fix Info link from the Java 1.3.1 32-bit column.

As with Java 1.4, you can dynamically reconfigure an LPAR running Java 1.3.1.

Note: The IBM SDK Version 1.3.1 only supports user names of up to eight characters. Before running the **java** or **appletviewer** commands, ensure that you are logged in with a user name that is no longer than eight characters.

IBM 64-bit SDK for AIX, Java 2 Technology Edition, Version 5

IBM 64-bit SDK for AIX®, Java™ 2 Technology Edition, Version 5 is released in **Java5_64.*** filesets. To see if a more recent service refresh is available, do the following:

1. Go to the developerWorks® Web site at <http://www.ibm.com/developerworks/java/jdk/aix>.
2. Select the **Download and service information** link.
3. Select the Fix Info link from the Java 5 64-bit column.

IBM 64-bit SDK for AIX, Java 2 Technology Edition, Version 1.4

IBM 64-bit SDK for AIX, Java 2 Technology Edition, Version 1.4 is released in **Java14_64.*** filesets. To see if a more recent service refresh is available, complete the following:

1. Go to the developerWorks Web site at <http://www.ibm.com/developerworks/java/jdk/aix>.
2. Select the **Download and service information** link.
3. Select the Fix Info link from the Java 1.4.x 64-bit column.

IBM 32-bit SDK for AIX, Java 2 Technology Edition, Version 5

IBM 32-bit SDK for AIX, Java 2 Technology Edition, Version 5 is released in **Java5.*** filesets. To see if a more recent service refresh is available, complete the following:

1. Go to the developerWorks Web site at <http://www.ibm.com/developerworks/java/jdk/aix>.
2. Select the **Download and service information** link.
3. Select the Fix Info link from the Java 5 32-bit column.

IBM Directory Server

To access the latest IBM Directory Server Lightweight Directory Access Panel (LDAP) product information, go to the following Web site:

<http://www-306.ibm.com/software/tivoli/resource-center/security/index.jsp>

Installation and Configuration

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

<http://www.ibm.com/software/tivoli/products/directory-server/>

From the **IBM Tivoli Directory Server** category on this Web site, click **Technical Documentation**. Read the following documents:

- *Readme Addendum*
- *Server Readme*
- *Client Readme*
- *Installation and Configuration Guide for Multiplatforms*

Before you run the **ldapxcfg** command, verify that the following links exist by typing the following commands:

```
/usr/ldap/db2 -> /usr/opt/db2_08_01  
/usr/ldap/lib/libdb2.a -> /usr/opt/db2_08_01/lib/libdb2.a
```

If these links are not present, create these links by typing the following commands:

```
ln -s -f /usr/opt/db2_08_01/lib/libdb2.a /usr/ldap/lib/libdb2.a  
ln -s -f /usr/opt/db2_08_01 /usr/ldap/db2
```

You can use the Web Administration Tool on AIX 4.3.3, 5.1, or 5.2. You can install the Web Administration Tool on a system with or without the client or server.

If you are using IBM 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 can cause the installation to fail if enough disk space is not allocated.

IBM HTTP Server for AIX, Version 2.0.47.1

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

Limitations

The license restriction for IBM HTTP Server, Version 2.0.47.1 states that when it is used outside of the IBM WebSphere Application Server (WAS), IHS can only be used in conjunction with AIX Web-based System Manager and the Documentation Library (DocSearch) in order to receive support.

Documentation

The IBM HTTP Server (IHS) product Web site includes the latest version of the software, documentation, and installation instructions. Visit the following Web site to get the most recent information:

<http://www.ibm.com/software/webservers/httpservers/>

IBM HTTP Server, Version 2.0.47.1, is available in InstallShield installation format only. Previous versions of IHS for AIX were built using the installp format. To properly install the latest version, you must first remove the previous installation of IHS and then install the new version.

The instructions in the following section guide you through this process.

