

## LSS2200-8P

Managed Layer 2 Gigabit Ethernet PoE++ Switch

(8) 10/100/1000Base-T IEEE 802.3bt + (2) 10G/5G/2.5G/1G SFP+ Multi-Gig Slots

CLI Reference

Part Number 33862  
Revision C June 2023

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## Revision History

Date	Rev.	Comments
2/27/23	B	FW v 1.6.0.0R6: Add ConsoleFlow On-premise support and add File Transfer support. Add the ability to install a custom SSL certificate and private key via CLI commands. Add note that Backup and Restore file format is a plain text file in CLI command format. Change Digital IO command syntax from "system DIO1" to "system DigitalIO 1". Allow spaces in PoE schedule profile names (use quotes around the name). Update NFC support in CLI. Add notes on upgrading from v1.5.0.0R16 to v1.6.0.0R6.
6/6/23	C	FW v 1.7.0.0R5: <b>1)</b> Removed the global "lldp-med" command. The LLDP service can be activated or deactivated globally, which also enables or disables LLDP-Med; the timing parameters are still set globally. LLDP-Med is then enabled or disabled per port in the respective interface view. <b>Note:</b> Any backup files made prior to 1.7.0.0 that enable LLDP on a port will need the global "lldp" command to be added. <b>2)</b> Added "ignore peer-dns-server" command to the VLAN interface configuration view and to the "show interface vlan <vid>" response. <b>3)</b> Added notes regarding firmware upgrades. <b>4)</b> Updated OpenWRT.

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# 1. Introduction

## Product Description

The LSS2200-8P is a managed Layer 2+ Gigabit Ethernet switch offering eight (8) 1Gbase-T interfaces with full IEEE 802.3bt 90W support, two (2) 10/5/2.5/1Gbase-T multi-gigabit SFP+ slots, two (2) programmable Digital Input/Outputs with 12V power output, and one (1) RJ-45 console port. The switch features Near Field Communications (NFC) support for simplified transfer of pre-configuration onto units prior to powering up and dispatching to install sites through the LSS2200-8P Mobile App.

The LSS2200-8P switch offers 720W total PoE budget for powering LED lighting, high-powered security and surveillance cameras and other IP devices. Its small footprint and hardened temperature rating make it ideal for powering IP devices distributed throughout a building. The LSS2200-8P also incorporates Bluetooth Low Energy (BLE) for wireless CLI without requiring physical access to troubleshoot, configure or reset the device. Cloud management and APIs for integrating with building management systems make the switch very easy to deploy and manage.

## About This Manual

This manual gives specific information on how to operate and use the management functions of the switch via its Command Line Interface (CLI). This manual is intended for use by network administrators who are responsible for operating and maintaining network equipment; it assumes a strong knowledge of Ethernet switch functions, the RS-232 Console, Internet Protocol (IP), and Telnet protocol. Note that this manual may provide links to third party websites for which Lantronix is not responsible.

## Related Manuals

- LSS2200-8P Quick Start Guide, 33859
- LSS2200-8P Install Guide, 33860
- LSS2200-8P Web User Guide, 33861
- LSS2200-8P CLI Reference, 33862
- LSS2200-8P REST API User Guide, 33863
- LSS2200-8P MobileApp User Guide, 33870
- Release Notes (revision specific)

## Safety Information

See the LSS2200-8P Install Guide for additional safety information.

## 2. 2. Initial Switch Configuration

### Connect and Log In to the Switch Using the CLI

Access to the Switch is protected by a logon security system. You can log in to the switch with the user name and password. After a failed logon attempt, the system displays *Wrong username or password!*. After you log on, the system monitors the interface for periods of inactivity.

1. Use the provided Cisco Blue RJ-45 to DB9 cable to connect a terminal or PC/terminal emulator to the switch port to access the CLI.
2. Attach the other end of the DB-9 cable to a PC running Telnet or a terminal emulation program such as HyperTerminal or Tera Term.
3. Use Console port settings Baud rate: 115200bps, Data bit: 8, Parity: None, Stop bit: 1 Flow control: none. Telnet Port 23. SSH Port 22.
4. Enter the CLI default user name `admin` and password `ltx-admin`.
5. After a successful initial login, you are prompted to change the password. Note that all fields are required
6. Perform initial switch configuration using the CLI (Command Line Interface).

## 3. 3. Command Line Interface (CLI) Operation

The command-line interface (CLI) is a text-based interface. You can access the CLI via either a direct serial connection to the device or a Telnet session

### Supported User Groups

The set of privilege levels includes:

**readonly** : user can only use show commands to view data; cannot perform config commands.

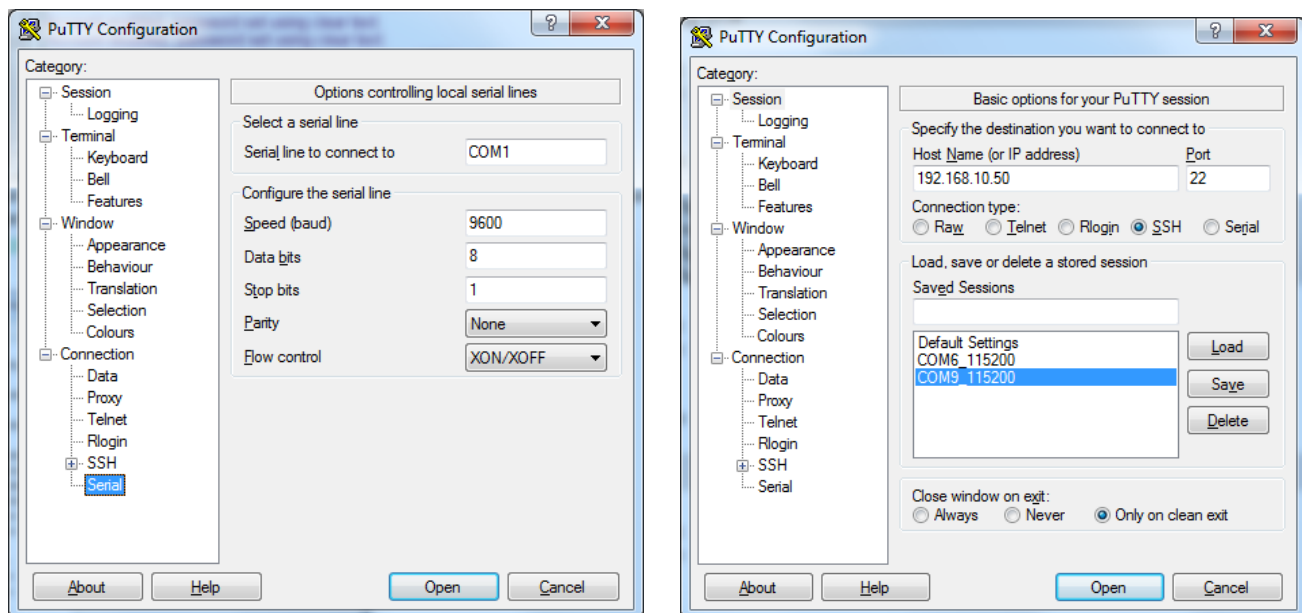
**Config** : user can perform show commands to view data and perform config commands to set parameters.

**Admin** : user has full access to any and all CLI commands.

See the Management > Users page for more information on setting user privilege levels.

### PuTTY Settings

Speed (baud): 115200, Data bits: 8, Stop bits: 1, Parity: None, Flow control: XON/XOFF.



## Login Procedure

```
LSS2200-8P login: admin <Enter>
LSS2200-8P login: admin-ltrx <Enter>
--: LSS2200-8P :--
```

**Note:** Wait for the command prompt. After a successful initial login, a prompt displays to change the password.

```
Password:
--: EOS :--

*** Password change required ***
New password:
Confirm password:
Password change succeeded. Please login again.
Please press Enter to activate this console.

LSS2200-8P # exit
Please press Enter to activate this console.

LSS2200-8P # login:
Login timed out Please press Enter to activate this console.
```

## CLI Command Modes

The CLI command modes are Exec mode, Config mode, Config Admin mode, and Interface Config modes. Each mode has its own prompt and set of available CLI commands, as described in the following sections.

**Note:** When entering a field with a space in the name, always quote the field.

After initial login, you should create an account for one or more personalized user names. It is recommended to create at least one other account in the “admin” group, then verify the ability to login to that account, and then delete the default “admin” user name.

## CLI Controls

### Using the ? and <tab> Functions

The CLI is flexible in that it will accept global commands from anywhere. So if you run a spanning tree command from the vlan path, it changes directories to where the spanning tree command was run. This is why there is a difference between using ? and <Tab>.

While in a VLAN interface, pressing ? shows the VLAN interface specific commands, and pressing <tab> shows the global commands. For example:

```
LSS2200-8P (config-vlan-if)# spanning-tree max-age 25
LSS2200-8P (config)#
```

Entering a “?” shows the commands that can only be run from that path:

**Output with ? command:** 22 commands

```
LSS2200-8P (config)# interface 10GigabitEthernet ½
LSS2200-8P (config-if)# ?
auto-negotiate      Enable Auto-negotiate the switch port
description         Update the switch port description
duplex              Update the switch port's duplex
enable              Enable the switch port
end                 Go back to EXEC View
exit                Exit from interface configuration mode
flow-control        Update the switch port's flow control
ip                  IP Configuration
jumbo-frame         Enable Jumbo-Frame on switch port
lldp                Configure LLDP
lldp-med            Enables LLDP-MED on the interface
loop-detect         Loop Detect Configuration
monitor             Monitoring different system events
no                  Negate a command or set its defaults
poe                 Enable to configure Power over Ethernet
port-security       Enable port security for the port
pvlan               Set PVLAN membership
qos                 QoS configuration for port
sfp-mode            Update the switch port's sfp mode
spanning-tree       Spanning tree port configuration
speed               Update the switch port's speed
switchport          Switching mode characteristics
```

Entering a “<Tab>” shows the commands that can only be run from that path, plus the global commands that can be run from that path. The global commands are at this path:

**Output with <tab> command:** 41 commands

```
LSS2200-8P (config-if)# <tab>
admin          aging-time    alarm        auto-negotiate  ble          clock         consoleflow
description    do            duplex        enable          end          exit          flow-control
interface      ip            jumbo-frame  lldp            lldp-med     logging       loop-detect
lpm            monitor       nfc           no              ntp          poe           port-security
pvlan          qos           rest-server   route           sfp-mode     snmp          snmptrap
spanning-tree speed         start         switchport      system       telnet
LSS2200-8P (config-if)#
```



## CLI Command Messages

### CLI Timeout Message

The CLI session times out after 10 minutes of inactivity.

```
LSS2200-8P (config-if)#  
Warning: Idle timeout. The session will be closed.  
Please press Enter to activate this console.
```

### CLI Syntax Error Message

```
LSS2200-8P (config)# interface  
Syntax Error: Incomplete Command  
LSS2200-8P (config)#
```

### CLI Illegal Parameter Message

```
LSS2200-8P (config-admin)# firmware verify ftp:  
Syntax error: Illegal parameter  
LSS2200-8P (config-admin)#
```

### CLI Login KEX algorithm Message

**Message:** *TTSSH unknown KEX algorithm: 9hicag-hellman-group1-sha1*

Meaning: Key Exchange (KEX) Method Names do not match.

Recovery: **1.** Click OK to clear the message dialog. **2.** Try logging in again with the same app (Tera Term). **3.** Try a different connection service. **4.** Try a different app to log in (PuTTY, HyperTerminal, HYPERACCESS, Windows Terminal).

## CLI Commands

### Exec Mode Commands (default view)

The CLI starts up mode in Exec mode. To show the available Exec mode commands type a ? (question mark) and hit Enter. To show the available CLI commands in Exec mode:

```
LSS2200-8P # ?
!           Comments
alarm      Actions for alarm conditions
clear      Clear or reset status or conditions
clock      Configure time settings
configure  Enter configuration mode
copy       copy system configuration
debug      Debug led
exit       Exit from the CLI
nslookup   nslookup command for network diagnostics
ping       Ping command for network diagnostics
reload     Rebooting or defaulting the device
show       show information
ssh        SSH for secure, encrypted connection
telnet     telnet to transfer data in plain text.
Traceroute Traceroute command for network diagnostics
who        Show logged in users
```

```
LSS2200-8P #
```

Command: **!**  
 Description: Comments  
 Mode: Exec mode  
 Parameters: Arguments ignored comment text  
 Example:

```
LSS2200-8P # !
Arguments ignored comment text
<cr>

LSS2200-8P #
```

Command: **alarm**  
 Description: Actions for alarm conditions  
 Mode: Exec mode  
 Parameters: mute Silence an active alarm notification  
 unmute Clear the muting of an active alarm notification  
 Arguments ignored comment text  
 Alarm Name The name of the alarm, Tab to complete/list

## Example:

```
LSS2200-8P # alarm mute 10GigabitEthernet-1/2-Temperature-high-alarm
LSS2200-8P # alarm unmute CPU-Temperature
LSS2200-8P # alarm mute <tab>
LSS2200-8P # alarm mute
10GigabitEthernet-1/1-Temperature-high-alarm          10GigabitEthernet-1/1-Temperature-low-alarm
10GigabitEthernet-1/1-Temperature-high-warning        10GigabitEthernet-1/1-Temperature-low-warning
10GigabitEthernet-1/1-Voltage-high-alarm             10GigabitEthernet-1/1-Voltage-low-alarm
10GigabitEthernet-1/1-Voltage-high-warning           10GigabitEthernet-1/1-Voltage-low-warning
10GigabitEthernet-1/1-Bias-high-alarm                 10GigabitEthernet-1/1-Bias-low-alarm
10GigabitEthernet-1/1-Bias-high-warning              10GigabitEthernet-1/1-Bias-low-warning
10GigabitEthernet-1/1-Tx-Power-high-alarm            10GigabitEthernet-1/1-Tx-Power-low-alarm
10GigabitEthernet-1/1-Tx-Power-high-warning          10GigabitEthernet-1/1-Tx-Power-low-warning
10GigabitEthernet-1/1-Rx-Power-high-alarm            10GigabitEthernet-1/1-Rx-Power-low-alarm
10GigabitEthernet-1/1-Rx-Power-high-warning          10GigabitEthernet-1/1-Rx-Power-low-warning
10GigabitEthernet-1/2-Temperature-high-alarm         10GigabitEthernet-1/2-Temperature-low-alarm
10GigabitEthernet-1/2-Temperature-high-warning       10GigabitEthernet-1/2-Temperature-low-warning
10GigabitEthernet-1/2-Voltage-high-alarm             10GigabitEthernet-1/2-Voltage-low-alarm
10GigabitEthernet-1/2-Voltage-high-warning           10GigabitEthernet-1/2-Voltage-low-warning
10GigabitEthernet-1/2-Bias-high-alarm                 10GigabitEthernet-1/2-Bias-low-alarm
10GigabitEthernet-1/2-Bias-high-warning              10GigabitEthernet-1/2-Bias-low-warning
10GigabitEthernet-1/2-Tx-Power-high-alarm            10GigabitEthernet-1/2-Tx-Power-low-alarm
10GigabitEthernet-1/2-Tx-Power-high-warning          10GigabitEthernet-1/2-Tx-Power-low-warning
10GigabitEthernet-1/2-Rx-Power-high-alarm            10GigabitEthernet-1/2-Rx-Power-low-alarm
10GigabitEthernet-1/2-Rx-Power-high-warning          10GigabitEthernet-1/2-Rx-Power-low-warning
loop-shutdown-GigabitEthernet-1/1                   loop-shutdown-GigabitEthernet-1/2
loop-shutdown-GigabitEthernet-1/3                   loop-shutdown-GigabitEthernet-1/4
loop-shutdown-GigabitEthernet-1/5                   loop-shutdown-GigabitEthernet-1/6
loop-shutdown-GigabitEthernet-1/7                   loop-shutdown-GigabitEthernet-1/8
loop-shutdown-10GigabitEthernet-1/1                 loop-shutdown-10GigabitEthernet-1/2
port-security-GigabitEthernet-1/1-shutdown          port-security-GigabitEthernet-1/1-limit-reached
port-security-GigabitEthernet-1/2-shutdown          port-security-GigabitEthernet-1/2-limit-reached
port-security-GigabitEthernet-1/3-shutdown          port-security-GigabitEthernet-1/3-limit-reached
port-security-GigabitEthernet-1/4-shutdown          port-security-GigabitEthernet-1/4-limit-reached
port-security-GigabitEthernet-1/5-shutdown          port-security-GigabitEthernet-1/5-limit-reached
port-security-GigabitEthernet-1/6-shutdown          port-security-GigabitEthernet-1/6-limit-reached
port-security-GigabitEthernet-1/7-shutdown          port-security-GigabitEthernet-1/7-limit-reached
port-security-GigabitEthernet-1/8-shutdown          port-security-GigabitEthernet-1/8-limit-reached
port-security-10GigabitEthernet-1/1-shutdown        port-security-10GigabitEthernet-1/1-limit-reached
port-security-10GigabitEthernet-1/2-shutdown        port-security-10GigabitEthernet-1/2-limit-reached
CPU-Temperature
LSS2200-8P #
```

**Command:** **clear**

Description: Clear or reset status or conditions

Mode: Exec mode

Parameters:

ip	Clear IP Configuration
lldp	Clear LLDP counters
loop-detect	Clear loop detect statistics or condition
port-security	Clear port-security condition
reload	Abandon any previous reload in/at request
statistics	Clear the port statistics on the specified port
Arguments	ignored comment text
dhcp	Clear IP DHCP Configuration
server	Clear IP DHCP Server Configuration
binding	Clear IP DHCP Server bindings
server	DHCP Server Server Name
ip	Ipv4 address
mac	MAC address
String	DHCP Server Server Name
A.B.C.D	Ipv4 address
xx:xx:xx:xx:xx:xx	MAC address
counters	Resets the LLDP counters to 0
shutdown	Clear the active loop-detect shutdown condition on the specified port
shut-down	Enable a port that is shut down by the port-security module
statistics	Clear the loop-detect statistics on the specified port
port	Port type (GigabitEthernet/10GigabitEthernet)
Port number	The switch port number, Tab to complete/list
name	port type
name	The switch port type (GigabitEthernet/10GigabitEthernet)
name	GigabitEthernet (1/1 ½ 1/3 ¼ 1/5 1/6 1/7 1/8)
name	10GigabitEthernet (1/1 ½)

**Example:**

```
LSS2200-8P # clear ip dhcp server binding server BobB ip 1.2.3.4 mac 11:22:33:44:55:66
LSS2200-8P # clear lldp counters
LSS2200-8P # clear loop-detect
LSS2200-8P # clear port-security shut-down name 10GigabitEthernet ½
LSS2200-8P # clear statistics name GigabitEthernet ½
LSS2200-8P # clear reload
The previous reload request has been cancelled
LSS2200-8P #
```

**Messages:***Error: Pool with the name BobB does not exist**There was no previous reload request to cancel*

Command: **clock**

Description: Configure time settings. **Note** that changing the System Time requires Web UI or CLI users to log in again.

