Interface Access and System Information

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Overview

This chapter describes how to:

■ View and modify the configuration for switch interface access
■ Use the CLI kill command to terminate a remote session
■ View and modify switch system information

For help on how to actually use the interfaces built into the switch, refer to:

■ Chapter 3, “Using the Menu Interface”
■ Chapter 4, “Using the Command Line Interface (CLI)”
■ Chapter 5, “Using the ProCurve Web Browser Interface”

Why Configure Interface Access and System Information? The interface access features in the switch operate properly by default. However, you can modify or disable access features to suit your particular needs. Similarly, you can choose to leave the system information parameters at their default settings. However, modifying these parameters can help you to more easily distinguish one device from another in your network.
Interface Access: Console/Serial Link, Web, and Inbound Telnet

Interface Access Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Default</th>
<th>Menu</th>
<th>CLI</th>
<th>Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivity Time</td>
<td>0 Minutes (disabled)</td>
<td>page 7-4</td>
<td>page 7-9</td>
<td>—</td>
</tr>
<tr>
<td>Inbound Telnet Access</td>
<td>Enabled</td>
<td>page 7-4</td>
<td>page 7-5</td>
<td>—</td>
</tr>
<tr>
<td>Outbound Telnet Access</td>
<td>n/a</td>
<td>—</td>
<td>page 7-6</td>
<td>—</td>
</tr>
<tr>
<td>Web Browser Interface Access</td>
<td>Enabled</td>
<td>page 7-4</td>
<td>page 7-8</td>
<td>—</td>
</tr>
<tr>
<td>Terminal type</td>
<td>VT-100</td>
<td>—</td>
<td>page 7-9</td>
<td>—</td>
</tr>
<tr>
<td>Event Log event types to list (Displayed Events)</td>
<td>All</td>
<td>—</td>
<td>page 7-9</td>
<td>—</td>
</tr>
<tr>
<td>Baud Rate</td>
<td>Speed Sense</td>
<td>—</td>
<td>page 7-9</td>
<td>—</td>
</tr>
<tr>
<td>Flow Control</td>
<td>XON/XOFF</td>
<td>—</td>
<td>page 7-9</td>
<td>—</td>
</tr>
</tbody>
</table>

In most cases, the default configuration is acceptable for standard operation.

**Note**

Basic switch security is through passwords. You can gain additional security by using the security features described in the Access Security Guide for your switch. You can also simply block unauthorized access via the web browser interface or Telnet (as described in this section) and installing the switch in a locked environment.
Menu: Modifying the Interface Access

The menu interface enables you to modify these parameters:

- Inactivity Timeout
- Inbound Telnet Enabled
- Web Agent Enabled

To Access the Interface Access Parameters:

1. From the Main Menu, Select...
   - 2. Switch Configuration...
     - 1. System Information

---

### Figure 7-1. The Default Interface Access Parameters Available in the Menu Interface

2. Press **[E]** (for **Edit**). The cursor moves to the **System Name** field.

3. Use the arrow keys (**↑**, **↓**, **←**, **→**) to move to the parameters you want to change.

   Refer to the online help provided with this screen for further information on configuration options for these features.

4. When you have finished making changes to the above parameters, press **[Enter]**, then press **[S]** (for **Save**).
CLI: Modifying the Interface Access

Interface Access Commands Used in This Section

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>show console</td>
<td>below</td>
</tr>
<tr>
<td>[no] telnet-server</td>
<td>below</td>
</tr>
<tr>
<td>[no] web-management</td>
<td>page 7-8</td>
</tr>
<tr>
<td>console</td>
<td>page 7-9</td>
</tr>
</tbody>
</table>

Listing the Current Console/Serial Link Configuration. This command lists the current interface access parameter settings.

