



Image Services

Oracle 9.2.0.4 Upgrade Procedures

IS Release 4.0.0

9844109-001

January 2004

Notices

This document contains information proprietary to FileNet Corporation (FileNet). Due to continuing product development, product specifications and capabilities are subject to change without notice. You may not disclose or use any proprietary information or reproduce or transmit any part of this document in any form or by any means, electronic or mechanical, for any purpose, without written permission from FileNet.

FileNet has made every effort to keep the information in this document current and accurate as of the date of publication or revision. However, FileNet does not guarantee or imply that this document is error free or accurate with regard to any particular specification. In no event will FileNet be liable for direct, indirect, special incidental, or consequential damages resulting from any defect in the documentation, even if advised of the possibility of such damages. No FileNet agent, dealer, or employee is authorized to make any modification, extension, or addition to the above statements.

FileNet may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Furnishing this document does not provide any license to these patents, trademarks, copyrights, or other intellectual property.

Please take a few moments to read the *End User License Agreement* on the Image Services 4.0.0 documentation CD. By installing the Image Services 4.0.0 software, the customer agrees to be bound by the terms of this agreement.

FileNet, ValueNet, Visual WorkFlo, and OSAR are registered trademarks of FileNet Corporation.

Document Warehouse and UserNet are trademarks of FileNet Corporation.

All other product and brand names are trademarks or registered trademarks of their respective companies.

Copyright © 1996, 2004 FileNet Corporation. All rights reserved.

FileNet Corporation
3565 Harbor Boulevard
Costa Mesa, California 92626
800.FILENET (345.3638)
Outside the U.S., call:
1.714.327.3400
www.filenet.com

Contents

1 Oracle 9.2.0.4 Upgrade Procedures 5

2 AIX/6000 6

Prepare to Install the Patch Set 6

Stop the Image Services and Oracle Software 6

Disable Oracle Archive Logging (if applicable) 6

Load the Oracle Patch Set 9.2.0.4 CD-ROM 8

Set Environment Variables 9

Launch the Oracle Universal Installer 10

After Installing the Patch Set 16

Re-enable Archive Logging (Optional) 17

Return to Production Mode 18

3 HP-UX 19

Prepare to Install the Patch Set 19

Stop the Image Services and Oracle Software 19

Disable Oracle Archive Logging (if applicable) 19

Create a Temporary File System 21

Load the Oracle Patch Set 9.2.0.4 CD-ROM 21

Set Environment Variables 22

Launch the Oracle Universal Installer 23

After Installing the Patch Set 28

Re-enable Archive Logging (Optional) 29

Return to Production Mode 30

4 Solaris 31

Prepare to Install the Patch Set 31

Stop the Image Services and Oracle Software 31

Disable Oracle Archive Logging (if applicable) 32

Create a Temporary File System 34

Load the Oracle Patch Set 9.2.0.4 CD-ROM 34

Set Environment Variables 35

Launch the Oracle Universal Installer 36

After Installing the Patch Set 41

Re-enable Archive Logging (Optional) 42

Return to Production Mode 43

5 Windows Server 44

Prepare to Install the Patch Set 44

Stop the Image Services and Oracle Software 44

Disable Oracle Archive Logging (if applicable) 44

Load the Oracle Patch Set 9.2.0.4 CD-ROM 45

Launch the Oracle Universal Installer 46

After Installing the Patch Set 47

Enable Archive Logging (Optional) 48

Return to Production Mode 49

Oracle 9.2.0.4 Upgrade Procedures

This document contains procedures for upgrading the Oracle9i software on your FileNet Image Services 4.0.0 servers to Oracle 9.2.0.4.

The Oracle 9.2.0.4 Patch Set is distributed on CD-ROM to Image Services customers with FileNet-controlled Oracle instances. If Oracle is Site-controlled, the Database Administrator is responsible for obtaining and installing the patch set.

Important!

This procedure is designed to support the installation of the 9.2.0.4 Oracle patch set for those systems that are using a FILENET runtime license of Oracle 9i. Systems that are using a full use Oracle license should not use this procedure, as there is a potential for data corruption and/or data loss.

Click the appropriate link to jump to the upgrade procedure for your specific Image Services platform:

- [Chapter 2, “AIX/6000,” on page 6](#)
- [Chapter 3, “HP-UX,” on page 19](#)
- [Chapter 4, “Solaris,” on page 31](#)
- [Chapter 5, “Windows Server,” on page 44](#)

Prepare to Install the Patch Set

Stop the Image Services and Oracle Software

- 1 As **fns** user, make sure the Image Services and Oracle software is stopped. Enter:

```
initfns -y stop
```

- 2 Make sure that all processes have been stopped by entering:

```
whatsup
```

If the resulting display shows that any processes, such as TM_ daemon, are still active, enter:

```
killfns -DAy
```

Disable Oracle Archive Logging (if applicable)

If Archive Logging is enabled on the server, you must disable it before you update the Oracle RDBMS software. Turning off Archive Logging will prevent non-essential records from being written to the log file and will speed the update.

- 1 As **fns** user, launch the FileNet System Configuration Editor by entering:

```
fn_edit &
```

- 2 Click **OK** in the initial dialog box.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the **Log Archive Start** field. An **X** in this field indicates that Archive logging is turned off. If archive logging is already turned off, you may exit `fn_edit` (without saving changes) and skip to the section, [“Load the Oracle Patch Set 9.2.0.4 CD-ROM” on page 8.](#)
- 5 A check mark indicates that Archive logging is turned on. Turn logging off by clicking the field. The field should change from a check mark to an **X**.
- 6 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.
- 7 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatadb
```

- 8 As **fns** user, start Oracle by entering:

```
fn_util startbdb
```

- 9 Make sure archive logging is turned off by entering as **fns** user:

```
sqlplus "/ as sysdba"
```

(The double-quotes are required; the space between / and **as** is optional.)