Mode: Exec mode

Parameters: set Configure system date and time  
time in HH:MM HH:MM format system time  
Date in YYYY-MM-DD format for system date

Example:

```
LSS2200-8P # clock set 11:30 2022-08-29
LSS2200-8P #
```

Messages:

*The system clock cannot be changed if NTP is active*

Command: **configure**

Description: Enter Configuration mode. See [Config Mode Commands](#) starting on page 58.

Mode: Exec mode

Parameters: terminal Configure from the terminal

Example:

```
LSS2200-8P # configure terminal
lss2200-8p (config)#
```

Command:	<b>copy</b>																																						
Description:	Copy system configuration.																																						
Mode:	Exec mode																																						
Syntax:	URI or (log (startup temp running default)-config) source of the copy (uri (startup running default)-config) – URI examples: [tftp://<address>/<file_name_or_path>]   [scp://<username>:<password>@<address>:/<file_path_and_name>]																																						
Parameters:	<table> <tr> <td>Web URI or (log (startup temp running default)-config)</td> <td>source of the copy (uri (startup running default)-config)</td> </tr> <tr> <td>log</td> <td>Log destination must be a URL</td> </tr> <tr> <td>startup</td> <td>startup-config</td> </tr> <tr> <td>temp</td> <td>temporary file</td> </tr> <tr> <td>running</td> <td>running-config</td> </tr> <tr> <td>default</td> <td>default-config</td> </tr> <tr> <td>startup-config</td> <td>Copy the startup-config file</td> </tr> <tr> <td>running-config</td> <td>Copy the running-config file</td> </tr> <tr> <td>default-config</td> <td>Copy the default-config file</td> </tr> <tr> <td>log</td> <td>log</td> </tr> <tr> <td>https:</td> <td>Copy using https secure protocol for source or destination</td> </tr> <tr> <td>http:</td> <td>Copy using http protocol for source or destination</td> </tr> <tr> <td>scp:</td> <td>Copy using secure copy protocol for source or destination</td> </tr> <tr> <td>tftp:</td> <td>Copy using trivial file transfer protocol for source or destination</td> </tr> <tr> <td>ftp:</td> <td>Copy using file transfer protocol for source or destination</td> </tr> <tr> <td>heading</td> <td>Include Heading with Date and Firmware Version (for future use)</td> </tr> <tr> <td>Date</td> <td>heading date (for future use)</td> </tr> <tr> <td>Firmware Version</td> <td>heading firmware version (for future use)</td> </tr> <tr> <td>Arguments</td> <td>ignored comment text</td> </tr> </table>	Web URI or (log (startup temp running default)-config)	source of the copy (uri (startup running default)-config)	log	Log destination must be a URL	startup	startup-config	temp	temporary file	running	running-config	default	default-config	startup-config	Copy the startup-config file	running-config	Copy the running-config file	default-config	Copy the default-config file	log	log	https:	Copy using https secure protocol for source or destination	http:	Copy using http protocol for source or destination	scp:	Copy using secure copy protocol for source or destination	tftp:	Copy using trivial file transfer protocol for source or destination	ftp:	Copy using file transfer protocol for source or destination	heading	Include Heading with Date and Firmware Version (for future use)	Date	heading date (for future use)	Firmware Version	heading firmware version (for future use)	Arguments	ignored comment text
Web URI or (log (startup temp running default)-config)	source of the copy (uri (startup running default)-config)																																						
log	Log destination must be a URL																																						
startup	startup-config																																						
temp	temporary file																																						
running	running-config																																						
default	default-config																																						
startup-config	Copy the startup-config file																																						
running-config	Copy the running-config file																																						
default-config	Copy the default-config file																																						
log	log																																						
https:	Copy using https secure protocol for source or destination																																						
http:	Copy using http protocol for source or destination																																						
scp:	Copy using secure copy protocol for source or destination																																						
tftp:	Copy using trivial file transfer protocol for source or destination																																						
ftp:	Copy using file transfer protocol for source or destination																																						
heading	Include Heading with Date and Firmware Version (for future use)																																						
Date	heading date (for future use)																																						
Firmware Version	heading firmware version (for future use)																																						
Arguments	ignored comment text																																						

## Example:

```
LSS2200-8P # copy running-config startup-config
Copy succeeded
LSS2200-8P # copy log ?
  Web URI or startup-config|temp-config|running-config destination of the copy
(uri|(startup|running)-config)
LSS2200-8P # copy log running-config startup
Log destination must be a URL
Copy failed
LSS2200-8P # copy log temp-config heading
Pipeline not implemented for "copy ('log', 'temp-config')"
```

URI examples: tftp://<address>/<file\_name\_or\_path>  
 scp://<username>:<password>@<address>:/<file\_path\_and\_name>

## Messages:

```
[ERR]: Callback event "done" with ID 9 processing timed out.
Exception sending backup for log: Failed to put : (28, 'TFTP response timeout')
Copy failed
Log destination must be a URL
Copy failed
```

Command: **debug**  
Description: Debug LED(s)  
Mode: Exec mode  
Parameters:

test	Debug led
all-leds	this command tests all LEDs in sequence
led	Select sequence to test all LEDs
String	Led to test, pass all to test all LEDs sequence else pass system1, system2, and CPLD for individual
state	on, off for individual LEDs. Ex: ON, OFF, ALERT.
System1	System (S1) LED
system2	System (S2) LED
cpld	Complex Programmable Logic Device
String	on, off for individual LEDs. Ex: ON,OFF,ALERT.

Example:

```
LSS2200-8P # debug test led system1 state ON
LSS2200-8P # debug test led system1 state OFF
LSS2200-8P # debug test led system1 state ALERT
LSS2200-8P # debug test led pass ON,OFF,ALERT
LSS2200-8P # debug test all-leds
LSS2200-8P # debug test led cpld state ON
LSS2200-8P #
```

Messages:

*Invalid LED state Ex: ON/OFF/ALERT*

*Syntax error: Illegal command line*

Command: **exit**  
Description: Exit from the CLI  
Mode: Exec mode  
Syntax: **exit** <cr>  
Parameters:  
Example:

```
LSS2200-8P # exit
Please press Enter to activate this console.
LSS2200-8P login:
```

Command: **nslookup**

Description: nslookup command for network diagnostics. It queries DNS records for a given domain name.

Mode: Exec mode

Parameters: host Look up information for host using the current default server  
String Look up information for host using the current default server

Example:

```
LSS2200-8P # nslookup host string
Server:      127.0.0.1
Address:     127.0.0.1#53

*** Can't find string: No answer
LSS2200-8P # nslookup host string <cr>
Server:      8.8.8.8
Address:     8.8.8.8#53

** server can't find string: NXDOMAIN
LSS2200-8P # nslookup host 192.168.60.1
Server:      127.0.0.1
Address:     127.0.0.1#53

** server can't find 1.60.168.192.in-addr.arpa: NXDOMAIN
LSS2200-8P #
```

Messages: ;; connection timed out; no servers could be reached

Command: **ping**

Description: Ping command for network diagnostics

Mode: Exec mode

Parameters: host Hostname or IP-address to ping  
interface Optional source IP-address or interface for sending packets  
repeat Requests to send count, default is 5  
String Hostname or IP-address to ping  
String Source IP-address or interface name  
Unsigned integer Requests count (1..65535)

Example:

```
LSS2200-8P # ping host 192.168.60.1 interface 192.168.60.1 repeat 3
PING 192.168.60.1 (192.168.60.1) from 192.168.60.1: 56 data bytes
64 bytes from 192.168.60.1: seq=0 ttl=64 time=0.232 ms
64 bytes from 192.168.60.1: seq=1 ttl=64 time=0.238 ms
64 bytes from 192.168.60.1: seq=2 ttl=64 time=0.240 ms

--- 192.168.60.1 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 0.232/0.236/0.240 ms
LSS2200-8P
```

Messages:

*ping: can't set multicast source interface*

*Syntax Error: Incomplete Command – Require host name or IP Address*

*Syntax error: Illegal command line*



Command: **reload**  
Description: Reboot or default the device  
Mode: Exec mode  
Parameters: defaults Set defaults on device  
warm Reboot the box  
at Reboot the box at a specified time / date  
in Reboot the box after a given duration  
time in HH:MM HH:MM time of day to reboot  
date to reboot Date in YYYY-MM-DD format  
time in HH:MM when to reboot

## Example:

```
LSS2200-8P # reload warm in 04:00
LSS2200-8P # reload defaults

Copy succeeded

LSS2200-8P #

LSS2200-8P # reload warm at 23:23 2022-12-22
LSS2200-8P # show reload
Reload was requested at 2022-12-22 23:23:00
Remaining: 8 days, 9:53:38
LSS2200-8P # reload warm at 23:23 2022-12-26
LSS2200-8P # show reload
Reload was requested at 2022-12-26 23:23:00
Remaining: 12 days, 9:52:40
LSS2200-8P # show reload
Reload was requested in 11:11:00
Remaining: 11:06:41
LSS2200-8P # clear reload
The previous reload request has been cancelled
LSS2200-8P # show reload
No future reload has been requested
LSS2200-8P # reload warm
```

Command: **show**  
Description: Show information (see the [Show Commands](#) section on page 21).

Command: **ssh**  
 Description: SSH for secure, encrypted connection  
 Mode: Exec mode  
 Parameters: delete Remove particular host key from SSH's known\_hosts; ssh delete command to remove the unwanted SSH key using the ssh-keygen command.  
 username@hostname/ipaddress ssh targethost [e.g. ssh name@1.2.3.4]  
 Hostname or IP Address Hostname or IP address to remove the particular host key

Example:

```
LSS2200-8P # ssh delete 1.2.3.4
SSH error: Command '['/usr/bin/ssh-keygen', '-R', '1.2.3.4']' returned non-zero exit status 255.
LSS2200-8P # ssh ssh1@192.168.1.60
ssh: connect to host 192.168.1.60 port 22: Network unreachable
LSS2200-8P #
```

Command: **telnet**  
 Description: telnet to transfer data in plain text. **Warning:** Non-secure Telnet State is enabled. Device is vulnerable to Cleartext Transmission of Sensitive Information. Setup and verify SSH, then disable Telnet.  
 Mode: Exec mode  
 Parameters:  
 host Host name or IP address to connect  
 port Port number to connect. If no port number is specified, telnet attempts at the standard port 23.  
 String Host name or IP address to connect  
 Unsigned integer Port number to connect. If no port number is specified, telnet attempts at the standard port 23. (1..65535)

Example:

```
LSS2200-8P # telnet host 192.168.10.50 port 23
Connected to 192.168.10.50

Entering character mode
Escape character is '^]'.

Eos login:
LSS2200-8P # telnet BobB
Syntax error: Illegal command line
LSS2200-8P # telnet <cr>
BusyBox v1.35.0 (2023-04-18 23:50:04 UTC) multi-call binary.

Usage: telnet HOST [PORT]

Connect to telnet server

LSS2200-8P #
```

Messages: *telnet: bad address 'AdminHost'*

*telnet: can't connect to remote host (1.2.3.4): Network unreachable*

Command: **traceroute**

Description: Traceroute command for network diagnostics. The traceroute command takes interface names as eth1.x rather than VLAN interface names such as VLAN1, VLAN2, etc. **Note** that only VLAN interfaces should be given as source interfaces.

Mode: Exec mode

Parameters:

host	IP address or domain name of the host to trace
interface	Optional source interface to use for sending packets (VLAN interface name such as VLAN1)
String	IP address or domain name of the host to trace
String	Source interface to use for sending packets

Example 1:

```
LSS2200-8P # traceroute host 172.27.100.32
traceroute to 172.27.100.32 (172.27.100.32), 30 hops max, 46 byte packets
 1 * * *
 2 * * *
 3 * * *
 4 * * *
 5 * * *
 6 * * *
 7 * * *
 8 * * *
 9 * * *
10 *
```

Example 2:

```
LSS2200-8P # traceroute host 172.27.197.38 interface 172.27.197.43
traceroute to 172.27.197.38 (172.27.197.38), 30 hops max, 46 byte packets
 1 172.27.197.38 (172.27.197.38) 0.029 ms 0.025 ms 0.017 ms
LSS2200-8P # traceroute interface vlan1 host 172.27.197.38
traceroute: can't bind to interface vlan1: No such device
traceroute to 172.27.197.38 (172.27.197.38), 30 hops max, 46 byte packets
 1 172.27.197.38 (172.27.197.38) 0.029 ms 0.028 ms 0.017 ms
LSS2200-8P # traceroute host 192.168.60.99
traceroute to 192.168.60.99 (192.168.60.99), 30 hops max, 46 byte packets
 1 192.168.60.1 (192.168.60.1) 3063.089 ms !H 3071.043 ms !H 3071.375 ms !H
LSS2200-8P #
```

Messages:

*1traceroute: sendto: Network unreachable*

*traceroute: bad address 'BobB'*

*Syntax Error: Incomplete Command – Require host name or IP Address*

*Syntax error: Illegal command line*

*traceroute: can't bind to interface vlan10: No such device*

Command: **who**  
Description: Show logged in users  
Mode: Exec mode  
Syntax: **who** <cr>  
Parameters: None  
Example:

```
LSS2200-8P # who
+-----+-----+-----+
| Username | From   | Since                |
+-----+-----+-----+
| admin    | network | 2023-05-20 23:31:26 |
| admin    | network | 2023-05-20 23:46:08 |
+-----+-----+-----+

LSS2200-8P #
```

## Show Commands

alarm	Show alarm related information
banner	Display the banner.
ble	BLE commands
clock	Display the configured system time settings
consoleflow	Show ConsoleFlow client configuration/ status
ddmi	show ddmi basic information
interface	Display port information for the given port
ip	Show IP related information
lldp	LLDP global config information
log	show system log
logging	Show SYSLOG related information
loop-detect	Show Loop Detect related information
lpm	Show LPM (Discovery) configuration/ status
mac	Show MAC Address related information
monitor	Port Mirroring information
nfc	NFC state
ntp	Show NTP related information
poe	Show PoE related information
port-security	Show port-security related information
pvlan	Display PVLAN configuration
qos	Show QOS related information
reload	Show information about any pending reload
rest-server	Show REST Server related information
route	Show route related information
running-config	Show Running Config in CLI format
snmp	Show SNMP related information
snmptrap	Show SNMP trap related information
spanning-tree	Show spanning tree related information
startup-config	Show Startup Config in CLI format
system	Show system information
telnet	Show telnet related information
uptime	Show system uptime
users	Show user accounts
vct	Display most recent Virtual Cable Test results for the given port
version	show version
vlan	Show VLAN related information
Arguments	ignored comment text

Command: **show alarm**  
Description: Show alarm related information  
Mode: Exec mode  
Parameters: config Show alarm configuration (Disabled Alarms List)  
            status Show alarm status (Active or muted alarms)

