297-2211-212

DMS 100 Family

TOP15 ADAS HP 9000/712

OAM Position Software Release Document

TOP15 and up | Standard 04.01 | February 2001

ATTENTION

Use this document in conjunction with **TOP15** (or higher) **ADAS Peripheral Module Software Release Document, 297-2211-211** to update the software in the TOPS Automated Directory Assistance Service (ADAS) OAM Position.

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DMS 100 Family

TOP15 ADAS HP 9000/712

OAM Position Software Release Document

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Publication history

NTP change history for document 297-2211-212

DATE	CHANGE DESCRIPTION
February 2001	Version 04.01 Standard release for the TOP15 release.
January 2001	Version 03.02 adds a workaround procedure for custom audio installation per CSR UT08927.
August 2000	Version 03.01 Standard release for the TOP 14 release.
January 2000	Version 02.01 Standard release for the TOP13 release.
December 1999	Version 01.01 Standard release for TOP12. First release of ADAS OAM Position Release Document as a separate NTP.

Table of Contents

1.0 Purpose

These release notes document the procedure for updating and installing the ADAS OAM Position. In addition, they document changes in the functionality of the OAM Position, at a high level. For specific information about the functionality of the ADAS OAM Position, the user is referred to the appropriate Northern Telecom Practice (NTP) documents.

These notes are not intended to document in detail the functionality of the ADAS OAM Position. Instead, they contain higher-level information about the functionality of the Position. Primarily, these release notes document the procedures for installing a new ADAS OAM position or upgrading the ADAS OAM software load.

Note: Read this document completely before making any changes to the OAM Position software. Insure that you have obtained all information that is required before starting.

1.1 Additional Information

Apart from these release notes, additional information about the ADAS OAM position is available from various sources:

- NTP (Northern Telecom Practice) documents describe the operation of the ADAS Specific software resident on the OAM Position.
- HP-UX documentation from Hewlett Packard documents the underlying workstation and software.

2.0 Hardware

The ADAS OAM position consists of a Hewlett Packard Model 712/60 workstation. The workstation is equipped with 32 megabytes of memory and a 1.2 gigabyte internal hard drive. In addition, the workstation is also equipped with a Hewlett Packard Model A2094A color monitor and a model C1521B Digital Data Storage (DDS) tape drive.

The ADAS Remote Access position consists of the same hardware as the ADAS OAM position.

2.1 Installing the Hardware

To install the OAM Position hardware or the Remote Access Position hardware, follow the directions in the HP Document, “HP Model 712 Hardware Installation Guide.” In addition, make sure that the SCSI Address Indicator on the back of the DDS drive is set to ‘3’. If it is not set to 3, use a ball-point pen or paper clip to push the buttons above and below the number, until the number 3 appears.

3.0 Software

The ADAS OAM Position and ADAS Remote Access Position, as delivered, are pre-installed with version 9.03 of the HP-UX operating system. As part of this version of HP-UX, an “Instant-Ignition” package has been pre-installed, also. This allows the system to be used with minimal user set-up. Beginning with ADAS12, HP-UX 9.07 operating system tapes are shipped with the ADAS loads. This is done to provide support for disk drives up to 2 Gbytes in size. Using HP-UX 9.07 allows for the use of a larger pool of replacement disk drives when recovering from a disk crash. HP-UX 9.03 cannot support disk drives larger than 1 Gbytes.

The ADAS OAM Position software is delivered on a DDS tape from Nortel. This tape is labeled “AWC***nnxx***”, where the ***nnxx*** denotes the version of the tape (i.e.- 07AJ). In addition to the OAM Position software, this tape also contains the ADAS audio which is downloaded to the DMS-100 switch.

Apart from the OAM Position Software and the audio, the tape contains a set of updates to the HP-UX operating system, intended to fix minor deficiencies. The tape contains an 8-USER update, which allows simultaneous use of the OAM position via the console, a network and a modem. Also present on the tape are a set of patches to the HP-UX operating system. These are documented in Appendix C on page 36.

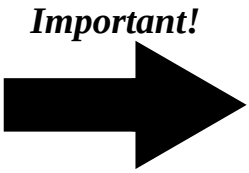
The tape also provides the ADAS Remote Access feature software. This is an optional feature that must be purchased separately. It appears on the tape as “rac***nnxx***.tar.Z” where ***nnxx*** denotes the version of the software (i.e.- 07aj).

The ADAS OAM Position loads for recent ADAS releases are shown below.

Note that the ADAS OAM Position loads do not change in the TOP15 ADAS stream.

ADAS OAM Position Load History Table

Load Type / Release	ADAS11	ADAS12	ADAS13	ADAS14	ADAS15
ADAS Workstation	awc11aa	awc12ac	awc12ac	awc12ac	awc12ac
ADAS Default Audio	adas_def.ab02	adas_def.ab02	adas_def.ab02	adas_def.ab02	adas_def.ab02
Remote Access	rac09aa	rac09aa	rac09aa	rac09aa	rac09aa
HP-UX Install and Run-Time 8 User tapes	HP-UX 9.03	HP-UX 9.07	HP-UX 9.07	HP-UX 9.07	HP-UX 9.07



3.1 Installation/Upgrade Changes

- AWC12AC requires updating the HPUX operating system from 9.03 to 9.07. A new tape, HPUX 9.07 Run-Time 8 User, is delivered with the AWC12AC tape. This new tape contains the files necessary to upgrade to the HPUX 9.07 operating system. A new HPUX 9.07 Install tape is also shipped for use along with the new Run-Time tape for doing full HPUX installations.
- The procedure for setting the date on the ADAS OAM Position will change for dates of 2000 and above. Refer to “8.0 Setting the Date After Year 2000” on page 25 for details. There is no change for setting the date to pre-2000 years.
- **Note: As of AWC07, the HP tool SAM should not be used to make networking changes. It is not capable of configuring the files correctly. It may still be used for other configuration changes.**

3.2 ADAS OAM Position Tape Contents

The ADAS OAM Position DDS tape contains the following files:

- An installation script, *ws_install*, which is used to install the remainder of the OAM Position load when performing a new install.
- A file to be used by the *update* program to upgrade the base HP-UX Operating system. This file is named *MERGE907.updt*, and contains an 8-user upgrade, which allows for dial-in, network, and console connections to the OAM Position. In addition, the *MERGE907.updt* file contains the patches listed in Appendix C on page 36.
- The OAM Position software load itself. This file will have the name *awc**NNXX**.tar.Z* where ***NNXX*** is the version and issue of the OAM Position load.
- (optional) One or more audio loads, typically labelled *adas_def.**NNXX**.tar* where ***NNXX*** is the version and issue of the audio load.
- A file, *adastape.file*, which lists the software and audio loads on the tape. This file is used by the installation process.
- The ADAS Remote Access software, *rac**NNXX**.tar.Z*, where **NNXX** is the version and issue of the Remote Access software.
- An installation script used to install the Remote Access feature, *remote_install.csh*.

