



Upgrading the Media Server 2000 Series

This document contains the procedures for upgrading and downgrading the Media Server 2000 Series software and the APS software.

Media Server 2000 Series upgrade and downgrade

The Media Server 2000 Series upgrade procedure enables you to apply a maintenance release or “patch” to a Media Server 2000 Series node, or upgrade the node as part of a network-wide upgrade to a new release. The downgrade procedure enables you to remove a maintenance release or patch from a Media Server 2000 Series node, or downgrade the node as part of a network-wide downgrade to a previous release.

MS 2000 Series upgrade and downgrade procedures

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APS upgrade and downgrade

This document contains procedures for upgrading and downgrading the Audio Provisioning Server (APS)

The APS is configured on a server that also hosts the CS 2000 Management Tools, “Succession Element and Sub-Network Manager (SESM),” “CS 2000 GWC,” “UAS Mgr,” and “Network Patch Manager (NPM).” For the procedure used to upgrade the APS software when the APS resides on this “CS 2000 Management Tool,” see your solution’s Upgrades document.

Note: Release APS09 can only be installed on an APS that is configured on the CS 2000 Management Tool (described in the paragraph above). For a procedure used to combine an APS at

release level APS06 or APS07 with the CS 2000 Management Tool, see your solution's Upgrades document.

APS upgrade and downgrade procedures

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Tools and utilities

This section contains information which helps you prepare for upgrading or downgrading the APS.

- Use servers with 36 GB drives on the T1400 SUN server. The APS application co-resides with other applications, SESM (UASEM, GWCEM), NPM, & SAM21EM. If you attempt to load all the applications on an 18 GB system, there will be insufficient file system space under “/data/oradata” for the table spaces required by the various applications.
- Perform an APS database and application file backup of your APS. Both must be done in order to restore the APS to a functioning system.
- The APS server needs to be upgraded with the base SSPFS released software. Follow the “SSPFS Upgrade Guide to SN07” to upgrade your SN04, SN05, SN06, or SN06.2 system to a SSPFS SN07 system.

Office impact

The following general impact on an office can be expected during a software upgrade:

- While an APS is out of service, audio provisioning cannot be performed; you can, however, continue to process calls.
- During software installation, audio distribution is disabled.

Upgrading a Media Server 2010

This procedure enables you to upgrade the Media Server 2010 as part of a network-wide upgrade to a new release.

Office impact

Upgrading the Media Server 2010 as part of network-wide upgrade is dependent upon the upgrade of other network elements first being completed. Therefore, this procedure must be performed at the appropriate time within the network upgrade sequence.

When this procedure is performed in response to a network-wide upgrade, the Media Server 2010 is not operational. Therefore, this procedure should be performed during an offline network maintenance window or when sufficient additional servers are available to maintain normal network operations while this node is out of service.

In this procedure each Media Server 2010 node in the network is to be updated one at a time.

When this upgrade procedure is successfully completed, INI files retrieved from the Media Server 2010 nodes will be encrypted.



CAUTION

During the upgrade procedure, you will perform a hard reset on the Media Server. If you are upgrading a 240 port Media Server 2010, the hard reset will take both Media Servers out of service. Any active calls will be dropped!

Material requirements

This is a software-only procedure and doesn't require special tools. The following files are provided either on compact disc or through electronic software distribution (ESD):

- CMP file (software executable load)
- INI file (configuration file)
- DAT files containing specific information (such as Conference tones, and information to deliver test trunk functionality)

The client workstation must be running the following programs:

- Microsoft Windows 98, NT, 2000, XP, or 2003
- Netscape 6, or higher, or Microsoft Internet Explorer (IE) 6.0, or higher

Procedure to upgrade a Media Server 2010

Before starting this procedure, review any documentation included with the software. The documentation included with the software may override or supplement the procedure described below.

For increased security, the CS 2000 Management Tool and SDM logins, and the MS 2000 Series Configuration Tool (Media Server 2000 Series CLUI) are equipped with login timeouts. If at any point the procedure below the user interface or telnet session times out, follow the procedure for logging back in, and continue the procedure from the point at which the timeout occurred.

Upgrading a Media Server 2010

At the Windows desktop interface

- 1 Open a DOS window and enter the following three commands:

```
ping <IP address of router>
```

```
ping <IP address of CS 2000 Management Tool>
```

```
ping <IP address of SDM>
```

If a response displays for all three commands, continue with the next step. If a response does not display for any one of the three commands, check connections and configuration of the network settings for the PC (or laptop). Do not continue with the procedure below until the ping commands all indicate successful connections.

- 2 Open a telnet connection to the CS 2000 Management Tool.
- 3 When prompted, enter **nortel** as the user name and **nortel** as the password.
- 4 Back up the files in the /data/load/ams directory by performing the following steps:
 - a Log in to the Media Server 2000 Series CLUI by entering the following commands:

```
cd /opt/nortel/NTsesm/bin/
```

```
./ms2000.sh
```

- b When prompted, enter **nortel** as the user name and **nortel** as the password.

The Media Server 2000 Series CLUI main menu displays.

```
***** Media Server 2000 Series CLUI Main Menu *****
1) Display list of MS 2000 series nodes
2) Node Maintenance and Configuration
3) Backup INI file for all nodes
4) Copy a file to the SDM/CBM
5) Configure Automated INI file backup
x) EXIT CLUI
Enter selection (1-5, x)
>
```

- c Enter the number corresponding to “Backup INI file for all nodes”. This will retrieve a current copy of the INI file for each Media Server 2010 configured in the system.

Note: The .ini files are backed up in a directory with the ams ip address as the directory name. Only the last five backed up .ini files are kept in this directory. Note the dates to determine which file is the most recent.

- d Press “x” to exit the Media Server 2000 Series CLUI.

- e Enter the following on the command line:

```
cd /data/loads/ams
```

- f Create a backup directory with a descriptive name that includes today’s date and the current release version, 6.2:

```
mkdir ams_bku_<today’s date>_<release>
```

Example

```
mkdir ams_bku_20031031_6.2
```

- g Back up the files:

```
cp -p *.cmp ams_bku_<today’s date>_<release>
```

```
cp -p *.dat ams_bku_<today’s date>_<release>
```

Note: If you receive an error such as “cp cannot access *.dat”, this indicates that there are no files of this type to back up.

- h Each Media Server 2010 node has a directory containing a copy of its INI file. The directory name is the IP address of the Media Server 2010 node. Make a backup copy of each Media

Server 2010 directory by **repeating** the following command at the command line for each Media Server 2010 node:

```
cp -pr <MS 2010 ip address> ams_bku_<today's date>_<release>
```

where *<release>* is the current release (6.2)

Example

```
cp -pr 172.17.40.230 ams_bku_20040501_6.2
```

- i Change to the backup directory you created in step [f](#) above and verify that the files and directory are actually present.

5 Determine the source for the software upgrade files.

If	Do
the software upgrade files are on CD	step 6
the software upgrade files have been delivered through ESD	step 7

6 Copy the files from the CD.

- a** Insert the CD into the CS 2000 Management Tool CD drive.

- b** Enter the following command:

```
cd /cdrom/cdrom0
```

- c** Enter the following command:

```
ls
```

Verify the content of the CD that displays by referring to the patch or release installation instructions to determine the correct release content. You may see .ini, .dat, and .cmp files listed, as well as an installation script (*<filename>.sh* or *<filename>.pl*). The CD may also contain some documentation or a README.file.

