

Administering the Switch

This chapter describes how to perform various administrative tasks on Catalyst 5000, 4000, 2948G, 2926G, and 2926 series switches.

Note For complete syntax and usage information for the commands used in this chapter, refer to the *Command Reference* for your switch.

This chapter consists of these sections:

- Setting the System Name and System Prompt on page 14-1
- Setting the System Contact and Location on page 14-3
- Setting the System Clock on page 14-4
- Creating a Login Banner on page 14-4
- Creating and Using Command Aliases on page 14-5
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Setting the System Name and System Prompt

The system name on the switch is a user-configurable string used to identify the device. The default configuration has no system name configured.

If you do not manually configure a system name, the system name is obtained through DNS if you configure the switch as follows:

- Assign the sc0 interface an IP address that is mapped to the switch name on the DNS server
- Enable DNS on the switch
- Specify at least one valid DNS server on the switch

If the DNS lookup is successful, the DNS host name of the switch is configured as the system name of the switch and is saved in NVRAM (the domain name is removed).

If you have not configured a system prompt, the first 20 characters of the system name are used as the system prompt (a greater-than symbol [>] is appended). The prompt is updated whenever the system name changes, unless the prompt is manually configured using the **set prompt** command.

The switch performs a DNS lookup for the system name whenever one of the following occurs:

- The switch is initialized (power on or reset)
- You configure the IP address on the sc0 interface using the CLI or Simple Network Management Protocol (SNMP)
- You configure a route using the **set ip route** command
- You clear the system name using the **set system name** command
- You enable DNS or specify DNS servers

If the system name is user configured, no DNS lookup is performed.

Configuring a Static System Name and Prompt

These sections describe how to statically configure the system name and prompt:

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- Clearing the System Name on page 14-3

Configuring a Static System Name

To statically configure the system name, perform this task in privileged mode:

Task	Command
Statically set the system name.	set system name <i>name_string</i>

Note When you set the system name, the system name is used as the system prompt. You can override the prompt string with the **set prompt** command.

This example shows how to set the system name on the switch:

```
Console> (enable) set system name Catalyst 5000
System name set.
Catalyst 5000> (enable)
```

Configuring a Static System Prompt

To statically configure the system prompt, perform this task in privileged mode:

Task	Command
Statically set the system prompt.	set prompt <i>prompt_string</i>

This example shows how to statically configure the system prompt on the switch:

```
Console> (enable) set prompt Catalyst5500>
Catalyst5500> (enable)
```

Clearing the System Name

To clear the system name, perform this task in privileged mode:

Task	Command
Clear the system name.	set system name

This example shows how to clear the system name:

```
Console> (enable) set system name
System name cleared.
Console> (enable)
```

Setting the System Contact and Location

You can specify the system contact and location to help you with resource management tasks.

To specify the system contact and location, perform this task in privileged mode:

Task	Command
Step 1 Set the system contact.	set system contact [<i>contact_string</i>]
Step 2 Set the system location.	set system location [<i>location_string</i>]
Step 3 Verify the global system information.	show system

This example shows how to specify the system contact and location and verify the configuration:

```
Catalyst 5000> (enable) set system contact sysadmin@corp.com
System contact set.
Catalyst 5000> (enable) set system location Sunnyvale CA
System location set.
Catalyst 5000> (enable) show system
PS1-Status PS2-Status Fan-Status Temp-Alarm Sys-Status Uptime d,h:m:s Logout
-----
ok          none          ok           off          ok           0,04:04:07    20 min

PS1-Type   PS2-Type   Modem   Baud   Traffic Peak Peak-Time
-----
other     none      disable 9600   0%     0% Tue Jun 23 1998, 16:51:36

System Name           System Location           System Contact
-----
Catalyst 5000         Sunnyvale CA              sysadmin@corp.com
Catalyst 5000> (enable)
```

Setting the System Clock

Note You can configure the switch to obtain the time and date using the Network Time Protocol (NTP). For information on configuring NTP, see Chapter 24, “Configuring NTP.”