Inserting the tape into the DDS drive and entering the command ***tar t*** will display the list of files on the tape. Note that the tape may contain multiple audio loads.

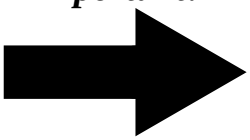
4.0 Pre-Install/Upgrade Procedure

Note: Much of the instructions in this section are duplicated in the "Getting Started chapter of the manual, *Using Your HP Workstation*, which is delivered with the Workstation by Hewlett Packard. The person performing the installation should follow the instructions in these ADAS OAM Position release notes, because ADAS specific information is contained therein.

There is some information which you should obtain before attempting to install a new ADAS OAM Position or perform an upgrade on an existing ADAS OAM Position. Appendix A on page 34 contains a checklist of the information which will be required for an OAM Position installation or upgrade. Appendix B on page 35 contains a checklist of the information which will be required to install the ADAS Remote Access software.

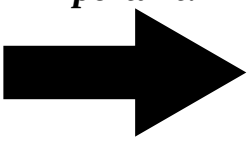
Note: The values for the Workstation LAN1 Address and the EIU LAN side Address are new as of the 07 load. All other values are the same as in previous releases.

Important!



- *Workstation System Name* This is the name by which the workstation will be known. The name given should uniquely identify the workstation within the network. Its value should be made up by the customer. This name will also appear on printed Performance Data files created by the Service Monitor.
- *Workstation LAN0 IP Address* The LAN0 Internet Protocol (IP) address is a four-part code which uniquely identifies the OAM Position from all other computers connected to the DMS Ethernet network. An example IP Address is 65.46.34.128. *Note*: This example IP address should not be used. Instead, obtain one from your local network administrator.

Important!



- *Workstation LAN1 IP Address* The LAN1 Internet Protocol (IP) address is a four-part code which uniquely identifies the OAM Position from all other computers connected to the Remote Access ethernet network. An example IP Address is 65.46.34.128. Note: This example IP address should not be used. Instead, obtain one from your local network administrator. Refer to the Remote Access Network Configuration NTP for more information on obtaining this address.

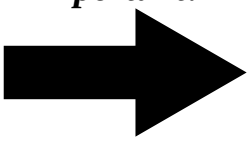
  Note: This address is only necessary if the ADAS Workstation will be used with the ADAS Remote Access feature. Otherwise, a default value of "127.0.0.1" should be used.

- *Time Zone* The time zone where the OAM Position is located. It is not necessary to find any standard abbreviated form of the time zone.
- *Subnetwork Mask* The Subnetwork mask is used to optionally configure more advanced networks. For a closed network, this mask should not be set.
- *Default Network Gateway* The Default Network Gateway is also used to optionally configure more advanced networks. Like the subnetwork mask, this is an optional parameter, and should not be set in a closed network.
- *BIND Name Server* More advanced networks use a name server to configure hostnames across the entire network. In a closed network, this parameter should not be set, either.

- *Font Server Name and IP Address* If there are multiple workstations on a network, it is possible to configure machines to share font information. In a closed network, there are no font servers, so this information should also not be set.
- *EIU IP Addresses* Both the LAN side and Supernode side IP addresses are required for the EIU. These values can be found in the DMS table IPROUTER.
- *CM and APU IP Addresses* The CM and APUs in an ADAS switch have IP addresses assigned to them In addition, the numbers associated with the APUs are also needed. The CM address can be found in DMS table IPNETWRK. The APU address information can be found in DMS table IPHOST.

Again, a worksheet for these values can be found in Appendix A on page 34 of these release notes. This worksheet should be completed before moving on to the next step. Once you have obtained these values, you may begin to perform the software installation on the OAM Position. Refer to the following section for details on where to start.

Important!



4.1 Installation Quick Reference

This section contains an overview of the steps necessary to make changes to the ADAS OAM Position. Follow these steps when making changes.

4.1.1 Installing or Upgrading the ADAS OAM Position Software

1. Complete section “4.0 Pre-Install/Upgrade Procedure” on page 13. Ensure that the checklist in Appendix A on page 34 has been completed before beginning the installation or upgrade.
2. If a previous version of the OAM Position software is already installed on the workstation, an upgrade to the new software release may be performed. Otherwise, a new install will be necessary. An upgrade is generally preferable to a new install. An upgrade takes less time and allows data from the previous release to be retained. Will this be an upgrade to a newer software load or the total installation of the OAM Position software load?

   If this is an **upgrade**, complete section “6.0 Upgrading the software on an OAM Position” on page 20.

   If this is a **new install**, complete section “5.0 Installing a New ADAS OAM Position” on page 16.
3. Do you want to install Custom Audio? If so, complete section “7.0 Installing New Audio” on page 22.
4. The ADAS Workstation software installation/upgrade is now complete. If you make configuration changes to the ADAS system using the Service Data Administration program, remember to perform an upload to update the APUs/VPUs.
5. If this ADAS Workstation will also be used as a Remote Workstation, go to Section 4.1.2, “Installing the ADAS Remote Access Software,” on page 14.

4.1.2 Installing the ADAS Remote Access Software

- Ensure that the checklist in Appendix B on page 35 has been completed before beginning the installation.

