SunATM™ SBus Adapters Manual Product Note

Sun

The Network Is the Computer™

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SunATM SBus Adapters Manual
Product Note

This is a Product Note for the *SunATM™ SBus Adapters Manual*, Part Number 802-4439-10, Revision A of December 1995. Read this Product Note before you read the manual; it contains the most up-to-date information since the manual was printed.

Managing SunATM Interfaces with SNMP

The SunATM software package provides an SNMP (Simple Network Management Protocol) agent which supports the ATM UNI and LAN Emulation Management Information Bases (MIBs) defined in the User Network Interface and LAN Emulation Specifications. This agent will provide information to a network management system, such as the SunNet Manager™ system.

Installing the SunATM SNMP Software

The configuration files for the SunATM SNMP Management Console and the SunATM SNMP agent daemon is contained in the `SUNWatmu` package. The management console configuration files will be installed in `/opt/SUNWatm/snmp`, and the agent daemon will be installed in `/opt/SUNWatm/bin`. Required configuration files for the agent daemon will be installed in `/etc/atmsnmp`.

Setting Up the Management Console

The schema and oid files containing the required ATM MIB definitions for SunNet Manager are installed in `/opt/SUNWatm/snmp`. In addition, the MIB files in abstract syntax notation (ASN.1) format are included if you are running a network manager that does not use schema files. Refer to the documentation for your network manager for information on how to generate the appropriate configuration files from the MIB files provided.

To configure your SunNet Manager console system to recognize SunATM agents:

1. **Start the** `snm` **console program and save your management database.**
   This can be done using File -> Save -> Management database from the snm console menus.

2. **Copy the SunATM schema and oid files which were installed on the SunATM hosts to the schema directory on the manager.**
   The files are called `atmf.mib.schema`, `lane.mib.schema`, `atmf.mib.oid`, and `lane.mib.oid`, and are installed in the `/opt/SUNWatm/snmp` directory on SunATM hosts. They should be copied to the `/opt/SUNWconn/snm/agents` directory on the management system.

3. **Build the object identifier database to include the SunATM object identifiers.**
   Do this by executing the following command on the management console system:

   ```
   # /opt/SUNWconn/bin/build_oid /opt/SUNWconn/snm/agents
   ```

4. **Start the** `snm` **console with the** `-i` **flag:**

   ```
   # snm -i
   ```

5. **Load your management database using File -> Load -> Management database from the menus.**
   The SunATM MIBs, `atmf.mib` and `lane.mib`, should now be available when you create or update a component.

Note – For further information on using SunNet Manager to monitor `snmp` agents, refer to the SunNet Manager documentation.

Setting Up Agent Systems

To configure a SunATM host to run as an SNMP agent, you must choose the SNMP agent option when installing the `SUNWatmu` package on your system. If this option is selected, the software will be configured to start the SunATM SNMP daemon (`atmsnmpd`) during system boot.

The default community values for the SunATM agent are public for read and private for write. If you wish to change these values, they should be changed in the `/etc/armsnmp/agent.cnf` file. This file contains SNMP agent configuration information, and you may customize these values as needed. The `atmsnmpd` daemon must be restarted after any changes to any of its configuration files, including the `agent.cnf` file.

Note – Only one SNMP agent may be active on a system. If you wish to run the SunATM agent on a host, no other SNMP agents may run on that host. If other agents are running, the `atmsnmpd` daemon will exit with an error message.

Changes to Appendix C, "Troubleshooting and Error Messages"

In Section C.1.2.3, "LAN Emulation Configuration," the following text should be inserted at the top of page C-11:

- Verify that the host has joined the Emulated LAN

  The `lanestate` field in the output of `lanestat` should indicate that the client is in the active state.

  If your system is not able to join the emulated LAN, there may be a problem with the way in which your LAN Emulation Services are configured. If the Emulated LAN uses an MTU size larger than 9 kilobytes, the SunATM host will not join (9 kB is the largest MTU size supported by the SunATM product). If the host is not able to join, an error message will be printed with an explanation.

The following error messages should be added to Section C.2.2, "Error Messages from `aarsetup` and `lanesetup`."

`ifname: cannot join ELAN (frame size too large; please use a different ELAN and rerun lanesetup)`

> The largest MTU size supported by the SunATM software is 9 kilobytes. If the LAN Emulation Services try to set a size larger than 9 Kbytes, the SunATM client will not be able to join the emulated LAN. Reset your LAN Emulation services to use an MTU size less than or equal to 9 kB, and rerun `lanesetup` to join the emulated LAN.

`ifname: frame-size change (please rerun lanesetup)`

> The MTU size was changed by the LAN Emulation Services, and `lanesetup` must be rerun to notify IP of the change. There is a slight chance that TCP connections will remain open during this change, and if that is the case, performance on those connections will be impacted by the change. You should either restart the affected applications, or reboot the system if this becomes a problem.