Installation Instructions

Due to the license restrictions for IHS 2.0.47.1, the following installation instructions apply only to the use of IHS with Web-based System Manager and DocSearch outside of a WebSphere Application Server environment:

1. Back up your Web server configuration files in the **conf** directories, and back up the Web site created under the **cgi-bin** and **htdocs** directories by copying them to the **/tmp** directory or another temporary backup directory structure.
2. Uninstall any previous versions of IHS 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 remove**.
 - d. From the Remove Installed Software panel, select **SOFTWARE name to list the software**, and press F4.
 - e. Select every fileset name that begins with **http_server** from the list by highlighting each fileset name and pressing F7. Then press Enter.
 - f. Change the **Preview only** option to **No**, and press Enter to remove the software.
 - g. Press F10 to exit smitty and return to the AIX command line.
3. If you obtained the IBM HTTP Server, Version 2.0.47.1 from the following IBM HTTP Server product Web site:

<http://www.ibm.com/software/webservers/htpservers/>

then the **wsm_remote** Software Bundle allows you to install IHS from the hard disk by specifying the directory path name that contains your copy of the software installation images. To install IHS on AIX using the **wsm_remote** Software Bundle, manually complete the setup as follows:

- a. The installation directory path name must be in the format **./ismp/ppc/package_name**. For example, downloaded installation images can be copied to the **/usr/sys/inst.images/ismp/ppc/IHS2** directory. In this example, the installation source name is **/usr/sys/inst.images**, and the package name is **IHS2**.
 - b. The response file named **silent.res** must be linked to the name **IHS2.response** for AIX to detect automatic responses during a silent installation, such as specifying the **-P ihs.installLocation=/usr/HTTPServer** preferred AIX installation location and a language other than the default en (English) language.
 - c. To use the **wsm_remote** multimedia bundle when installing from disk, you must also copy the following DocSearch filesets to the installation directory. Because the DocSearch filesets are built using the installp format, copy them to the installation source and build the **.toc** file. Using the example above, perform the following steps:
 - 1) From the AIX base media, copy the following filesets to the **/usr/sys/inst.images** directory:
 - **bos.docregister.com**
 - **bos.docsearch.client.Dt**
 - **bos.docsearch.client.com**
 - **bos.docsearch.rte**
 - **bos.html.en_US.topnav.navigate**
 - 2) Change to the **/usr/sys/inst.images** directory.
 - 3) Run the **inutoc** command to build the **.toc** file. The installation source name when you are installing through the **wsm_remote** bundle is **/usr/sys/inst.images**.
4. Type `smitty install_bundle`.
 5. On the Install Software Bundle panel, do one of the following:
 - Press F4 to select CD-ROM or DVD-RAM (per the system configuration) if you are using AIX Expansion Pack and AIX base media.
 - Type the path name of the directory that contains the downloaded IHS images and the copied DocSearch images.
 6. In the **Select a Fileset Bundle** list, select the **wsm_remote** bundle, and press Enter.
 7. Change **ACCEPT new license agreements** from no to yes, and press Enter to complete the installation and the remote configuration for Web-based System Manager.
 8. Press F10 to exit smitty and return to the AIX command line.
 9. The response file specifies the **/usr/HTTPServer** directory as the base directory and uses English as the default language. Additional message filesets for the other country codes are available with the software. To install additional languages, run the following command from an aixterm or dtterm window to start the InstallShield window:

```
geninstall -d install_images_pathname J:IHS2
```

Using the example above, the command is as follows:

```
geninstall -d /usr/sys/inst.images J:IHS2
```

10. To verify that the installation is complete, type the following from the AIX command line:

```
lslpp -L IHS2
```

The results show that IHS2 is installed in the **/usr/HTTPServer** directory. The post-installation script completes the remote management environment configuration and starts the HTTP Server. Documents and files are served from the **/usr/HTTPServer/htdocs** directory.