- If this is the initial installation of the Remote Access software on a workstation dedicated to performing Remote Access, complete section “9.2.1 Completing Installation of HP-UX” on page 26.
- If this is a reinstallation of the Remote Access software on a workstation dedicated to performing Remote Access, an install of HPUX will be necessary before reinstalling the Remote Access software. Refer to section “9.2.1 Completing Installation of HP-UX” on page 26 for instructions to reinstall HPUX. You will need to follow the instructions in Chapter 9 of the *ADAS OAM Position User Guide* (NTP 297-2211-311) as described in step 1.
- If this is the initial installation of the Remote Access software on an ADAS OAM Position, complete section “9.2.2 Installation on an ADAS OAM Position” on page 27.

4.1.3 Backup/Restore Procedure

- To perform a Backup of the system, complete section “11.1 Backup Procedure” on page 31.
- To perform a Restore of the system, complete section “11.2 Restore Procedure” on page 32.

5.0 Installing a New ADAS OAM Position

This section applies to sites which are installing ADAS for the first time. Sites which are upgrading from a previous version should follow the directions in Section 6.0, “Upgrading the software on an OAM Position,” on page 20.

CONVENTIONS

In the following sections, the word “Enter” refers to the act of typing something, then hitting the *Enter* key. For example, the correct response to the phrase “Enter the system name” would be to type in the name of the system, followed by hitting the *Enter* key.

The word “Key” refers to the act of typing something on the keyboard, without hitting the *Enter* key. For example, the correct response to the phrase “Key ‘y’” would be to hit the ‘y’ key.

Finally, the word ‘Click’ is used to refer to the act of moving the mouse to a specific point on the screen, and clicking the leftmost mouse button. So, the command “Click on the ‘No’ Button” refers to the act of positioning the mouse over the part of the screen that looks like a button labeled ‘No’, and pressing and releasing the left mouse button. The *Using a Mouse* section of the *Using your HP Workstation* manual describes the mouse in more detail.

5.1 Performing the Workstation Configuration

This section describes the procedure to configure the base HP-UX software on the OAM Position. This section is executed after initial HP-UX installation. Refer to the *ADAS OAM Position User Guide* (NTP 297-2211-311) chapter 9, steps 1-28 for the procedure to install HP-UX 9.07. The next section will describe the actual installation of the ADAS software. Before starting, insure that the information discussed in section “Pre-Install/Upgrade Procedure” on page 13 is known.

Follow the following steps to install the OAM Position.

1. Turn on the power to all of the HP Devices, in the following order:
   - DDS Drive
   - Monitor
   - Base Unit

   At this stage, if the workstation was not delivered correctly, an error message indicating that no bootable devices could be found will be displayed. If this error message is displayed, follow the instructions found in Chapter 9 of the *ADAS OAM Position User Guide* (NTP 297-2211-311).
2. You will now be asked if you would like to link the system to a network. Key “y” to this prompt.
3. You will be asked if you would like to continue. Key “y”.
4. Next, you will be prompted for the system name. Enter the name as it appears on line 1 of the checklist in Appendix A on page 34. The name should be unique within the network. You will then be asked to verify the name. If it is correct, key “y”.

5. Next, you will be prompted for the Internet Protocol Address of the OAM Position. Enter the address for the workstation from item 6 of the checklist. As before, you will be asked to verify the address.
6. After entering the IP address, you will be asked if you want to configure additional network parameters such as a subnet mask, default network gateway, and BIND nameserver. Enter 'n'.
7. Next you will be prompted for the Time Zone from a list of time zones. Enter and confirm the number next to the Time Zone which matches your current time zone.
8. Next, you will be asked if the date and time are correct. If they are, Enter 'y' and skip to step 10. If not, enter 'n'.
9. If you hit 'n' in the previous step, you will be prompted to enter the month, day of the month, last two digits of the year, and the hour and minute of the day. The hour should be entered in 24 hour time
10. You will also be asked if you want to configure a Font Server. Enter 'n'.
11. You will be asked if you want to enter a 'root' password for the machine. Enter 'n'. The password will be set later in the installation process.
12. The OAM Position will now display many messages pertaining to the hardware and software on the machine. You will not need to respond to any of these messages, unless something is wrong with the OAM Position.
    When complete, the workstation will give the prompt:
    `Console Login:`

5.2 Installing the ADAS Software

This section describes the procedure for installing the ADAS OAM Position software on the workstation.

1. Login to the OAM Position as *root*. This is done by entering root as the userid and hitting enter for the password.
2. After a few seconds, you will be presented with a unix window. When prompted:
   `Is your console one of the following: a 2392A, 2393A, 2397A, or 700.92? [y,n]:`
   Enter:
   `y`
   A few messages will be received, followed by the "#" prompt.
3. You will now load the ADAS software from the ADAS Install DDS Tape. Insert the tape into the DDS drive, by locating the arrow on the side of the tape, and placing the tape, arrow up, into the tape drive, in the direction of the arrow. Wait for the two lights on the front panel to stop blinking before proceeding to the next step.
4. In the Unix window, enter the command:
   `cd /tmp`
5. Enter:
   `tar xv ws_install`
6. Enter:
   `./ws_install`
7. You will see the following messages:

- Changing the root password
- Adding the password entry for NT-TAS.
- Adding the home directory for ntas.
- Adding local printer ljet6

Ignore the messages “chown: unknown user id admin”.

8. You will next be asked to enter the IP address of the CM. Enter the IP Address [Line 8 from Checklist].
9. Now, you will be asked to enter the IP address of the supernode side of the EIU. Enter this address [Line 9 of the checklist].
10. You will next be asked to enter the IP address of the LAN side of the EIU. Enter this address [Line 10 of the checklist].
11. Next, you will be prompted for the LAN1 IP Address of the OAM Position. This is the LAN used for the ADAS Remote Access feature.

    If Remote Access **will not** be used with this OAM Position, enter the address “127.0.0.1”.

    If Remote Access **will** be used with this OAM Position, enter the IP address for LAN 1 of the OAM Position. [Line 7 of the checklist].
12. You will be prompted to enter information about the first APU. Enter the APU number of the first APU [11a from the checklist]. Then, enter the IP address corresponding to the first APU [11b from the checklist].
13. Repeat step 12 for the second APU. Note that the lines in the checklist will advance for the second APU.
14. After the first two, you will be asked if there are any more APUs. If there are, enter ‘Y’. If not, enter ‘N’. If you entered ‘y’, you will be asked to enter the APU number and IP address as in step 12, above. Continue until the information has been entered for all the APUs in the system.
15. You will now be shown all of the information which you have entered, and asked to verify that it is correct. If the information is correct, enter ‘y’. If not, enter ‘n’ to repeat steps 9-17 again.