```
SQL> archive log list;
```

Database log mode should indicate "Archive Mode." Automatic archival should indicate "Disabled."

- 10 Exit from sqlplus by entering:

```
SQL> exit
```

Load the Oracle Patch Set 9.2.0.4 CD-ROM

- 1 Insert the first FileNet CD (Disk1) containing the Oracle Patch Set 9.2.0.4 for AIX/6000 Operating System.

- 2 Mount the CD-ROM using this command syntax:

```
mount -rv cdrfs <device_name> <mount_point>
```

- a If you're not sure of the CD-ROM <device_name>, you can find it by entering:

```
lsdev -C | grep cd
```

The CD-ROM device name will be similar to **/dev/cd0**.

- b The <mount_point> is a directory on the server. If a /cdrom directory does not already exist on the server for this purpose, enter:

```
mkdir /cdrom
```

Then, the mount command you enter should look like this example:

```
mount -rv cdrfs /dev/cd0 /cdrom
```

Set Environment Variables

- 1 As the **oracle** user, make sure the environment variables ORACLE_HOME and ORACLE_SID are set correctly.

```
echo $ORACLE_HOME  
echo $ORACLE_SID
```

- 2 ORACLE_HOME should point to the location of the Oracle 9.2.0 software, and ORACLE_SID should be IDB, for example. To change them:

- For Bourne or Korn shell, enter:

```
export ORACLE_HOME=<Oracle Home Directory>  
export ORACLE_SID=<Oracle Site Identifier>
```

- For C shell, enter:

```
setenv ORACLE_HOME <Oracle Home Directory>  
setenv ORACLE_SID <Oracle Site Identifier>
```

- 3 Make sure the DISPLAY environment variable is set.

- For Bourne or Korn shell, enter:

```
export DISPLAY=<host_identifier>:0
```

- For C shell, enter:

setenv DISPLAY <host_identifier>:0

where <host_identifier> is the server identifier, either the server name or IP address.

- 4 Use the Oracle Universal Installer to install the Patch Set as described in the next section.

Launch the Oracle Universal Installer

- 1 As **oracle** user, launch the installer by entering:

./cdrom/runInstaller

- 2 On the Welcome screen, click the **Next** button to display the File Locations screen.



Welcome

The Oracle Universal Installer guides you through the installation and configuration of your Oracle products.

Click "Installed Products..." to see all installed products.

- 3 At the **Source...** entry field, click the *Browse...* button and navigate to the *stage* directory located on the CD-ROM. (The *stage* directory is located under the Disk1/ sub-directory on the CD.)

File Locations

Source...

Enter the full path of the file representing the product(s) you want to install:

Path:

Destination...

Enter or select an Oracle Home name and its full path:

Name:

Path:

- 4 Select the products.jar file. Click the **Next** button.
The products file will be read and the installer will load the product definitions. The products to be loaded are displayed on the Summary screen.



- 5 Before you install the patch set, you need to install the latest version of the Oracle Universal Installer, which is included with the patch set.

When you're prompted to select either the Oracle Universal Installer or the Oracle Patch Set, select:

Oracle Universal Installer 2.2.0.18.0

And click **Next**. When the Summary screen displays, click the **Install** button. Expect the installation to go very quickly.

- 6 After the installation has completed successfully, the installer displays:

End of Installation

- 7 After you've installed the latest version of the Oracle Universal Installer, click **Next Install**. This time, choose:

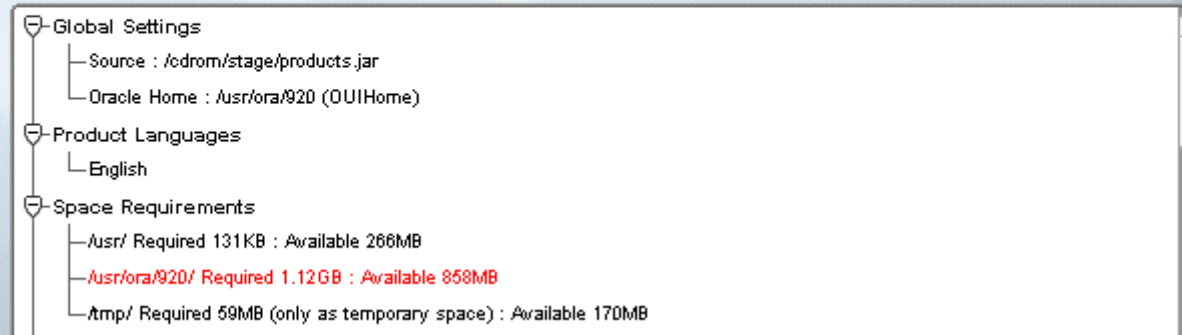
Oracle9iR4 9.2.0.4.0 Patch Set

- 8 Verify the products listed on the Summary screen.

Note Disregard the amount of space shown as Required. It assumes that all products will be installed, and is **not** accurate for this update. The amount of space you actually need is much less.

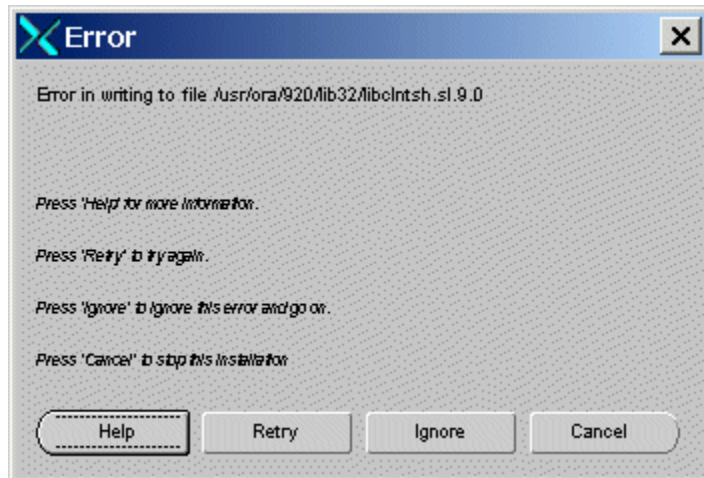
Summary

Oracle9iR4 Patchset 9.2.0.4.0



- 9 On the Summary screen, click the **Install** button. Expect the installation to take about an hour.

- 10 During the installation, you'll be prompted to insert Disk2.
 - a Unmount Disk1 by entering:
umount /cdrom
 - b Remove Disk1, insert Disk 2, and mount Disk2:
mount -rv cdrfs /dev/cd0 /cdrom
 - c Click OK in the prompt window to resume the installation.
- 11 If you encounter problems writing to a file during the installation process, as shown in the Error message below, change the permissions for the Oracle libraries and binaries.



You may need to take one of these actions:

- To add write permission for the owner of a file, enter:

chmod u+w <filename>

- To change the ownership of a file, enter:

chown oracle:dba <filename>

- To rename a file, enter:

mv <filename> <newfilename>

After you've made the appropriate change, click **Retry** on the Error screen to continue.

- 12** You'll be prompted to insert Disk1 again.

- a Unmount Disk2 by entering:

umount /cdrom

- b Remove Disk2, insert Disk 1, and mount Disk1:

mount -rv cdrfs /dev/cd0 /cdrom

- c Click OK in the prompt window to continue.

- 13** When the installer prompts you to run the root.sh script, open a new X window and log on as **root** user to run \$ORACLE_HOME/root.sh.

Accept the default values at any prompts you receive.

- 14** After the installation has completed successfully, the installer displays:

End of Installation

Click **Exit** and confirm to exit the installer.

- 15 Unmount Disk1.

umount /cdrom

Remove Disk1 from the CD-ROM drive and store it with Disk2 in a safe place.

After Installing the Patch Set

After the Patch Set has been successfully installed, you need to run the following SQL*PLUS commands on each database associated with this Oracle 9.2.0.4 instance.

- 1 As the **oracle** user, launch SQL*PLUS by entering:

sqlplus "/ as sysdba"

- 2 Start the database in migrate mode.

SQL> startup migrate pfile = /fnsw/local/oracle/init.ora

- 3 Begin spooling the output to a log file, and execute the catpatch.sql script to update the database with the newly patched software. This step will also take about an hour.

SQL> spool patch.log

SQL> @\$ORACLE_HOME/rdbms/admin/catpatch.sql

SQL> spool off

- 4 Review the patch.log file for errors and correct any problems. If necessary, run the catpatch script again until no errors are reported.

- 5 Shutdown the database and then restart it to take it out of migrate mode.