**Syntax:** show console

This example shows the switch’s default console/serial configuration.

```
ProCurve> show console
Console/Serial Link...
  Inbound Telnet Enabled : Yes
  Web Agent Enabled : Yes
  Terminal Type : VT100
  Screen Refresh Interval (sec) : 3
  Displayed Events : ALL
  Baud Rate : speed-sense
  Flow Control : XON/XOFF
  Session Inactivity Time (min) : 0

Figure 7-2. Listing of Show Console Command
```

Reconfigure Inbound Telnet Access. In the default configuration, inbound Telnet access is enabled.
Syntax:  [no] telnet-server [listen <oobm | data | both>]

Enables or disables inbound Telnet access on a switch.

Use the no version of the command to disable inbound Telnet access.

The listen parameter is available only on switches that have a separate out-of-band management port. Values for this parameter are:

- oobm — inbound Telnet access is enabled only on the out-of-band management port.
- data — inbound Telnet access is enabled only on the data ports.
- both — inbound Telnet access is enabled on both the out-of-band management port and on the data ports. This is the default value.

Refer to Appendix I, “Network Out-of-Band Management” in this guide for more information on out-of-band management.

The listen parameter is not available on switches that do not have a separate out-of-band management port.

To disable inbound Telnet access:

ProCurve(config)# no telnet-server

To re-enable inbound Telnet access:

ProCurve(config)# telnet-server

Outbound Telnet to Another Device. This feature operates independently of the telnet-server status and enables you to Telnet to another device that has an IP address.
**Syntax:** telnet <ipv4-addr | ipv6-addr | hostname | switch-num> [oobm]

*Initiates an outbound telnet session to another network device. The destination can be specified as:*

- IPv4 address
- IPv6 address
- Hostname
- Stack number of a member switch (1-16) if the switch is a commander in a stack and stacking is enabled

*For switches that have a separate out-of-band management port, the oobm parameter specifies that the Telnet traffic will go out from the out-of-band management interface. If this parameter is not specified, the Telnet traffic goes out from the data interface. The oobm parameter is not available on switches that do not have a separate out-of-band management port. Refer to Appendix I, “Network Out-of-Band Management” in this guide for more information on out-of-band management.*

For example, if the host “Labswitch” is in the domain abc.com, you can enter the following command and the destination is resolved to “Labswitch.abc.com”.

    ProCurve(config)# telnet Labswitch

You can also enter the full domain name in the command:

    ProCurve(config)# telnet Labswitch.abc.com

You can use the **show telnet** command to display the resolved IP address.
Interface Access and System Information
Interface Access: Console/Serial Link, Web, and Inbound Telnet

<table>
<thead>
<tr>
<th>ProCurve(config)# show telnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telnet Activity</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Session : ** 1</td>
</tr>
<tr>
<td>Privilege: Manager</td>
</tr>
<tr>
<td>From : Console</td>
</tr>
<tr>
<td>To :</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Session : ** 2</td>
</tr>
<tr>
<td>Privilege: Manager</td>
</tr>
<tr>
<td>From : 12.13.14.10</td>
</tr>
<tr>
<td>To : 15.33.66.20</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Session : ** 3</td>
</tr>
<tr>
<td>Privilege: Operator</td>
</tr>
<tr>
<td>From : 2001:db7:5:0:203:4ff:fe0a:251</td>
</tr>
<tr>
<td>To : 2001:db7:5:0:203:4ff1:fd12</td>
</tr>
</tbody>
</table>

**Figure 7-3. Example of show telnet Command Displaying Resolved IP Addresses**

**Reconfigure Web Browser Access.** In the default configuration, web browser access is enabled.

**Syntax:** [no] web-management [listen <oobm | data | both>]

*Use the no version of the command to disable inbound HTTP access.*

*The listen parameter is available only on switches that have a separate out-of-band management port. Values for this parameter are:*

- **oobm** — inbound HTTP access is enabled only on the out-of-band management port.
- **data** — inbound HTTP access is enabled only on the data ports.
- **both** — inbound HTTP access is enabled on both the out-of-band management port and on the data ports. This is the default value.