    After entering all of the setup information, a message will be displayed indicating that the OAM Position is rebooting. This is normal, and in fact will happen several times. If you chose not to use Remote Access with this OAM Position in step 12, ignore messages from the “ifconfig” and “route” commands about failing to configure LAN 1. **Do not respond to any of the messages that appear on the screen until you are asked which audio load to install.**
16. At this point, a window will be displayed, and you will be asked to enter the number corresponding to the default audio load. Enter in the number corresponding to the audio load you wish (in most cases, there will only be one load).

    The OAM Position will reboot one final time. After the reboot, a login window will be displayed. When this window is displayed, the workstation installation is complete. **Do not attempt to log in until the login window appears.**

    - The OAM Position is now running HPUX, is running the ADAS software and is configured for the network.

- If you intend to install custom audio, continue with section “7.0 Installing New Audio” on page 22. Otherwise, return to step 4 of Section 4.1, “Installation Quick Reference,” on page 14 to complete the ADAS Workstation installation.

6.0 Upgrading the software on an OAM Position

It is not necessary to perform all the steps of the "Installing a New ADAS OAM Position" section if the OAM Position has been previously installed. Instead, it is possible to select different pieces of the workstation load from the DDS tape. Before starting this procedure, insure that the information discussed in section "Pre-Install/Upgrade Procedure" on page 13 is known.

The process of installing new OAM Position software also causes old configuration data to be retained. So, there is no need to recreate users or groups. In addition, the existing audio data and scenario files are retained.

NOTE: For TOP15, no changes have been made to the ADAS OAM Position loads from the TOP12 load. No software installation or upgrade work is required for sites already running the *awc12ac* load. Do not attempt to reinstall the *awc12ac* load as noted below.

6.1 Upgrading to New Software

Only new versions of the OAM Position software may be installed using this procedure. Do not attempt to reinstall the current load. If it is necessary to reinstall the current load, HP-UX must also be reinstalled. Follow steps 1 through 28 of the instructions found in Chapter 9 of the *ADAS OAM Position User Guide* (NTP 297-2211-311) to reinstall HP-UX. Perform a new install of the ADAS OAM Position software using the steps in "Performing the Workstation Configuration" on page 16.

Before upgrading to the AWC12 software, the operating system on the OAM Position must be upgraded from HPUX 9.03 to HPUX 9.07. The HPUX upgrade is done as follows:

1. Login to the OAM Position as 'root.'
2. Insert the tape containing 'HPUX Run-Time 8 User.'
3. Open a unix shell from the OAM Position Operations toolset.
4. When the unix prompt returns, type the following command and press the Enter key:
   ```
   /etc/update -mr
   ```
5. This will upgrade the operating system to 9.07. When the upgrade is complete, the OAM Position will reboot and the login screen will be presented. The next step is to apply required patches to the HPUX9.07 software.
6. Login to the OAM Position as 'root.
7. Insert the tape containing the OAM Position load into the DDS drive.
8. Open a unix shell from the OAM Position Operations toolset.
9. In the unix shell window, type the following command, then press the *Enter* key:
   ```
   cd /tmp ; tar xv MERGE907.updt
   ```
10. When the unix shell prompt returns, type the following command and press the *Enter* key:
    ```
    /etc/update -s /tmp/MERGE907.updt -r \*
    ```

11. This will install fixes to the HPUX 9.07 operting system. The OAM Position will then reboot. When the login screen returns, continue with the installation of the AWC12 software as follows:
12. Login to the OAM Position as 'root.'
13. Insert the tape containing the OAM Position load into the DDS drive. It should still be in the tape drive from step 7 above.
14. Open a unix shell from the **OAM Position Operations** toolset.
15. In the unix shell window, type the following command, then press the *Enter* key:
    `cd /tmp ; tar t`
16. You will be given a list of the files on the tape. One of these files should be named awc*NNXX*.tar.Z where *NNXX* indicate the version of the load.
17. Retrieve this load file from the tape, by typing the command
    `tar xv awc`*`NNXX`*`.tar.Z`
    where *NNXX* is the same as in the previous step.
18. The .Z extension indicates that this file is compressed. Uncompress it by typing the command:
    `uncompress awc`*`NNXX`*`.tar.Z`
19. Open an Installation window from the **OAM Position Administration** toolset.
20. Select an Archive File, and type the full pathname of the uncompressed file obtained in step 18, as follows:
    `/tmp/awc`*`NNXX`*`.tar`
21. After the release information has been obtained, click on the *Select Release* button to select the packages you would like to install, and click on the *Install* button. A confirmation window will appear. Click on *OK* to continue. The software will be loaded onto the OAM Position, and the OAM Position will reboot. After the reboot, the new software will be installed. **Do not attempt to log in until the login window appears.**
22. If you intend to install custom audio, continue with section "7.0 Installing New Audio" on page 22. Otherwise, return to step 4 of Section 4.1, "Installation Quick Reference," on page 14 to complete the ADAS Workstation installation.

7.0 Installing New Audio

Occasionally, it may become necessary to install a new set of audio into the ADAS service. This new audio could consist of base and/or custom audio. This section will describe how to retrieve audio loads off of tape and how install base and custom audio into the ADAS Service.

7.1 Retrieving Audio Loads From Tape

Occasionally, it may become necessary to install just the audio present on the DDS tape. This section describes the procedure for doing so.

1. Login to the OAM Position as 'admin.'
2. Insert the tape containing the OAM Position load into the DDS drive.
3. Open a unix shell from the **OAM Position Operations** toolset.
4. In the unix shell window, type the following command:
   ```
   cd /tmp ; tar t
   ```
5. You will be given a list of the files on the tape. Find the name of the file which contains the audio to install. This will probably be of the form **adas_def.*XXNN*.tar** where ***XXNN*** indicates the version of the audio.
6. Once you have determined the name of the load file, retrieve it from the tape, by typing the following command:
   ```
   tar xv adas_def.XXNN.tar
   ```
7. Install the audio by typing the following command:
   ```
   cd /iws/vsd/audio_loads ; tar xf /tmp/adas_def.XXNN.tar
   ```
8. Once the load has been installed, you may remove the loadfile by typing the command **rm /tmp/*loadfile***
9. If you need to install some custom audio proceed to "Installing Custom Audio" on page 22. If you only need to install the base audio, skip to "Installing Base Audio" on page 24.