```
SQL> shutdown
```

```
SQL> startup pfile= /fnsw/local/oracle/init.ora
```

- 6 This step is optional. It recompiles all invalid PL/SQL packages now rather than when accessed for the first time. Expect this step to take just a minute or so.

```
SQL> @$ORACLE_HOME/rdbms/admin/utlrp.sql
```

- 7 Shutdown the database and exit from sqlplus by entering:

```
SQL> shutdown
```

```
SQL> exit
```

Re-enable Archive Logging (Optional)

If you disabled the Archive Logging feature on the server earlier in this procedure, now you can re-enable it. If you do not need to enable this feature, skip to [“Return to Production Mode” on page 18](#).

- 1 As **fnsw** user, launch the FileNet System Configuration Editor by entering:

```
fn_edit &
```

- 2 Click **OK** in the initial dialog box.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the Log Archive Start field. An **X** in this field indicates that Archive logging is turned off. A check mark indicates that Archive logging is turned on.

Click the field to place a check mark in the field.

- 5 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.
- 6 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatertdb
```

Return to Production Mode

After the Oracle Patch Set has been successfully installed, you can restart Oracle and Image Services, and resume normal processing.

Prepare to Install the Patch Set

Stop the Image Services and Oracle Software

- 1 As **fns** user, make sure the Image Services and Oracle software is stopped. Enter:

```
initfns -y stop
```

- 2 Make sure that all processes have been stopped by entering:

```
whatsup
```

If the resulting display shows that any processes, such as **TM_** daemon, are still active, enter:

```
killfns -DAy
```

Disable Oracle Archive Logging (if applicable)

If Archive Logging is enabled on the server, you must disable it before you update the Oracle RDBMS software. Turning off Archive Logging will prevent non-essential records from being written to the log file and will speed the update.

- 1 As **fns** user, launch the FileNet System Configuration Editor by entering:

```
fn_edit &
```

- 2 Click **OK** in the initial dialog box.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the **Log Archive Start** field. An **X** in this field indicates that Archive logging is turned off. If archive logging is already turned off, you may exit `fn_edit` (without saving changes) and skip to the section, **[“Create a Temporary File System” on page 21.](#)**

- 5 A check mark indicates that Archive logging is turned on. Turn logging off by clicking the field. The field should change from a check mark to an **X**.

- 6 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.

- 7 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatertdb
```

- 8 As **fns** user, start Oracle by entering:

```
fn_util starttrdb
```

- 9 Make sure archive logging is turned off by entering as **fns** user:

```
sqlplus "/ as sysdba"
```

(The double-quotes are required; the space between / and **as** is optional.)