*Refer to Appendix I, “Network Out-of-Band Management” in this guide for more information on out-of-band management.*

*The listen parameter is not available on switches that do not have a separate out-of-band management port.*

---

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To disable web browser access:

```
ProCurve(config)# no web-management
```

To re-enable web browser access:

```
ProCurve(config)# web-management
```

**Reconfigure the Console/Serial Link Settings.** You can reconfigure one or more console parameters with one console command.

**Syntax:** `console`

```
[terminal < vt100 | ansi | none >]
[screen-refresh < 1 | 3 | 5 | 10 | 20 | 30 | 45 | 60 >]
[baud-rate
  < speed-sense | 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 1155200 >]
[flow-control < xon/xoff | none >]
[inactivity-timer < 0 | 1 | 5 | 10 | 15 | 20 | 30 | 60 | 120 >]
[events <none | all | non-info | critical | debug]
[local-terminal <vt 100 | none | ansi>]
```

**Note**
If you change the Baud Rate or Flow Control settings for the switch, you should make the corresponding changes in your console access device. Otherwise, you may lose connectivity between the switch and your terminal emulator due to differences between the terminal and switch settings for these two parameters.

All console parameter changes except `events` and `inactivity-timer` require that you save the configuration with `write memory` and then execute `boot` before the new console configuration will take effect.

For example, to use one command to configure the switch with the following:

- VT100 operation
- 19,200 baud
- No flow control
- 10-minute inactivity time
- Critical log events

you would use the following command sequence:
Interface Access and System Information
Interface Access: Console/Serial Link, Web, and Inbound Telnet

ProCurve(config)# console terminal vt100 baud-rate 19200 flow-control none inactivity-timer 10 events critical
Command will take effect after saving configuration and reboot.
ProCurve(config)# write memory
ProCurve(config)# reload

The switch implements the Event Log change immediately. The switch implements the other console changes after executing write memory and reload.

Figure 7-4. Example of Executing the Console Command with Multiple Parameters

**Note**

When using redundant management, console settings, such as mode, flow-control and baud-rate, are the same on both management modules. There cannot be individual settings for each management module.

You can also execute a series of console commands and then save the configuration and boot the switch. For example:

```
ProCurve(config)# console baud-rate speed-sense
Command will take effect after saving configuration and reboot.
ProCurve(config)# console flow-control xon/xoff
Command will take effect after saving configuration and reboot.
ProCurve(config)# console inactivity-timer 0
Command will take effect after saving configuration and reboot.
ProCurve(config)# write memory
ProCurve(config)# reload
```

Figure 7-5. Example of Executing a Series of Console Commands
Denying Interface Access by Terminating Remote Management Sessions

The switch supports up to five management sessions. You can use `show ip ssh` to list the current management sessions, and `kill` to terminate a currently running remote session. (Kill does not terminate a Console session on the serial port, either through a direct connection or via a modem. It does not affect the console on the standby module.)

**Syntax:** `kill [<session-number>]

For example, if you are using the switch's serial port for a console session and want to terminate a currently active Telnet session, you would do the following:

```
ProCurve(config)# show ip ssh
SSH Enabled : Yes
IP Port Number : 22
Timeout (sec) : 120
Server Key Size [bits] : 512
Ses Type Source IP and Port
--- -------- -------------------
1  console
2  telnet
3  ssh  15.30.252.195:1531
4  inactive
5  inactive

ProCurve(config)# kill 2
ProCurve(config)# show ip ssh
SSH Enabled : Yes
IP Port Number : 22
Timeout (sec) : 120
Server Key Size [bits] : 512
Ses Type Source IP and Port
--- -------- -------------------
1  console
2  inactive
3  ssh  15.30.252.195:1531
4  inactive
5  inactive
```

Figure 7-6. Example of Using the “Kill” Command To Terminate a Remote Session
System Information

