# PARADYNE™

**OneVision** ™
**ACCULINK Access Controller Manager**
**for HP OpenView**
**Feature Number 7800-D1-999**
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# Overview

The OneVision™ ACCULINK® Access Controller (AAC) Manager supports the ACCULINK Access Controller under HP OpenView™. It provides the means to administer the AAC device, accept traps from it, and gather performance data.

This feature document provides instructions on:

- How to prepare for and install the OneVision AAC Manager software on both HP® and Sun® workstations

- How to remove the installed software if necessary

- How to assist and/or accelerate the process of discovering AAC devices for the HP OpenView Map

- How to cut through to the AAC Terminal Interface

- How to upload or download configuration images from or to the AAC

- Which SNMP traps are generated by the AAC

This document assumes that you have a working knowledge of UNIX® and HP OpenView. If you are not familiar with the general use of HP OpenView, refer to your HP OpenView documentation for a description of the user interface.

# Features

The AAC Manager provides the following features:

- Discovery and addition of AAC devices on a network map

- Cut-through from HP OpenView to the AAC for configuration, diagnostics, and device performance evaluation

- AAC configuration image transfer allowing storage of AAC device options on HP OpenView for use in disaster recovery

- Simple Network Management Protocol (SNMP) trap handling

# Installation Information

This section provides information you need to know prior to installing the AAC Manager software.

## Hardware Requirements

The AAC Manager runs under HP OpenView on either an HP or Sun workstation that is connected to the AAC device. The AAC device must have firmware revision 3.2. Any additional hardware requirements are the same as those of HP OpenView.

## Software Requirements

The AAC Manager requires the HP OpenView SNMP Management Platform release 3.31 and the HP OpenView Network Node Manager.

## Network Requirements

The AAC must be connected to the HP OpenView host via a TCP/IP network. No limitation on the physical medium exists provided that the TCP/IP software package is certified to run on the given processor, HP or Sun, and the network software supports TCP/IP.

The AAC Manager also requires an active diagnostic channel connection between the HP OpenView host and the AAC.

You are responsible for ensuring that the AAC device is properly configured and connected to the HP OpenView host.

## Environment Requirements

The directory **/usr/OV/bin** must be included in your PATH environment variable. The X-Windows-based VT100 terminal emulator, **xterm**, must be present and a path to it must exist when running the HP OpenView AAC Manager.

## Distribution Media

The ACCULINK Access Controller Manager is distributed on a 4 mm Digital Data Storage (DDS) tape for HP systems and on 3.5″ floppy diskettes for Sun systems.

## Software License

The software license contains the serial number assigned to the AAC Manager application software. The serial number is requested when you place a call for support. Please retain this license for future reference and keep it in a secure place.

# Installing the Application

This section describes how to install the AAC Manager software on both HP and Sun workstations.

## Installing on HP Systems

To install the AAC Manager on HP systems, perform the steps below. (Refer to your HP OpenView documentation for detailed descriptions of the HP OpenView commands.) To abort the installation process, use the UNIX interrupt key (for example, Control-D or Delete).

1. Log in as root.

2. Ensure that the HP OpenView Network Node Manager (NNMGR) and the SNMP Management Platform (SNMPRUN) are installed. You can check that they are installed by using the HP OpenView command `ovverify`.

3. Exit HP OpenView Windows (ovw) to terminate ovw processes. You can ensure that no ovw processes are running by using the UNIX command `ps -el | grep ovw`.

4. Insert the AAC Manager tape and

   *TYPE:*    `/usr/OV/bin/ovinstall -p ATTAAC -- -s /dev/rmt/0m`

5. To register the serial number of the AAC Manager:

   *TYPE:*    `attAACSerial`

6. When prompted:

   *TYPE:*    *<the serial number listed on your software license agreement>*

7. Eject the tape and store it in a safe place.

8. Check **/tmp/update.log** for errors, that is, log entries beginning with **Warning** or **Error**. Consult HP OpenView documentation if any errors are found.

9. Exit from root.

## Installing on Sun Systems

To install the AAC Manager on Sun systems, perform the steps below. (Refer to your HP OpenView documentation for detailed descriptions of the HP OpenView commands.) To abort the installation process, use the UNIX interrupt key (for example, Control-D or Delete).

1. Log in as root.

2. Ensure that the HP OpenView Network Node Manager (NNMGR) and the SNMP Management Platform (SNMPRUN) are installed. You can check that they are installed by using the HP OpenView command `ovverify`.

3. Exit HP OpenView Windows (ovw) to terminate any ovw processes. You can ensure that no ovw processes are running by using the UNIX command `ps -el | grep ovw`.

4. Create a directory in a path other than **/usr**. This directory is temporary and only needed for the installation process.