```
SQL> archive log list;
```

Database log mode should indicate "Archive Mode." Automatic archival should indicate "Disabled."

- 10 Exit from sqlplus by entering:

```
SQL> exit
```

Create a Temporary File System

- 1 Use SAM to create a temporary file system named /ora9204. This file system should be **600 MB** or larger.
- 2 Give this new file system universal access privileges by entering:

```
chmod 777 /ora9204
```

Load the Oracle Patch Set 9.2.0.4 CD-ROM

- 1 Insert the FileNet CD containing the Oracle Patch Set 9.2.0.4 for the HP-UX Operating System.
- 2 As **root** user, mount the CD-ROM device on the /cdrom directory by entering a command similar to the following:

```
mount /dev/dsk/c2t2d0 /cdrom
```

where **/dev/dsk/c2t2d0** is the CD-ROM device file name.

- 3 Change to the new file system and extract the Patch Set archive file from the CD. Enter:

```
cd /ora9204  
cpio -idcmv < /cdrom/9204_hpunix_Release.cpio
```

Set Environment Variables

As the **oracle** user, make sure the environment variables **ORACLE_HOME** and **ORACLE_SID** are set correctly.

```
echo $ORACLE_HOME  
echo $ORACLE_SID
```

ORACLE_HOME should point to the location of the Oracle 9.2.0 software, and **ORACLE_SID** should be unchanged, e.g., **IDB**.

- For Bourne or Korn shell, enter:

```
export ORACLE_HOME=<Oracle Home Directory>  
export ORACLE_SID=<Oracle Site Identifier>
```

- For C shell, enter:

```
setenv ORACLE_HOME <Oracle Home Directory>  
setenv ORACLE_SID <Oracle Site Identifier>
```

- 4 Make sure the **DISPLAY** environment variable is set.

- For Bourne or Korn shell, enter:

```
export DISPLAY=<host_identifier>:0
```

- For C shell, enter:

```
setenv DISPLAY <host_identifier>:0
```

where <host_identifier> is the server identifier, either a name or IP address.

- 5 Use the Oracle Universal Installer to install the Patch Set as described in the next section.

Launch the Oracle Universal Installer

- 1 Change to the \$ORACLE_HOME/bin directory where the Oracle Universal Installer is located.

For example:

```
cd /usr/ora/920/bin
```

- 2 Start the installer from the appropriate directory on your server:

```
./runInstaller
```

- 3 On the Welcome screen, click the **Next** button to display the File Locations screen.



Welcome

The Oracle Universal Installer guides you through the installation and configuration of your Oracle products.

Click "Installed Products..." to see all installed products.

- 4 Click the **Browse** button for the Source... entry field and navigate to the *stage* directory where it was copied onto the server's hard drive.

The screenshot shows the 'File Locations' dialog box in the Oracle Universal Installer. It is divided into two sections: 'Source...' and 'Destination...'. The 'Source...' section has a text prompt 'Enter the full path of the file representing the product(s) you want to install:' followed by an empty 'Path:' text box and a 'Browse...' button. The 'Destination...' section has a text prompt 'Enter or select an Oracle Home name and its full path:'. It contains two text boxes: 'Name:' with the value 'OUIHome' and 'Path:' with the value '/usr/ora/920'. Both text boxes have dropdown arrows on their right sides, and there is a 'Browse...' button to the right of the 'Path:' box.

- 5 Select the `products.jar` file. Click the **Next** button.
The `products` file will be read and the installer will load the product definitions. The products to be loaded are displayed on the Summary screen.



- 6 Before you install the patch set, you need to install the latest version of the Oracle Universal Installer, which is included with the patch set.

When you're prompted to select either the Oracle Universal Installer or the Oracle Patch Set, select:

Oracle Universal Installer 2.2.0.18.0

And click **Next**. When the Summary screen displays, click the **Install** button. Expect the installation to go very quickly.

- 7 After the installation has completed successfully, the installer displays:

End of Installation

- 8 After you've installed the latest version of the Oracle Universal Installer, click **Next Install**. This time, choose:

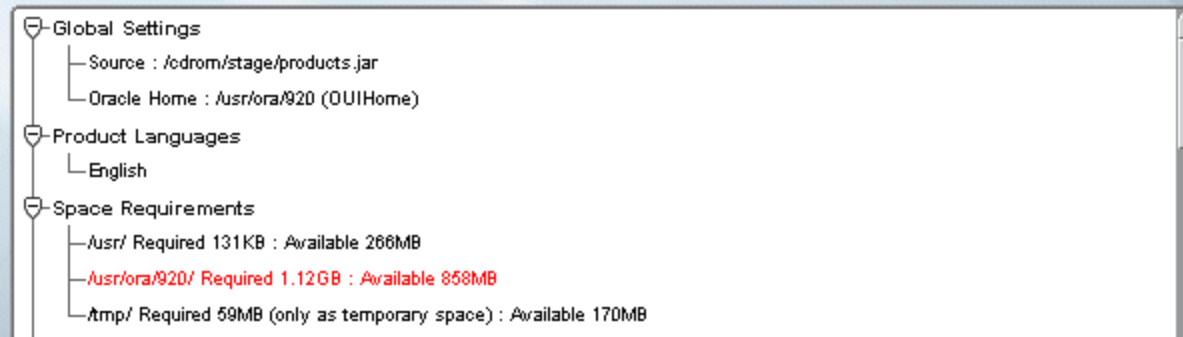
Oracle9iR4 9.2.0.4.0 Patch Set

- 9 Verify the products listed on the Summary screen.

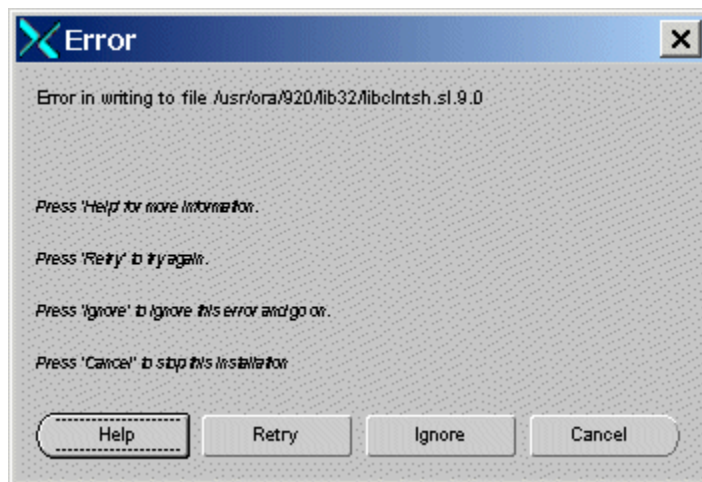
Note Disregard the amount of space shown as Required. It assumes that all products will be installed, and is **not** accurate for this update. The amount of space you actually need is much less.

Summary

Oracle9iR4 Patchset 9.2.0.4.0



- 10 On the Summary screen, click the **Install** button. Expect the installation to take about an hour.
- 11 If you encounter problems writing to a file during the installation process, as shown in the Error message below, change the permissions for the Oracle libraries and binaries.



You may need to take one of these actions:

- To add write permission for the owner of a file, enter:

chmod u+w <filename>

- To change the ownership of a file, enter:

chown oracle:dba <filename>

- To rename a file, enter:

mv <filename> <newfilename>

After you've made the appropriate change, click **Retry** on the Error screen to continue.

- 12** When the installer prompts you to run the root.sh script, open a new X window and log on as **root** user to run `$ORACLE_HOME/root.sh`.

Accept the default values at any prompts you receive.

- 13 After the installation has completed successfully, the installer displays:

End of Installation

Click **Exit** and confirm to exit the installer.

After Installing the Patch Set

After the Patch Set has been successfully installed, you need to run the following SQL*PLUS commands on each database associated with this Oracle 9.2.0.4 instance.

- 1 As the **oracle** user, launch SQL*PLUS by entering:

```
sqlplus "/ as sysdba"
```

- 2 Start the database in migrate mode.

```
SQL> startup migrate pfile = /fnsw/local/oracle/init.ora
```

- 3 Begin spooling the output to a log file, and execute the catpatch.sql script to update the database with the newly patched software. This step will also take about an hour.

```
SQL> spool patch.log
```

```
SQL> @$ORACLE_HOME/rdbms/admin/catpatch.sql
```

```
SQL> spool off
```

- 4 Review the patch.log file for errors and correct any problems. If necessary, run the catpatch script again until no errors are reported.

- 5 Shutdown the database and then restart it to take it out of migrate mode.

```
SQL> shutdown
```

```
SQL> startup pfile= /fnsw/local/oracle/init.ora
```

- 6 This step is optional. It recompiles all invalid PL/SQL packages now rather than when accessed for the first time. Expect this step to take just a minute or so.

```
SQL> @$ORACLE_HOME/rdbms/admin/utlrp.sql
```

- 7 Shutdown the database and exit from sqlplus by entering:

```
SQL> shutdown
```

```
SQL> exit
```

Re-enable Archive Logging (Optional)

If you disabled the Archive Logging feature on the server earlier in this procedure, now you can re-enable it. If you do not need to enable this feature, skip to [“Return to Production Mode” on page 30](#).

- 1 As **fnsw** user, launch the FileNet System Configuration Editor by entering:

```
fn_edit &
```

- 2 Click **OK** in the initial dialog box.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the Log Archive Start field. An **X** in this field indicates that Archive logging is turned off. A check mark indicates that Archive logging is turned on.

Click the field to place a check mark in the field.

- 5 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.
- 6 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatertdb
```

Return to Production Mode

After the Oracle Patch Set has been successfully installed, you can restart Oracle and Image Services, and resume normal processing.

Prepare to Install the Patch Set

Note Oracle provides both 32-bit and 64-bit versions of its Database Software on the Sun SPARC Solaris platform.

The 32-bit version of the Oracle database software can be run on the 32-bit or 64-bit version of the Solaris Operating Environment. The 64-bit version of the database software can only be run on the 64-bit version of the Solaris OE.

The **32-bit** version of a Patch Set **MUST ONLY** be installed on the 32-bit version of the Oracle database software (regardless of whether the Solaris Operating Environment is 32-bit or 64-bit).

The **64-bit** version of a Patch Set **MUST ONLY** be installed on the 64-bit version of the Oracle database software (which will be running on the 64-bit Solaris).

Stop the Image Services and Oracle Software

- 1 As **fns** user, make sure the Image Services and Oracle software is stopped. Enter:

```
initfns -y stop
```

- 2 Make sure that all processes have been stopped by entering:

whatsup

If the resulting display shows that any processes, such as TM_daemon, are still active, enter:

killfnsw -DAy

Disable Oracle Archive Logging (if applicable)

If Archive Logging is enabled on the server, you must disable it before you update the Oracle RDBMS software. Turning off Archive Logging will prevent non-essential records from being written to the log file and will speed the update.

