Getting Started

This chapter tells you how to get your Cisco Catalyst 1800 Token Ring switch working. It contains the following sections:

- Installing Your Catalyst 1800 Switch

- Using the Console Interface

- Special Features

- Accessing the Main Menu

- Quick Configuration

- Exiting the Console Interface

Installing Your Catalyst 1800 Switch

Perform the following steps to connect your Catalyst 1800 switch to a PC or VT series compatible terminal:

Step 1 Connect one end of the supplied console cable to the console port on the front of the Catalyst 1800 switch's bottom slot (slot 1) and the other end to the appropriate communications port on the PC or VT series terminal. (For additional information, refer to the *Catalyst 1800 Token Ring Switch Cable Kit Guide*.)

Step 2 Turn on the PC and configure your VT emulation package with the following parameters to allow access to the Catalyst 1800 switch's out-of-band management:

Table 2-1   **Terminal Emulation Parameters**

Parameter	Value
Data Bits	8 Bits
Duplex	Full
Parity	None
Speed	9600
Stop Bits	1
Terminal type	VT100

Step 3 Power up the Catalyst 1800 switch.

> **Note** Ignore messages about ring status that appear as token ring ports initialize.

Step 4 When the Catalyst 1800 switch has completed booting up, you are prompted to enter a password. The system default password is **public**.

Using the Console Interface

This section describes how to use the console interface of the Catalyst 1800 switch. The console interface is a standard male DB-9 connector and provides access to menu commands via a PC or VT series compatible terminal.

You can access all configuration parameters available in the SNMP MIBs through the console interface. All configurable parameters are stored in nonvolatile RAM (NVRAM) for access on subsequent boots of the Catalyst 1800 switch.

The console interface combines a menu display with a command line input function. The menu selections are made through the fully interactive command line interface.

You can access menus by entering a menu selection at the console prompt (`Catalyst 1800>`). When the desired menu appears, enter the selection on the command line with the required parameters.

For example, to configure port 1 with IP information, enter a command similar to this:

```
Configure ip 1 address 204.242.251.3
```

The next menu will display above the command line each time you enter a keyword and press **Space**. The preceding sample displays the Configuration menu, the Configuring IP Parameters menu, and the IP Parameters Display menu. A more detailed example is provided in the section "Quick Configuration." Unless otherwise noted, all changes to configuration parameters take effect immediately.

Abbreviated Text Recognition

You can specify a command by using a shorthand known as Abbreviated Text Recognition. This means that the Catalyst 1800 switch allows you to enter the minimal number of characters that it takes to recognize a certain parameter. When you press the space bar, the system displays the next screen.

Therefore, you could also enter the command in the preceding example by using the following syntax:

```
c i 1 a 204.242.251.3
```

> **Note** If the abbreviation is too short for recognition, the system erases it. Retype the entry with additional characters before pressing the space bar.

Command Line Editing

If you want to change a series of parameters listed on the same menu, you need to reenter the same string of initial parameters and then supply the unique final one. In the preceding example, enter the first command letters (**c i l a**), then supply the unique value for the address (**155.243.251.4**). The command would appear as follows:

```
c i l a 155.243.251.4
```

If you want to enter a different address yet use the same command, use **^P**, the previous command callback. This feature recalls the command you typed previously. Then press **Backspace** to erase the IP address portion of the command and type the new parameter value you want.

As you type the parameters, you can display the next screen by pressing either **Return** or **Space**. In most cases, this manual instructs you to press **Return**. Most of the time you can use either key.

If you are using the **Space** bar to display your screens and reach the end of a series of parameters, the system displays this prompt:

```
End of command. Enter <CR>.
```

On-line Help

At any point, you can access the On-Line Help screen. Type **h**, then press **Space**. The following screen appears, providing instructions on keyboard shortcuts.

```
Cisco Systems Catalyst 1800 Token Ring Switch


                              Help on Key Strokes


Keystroke            Result                      Keystroke           Result
==============================================================================================
Ctrl-A               Beginning Of Line           Ctrl-K              Clear to End of Line
Ctrl-P               Restore Prev Command Line    Ctrl-N              Restore Next Command Line
SPACE                Enter Next Command Screen    ESC                 Return to Prev/Main Menu


Use CR to select next Command Menu or complete a Command

To Refresh the Screen, select System Refresh
```

Special Features

This section explains the following special features of the Catalyst 1800 switch:

- Using the display command
- Displaying the previous screen

Using the Display Command

Many configuration menus list a Display command among the available options. Use this command to display the current settings for all ports. If this feature is available for the component you are using, the system displays a message similar to the following:

```
Enter port number or 0 for all ports
```

At this point, you can either type **0** or the port number. If you type **0**, the parameters that you change will affect all of the ports connected to the Catalyst 1800 switch.