## Example:

```
LSS2200-8P # show alarm config
Disabled Alarms List
=====rnet-1/1-Temperature-high-alarm
10GigabitEthernet-1/1-Temperature-high-warning
10GigabitEthernet-1/1-Temperature-low-warning
LSS2200-8P # show alarm status
Active or muted alarms
=====
Alarm Name : 10GigabitEthernet-1/1-Temperature-high-alarm
=====
Message    : Temperature 52.3125 is above threshold
State      : active
Timestamp  : 2023-05-19T19:03:11+00:00
Level      : error

Alarm Name : 10GigabitEthernet-1/1-Voltage-high-alarm
=====
Message    : Voltage 3.3744 is above threshold
State      : active
Timestamp  : 2023-05-19T19:03:11+00:00
Level      : error

Alarm Name : 10GigabitEthernet-1/1-Bias-high-alarm
=====
Message    : Bias 30.912 is above threshold
State      : active
Timestamp  : 2023-05-19T19:03:11+00:00
Level      : error

Alarm Name : 10GigabitEthernet-1/1-Tx-Power-high-alarm
=====
Message    : Tx Power 0.0254 is above threshold
State      : active
Timestamp  : 2023-05-19T19:03:11+00:00
Level      : error

Alarm Name : 10GigabitEthernet-1/1-Rx-Power-high-alarm
=====
Message    : Rx Power 0.0 is above threshold
State      : active
Timestamp  : 2023-05-19T19:03:11+00:00
Level      : error

LSS2200-8P #
```

Command: **show banner**  
 Description: Display the banner.  
 Mode: Exec mode  
 Syntax: **show banner** <cr>  
 Parameters: None

Example:

```
LSS2200-8P # show banner
Banner
=====
--: EOS :--
LSS2200-8P #
```

Command: **show ble**  
 Description: Display Bluetooth Low Energy parameters  
 Mode: Exec mode  
 Parameters: broadcast BLE broadcast state  
 connection BLE software connection state  
 mac BLE mac address  
 status BLE status Information  
 version BLE software version

Example:

```
LSS2200-8P # show ble broadcast
BLE Broadcast State
=====
Broadcast Status      : Enabled
LSS2200-8P # show ble connection
BLE Software Connection State
=====
Connection State     : BLE Disconnected
LSS2200-8P # show ble mac
BLE MAC Info.
=====
BLE MAC              : D0:CF:5E:96:FC:72
LSS2200-8P #
LSS2200-8P # show ble status
BLE Status
=====
Broadcast Status     : Enabled
Connection State     : BLE Disconnected
BLE Version          : LN BLE 1.0.3
BLE MAC              : D0:CF:5E:96:FC:72
LSS2200-8P # show ble version
BLE Version Info.
=====
BLE Version          : LN BLE 1.0.3
LSS2200-8P #
```

Command: **show clock**  
Description: Display the configured system time and date settings  
Mode: Exec mode  
Parameters: None

Example:

```
LSS2200-8P # show clock
System Clock
=====
August, 2022
Timezone: America/Chicago
LSS2200-8P # show clock
System Clock
=====
January, 2023
Timezone: UTC
LSS2200-8P #
```

Command: **show consoleflow**  
Description: Show ConsoleFlow client configuration / status. Lantronix ConsoleFlow™ software can provision remotely deployed Lantronix devices without user intervention. See the Lantronix [ConsoleFlow webpage](#) for more information.  
Mode: Exec mode  
Parameters: config Show ConsoleFlow client configuration  
status Show ConsoleFlow client status

Example 1:

```
LSS2200-8P # show consoleflow config
ConsoleFlow client configuration
=====
State: Enabled
Device Name: LSS2200-8P-2QB9
Device Description: Lantronix LSS2200-8P
Status Update Interval: 1
Content Check Interval: 24
Apply Firmware Updates: Enabled
Apply Configuration Updates: always
Remote Access Local Port: <Random>
Active Connection: Connection:1

Connection:1
=====
Host: api.consoleflow.com
Connect to: Cloud
Port: 443
Secure Port: Enabled
Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Host:
```



```

Proxy Port: 80
Proxy Username:
Proxy Password:

Connection:2
=====
Host: api.consoleflow.com
Connect to: Cloud
Port: 443
Secure Port: Enabled
Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Host:
Proxy Port: 80
Proxy Username:
Proxy Password:

```

LSS2200-8P #

Example 2:

```

LSS2200-8P # show consoleflow status
ConsoleFlow client status
Status: Started
Device Id: .....
Device Key: <Configured>
Last Status Update: <Not Available>
Last Content Check: <Not Available>
Available Updates:
  Firmware: <Not Available>
  Configuration: <Not Available>

LSS2200-8P # show consoleflow status
ConsoleFlow client status
Status: Started
Device Id: .....
Device Key: <Configured>
Last Status Update: <Not Available>
Last Content Check: <Not Available>
Available Updates:
  Firmware: <Not Available>
  Configuration: <Not Available>

LSS2200-8P # show consoleflow status
ConsoleFlow client status
Status: Started
Device Id: .....
Device Key: <Configured>
Last Status Update: <Not Available>
Last Content Check: <Not Available>
Available Updates:
  Firmware: <Not Available>
  Configuration: <Not Available>

```

Command: **show ddm**

Description: Show basic or extended Digital Diagnostics Monitoring Interface (DDMI) information.

Mode: Exec mode

Parameters: extended show ddm extended information

Example:

```
LSS2200-8P # show ddm
DDMI Basic Information
=====
| Part Number | Serial Number | Vendor Name | Date Code | Revision |
+-----+-----+-----+-----+-----+
| 10GigabitEthernet 1/1 | TN-10GSFP-SR | 8801095 | Transition | 2012/07/31 | 0001 |
| 10GigabitEthernet 1/2 | TN-SFP-LX1 | 90%16 | Transition | 2008/05/02 | 0000 |
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| Port | Type | Alarm status | Current Value | High Alarm | Low Alarm |
High Warning | Low Warning |
+-----+-----+-----+-----+-----+
| 10GigabitEthernet 1/1 | Bias | Normal | 5.456 | 20.0 | 1.0 |
15.0 | 2.0 |
| 10GigabitEthernet 1/1 | Rx Power | Normal | 0.1868 | 1.0 | 0.0646 |
0.7943 | 0.1023 |
| 10GigabitEthernet 1/1 | Temperature | Normal | 44.1562 | 90.0 | -5.0 |
85.0 | 0.0 |
| 10GigabitEthernet 1/1 | Tx Power | Normal | 0.5248 | 1.0 | 0.1479 |
0.7943 | 0.1862 |
| 10GigabitEthernet 1/1 | Voltage | Normal | 3.348 | 3.6 | 3.0 |
3.5 | 3.1 |
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| Port | Type | Alarm status | Current Value | High Alarm | Low Alarm |
High Warning | Low Warning |
+-----+-----+-----+-----+-----+
| 10GigabitEthernet 1/2 | Bias | Normal | %688 | 20.512 | 0.026 |
17.948 | 0.128 |
| 10GigabitEthernet 1/2 | Rx Power | Normal | %2776 | 2.9946 | 0.0347 |
2.3796 | 0.0646 |
| 10GigabitEthernet 1/2 | Temperature | Normal | %.25 | 90.0 | -10.0 |
85.0 | -5.0 |
| 10GigabitEthernet 1/2 | Tx Power | Normal | %2168 | 0.8283 | 0.0738 |
0.658 | 0.0929 |
| 10GigabitEthernet 1/2 | Voltage | Normal | %34 | 3.75 | 2.75 |
3.55 | 2.92 |
+-----+-----+-----+-----+-----+
LSS2200-8P #
```

Command: **show interface**

Description: Display port information for the given port

Mode: Exec mode

Parameters:

- \* Display port information for all ports
- vlan Display status of the vlan interface
- The switch port type port type (GigabitEthernet/10GigabitEthernet)
- Display Info Type show type (config/status/statistics)
- config Show interface configuration information
- status Show interface status
- statistics Show interface statistics
- Vlan ID (1..4094) Number in the range 1-4094
- Number in the range 1-4094 Vlan ID (1..4094)
- port-number The switch port number, Tab to complete/list

Example 1:

```
LSS2200-8P # show interface * config
Port Configuration
=====
+-----+-----+-----+-----+-----+-----+-----+
| Port Name      | Enabled | Speed | Duplex | Flow Ctrl | Autonegotiate | Jumbo Frame |
+-----+-----+-----+-----+-----+-----+-----+
| GigabitEthernet 1/1 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/2 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/3 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/4 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/5 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/6 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/7 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
| GigabitEthernet 1/8 | Enabled | 1G   | full  | None   | Enabled   | Disabled |
+-----+-----+-----+-----+-----+-----+

+-----+-----+-----+-----+-----+
| Port Name      | Enabled | SFP Mode | Flow Ctrl | Jumbo Frame |
+-----+-----+-----+-----+-----+
| 10GigabitEthernet 1/1 | Enabled | 10G-BASE-R | None   | Disabled |
| 10GigabitEthernet 1/2 | Enabled | 10G-BASE-R | None   | Disabled |
+-----+-----+-----+-----+-----+

LSS2200-8P #
```

Example 2:

```
LSS2200-8P # show interface GigabitEthernet 1/7
Con
    Speed : 1G
    Duplex : full
    Flow Control : None
    Autonegotiate : Enabled
    Jumbo Frame : Disab1/7
=====
    Enabled : Enabled
    Link : Up
    Speed : 100M
    Duplex : full
    Flow Control : None
```

```

Autonegotiate : Enabled
  Jumbo Frame : Ethernet 1/7
=====
  Bytes : in:2471786 out:12063541 total:14535327
  Unicast : in:17 out:4 total:21
Broadcast : in:7548 out:32079 total:39627
Multicast : in:0t:0 total:0
  Errors : in:0 out:0 total:0
  Pause : in:0 out:0 total:0

```

Queue Statistics for port : GigabitEthernet 1/7

```

=====
| Queue Number | Queued          | Egress packets |
=====
| 0            | 0              | 0              |
| 2            | 0              | 0              |
| 4            | 0              | 0              |
| 5            | 0              | 0              |
| 6            | 0              | 2              |
| 7            | 0              | 0              |

```

LSS2200-8P #

Example 3:

```

LSS2200-8P # show interface vlan 1
Interface Configuration
=====
Interface          : VLAN1
VLAN ID            : 1
Protocol           : Static
IP address         : 192.168.60.1
Netmask            : 255.255.255.0
Interface Status
=====
IPv4 Address       : 192.168.60.1
IPv4 Netmask       : 255.255.255.0
MTU                : 10240
State              : UP
MAC                : 00:c0:f2:96:08:c1
RX Bytes           : 486813092
RX Packets         : 1682018
RX Errors          : 0
RX Dropped         : 44751
RX Overrun         : 0
RX Multicast       : 926388
TX Bytes           : 12435306
TX Packets         : 14480
TX Errors          : 0
TX Dropped         : 0
LSS2200-8P #

```

Messages:

*Interface "VLAN11" does not exist*

*Interface Status not available!*

Command: **show ip**  
 Description: Show Internet Protocol related information  
 Mode: Exec mode  
 Parameters:

dhcp	Show IP DHCP Relay Information
interface	Show IPv4 address configuration
neighbors	Show all entries in ARP Table
relay	Show IP DHCP Relay Information
server	Show IP DHCP Server Information
snooping	Show IP DHCP Snooping Information
brief	Show Brief IP interface status
binding	Show IP DHCP Server Binding Information
String	DHCP Server Pool Name
server	DHCP Server Pool Name
	Output modifiers
<ipv4_ucast>	IP address in dotted-decimal notation
state	State of binding
type	Type of binding
<cr>	

Example 1:

```
LSS2200-8P # show ip dhcp relay
DHCP Relay Configuration
=====
Relay Status      : Disabled
Relay Address     : ---
Relay Interface   : ---
Server Address    : ---
Server Interface  : ---
```

```
LSS2200-8P #
```

Example 2:

```
LSS2200-8P # show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
=====
| VLAN 1        | 192.168.60.1/24 | Static    | UP
LSS2200-8P # show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
| VLAN 1        | 192.168.60.1/WN
| VLAN 5        | 10.4.52.62/16   | DHCP      | UP
LSS2200-8P # show ip dhcp server binding server Pool1
DHCP Server Bindings
=====
Error: Pool with the name Pool1 does not exist
LSS2200-8P #
```

## Example 3:

```
LSS2200-8P # show ip neighbors
```

IP address	HW address	Device	Router	State
	-----8e:8a	eth1.1	No	REACHABLE
172.27.197.31	00:c0:f2:82:3b:05	eth1.1	No	STALE
172.27.197.11	68:05:ca:61:5b:ba	eth1.1	No	STALE
fe80::2c0:f2ff:fe58:fe11	00:c0:f2:58:fe:11	eth1.1	No	STALE
fe80::201:c1ff:fe00:c990	00:01:c1:00:c9:90	eth1.1	No	STALE
fe80::20c:29ff:fe4b:ca4f	00:0c:29:4b:ca:4f	eth1.1	No	STALE
fe80::79b0:5ee4:a95a:f603	10:1f:74:fb:ba:92	eth1.1	No	STALE
fe80::2c0:f2ff:fe8b:97c0	00:c0:f2:8b:97:c0	eth1.1	No	STALE
fe80::4965:f47b:9e76:af7	b8:6b:23:af:38:77	eth1.1	No	STALE

```
LSS2200-8P #
```

## Example 4:

```
LSS2200-8P # show ip dhcp snooping
```

```
DHCP Snooping Configuration
```

```
=====
```

```
Snooping Status Trusted |
```

	Snooping Status	Trusted
10GigabitEthernet 1/1	UnTrusted	
10Gig		
GigabitEthernet 1/1	UnTrusted	
GigabitEthernet 1/3	UnTrusted	
GigabitEthernet 1/5	UnTrusted	
GigabitEthernet 1/7	UnTrusted	
GigabitEthernet 1/8	UnTrusted	

```
LSS2200-8P #
```

```
Messages: Error: Pool with the name Pool1 does not exist
```

Command: **show lldp**  
 Description: Show LLDP global config information  
 Mode: Exec mode  
 Parameters: config Display LLDP config  
 med Display LLDP-MED Remote devices  
 neighbors Displays information about LLDP neighbors  
 statistics Display LLDP counters

Example 1:

```
LSS2200-8P # show lldp config
LLDP Configuration
=====
LLDP          : Enabled
TxInterval    : 90
Holdtime      : 360

LLDP Port configurations
=====
+-----+-----+-----+
| Port                | LLDP | MED  |
+-----+-----+-----+
| 10GigabitEthernet 1/1 | Both | Enabled |
| 10GigabitEthernet 1/2 | Both | Enabled |
| GigabitEthernet 1/1  | Both | Enabled |
| GigabitEthernet 1/2  | Both | Disabled |
| GigabitEthernet 1/3  | Both | Enabled |
| GigabitEthernet 1/4  | Both | Enabled |
| GigabitEthernet 1/5  | Both | Enabled |
| GigabitEthernet 1/6  | Both | Enabled |
| GigabitEthernet 1/7  | Both | Enabled |
| GigabitEthernet 1/8  | Both | Enabled |
+-----+-----+-----+

LSS2200-8P # show lldp med
MED Information
=====

MED Capability Codes:
  (NP) Network Policy, (LI) Location Identification
  (PS) Power Source Entity, (PD) Power Device
  (IN) Inventory

Local Interface    : GigabitEthernet 1/2
Port ID            : 38:f3:ab:ef:83:92
Capabilities       : LLDP-MED Capabilities
Device Type        : Endpoint Class 1
S/W revision       : not advertised
H/W revision       : not advertised
Manufacturer       : not advertised
Model              : not advertised
-----
LSS2200-8P #
```

## Example 2:

```
LSS2200-8P # show lldp neighbors
```

```
LLDP Neighbor Information
```

```
=====
```

```
Local Interface      : GigabitEthernet 1/2
Chassis ID           : 38:f3:ab:ef:83:92
Port ID              : 38:f3:ab:ef:83:92
Port Description     : None
System Name          : None
System Description   : None
Time-To-Live         : 3601
Time Remaining       : 3439 seconds
System Capabilities  : None
```

```
Local Interface      : GigabitEthernet 1/4
Chassis ID           : ac:cc:8e:ba:f7:c1
Port ID              : ac:cc:8e:ba:f7:c1
Port Description     : eth0
System Name          : axis-acc8ebaf7c1
System Description   : AXIS P1447-LE Network Camera 7.35.2.3
Time-To-Live         : 120
Time Remaining       : 115 seconds
System Capabilities  : Bridge (Switch):Off, WLAN Access Point:Off, Router:Off, Station:On
Management Addresses : 192.168.0.90
LSS2200-8P #
```

## Example 4:

```
LSS2200-8P # show lldp statistics
```

```
LLDP Statistics
```

```
=====
```

```
Total frames transmitted : 493100
Total frames received     : 198134
Total entries aged        : 0
Total entries discarded   : 0
```

```
LSS2200-8P #
```



Command: **show log**  
 Description: Show system log  
 Mode: Exec mode  
 Parameters: paged Display log in paged output  
 filter Filter for logread (read the ring buffer records and display them chronologically).  
 filter Filter for paged logread  
 String Filter for logread  
 Ctrl C Abort operation