7.2 Installing Custom Audio

This section describes how to install custom audio onto the ADAS OAM Position. The tool **vds2vrec** is used to install the custom audio which is in the VDS audio format. It is up to the customer to decide which custom audio to install. Information about the custom audio can be found in the document **ADAS Base Voice Replacement (SAX-017)**. This information is needed when installing the custom using the **vds2vrec** tool.

Currently there is a limit of a 103 custom audio (vds) prompts that may be uploaded to the ADAS Service. If the number of custom audio prompts exceeds this limit, uploads in the **Service Data Manager** will fail. So, if after adding custom audio uploads in the **Service Data Manager** fail consistently, check the number of custom audio prompts installed. In a unix shell window, type in the following commands to determine the number of custom audio prompts currently installed. These command should only be used if custom audio has been installed and uploads to the CM are failing consistently.

```
cd /iws/vsd/custom_audio/audio_envs
```

```
ls *d | wc -l
102
```

The number returned (for this example it was *102*) is number of installed custom audio prompts. If the number of installed custom audio exceeds the limit, please contact the next NT level of support. If no number is returned or the number is less then the limit, then the maximum number of custom audio prompt that may be uploaded has not been exceeded.

7.2.1 Custom Audio Installation Instructions

This section describes the steps needed to make selected custom audio prompts available to the Service Data MMI.

1. Login to the OAM Position as 'admin.'
2. Open a unix shell from the **OAM Position Operations** toolset.
3. In the unix shell window, type the following command and press the *Enter* key:

   `cd /iws/vsd`

   Type **ls -l** and verify that a **custom_audio** directory exists. If the directory exists, then proceed to the next step. If this directory is not present, then complete procedure "10.3 Workaround for Installing Custom Audio" on page 30 before proceeding to the next step.
4. For each Audio File you wish to install, execute the vds2vrec command with the pathname of the audio file:

   `./vds2vrec audio_loads/adas_def.`*`XXNN`*`/vds/`*`prompt_name`*`.aud`

   XXNN is the version of current audio load. ***`prompt_name`*** is the name of the custom audio you wish to install. The suffix **.aud** is used to identify an audio data file. If the current audio load was *adas_def.ab02* and the prompt you wish to install was *list-yes-se*, then the following command would be needed:

   `./vds2vrec audio_loads/adas_def.ab02/vds/list-yes-se.aud`

   Some audio files will be stored in subdirectories under the **vds** directory. The **FILE DESTINATION** field of a prompt in the document **ADAS Base Voice Replacement (SAX-017)** indicates where an audio file is stored. For example, the **FILE DESTINATION** for prompt *info-se* is "/Intros-100ms-Silence/<segment name>.aud". This indicates the prompt *info-se* is stored in the subdirectory *Intros-100ms-Silence*/ under the *vds/* directory. To install prompt *info-se*, the following command would be needed (the command should be entered on a single line):

   `./vds2vrec audio_loads/adas_def.ab02/vds/Intros-100ms-Silence/info-se.aud`

5. **vds2vrec** will prompt the user for additional information. The required Sematic Intent, Semantic Context, Tone, and Category data for each Audio File name can be found in document **ADAS Base Voice Replacement (SAX-017)**. When **vds2vrec** prompts for a message name, the custom audio's prompt name should be entered. The suffix *.aud* should not be part of the prompt name entered.

6. From the **Advanced Services** toolset, select **Service Data Administration**. Verify that the custom audio is available. Use the **Service Data Manager** to select the desired custom audio.
7. If the Base Audio needs to be changed too, skip to the next section. If only new custom audio is being added, perform an **Upload** in the **Service Data Manager**.
8. Verify service with test calls.

7.3 Installing Base Audio

This section describes how to install a new base audio load. Installing the Base Audio should only be done when a new set of base audio needs to installed into the ADAS Service. **This procedure will require that the VPUs be BSY'd and TST'd in order to remove the previous set of base audio. This operation will take ADAS out of service temporarily. ADAS calls will be handled manually during this time. Each VPU may take approximately 10-12 minutes to RTS.**

7.3.1 Base Audio Installation Instructions

This section describes the steps needed to make a new set of base audio available to the **Service Data Manager**.

1. Busy all VPU's from MAP.
2. Run Out of Service test on VPU's to remove all old audio.
3. Issue the following commands:
   ```
   cd /iws/vsd/audio_loads
   ```
4. Execute the following command to install the new audio:
   ```
   vsd_install_audio.sh
   ```
5. Something similar to the following will be displayed:
   ```
   Service Data Manager Audio Load Installation tool
   Available audio loads are:
   1) adas_def.aa13
   2) adas_def.ab02
     Enter the number for the desired default audio load:
   ```
6. Enter the number corresponding to the desired audio load. In this case, enter **2** to select adas_def.ab02.
7. Restart the Service Data MMI and make the desired selections.
8. Perform the upload.

   If the uploads fails with a message that states "The currently selected prompts in the following dialog(s) are no longer available....", the selected scenario is no longer valid. The scenario *adas_default_scenario* must be used as a base for creating a new scenario. The invalid scenario should be deleted.
9. Return the VPU's to service.
10. Verify service with test calls

8.0 Setting the Date After Year 2000

The *date* command that is used during the ADAS Workstation boot procedure is not capable of setting the system date beyond December 31, 1999. The *date* command that is used after logging in to the ADAS Workstation is able to set the date to the year 2000 and beyond. Use the following procedures if it is necessary to set the system date after December 31, 1999.

8.1 New Install/Reboot Date Setting

During the booting of the ADAS OAM Position, the system pauses at a prompt that shows the current date and time and asks if you want to change it. If you do nothing, the system will time out and continue with the boot process without changing the date and time. If you answer **Yes** (the date is correct), booting will also continue. If the date is already set beyond 1999, the correct date will be retained.

If you answer **No** (the date is not correct), you will be prompted to change it.This date command does not recognize dates beyond 1999. **Do not attempt to set the date using this version of the *date* command.** If you inadvertently attempt to set the date during booting, enter a date earlier than 2000 and allow the system to continue booting.