- d** Copy the files to the ams directory on the CS 2000 Management Tool by entering the following command:

```
cp * /data/loads/ams
```

- e** Enter the following commands:

```
cd /data/loads/ams
```

```
ls -ltr
```

Ensure that the files you copied are present in the directory. The newer files will appear near the bottom of the listing.

Note: Make a note of the full path name of the .cmp file for use later in this procedure.

- 7 Prepare the .dat file and the .ini file.
 - a Refer to the release notes and consult with your network administration regarding the tones file to determine if a customized toneset .DAT file is appropriate for your network.
 - b Perform an upgrade to the .ini file by entering the following command:

```
perl iniupgrade.pl AMS_DefaultConfig_IP_v109.ini  
<SN06.2 ini file from step 4c> <SN07 .ini filename>
```

- 8 Install the new software load on the Media Server 2010.
 - a Log in to the Media Server 2000 Series CLUI by entering the following commands:

```
cd /opt/nortel/NTsesm/bin/  
./ms2000.sh
```
 - b When prompted, enter **nortel** as the user name and **nortel** as the password.

The Media Server 2000 Series CLUI main menu displays.
 - c Enter the number corresponding to “Node Maintenance and Configuration”.
 - d In response to the prompt, enter the IP address of the Media Server 2010 node that you are upgrading.

The Main Menu for MS2010 at <ip_address> displays.

```
***** Main Menu for MS2010 at <ip_address> *****
```

- ```
1) Maintenance Menu
2) Configuration Menu
x) EXIT
```

```
Enter selection (1-2, x)
```

```
>
```

- e Enter the number corresponding to, “Configuration Menu”.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

```
Main Configuration Menu for MS2010 at <ip_address>
```

- ```
1) Display this nodes current configuration
```

- 2) General node configuration
- 3) Configure Network Time settings
- 4) SNMP configuration and security
- x) EXIT

Enter selection (1-4, x)

>

- f Enter the number corresponding to “Display this nodes current configuration”.

The current configuration information for the node displays.

Make a note of the existing configuration values for this node, especially the “Software Version”, for use later in this procedure.

Note: If you encounter the error, “The MS 2000 node at xx.xxx.xxx.xx is either not in service or is not an MS 2000 node”, verify that you have entered the correct IP address. Use the “ping” command to ensure that the MS 2010 node can be accessed. If necessary, “hard” reset the server and repeat step [d](#). Instructions for performing a hard reset can be found in steps [18a](#) and [18b](#)

- g Press Enter to continue.

The Main Configuration Menu for MS2010 at <ip_address> displays.

- h Press “x”, to exit this menu.

The Main Menu for MS2010 at <ip_address> displays.

- i Enter the number corresponding to the “Maintenance Menu”.

The Maintenance Menu for MS2010 at <ip_address> displays.

**** Maintenance Menu for MS2010 at <ip_address> ****

- 1) Download load files to this node
- 2) Backup the INI file for this node
- 3) Perform a soft reset on this node
- 4) Lock or Unlock this node
- x) EXIT

Enter selection (1-4, x)

>

- j Enter the number corresponding to “Lock or Unlock this node”.

The MS 2000 Lock Menu displays.

- i In response to the prompt, enter the number corresponding to “Perform Graceful Lock”.

Note: Gracefully locking a node ensures that active calls on the node complete before the node is locked and removed from service.

- ii In response to the prompt, enter “y” and press Enter. When prompted to continue, press Enter again.

The MS 2000 Lock Menu displays.

- iii Press “x”, to exit this menu.

The Maintenance Menu for MS2010 at <ip_address> displays.

- k Determine whether the node is locked.

If	Do
the “Current state” in the Media Server 2010 Lock Menu displayed in the previous step indicates that the node <u>is</u> locked	step q
the “Current state” in the Media Server 2010 Lock Menu displayed in the previous step indicates that the node <u>is not</u> locked	step l

- l Press “x”, to exit the menu.

The Main Menu for MS2010 at <ip_address> displays

- m Enter the number corresponding to “Configuration Menu”.

The Main Configuration Menu for MS2010 at <ip_address> displays.

- n Wait for the calls on the node to complete. Enter the number corresponding to “Display this nodes current configuration”.

The current configuration information for the node displays.

In the configuration display, look for the “Lock State” parameter. If the node is not locked, press Enter and perform this step again. If the node is locked, press Enter and go on to the next step.

- o Press “x” to exit the menu.

The Main Menu for MS2010 at <ip_address> displays.

- p** Enter the number corresponding to “Maintenance Menu”.
The Maintenance Menu for MS2010 at <ip_address> displays.
- q** Enter the number corresponding to “Download load files to this node”.
The MS 2000 Restore Loads Menu displays.
- r** The Toneset and TestTrunk .dat files must be copied to the SDM. The .dat files only need to be copied once.
- i**

If	Do
this is the first node you are upgrading using this procedure	continue this step
this is not the first node you are upgrading using this procedure	step v

- ii** Enter the number corresponding to “Download call progress tones (.dat) file”.
A list of .dat files displays.
- iii** Enter the number corresponding to the appropriate toneset .dat file to upload. In response to the prompt to do a soft reset, enter “n”.
- iv** In response to the prompt to save the files to the SDM, enter “y”.
When the file has been successfully copied to the SDM, as indicated by a message display at the console, the MS 2000 Restore Loads Menu displays.
- v** Enter the number corresponding to “Download load files to this node”.
The MS 2000 Restore Loads Menu displays.
- vi** Enter the number corresponding to “Download call progress tones (.dat) file”.
A list of .dat files displays.
- vii** Enter the number corresponding to the appropriate TestTrunk .dat file to upload. In response to the prompt to do a soft reset, enter “n”.
- viii** When the download completes, as indicated by a message display on the console, you will be prompted to transfer the file to the SDM. Enter “y” in response to the prompt to save the file to the SDM.

When the file has been successfully copied to the SDM, as indicated by the message display at the console, the MS 2000 Restore Loads Menu displays.

- s** Enter the number corresponding to “Download load image (.cmp) file”.

A list of .cmp files displays.

- t** Enter the number corresponding to the correct file copied off of the upgrade software CD. In response to the prompt to continue, enter “y”.

The download begins. The Media Server 2000 Series CLUI will not respond for up to five minutes while the download is in progress.

- u** When the download completes, as indicated by a message display on the console, you will be prompted to transfer the file to the SDM. Enter “y” in response to the prompt to save the .cmp file to the SDM.

When the file has been successfully copied to the SDM, as indicated by a message display at the console, the MS 2000 Restore Loads Menu displays.

- v** The INI file associated with the new software load must be installed on the Media Server 2010 nodes.

Note: This is the SN07 .ini file that was created in step [7](#).

- i** Enter the number corresponding to for “Download configuration (.ini) file”.

A list of .ini files displays.

- ii** Enter the number corresponding to the INI file to upload. This file was created in step [7](#). In response to the prompt to continue, enter “y”.

The download begins. The Media Server 2000 Series CLUI will not respond for up to five minutes while the download is in progress.

- iii** When the download completes, as indicated by a message display on the console, you will be prompted to transfer the file to the SDM. Enter “y” in response to the prompt to save the INI file to the SDM.

When the file has been successfully copied to the SDM, as indicated by the message display at the console, the MS 2000 Restore Loads Menu displays.

- w** Press “x” to exit this menu.

The Maintenance Menu for MS2010 at <ip_address> displays.

- x** Enter the number corresponding to “Perform a soft reset on this node”. In response to the prompt, “Perform Soft Reset?”, enter “y”. In response to the prompt to continue, press Enter.

The Maintenance Menu for MS2010 at <ip_address> displays.