Note Token Ring port configurations do not necessarily affect an FDDI port.

Displaying the Previous Screen

If you want to display the previous screen at any time, press **Escape**. You can continue displaying previous screens by pressing **Escape**.

Accessing the Main Menu

Perform the following steps to access the Catalyst 1800 switch Main menu:

Step 1 Load your MS-DOS terminal emulation software. (The baud rate defaults to 9600 bps.)

Step 2 Turn on the Catalyst 1800 switch.

Step 3 The Catalyst 1800 switch Password menu appears, followed by a password prompt:

```
Cisco Systems Catalyst 1800 Token Ring Switch




                                Switch is Password Protected




        Password:
```

Step 4 Type a valid password (a community name with read-write access) at the prompt. The default password is **public**. The Cisco Catalyst 1800 Password is defined by the community name. If you want to change the switch password, you will have to add or change a community name, ensuring that it has read/write access. For more information, see the section "Configuring SNMP" in the chapter "Configuring the Catalyst 1800 Switch."

The Catalyst 1800 Main menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch


                                        Select From

                                    Configure
                                    Monitor
                                    Security
                                    System
                                    Quit
                                    Help

        Catalyst 1800>
```

Four submenus on the Main menu let you set industry standard network management parameters:

Configure	Configure software
Monitor	Monitor performance
Security	Set security parameters
System	Update the system software and set system parameters

From this menu you can also access on-line help and exit the system, which returns you to the Password menu.

Quick Configuration

This section describes the steps you need to take to configure either a single ring or multiring switch. It also explains how to customize the Catalyst 1800 descriptions.

Before you do a quick configuration, you need to know the following:

- The IP address that you want to assign to the Catalyst 1800 switch

- The IP subnet mask to be assigned

- The IP address of the network management platform (SNMP)

- The IP address of your router (if you have one)

- The segment (ring) number(s) you plan to connect to the Catalyst 1800 switch (if you are configuring a multiring switch)

Configuring a Single-Ring Switch

Follow these steps:

Step 1   Connect a PC or VT series terminal to the Catalyst 1800 console port. (The baud rate defaults to 9600 bps.)

Step 2   Turn on the PC terminal.

Step 3   Turn on the Catalyst 1800 switch.

Step 4   Enter a valid password (the default password is **public**). The Catalyst 1800 Main menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch


                                     Select From

                            Configure
                            Monitor
                            Security
                            System
                            Quit
                            Help

   Catalyst 1800>
```

Step 5   If you want to use SNMP network management, type this command:

Configure IP

The system responds:

```
Enter port number or 0 for setting all ports
```

Step 6   Type this command (using the shortest unique command string) to set the IP parameters for all ports:

c i 0

The Configuring IP Parameters menu appears and the system prompts you to choose a menu selection:

Note   From this menu, you can select any parameter to display the IP Configuration menu. You can also use the **Display** command.

```
Cisco Systems Catalyst 1800 Token Ring Switch


                                             Select From

                                             Address
                                             Default Gateway
                                             Subnet Mask
                                             Display



Catalyst 1800> c i 0
```

Step 7   Enter this command at the prompt:

Addr *xxx.xxx.xxx.xxx*

Here, *xxx.xxx.xxx.xxx* is the IP address that you have assigned to the Catalyst 1800 switch. The IP Parameters Display menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch

                           IP Address Information for port 0


                              IP Address:0.0.0.0

                              Subnet Mask:0.0.0.0

                              Default Gateway:0.0.0.0



Catalyst 1800> Configure IP 0 Addr
```

Step 8   Press **^P**. The previous command is recalled.

Step 9   Press **Backspace** until the parameter Addr is removed.

Step 10   Type the following command:

s *xxx.xxx.xxx.xxx*

Here, *xxx.xxx.xxx.xxx* is the IP subnet mask required for your local network.

Step 11   Press **^P**. The previous command is recalled.

Step 12   Press **Backspace** until the parameter is removed.

Step 13   Type the following command:

def *xxx.xxx.xxx.xxx*

Here, *xxx.xxx.xxx.xxx* is the IP Address of the default gateway device on your local network or subnet.

You can now configure the Catalyst 1800 switch from an SNMP-based network management platform.

Configuring a Multiring Switch

If you plan to configure the switch for multiring mode operation (that is, you need to support multiple ring numbers), follow these steps:

Step 1   Type this command at the Catalyst 1800 Main menu:

c l 1

(The first argument of the command is the letter **l**, abbreviating **logical**, not the numeral 1. The second argument is the port number. If you are configuring a port other than port 1, type its number in place of 1 as the second argument.) The Configuring Logical Segments menu appears for the specified port.