5. *TYPE:* `cd` *<path of directory created in Step 4>*

6. Insert the first AAC Manager diskette.

7. *TYPE:* `bar xvf /dev/rfd0`

8. Insert the remaining diskettes as prompted.

9. *TYPE:* `cd /usr/OV/bin`

10. *TYPE:* `ovinstall –p ATTAAC –– –d` *<path of directory created in Step 4>*`/attAAC`

11. To register the serial number of the AAC Manager:

    *TYPE:* `attAACSerial`

12. When prompted:

    *TYPE:* *<the serial number listed on your software license agreement>*

13. *TYPE:* `rm –r` <directory created in Step 4>

14. Eject the final diskette and store the diskette set in a safe place.

15. Check **/tmp/update.log** for errors, that is, log entries beginning with **Warning** or **Error**. Consult HP OpenView documentation if any errors are found.

16. Exit from root.

# Removing the Application

To remove the AAC Manager application, perform the following steps:

1. Log in as root

2. *TYPE:* `cd /usr/OV/bin`

3. *TYPE:* `ovremove -p ATTAAC`

4. Exit from root.

The removal process displays a running report of the process, concluding with a message that the process is complete.

# Discovering Devices

This section describes how HP OpenView discovers the AAC device and how you can accelerate that process.

Once the AAC is assigned an IP address and is physically connected to the HP OpenView host, HP OpenView discovers it automatically. With large networks, however, discovery can take a long time. You may want to accelerate the process by one of two methods. You may provide a "seed" file which identifies a portion of the network to HP OpenView (Refer to the HP OpenView documentation for further information on "seed" files). Alternatively, you can assist the device discovery by "pinging" the AAC.

## Ping Process

Ping the AAC using the following steps:

1. Select *Diagnose–>Network Connectivity–>Ping* from the HP OpenView menu.

   The HP OpenView Ping window appears.

2. Click on the **To Name** or **IP Address** field

   *TYPE:*        *< IP address of AAC >*

3. Click on **Restart.**

   The Ping window shows repetitive pinging of the device.

4. Click on **Stop** after multiple successful pings.

5. Click on **Close** to dismiss the Ping window.

   The Ping window disappears leaving a HP OpenView Map window. An AAC symbol (see Figure 1) appears on the HP OpenView Map.

## AAC Device Symbol

The AAC Manager provides the symbol that represents the AAC device (see Figure 1).



**Figure 1.  AAC Symbol for HP OpenView Map**

# Accessing the Terminal Interface

The Terminal Interface provides the ability to connect directly to the AAC. The Terminal Interface provides VT100 terminal access over a telnet session. The Terminal Interface is limited to one session at a time per physical device, although multiple sessions can be established concurrently to multiple devices, each with its own Terminal Interface window.

To connect to the Terminal Interface of the AAC, perform the following steps:

1. Select the AAC device symbol on the HP OpenView Map.

2. Select *Administer–>OneVision Device Mgmt–>AAC Manager–>Connect*.

   The Terminal Interface window appears requesting a password (see Figure 2).

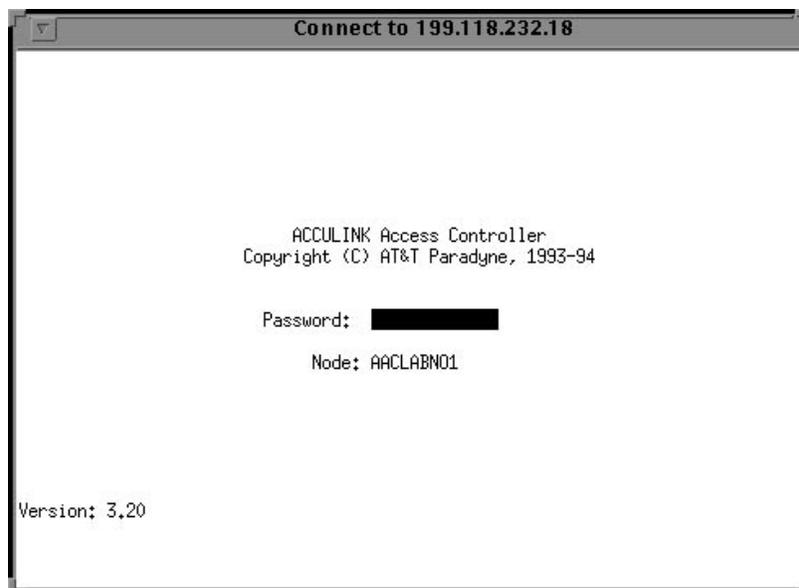

**Figure 2.  Terminal Interface Window**

3. **TYPE:**   *<the required password>*

   **PRESS:**   Return

To terminate the Terminal Interface session, log off the device. The Terminal Interface window then disappears.