- y** Press “x” to exit this menu.

The Main Menu for MS2010 at <ip_address> displays.

- z** After waiting approximately 2 minutes for the soft reset to complete, enter the number corresponding to “Configuration Menu”.

The Main Configuration Menu for MS2010 at <ip_address> displays.

- aa** Enter the number corresponding to “Display this nodes current configuration”.

The current configuration information for the node displays.

- ab** In the configuration display, look for the “Software Version” parameter. Verify that the expected version of the software has been downloaded (check the release notes for the software upgrade label). Press Enter.

The Main Configuration Menu for MS2010 at <ip_address> displays.

- ac** At this point in the upgrade it may be necessary to configure any new functionality. Refer to the release notes to determine if there are any special configuration requirements for the new release.

- ad** Press “x” to exit this menu.

The Main Menu for MS2010 at <ip_address> displays.

- ae** Press “x” to exit this menu.

The Media Server 2000 Series CLUI main menu displays.

- 9** Press “x”, to exit from the MS 2000 Series CLUI.

- 10** Minimize the window containing the telnet connection with the CS 2000 Management Tool.

If

Do

this is the first node you are downgrading using this procedure

step [11](#)

- | | If | Do |
|-----------|---|-------------------------|
| | this is not the first node you downgrading using this procedure | step 17 |
| 11 | Open a telnet connection to the SDM server in order to redirect links to the new file versions. | |
| 12 | Log in with the “root” user name and password. | |
| 13 | Enter the following commands at the command line:
<pre>cd /swd/ams</pre> <pre>ls -ltr *.cmp</pre> <p><i>The “.cmp” files in the “ams” directory display.</i></p> <p>Example</p> <pre>-rwxr-xr-x 2 swld swld 1024 date **:** ams_420108255.cmp</pre> <pre>-lrwxr-xr-x 2 swld swld 1024 date **:** ams.cmp -> ams_420108255.cmp</pre> <pre>-rwxr-xr-x 2 swld swld 1024 todaysdate **:** ams_<newrel>.cmp</pre> | |
| 14 | Enter the following command:
<pre>ln -sf <new filename> <linkname></pre> <p>Example</p> <pre>ln -sf AMS_420109378.cmp ams.cmp</pre> <p>Note: The linkname is the name to the left of the pointer (->) in the listing output lines beginning with “l” (lower-case L). (Refer to the example in step 13.) Record the value of the linked file displayed in step 13 for possible use in a downgrade procedure should a severe problem requiring a downgrade to the current release occur.</p> | |
| 15 | Enter the following command:
<pre>sum *.cmp sort</pre> <p><i>A list of the “.cmp” files, with checksums for each of the files, displays.</i></p> <p>Example</p> <pre>17124 ams.cmp</pre> <pre>54723 AMS_420108255.cmp</pre> <pre>17124 AMS_420109378.cmp</pre> | |

Verify that the checksums for the symbolic link matches the checksum for the new .cmp file. Thus, in the example above, the files “ams.cmp” and “AMS_42109378.cmp” both have the same checksum, “17124”.

Note: If the message, “sum: ams.cmp No such file or directory” displays, this indicates an invalid link. Steps [13](#) through [15](#) must, in that case, be repeated.

- 16 Minimize the window containing the telnet connection with the SDM.
- 17 Enter the following command on the command line in the window containing the telnet session with the CS 2000 Management Tool:

```
ping -s <IP address of MS 2010>
```

Example

```
ping -s 10.10.10.10
```

A ping display starts.

Example

```
Reply from 10.10.10.10: bytes=32 time<10ms TTL=252  
Reply from 10.10.10.10: bytes=32 time<10ms TTL=252
```

```
.  
.
```

At an Media Server 2010 unit

- 18 Perform a “hard” reset of the Media Server 2010:



CAUTION

Performing a hard reset on a 240 port Media Server 2010, takes both Media Servers out of service.

- a At the Breaker Interface Panel located at the top of the frame, turn off the breaker associated with the Media Server 2010 that you are upgrading and then turn the breaker on again.

In the ping command window, check that the Media Server 2010 is again responding. Wait up to three minutes

for the reply. The normal response is a short down time with a return to service of the Media Server 2010.

- b** Check the activity lights on the front of the Media Server 2010 card:
- the blue hot swap ready LED should not be illuminated
 - the green power LED should be lit
 - the dual ethernet LEDs should indicate a connection (solid green) with activity (blinking orange)
 - the yellow activity LED should light after about one minute
 - the red Fail LED should not be lit

Note: A problem with the yellow LED indicates a problem with the bootp server download of the software. Check the output from steps [13](#) through [15](#) for a possible problem with the .cmp file configuration.

At the Windows desktop interface

- 19** Press the “Ctrl” key and hold while pressing the “C” key. This will terminate the “ping” command.
- 20** Verify that the upgrade has been completed.
- a** Log in to the Media Server 2000 Series CLUI by entering the following commands:
- ```
cd /opt/nortel/NTsesm/bin/
./ms2000.sh
```
- b** When prompted, enter **nortel** as the user name and **nortel** as the password.
- The Media Server 2000 Series CLUI main menu displays.*
- c** Enter the number corresponding to “Node Maintenance and Configuration”.
- d** In response to the prompt, enter the IP address of the Media Server 2010 node that you are upgrading.
- The Main Menu for MS2010 at <ip\_address> displays.*
- e** Enter the number corresponding to “Configuration Menu”.
- The Main Configuration Menu for MS2010 at <ip\_address> displays.*
- f** Enter the number corresponding to “Display this nodes current configuration”.
- The current configuration information for the node displays.*

Verify that the configuration information displayed matches the expected configuration values in the release notes. Pay particular attention to the software version and compare it to the expected value making sure it has changed since performing step [8e](#). Ensure that the port allocation and language settings are correct. This verifies that the upgrade was done successfully.

**g** Press Enter to continue.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

**21** Press “x” to exit this menu.

*The Main Menu for MS2010 at <ip\_address> displays.*

**22** Press “x” to exit the menu.

*The Main Menu for MS2010 at <ip\_address> displays.*

**23** Enter the number corresponding to “Maintenance Menu for MS2010 at <ip\_address>”.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*

**24** Enter the number corresponding to the “MS2000 Lock Menu”.

*The MS 2000 Lock menu displays.*

**a** In response to the prompt, enter the number corresponding to “Unlock this node”.

*The MS2000 Lock Menu displays.*

**b** Press “x” to exit this menu.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*

**25** Press “x” twice to return to the Media Server 2000 Series Main menu.

*The Media Server 2000 Series CLUI Main Menu displays.*

**26** At this point in the procedure, you have completed upgrading a node. The functionality of the node can be verified by directing calls to it. After this verification is complete, determine whether additional nodes are to be upgraded.

| <b>If</b>                       | <b>Do</b>               |
|---------------------------------|-------------------------|
| another node is to be upgraded  | step <a href="#">8c</a> |
| no other node is to be upgraded | step <a href="#">27</a> |

- 27 Log off from all Media Server 2010 nodes and close all windows.  
**Note:** It is recommended that you perform a full backup of the SESM.
- 28 Add the Media Server 2010 devices to the Integrated EMS for alarm handling. Refer to the Adding a Media Server MS2000 NE) in the *Integrated EMS Configuration Management* document, *NN10330-511*.
- 29 Delete the Media Server 2010 devices from the SESM inventory. Refer to the Adding a Media Server MS2000 NE) in the *Integrated EMS Configuration Management* document, *NN10330-511*. Log off from all Media Server 2010 nodes and close all windows.
- 30 You have completed this procedure.