11. After you install IHS, remove the world writable permissions from the `/usr/HTTPServer/conf/httpd.conf.sample.afpa` file by typing the following command as the root user:

```
chmod o-w /usr/HTTPServer/conf/httpd.conf.sample.afpa
```

Third-Party License Terms and Conditions, Notices and Information

The 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 provided to you for your convenience only. The English version of the file is the official version. 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.

IBM HTTP SERVER AND THE APACHE HTTP SERVER: The IBM HTTP Server component of the Program includes software developed by The Apache Group for use in the Apache HTTP Server project (<http://www.apache.org/>). Portions of the IBM HTTP Server are based on software developed by The Apache Group. The software developed by The Apache Group is Copyright (c) 2000-2002. All rights reserved.

OPENSSL: The IBM HTTP Server component of the Program includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>) and software developed by Eric Young (eay@cryptsoft.com). The copyright notices, lists of conditions and disclaimers related to OpenSSL can be found in the `readme.txt` file located in the `icc` subdirectory of the SSL component.

Open Secure Shell, Version 4.3.0.5200

Open Secure Shell (OpenSSH) requires Open Secure Sockets Layer (OpenSSL) Version 0.9.7g-1 for encryption. The OpenSSL package is available on the *AIX Toolbox for Linux Applications* CD or DVD. The package name is `openssl-0.9.7g-1.aix5.1.ppc.rpm`, and it can be installed using SMIT. You must install OpenSSL before installing OpenSSH.

After OpenSSH is installed, you can find the readme file in the `/usr/openssh/` directory.

Note: OpenSSH installation uses the AIX electronic license feature. When you are installing OpenSSH through SMIT, you must view and accept the license text provided with OpenSSH.

OpenSSH 4.3 and later versions use Kerberos 5 authentication and authorization through the Network Authentication Service (NAS), Version 1.4.0.4. You must migrate from previous versions of NAS (Kerberos) before updating OpenSSH.

IBM Text-to-Speech, Version 6.7.4.0

IBM Text-to-Speech (TTS) is a speech engine that allows applications to produce speech.

Hardware Requirements:

Audio card

Software Requirements:

- AIX 5L for POWER Version 5.1 with the 5100-04 Recommended Maintenance package (APAR IY39794) or later
- AIX 5L Version 5.2
- xIC.rte 5.0.2.1 or later
- xIC.aix50.rte 5.0.2.5 or later

TTS includes the following `installp` packages:

tts_access.base

IBM TTS runtime base

tts_access.base.en_US

IBM TTS runtime (U.S. English)

Note: Install both of the listed packages. Selecting the **tts_access.base** package automatically installs the **tts_access.base.en_US** package.

TTS is installed in the **/usr/opt/ibmtts** directory.

For more information, see the **/usr/opt/ibmtts/docs/readme.htm** file or the **/usr/opt/ibmtts/docs/readme.txt** file.

IBM Network Authentication Service, Version 1.4.0.4 for AIX

IBM Network Authentication Service, Version 1.4.0.4 for AIX is a network-authentication protocol based on the IETF RFC 1510 standards protocol for the Kerberos V5 IBM Network Authentication Service. The IBM Network Authentication Service includes the Generic Security Service Application Programming Interface (GSS-API), the Key Distribution Center (KDC) server, 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 1.4 before configuring or using the program, where *lang* specifies one of the following language locales:

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

The **README.lang** file for AIX is located 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)
- ko_KR (Korean)
- zh_CN (Simplified Chinese)

The documentation is in both HTML and PDF formats. Install the **krb5.doc.lang.html** fileset for access to HTML documents and the **krb5.doc.lang.pdf** fileset for access to PDF documents.

The IBM Network Authentication Service Version 1.4 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 1.4 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 1.4 Administrator's and User's Guide* details the installation and configuration procedures for the product.

License

The **NAS.LICENSE.README** file for Network Authentication Service, Version 1.4 is located in the root directory of the *AIX 5L Version 5.2 Expansion Pack* CD or DVD, Volume 1.