System Information Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Default</th>
<th>Menu</th>
<th>CLI</th>
<th>Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Name</td>
<td>switch product name</td>
<td>page</td>
<td>page</td>
<td>page</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-15</td>
<td>7-18</td>
</tr>
<tr>
<td>System Contact</td>
<td>n/a</td>
<td>page</td>
<td>page</td>
<td>page</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-15</td>
<td>7-18</td>
</tr>
<tr>
<td>System Location</td>
<td>n/a</td>
<td>page</td>
<td>page</td>
<td>page</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-15</td>
<td>7-18</td>
</tr>
<tr>
<td>MAC Age Time</td>
<td>300 seconds</td>
<td>page</td>
<td>page</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-17</td>
<td></td>
</tr>
<tr>
<td>Time Sync Method</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>See Chapter 9, “Time Protocols”.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Zone</td>
<td>0</td>
<td>page</td>
<td>page</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-17</td>
<td></td>
</tr>
<tr>
<td>Daylight Time Rule</td>
<td>None</td>
<td>page</td>
<td>page</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-13</td>
<td>7-17</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>January 1, 1990 at 00:00:00 at last power reset</td>
<td>—</td>
<td>page</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7-18</td>
<td></td>
</tr>
</tbody>
</table>

Configuring system information is optional, but recommended.

**System Name:** Using a unique name helps you to identify individual devices where you are using an SNMP network management tool such as ProCurve Manager.

**System Contact and Location:** This information is helpful for identifying the person administratively responsible for the switch and for identifying the locations of individual switches.

**MAC Age Time:** The number of seconds a MAC address the switch has learned remains in the switch’s address table before being aged out (deleted). Aging out occurs when there has been no traffic from the device belonging to that MAC address for the configured interval.

**Time Sync Method:** Selects the method (TimeP or SNTP) the switch will use for time synchronization. For more on this topic, refer to Chapter 9, “Time Protocols”.
**Time Zone:** The number of minutes your time zone location is to the West (+) or East (-) of Coordinated Universal Time (formerly GMT). The default 0 means no time zone is configured. For example, the time zone for Berlin, Germany is + 60 (minutes) and the time zone for Vancouver, Canada is - 480 (minutes).

**Daylight Time Rule:** Specifies the daylight savings time rule to apply for your location. The default is **None**. (For more on this topic, refer to Appendix D, “Daylight Savings Time on ProCurve Switches.”)

**Time:** Used in the CLI to specify the time of day, the date, and other system parameters.

---

**Menu: Viewing and Configuring System Information**

To access the system information parameters:

1. From the Main Menu, Select...

   2. **Switch Configuration**...

      1. **System Information**

---

**Figure 7-7. The System Information Configuration Screen (Default Values)**

---

**Note**

To help simplify administration, it is recommended that you configure **System Name** to a character string that is meaningful within your system.
2. Press [E] (for Edit). The cursor moves to the **System Name** field.

3. Refer to the online help provided with this screen for further information on configuration options for these features.

4. When you have finished making changes to the above parameters, press [Enter], then press [S] (for **Save**) and return to the Main Menu.

**CLI: Viewing and Configuring System Information**

**System Information Commands Used in This Section**

<table>
<thead>
<tr>
<th>Command</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>show system information</td>
<td>below</td>
</tr>
<tr>
<td>hostname</td>
<td>below</td>
</tr>
<tr>
<td>snmp-server [contact] [location]</td>
<td>below</td>
</tr>
<tr>
<td>mac-age-time time</td>
<td>page 7-17</td>
</tr>
<tr>
<td>timezone</td>
<td>page 7-17</td>
</tr>
<tr>
<td>daylight-time-rule</td>
<td>page 7-17</td>
</tr>
<tr>
<td>date time</td>
<td>page 7-18</td>
</tr>
</tbody>
</table>

**Listing the Current System Information.** This command lists the current system information settings.

**Syntax:** `show system information`

This example shows the switch’s default console configuration.

```
ProCurve# show system information

Status and Counters - General System Information

System Name : ProCurve
System Contact :
System Location :

MAC Age Time (sec) : 300
Time Zone : 0
Daylight Time Rule : None
```

**Figure 7-8. Example of CLI System Information Listing**
Configure a System Name, Contact, and Location for the Switch. To help distinguish one switch from another, configure a plain-language identity for the switch.