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## Downgrading a Media Server 2010

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This procedure enables you to downgrade the Media Server 2010 software as part of a network-wide downgrade to a previous release.

### Office impact

Downgrading the Media Server 2010 as part of network-wide upgrade is dependent upon the downgrade of other network elements first being completed. Therefore, this procedure must be performed at the appropriate time within the network downgrade sequence.

When this procedure is performed in response to a network-wide downgrade, the Media Server 2010 is not operational. Therefore, this procedure should be performed during an offline network maintenance window or when sufficient additional servers are available to maintain normal network operations while this node is out of service.

### Material requirements

This is a software-only procedure and doesn't require special tools. This procedure should be performed only if you have first performed the procedure, "Upgrading the Media Server 2010".

### Procedure to downgrade a Media Server 2010

For increased security, the CS 2000 Management Tool and SDM logins, and the MS 2000 Series Configuration Tool (Media Server 2000 Series CLUI) are equipped with login timeouts. If at any point the procedure below the user interface or telnet session times out, follow the procedure for logging back in and continue the procedure from the point at which the timeout occurred.

#### Downgrading a Media Server 2010

##### *At the Windows desktop interface*

- 1 Open a DOS window and then enter the following three commands:

```
ping <IP address of router>
```

```
ping <IP address of CS 2000 Management Tool>
```

```
ping <IP address of SDM>
```

If a response displays for all three commands, continue with the next step. If a response does not display for any one of the three commands, check connections and configuration of the network settings for the PC (or laptop). Do not continue with the

procedure below until the ping commands all indicate successful connections.

- 2 Open a telnet connection to the CS 2000 Management Tool.
- 3 When prompted, enter **nortel** as the user name and **nortel** as the password.
- 4 Restore the 6.2 datafill.

- a Enter the following on the command line:

```
cd /data/loads/ams
```

- b Locate the backup copy of the SN06.2 software and datafill by entering the following command:

```
ls -lt
```

The SN06.2 backup directory name should appear in the format, "ams\_bku\_<backup\_date>\_6.2," where <backup date> is the date that the backup directory was created.

#### **Example**

```
ams_bku_20031031_6.2
```

- c Enter the following command to locate the SN06.2 versions of the .cmp, .ini, and .dat files that are to be restored:

```
ls -ltr ams_bku_<backup_date>_6.2
```

Make a note of the names of the files that must be restored, for use later on in this procedure.

- d Restore the SN06.2 software and datafill by changing to the backup directory and entering the following command:

```
cp -pr * ../
```

- 5 Enter the following command:

```
ls -ltr
```

Make a note of the backed up toneset filename which was the name of the backed up toneset file which was upgraded in step [8r](#) of the upgrade procedure (usually conf-tones.dat or customset.dat) for use in the next step.

#### **a**

| <b>If</b>                                                       | <b>Do</b>               |
|-----------------------------------------------------------------|-------------------------|
| this is the first Media Server 2010 you are downgrading         | step <a href="#">5b</a> |
| this is not the first node you downgrading using this procedure | step <a href="#">7</a>  |

- b** Note the name of each directory which corresponds to the IP address of an Media Server 2010 node.

**Example**

```
drwxr-xr-x 2 root other 512 Jan 8 07:11 172.17.40.230
```

- c** Enter the following command:

```
cd <backup_dir>
```

**Example**

```
cd 172.17.240.230
```

- d** Enter the following command:

```
ls -ltr
```

Note the backup file corresponding to step 5c of the upgrade procedure. The filename is in the form <timestamp>.Board.ini

**Example**

```
-rw-r--r-- 1 root other 2632 Apr 7 18:46 2004-04-07_18:46:34.Board.ini
```

- e** Enter the following command:

```
cp -p <timestamp>.Board.ini ../<ip_addressof MS2010>.ini
```

**Example**

```
cp -p 2004-04-07_18:46:34.Board.ini ../172.17.240.230.ini
```

- f** Enter the following commands:

```
cd ..
```

```
ls -ltr
```

*The backup file is restored to the current directory (/data/loads/ams)*

**g**

| <b>If</b>                                       | <b>Do</b>                                              |
|-------------------------------------------------|--------------------------------------------------------|
| there is another Media Server 2010 to downgrade | step <a href="#">b</a> through <a href="#">f</a> again |
| this is the last Media Server 2010 to downgrade | step <a href="#">7</a>                                 |

- 6** In the /data/loads/ams directory, enter the following command:

```
ftp <ip_address_of_SDM>
```

- a** When prompted, enter the root password.  
**b** Enter the following commands:

```
put TestTrunk.dat
```

```
put <name of toneset file>.dat
```

c At the ftp prompt, type:

```
put <ip_address_of_MS2010>.ini
```

**Example**

```
put 172.17.240.230.ini
```

d

| If                                              | Do                                   |
|-------------------------------------------------|--------------------------------------|
| there is another Media Server 2010 to downgrade | step <a href="#">b</a> for this node |
| this is the last Media Server 2010 to downgrade | step <a href="#">e</a>               |

e At the ftp prompt, type:

```
quit
```

7 Open a telnet connection to the SDM server in order to redirect links to the previous file versions.

8 Log in with the “root” user name and password.

| If                                                              | Do                      |
|-----------------------------------------------------------------|-------------------------|
| this is the first node you are downgrading using this procedure | step <a href="#">9</a>  |
| this is not the first node you downgrading using this procedure | step <a href="#">12</a> |

9 Enter the following commands at the command line:

```
cd /swd/ams
```

```
ls -ltr *.cmp
```

*The “.cmp” files in the “ams” directory display.*

**Example**

```
-rwxr-xr-x 2 swld swld 1024 date *.*.* ams_420109268.cmp
```

```
-lrwxr-xr-x 2 swld swld 1024 date *.*.* ams.cmp ->
ams_420109268.cmp
```

```
-rwxr-xr-x 2 swld swld 1024 todaysdate *.*.*
ams_<oldrel>.cmp
```

10 Enter the following command:

```
ln -sf <old filename> <linkname>
```

**Example**

```
In -sf AMS_420108255.cmp ams.cmp
```

**Note:** The linkname is the name to the left of the pointer (->) in the listing output lines beginning with “l” (lower-case L). (Refer to the example in step [9](#).)

- 11 Enter the following command:

```
sum *.cmp | sort
```

*A list of the “.cmp” files, with checksum for each of the files, displays.*

**Example**

```
17124 ams.cmp
```

```
17124 AMS_420108255.cmp
```

```
54723 AMS_420109378.cmp
```

Verify that the checksums for the symbolic link matches the checksum for the old release file. Thus, in the example above, the files “ams.cmp” and “AMS\_42108255.cmp” both have the same checksum, “17124”.

**Note:** If the message, “sum: ams.cmp No such file or directory” displays, this indicates an invalid link. Steps [9](#) through [11](#) must, in that case, be repeated.

- 12 Minimize the window containing the telnet connection with the SDM. Restore the window containing the telnet connection with the CS 2000 Management Tool.
- 13 Downgrade the software on the Media Server 2010 node by performing the following steps:

- a Log in to the Media Server 2000 Series CLUI by entering the following commands:

```
cd /opt/nortel/NTsesm/bin/
```

```
./ms2000.sh
```

- b When prompted, enter **nortel** as the user name and **nortel** as the password.