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**NOTE**

If you connect to the Terminal Interface using *Misc–>Terminal Connect–>Telnet (xterm)*, you will not be able to upload or download configuration images.

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Refer to the *ACCULINK ACCESS CONTROLLER Reference Guide (Pub. AT&T 582-510-100) Revision 3.2* for further information.

# Transferring Configuration Images

Hardware and software options selected via the Terminal Interface for an AAC are stored in a configuration image on the device. The configuration image can be transferred (uploaded) from the AAC device to the HP OpenView host and stored in a UNIX file. Conversely, a configuration image can be transferred from the HP OpenView host to the AAC device (downloaded). You can use such image transfers to back up the AAC's configuration or to establish or restore the configuration of an AAC in the event of a disaster recovery. Each configuration is specific to the device from which it was uploaded. You cannot download from one AAC to another.

## Uploading Configuration Images

To upload the configuration image from the AAC, perform the following steps:

1. Select the map window which contains the AAC that you want to upload from.

2. Select the AAC device symbol on the HP OpenView Map.

3. Open a Terminal Interface window as described in the previous section.

> **NOTE**
>
> Uploading configuration images requires that you be logged onto the Terminal Interface as either *Superuser* or *Manager*.

4. Select *Administer–>OneVision Device Mgmt–>AAC Manager–>Configuration Upload/Download*.

> **NOTE**
>
> If you connect to the Terminal Interface using *Misc–>Terminal Connect–>Telnet (xterm)*, you will not be able to upload or download configuration images.

The Upload/Download window appears (see Figure 3).

5. Click on **Select**.
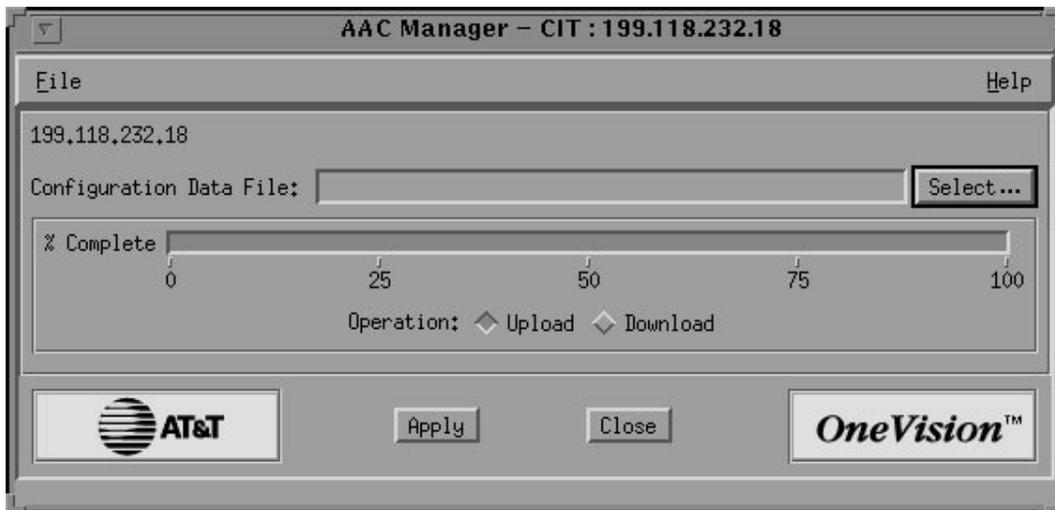
The File Selection Window appears (see Figure 4).
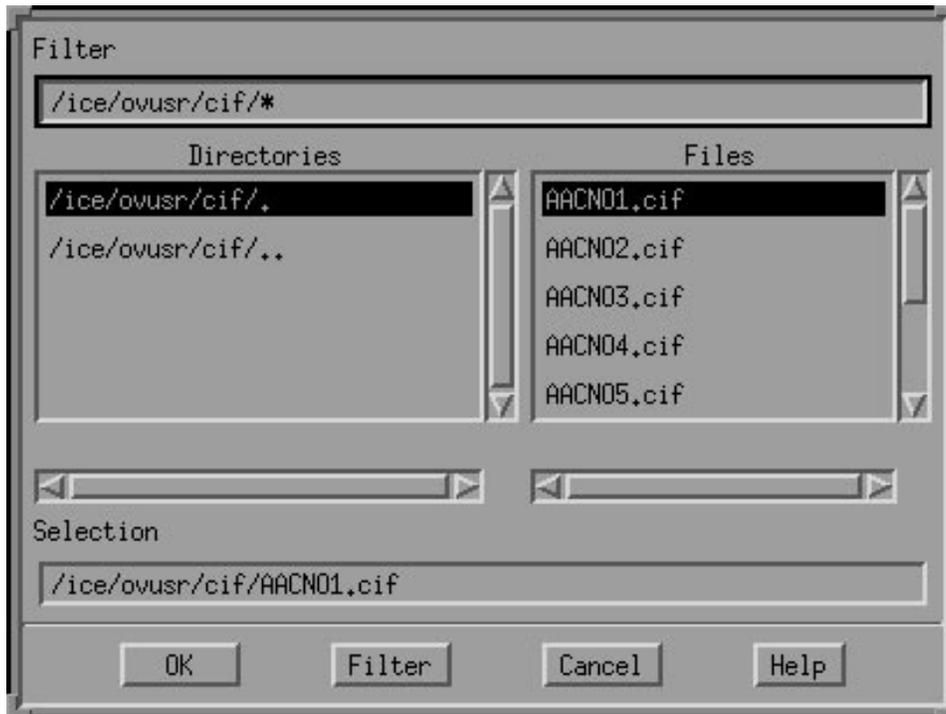
**Figure 3.  Upload/Download Window**