**Syntax:**

```
hostname < name-string >
```

```
snmp-server [contact <system-contact>] [location <system-location>]
```

Each field allows up to 255 characters.

For example, to name the switch “Blue” with “Next-4474” as the system contact, and “North-Data-Room” as the location:

```
ProCurve(config)# hostname Blue
Blue(config)# snmp-server contact Ext-4474 location North-Data-Room
```

---

![Image](image-url)

**Figure 7-9. System Information Listing After Executing the Preceding Commands**

The menu interface will only display up to 47 characters although you can specify a name up to 255 characters in length. A message beginning with “+” displays if the name exceeds 47 characters. You can use the CLI `show running`, `show config`, or `show system information` commands to see the complete text. The menu interface is shown in Figure 7-10.
Figure 7-10. Menu Screen Showing System Information

The Web Browser interface also allows you to enter a maximum of 255 characters. You can view all the characters by using the cursor to scroll through the field.
Reconfigure the MAC Age Time for Learned MAC Addresses. This command corresponds to the MAC Age Interval in the menu interface, and is expressed in seconds.

**Syntax:** `mac-age-time < 10 - 1000000 > (seconds)`

Allows you to set the MAC address table’s **age-out** interval. An address is aged out if the switch does not receive traffic from that MAC address for the **age-out** interval, measured in seconds. Default: 300 seconds.

For example, to configure the age time to seven minutes:

```
ProCurve(config)# mac-age-time 420
```

Configure the Time Zone and Daylight Time Rule. These commands:

- Set the time zone you want to use
- Define the daylight time rule for keeping the correct time when daylight-saving-time shifts occur.

**Syntax:**

```
time timezone < -720 - 840 >
time daylight-time-rule < none | alaska | continental-us-and-canada | middle-europe-and-portugal | southern-hemisphere | western-europe | user-defined>
```

East of the 0 meridian, the sign is “+”. West of the 0 meridian, the sign is “-”.

---

**Figure 7-11. System Location and System Contact in the Web Browser**
For example, the time zone setting for Berlin, Germany is +60 (zone +1, or 60 minutes), and the time zone setting for Vancouver, Canada is -480 (zone -8, or -480 minutes). To configure the time zone and daylight time rule for Vancouver, Canada:

```
ProCurve(config)# time timezone -480
daylight-time-rule continental-us-and-canada
```

**Configure the Time and Date.** The switch uses the time command to configure both the time of day and the date. Also, executing time without parameters lists the switch’s time of day and date. Note that the CLI uses a 24-hour clock scheme; that is, hour (hh) values from 1 p.m. to midnight are input as 13 - 24, respectively.

**Syntax:** `time [ hh:mm [:ss ]] [ mm/dd/[ yy] yy ]`

For example, to set the switch to 9:45 a.m. on November 17, 2002:

```
ProCurve(config)# time 9:45 11/17/02
```

**Note**

Executing `reload` or `boot` resets the time and date to their default startup values.

**Web: Configuring System Parameters**

In the web browser interface, you can enter the following system information:

- System Name
- System Location
- System Contact

For access to the MAC Age Interval and the Time parameters, use the menu interface or the CLI.

**Configure System Parameters in the Web Browser Interface.**

1. Click on the **Configuration** tab.
2. Click on **[System Info]**.
3. Enter the data you want in the displayed fields.
4. Implement your new data by clicking on **[Apply Changes]**.

To access the web-based help provided for the switch, click on [?] in the web browser screen.