AIX Certificate and SSL Base Runtime, Version 7.0

The **GSKit.README** file for AIX Certificate and SSL Base Runtime (GSKIT), Version 7.0 is located in the root directory of the *AIX 5L Version 5.2 Expansion Pack* CD or DVD, Volume 1.

XL C/C++ Runtime, Fortran Runtime, and SMP Runtime License Readme Files

The following license readme files are located in the base directory of the *AIX 5L Version 5.2 Expansion Pack* CD or DVD, Volume 1:

Compiler Runtime Environments	File Name
XL C/C++ Enterprise Edition, Version 8.0 for AIX, C/C++, and SMP Runtime Environment Components	xIC.license.README.pdf
XL Fortran Enterprise Edition, Version 10.1 for AIX, Fortran, and SMP Runtime Environment Components	xlfrte.license.README.pdf

Note: The license information for the SMP Runtime Environment, Version 1.6 filesets are included in the **xIC.license.README.pdf** and **xlfrte.license.README.pdf** files.

DES Encryption Kernel Extension 64-bit Support

With the DES encryption kernel extension, `nfs_kdes_full.ext`, you can now use 64-bit kernels. This extension is used to enable Secure NFS by encrypting time stamps sent between the client and the server that allow each remote procedure call (RPC) message to be authenticated. For more information, see the "Network File Systems Security" section 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.

Certificate Authentication Services (CAS), Version 5.2.0.50

Migrating Database Tables

This section describes the steps needed to migrate the database tables used by the **cas.server.rte** fileset version 5.2.0.50.

You may need to run a migration script to migrate the database tables used by CAS server (JavaPKI) after you have performed a migration installation of the **cas.server.rte** fileset Version 5.2.0.50 over an earlier version of the **cas.server.rte** fileset.

In some cases, you must complete the migration steps manually. The migration script is **/usr/cas/server/bin/MigrateData.sh**.

Note: The script only supports migration from pre-5.2.0.10 to 5.2.0.10.

You must run the database migration script if the following conditions are true:

- You have performed a **cas.server.rte** Version 5.2.0.50 migration installation over a previous version of **cas.server.rte** (version number is less than 5.2.0.50).
- You have configured the previous CAS server correctly.
- The previous CAS server has been running and there is data in the database tables used by the previous CAS server.

Running the Migration Script

You must have root user authority to run the **/usr/cas/server/bin/MigrateData.sh** migration script.

The script will show the default CAS user name (\$PKIUSER) in your current CAS server configuration file, **/usr/cas/server/PkiConfig.properties**, and ask you to enter another one if you want to use a CAS user name other than the default. The CAS user name is the user name that CAS server uses when it runs.

The utility will print some SQL information and any errors during processing.

When you run the migration script, it does the following:

- Creates backup tables for all tables used by JavaPKI.
- Copies data from the original tables to backup tables.
- Drops the original tables.
- Creates new tables using the new schema.
- Copies data from the backup tables to the new tables.

The only data not copied to the new tables is audit information. Because this data is for audit only, this data remains in the backup tables.

Backup tables are found with **tmp** appended to their names. For example: **icltmp**, **rcltmp**, **reqtmp**, and **audit_logtmp**. Keep the backup tables for later use.

If there is no data in the database tables, complete the manual migration steps listed in the **Manual Migration Steps** section.

After the migration is complete, you can start the new version of the CAS server (JavaPKI).

Manual Migration Steps

The migration script only runs if there is data in the current tables. If there are no tables or no data in the tables, you must drop any previous tables and create new tables.

Log in as the CAS user (\$PKIUSER), and use the following DB2 commands to drop the previous tables (**drop_tables.sql** is located in the **/home/\$PKIUSER/javapki/sqlscripts/** directory):

```
db2 -tf javapki/sqlscripts/drop_tables.sql
db2 -tf javapki/sqlscripts/audit_drop_tables.sql
```

Log in as the CAS user (\$PKIUSER), and use the following commands to create the new tables (**create_tables.sql** is located in the **/home/\$PKIUSER/javapki/sqlscripts/** directory):

```
db2 -tf javapki/sqlscripts/create_tables.sql
audit_create_tables.aix dbname dbuser language
```

After the new tables are created, you can start the new version of the CAS server (JavaPKI).