## Example:

```
LSS2200-8P # show log
Sep 19 15:08:19 LSS2200-8P daemon.err python3[2007]: result = func(*args, **kwargs)
Sep 19 15:08:19 LSS2200-8P daemon.err python3[2007]: File "/usr/lib/python3.8/site-
packages/eos/modules/consoleflow_client.py", line 2278, in _cf_client_main
Sep 19 15:08:19 LSS2200-8P daemon.err python3[2007]: ret_value =
ConsoleFlowClient().main(signal_parent)
Sep 19 15:08:19 LSS2200-8P daemon.err python3[2007]: File "/usr/lib/python3.8/site-
packages/eos/modules/consoleflow_client.py", line 2242, in main
Sep 19 15:08:19 LSS2200-8P daemon.err python3[2007]: if self.connect_server(subscribe_msg_Q) is
not SUCCESS:
↓↓↓↓↓↓
Sep 19 15:38:18 LSS2200-8P daemon.info start_umsd[1904]: msdBspRmuTxRx(248) : ERROR : Sequence numb"r
error, got 1, expected 66
Sep 19 15:38:20 LSS2200-8P daemon.err python3[2007]: 2022-09-19 15:38:20,962 WARNING
launcher.launch_child:224 - launcher.MainThread eos.modules.consoleflow_client did not signal ready()
Sep 19 15:38:25 LSS2200-8P daemon.info start_umsd[1904]: msdBspRmuTxRx(248) : ERROR : Sequence number
error, got 1, expected 67
<Enter>
(END)Operation aborted
LSS2200-8P # show log filter 2023
May 20 20:48:34 LSS2200-8P daemon.err python3[2430]: 2023-05-20 20:48:34,405 ERROR
consoleflow_client.main:2453 - consoleflow_client.MainThread *****Connection Failed, will retry
after 330*****
May 21 01:25:50 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:25:50,930 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
May 21 01:26:20 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:26:20,944 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
May 21 01:26:50 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:26:50,959 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
May 21 01:27:20 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:27:20,973 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
May 21 01:27:50 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:27:50,985 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
May 21 01:28:21 LSS2200-8P daemon.err python3[2430]: 2023-05-21 01:28:21,015 ERROR
protocol.__init__:461 - lldp.MainThread TLV Type is ZERO, Breaking the while loop
```

Command: **show logging**  
 Description: Show Syslog configuration  
 Mode: Exec mode  
 Parameters: config show syslog configuration

Example:

```
LSS2200-8P # show logging config
Syslog Configuration
=====
Buffer size: 7000 KiB
Output Level: warning
Syslog remote server: 192.168.60.1
Port: 514
Protocol: udp
LSS2200-8P #
```

Command: **show loop-detect**  
 Description: Show Loop Detect related information  
 Mode: Exec mode  
 Parameters: config Show Loop Detect configuration  
 status Show Loop Detect status

Example:

```
LSS2200-8P # show loop-detect config
Loop detect configuration
=====
Enable           Disabled
Port shutdown time 75555
Tx period        5
```

Port	Enable	Action
GigabitEthernet 1/1	Disabled	log-shutdown
GigabitEthernet 1/2	Disabled	log-shutdown
GigabitEthernet 1/3	Disabled	log-shutdown
GigabitEthernet 1/4	Disabled	log-shutdown
GigabitEthernet 1/5	Disabled	log-shutdown
GigabitEthernet 1/6	Disabled	log-shutdown
GigabitEthernet 1/7	Disabled	log-shutdown
GigabitEthernet 1/8	Disabled	log-shutdown
10GigabitEthernet 1/1	Disabled	log-shutdown
10GigabitEthernet 1/2	Disabled	log-shutdown

```
LSS2200-8P # show loop-detect status
Loop detect status
=====
```

Name	Loop count	Loop detected	Port shutdown	Last loop time
GigabitEthernet 1/1	0	No	No	-
GigabitEthernet 1/2	0	No	No	-
GigabitEthernet 1/3	0	No	No	-
GigabitEthernet 1/4	0	No	No	-
GigabitEthernet 1/5	0	No	No	-
GigabitEthernet 1/6	0	No	No	-

GigabitEthernet 1/7	0	No	No	-
GigabitEthernet 1/8	0	No	No	-
10GigabitEthernet 1/1	0	No	No	-
10GigabitEthernet 1/2	0	No	No	-

LSS2200-8P #

Command: **show lpm**

Description: Show LPM (Discovery) configuration/ status

Mode: Exec mode

Parameters: config LPM (Discovery) State  
 status show LPM (Discovery) status

Example:

```
LSS2200-8P # show lpm config
LPM State
=====
LPM State      : Enabled
LSS2200-8P # show lpm status
LPM status
=====
Status: Running
Queries:
  Valid: 0
  Unknown: 0
Erroneous Packets: 0
Errors: 0
Last Connection: 0.0.0.0/0

LSS2200-8P # show lpm config
LPM State
====State      : Enabled
LSS2200-8P # show lpm status
LPM status
====us: Running
Queries:
  Valid: 0
  Unknown: 0
Erroneous Packets: 0
Errors: 0
Last Connection: 0.0.0.0/0

LSS2200-8P #
```

Command: **show mac**  
 Description: Show MAC Address related information  
 Mode: Exec mode  
 Parameters: address table Display all entries in MAC Table  
 Example:

```
LSS2200-8P # show mac address-table
MAC Address Table
=====
+-----+-----+-----+
| MAC Address      | VLAN | Ports                |
+-----+-----+-----+
| 00:09:18:4e:20:e9 | 1    | GigabitEthernet 1/3 |
| 00:09:18:4f:bc:3a | 1    | GigabitEthernet 1/1 |
| ac:cc:8e:ba:f7:c1 | 1    | GigabitEthernet 1/4 |
| e0:55:3d:84:a8:96 | 1    | GigabitEthernet 1/6 |
| 38:f3:ab:ef:83:92 | 1    | GigabitEthernet 1/2 |
| 00:c0:f2:96:08:c1 | 1    | CPU                  |
+-----+-----+-----+

LSS2200-8P #
```

Command: **show monitor**  
 Description: Show Port Mirroring information  
 Mode: Exec mode  
 Parameters: config Display MIRROR session information  
 Example:

```
LSS2200-8P # show monitor config
Port Mirroring
=====
Ingress Mirror Port : Not Configured
Egress Mirror Port  : Not Configured

+-----+-----+-----+
| Port                | Rx   | Tx   |
+-----+-----+-----+
| 10GigabitEthernet 1/1 | No   | No   |
| 10GigabitEthernet 1/2 | No   | No   |
| GigabitEthernet 1/1  | No   | No   |
| GigabitEthernet 1/2  | No   | No   |
| GigabitEthernet 1/3  | No   | No   |
| GigabitEthernet 1/4  | No   | No   |
| GigabitEthernet 1/5  | No   | No   |
| GigabitEthernet 1/6  | No   | No   |
| GigabitEthernet 1/7  | No   | No   |
| GigabitEthernet 1/8  | No   | No   |
+-----+-----+-----+

LSS2200-8P #
```

Command: **show nfc**

Description: Show Near Field Communication information. Near Field Communications [technology](#) lets two NFC-enabled devices communicate when held in close proximity to each other. **Note:** NFC support in the web UI and CLI will be provided in an upcoming release.

Mode: Exec mode

Parameters: data Read NFC tag data  
state nfc tag state

Example:

```
LSS2200-8P # show nfc data
NFC Data
=====
No NFC data available
LSS2200-8P # show nfc state
NFC State
=====
NFC State      : Enabled
LSS2200-8P #
```

Command: **show ntp**

Description: Show Network Time Protocol information

Mode: Exec mode

Parameters: status show NTP Status

Example:

```
LSS2200-8P # show ntp status
NTP Configuration
=====
STATUS: Enabled

Servers
=====
NAME      | ADDRESS
pool.ntp.org | pool.ntp.org
LSS2200-8P #
```

Command: **show poe**  
 Description: Show Power over Ethernet related information.  
 Mode: Exec mode  
 Parameters: apr-status Display PoE APR status per port  
 config Display PoE configuration for all ports  
 global Show global PoE settings  
 pse-status Display status information for the PSE controller  
 schedule Display PoE Schedule Profile configuration.  
 schedule-status Display PoE Schedule status per port  
 status Display PoE status for all ports  
 <cr>

## Example 1:

```
LSS2200-8P # show poe apr-status
```

```
PoE APR Status
```

```
=====
+-----+-----+
| Port          | APR Status |
+-----+-----+
| GigabitEthernet 1/1 | Off        |
| GigabitEthernet 1/2 | Off        |
| GigabitEthernet 1/3 | Off        |
| GigabitEthernet 1/4 | Off        |
| GigabitEthernet 1/5 | Off        |
| GigabitEthernet 1/6 | Off        |
| GigabitEthernet 1/7 | Off        |
| GigabitEthernet 1/8 | Off        |
+-----+-----+
```

```
LSS2200-8P #
```

## Example 2:

```
LSS2200-8P # show poe config
```

```
PoE Configuration
```

```
=====
+-----+-----+-----+-----+-----+-----+-----+
| Port          | Enabled | Force   | Priority | Oper-mode | Max Power | Schedule Id |
+-----+-----+-----+-----+-----+-----+-----+
| GigabitEthernet 1/1 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/2 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/3 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/4 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/5 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/6 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/7 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
| GigabitEthernet 1/8 | Enabled | Disabled | low      | IEEE-802.3bt | 0.0      |              |
+-----+-----+-----+-----+-----+-----+-----+
```

```
PoE APR Configuration
```

```
=====
+-----+-----+-----+-----+-----+-----+
| Port          | APR Enabled | Failure      | Interval | IP Address | Retries |
+-----+-----+-----+-----+-----+-----+
| GigabitEthernet 1/1 | Disabled    | ResetLogTrap | 10       | 0.0.0.0    | 3        |
| GigabitEthernet 1/2 | Disabled    | ResetLogTrap | 10       | 0.0.0.0    | 3        |
| GigabitEthernet 1/3 | Disabled    | ResetLogTrap | 10       | 0.0.0.0    | 3        |
+-----+-----+-----+-----+-----+-----+
```

GigabitEthernet 1/4	Disabled	ResetLogTrap	10	0.0.0.0	3
GigabitEthernet 1/5	Disabled	ResetLogTrap	10	0.0.0.0	3
GigabitEthernet 1/6	Disabled	ResetLogTrap	10	0.0.0.0	3
GigabitEthernet 1/7	Disabled	ResetLogTrap	10	0.0.0.0	3
GigabitEthernet 1/8	Disabled	ResetLogTrap	10	0.0.0.0	3

LSS2200-8P #

Example 3:

```
LSS2200-8P # show poe global
PoE Global Config:
=====
Fast PoE:      Enabled
PS1 Power (W): 1600
PS2 Power (W): 0
```

Example 4:

```
LSS2200-8P # show poe pse-status
PoE PSE Controller Status
=====
PS1 Status:      Off
PS2 Status:      Powered
PSE Power Allocated: 62.200001
PSE Power Available: 645.000000
PSE Firmware Version: 1.3.0B9
LSS2200-8P #
```

Example 5:

```
LSS2200-8P # show poe schedule
PoE Schedule List
=====
PoE Schedule Name : PoE-ResetSunday
=====
+-----+-----+-----+-----+
| Day | Hour | Minute | Action |
+-----+-----+-----+-----+
| sun | 1   | 30    | reset  |
+-----+-----+-----+-----+
```

```
LSS2200-8P # show poe schedule-status
PoE Schedule Status
=====
+-----+-----+-----+-----+
| Port                | Schedule Status |
+-----+-----+-----+-----+
| GigabitEthernet 1/1 | Off             |
| GigabitEthernet 1/2 | Off             |
| GigabitEthernet 1/3 | Off             |
| GigabitEthernet 1/4 | Off             |
| GigabitEthernet 1/5 | Off             |
| GigabitEthernet 1/6 | Off             |
| GigabitEthernet 1/7 | Off             |
| GigabitEthernet 1/8 | Off             |
+-----+-----+-----+-----+
```

LSS2200-8P # show poe global

```
PoE Global Config:
=====
Fast PoE:      Disabled
PS1 Power (W): 0
PS2 Power (W): 0
LSS2200-8P #
```

#### Example 6:

```
LSS2200-8P # show poe status
```

```
PoE Status
=====
```

Port	PD-Class	Power Used (W)	Current Used (mA)	PD Voltage (V)	Temperature (C)
GigabitEthernet 1/1	2	1.8	33.0	56.2	36.25
GigabitEthernet 1/2	-	0.1	3.0	56.2	36.25
GigabitEthernet 1/3	2	1.9	34.0	56.26	35.0
GigabitEthernet 1/4	3	4.9	88.0	56.33	33.75
GigabitEthernet 1/5	-	0.0	0.0	56.01	35.0
GigabitEthernet 1/6	4	5.9	105.0	56.39	33.75
GigabitEthernet 1/7	-	0.0	0.0	0.0	33.75
GigabitEthernet 1/8	-	0.0	0.0	0.0	33.75

Port	Power Requested (W)	Power Allocated (W)	Status
GigabitEthernet 1/1	0.0	15.0	PD-Detected-4-Pair-IEEE-802.3bt-Single-Signature
GigabitEthernet 1/2	0.0	0.0	PD-Forced
GigabitEthernet 1/3	0.0	15.0	PD-Detected-4-Pair-IEEE-802.3bt-Single-Signature
GigabitEthernet 1/4	0.0	15.0	PD-Detected-4-Pair-IEEE-802.3bt-Single-Signature
GigabitEthernet 1/5	0.0	0.0	PD-Forced
GigabitEthernet 1/6	0.0	60.0	PD-Detected-4-Pair-IEEE-802.3bt-Single-Signature
GigabitEthernet 1/7	0.0	0.0	No-PD-Detected
GigabitEthernet 1/8	0.0	0.0	No-PD-Detected

```
LSS2200-8P #
```

The PoE PSE firmware supports these port status values:

- Disabled-PHO - PoE Hardware Override is active (DIP switch setting). **Note:** PHO is not currently an available feature and status should not be changed until fully supported
- Port-Off - PoE is configured as disabled for the port or for the switch as a whole.
- No-PD-Detected.
- unknown.
- PD-Detected-2-Pair-IEEE-802.3bt-Single-Signature.
- PD-Detected-4-Pair-IEEE-802.3bt-Single-Sign-ature.
- PD-Forced - PoE is configured to deliver power in Forced mode (ignoring PD classification). In Forced mode the switch port will power up the linked PD without an– detect/negotiate mechanism so it is important that you know what the PD is capable of accepting to prevent damage. In Forced mode the PD is limited to the Operation Mode setting. **Note:** you must set PoE Mode t– Disabled before setting PoE Mode to Forced.

The PoE Auto Power Reset status can include:

- **Off** : PoE APR is disabled.
- **On** : PoE APR is enabled.
- **Monitoring - Duration: 0s Consecutive Failures: 0 Failure Events: 0** : PoE APR monitoring has begun.
- **Discovery Phase 1 - Duration: 0s** : PoE discovery phase 1 has begun.
- **Port Disabled - APR Failure - Discovery failed after 20 minutes, please verify configuration:** the PoE APR discovery failed after 20 minutes; check the port config.
- **APR Failure - Discovery failed after 20 –minutes, please verify configuration:** the PoE APR discovery failed after 20 minutes; check the APR config.