To set the system clock, perform this task in privileged mode:

Task	Command
Step 1 Set the system clock.	set time [<i>day_of_week</i>] [<i>mm/dd/yy</i>] [<i>hh:mm:ss</i>]
Step 2 Display the current date and time.	show time

This example shows how to set the system clock and display the current date and time:

```

Console> (enable) set time Mon 06/15/98 12:30:00
Mon Jun 15 1998, 12:30:00
Console> (enable) show time
Mon Jun 15 1998, 12:30:02
Console> (enable)

```

Creating a Login Banner

You can create a single or multiline message banner that appears on the screen when someone logs in to the switch. The first character following the **motd** keyword is used to delimit the beginning and end of the banner text. Characters following the ending delimiter are discarded. After entering the ending delimiter, press **Return**. The banner must be fewer than 255 characters.

Configuring a Login Banner

To configure a login banner, perform this task in privileged mode:

Task	Command
Step 1 Enter the message of the day.	set banner motd <i>c message_of_the_day c</i>
Step 2 Display the login banner by logging out and logging back into the switch.	

This example shows how to set the login banner on the switch using the # symbol as the beginning and ending delimiter:

```

Console> (enable) set banner motd #
Welcome to the Catalyst 5000 Switch!
Unauthorized access prohibited.
Contact sysadmin@corp.com for access.
#
MOTD banner set
Console> (enable)

```

Clearing the Login Banner

To clear the login banner, perform this task in privileged mode:

Task	Command
Clear the message of the day.	set banner motd cc

This example shows how to clear the login banner:

```
Console> (enable) set banner motd ##
MOTD banner cleared
Console> (enable)
```

Creating and Using Command Aliases

You can use the **set alias** command to define command aliases (shorthand versions of commands) for frequently used or long and complex commands. Command aliases can save you time and can help prevent typing errors when you are configuring or monitoring the switch.

The *name* argument defines the command alias. The *command* and *parameter* arguments define the command to enter when the command alias is entered at the command line.

To define a command alias on the switch, perform this task in privileged mode:

Task	Command
Step 1 Define a command alias on the switch.	set alias name command [parameter] [parameter]
Step 2 Verify the currently defined command aliases.	show alias [name]

This example shows how to define two command aliases, **sm8**, that issues the **show module 8** command, and **sp8**, that issues the **show port 8** command. This example also shows how to verify the currently defined command aliases and what happens when you enter the command aliases at the command line:

```
Console> (enable) set alias sm8 show module 8
Command alias added.
Console> (enable) set alias sp8 show port 8
Command alias added.
Console> (enable) show alias
sm8          show module 8
sp8          show port 8
Console> (enable) sm8
Mod Module-Name      Ports Module-Type      Model      Serial-Num Status
-----
8                    2      DS3 Dual PHY ATM      WS-X5166   007243262 ok

Mod MAC-Address(es)      Hw      Fw      Sw
-----
8  00-60-2f-45-26-2f      2.0     1.3     51.1(103)
Console> (enable) sp8
Port Name              Status      Vlan      Level Duplex Speed Type
-----
8/1                    notconnect trunk      normal full   45 DS3 ATM
8/2                    notconnect trunk      normal full   45 DS3 ATM

Port  ifIndex
-----
8/1   285
8/2   286
```

Use 'session' command to see ATM counters.

```
Last-Time-Cleared
-----
Thu Sep 10 1998, 16:56:08
Console> (enable)
```

Creating and Using IP Aliases

You can use the **set ip alias** command to define textual aliases for IP addresses. IP aliases can make it easier to refer to other network devices when using **ping**, **telnet**, and other commands, even when Domain Name System (DNS) is not enabled.

The *name* argument defines the IP alias. The *ip_addr* argument defines the IP address to which the name refers.

To define an IP alias on the switch, perform this task in privileged mode:

Task	Command
Step 1 Define an IP alias on the switch.	set ip alias name ip_addr
Step 2 Verify the currently defined IP aliases.	show ip alias [name]

This example shows how to define two IP aliases, **sparc**, which refers to IP address 172.20.52.3, and **cat5509**, which refers to IP address 172.20.52.71. This example also shows how to verify the currently defined IP aliases and what happens when you use the IP aliases with the **ping** command:

```
Console> (enable) set ip alias sparc 172.20.52.3
IP alias added.
Console> (enable) set ip alias cat5509 172.20.52.71
IP alias added.
Console> (enable) show ip alias
default          0.0.0.0
sparc            172.20.52.3
cat5509          172.20.52.71
Console> (enable) ping sparc
sparc is alive
Console> (enable) ping cat5509
cat5509 is alive
Console> (enable)
```