*The Media Server 2000 Series CLUI main menu displays.*

```
***** Media Server 2000 Series CLUI Main Menu *****
```

- 1) Display list of MS 2000 series nodes
- 2) Node Maintenance and Configuration
- 3) Backup INI file for all nodes

- 4) Copy a file to the SDM/CBM
- 5) Configure Automated INI file backup
- x) EXIT CLUI

Enter selection (1-5, x)

>

- c** Enter the number corresponding to “Node Maintenance and Configuration”.
- d** In response to the prompt, enter the IP address of the Media Server 2010 node that you are downgrading.

*The Main Menu for MS2010 at <ip\_address> displays.*

\*\*\*\*\* Main Menu for MS2010 at <ip\_address> \*\*\*\*\*

- 1) Maintenance Menu
- 2) Configuration Menu
- x) EXIT

Enter selection (1-2, x)

>

- e** Enter the number corresponding to “Configuration Menu”.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

\*Main Configuration Menu for MS2010 at <ip\_address>\*

- 1) Display this nodes current configuration
- 2) General node configuration
- 3) Configure Network Time settings
- 4) SNMP configuration and security
- x) EXIT

Enter selection (1-4, x)

>

- f** Enter the number corresponding to “Display this nodes current configuration”.

*The current configuration information for the node displays.*

Make a note of the existing configuration values for this node, especially the “Software Version”, for use later in this procedure.

- g** Press Enter.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

- h** Press “x” to exit this menu.

*The Main Menu for MS2010 at <ip\_address> displays.*

- i** Enter the number corresponding to “Maintenance Menu”.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*

- j** Enter the number corresponding to “Lock or Unlock this node”.

*The MS 2000 Lock Menu displays.*

- i** In response to the prompt, enter the number corresponding to “Perform Graceful Lock”.

**Note:** Gracefully locking a node ensures that active calls on the node complete before the node is locked, or, removed from service.

- ii** In response to the prompt, enter “y” and press Enter. When prompted to continue, press Enter again.

*The MS 2000 Lock Menu displays.*

- iii** Press “x” to exit this menu.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*

- k** Determine whether the node is locked.

| <b>If</b>                                                                                                                | <b>Do</b>     |
|--------------------------------------------------------------------------------------------------------------------------|---------------|
| the “Current state” in the MS 2000 Lock Menu displayed in the previous step indicates that the node <u>is</u> locked     | step <b>l</b> |
| the “Current state” in the MS 2000 Lock Menu displayed in the previous step indicates that the node <u>is not</u> locked | step <b>q</b> |

- l** Wait for the calls on the node to complete. Press “x” to exit the menu.

*The Main Menu for MS2010 at <ip\_address> displays.*

- m** Enter the number corresponding to “Configuration Menu”.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

- n** Wait for the calls on the node to complete. Enter the number corresponding to “Display this nodes current configuration”.  
*The current configuration information for the node displays.*  
In the configuration display, look for the “Lock State” parameter. If the node is not locked, press Enter and perform this step again. If the node is locked, press Enter and go on to the next step.
- o** Press “x” to exit the menu.  
*The Main Menu for MS2010 at <ip\_address> displays.*
- p** Enter the number corresponding to “Maintenance Menu”.  
*The Maintenance Menu for MS2010 at <ip\_address> displays.*
- q** Enter the number corresponding to “Download load files to this node”.  
*The MS 2000 Restore Loads Menu displays.*
- r** Enter the number corresponding to “Download load image (.cmp) file”.  
*A list of .cmp files displays.*
- s** Enter the number corresponding to the version of the file that was in the Media Server 2010 node before the last upgrade was performed. You noted this file in an early step in that procedure. In response to the prompt to continue, enter “y”.  
The download begins. The Media Server 2000 Series CLUI will not respond for up to five minutes while the download is in progress.
- t** When the download completes, as indicated by a message display on the console, you will be prompted to transfer the file to the SDM. Enter “n” in response to the prompt to save the .cmp file to the SDM.  
*The MS 2000 Restore Loads Menu displays.*
- u** Enter the number corresponding to “Download configuration (.ini) file”.  
*A list of .ini files displays.*
- v** Enter the number corresponding to the INI file to download. In response to the prompt to continue, enter “y”.  
The download begins. The Media Server 2000 Series CLUI will not respond for up to five minutes while the download is in progress.

- w** When the download completes, as indicated by a message display on the console, you will be prompted to transfer the file to the SDM. Enter “n” in response to the prompt to save the INI file to the SDM.

*The MS 2000 Restore Loads Menu displays.*
- x** Press “x” to exit this menu.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*
- y** Enter the number corresponding to “Perform a soft reset on this node”. In response to the prompt, “Perform Soft Reset?”, enter “y”. In response to the prompt to continue, press Enter.

*The Maintenance Menu for MS2010 at <ip\_address> displays.*
- z** After waiting approximately 2 minutes for the soft reset to complete, press “x” to exit this menu.

*The Main Menu for MS2010 at <ip\_address> displays.*
- aa** Enter the number corresponding to “Configuration Menu”.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*
- ab** Enter the number corresponding to “Display this nodes current configuration”.
- ac** Verify that the configuration information displayed matches the expected configuration values in the release notes. Pay particular attention to the software version and compare it to the expected value making sure it has changed since performing step [13f](#). This verifies that the downgrade was done successfully.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*
- ad** Press "x" twice to return to the Media Server 2000 Series CLUI main menu.

*The Media Server 2000 Series CLUI main menu displays.*
- 14** Press “x”, to exit this menu.
- 15** Minimize the window containing the telnet connection with the CS 2000 Management Tool.

- 16** Enter the following command on the command line in the window containing the telnet session with the CS 2000 Management Tool:

```
ping -s <IP address of MS 2010>
```

**Example**

```
ping -s 10.10.10.10
```

*A ping display starts.*

**Example**

```
Reply from 10.10.10.10: bytes=32 time<10ms TTL=252
```

```
Reply from 10.10.10.10: bytes=32 time<10ms TTL=252
```

**Note:** If the Media Server 2010 has crashed or is otherwise not reachable, the reply will be “Request timed out”. Proceed with the next step of this procedure.

**At an Media Server 2010 unit**

- 17** Perform a “hard” reset of the Media Server 2010:
- a** At the Breaker Interface Panel located at the top of the frame, turn off the breaker associated with the Media Server 2010 that you are downgrading and then turn the breaker on again.  
*The ping display stops while the Media Server 2010 reboots. The ping display restarts after the reboot has completed successfully.*
  - b** Check the activity lights on the front of the Media Server 2010 card:
    - the blue hot swap ready LED should not be continuously illuminated
    - the green power LED should be lit
    - the dual ethernet LEDs should indicate a connection (solid green) with activity (blinking orange)
    - the yellow activity LED should light after about one minute
    - the red Fail LED should not be lit

**Note:** A problem with the yellow LED indicates a problem with the bootp server download of the software. Check the output from steps [9](#) through [11](#) for a possible problem with the .cmp file configuration.
  - c** Perform steps [a](#) and [b](#) on each Media Server 2010 in the system

**At the Windows desktop interface**

- 18** In the ping command window, check that the Media Server 2010 is again responding (you may need to wait for up to three minutes for the reply). The normal response is a short down time with a return to service of the Media Server 2010.

If the system fails this test, repeat step [17](#) (checking for a hardware problem) and previous steps to verify the boot files have been downgraded properly until the system comes back into service.

Press the “Ctrl” key and hold while pressing the “C” key. This will terminate the “ping” command.

- 19** Verify that the downgrade has been completed.

- a** Log in to the Media Server 2000 Series CLUI by entering the following commands:

```
cd /opt/nortel/NTsesm/bin/
./ms2000.sh
```

- b** When prompted, enter **nortel** as the user name and **nortel** as the password.