```
Cisco Systems Catalyst 1800 Token Ring Switch



                                     Select From

                                 Best Path
                                 Frame Size
                                 Max Hops
                                 Port Type
                                 Ring Number
                                 STEMode
                                 Display




        Catalyst 1800>c l 1
```

Step 2 Type **r**. The Logical Segment Configuration menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch

                              Logical Segment Configuration

Port#       Type       Segment#       MaxHops        MaxFrame          STEMode          BestPath

1           SRT        101(x065)      7              4865              Forced           Enabled
2           SRT        101(x065)      7              4865              Forced           Enabled
3           SRT        101(x065)      7              4865              Forced           Enabled
4           SRT        101(x065)      7              4865              Forced           Enabled
5           SRT        101(x065)      7              4865              Forced           Enabled




Catalyst 1800> Configure Logical 1 r
```

Note This menu differs slightly if you are using FDDI.

Step 3 Type the hex value of the segment (ring) number (displayed in decimal and hex notation) you plan to connect to the Catalyst 1800 switch. Then configure each port to match that segment number. Note that Token Ring segment numbers default to 101(x65), while FDDI ports default to102 (x66).

Customizing the System Descriptions

If you want to customize the Catalyst 1800 system descriptions, perform these steps:

Step 1 Type this command at the Catalyst 1800 Main menu:

c sy

Step 2 The Configure System Information menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch

                                              Select From

                                                  Contact
                                                  Date
                                                  Descriptor
                                                  Location
                                                  Name
                                                  Time
                                                  Display



        Catalyst 1800>Configure System
```

Step 3 To display the System Information menu, type this command:

c sy display

The System Information menu appears:

```
Cisco Systems Catalyst 1800 Token Ring Switch


                                   System Information

     Description    :            Cisco Catalyst 1800
     Admin. Contact :            Technical Support
     Name           :            Cisco1800.com
     Location       :
    Date         :            Thursday, September 21, 1995 DST
     Time           :            11:50:
     UpTime         :            10 days 6:44:45
    Temperature    :            51˚C
    Power Config   :        A

     HW Rev         :            K00 S/N :25510121   Part #: MOD-0044-00
     SW Rev         :            TRX.2.1.6
     HW Image Rev   :            TRX A34
     Boot ROM Rev   :            TRX MP01.x1-TRX LB0.2x1

Catalyst 1800> con sys display
```

Step 4   Add the following to the command string:

`Description`

Step 5   Add a description for the Catalyst 1800 switch and press **Return**.

If you want spaces between words, enclose the words between double quotes. For example, type **"Catalyst 1800"**.

Step 6   Press **^P**. The previous command is recalled.

Step 7   Press **Backspace** until the value and the Description keyword are removed.

Step 8   Type the following command:

`Name`

Step 9   Enter a unique name for the Catalyst 1800 switch and press **Return**. For example, type **Cisco.company.com**.

Note   You do not need to enclose this designation with quotes, unless there are spaces within the name.

Step 10   Press **^P**. The previous command is recalled.

Step 11   Press **Backspace** until the value and the Name keyword are removed.

Step 12   Type the following command:

`Location`

Step 13   Enter the location of the Catalyst 1800 switch and press **Return**.

For example, type **"Bldg. 9 Anytown"**.

Step 14   Press **^P**. The previous command is recalled.

Step 15   Press **Backspace** until the value and the Location keyword are removed.

Step 16   Type the following command:

```
Contact
```

Step 17   Enter contact information and press **Return**.

For example, type **"Technical Support"**.

The system information configuration is finished.

Exiting the Console Interface

Type **Q** to exit the console interface. The Catalyst 1800 switch Password menu appears, followed by a password prompt:

```
Cisco Systems Catalyst 1800 Token Ring Switch




                                   Switch is Password Protected




       Password:
```