Command: **show pvlan**



Description: Display Port VLAN configuration

Mode: Exec mode

Parameters:

The switch port type port type (GigabitEthernet/10GigabitEthernet)

GigabitEthernet The switch port number, Tab to complete–list port-number (1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8)

10GigabitEthernet 1/1 1/2

Example:

```
LSS2200-8P # show pvlan interface GigabitEthernet 1/2
```

```
Port                PVLANS
=====
GigabitEthernet 1/2    1
```

```
LSS2200-8P # show pvlan
```

```
PVLAN              Ports
=====
    1                GigabitEthernet 1/1
                    GigabitEthernet 1/2
                    GigabitEthernet 1/3
                    GigabitEthernet 1/4
                    GigabitEthernet 1/5
                    GigabitEthernet 1/6
                    GigabitEthernet 1/7
                    GigabitEthernet 1/8
                    10GigabitEthernet 1/1
                    10GigabitEthernet 1/2
    2                GigabitEthernet 1/1
    3                GigabitEthernet 1/2
    4                GigabitEthernet 1/3
    5                GigabitEthernet 1/3
    6                GigabitEthernet 1/3
    7                GigabitEthernet 1/4
    8                GigabitEthernet 1/4
```

```
LSS2200-8P #
```

Command: **show port-security**  
 Description: Show port-security related information  
 Mode: Exec mode  
 Parameters: config Show Port security configuration  
 status Show Port security status

Example:

```
LSS2200-8P # show port-security config
```

```
Port Security Configuration
```

```
=====
```

```
Aging Configuration
```

```
=====
```

```
Aging enabled : True
```

```
Aging Time    : 300
```

Port	Enabled	Maximum	Violation
10GigabitEthernet 1/1	Disabled	1023	protect
10GigabitEthernet 1/2	Disabled	1023	protect
GigabitEthernet 1/1	Enabled	1023	protect
GigabitEthernet 1/2	Enabled	1023	protect
GigabitEthernet 1/3	Enabled	1023	shutdown
GigabitEthernet 1/4	Disabled	1023	shutdown
GigabitEthernet 1/5	Enabled	1023	protect
GigabitEthernet 1/6	Enabled	1023	protect
GigabitEthernet 1/7	Disabled	1023	protect
GigabitEthernet 1/8	Disabled	1023	protect

```
LSS2200-8P # show port-security status
```

```
Port Security Status
```

```
=====
```

Port	Learn Count	State
10GigabitEthernet 1/1	0	disabled
10GigabitEthernet 1/2	0	disabled
GigabitEthernet 1/1	1	limit-not-reached
GigabitEthernet 1/2	2	limit-not-reached
GigabitEthernet 1/3	0	limit-not-reached
GigabitEthernet 1/4	0	disabled
GigabitEthernet 1/5	0	limit-not-reached
GigabitEthernet 1/6	1	limit-not-reached
GigabitEthernet 1/7	0	disabled
GigabitEthernet 1/8	0	disabled

```
LSS2200-8P #
```

Command: **show qos**  
 Description: Show QoS related information  
 Mode: Exec mode  
 Parameters: config Show QoS Port configuration

Example:

```
LSS2200-8P # show qos config
LSS2200-8P # show qos config
QoS Global Configuration
=====
Weight distribution : default
Queue (0-7) weights : 11 12 16 1 1 1 1 1

QoS Port Configuration
=====
+-----+-----+-----+-----+
| Port                | Egress-Limit (Kbps) | Ingress-Limit (Kbps) | Scheduling Method |
+-----+-----+-----+-----+
| GigabitEthernet 1/1 |                    |                    | WRR                |
| GigabitEthernet 1/2 |                    |                    | SP                 |
| GigabitEthernet 1/3 |                    |                    | WRR                |
| GigabitEthernet 1/4 | Disabled           | Disabled           | WRR                |
| GigabitEthernet 1/5 |                    |                    | SP                 |
| GigabitEthernet 1/6 | Disabled           |                    | WRR                |
| GigabitEthernet 1/7 | Disabled           | Disabled           | WRR                |
| GigabitEthernet 1/8 | Disabled           | Disabled           | WRR                |
| 10GigabitEthernet 1/1 | Disabled          | Disabled           | WRR                |
| 10GigabitEthernet 1/2 | Disabled          | Disabled           | WRR                |
+-----+-----+-----+-----+

QoS Ingress Configuration
=====
+-----+-----+-----+-----+
| Port                | Priority Mode        | Queue Priority        | Frame Priority      |
+-----+-----+-----+-----+
| GigabitEthernet 1/1 | vlan-ip-port        | 1                     | 4                   |
| GigabitEthernet 1/2 | ip-port             | 2                     | 5                   |
| GigabitEthernet 1/3 | vlan-ip-port        | 3                     | 3                   |
| GigabitEthernet 1/4 | vlan-ip-port        | 4                     | 2                   |
| GigabitEthernet 1/5 | vlan-port           | 0                     | 1                   |
| GigabitEthernet 1/6 | port                | 0                     | 0                   |
| GigabitEthernet 1/7 | vlan-ip-port        | 0                     | 0                   |
| GigabitEthernet 1/8 | vlan-ip-port        | 0                     | 0                   |
| 10GigabitEthernet 1/1 | vlan-ip-port        | 0                     | 0                   |
| 10GigabitEthernet 1/2 | vlan-ip-port        | 0                     | 0                   |
+-----+-----+-----+-----+

Mapping and Queue Configuration
=====
+-----+-----+-----+
| Port                | Vlan Priority        | Egress Queue          |
+-----+-----+-----+
| GigabitEthernet 1/1 | 0                    | 0                     |
|                    | 1                    | 1                     |
|                    | 2                    | 2                     |
|                    | 3                    | 3                     |
|                    | 4                    | 4                     |
|                    | 5                    | 5                     |
+-----+-----+-----+
```

GigabitEthernet 1/2	6	6
	7	7
	0	0
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
	7	7



GigabitEthernet 1/7	0	0
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
GigabitEthernet 1/8	7	7
	0	0
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
10GigabitEthernet 1/1	7	7
	0	0
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
10GigabitEthernet 1/2	7	7
	0	0
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
	7	7

LSS2200-8P #

Command: **show reload**  
 Description: Show information about any pending reload  
 Mode: Exec mode  
 Parameters: <cr>  
 Example:

```
LSS2200-8P # show reload
No future reload has been requested
LSS2200-8P # show reload
Reload was requested at 2023-06-10 03:42:00
Remaining: 20 days, 0:33:59
LSS2200-8P #
```

Command: **show rest-server**  
 Description: Show REST Server related information  
 Mode: Exec mode  
 Parameters: config show REST API server configuration  
 Example:

```
LSS2200-8P # show rest-server config
REST API Server Configuration
=====
REST Server Enabled: Enabled
REST Server Port: 8000
```

Command: **show route**  
 Description: Show route related information  
 Mode: Exec mode  
 Parameters: config Display all configuration of routes  
 status Display all routes in Routing Table  
 Example:

```
LSS2200-8P # show route config
Configured Routes
=====
+-----+-----+-----+-----+
| Route-name | Target/Netmask | Interface | Gateway |
+-----+-----+-----+-----+
+-----+-----+-----+-----+

LSS2200-8P # show route status
Routing Table
=====
+-----+-----+-----+-----+-----+
| Target/Netmask | Gateway | Interface | MTU | Metric |
+-----+-----+-----+-----+-----+
| 192.168.60.0/24 | 0.0.0.0 | eth1.1 | 1500 | 0 |
+-----+-----+-----+-----+-----+

LSS2200-8P #
```

Command: [show running-config](#)

Description: Show Running Config in CLI format. **Note** that the “no poe” command is not included in the show running-config output if either PoE mode is enabled or if PoE Force mode is enabled. Disable poe before setting poe forced. Settings that are at default values are generally omitted. You can include them using the "all-defaults" option parameter.

Mode: Exec mode

Parameters: all-defaults Include most/all defaults (all-defaults)  
 heading Include date and version heading (heading)

Example 1:

```
LSS2200-8P # show running-config

# RUNNING Config
# =====

system name LSS2200-8P

consoleflow
  device_name LSS2200-8P-2QB9
  device_description "Lantronix LSS2200-8P"

ntp
ntp server name pool.ntp.org address pool.ntp.org

interface vlan 100

lldp
lldp txinterval 90

loop-detect tx 5

poe schedule "PoE-ResetSunday" day sun hour 0 min 0 action on

logging buffer-size 7000
logging host 192.168.60.1 transport udp port 514

admin
  username admin password $5$6.NEOZRYFPR0glkK$VZtz4moqwdCvoh06bRwnYyw0Bxhqv4VSQMGwo5HJ4eB group admin
  username Jeffs password $5$b0NkgeESq2St/wtT$ej3qtq.5PPqa8iDigQuC7PTAr3fBvR7ruPjEFQVOYH9 group readonly

interface GigabitEthernet 1/1
  pvlan 1,2

  lldp both
  lldp-med

  port-security

  poe priority critical
  poe maxpower 30.0
  poe schedule "PoE-ResetSunday"

  qos egress limit
  qos ingress limit
  qos ingress default queue 1 frame 4

interface GigabitEthernet 1/2
  pvlan 1,3

  lldp both

  port-security

  poe force
  poe priority high
```

```
poe maxpower 40.0
poe schedule "PoE-ResetSunday"

qos egress limit
qos ingress limit
qos schedule SP
qos ingress priority-mode ip-port
qos ingress default queue 2 frame 5

interface GigabitEthernet 1/3
  pvlan 1,4,5,6

  lldp both
  lldp-med

  port-security
  port-security violation-mode shutdown

  poe maxpower 30.0
  poe schedule "PoE-ResetSunday"

  qos egress limit
  qos ingress limit
  qos ingress default queue 3 frame 3

interface GigabitEthernet 1/4
  pvlan 1,7,8

  lldp both
  lldp-med

  port-security violation-mode shutdown

  poe opermode IEEE-802.3at
  poe maxpower 20.0

  qos ingress default queue 4 frame 2

interface GigabitEthernet 1/5
  lldp both
  lldp-med

  port-security

  poe force
  poe opermode IEEE-802.3af
  poe maxpower 10.0

  qos egress limit
  qos ingress limit
  qos schedule SP
  qos ingress priority-mode vlan-port
  qos ingress default queue 0 frame 1

interface GigabitEthernet 1/6
  lldp both
  lldp-med

  port-security

  qos ingress limit
  qos ingress priority-mode port

interface GigabitEthernet 1/7
  lldp both
  lldp-med

interface GigabitEthernet 1/8
  lldp both
```

```

lldp-med

interface 10GigabitEthernet 1/1
  lldp both
  lldp-med

interface 10GigabitEthernet 1/2
  lldp both
  lldp-med

```

LSS2200-8P #

### Example 2:

```

LSS2200-8P # show running-config all-defaults heading
↓↓↓↓
↓↓↓↓
LSS2200-8P # show running-config all-defaults heading
# RUNNING Config : V 1.7.0.0R5 ( 03:23:08 21 May, 2023 )

system name LSS2200-8P

clock timezone UTC

ble broadcast

consoleflow
  state
  device_name LSS2200-8P-2QB9
  device_description "Lantronix LSS2200-8P"
  status_update_interval 1
  content_check_interval 24
  apply_firmware_updates
  apply_configuration_updates always
  remote_access_local_port 0
  active_connection Connection:1
  connection connection:1
    host api.consoleflow.com
    connect_to Cloud
    port 443
    secure_port
    validate_certificates
    local_port 0
    mqtt_security
  connection connection:2
    host api.consoleflow.com
    connect_to Cloud
    port 443
    secure_port
    validate_certificates
    local_port 0
    mqtt_security

lpm

nfc

no telnet server

ntp
ntp server name pool.ntp.org address pool.ntp.org

rest-server

interface vlan 1
  no ignore peer-dns-server
  ip address 192.168.60.1 netmask 255.255.255.0

```



```
interface vlan 100
  no ignore peer-dns-server

lldp
lldp txinterval 90
lldp holdtime 4

no ip dhcp snooping

no loop-detect
loop-detect tx 5

aging-time 300

system DigitalIO 1
  input snmp-trap disable
  input snmp-action low-to-high
system DigitalIO 2
  input snmp-trap disable
  input snmp-action low-to-high

no poe fast_mode
poe pse ps1 0
poe pse ps2 0

poe schedule "PoE-ResetSunday" day sun hour 0 min 0 action on

logging buffer-size 7000
logging severity warning
logging host 192.168.60.1 transport udp port 514

no snmp
snmp community public

qos weights default
↓↓↓↓
↓↓↓↓
no loop-detect
loop-detect action all

LSS2200-8P #
```

Command: **show snmp**  
 Description: Show SNMP related information  
 Mode: Exec mode  
 Parameters: config show SNMP configuration  
 Example:

```
LSS2200-8P # show snmp config
SNMP global Configuration
=====
Enable: Enabled

SNMP v2c Configuration
=====
| Community | Access | Host/Network | Restricted OID |
=====
| public | read-only | | |

SNMP v3 User Configuration
=====
| User name | Security level | Auth Protocol | Priv Protocol | View name |
=====
| MaryK | authNoPriv | MD5 | | |

SNMP v3 View Configuration
=====
| View name | Type | OID |
=====
LSS2200-8P #
```

Command: **show snmptrap**  
 Description: Show SNMP trap related information  
 Mode: Exec mode  
 Parameters config trap configuration  
 Example:

```
LSS2200-8P # show snmptrap config
SNMP Trap Configuration
=====
Authentication Trap: Enabled
Link Up/Link Down Trap: Enabled
Cold Start Trap: Enabled
Trap Server: 192.168.70.99
LSS2200-8P #
```

Command: **show spanning-tree**  
 Description: Show spanning tree related information  
 Mode: Exec mode  
 Parameters: config Show spanning tree configuration  
 statistics Show spanning tree statistics  
 status Show spanning tree status

Example 1:

```
LSS2200-8P # show spanning-tree config

Spanning tree configuration
=====

Bridge configuration:

Enabled          : Disabled
Protocol version : RSTP
Priority         : 32768
Forward delay   : 15
Maximum age     : 20
Transmit hold count : 6

Port configurations:
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Name           | Auto cost | Admin cost | Priority | Auto edge | Admin edge | P2P | Role | TCN prop |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| GigabitEthernet 1/1 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/2 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/3 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/4 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/5 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/6 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/7 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| GigabitEthernet 1/8 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| 10GigabitEthernet 1/1 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
| 10GigabitEthernet 1/2 | Enabled  | -          | 128     | Enabled  | False     | auto | Allowed | Allowed |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+

LSS2200-8P #
```

Example 2:

```
LSS2200-8P # show spanning-tree statistics

Spanning tree statistics
=====

Bridge statistics:

Topology changes      : 0

Port BPDU statistics
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Name           | Tx STP | Tx TCN | Tx RST | Tx MST | Tx SPT | Rx STP | Rx TCN | Rx RST | Rx MST | Rx SPT |
| Rx ??? | Rx Bad |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| GigabitEthernet 1/1 | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0      | 0      |
| GigabitEthernet 1/2 | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0      | 0      |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```

| GigabitEthernet 1/3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| GigabitEthernet 1/4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| GigabitEthernet 1/5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| GigabitEthernet 1/6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| GigabitEthernet 1/7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| GigabitEthernet 1/8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| 10GigabitEthernet 1/1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
| 10GigabitEthernet 1/2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | | | | | | | | | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
LSS2200-8P #

```

Example 3:

```

LSS2200-8P # show spanning-tree status

Spanning tree status
=====

Bridge status:

Running          : No

Port status:
+-----+-----+-----+-----+-----+-----+-----+-----+
| Name                | Id | Role | State      | Path cost | Edge | P2P | Up time |
+-----+-----+-----+-----+-----+-----+-----+-----+
| GigabitEthernet 1/1 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/2 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/3 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/4 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/5 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/6 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/7 | -  | -    | forwarding | -          | -    | -   | -        |
| GigabitEthernet 1/8 | -  | -    | forwarding | -          | -    | -   | -        |
| 10GigabitEthernet 1/1 | -  | -    | forwarding | -          | -    | -   | -        |
| 10GigabitEthernet 1/2 | -  | -    | forwarding | -          | -    | -   | -        |
+-----+-----+-----+-----+-----+-----+-----+-----+

LSS2200-8P #

```

Command: **show startup-config**

Description: Show Startup Config in CLI format. Settings that are at default values are generally omitted. You can include them using the "all-defaults" option parameter.

Mode: Exec mode

Parameters: all-defaults Include most/all defaults (all-defaults)  
heading Include date and version heading (heading)

Example:

```
LSS2200-8P # show startup-config
# STARTUP Config
# =====

system name LSS2200-8P

no ble broadcast

consoleflow
  device_name SET_BY_MO_WATCHER
  device_description "SET_BY_MO_WATCHER"

ntp
ntp server name pool.ntp.org address pool.ntp.org

admin
  username admin password $5$8H6156VxKCqr9JQ7$xMX4ke1n5Baqtq18p92TbXvAftfmKeLWk/z8b1d2JvB
  group admin

LSS2200-8P #
```

Command: **show system**  
 Description: Show system information  
 Mode: Exec mode  
 Parameters:

config	Show system information
cpu	Show ½PU usage
DigitalIO	System DigitalIO Information
memory	Show Memory usage
power	Show system power usage
temperature	Show CPU system temperature
config	System DigitalIO Information
status	System DigitalIO Information

<cr>

Example 1:

```
LSS2200-8P # show system config
System Name:      lss2200-8p
Contact:         Tech Pubs
Location:        Engineering 2nd Floor
LSS2200-8P # show system cpu
current: 22.77%
 5 mins : 19.21%
15 mins : 21.90%
LSS2200-8P # show system DigitalIO config
System Digital IO Configuration
=====
DigitalIO 1:
  Name           :
  IO Type        : input
  IO active      :
  SNMP trap      : Disabled
  SNMP input action : low-to-high
DigitalIO 2:
  Name           :
  IO Type        : input
  IO active      :
  SNMP trap      : Disabled
  SNMP input action : low-to-high
LSS2200-8P # show system DigitalIO status
System Digital IO Status
=====
DigitalIO 1:
  IO Type        : input
  State          : input
  State          : Low
LSS2200-8P #
LSS2200-8P # show system memory
Total          : 912.875MB
Available      : 400.727MB [43.90%]

LSS2200-8P # show system temperature
CPU Temperature: 48.28C
```

```
LSS2200-8P #
```

Example 2:

```
LSS2200-8P # show system power
```

```
System Power Status
```

```
=====
```

```
Voltage:      56.18V
```

```
Current:      0.09A
```

```
Power:        5.06W
```

```
LSS2200-8P #
```

Command: **show telnet**

Description: Show telnet related information

Mode: Exec mode

Parameters: server Show telnet server configuration  
<cr>

Example:

```
LSS2200-8P # show telnet server
```

```
Telnet service enabled
```

```
LSS2200-8P #
```

```
LSS2200-8P # show telnet server
```

```
Telnet service enabled
```

```
Warning: Non-secure Telnet State is enabled. Device is vulnerable to Cleartext Transmission of Sensitive Information. Setup and verify SSH, then disable Telnet.
```

```
LSS2200-8P #
```

Command: **show uptime**

Description: Show system uptime

Mode: Exec mode

Parameters:

Example:

```
LSS2200-8P # show uptime
```

```
System Uptime
```

```
=====
```

```
3 days, 1:03:36
```

```
LSS2200-8P #
```

Command: **show users**  
 Description: Show user accounts  
 Mode: Exec mode

Parameters:

Example:

```
LSS2200-8P # show users
```

```
Local Users:
```

Name	Group	Status
admin	admin	Enabled
BobB	config	Enabled
PLM1	config	Enabled
TechSuppt	readonly	Enabled

```
LSS2200-8P #
```

Command: **show vct**  
 Description: Display most recent Virtual Cable Test results for the given port.  
 Mode: Exec mode

Parameters:

all show virtual cable test diagnostics for all ports  
 The 1G switch port type port type (GigabitEthernet)  
 The switch port number, Tab to complete/list: 1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8

Example:

```
LSS2200-8P # show vct GigabitEthernet 1/1
```

```
Cable diagnostics for port : GigabitEthernet 1/1 (Timestamp: 2023-05-21 20:13:22.488883)
```

pair	Status	Length (meters)
A	Pair Ok	-
B	Pair Ok	-
C	Pair Short	0
D	Pair Short	0

```
LSS2200-8P # show vct GigabitEthernet 1/2
```

```
Cable diagnostics for port : GigabitEthernet 1/2 (Timestamp: 2023-05-21 20:13:44.004023)
```

pair	Status	Length (meters)
A	Pair Ok	-
B	Pair Ok	-
C	Pair Ok	-
D	Pair Ok	-

```
LSS2200-8P #
```

Messages: *Interface GigabitEthernet 1/9 does not valid for virtual cable test*



Command: **show version**  
 Description: Show version information.  
 Mode: Exec mode  
 Parameters:  
 Example:

```
LSS2200-8P # show version
```

```
Version Information
```

```
=====
```

```
Model:          LSS2200-8P
Firmware Version: 1.7.0.0R5
Hardware Rev:    DAB
MAC Address:     00:C0:F2:96:08:C0
Serial Number:   00C0F29608C0
```

```
LSS2200-8P #
```

Command: **show vlan**  
 Description: Show VLAN related information  
 Mode: Exec mode  
 Parameters: config            Display VLAN configuration  
              Arguments        ignored comment text

Example:

```
LSS2200-8P # show vlan config
```

```
Port                    Mode    PVID    Allowed VLANs
```

```
=====
```

```
GigabitEthernet 1/18
GigabitEthernet 1/2    access    4    4
GigabitEthernet 1/3    trunk     2    1,10
GigabitEthernet 1/4    trunk     3    1,2,11-15
GigabitEthernet 1/5    access   4000 4000
GigabitEthernet 1/6    access    1    1
GigabitEthernet 1/7    access    1    1
GigabitEthernet 1/8    access    1    1
10GigabitEthernet 1/1 access    1    1
10GigabitEthernet 1/2 access    1    1
```

```
LSS2200-8P #
```

## Config Mode Commands

In Config mode perform config commands to set parameters. To enter Config mode from Exec mode:

```
LSS2200-8P # configure terminal
LSS2200-8P (config)#
```

To negate a command (reverse its setting), prefix the command with "no". For example, "no telnet" disables the Telnet protocol, and "no lldp rx" disables Link Layer Discovery Protocol in the receive direction on the port identified by the current Interface Mode.

To run an Exec Mode (default view) command while in Config Mode, prefix the command with "do". For example, "do show running-config".

To display available Config mode commands, enter a ? (question mark) and hit Enter.

```
lss2200-8p (config)# ?
  admin          Security administration view
  aging-time     Enable MAC address aging
  alarm          Enable alarm
  ble            BLE Commands
  clock          Configure time settings
  consoleflow    Configure ConsoleFlow client settings
  container      Enter container management view
  do             To run exec commands in config mode
  end            Go back to EXEC View
  exit           Exit from configure mode
  interface      Select an interface to configure
  ip             IP Configuration
  lldp           Enable LLDP
  logging        Configure Syslog
  loop-detect    Loop Detection Enabled
  lpm            Enable LPM (Discovery) Tool
  monitor        Monitoring different system events
  nfc            Enable NFC
  no             Negate a command or set its defaults
  ntp            enable ntp
  poe            Power over Ethernet configuration settings
  qos            Configure QoS Parameters
  rest-server    Enable REST API server
  route          Create Static route. Creates network routes.
  snmp           enable SNMP access
  snmptrap      Configure SNMP Traps
  spanning-tree  Enable spanning tree
  start          Start Virtual Cable Test
  system         configure system settings
  telnet         Configure the Telnet server
lss2200-8p (config)#
```

**Command:** **admin**

Description: Security administration view; enter Config Admin mode. See the [Config Admin Mode Commands](#) on page 91.

Mode: Config mode

Parameters:

Example:

```
lss2200-8p (config)# admin
lss2200-8p (config-admin)#
```

**Command:** **aging-time**

Description: Enable MAC address aging

Mode: Config mode

Parameters: MAC address aging time in seconds Set MAC address aging time (4..956)

Example:

```
lss2200-8p (config)# aging-time 300
lss2200-8p (config)#
```

**Command:** **alarm**

Description: Enable the specified alarm.

Mode: Config mode

Parameters: alarm The name of the alarm, Tab to complete/list Alarm Name

Alarm Categories:

10GigabitEthernet-1/1-Temperature-high-alarm	10GigabitEthernet-1/1-Temperature-low-alarm
10GigabitEthernet-1/1-Temperature-high-warning	10GigabitEthernet-1/1-Temperature-low-warning
10GigabitEthernet-1/1-Voltage-high-alarm	10GigabitEthernet-1/1-Voltage-low-alarm
10GigabitEthernet-1/1-Voltage-high-warning	10GigabitEthernet-1/1-Voltage-low-warning
10GigabitEthernet-1/1-Bias-high-alarm	10GigabitEthernet-1/1-Bias-low-alarm
10GigabitEthernet-1/1-Bias-high-warning	10GigabitEthernet-1/1-Bias-low-warning
10GigabitEthernet-1/1-Tx-Power-high-alarm	10GigabitEthernet-1/1-Tx-Power-low-alarm
10GigabitEthernet-1/1-Tx-Power-high-warning	10GigabitEthernet-1/1-Tx-Power-low-warning
10GigabitEthernet-1/1-Rx-Power-high-alarm	10GigabitEthernet-1/1-Rx-Power-low-alarm
10GigabitEthernet-1/1-Rx-Power-high-warning	10GigabitEthernet-1/1-Rx-Power-low-warning
10GigabitEthernet-1/2-Temperature-high-alarm	10GigabitEthernet-1/2-Temperature-low-alarm
10GigabitEthernet-1/2-Temperature-high-warning	10GigabitEthernet-1/2-Temperature-low-warning
10GigabitEthernet-1/2-Voltage-high-alarm	10GigabitEthernet-1/2-Voltage-low-alarm
10GigabitEthernet-1/2-Voltage-high-warning	10GigabitEthernet-1/2-Voltage-low-warning
10GigabitEthernet-1/2-Bias-high-alarm	10GigabitEthernet-1/2-Bias-low-alarm
10GigabitEthernet-1/2-Bias-high-warning	10GigabitEthernet-1/2-Bias-low-warning
10GigabitEthernet-1/2-Tx-Power-high-alarm	10GigabitEthernet-1/2-Tx-Power-low-alarm
10GigabitEthernet-1/2-Tx-Power-high-warning	10GigabitEthernet-1/2-Tx-Power-low-warning
10GigabitEthernet-1/2-Rx-Power-high-alarm	10GigabitEthernet-1/2-Rx-Power-low-alarm
10GigabitEthernet-1/2-Rx-Power-high-warning	10GigabitEthernet-1/2-Rx-Power-low-warning
loop-shutdown-GigabitEthernet-1/1	loop-shutdown-GigabitEthernet-1/2
loop-shutdown-GigabitEthernet-1/3	loop-shutdown-GigabitEthernet-1/4
loop-shutdown-GigabitEthernet-1/5	loop-shutdown-GigabitEthernet-1/6
loop-shutdown-GigabitEthernet-1/7	loop-shutdown-GigabitEthernet-1/8
loop-shutdown-10GigabitEthernet-1/1	loop-shutdown-10GigabitEthernet-1/2
port-security-GigabitEthernet-1/1-shutdown	port-security-GigabitEthernet-1/1-limit-reached
port-security-GigabitEthernet-1/2-shutdown	port-security-GigabitEthernet-1/2-limit-reached
port-security-GigabitEthernet-1/3-shutdown	port-security-GigabitEthernet-1/3-limit-reached
port-security-GigabitEthernet-1/4-shutdown	port-security-GigabitEthernet-1/4-limit-reached

```
port-security-GigabitEthernet-1/5-shutdown      port-security-GigabitEthernet-1/5-limit-reached
port-security-GigabitEthernet-1/6-shutdown      port-security-GigabitEthernet-1/6-limit-reached
port-security-GigabitEthernet-1/7-shutdown      port-security-GigabitEthernet-1/7-limit-reached
port-security-GigabitEthernet-1/8-shutdown      port-security-GigabitEthernet-1/8-limit-reached
port-security-10GigabitEthernet-1/1-shutdown    port-security-10GigabitEthernet-1/1-limit-reached
port-security-10GigabitEthernet-1/2-shutdown    port-security-10GigabitEthernet-1/2-limit-reached
CPU-Temperature
```

**Example:**

```
lss2200-8p (config)# alarm 10GigabitEthernet-1/1
lss2200-8p (config)# alarm 10GigabitEthernet-1/2-Bias
lss2200-8p (config)# alarm loop-shutdown-shutdown
lss2200-8p (config)#
```

**Command:** `ble`

Description: Bluetooth Low Energy commands.

Mode: Config mode

Parameters: `broadcast`      Enable BLE Broadcast  
               `disconnect`      ble disconnect

## Example:

```
LSS2200-8p (config)# ble broadcast
LSS2200-8p (config)# ble disconnect
LSS2200-8P (config)# do show ble broadcast
BLE Broadcast State
=====
Broadcast Status      : Enabled
LSS2200-8P (config)# do show ble connection
  <cr>

LSS2200-8P (config)# do show ble connection
BLE Software Connection State
=====
Connection State     : BLE Disconnected
LSS2200-8P (config)#
```

**BLE Configure Commands:**

1. `ble broadcast enable/disable` is used to enable/disable the broadcasting. Broadcast is enabled by default.
2. `ble disconnect` is used to disconnect the existing software connection.

**BLE Show Commands:**

1. `show broadcast` di state as *Enabled* or *Disabled*.
2. `show connection` displays the software connection status as *BLE Connected* or *BLE Disconnected*.
3. `show mac` displays the BLE MAC add:xx.
4. `show version` displays the BLE Version (currently "*TN BLE 1.0.5*").
5. `show status` displays the BLE status information as all above parameters as Broadcast Status, Connection State, BLE Version, BLE MAC

**Procedure to use BLE Application:**

1. Configure username (e.g., `username admin group admin`).
2. Set password as "`admin`".
3. Scan PoE++ devices from mobile application.
4. Connect to PoE++.
5. Use username as "`admin`" and password as "`admin`" to login.
6. Use Clish commands in text area to diagnose or get the different status information.
7. Click on "Disconnect" to disconnect from device.

**Note:** Do not use "SET IP ADDRESS", "POE ON", "POE OFF", or "REBOOT DEVICE" buttons for now.

**Known BLE Issues:**

1. The "`show ble connection`" command used from The LSS2200-8P MobileApp gives "*BLE Disconnected*" response.
2. "SET IP ADDRESS", "POE ON", "POE OFF", "REBOOT DEVICE" buttons not verified & tested. (Might be mobile application side change required)
3. On LSS2200-8P device reboot, send "powerdown" notification to is not implemented.

**Command:** **clock**

Description: Configure time settings. The time zones are case-sensitive.

Mode: Config mode

Parameters: **timezone** Configure system time zone

String	system Time zone:		
Africa/Abidjan	Africa/Accra	Africa/Addis_Ababa	Africa/Algiers
Africa/Asmara	Africa/Bamako	Africa/Bangui	Africa/Banjul
Africa/Bissau	Africa/Blantyre	Africa/Brazzaville	Africa/Bujumbura
Africa/Cairo	Africa/Ceuta	Africa/Conakry	Africa/Dakar
↓	↓	↓	↓
America/Anguilla	America/Antigua	America/Araguaina	America/Argentina/Buenos_Aires
America/Whitehorse	America/Winnipeg	America/Yakutat	America/Yellowknife
Antarctica/Casey	Antarctica/Davis	Antarctica/DumontDUrville	Antarctica/Macquarie
Antarctica/Mawson	Antarctica/McMurdo	Antarctica/Palmer	Antarctica/Rothera
Antarctica/Syowa	Antarctica/Troll	Antarctica/Vostok	Arctic/Longyearbyen
Asia/Aden	Asia/Almaty	Asia/Amman	Asia/Anadyr
Asia/Aqtau	Asia/Aqtobe	Asia/Ashgabat	Asia/Atyrau
↓	↓	↓	↓
Atlantic/Bermuda	Atlantic/Canary	Atlantic/Cape_Verde	Atlantic/Faroe
Atlantic/Madeira	Atlantic/Reykjavik	Atlantic/South_Georgia	Atlantic/St_Helena
Atlantic/Stanley	Australia/Adelaide	Australia/Brisbane	Australia/Broken_Hill
Australia/Currie	Australia/Darwin	Australia/Eucla	Australia/Hobart
Australia/Lindeman	Australia/Lord_Howe	Australia/Melbourne	Australia/Perth
Australia/Sydney	Etc/GMT	Etc/GMT+1	Etc/GMT+10
Etc/GMT+11	Etc/GMT+12	Etc/GMT+2	Etc/GMT+3
Etc/GMT+4	Etc/GMT+5	Etc/GMT+6	Etc/GMT+7
Etc/GMT+8	Etc/GMT+9	Etc/GMT-1	Etc/GMT-10
Etc/GMT-11	Etc/GMT-12	Etc/GMT-13	Etc/GMT-14
Etc/GMT-2	Etc/GMT-3	Etc/GMT-4	Etc/GMT-5
Etc/GMT-6	Etc/GMT-7	Etc/GMT-8	Etc/GMT-9
Europe/Amsterdam	Europe/Andorra	Europe/Astrakhan	Europe/Athens
Europe/Belgrade	Europe/Berlin	Europe/Bratislava	Europe/Brussels
Europe/Bucharest	Europe/Budapest	Europe/Busingen	Europe/Chisinau
Pacific/Tahiti	Pacific/Tarawa	Pacific/Tongatapu	Pacific/Wake
Pacific/Wallis	UTC		

Example:

```
lss2200-8p (config)# clock timezone america/chicago
Invalid Timezone
lss2200-8p (config)# clock timezone America/Chicago
lss2200-8p (config)#
```

**Command:** **consoleflow**

Description: Configure ConsoleFlow client settings in config-consoleflow mode. The Lantronix ConsoleFlow™ software platform provides automation by provisioning remotely deployed Lantronix devices without user intervention. See <https://www.lantronix.com/consoleflow/> for more information.

