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.

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.

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. It then presents you with the next screen.

Therefore, you could also enter the command in the preceeding 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, supplying additional characters.

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 supply the unique final one. In the preceeding example, enter the first command letters (`c i 1 a`), then supply the unique value for the address (**155.243.251.4**). The command would appear as follows:

```
c i 1 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 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.

However, 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.

Figure 2-1   On-Line Help Screen

```
              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 (Figure 2-2). The system displays the following prompt:

```
Enter Password
```

Figure 2-2   Catalyst 1800 Password Menu

```
        Cisco Systems Catalyst 1800 Token Ring Switch




                Switch is Password Protected




Password: public
```

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. The four submenus (Configure, Monitor, Security, System) listed on this menu contain industry standard network management parameters. This menu is the gateway to configuring the software, monitoring performance, setting security parameters, updating the system software and parameters, accessing on-line help, and exiting the system, which returns you to the Password menu.

Figure 2-3   **Catalyst 1800 Main Menu**

```
Cisco Systems Catalyst 1800 Token Ring Switch


                    Select From

        Configure
        Monitor
        Security
        System
        Quit
        Help
```

`Catalyst 1800>`

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 (see Figure 2-3).

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 (see Figure 2-4) 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.

Figure 2-4   **Configuring IP Parameters Menu**

```
        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*
where *xxx.xxx.xxx.xxx* is the IP address that you have assigned to the Catalyst 1800 switch.

The IP Parameters Display menu appears (see Figure 2-5).

Figure 2-5   **IP Parameters Display Menu**

```
      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*
where *xxx.xxx.xxx.xxx* is the standard your organization uses for its IP subnet mask.

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
```
where *xxx.xxx.xxx.xxx* is the IP Address of the default gateway device on this 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:

```
Configure Logical 1
```

The Configuring Logical Segments menu appears for port 1(see Figure 2-6). If you are configuring a different port, type its number.

Figure 2-6   Configuring Logical Segments Menu

```
        Cisco Systems Catalyst 1800 Token Ring Switch


                       Select From

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




Catalyst 1800>Configure Logical 1
```

Step 2 Type **r**.

The Logical Segment Configuration menu appears (see Figure 2-7).

Figure 2-7   Logical Segment Configuration Menu

```
                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:

Configure System

Step 2   The Configure System Information menu appears (see Figure 2-8).

Figure 2-8   Configure System Information Menu

```
            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:

con sys display

The System Information menu appears (see Figure 2-9).

Figure 2-9   System Information Menu

```
              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 Password screen reappears (see Figure 2-2).