

Chapter 5

Confirming the Installation

This chapter will help you confirm that you have correctly installed the hardware and software for your workgroup EISA SGI adapter. Please make sure that you have followed all the steps in the chapter, “Installing the Workgroup EISA SGI Adapter Software” and the chapter, “Installing the Workgroup EISA SGI Adapter Hardware.”

System Startup Messages

This section assumes that you have rebooted your Indigo² workstation. Refer to your *Indigo² Workstation Owner's Guide* for the correct way to reboot your system.

During the initialization process, you will see messages that indicate that the hardware is installed properly. The Institute for Electrical and Electronics Engineers (IEEE) and FDDI addresses that are unique to each EISA SGI adapter are read from the FDDI interface. The following display is from a IRIX startup.

```
May 4 13:47:07 2A:sgimonitor unix: fddi0 driver rev: 1.0 hw rev: 4.0 fw
rev: 3.73
May 4 13:47:07 2A:sgimonitor unix: fddi0 diagnostics passed. 0x0
May 4 13:47:07 2A:sgimonitor unix: fddi0 address 00:40:0b:40:c4:d2
(00:02:d0:02:23:4b)
May 4 13:47:15 2A:sgimonitor unix: fddi0 ring up
```

After the system is initialized, the login prompt will appear. Log in to your system as usual.

The Link Status Indicator

Two diagnostic LEDs are mounted on the EISA SGI adapter. These indicate status and ring operation.

The status LED monitors the adapter's status. If this LED is on, the adapter has passed its internal diagnostics. This LED must be on for the adapter to function properly.

The ringop LED monitors ring operation. If this LED is on, the adapter is connected to the CDDI/FDDI ring. If this LED is not on, check that the adapter is connected to the concentrator and to the RJ-45 wall outlet. If both connections are good, then check to see if there is a cable fault and if the concentrator is operational.

Confirming the EISA SGI FDDI Operation

You can verify that the adapter recognizes the IP address, netmask, and the broadcast addresses that you set up.

Step 1 Log in to the system as root.

Step 2 Enter the password for the root login at the prompt.

Confirming IP, Netmask, and Broadcast Addresses

The ifconfig command displays slightly different information, depending on the operating system software. Following are examples of the ifconfig command used with IRIX system software.

EISA SGI ifconfig Command Example

Use the **ifconfig** command to display the current FDDI configuration. The following message should appear:

```
console# ifconfig fddi0
fddi0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST>
        inet 198.133.219.99 netmask 0xfffff00 broadcast 198.133.219.255

console#
```

where:

198.133.219.99 is the address you assigned in the /etc/hosts file.

Note The IP address and the netmask address are usually assigned by the network administrator for your system.

Confirming Connections to Network Devices

You can use the **ping** command to determine if your adapter is connected to the network or other devices on the network. Typically, you will want to ping the following devices:

- The EISA SGI adapter, to confirm that the adapter driver is properly installed
- Another workstation on the ring, to confirm that the adapter is properly connected to the network

Enter the **ping** command, as follows:

```
console# ping console-fddi
PING console-fddi.cisco.com (192.122.173.42): 56 data bytes
64 bytes from 192.122.173.42: icmp_seq=0 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=1 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=2 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=3 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=4 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=5 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=6 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=7 ttl=255 time=3 ms
64 bytes from 192.122.173.42: icmp_seq=8 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=9 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=10 ttl=255 time=2 ms
64 bytes from 192.122.173.42: icmp_seq=11 ttl=255 time=2 ms

----console-fddi.cisco.com PING Statistics----
12 packets transmitted, 12 packets received, 0% packet loss
round-trip min/avg/max = 2/2/3 ms

console#
```

ttcp—Performance Measurement

The performance of the EISA SGI adapter can be monitored using the following test setup (which is similar to Figure 5-1) and the ttcp utility.

Note For optimal performance, disable the Ethernet interfaces of the workstations prior to running the ttcp utility.

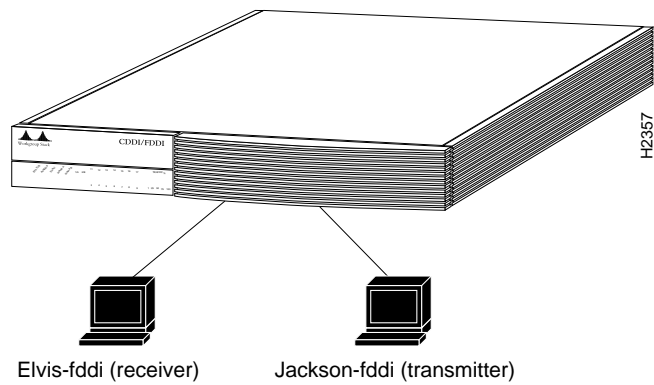


Figure 5-1 ttcp Hardware Test Configuration

In the following examples, refer to Figure 5-1.

The TCP measurements format of the **ttcp** command is as follows:

From the receiver:

```
Elvis-fddi: ttcp -r -v -R65535
```

From the transmitter:

```
Jackson-fddi: ttcp -t -v -S65535 Elvis-fddi
```

The UDP measurements format of the **ttcp** command is as follows:

From the receiver:

```
Elvis-fddi: ttcp -r -u -v -R65535
```

From the transmitter:

```
Jackson-fddi: ttcp -t -u -v -S65535 Elvis-fddi
```