Mode: Config mode > ConsoleFlow

Parameters (shown by ? command):

active_connection	Connection instance to use when connecting to ConsoleFlow (connection:1 or connection:2)
apply_configuration_updates	Controls whether configuration updates will be applied (never or always).
apply_firmware_updates	Automatically apply new firmware
connection	Configure ConsoleFlow client connection settings
content_check_interval	Sets the firmware and configuration check interval
device_description	Sets the Device Description
device_name	Sets the Device Name
do	To run exec commands in Config mode: ! alarm clear clock configure copy debug exit nslookup ping reload shell show ssh telnet traceroute who
end	Go back to EXEC View
exit	Go back to Configure view
no	Negate a command or set its defaults
remote_access_local_port	Local port for ConsoleFlow Remote Access. When configured, a total of 16 consecutive ports will be reserved
state	enable the ConsoleFlow client
status_update_interval	Sets the status update interval
Instance (connection:1/connection:2)	Controls if and when configuration updates will be applied (never/if/unchanged/unchanged)/always)
Instance (connection:1/connection:2)	Unsigned integer Local port (1..65535)
no	active_connection aging-time alarm apply_configuration_updates apply_firmware_updates ble clock content_check_interval device_description device_name interface ip lldp lldp-med logging loop-detect lpm monitor nfc ntp poe qos remote_access_local_port rest-server route snmp snmptrap spanning-tree state status_update_interval system telnet
enable/ disable	(enable/disable)
time period in minutes	(1..2160) content_check_interval
String	device description
String	device ID
String	device key
String	device name
enable/ disable	reboot_after_firmware_update (enable/disable)
enable/ disable	reboot_after_update
port number	0 or in range 1024-65520
port number 0 or in range 1024-65520	port number local port
time period in minutes	status_update_interval (1..1440)

monitor	set mirroring
destination	the monitor destination (mirroring)
egress ingress	mirror destination
time period in minutes	(1..1440)
active_connection	sets to default value
apply_configuration_updates	sets to default value
apply_firmware_updates	sets to default value
content_check_interval	sets to default value
device_description	sets to default value
device_name	sets to default value
remote_access_local_port	sets to default value
no state	disable the client
status_update_interval	sets to default value

Example 1:

```
LSS2200-8P (config)# consoleflow
lss2200-8p (config-consoleflow)# apply_firmware_updates enable
apply_firmware_updates:enable
lss2200-8p (config-consoleflow)#
```

Example 2:

```
lss2200-8p (config-consoleflow)# content_check_interval 300
content_check_interval:300
LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# apply_firmware_updates
apply_firmware_updates:enable
LSS2200-8P (config-consoleflow)# apply_configuration_updates?
Controls if no configuration updates will be applied, or if the device will always apply
configuration updates. (never/always)

LSS2200-8P (config-consoleflow)# apply_configuration_updates always ?
<cr>

LSS2200-8P (config-consoleflow)# apply_configuration_updates always
apply_configuration_updates:always
LSS2200-8P (config-consoleflow)#
```

Example 3:

```
lss2200-8p (config-consoleflow)# state enable
state:enable
lss2200-8p (config-consoleflow)#
```



## Example 4:

```
lss2200-8p (config-consoleflow)# status_update_interval 240
status_update_interval:240
lss2200-8p (config-consoleflow)#
```

Example 5: Enter specified ConsoleFlow connection mode and display available commands. See the following section for Console Flow Connection commands.

```
lss2200-8p (config-consoleflow)# connection connection:1
lss2200-8p (config-consoleflow-connection:1)# ?
do                               To run exec commands in config mode
end                               Go back to EXEC View
exit                             Go back to configure view
host                             Hostname or IP address of ConsoleFlow
local_port                       Local port for ConsoleFlow client. When configured, a total of 16
                                consecutive ports will be reserved
mqtt_security                   Enable SSL for MQTT
mqtt_state                      Enable or Disable MQTT
no                               Negate a command or set its defaults
port                             Port of ConsoleFlow
secure_port                     Enable https for ConsoleFlow client
validate_certificates           Enable server certificate validation on ConsoleFlow client
lss2200-8p (config-consoleflow)#
```

## Example 6:

```
lss2200-8p (config-consoleflow)# do show consoleflow status
ConsoleFlow client status
=====
Status: Exited
Device Id: .....
Device Key: <Configured>
Last Status Update: <Not Available>
Last Content Check: <Not Available>
Available Updates:
  Firmware: <Not Available>
  Configuration: <Not Available>

LSS2200-8P (config-consoleflow)# do show consoleflow config
ConsoleFlow client configuration
=====
State: Enabled
Device Name: LSS2200-8P-T51A
Device Description: Lantronix LSS2200-8P
Status Update Interval: 24
Content Check Interval: 24
Apply Firmware Updates: Enabled
Apply Configuration Updates: always
Remote Access Local Port: <Random>
Active Connection: Connection:1

Connection:1
=====
Host: api.consoleflow.com
Connect to: Cloud
Port: 443
Secure Port: Enabled
```

```

Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Host:
Proxy Port: 80
Proxy Username:
Proxy Password:

Connection:2
=====
Host: api.consoleflow.com
Connect to: Cloud
Port: 443
Secure Port: Enabled
Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Port: 80
Proxy Username:
Proxy Password:
LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# no state
state:disable
LSS2200-8P (config-consoleflow)#

```

Parameters (shown by **tab** command):

active_connection	admin	time	alarm	
apply_configuration_updates	apply_firmware_updates	ble	clock	
connection	consoleflow	content_check_interval	device_description	
device_name	do	end	exit	
interface	ip	lldp	lldp-med	
logging	loop-detect	lpm	monitor	
nfc	no	ntp	poe	
qos	remote_access_local_port	rest-server	route	
snmp	snmptrap	spanning-tree	start	
state	status_update_interval	system	telnet	

See the following section for Console Flow Connection commands.

**Command:** **consoleflow connection**

Description: Configure ConsoleFlow connection settings in config-consoleflow-connection mode.

Mode: Config ConsoleFlow Connection mode

Parameters: (shown by ? command):

connect\_to Connect to cloud or on-premise VM

Instance (Cloud/On-Premise)

do To run Exec commands in Config mode

end Go back to EXEC View

exit Go back to configure view

host Hostname or IP address of ConsoleFlow

local\_port Local port for ConsoleFlow client. When configured, a total of 16 consecutive ports will be reserved

mqtt\_security Enable SSL for MQTT

no Negate a command or set its defaults

port Port of ConsoleFlow

secure\_port Enable https for ConsoleFlow client

validate\_certificates Enable server certificate validation on ConsoleFlow client

do Run Exec commands in Config mode:

!	alarm	clear	clock	configure	copy	debug
exit	nslookup	ping	reload	shell	show	ssh
telnet	traceroute	who				

local\_port port number 0 or in range 1024-65520

monitor mirroring

no:	clock	host	interface	ip	lldp
	lldp-med	local_port	logging	loop-detect	monitor
	mqtt_security	nfc	ntp	poe	port
	qos	rest-server	route	secure_port	snmp
	snmptrap	spanning-tree	system	telnet	

port CF port Unsigned integer (1..65535)

egress The switch port type Gigabit Ethernet Port Type (GigabitEthernet/10GigabitEthernet)

ingress The switch port type Gigabit Ethernet Port Type (GigabitEthernet/10GigabitEthernet)

Port Type 1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8

Example 1:

```

lss2200-8p (config-consoleflow-connection:1)# do show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
=====
| VLAN 1        | 192.168.10.10/24 | Static   | UP
lss2200-8p (config-consoleflow-connection:1)# host BobB
host:BobB
lss2200-8p (config-consoleflow-connection:1)# local_port 0
local_port:0
LSS2200-8P (config-consoleflow-connection:2)# monitor destination egress 10GigabitEther%
1/8
%2200-8P (config-consoleflow-connection:2)#
lss2200-8p (config-consoleflow-connection:1)# mqtt_security
mqtt_security:enable

```

```
lss2200-8p (config-consoleflow-conneg-consoleflow-connection:1)# validate_certificates
validate_certificates:enable
lss2200-8p (config-consoleflow-connection:1)#
```

Example 2: Go to ConsoleFlow Config mode from ConsoleFlow Config Connection mode

```
LSS2200-8P (config-consoleflow-connection:2)# consoleflow
LSS2200-8P (config-consoleflow)#
```

Example 3:Set Hostname or IP address of ConsoleFlow:

```
lss2200-8p (config-consoleflow-connection:1)# host BobB
host:BobB
lss2200-8p (config-consoleflow-connection:1)#
```

Example 4: Set local port:

```
LSS2200-8P (config-consoleflow-connection:1)# local_port 1024
local_port:1024
LSS2200-8P (config-consoleflow-connection:1)#
```

Example 5: Enable MQTT (Message Queuing Telemetry Transport):

```
lss2200-8p (config-consoleflow-connection:1)# mqtt_security enable
mqtt_security:enable
lss2200-8p (config-consoleflow-connection:1)# mqtt_state enable
mqtt_state:enable
lss2200-8p (config-consoleflow-connection:1)
```

Example 6: Set Connection mode:

```
LSS2200-8P (config-consoleflow-connection:2)# connect_to Cloud
connect_to:Cloud
LSS2200-8P (config-consoleflow-connection:2)# connect_to On-Premise
connect_to:On-Premise
LSS2200-8P (config-consoleflow-connection:2)#
```

Example 6:

```
lss2200-8p (config-consoleflow-connection:1)# port 987
port:987
lss2200-8p (config-consoleflow-connection:1)# secure_port enable
secure_port:enable
lss2200-8p (config-consoleflow-connection:1)# do show consoleflow config
ConsoleFlow client configuration
=====
State: Enabled
Device Name: LSS2200-8P-2QB9
Device Description: Lantronix LSS2200-8P
Status Update Interval: 1
Content Check Interval: 24
Apply Firmware Updates: Enabled
Apply Configuration Updates: always
Remote Access Local Port: <Random>
Active Connection: Connection:1

Connection:1
=====
Host: api.consoleflow.com
```

```

Connect to: Cloud
Port: 987
Secure Port: Enabled
Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Host:
Proxy Port: 80
Proxy Username:
Proxy Password:

Connection:2
=====
Host: api.consoleflow.com
Connect to: Cloud
Port: 443
Secure Port: Enabled
Validate Certificates: Enabled
Local Port: <Random>
MQTT Security: Enabled
MQTT Local Port: <Random>
Use Proxy: Disabled
Proxy Type: SOCKS5
Proxy Host:
Proxy Port: 80
Proxy Username:
Proxy Password:
lss2200-8p (config-consoleflow-connection:1)# exit
lss2200-8p (config-consoleflow)# end
LSS2200-8P #

```

Parameters: (shown by tab command):

```

LSS2200-8P (config-consoleflow-connection:2)# <tab>
admin          aging-time      alarm           ble
clock          connect_to     con“oleflow ”  do
end            e‘it          ,             hos‘         interface
i‘            lldp          lldp-med      local_port
logging        loop-detect    lpm           monitor
mqtt_security  nfc           no            ntp
poe           port          qos           rest-server
route         secure_port   snmp          snmptrap
spanning-tree start         system        telnet
validate_certificates
LSS2200-8P (config-consoleflow-connection:2)#

```

**Command:** **do**

Description: To run exec commands in Config mode

Mode: Config mode

Parameters: !           Comments

alarm           Actions for alarm conditions

clear           Clear or reset status or conditions

clock           Configure time settings

configure       Enter configuration mode

copy            copy system configuration

debug           Debug led

exit            Exit from the CLI

nslookup        nslookup command for network diagnostics

ping            Ping command for network diagnostics

reload          Rebooting or defaulting the device

show            show information

ssh             SSH for secure, encrypted connection

telnet          telnet to transfer data in plain text.

traceroute      Traceroute command for network diagnostics

who             Show logged in users

mute            Silence an active alarm notification

unmute          Clear the muting of an active alarm notification

Arguments      ignored comment text

The name of the alarm, Tab to complete/list Alarm Name

ip              Clear IP Configuration

lldp            Clear LLDP counters

loop-detect    Clear loop detect statistics or condition

port-security   Clear port-security condition

reload          Abandon any previous reload in/at request

statistics      Clear the port statistics on the specified port

The switch port type   port type (GigabitEthernet/10GigabitEthernet)

The switch port number, Tab to complete/list port-number

set             Configure system date and time

time in HH:MM   HH:MM format system time

Date in YYYY-MM-DD format for system date

terminal        Configure from the terminal

Web URI or (log|(startup|temp|running|default)-config) source of the copy  
(uri|(startup|running|default)-config)

test            Debug led

all-leds        this command tests all leds in sequence

led             Select sequence to test all leds

host            Look up information for host using the current default server

String          Look up information for host using the current default server

host            Hostname or IP-address to ping

interface       Optional source IP-address or interface for sending packets

repeat	Requests to send count, default is 5			
Unsigned integer	Requests count (1..65535)			
defaults	Set defaults on device			
warm	Reboot the box			
show:				
alarm	banner	ble	clock	consoleflow
ddmi	interface	lp	lldp	log
logging	loop-detect	lpm	mac	monitor
nfc	ntp	poe	port-security	qos
reload	rest-server	route	running-config	snmp
snmptrap	spanning-tree	startup-config	system	telnet
uptime	users	version	vlan	
delete	Remove the particular host key from SSH's known_hosts file; ssh delete command to remove the unwanted SSH key using the ssh-keygen command.			
name@hostname/ipaddress	ssh targethost [e.g. ssh name@1.2.3.4]			
Hostname or IP Address	Hostname or IP address to remove the particular host key			
host	Host name or IP address to connect (telnet)			
port	Port number to connect. If no port number is specified, telnet attempts at the standard port 23.			
Unsigned integer	Port number to connect. If no port number is specified, telnet attempts at the standard port 23. (1..65535)			
host	IP address or domain name of the host to trace			
interface	Optional source interface to use for sending <a href="#">packets (traceroute)</a>			
String	IP address or domain name of the host to trace			
String	Source interface to use for sending packets (traceroute)			
config	LPM (Discovery) State			
status	Show LPM (Discovery) status			

## Example 1:

```

lss2200-8p (config)# do alarm unmute CPU-Temperature
lss2200-8p (config)# do clear statistics name 10GigabitEthernet 1/4
lss2200-8p (config)# do show uptime
System Uptime
=====
19 days, 21:59:02
LSS2200-8P (config)# do who
+-----+-----+-----+
| Username | From   | Since |
+-----+-----+-----+
| admin    | network | 2023-05-21 16:15:23 |
+-----+-----+-----+

LSS2200-8P (config)#

```

## Example 2:

```

LSS2200-8P (config)# do show lpm config
LPM State
=====
LPM State      : Enabled
LSS2200-8P (config)# do show lpm status
LPM status

```

```
=====  
Status:  Running  
Queries:  
  Valid:  0  
  Unknown: 0  
Erroneous Packets:  0  
Errors:  0  
Last Connection:  0.0.0.0/0  
  
LSS2200-8P (config)#
```

**Command:** **end**  
**Description:** Go back to Exec mode  
**Mode:** Config mode  
**Parameters:**  
**Example:**

```
LSS2200-8P (config)# end  
LSS2200-8P #
```

**Command:** **exit**  
**Description:** Exit from Configure mode  
**Mode:** Config mode  
**Parameters:**  
**Example:**

```
LSS2200-8P (config)# exit  
LSS2200-8P #
```



**Command:** [interface](#)

on: Select an interface to configure. Enter Interface Config mode; see [Interface Config Mode Commands](#) on page 104.

Mode: Config mode

Parameters:	10GigabitEthernet	Ethernet IEEE 802.3
	GigabitEthernet	Ethernet IEEE 802.3
	Switch/Interface number	Ethernet 1G interface number (1/1 1/2)
	Switch/Interface number	Ethernet 10G interface number (1/1 1/2)
	vlan	VLAN ID
	Number in the range 1-4094	VLAN Identifier (1..4094)

Example: Enter Config mode and display the available commands:

```
LSS2200-8P # configure terminal
LSS2200-8P (config)# interface ?
  10GigabitEthernet  Ethernet IEEE 802.3
  GigabitEthernet    Ethernet IEEE 802.3
  vlan                VLAN ID
  <cr>

LSS2200-8P (config)#
```

<b>Command:</b>	<b>ip</b>
Description:	IP Configuration and enter DHCP Server Config mode.
Mode:	Config mode
Parameters:	
	dhcp IP DHCP Configuration
	relay Enable DHCP Relay
	server Create a DHCP server
	snooping Enable DHCP Snooping
	address Local Address DHCP Relay listens on
	server DHCP Server IP Address
	A.B.C.D Local IPv4 address to listen for DHCP Requests
	interface Local Interface Name to Listen for DHCP Requests
	String Local Interface Name to Listen for DHCP Requests
	A.B.C.D IPV4 address of the DHCP server
	interface Interface Name to accept DHCP server replies
	String DHCP Server Name
	authoritative Set DHCP Server as Authoritative
	default-router Configure the Default Router Address List for the Pool
	dns-server Configure the DNS Server Address List for the Pool
	domain-name Configure the Domain Name for the Pool
	exit Exit from DHCP Server configuration mode
	host Configure Host Based IP Address for DHCP Server
	lease DHCP Address Lease Time
	netbios-name-server Configure the Netbios Name SERVER Address List for the Pool
	netbios-node-type Configure the Netbios Node Type
	netbios-scope Configure the netbios scope option
	nis-domain-name Configure the NIS Domain Name option
	nis-server Configure the NIS SERVER Address List for the Pool
	no Negate a command or set its defaults
	ntp-server Configure the NTP SERVER Address List for the Pool
	option Configure the DHCP Option
	range Configure the DHCP Pool Range
	server DHCP Server Address List Configuration
	vendor Configure vendor specific Information
	A.B.C.D Comma separated list of Default Router Address
	A.B.C.D Comma separated list of DNS Address
	String Domain Name
	client-id Configure Client ID based Fixed IP Address mapping in DHCP Server
	mac Configure Host MAC Address based Fixed IP Address in DHCP Server
	String Client Identifier
	xx:xx:xx:xx:xx:xx MAC Address
	hostname Host Name
	lease DHCP Address Lease Time
	time DHCP Address Lease Time
	DHCP Lease time Lease value (0-365)days/(1-24)hours/(1-60)minutes (1..365)

DHCP Lease for Days/Hours/Minutes    Lease Type (days/hours/minutes)  
A.B.C.D                                    IP Address  
A.B.C.D                                    Comma separated list of NetBios Name Server Address  
NetBios Node Type Option            broadcast(b)/peer-to-peer(p)/mixed(m)/hybrid(h)  
Netbios Node Type (b/p/m/h)        (broadcast/peer-to-peer/mixed/hybrid)  
String                                    Netbios scope  
String                                    NIS Domain Name  
A.B.C.D                                    Comma separated list of NIS Server Address  
no                                        Negate a command or set its defaults; valid entries are:  
aging-time    alarm                            authoritative            ble  
clock         default-router                    dns-server                domain-name  
host         interface                        ip                         lease  
lldp         lldp-med                        logging                    loop-detect  
monitor     netbios-name-server            netbios-node-type        netbios-scope  
nfc         nis-domain-name                nis-server                ntp  
ntp-server   option                            poe                        qos  
range       rest-server                     route                      server  
snmp        snmptrap                        spanning-tree             system  
telnet      vendor  
A.B.C.D                                    Comma separated list of NTP Server Addresses  
DHCP Option Code                    Option Code (1..254)  
A.B.C.D                                    IPv4 DHCP Pool Start Address  
A.B.C.D                                    IPv4 DHCP Pool End Address  
netmask                                IPv4 DHCP Pool Netmask  
broadcast                               IPv4 DHCP Pool Broadcast Address  
vendor                                 Vendor Class Identifier  
user                                    User Class Identifier  
lease                                    DHCP Address Lease Time  
A.B.C.D                                    IPv4 DHCP Pool Broadcast Address  
String                                    Vendor Identifier  
address                                 DHCP Server Listen Address List Configuration  
A.B.C.D                                    Comma separated list of listen Address  
specific                                 Configure vendor specific Information  
info                                     Configure the vendor specific info