*The Media Server 2000 Series CLUI main menu displays.*

- c** Enter the number corresponding to “Node Maintenance and Configuration”.

- d** In response to the prompt, enter the IP address of the Media Server 2010 node that you are downgrading.

*The Main Menu for MS2010 at <ip\_address> displays.*

- e** Enter the number corresponding to “Configuration Menu”.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

- f** Enter the number corresponding to “Display this nodes current configuration”.

*The current configuration information for the node displays.*

Verify that the configuration information displayed matches the expected configuration values in the release notes.

These values should be the same as those for the release you are downgrading to.

- g** Press Enter.

*The Main Configuration Menu for MS2010 at <ip\_address> displays.*

- h Press “x” to exit this menu.  
*The Main Menu for MS2010 at <ip\_address> displays.*
    - i Enter the number corresponding to “Maintenance Menu”.  
*The Maintenance Menu for MS2010 at <ip\_address> displays.*
    - j Enter the number corresponding to “Lock or Unlock this node”.  
*The MS 2000 Lock Menu displays.*
      - i In response to the prompt, enter the number corresponding to “Unlock Node”.  
*The MS 2000 Lock Menu displays.*
      - ii Press “x”, to exit this menu.  
*The Maintenance Menu for MS2010 at <ip\_address> displays.*
  - 20 Press “x” twice to return to the Media Server 2000 Series CLUI main menu.  
*The Media Server 2000 Series CLUI main menu displays.*
  - 21 Press “x” to exit the Media Server 2000 Series CLUI main menu.
  - 22 At this point in the procedure, you have completed downgrading a node. The functionality of the node can be verified by directing calls to it. After this verification is complete, determine whether additional nodes are to be downgraded.
- | <b>If</b>                         | <b>Do</b>               |
|-----------------------------------|-------------------------|
| another node is to be downgraded  | step <a href="#">13</a> |
| no other node is to be downgraded | step <a href="#">23</a> |
- 23 Log off from all Media Server 2010 nodes and close all windows.
  - 24 Enter the following on the command line in the telnet session window with the CS 2000 Management Tool:  
**Exit**
  - 25 You have completed this procedure.

## Upgrading the APS

Use the following procedure to upgrade the APS to APS09.



### CAUTION

The SSPFS load does not allow the “root” user to log in remotely. The root user can login only on the server console. All of the APS install commands are executed as “root”. Failure to do so results in errors. If you perform the APS install as the “maint” user, you will get errors. The “maint” user account is allowed to log in remotely. SSPFS only allows root to log in from the console terminal. Once you have logged in as the “maint” user, you can then become the root user.



### CAUTION

Do not change the hostname and IP address of the server during the upgrade. If this is needed, perform this activity as a post upgrade procedure.

### *At the system console (Windows desktop interface)*

- 1 Log in as the “root” user.

**Note:** If you are logged in as “maint”, type `su -root` to become the root user.

You are prompted for the root password

- 2 Enter the root password.



### CAUTION

Perform an APS database and application file backup of your APS. Both must be done in order to restore the APS to a functioning system.

- 3 You can choose disk-based backups or tape-based backups. If you choose tape-based backups, check your hardware to make

sure it has a 4mm DAT drive.

---

| <b>If</b>                                 | <b>Do</b>              |
|-------------------------------------------|------------------------|
| If you are performing a disk-based backup | step <a href="#">4</a> |
| If you are performing a tape-based backup | step <a href="#">5</a> |

---

**Note:** You will need two to four tapes if performing a tape-based backup.

### ***Disk-based backup***

- 4** Enter the following commands to back up the APS database to disk:

```
ips_export_db.sh -diskonly
```

**Note:** This dmp files are written to:

```
/audio_files/aps_db_backup/*
```

Proceed to step [17](#)

### ***Tape-based backup***

- 5** To back up the database and application files to tape, insert a write-enabled (white or grey tab is moved to the right where it can be seen) DAT tape into the 4mm DAT drive on the server. Rewind the tape by entering the following command:

```
mt -f /dev/rmt/0 rewind
```

- 6** Initiate a backup of the database to the tape by entering the following command (on one command line):

```
ips_export_db.sh -t /dev/rmt/0 | tee ,/export_log
```

The system displays a log of activity as the database backup proceeds.

- 7** After the backup has completed, review the “export log” for any errors that may have occurred, by entering the following commands:

```
cd /APS_spool/ips_export
```

```
ls -l -t
```

The system displays a listing of files in the “ips\_export” directory.

```
more export.log.x
```

where “export.log.x” is the name of the most recent log file. To determine the most recent log file, look at the time stamps

associated with the listing that results from the “ls -l -t” command.

The system displays the log messages in the “export.log.x” file.

- 8 Rewind the backup tape by performing the following command:

```
mt -f /dev/rmt/0 rewind
```

- 9 List the contents of the tape by entering the following command:

```
tar -tvf /dev/rmt/0 | more
```

The system displays a listing of the tape contents. Review this listing to ensure that all of the files were backed up.

**Note:** It is important that you have entered the above command and see the file listing from the tape before continuing.

- 10 Eject the backup tape, label it, and move the write-enable tab to the “read-only” position (white or grey tab is moved to the left where it cannot be seen), to prevent the data on the tape from being accidentally over-written. The tape should be stored for use later.

- 11 To back up the APS file systems, insert another write-enabled (white or grey tab is moved to the right where it can be seen) DAT tape into the 4mm DAT drive on the server. Rewind the tape by entering the following command:

```
mt -f /dev/rmt/0c rewind
```

- 12 Enter the following commands to back up the APS file systems:

```
cd /
```

```
/us/ntdb/uas/scripts/backup_appl_data.sh
```

**Note:** This script backs up the file systems “/PROV\_data”, “/audio\_files”, and “/user\_audio\_files”.

The system displays output messages and a successful backup message.

- 13 Rewind the backup tape by performing the following command:

```
mt -f /dev/rmt/0c rewind
```

- 14 List the contents of the tape by entering the following command:

```
tar -tvf /dev/rmt/0c | more
```

The system displays a listing of the tape contents. Review this listing to ensure that all of the files were backed up.

**Note:** It is important that you have entered the above command and see the file listing from the tape before continuing.

- 15 Eject the backup tape, label it, and move the write-enable tab to the “read-only” position (white or grey tab is moved to the left where it cannot be seen), to prevent the data on the tape from being accidentally over-written. Store the tape for use later.
- 16 Refer to the solution level documentation to upgrade the SSPFS load to SN07, and then return to this procedure.

### ***Upgrading the APS***

To upgrade the APS to APS09, the existing software load (APS06, APS07, APS08, or APS08.2) must be uninstalled along with any associated patches.

- 17 To list the APS software package(s), enter the following command:

```
pkginfo |grep aps
```

The installed APS packages display.

*Example output for APS06:*

```
application NORTaps APS06-51.0 Package -
/opt/uas/aps. April 4, 2002
```

*Example output for APS07:*

```
application NORTaps IPS07-14.0 DB Package which
goes into /usr/ntdb/aps07
```

```
application NTaps07 APS07-14.0 Package -
/opt/uas/aps. July 18, 2002
```

**Note:** In the examples above, APS06 has one SUN package and APS07 has two packages to remove. Also any existing patches listed must be removed.

- 18 Remove any APS patches listed from the previous command:

```
pkgrm NTapsp<#>
```

- 19 When prompted, enter “yes”.