When the system completes booting and the login screen is presented, follow the instructions in “8.2 Changing the Date on an Installed System” on page 25 to set the date correctly.

8.2 Changing the Date on an Installed System

The following procedure sets the system date and time.

1. Open a UNIX Shell window.
2. Use the *date* command to set the date. The command is:

   ```
   date MMDDhhmmYY
   ```

   where

   ```
   MM = month (1 to 12)
   DD = day (1 to 31)
   hh = hour (0 to 23)
   mm = minute (0 to 59)
   YY = year (00 to 99)
   ```

3. If you are asked if you want to run the clock backwards, enter:

   ```
   Y
   ```

   The new date and time will be displayed.

9.0 ADAS Remote Access

9.1 Overview

ADAS Remote Access allows a user at a Remote Workstation to access an ADAS Workstation as if they were physically located at the ADAS Workstation. All mouse and keyboard input to the ADAS Workstation and output to the ADAS Workstation monitor is redirected to the Remote Workstation. This provides the ability to remotely configure ADAS rather than having to travel to the location of the ADAS system.

Remote Access is an optional feature that may be purchased separately from the basic ADAS OAM Position software. Skip this section if you are not installing ADAS Remote Access.

These notes describe the installation of the ADAS Remote Access software and how to start the Remote Access application. For complete details on configuring the ADAS Remote Access network, assigning IP addresses, and testing the network, refer to the *TOPS ADAS Network Configuration Reference Guide* NTP, 297-2211-800.

9.2 Installation

Remote Access is delivered on the same tape as the ADAS Workstation software. The Remote Access software must be installed on an HP Workstation that has the same hardware configuration as an ADAS Workstation. It may also be installed on an existing ADAS OAM Workstation. In either case, the Remote Access Workstation must be located on the same LAN as the ADAS Workstations that it will access.

Note: The ADAS07 or newer software must be loaded onto all ADAS OAM Positions that will be remotely accessed using the Remote Access feature. In addition, all hardware connections for the Remote Access network must be in place and operational before starting the installation.

9.2.1 Completing Installation of HP-UX

Before starting the installation of the Remote Access software, complete the checklist in Appendix B on page 35. This information will be requested during the installation.

The Remote Workstation is normally delivered with the HP-UX operating system already installed. All that remains is to enter the information to connect the system to the network.

1. Turn on the power to all of the HP Devices, in the following order:
   - DDS Drive
   - Monitor
   - Base Unit

   At this stage, if the workstation was not delivered correctly, an error message indicating that no bootable devices could be found will be displayed. If this error message is displayed, follow the instructions found in Chapter 9 of the *ADAS OAM Position User Guide* (NTP 297-2211-311).

2. You will now be asked if you would like to link the system to a network. Key “y” to this prompt.
3. You will be asked if you would like to continue. Key “y”.
4. Next, you will be prompted for the system name. Enter the name as it appears on line 1 of the checklist in Appendix B on page 35. The name should be unique within the network. You will then be asked to verify the name. If it is correct, key “y”.
5. Next, you will be prompted for the IP Address of the OAM Position. Enter the address for the workstation from item 2 of the checklist in Appendix B on page 35. As before, you will be asked to verify the address.
6. After entering the IP address, you will be asked if you want to configure additional network parameters such as a subnet mask, default network gateway, and BIND nameserver. Enter ‘n’.
7. Next you will be prompted for the Time Zone from a list of time zones. Enter and confirm the number next to the Time Zone which matches your current time zone.
8. Next, you will be asked if the date and time are correct. If they are, Enter ‘y’ and skip to step 10. If not, enter ‘n’.
9. If you hit ‘n’ in the previous step, you will be prompted to enter the month, day of the month, last two digits of the year, and the hour and minute of the day. The hour should be entered in 24 hour time
10. You will also be asked if you want to configure a Font Server. Enter ‘n’.
11. You will be asked if you want to enter a ‘root’ password for the machine. Enter ‘y’. Enter the ‘root’ password from line 3 of the checklist in Appendix B on page 35.
12. The Remote Access Position will now display many messages pertaining to the hardware and software on the machine. You will not need to respond to any of these messages, unless something is wrong with the Remote Access Position.
    When complete, the workstation will give the prompt:
    ```
    Console Login:
    ```
    Continue with section “9.2.3 Installation on a Dedicated Remote Workstation” on page 28.

9.2.2 Installation on an ADAS OAM Position

The following steps detail the procedure for installing the Remote Access software on a workstation that already has the ADAS OAM Position software installed. If you are installing the Remote Access software on a workstation that is not already an ADAS OAM Position, use the procedure described in section “9.2.3 Installation on a Dedicated Remote Workstation” on page 28:

1. Ensure that all hardware connections are in place and operational for the Remote Access network.
2. Insert the ADAS OAM Position load tape in the DAT drive of the Remote Access Workstation.
3. Login to the Remote Access Workstation as ‘root’.
4. At a UNIX prompt, enter the command:
    ```
    cd /tmp
    ```
5. Enter:

```
tar xv remote_install.csh
```

6. Enter:
```
./remote_install.csh
```
7. At this time, directories will be created and the Remote Access software will be installed. The software is installed into the directory */iws/rac*. All files related to Remote Access are located in this directory.
8. Enter the command:
```
rehash
```
This will allow the Remote Access software to be executed with the current working directory set to any directory.

9.2.3 Installation on a Dedicated Remote Workstation

The following steps detail the procedure for installing the Remote Access software on a workstation that is dedicated to running the Remote Access application. That is, one that does not have the ADAS OAM Position software installed. If you are installing the Remote Access software on a workstation that is already an ADAS OAM Position, use the procedure described in section “9.2.2 Installation on an ADAS OAM Position” on page 27:

1. Insert the ADAS OAM Position load tape in the DAT drive of the Remote Access Workstation.
2. Login to the Remote Access Workstation as root.
3. At a UNIX prompt, enter the command:
```
cd /tmp
```
4. Enter:
```
tar xv remote_install.csh
```
5. Enter:
```
./remote_install.csh
```
6. At this time, directories will be created and the Remote Access software will be installed. The software is installed into the directory */iws/rac*. All files related to Remote Access are located in this directory.
7. When the installation is finished, a message will be displayed stating that the installation is complete. A few seconds later, a login window will appear asking for your username and password. Login to the Remote Access Workstation as root.
8. The workstation will automatically start the Remote Access MMI and a Command Interpreter window.