- 1 As **fnsw** user, launch the FileNet System Configuration Editor by entering:

fn_edit &

- 2 Click **OK** in the initial dialog box.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the **Log Archive Start** field. An **X** in this field indicates that Archive logging is turned off. If archive logging is already turned off, you may exit **fn_edit** (without saving changes) and skip to the section, **[“Create a Temporary File System” on page 34.](#)**

- 5 A check mark indicates that Archive logging is turned on. Turn logging off by clicking the field. The field should change from a check mark to an **X**.
- 6 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.
- 7 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatertdb
```

- 8 As **fns** user, start Oracle by entering:

```
fn_util starttrdb
```

- 9 Make sure archive logging is turned off by entering as **fns** user:

```
sqlplus "/ as sysdba"
```

(The double-quotes are required; the space between / and **as** is optional.)

```
SQL> archive log list;
```

Database log mode should indicate "Archive Mode." Automatic archival should indicate "Disabled."

- 10 Exit from sqlplus by entering:

```
SQL> exit
```

Create a Temporary File System

- 1 Create a temporary file system named `/ora9204`. This file system should be **900 MB** or larger.
- 2 Give this new file system universal access privileges by entering:

```
chmod 777 /ora9204
```

Load the Oracle Patch Set 9.2.0.4 CD-ROM

- 1 Insert the appropriate CD (32-bit or 64-bit) for your server configuration containing the Oracle Patch Set 9.2.0.4 for the Solaris Operating Environment. The CD mounts automatically.
- 2 Unzip the Patch Set file from the CD into the new directory:

```
cd /cdrom/cdrom0
```

- For 32-bit Oracle, enter:

```
unzip p3095277_9204_solaris.zip -d /ora9204
```

- For 64-bit Oracle, enter:

```
unzip p3095277_9204_solaris64.zip -d /ora9204
```

- 3 Change back to the root directory and remove the CD-ROM from the drive.

```
cd /  
eject
```

- 4 Change to the new file system and extract the Patch Set archive file from the CD. Enter:

```
cd /ora9204
```

- For 32-bit Oracle, enter:

```
cpio -idcmv < /ora9204/9204_solaris_release.cpio
```

- For 64-bit Oracle, enter:

```
cpio -idcmv < /ora9204/9204_solaris64_release.cpio
```

Set Environment Variables

- 1 As the **oracle** user, make sure the environment variables ORACLE_HOME and ORACLE_SID are set correctly.

```
echo $ORACLE_HOME
```

```
echo $ORACLE_SID
```

ORACLE_HOME should point to the location of the Oracle 9.2.0 software, and ORACLE_SID should be unchanged, e.g., IDB.

- For Bourne or Korn shell, enter:

```
export ORACLE_HOME=<Oracle Home Directory>
```

```
export ORACLE_SID=<Oracle Site Identifier>
```

- For C shell, enter:

```
setenv ORACLE_HOME <Oracle Home Directory>  
setenv ORACLE_SID <Oracle Site Identifier>
```

- 2 Change to the \$ORACLE_HOME/bin directory where the Oracle Universal Installer is located.

For example:

```
cd /usr/ora/920/bin
```

- 3 Make sure the DISPLAY environment variable is set.

- For Bourne or Korn shell, enter:

```
export DISPLAY=<host_identifier>:0
```

- For C shell, enter:

```
setenv DISPLAY <host_identifier>:0
```

where <host_identifier> is the server identifier, either a name or IP address.

- 4 Use the Oracle Universal Installer to install the Patch Set as described in the next section.

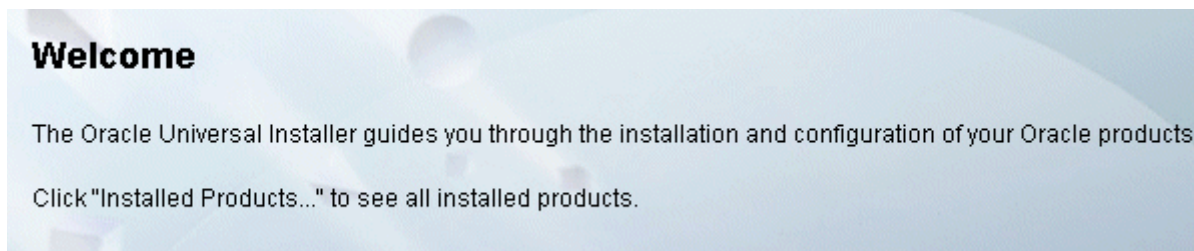
Launch the Oracle Universal Installer

- 1 Start the installer from the appropriate directory on your server:

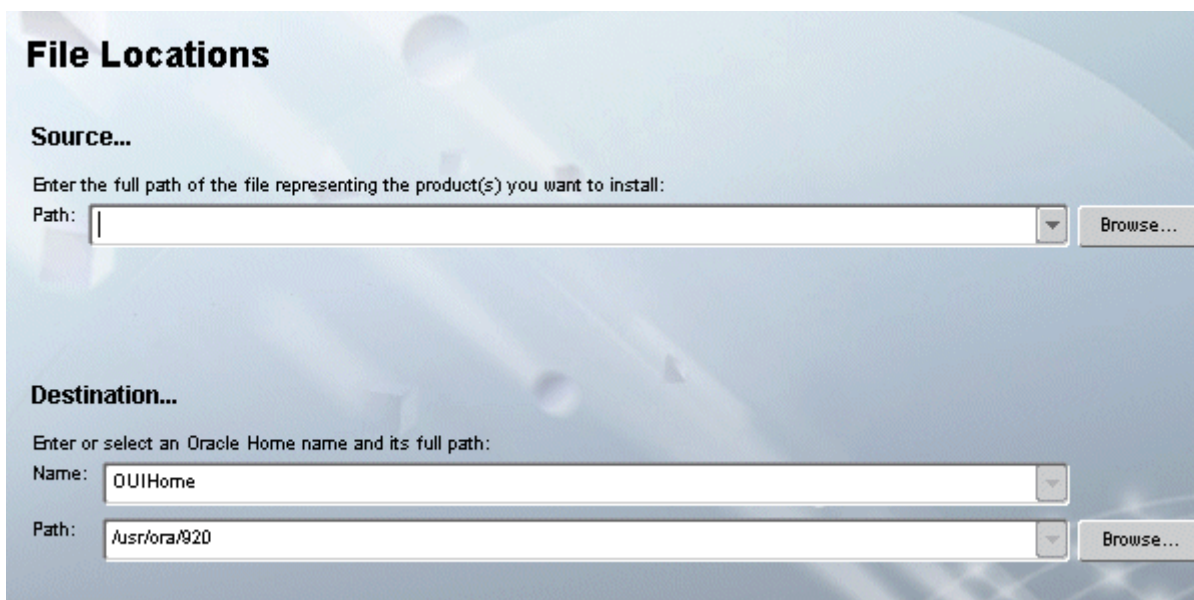
```
./runInstaller
```

- 2 Follow the steps below within the installer:

- 3 On the **Welcome** screen, click the *Next* button to display the **File Locations** screen.



- 4 At the **Source...** entry field, click the *Browse...* button and navigate to the *stage* directory located on the CD-ROM. (The *stage* directory is located under the Disk1/ sub-directory on the CD.)



- 5 Select the `products.jar` file. Click the **Next** button
The products file will be read and the installer will load the product definitions. The products to be loaded will be displayed.



- 6 Before you install the patch set, you need to install the latest version of the Oracle Universal Installer, which is included with the patch set.

When you're prompted to select either the Oracle Universal Installer or the Oracle Patch Set, select:

Oracle Universal Installer 2.2.0.18.0

And click **Next**. When the Summary screen displays, click the **Install** button. Expect the installation to go very quickly.

- 7 After the installation has completed successfully, the installer displays:

End of Installation

- 8 After you've installed the latest version of the Oracle Universal Installer, click **Next Install**. This time, choose:

Oracle9iR4 9.2.0.4.0 Patch Set

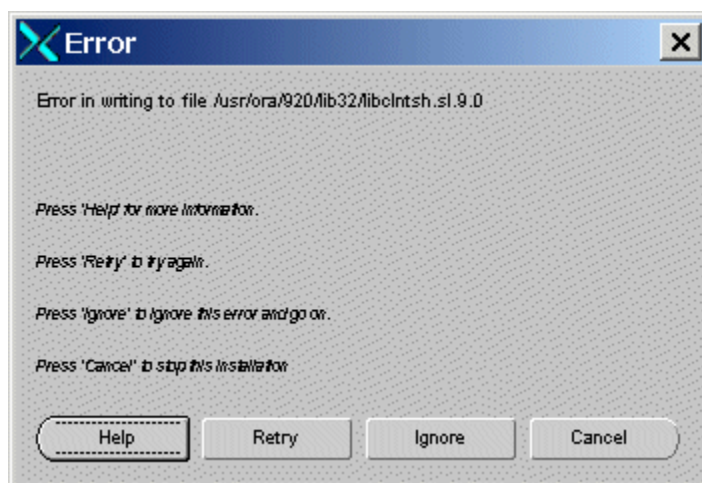
- 9 Verify the products listed on the Summary screen.

Note Disregard the amount of space shown as Required. It assumes that all products will be installed, and is **not** accurate for this update. The amount of space you actually need is much less.



- 10 On the Summary screen, click the **Install** button. Expect the installation to take about an hour.

- 11 If you encounter problems writing to a file during the installation process, as shown in the Error message below, change the permissions for the Oracle libraries and binaries.



You may need to take one of these actions:

- To add write permission for the owner of a file, enter:
chmod u+w <filename>
- To change the ownership of a file, enter:
chown oracle:dba <filename>
- To rename a file, enter:
mv <filename> <newfilename>

After you've made the appropriate change, click **Retry** on the Error screen to continue.

- 12 When the installer prompts you to run the `root.sh` script, open a new X window and log on as **root** user to run `$ORACLE_HOME/root.sh`.

Accept the default values at any prompts you receive.

- 13 After the installation has completed successfully, the installer displays:

```
End of Installation
```

Click **Exit** and confirm to exit the installer.

After Installing the Patch Set

After the Patch Set has been successfully installed, you need to run the following SQL*PLUS commands on each database associated with this Oracle 9.2.0.4 instance.

- 1 As the **oracle** user, launch SQL*PLUS by entering:

```
sqlplus "/ as sysdba"
```

- 2 Start the database in migrate mode.

```
SQL> startup migrate pfile = /fnsw/local/oracle/init.ora
```

- 3 Begin spooling the output to a log file, and execute the `catpatch.sql` script to update the database with the newly patched software. This step will also take about an hour.

```
SQL> spool patch.log
```

```
SQL> @$ORACLE_HOME/rdbms/admin/catpatch.sql
```

```
SQL> spool off
```

- 4 Review the patch.log file for errors and correct any problems. If necessary, run the catpatch script again until no errors are reported.
- 5 Shutdown the database and then restart it to take it out of migrate mode.

```
SQL> shutdown
SQL> startup pfile= /fnsw/local/oracle/init.ora
```

- 6 This step is optional. It recompiles all invalid PL/SQL packages now rather than when accessed for the first time. Expect this step to take just a minute or so.