20

| <b>If</b>                | <b>Do</b>       |
|--------------------------|-----------------|
| To remove APS06 software | # pkgrm NORTaps |

|           | <b>If</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Do</b>               |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
|           | To remove APS07 software                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | # pkgrm NORTips         |
| <b>21</b> | When prompted, enter “yes”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |
| <b>22</b> | Verify that there are no more APS patches or packages on the server by typing:<br><b>pkginfo   grep aps</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |
| <b>23</b> | FTP the APS09 loads to the APS Server <i>or</i> put the APS09 CD into the drive and copy the loads to the root directory.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |
|           | <b>If</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Do</b>               |
|           | If you FTP the APS09 load to the APS Server                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | step <a href="#">24</a> |
|           | If you use the APS09 CD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | step <a href="#">25</a> |
| <b>24</b> | FTP the APS09 software to the APS server by following steps below: <ul style="list-style-type: none"> <li><b>a</b> cd / (Change to the root directory)</li> <li><b>b</b> initiate an ftp session. ftp &lt;ip_address_of remote_server&gt;</li> <li><b>c</b> login into remote server</li> <li><b>d</b> change transfer mode to binary by entering “binary”</li> <li><b>e</b> locate APS/IPS load</li> <li><b>f</b> get &lt;aps_load&gt;</li> <li><b>g</b> get &lt;ips_load&gt;</li> </ul> Proceed to step <a href="#">26</a> .                                                 |                         |
| <b>25</b> | To load the APS09 software to the APS server, follow steps below: <ul style="list-style-type: none"> <li><b>a</b> put APS09 cd in the drive</li> <li><b>b</b> wait 30 seconds until the server auto mounts the CD drive</li> <li><b>c</b> enter “df” to verify to can see the cdrom drive listed in the mounted drive list.</li> <li><b>d</b> copy the APS09 CD contents to the root filesystem</li> <li><b>e</b> # cp /cdrom/cdrom0/* /</li> <li><b>f</b> Verify the loads got copied</li> <li><b>g</b> # ls -l /NTaps09* NORTips*</li> </ul> You should see two loads listed |                         |

**26** Install the APS09 package, by entering:

```
pkgadd -d NTaps09-xx.pkg
```

where xx is the APS loadbuild number

*Example output:*

```
> 1
```

```
Installation of <NTaps09> was successful.
```

**27** Install the IPS package by entering:

```
pkgadd -d NORTips09-<xx>.pkg
```

where xx is the APS loadbuild number

*Example output:*

The following files are already installed on the system and are being used by another package:

```
* /PROV_data/archive <attribute change only>
* /audio_files/phys_seg <attribute change only>
* /audio_files/phys_seg/converted_audio
<attribute change only>
* /opt/APS_app <attribute change only>
* /opt/uas/asam <attribute change only>
* /opt/uas/asam/bin <attribute change only>
* /opt/uas/uas_conf_backup <attribute change
only>
* /user_audio_files/admin <attribute change
only>
* /user_audio_files/admin/archive <attribute
change only>
* /user_audio_files/admin/bulkarchive
<attribute change only>
* /user_audio_files/admin/bulkimport <attribute
change only>
* /user_audio_files/admin/export <attribute
change only>
* /user_audio_files/admin/import <attribute
change only>
* /user_audio_files/audio_upload_files
<attribute change only>
```

```
* - conflict with a file which does not belong
to any package.
```

```
Do you want to install these conflicting files
[y,n,?,q] n
```

**28** Enter “n” at the prompt.

```
Do you want to continue with the installation of
<NORTips> [y,n,?] y
```

**29** Enter “y” at the prompt to continue with the installation.

```
This package contains scripts which will be
executed with super-user permission during the
process of installing this package.
```

```
Do you want to continue with the installation of
<NORTips> [y,n,?] y . . .
```

**30** Enter “y” at the prompt to continue with the installation.

```
Executing postinstall script.

Package Installation Def (PKGINST) : NORTips
Package Install Dir (INST_DATADIR) :
/var/tmp/dstreAAAyhaqxc

PATH :
/sbin:/usr/sbin:/usr/bin:/usr/sadm/install/bin
Package Installation Node (PKGINST) : NORTips
Package Install Log File (INSTLOG) :

APS INSTALLATION
PATH :
/sbin:/usr/sbin:/usr/bin:/usr/sadm/install/bin

--> Install complete: Sat Jun 29 17:15:46 EDT
2002

Installation of <NORTips> was successful.
```

**Note:** It is important that you are the root user before entering the command in the next step. The root user has by “default” a “ksh”, korn shell as the default shell. If you are logged in as the “maint” user or in another user account, become the “root” user by entering “su – root”. You will be prompted for the root password.

- 31** Run the IPS install script by entering:

```
./start.sh 2>&1 | tee /startinstall.log
```

The system displays a log of activity.

- 32** When the install is finished, check the /apsinst.log for application install errors
- 33** After a few minutes, you can access the APS login screen ([http://<ip\\_address>:8080/aps/](http://<ip_address>:8080/aps/)).

**Note:** The APS09 software release also supports the use of HTTPS (SSL).

### ***Resourcing the login shell***

The environment variables and the root login shell have been modified by the install. You need to re-source your current login shell to get access to these variables. This can be done in one of two ways.

- 34** Log out and log back in as root, or

Re-source the new profiles for root by entering the following at the root filesystem:

**a** \$ ./etc/profile

**b** \$ ./profile

- 35** To verify/configure the SNMP Agent and its data on the APS:

**a** as the root user, enter: **apscli**

**b** pick the menu option for SNMP to configure the SNMP agent on the APS

**Note:** The above procedure (SNMP config) takes about 5 minutes.

### ***Installation Verification of the APS***

- 36** Verify the APS install worked without errors by reviewing the “apsinst.log” at the root file system on the Solaris Server. Look for any errors in the files.

- 37** Access the APS login page and login as 'admin', 'admin'. This action exercises most of the major areas in the APS tool (web server, tomcat, database, etc.).
- 38** Verify the data base, web server, web services, and the APS are up and running. The servquery command is located at:

```
/opt/servman/bin/servquery -status all
```

The following status displays:

| APP NAME            | STATUS         |
|---------------------|----------------|
| =====               | =====          |
| OMPUSH              | RUNNING        |
| <b>DATABASE</b>     | <b>RUNNING</b> |
| CINOTIFIER          | RUNNING        |
| SESMSERVICE         | RUNNING        |
| <b>WEBSERVICES</b>  | <b>RUNNING</b> |
| APS                 | RUNNING        |
| ORA_AUTO_BACKUP     | RUNNING        |
| DELEGATE            | RUNNING        |
| BOOTP               | RUNNING        |
| ORA_ARCHIVE_ROTATOR | RUNNING        |
| <b>WEBSERVER</b>    | <b>RUNNING</b> |

- 39** You have completed upgrading the APS09 software.

## Downgrading the APS

Use the following procedure to downgrade the APS from APS09 to APS08.



### CAUTION

It is absolutely critical to have created backups of the APS database and the APS application files. This is part of the upgrade procedure. A downgrade can involve a complete reload of the server including the operating system.



### CAUTION

The SSPFS load does not allow the “root” user to log in remotely. The root user can login only on the server console. All of the APS install commands are executed as “root”. Failure to do so results in errors. If you perform the APS install as the “maint” user, you will get errors. The “maint” user account is allowed to log in remotely. SSPFS only allows root to log in from the console terminal. Once you have logged in as the “maint” user, you can then become the root user.



### CAUTION

Do not change the hostname and IP address of the server during the downgrade. If this is needed, perform this activity as a post downgrade procedure.