9.3 Starting Remote Access

This section describes how to start execution of the ADAS Remote Access software.

9.3.1 Starting Remote Access on an ADAS OAM Position

From a UNIX prompt, enter the command:

```
remote_access
```

This will start execution of the Remote Access software. The Remote Access software will remain active until the user logs off the workstation or until the Remote Access MMI is explicitly ended by the user. Any time a user logs in to the OAM Position, the Remote Access MMI will to be restarted before it can be used.

9.3.2 Starting Remote Access on a Dedicated Remote Workstation

The Remote Access MMI will start automatically each time a user logs in to the Remote Workstation.

The Remote Access MMI can be started manually by pressing the right mouse button while the mouse cursor is not inside any window and selecting “ADAS Remote Access”. It can also be started from a UNIX prompt by entering the command:

```
remote_access
```

This will start execution of the Remote Access software.

9.4 Special Considerations

Certain ADAS Workstation software will allow more than one user (one local, one remote) to be actively using it at the same time. Unintended interactions can occur if conflicting actions are performed at the same time by each user. The following sections will help avoid problems from this situation.

9.4.1 Service Monitor

While multiple users can enter the Service Monitor at the same time, data collection can only be performed by one user at a time. If a second user attempts to start data collection, it will fail. However, the second user is able to access and print performance data files that have been created.

The suggested use of the Service Monitor is to start data collection on the ADAS Workstation and leave it running. Use the *Save Scheduler* dialog to define collection periods. Use the Remote Workstation to access the Performance Data files.

9.4.2 Service Data Administration

Multiple users are allowed to used the Service Data Administration at the same time. A problem can occur if more than one user attempts to modify the current scenario at the same time. Changes made by each user are not seen by the other user unless the scenario file is deliberately reloaded. This can lead to conflicting changes being made by the users. Only the changes made and saved last will be saved.

This situation can be avoided by coordinating changes by administrators.

10.0 Known Bugs and Work-Arounds

10.1 FTP

In the new version of FTP delivered with HPUX 9.07, the size of the buffer which is used to receive data from the remote host has increased from 8 kilobytes to 56 kilobytes. Unfortunately, the version of FTP available on the DMS-100 switch only supports 8k buffers.

Hewlett-Packard has supplied a patch, PHNE_13595, which allows users to set the buffer size, by specifying the -B option on the FTP command line.

For example, to ftp to the CM on a DMS-100, the following command should be used:

```
ftp -B8 CM0000
```

10.2 Installation Fails

There are some common instances where the installation of a new OAM Position can fail if the stated directions are not followed exactly.

10.2.1 Existing Installation

A situation which has been found occurs when an installation of a new load is attempted on an OAM Position with a load already existing. When this error happens, the software installation screen will appear to 'hang' -- that is, it will stop writing output to the screen, but nothing else seems to be happening.

The solution to this problem is to use the *abort* button to stop the installation, logout, log back in as the root user, and restart the installation.

10.2.2 Installing a Duplicate Load

If an already installed load is reinstalled on the OAM Position, the Service Data Administrator will not function properly. An error message will indicate that there is a problem with the default audio. Installing a duplicate load is not allowed.

To fix this, reinstall HP-UX and the OAM Position software following the procedure in "Installing a New ADAS OAM Position" on page 16.

10.3 Workaround for Installing Custom Audio

With the awc12ac load, attempts to install custom audio will fail due to missing target directories that are required by the vds2vrec tool. Prior to the 1st time custom audio is installed for a awc12ac load, the following steps must be completed in order to create these directories.

1. **cd /iws/vsd**
2. **mkdir custom_audio**
3. **cd custom_audio**
4. **mkdir audio_envs**
5. **mkdir info_envs**

11.0 Backup and Restore Procedure

HP-UX provides a utility for creating a backup copy of the files stored on the hard disk of the OAM Position. This section contains instructions and recommendations for creating a backup copy of the hard disk onto DDS tape and for restoring files to the hard disk from that backup.

Before attempting a backup, the user should be familiar with Chapter 9, “Backing Up and Restoring Your Data” of the Hewlett Packard *System Administration Tools* manual, especially pages 9-21 through 9-24. The restore procedure is documented in pages 9-39 through 9-44.

11.1 Backup Procedure

HP-UX provides a tool named *SAM*, short for “System Administration Manager.” SAM can be used to perform many of the common system administration tasks in HP-UX. Among the tasks that it can perform is the ability to perform backups. This tool has been added to the “OAM Position Administration” toolkit, available to administrative users on the OAM Position.

To make a backup copy of the disk, perform the following steps:

1. From the “OAM Position Administration” toolkit, select “HP SAM.”
2. When the SAM window appears, select “Backup and Recovery” by clicking on it with the left mouse button. Then, again with the left mouse button, click on the button that says “Open.”
3. Now, select “Backup Devices” and click on the “Open” button.
4. You will be presented with a list of the possible backup devices on your system. If you are running a standard OAM Position, you will only see one device, the DDS Data Compression Tape Drive. Select this device by clicking the left mouse button on it.
5. Now, click the left button on the *Actions* menu button. A menu will appear, from which you should click on the button labelled “Backup Files Interactively.”
6. A new dialog box will be displayed, asking you to complete the required steps. Click on the button labelled ‘Specify Backup Device.’
7. Another new dialog box will appear. In this box, the device should already be filled in. Click on the ‘OK’ button to select it.
8. Click on the ‘Select Backup Scope” button.
9. Another new dialog box will appear. In this box, select the Entire System as the backup scope, by clicking on the button to the left of the words “Entire System.” Then, click on the ‘OK’ button at the bottom of the dialog.
10. Find a blank DDS tape with which to make the backup. Make sure that the tape is write-enabled, by moving the white lever so that covers the opening in the back of the tape. Then, insert the tape into the DDS tape drive, and wait for the lights to stop blinking.
11. Click on the ‘OK’ button at the bottom of the window. At this point, a message might appear cautioning you that there is more than one user on the system. This is

not a problem, as long as no user is writing any files. To be sure, close any other applications that are running, and click on 'Yes'.

