

Installing the SunATM Software

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Before installing and configuring the SunATM software, you must first install the SunATM SBus adapter into the system. See Chapter 1, “Introducing and Installing the SunATM-622/MMF SBus Adapter 2.1,” and Chapter 2, “Introducing and Installing the SunATM-155 SBus Adapters 2.1,” for more information.

After you have installed the SunATM software, but *before* you reboot your system, you will need to configure the SunATM software. See Chapter 4, “Configuring the SunATM Interface,” for instructions on how to use the `atmadmin` configuration program.

3.1 Before Installing the SunATM Software

Before installing the SunATM 2.1 software, you must first remove any previous version of the SunATM software that may be present on your system. If you attempt to add the software packages over existing SunATM packages, the installation will fail.

- ◆ **Check for any SunATM software packages by using the `pkginfo` command:**

```
# /usr/bin/pkginfo | grep SUNWatm
```

If you find any SunATM packages, you must remove them.

- ◆ **Remove any existing SunATM software packages by using the `pkgrm` command:**

```
# /usr/sbin/pkgrm SUNWatm SUNWatma SUNWatmu
```

3.2 Installing the SunATM 2.1 Software

3.2.1 Adding the Software Packages Using `pkgadd`

1. **Become superuser (root).**
2. **Insert the SunATM 2.1 CD-ROM into the CD-ROM player connected to your system.**
 - If your system is running the Volume Management software, it should automatically mount the CD on this directory: `/cdrom/sunatm_2_1`
 - If your system is not running the Volume Management software, type the following to mount the CD-ROM:

```
# mkdir /cdrom
# mount -F hsfs -o ro /dev/dsk/c0t6d0s2 /cdrom
```

3. Add the SunATM 2.1 software packages.

- If your system is running the Volume Management software, type:

```
# /usr/sbin/pkgadd -d /cdrom/sunatm_2_1 SUNWatm SUNWatmu SUNWatma
```

- If your system is not running the Volume Management software, and you have mounted the CD-ROM as described in Step 2, type:

```
# /usr/sbin/pkgadd -d /cdrom SUNWatm SUNWatmu SUNWatma
```

Note – For basic ATM functionality, the SUNWatm package is the only required software package. The SUNWatmu package contains the man pages and the files required to configure an ATM Simple Network Management Protocol (SNMP) management system. The SUNWatma package provides the SunATM interim Application Programmers' Interface (API) libraries and header files.

The SunATM packages will be installed in the following directories:

- SunATM Device Drivers and Utilities (SUNWatm) will go into /kernel/mod, /kernel/drv and /etc/opt/SUNWatm
- SunATM Runtime Support Software (SUNWatmu) will go into /opt/SUNWatm
- SunATM Interim API (SUNWatma) will go into /usr/include/atm and /usr/lib

Note – Man pages contained in the SUNWatmu package will go into /opt/SUNWatm/man. (Add this path to your system's \$MANPATH environment variable.) Interim API examples will go into /opt/SUNWatm/examples.

4. Eject the SunATM 2.1 CD-ROM.

- If your system is running the Volume Management software and a window interface, click on the Eject Disk button on the `/cdrom/sunatm_2_1` File Manager.
- If your system is running the Volume Management software without a window interface, type:

```
# cd /  
# eject cdrom
```

- If you are not running the Volume Management software, and you mounted the CD-ROM as described in Step 2, type:

```
# cd /  
# umount /cdrom  
# eject cdrom
```

Note – For more information about the Volume Management software, refer to the Solaris documentation.

5. Configure your SunATM interface(s).

You must complete the network configuration of your SunATM interface before you can use the interface. An interactive program, `/etc/opt/SUNWatm/bin/atmadmin`, is included with the SunATM software, and it may be used to configure your SunATM interfaces. See Chapter 4, “Configuring the SunATM Interface,” for instructions on how to use the `atmadmin` configuration program.



Caution – You *must* configure the SunATM software before rebooting your system.