**Pre downgrade procedure**

- 1 Locate the following media for this procedure
  - Current APS database backup tape or database files, backup audio file tape
  - Software media for the old software load
  - Installation procedure for the old software load
  - Maintenance release for the old APS software load
- 2 Enter the root password.
- 3 You can choose disk-based backups or tape-based backups. If you choose tape-based backups, check your hardware to make sure it has a 4mm DAT drive.

| If                                        | Do                     |
|-------------------------------------------|------------------------|
| If you are performing a disk-based backup | step <a href="#">4</a> |
| If you are performing a tape-based backup | step <a href="#">5</a> |

**Note:** You will need two to four tapes if performing a tape-based backup.

**Disk-based backup**

- 4 Enter the following commands to back up the APS database to disk:

```
ips_export_db.sh -diskonly
```

**Note:** This dmp files are written to:

```
/audio_files/aps_db_backup/*
```

Proceed to step [17](#)

**Tape-based backup**

- 5 To back up the database and application files to tape, insert a write-enabled (white or grey tab is moved to the right where it can be seen) DAT tape into the 4mm DAT drive on the server. Rewind the tape by entering the following command:

```
mt -f /dev/rmt/0 rewind
```

- 6 Initiate a backup of the database to the tape by entering the following command (on one command line):

```
ips_export_db.sh -t /dev/rmt/0 | tee ./export_log
```

- The system displays a log of activity as the database backup proceeds.
- 7 After the backup has completed, review the “export log” for any errors that may have occurred, by entering the following commands:
- ```
cd /APS_spool/ips_export
ls -l -t
```
- The system displays a listing of files in the “ips_export” directory.
- ```
more export.log.x
```
- where “export.log.x” is the name of the most recent log file. To determine the most recent log file, look at the time stamps associated with the listing that results from the “ls -l -t” command.
- The system displays the log messages in the “export.log.x” file.
- 8 Rewind the backup tape by performing the following command:
- ```
mt -f /dev/rmt/0 rewind
```
- 9 List the contents of the tape by entering the following command:
- ```
tar -tvf /dev/rmt/0 | more
```
- The system displays a listing of the tape contents. Review this listing to ensure that all of the files were backed up.
- Note:** It is important that you have entered the above command and see the file listing from the tape before continuing.
- 10 Eject the backup tape, label it, and move the write-enable tab to the “read-only” position (white or grey tab is moved to the left where it cannot be seen), to prevent the data on the tape from being accidentally over-written. The tape should be stored for use later.
- 11 To back up the APS file systems, insert another write-enabled (white or grey tab is moved to the right where it can be seen) DAT tape into the 4mm DAT drive on the server. Rewind the tape by entering the following command:
- ```
mt -f /dev/rmt/0c rewind
```
- 12 Enter the following commands to back up the APS file systems:
- ```
cd /
/us/ntdb/uas/scripts/backup_appl_data.sh
```

**Note:** This script backs up the file systems “/PROV\_data”, “/audio\_files”, and “/user\_audio\_files”.

The system displays output messages and a successful backup message.

- 13 Rewind the backup tape by performing the following command:

```
mt -f /dev/rmt/0c rewind
```

- 14 List the contents of the tape by entering the following command:

```
tar -tvf /dev/rmt/0c | more
```

The system displays a listing of the tape contents. Review this listing to ensure that all of the files were backed up.

**Note:** It is important that you have entered the above command and see the file listing from the tape before continuing.

- 15 Eject the backup tape, label it, and move the write-enable tab to the “read-only” position (white or grey tab is moved to the left where it cannot be seen), to prevent the data on the tape from being accidentally over-written. Store the tape for use later.
- 16 Refer to the solution level documentation to downgrade the SSPFS load to the lower SSPFS software release level, and then return to this procedure.

### ***Downgrading the APS***

- 17 List the APS software package(s) by entering the following command:

```
pkginfo |grep aps
```

The installed APS packages display.

*Example output for APS09:*

```
application NORTaps APS09-34.0
/opt/uas/aps. April 4, 2002
```

- 18 Remove any APS patches listed from the previous command:

```
pkgrm NTapsp<#>
```

- 19 When prompted, enter “yes”.

- 20 Verify that there are no more APS patches or packages on the server by typing:

```
pkginfo | grep aps
```

- 21** Locate the old APS package on CD or on the root disk by typing the following command:

```
ls -l *.pkg
```

An example screen output is shown below:

```
-rw-r--r-- 1 root other 32794112 Aug 5 07:36
NORTipsxx-y.0.pkg
-rw-r--r-- 1 root other 28055552 Aug 5 07:38
NTapsxx-y.0.pkg
```

- 22** If the package is not on the server, locate the old APS CD and copy the package from CD to the root file system.
- 23** Install the old software. Refer to the old software release installation procedure. when complete, return to this procedure.
- 24** Once the APS08 software is loaded on the root file system, re-apply the software using the following commands:

```
pkgadd -d NTaps<xx>-<y>.0
```

```
pkgadd -d NORTips<xx>-<y>.0
```

- 25** Start the installation from the root file system as the root user by entering:

```
> ./start.sh 2>&1 | tee /startinstall.log
```

An example output message is shown below:

```
x install/load_software.sh, 4230 bytes, 9 tape
blocks
```

When the install is finished, please check the /apsinst.log for application install errors

## 26



### CAUTION

Make sure the backup tapes used in this step are the ones made while the APS was on the lower SSPFS and APS software releases and not the backup tape while on SN07. The APS database backup made on SN07 will not restore to a SN05 or SN06 APS database.

Restore the database and application files from the backup tapes.

**a** Make sure the APS audio file tape is write protected and load it into the drive.

**b** Change directory to the root file system by typing:

```
$ cd /
```

**c** Restore audio files to the file system by entering:

```
$ tar xvf /dev/rmt/0
```

The files are read from tar and placed on the file systems.

**d** Audio files should be placed in these filesystems: /audio\_files and /user\_audio\_files

**e** Make sure the APS database file tape is write protected and load it into the drive.

**f** Start the DB restore from the tape by typing:

```
$ ips_export_db.sh -t /dev/rmt/0 -restore
```

This command restores the APS DB from the tape to the following directory:

```
/audio_files/aps_db_backup/*.dmp
```

### ***Installation Verification of the APS***

**27** When the install is finished, check the /apsinst.log for application install errors.

**28** After a few minutes, you can access the APS login screen (**http://<ip\_address>:8080/aps/**)

Access the APS login page and login as 'admin', 'admin'. This action exercises most of the major areas in the APS tool (web server, tomcat, database, etc.).

**29** Verify the data base, web server, web services, and the APS are up and running. The servquery command is located at:

```
/opt/servman/bin/servquery -status all
```

The following status displays:

| APP NAME           | STATUS         |
|--------------------|----------------|
| =====              | =====          |
| OMPUSH             | RUNNING        |
| <b>DATABASE</b>    | <b>RUNNING</b> |
| CINOTIFIER         | RUNNING        |
| SESMSERVICE        | RUNNING        |
| <b>WEBSERVICES</b> | <b>RUNNING</b> |

|                     |                |
|---------------------|----------------|
| APS                 | RUNNING        |
| ORA_AUTO_BACKUP     | RUNNING        |
| DELEGATE            | RUNNING        |
| BOOTP               | RUNNING        |
| ORA_ARCHIVE_ROTATOR | RUNNING        |
| <b>WEBSERVER</b>    | <b>RUNNING</b> |

**30** You have completed this procedure.