12. Another window will appear giving messages coming from the backup routine. You can use this window to monitor the progress of the backup.

11.2 Restore Procedure

This section documents the procedure for doing a total restore of the entire disk from the backup tape produced in the previous section. It is possible to restore individual files and directories. This procedure is documented in chapter 9 of the HP *System Administration Tasks* manual.

To restore the disk, perform the following steps:

1. If needed, re-install the operating system, as documented in the HP manual *Installing and Upgrading HP-UX* or by referring to the *OAM User Guide* (297-2211-311).
2. Login to HP-VUE as root, with the password you typed in earlier.
3. Open a window, by clicking on the terminal icon at the bottom of the screen.
4. In the new window, type:
   ```
   /usr/bin/sam
   ```
   or by selecting "HP SAM" from the "OAM Position Administration" toolkit.
5. When the SAM window appears, select "Backup and Recovery" by clicking on it with the left mouse button. Then, again with the left mouse button, click on the button that says "Open."
6. Now, select "Backup Devices" and click on the "Open" button.
7. You will be presented with a list of the possible backup devices on your system. If you are running a standard OAM Position, you will only see one device, the DDS Data Compression Tape Drive. Select this device by clicking the left mouse button on it.
8. Push and hold down the right mouse button. A menu will appear. Drag the mouse down until the "Recover Files or Directories" item is selected.
9. Click the left mouse button on the button labelled "Specify Backup Device."
10. When the dialog pops up, click on the 'OK' button.
11. Click on the "Select Recovery Scope" button.
12. Click on the button labelled "all Files on Media." Then, click on the 'OK' button again.
13. Click on the "Set Additional Parameters" button, and click on the "overwrite New files button. Then, click on the 'OK' button at the bottom of the window.
14. Click on the 'OK' button at the bottom of the dialog.
15. A window may appear, stating that more than one user exists on the system, and that an incomplete recovery may result. Click on the 'Yes' button here.
16. Finally, a window indicating that the recovery may take some time will appear. Make sure that the backup tape is write-protected and in the DDS drive. Then, click on the 'Yes' Button.
17. A window will appear, displaying information on files being restored.

18. When the restore is finished, return to the terminal window, and type the following command: **`/etc/shutdown -r now -y`**

Appendix A OAM Position Checklist

This appendix contains the checklist of information which will be required during any ADAS OAM software installation or upgrade. Refer to the TOPS ADAS Network Configuration Reference Guide NTP (297-2211-800) and Section 4.0, “Pre-Install/Upgrade Procedure,” on page 13 for details on determining the values.

Item #	Item	Data
1	Workstation System Name[a]	_____

a. The system name may be any name you choose. It should be unique if the workstation is connected to a network for Remote Access.

Item #	Item	IP Address
6	Workstation LAN0 Address[a]	____.____.____.____
7	Workstation LAN1 Address[b]	____.____.____.____
8	CM[c]	____.____.____.____

a. Found in DMS table EXNDINV. Reference the ADAS_OAMPOS tuple. The IPADDRESS field is the LAN0 Address.

b. Assigned by the administrator of the Remote Access network. If the Remote Access feature will not be used, should be “127.0.0.1”.

c. Found in DMS table IPNETWRK, field CMIPADDR.

Note: The following APU IP addresses must be for the SNIX side.

Item #	Item	IP Address
9	EIU (Supernode side)[a]	____.____.____.____
10	EIU (LAN side)[b]	____.____.____.____
11	APU___(a)[c]	____.____.____.____ (b)
12	APU___(a)	____.____.____.____ (b)
13	APU___(a)	____.____.____.____ (b)
14	APU___(a)	____.____.____.____ (b)
15	APU___(a)	____.____.____.____ (b)
16	APU___(a)	____.____.____.____ (b)
17	APU___(a)	____.____.____.____ (b)
18	APU___(a)	____.____.____.____ (b)
19	APU___(a)	____.____.____.____ (b)
20	APU___(a)	____.____.____.____ (b)
21	APU___(a)	____.____.____.____ (b)
22	APU___(a)	____.____.____.____ (b)

a. Found in DMS table IPROUTER. This is the first Internet Protcol address in the EIU tuple, field SNIPADR.

b. Found in DMS table IPROUTER. This is the second IP address in the EIU tuple, field ETHIPADR.

c. Found in DMS table IPHOST. The second IP address for each APU should be used, field UNIXADDR.

Appendix B Remote Access Position Checklist

This appendix contains the checklist of information which will be required during any ADAS Remote Access software installation. Refer to the *TOPS ADAS Network Configuration Reference Guide* NTP (297-2211-800) for more details on determining the values.

Item #	Item	IP Address
1	Workstation System Name[a]	_____
2	Remote Workstation IP Address[b]	____·____·____·____
3	'root' User Password[c]	_____

a. The system name may be any name you choose. It should be unique within the Remote Access network.

b. Assigned by the administrator of the Remote Access network. Refer to the *TOPS ADAS Network Configuration Reference Guide* NTP (297-2211-800) for help in determining this address.

c. The password that is chosen will be required for logging on to the Remote Access position in the future. Keep a record of the password in a safe place in case you forget it.

Appendix C HP-UX Patches Available

The DDS tape delivered with the system includes a set of HP-UX patches which are automatically installed when the workstation is first installed. This section contains a brief description of these patches. For more information, see the appropriate HP documentation.

C.1 PHNE_13595

In HPUX 9.07, the FTP program, used to transfer files between machines across a network, changed to allow a larger buffer to receive incoming files. This allows file transfer to proceed faster. However, the FTP program on the DMS-100 Supernode is not capable of using the larger buffer. As a result, FTP sessions from the workstation to the switch are not capable of transmitting data. This patch allows the user to select the size of the buffer to use, by specifying the -B option on the command line. For communication to the supernode, the following command should be used:

```
ftp -B8 CM0000
```

C.2 PHNE_14212

A bug in the telnet protocol is present in HPUX 9.07. This bug causes telnet connections to some non-Hewlett-Packard machines, including the supernode, to fail after some time. This patch fixes that bug.

TOP15 ADAS HP 9000/712

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