```
SQL> @$ORACLE_HOME/rdbms/admin/utlrp.sql
```

- 7 Shutdown the database and exit from sqlplus by entering:

```
SQL> shutdown
SQL> exit
```

Re-enable Archive Logging (Optional)

If you disabled the Archive Logging feature on the server earlier in this procedure, now you can re-enable it. If you do not need to enable this feature, skip to [“Return to Production Mode” on page 43](#).

- 1 As **fns** user, launch the FileNet System Configuration Editor by entering:

```
fn_edit &
```

- 2 Click **OK** in the initial dialog box.

- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the Log Archive Start field. An **X** in this field indicates that Archive logging is turned off. A check mark indicates that Archive logging is turned on.

Click the field to place a check mark in the field.

- 5 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.

- 6 Rebuild the Oracle configuration files by entering:

```
fn_build -a  
fn_util updatertdb
```

Return to Production Mode

After the Oracle Patch Set has been successfully installed, you can restart Oracle and Image Services, and resume normal processing.

Prepare to Install the Patch Set

Stop the Image Services and Oracle Software

- 1 Shut down the existing Oracle Server instance with normal or immediate priority. i.e., Shutdown all instances cleanly.
- 2 Stop all Oracle services. (e.g., TNSListener, OracleServiceIDB, etc.)

Disable Oracle Archive Logging (if applicable)

If Archive Logging is enabled on the server, you must disable it before you update the Oracle RDBMS software. Turning off Archive Logging will prevent non-essential records from being written to the log file and will speed the update.

- 1 Logon as Windows **Administrator**.
- 2 Open the Image Services System Configuration Editor.

On the Windows Taskbar, click the **Start** button, point to **Programs**, point to the **FileNet Image Services**, point to **System Configuration**, and click the **Configuration Editor** icon.

The Open Configuration Database dialog box displays.

- 3 Verify that the two-part domain information is correct in the Open Configuration Database dialog box and click **OK**.
- 4 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 5 On the Oracle sub-tab, locate the **Log Archive Start** field. An **X** in this field indicates that Archive logging is turned off. If archive logging is already turned off, you may exit `fn_edit` (without saving changes) and skip to the section, [**“Load the Oracle Patch Set 9.2.0.4 CD-ROM” on page 45.**](#)
- 6 A check mark indicates that Archive logging is turned on. Turn archive logging off by clicking the field to place an **X** in it.
- 7 Exit the System Configuration Editor by selecting Exit from the File pulldown menu. Be sure to **save** your changes to the configuration database when you are prompted.
- 8 Update the `init.ora` file and rebuild the Oracle configuration files by entering the following commands at a Command Prompt:

```
fn_build -a
fn_util updatertdb
```

Load the Oracle Patch Set 9.2.0.4 CD-ROM

- 1 Insert the CD containing the Oracle Patch Set 9.2.0.4 for Windows into the CD-ROM drive.

- 2 Unzip the Patch Set file from the CD onto the server's hard drive.

Launch the Oracle Universal Installer

- 1 Open a Command Prompt window and change to the following directory:

`<drive>:\<unzip_directory>\Disk1\`

- 2 Start the Patch Set installer by entering the following command:

`setup`

The Welcome screen appears.

- 3 At the Welcome screen, click **Next**.

The File Locations dialog box appears.

- 4 In the Source...entry field, click the **Browse** button and navigate to the Stage directory.

Tip The Stage directory is located in the following directory structure:
`<drive>:\<unzip_directory>\Disk1\`

- 5 Select the products.jar file, and click **Next**.

The products that will be loaded are displayed.

- 6 Verify the products listed and click the **Install** button.

Tip If a write error occurs, rename the noted file and select the retry option.

When the installation completes successfully, the End of Installation window will display.

- 7 Click **Exit** and confirm to exit the installer.
- 8 Reboot the Oracle server and log back on as Windows **Administrator**.

After Installing the Patch Set

To complete the installation of this patch set, you need to start up each database associated with the upgraded \$ORACLE_HOME and log in using SQL*Plus (e.g., sqlplus "/as sysdba").

- 1 Run the following commands\scripts in order from \$ORACLE_HOME within a MIGRATE session:

```
startup migrate pfile = <drive>:\fnsw_loc\oracle\init.ora
```

```
spool <drive>:\fnsw_loc\oracle\patch.log
```

```
@<drive>:\oracle\ora920\rdbms\admin\catpatch.sql
```

```
spool off
```

- 2 Review the patch.log file for errors and re-run the catpatch script after correcting any problems.

```
shutdown
```

```
startup pfile=<drive>:\fnsw_loc\oracle\init.ora
```

- 3 The following step is optional. It recompiles all invalid PL/SQL packages now rather than when accessed for the first time.

@<drive>:\oracle\ora920\rdbms\admin\utlrp.sql

- 4 Exit from sqlplus by entering:

exit

Enable Archive Logging (Optional)

If you disabled Archive Logging on your server earlier in this procedure, now you can re-enable it. If you did not disable Archive Logging, skip to the section, [“Return to Production Mode” on page 49](#).

- 1 Open the Image Services System Configuration Editor.
The Open Configuration Database dialog box displays.
- 2 Verify that the two-part domain information is correct in the Open Configuration Database dialog box and click **OK**.
- 3 When the main System Configuration Editor window displays, click the Relational Databases tab.

The Oracle sub-tab should be on top. If not, click the Oracle sub-tab to bring it to the front.

- 4 On the Oracle sub-tab, locate the Log Archive Start field. An **X** in this field indicates that Archive logging is turned off. A check mark indicates that Archive logging is turned on.

Click the field to place a check mark in the field.

- 5 Exit the Configuration Editor by selecting Exit from the File pulldown menu. Be sure to save your changes to the configuration database when you are prompted.

- 6 To complete this procedure, you must update the init.ora file and rebuild the Oracle configuration files by entering the following commands at a Command Prompt:

```
fn_build -a  
fn_util updatertdb
```

Return to Production Mode

After the Oracle Patch Set has been successfully installed, you can restart Oracle and Image Services, and resume normal processing.