Roll Back Database Tables

The migration tool will ask DB2 to roll back if there are any problems during the migration.

Performing the rollback after you successfully run the migration script is completed manually. The tables must be migrated from the backup tables to their original names. You must also populate the serial table using the SQL statements. Obtain the last serial number issued prior to setting the serial table. Add 1 to the value of the last serial number, and insert the value into the icl table.

The following is an example of SQL statements that populate the serial table:

```
serialnum = select max(serial) from icl;
serialnum++;
insert into serial set serial=serialnum;
```

Pegasus CIM Server Version 2.5.1.0, OS Base Providers Version 1.2.6, and SMI-S Providers Version 1.1.0.0

The Pegasus CIM Server is an implementation of the Web-Based Enterprise Management (WBEM) standards as defined by the Distributed Management Task Force (DMTF). Pegasus CIM Server, OS Base Providers, and SMI-S Providers for an AIX operating system are contained in the **sysmgt.pegasus.cimserver**, **sysmgt.pegasus.osbaseproviders**, and **sysmgt.pegasus.smisproviders** filesets. The **smisproviders** fileset has a corequisite on the **hba** fileset that requires the latest technology level of AIX 5.2. The version of Pegasus CIM Server being delivered on the *AIX 5L Version 5.2 Expansion Pack* is the 2.5.1.0 version from the Open Pegasus project at the following Web site:

<http://www.openpegasus.org>

The new 2.5.1.0 version of Open Pegasus has support for:

- PAM (Pluggable Authentication Modules) Authentication
- SLP (Service Location Protocol)

Note: Previously, if you installed CIM Server, the OS Base Providers would also be automatically installed. Now if you need to upgrade, both must be installed.

Documentation

Documentation for Pegasus CIM Server and OS Base Providers is available in the *AIX 5L Version 5.2 Common Information Model Guide*.

For information specific to Pegasus CIM Server, see the following Web site:

<http://www.openpegasus.org>

After installation, the Pegasus CIM Server readme file is located in the **/opt/freeware/cimom/pegasus/README** directory.

The OS Base Providers readme file is located in the **/usr/pegasus/provider/README** directory.

The SMI-S Providers readme file is located in the **/usr/pegasus/provider/README_SMIS** directory.

Requirements

OpenSSL

The Pegasus CIM Server is delivered with SSL ready. Therefore, it requires the **libssl.a** library to be available on the system before you can start the Pegasus CIM Server. The **libssl.a** library is a part of the OpenSSL rpm, which is available on the *AIX Toolbox for Linux Applications* CD or DVD. It can also be downloaded from the AIX Toolbox for Linux Applications Web site at:

<http://www.ibm.com/servers/aix/products/aixos/linux/download.html>

The package name is **openssl-0.9.7XXX.aix5.1.ppc.rpm**, where *XXX* indicates the build level. Install OpenSSL before starting the Pegasus CIM Server.

For more information about the OpenSSL rpm and Pegasus CIM Server, see the readme file in the **/opt/freeware/cimom/pegasus** directory after you install the Pegasus CIM Server.

RSCT CIM Resource Manager, Version 2.3.9.0

The CIM resource manager (CIM RM) is an RMC resource manager that enables RMC to be used to query system configuration through CIM classes. CIM RM is contained in the package *rsct.exp*.

This release adds the following new functions:

- The ability to monitor changes in CIM properties and run user-defined responses.
- New command line tools to list and explore associations among CIM resources.

The RSCT CIM Resource Manager supports Base Providers for AIX available in the **sysmgt.pegasus** filesets.

Documentation

For more information about the CIM Resource Manager, see the IBM Reliable Scalable Cluster Technology Administration Guide. After installation, the CIM RM README is found in **/usr/sbin/rsct/README/rsct.exp.README**.

Appendix. Notices

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