6. Perform a reconfiguration boot on your system, and check the network.

See Section 3.3, “Rebooting the System and Examining Network Interfaces,” for more information.

3.2.2 Using the `pkgadd` Utility

When the device on which the package resides is not specified, `pkgadd` checks the default spool directory (`/var/spool/pkg`). If the package is not there, installation fails. The `-d` option allows you to specify a different spool directory, and the name specified after `-d` must be a full pathname to a device or directory (as shown in the examples).

When `pkgadd` encounters a problem, information about the problem is displayed with the following prompt:

```
Do you want to continue with this installation?
```

You should respond with either `yes`, `no`, or `quit`. If more than one package has been specified, `no` stops the installation of the package being installed but informs `pkgadd` to continue with installation of the other packages. `quit` tells `pkgadd` to stop installation of all packages.

Note – For more information about the `pkgadd` utility, refer to the `pkgadd(1M)` man page.

3.2.3 Checking the Package Installation Using `pkgchk`

Once the package is installed, you can use the `pkgchk` command to see if the installation was complete:

```
# /usr/sbin/pkgchk SUNwatm
```

Multiple packages can be specified at the command line by separating the package names with a space. If no package identifier is specified, the entire contents of the machine are checked.

3.2.4 Checking the SunATM Software Installation Using `pkginfo`

Check the ATM software installation by using the `pkginfo` command:

```
# /usr/bin/pkginfo | grep SUNWatm
system      SUNWatm      SunATM Device Drivers
application SUNWatma     SunATM Interim Api Support Software
application SUNWatmu     SunATM Runtime Support Software
```

3.2.5 Removing the Software Packages Using `pkgrm`

You can remove one or more packages with the following command:

```
# /usr/sbin/pkgrm SUNWatm SUNWatma SUNWatmu
```

In this example, `pkgrm` removes the packages identified as `SUNWatm` (SunATM Device Drivers and Utilities), `SUNWatma` (SunATM Interim API Support Software), and `SUNWatmu` (SunATM Runtime Support Software).

3.3 Rebooting the System and Examining Network Interfaces

1. Reboot the system using the `boot -r` command.

The `-r` option is required by the Solaris software environment when installing new hardware. Use the `-v` option to display the boot messages, so you can see that the SunATM adapters are recognized correctly.

To start the boot process from the `ok` prompt, type:

```
ok boot -rv
```

Note – For Solaris 2.x, use `boot -r` whenever the physical configuration of the system is changed. Refer to the `boot(1M)` man page for more information.

2. Execute `ifconfig -a` and `netstat -i` commands to examine the state of all network interfaces.

You can also use `/usr/sbin/ping` or `/usr/sbin/spray` commands to see if a network interface is active.

The following are examples of `ifconfig -a`, `ping`, and `netstat -i` output. Refer to the `ifconfig(1M)`, `ping(1M)`, `spray(1M)`, and `netstat(1M)` man pages for more information.

```
example% /sbin/ifconfig -a
lo0: flags=849<UP,LOOPBACK,RUNNING,MULTICAST> mtu 8232
      inet 127.0.0.1 netmask ff000000
ba0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 9180
      inet 129.144.130.9 netmask ffffffff broadcast 129.144.130.255
      ether 8:0:20:75:89:ff
```

```
example% /usr/sbin/ping zelda
zelda is alive
```

```
example% netstat -i
Name  Mtu   Net/Dest      Address      Ipkts  Ierrs  Opkts  Oerrs  Collis Queue
lo0   8232  loopback     localhost    1      0      1      0      0      0
ba0   9180  umtv20-130-n zardoze     5875   0      382812 0      0      0
```



Caution – Do not change the SBus slot in which a SunATM SBus adapter is installed once the system has been booted. The Solaris 2.x software environment remembers the location of each SBus adapter that has been installed. Switching SBus slots will cause the operating system to assume that you removed your original SunATM SBus adapter and added a second adapter to the system. Refer to the on-line man page about `path_to_inst` for more information.