**Figure 4.  File Selection Window**

6. Choose an existing UNIX directory and file to receive the configuration image or enter the name of a new directory and/or file, and click **OK.**

   The File Selection Window disappears.

7. Click on **Upload.**

8. Click **Apply** to begin the operation.

   The percentage gauge in the center of the Upload/Download window displays the progress of the operation (see Figure 3). The operation is complete when the percentage gauge reaches 100% and **Operation Complete** is displayed at the bottom of the window.

   The time required to upload a configuration image from an AAC to the HP OpenView host depends on your network configuration and transmission speed.

9. Click **Close**.

10. Select the Terminal Interface window. A message is displayed:

    **Transfer is successful. Press any key to continue.**

11. *PRESS:*   Enter

12. Close the Terminal Interface window.

## Downloading Configuration Images

To download the configuration image from the AAC, perform the following steps:

1. Select the map window which contains the AAC to which you want to download.

2. Select the AAC device symbol on the Map.

3. Open a Terminal Interface window as described in the previous section.

> **NOTE**
>
> Downloading configuration images requires that you be logged onto the Terminal Interface as either *Superuser* or *Manager*.

4. Select *Administer–>OneVision Device Mgmt–>AAC Manager–>Configuration Upload/Download*.

> **NOTE**
>
> If you connect to the Terminal Interface using *Misc–>Terminal Connect–>Telnet (xterm)*, you will not be able to transfer any configuration images to or from the AAC.

The Upload/Download window (see Figure 3) appears.

5. Click on **Select**.

   The File Selection Window appears (see Figure 4).

6. Select an existing UNIX directory and configuration image file to be sent to the AAC, and click **OK.**

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**NOTE**

You must not select a configuration image file that was uploaded from another AAC. Each configuration image contains information and options specific to the particular AAC from which the configuration image was transferred.

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   The File Selection Window disappears.

7. Click on **Download.**

8. Click **Apply** to begin the operation.

   The percentage gauge in the center of the Upload/Download window displays the progress of the operation (see Figure 3). The operation is complete when the percentage gauge reaches 100% and **Operation Complete** is displayed at the bottom of the window.

   The time required to download a configuration image from the HP OpenView host to an AAC could exceed twenty minutes depending on the size of your network and its configuration and transmission speed.

9. Click **Close**.

10. Select the Terminal Interface window. A message is displayed:

       **Transfer is successful. Press any key to continue.**

11. *PRESS:*   Enter

    The following message is displayed:

        **A reboot is required to activate the new configuration.**
        **OK to reboot the system (y/n)?**

12. *TYPE:*   y

    The AAC is reset and all options contained in the downloaded configuration image are applied.

# Trap Support

The AAC generates alarms and events in the form of SNMP traps. These traps are managed by the HP OpenView platform and can be viewed using the HP OpenView Event Browser application as described in the HP OpenView documentation.

The AAC generates the following generic traps:

- **Link Down** – The AAC has recognized a failure in one of its communication interfaces.

- **Link Up** – The AAC has recognized that one of its communication interfaces has just come up.

- **Cold Start** – The AAC has just performed a cold start.

The AAC generates the following enterprise-specific traps:

- **WANSWTCH** – The AAC has switched WAN port operations to a redundant port.

- **DCHAN** – The diagnostic channel is down or out-of-service.

- **EER** – The excessive error rate threshold has been exceeded on the WAN card.

- **ACO** – Alarm Cut-Off is set and another alarm has been received by the AAC.

- **SENSOR** – The Alarm card in the AAC has received an alarm from another attached device.

All AAC traps are stored in the status events log in the following format:

> <Severity> <Date> <Time> <IP address> <Trap Type> <:> <Trap text>

For further information on AAC traps, refer to the *ACCULINK ACCESS CONTROLLER Reference Guide (Pub. AT&T 582-510-100) Revision 3.2*, section 2-C.