## Example:

```
lss2200-8p (config)# ip dhcp relay address 192.168.1.99
lss2200-8p (config)# ip dhcp server 2.4.6.8
lss2200-8p (config)# ip dhcp snooping
lss2200-8p (config)# ip dhcp server DhcpSrvr1
lss2200-8p (config-dhcp)# authoritative
lss2200-8p (config-dhcp)# default-router 2.3.4.5
lss2200-8p (config-dhcp)# dns-server 192.168.10.100
lss2200-8p (config-dhcp)# domain-name BobB
lss2200-8p (config-dhcp)# host client-id Sams 4.3.2.1 hostname DHost1 lease time 10 days
lss2200-8p (config-dhcp)# host mac 11:22:33:44:55:66 1.2.3.4
lss2200-8p (config-dhcp)# netbios-name-server 1.2.3.4
```

```

lss2200-8p (config-dhcp)# netbios-node-type broadcast
lss2200-8p (config-dhcp)# netbios-node-type peer-to-peer
lss2200-8p (config-dhcp)# netbios-scope BBString1
lss2200-8p (config-dhcp)# nis-domain-name NisD1
lss2200-8p (config-dhcp)# nis-server 5.4.3.2
lss2200-8p (config-dhcp)# ntp-server 192.168.1.77
lss2200-8p (config-dhcp)#

```

**Command:** [logging](#)

Description: Set syslog parameters

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters:	buffer-size	Configure Syslog buffer size
	host	Add Syslog server
	severity	Configure Syslog output severity level
	Unsigned integer	Syslog buffer size (1..65535)
	A.B.C.D	IP address of Syslog server
	Syslog severity level	Syslog output severity level (emergency/alert/critical/error/warning/notice/info/debug)
	transport	Syslog server transport protocol
	port	Syslog server port
	Syslog transport protocol choice	Syslog server transport protocol (tcp/udp)
	port	Syslog server port
	Unsigned integer	Syslog server port (1..65535)

**Example:**

```

LSS2200-8P (config)# logging host 172.27.100.88
LSS2200-8P (config)# logging buffer-size 7500
LSS2200-8P (config)# logging severity warning
LSS2200-8P (config)# logging host 192.168.60.1 transport tcp port 678
LSS2200-8P (config)# logging host 192.168.60.1 transport udp port 6514
LSS2200-8P (config)#

```

**Command:** `lldp`

Description: Configure Link Level Discovery Protocol.

**Note 1:** FW v 1.7.0.0R5 removed the global "lldp-med" command. The LLDP service can be activated or deactivated globally, which also enables or disables LLDP-Med; the timing parameters are still set globally. LLDP-Med is then enabled or disabled per port in the respective interface view.

**Note 2:** Any backup files made prior to 1.7.0.0 that enable LLDP on a port will require the global "lldp" command to be added. This command can go anywhere above the first "interface" view, left-aligned, and not in an indented section. Without this, the interface "lldp" commands will fail to apply during restore.

**Note 3:** Ports must be enabled individually for LLDP; a global `no lldp` will disable all ports, a global re-enable will not activate ports, just the service.

Mode: Config mode

Parameters: `holdtime` LLDP Hold time (the neighbor switch will discard the LLDP information after 'hold time' multiplied by 'txinterval' seconds).

`txinterval` LLDP Packet Transmission Interval.

`Tx Hold Time` Transmit holdtime multiplier value (2..10).

`Tx Interval` The interval (in seconds) at which LLDP packets are sent to neighbors (5..120).

`<cr>` Enable LLDP globally

Example:

```
LSS2200-8P (config)# lldp holdtime 5
LSS2200-8P (config)# lldp txinterval 50
LSS2200-8P (config)# do show lldp config
```

LLDP Configuration

=====

```
LLDP          : Enabled
TxInterval    : 50
Holdtime      : 250
```

LLDP Port configurations

=====

Port	LLDP	MED
10GigabitEthernet 1/1	Both	Enabled
10GigabitEthernet 1/2	Both	Enabled
GigabitEthernet 1/1	Both	Enabled
GigabitEthernet 1/2	Both	Disabled
GigabitEthernet 1/3	Both	Enabled
GigabitEthernet 1/4	Both	Enabled
GigabitEthernet 1/5	Both	Enabled
GigabitEthernet 1/6	Both	Enabled
GigabitEthernet 1/7	Both	Enabled
GigabitEthernet 1/8	Both	Enabled

```
LSS2200-8P (config)#
```

**Messages:**

*Error: lldp is disabled, please enable.*

**Command:** **logging**

Description: Configure Syslog. Note that when you configure the logging severity, that severity level applies to the internal log and to log message forwarding to a syslog server.

Mode: Config mode

Parameters:	buffer-size	Configure Syslog buffer size
	host	Add Syslog server
	severity	Configure Syslog output severity level
	Unsigned integer	Syslog buffer size (1..65535)
	A.B.C.D	IP address of Syslog server
	Syslog severity level	Syslog output severity level (emergency/alert/critical/error/warning/notice/info/debug)
	transport	Syslog server transport protocol
	port	Syslog server port

Example:

```
lss2200-8p (config)# logging buffer-size 5000
lss2200-8p (config)# logging host 192.168.1.77
lss2200-8p (config)# logging severity warning
LSS2200-8P (config)# logging host 192.168.60.1 transport udp port 3391
LSS2200-8P (config)# logging host 192.168.60.1 transport tcp port 999
lss2200-8p (config)#
```

**Command:** **loop-detect**

Description: Loop Detection Enabled

Mode: Config mode

Parameters: Loop Detect Shutdown Time Period In seconds (0..604800)  
Loop Detect frame transmission interval in seconds (1..10)

Example:

```
lss2200-8p (config)# loop-detect shutdown 3000
lss2200-8p (config)# loop-detect tx 4
lss2200-8p (config)#
```

**Command:** **lpm**

**Description:** Enable LPM Discovery tool. Lantronix Provisioning Manager allows easy administration of Lantronix Remote Environment Management (REM) devices and IoT gateways and device servers. With LPM, you can quickly update firmware, update configuration, and provision one or more devices at the same time. See the LPM webpage at <https://docs.lantronix.com/products/lpm/5.x/>.

**Mode:** Config mode

**Parameters:** None

**Example:**

```
LSS2200-8P (config)# do show lpm config
LPM State
=====
LPM State      : Enabled
LSS2200-8P (config)# lpm
LSS2200-8P (config)# do show lpm config
LPM State
=====
LPM State      : Enabled
LSS2200-8P (config)#
```

**Command:** **monitor**

**Description:** Monitoring different system events

**Mode:** Config mode

**Parameters:**

destination	MIRROR destination port
egress	Configure a MIRROR destination egress port
ingress	Configure a MIRROR destination ingress port
The switch port type	Gigabit Ethernet Port Type (GigabitEthernet/10GigabitEthernet)
The switch port type	Gigabit Ethernet Port Type (GigabitEthernet/10GigabitEthernet)
	1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8

**Example:**

```
lss2200-8p (config)# monitor destination egress GigabitEthernet 1/4
lss2200-8p (config)# monitor destination ingress 10GigabitEthernet 1/8
lss2200-8p (config)#
```

**Command:** `nfc`

Description: Enable Near Field Communication via the LSS2200-8P MobileApp.

Parameters:

Example:

```
lss2200-8p (config)# nfc
lss2200-8p (config)# do show nfc state
NFC State
=====
NFC State      : Enabled
lss2200-8p (config)# no nfc
lss2200-8p (config)# do show nfc state
NFC State
=====
NFC State      : Disabled
lss2200-8p (config)#
LSS2200-8P (config)# do show nfc data
NFC Data
=====
No NFC data available
LSS2200-8P (config)#
```



**Command:** **no**

Description: Negate a command or set its defaults.

Mode: Config mode

## Parameters:

aging-time	alarm	ble	clock	interface	ip	lldp
lldp-med	logging	loop-detect	lpm	monitor	nfc	ntp
poe	qos	rest-server	route	snmp	snmptrap	
spanning-tree	system	telnet				

The name of the alarm, Tab to complete/list	Alarm Name
broadcast	Disable BLE Broadcast
timezone	Restore the default time zone settings
server	Remove a server from NTP Servers list
String	Name of server to delete
fast_mode	Disable power at boot, do not wait for startup config
schedule	Clear Power over Ethernet Scheduling settings
String	PoE Schedule Profile Name
day	Day of Week
hour	Hour HH
min	Minute MM
weights	Set QoS queue weights to defaults
rest-server	Disable REST API server
Name	Name of static route to delete
community	Delete the SNMP v2c community
user	Delete the SNMP v3 user
view	Delete SNMP v3 view
The name of the SNMP v2c community, Tab to complete/list	SNMP v2c community string for read-only access
The name of the SNMP v3 user, Tab to complete/list	SNMP v3 user name
The name of the SNMP v3 view, Tab to complete/list	SNMP v3 MIB view identifier
authentication-failure	disable SNMP Authentication failure Traps
link-up-down	disable SNMP Link Up/Link Down Traps
server	Delete the SNMP v2c Traps Sink server
contact	Default system contact to blank
location	Default system location to blank
name	Default system name to 'eos'
server	Disable the Telnet server

## Example:

```
lss2200-8p (config)# no ble broadcast
lss2200-8p (config)# no clock Timezone
lss2200-8p (config)# no qos weights
lss2200-8p (config)# no rest-server
lss2200-8p (config)# no snmptrap authentication-failure
lss2200-8p (config)# no spanning-tree
lss2200-8p (config)# no telnet server
lss2200-8p (config)#
```

**Command:** **ntp**

Description: Enable Network Time Protocol

Mode: Config mode

Parameters: server Add an NTP Server or modify its address  
 name Server name  
 address Server address (IPv4 address or DNS domain name)  
 String Server name

Example:

```
lss2200-8p (config)# ntp server name Srvr1 address 192.168.1.200
lss2200-8p (config)#
```

**Command:** **poe**Description: Configure Power over Ethernet settings. **Note** that when 'poe force' is entered, then PoE Force mode is set to 'True' and PoE is set to 'False'. The 'no poe' command is not added if either PoE or PoE Force mode is enabled (for both 'show config' and 'show config with defaults').**Note** that you must disable poe before setting poe forced.

Mode: Config mode

Parameters: fast\_mode Enable power at boot, do not wait for startup config  
 pse Set power supply delivery budgets  
 schedule Configure Power over Ethernet Scheduling Profile  
 Power supply identifier ('ps1', 'ps2') Power supply (ps1/ps2)  
 Power supply budget in Watts (30..1600) Power budget (30..1600)  
 String PoE Schedule Profile Name  
 day Day of Week  
 hour Hour HH  
 min Minute MM  
 action Scheduled Action  
 PoE Schedule Day of Week Day of Week (sun/mon/tue/wed/thu/fri/sat)  
 PoE Schedule Action Type Scheduled Action (on/off/reset)

Example:

```
lss2200-8p (config)# poe fast_mode
Fast PoE is Enabled
lss2200-8p (config)# no poe fast_mode
Fast PoE is Disabled
lss2200-8p (config)# poe pse ps1 1600
lss2200-8p (config)# poe pse ps2 1350
lss2200-8p (config)# poe schedule Prof1 day sun hour 12 min 30 action reset
lss2200-8p (config)#
```

**Command:** **qos**

Description: Configure QoS parameters

Mode: Config mode

Parameters: weights QoS queue weights distribution mode  
 QoS queue weights distribution mode options QoS queue weights distribution mode (even/default/custom)  
 Queue weights for queues 0-7 Weight for Queue 0 (1..16)

Example:

```
lss2200-8p (config)# qos weights even
lss2200-8p (config)# qos weights default
lss2200-8p (config)# qos weights custom 1 2 3 4 5 6 7 8
lss2200-8p (config)#
```

**Command:** **rest-server**

Description: Enable REST API server.

Mode: Config mode

Example:

```
lss2200-8p (config)# rest-server
lss2200-8p (config)# do show rest-server config
REST API Server Configuration
=====
REST Server Enabled: Enabled
REST Server Port: 8000
lss2200-8p (config)#
```

**Command:** **route**

Description: Create Static route.

Mode: Config mode

Parameters: name Name of static route to add  
 address Destination network ip/prefix  
 gateway The network gateway  
 interface The route interface  
 Name Name of static route to add  
 A.B.C.D[/mask] Destination network ip/prefix. Routes created with network address.  
 A.B.C.D The network gateway  
 Interface Name The route interface

Example:

```
lss2200-8p (config)# route name route6 address 1.2.3.4 gateway 2.3.4.5 interface VLAN1
route_name='route66', target_ip='1.2.3.4', gateway='2.3.4.5', interface='VLAN1'
lss2200-8p (config)#
```

Messages: *Failed to add static route*  
*Route-name already exists!!*

**Command:** **snmp**

Description: Enable SNMP access

Mode: Config mode

## Parameters:

community	Create SNMP v2c community
user	Create SNMP v3 user
view	Create SNMP v3 view
The name of the SNMP v2c community, Tab to complete/list	SNMP v2c community string for read-only access
The name of the SNMP v3 user, Tab to complete/list	SNMP v3 user name
The name of the SNMP v3 view, Tab to complete/list	SNMP v3 MIB view identifier
host-access	Host/network access for community
restrict-oid	Restrict community to the specified OID
A.B.C.D[/mask]	Host/network access for community
String	Restrict community to the specified OID
security-level	Security levels of group which defines their access right
auth-protocol	Authentication type of the user
auth-key	Private key to use with authentication protocol
priv-protocol	Type of privacy protocol
priv-key	Associated key to use with the privacy protocol
view-name	MIB view to which this user belongs to
SNMP v3 user security level	Security levels of group which defines their access right: (noAuthNoPriv/authNoPriv/authPriv)
SNMP v3 user authentication type	Authentication type of the user (MD5/SHA)
String	Private key to use with authentication protocol
SNMP v3 user privacy protocol	Type of privacy protocol (DES/AES)
String	Associated key to use with the privacy protocol
The name of the SNMP v3 view,	Tab to complete/list MIB view to which this user belongs to.
oid	The OID to include or exclude from this view
type	MIB view type
String	The OID to include or exclude from this view
SNMP v3 MIB view type	MIB view type (included/excluded)

## Example:

```
lss2200-8p (config)# snmp community public restrict-oid
lss2200-8p (config)# snmp community public host-access 1.2.3.4/255.255.255.0
Syntax error: Illegal parameter
lss2200-8p (config)#
lss2200-8p (config)# snmp user BobB security-level authPriv auth-protocol SHA auth-key
adminadmin priv-protocol AES priv-key abc123 view-name myView
Privacy key is under minimum length of 8
lss2200-8p (config)# snmp user BobB security-level authPriv auth-protocol SHA auth-key
adminadmin priv-protocol AES priv-key abc123!@# view-name myView
lss2200-8p (config)# snmp view ssssss type excluded oid .1.2.3.4.5.6
lss2200-8p (config)#
```

**Command:** **snmptrap**

Description: Configure SNMP Traps

Mode: Config mode

Parameters: authentication-failure enable SNMP Authentication failure Traps  
 link-up-down enable SNMP Link Up/Link Down Traps.  
 server Add SNMP v2c Traps Sink server  
 A.B.C.D IP address of SNMP v2c Traps Sink server

## Example:

```
lss2200-8p (config)# snmptrap authentication-failure
lss2200-8p (config)# snmptrap link-up-down
lss2200-8p (config)# snmptrap server
Syntax error: Incompleted command
lss2200-8p (config)# snmptrap server 1.2.3.4
A SNMPTrap with Sink Server IP 1.2.3.4 already exists
lss2200-8p (config)# snmptrap server 2.3.4.5
lss2200-8p (config)# do show snmptrap config
```

## SNMP Trap Configuration

=====

```
Authentication Trap: Enabled
Link Up/Link Down Trap: Enabled
Cold Start Trap: Enabled
Trap Server: 1.2.3.4, 192.168.10.50, 2.3.4.5
lss2200-8p (config)#
```

**Command:** **spanning-tree**

Description: Enable spanning tree

Mode: Config mode

Parameters: forward-delay Delay when transitioning ports to forwarding  
 max-age Maximum age of information transmitted by bridge  
 priority Priority, lowest value selects root  
 transmit-hold-count Limits BPDU / per second sent by bridge port  
 Delay in seconds: set so max age does not exceed 2 x (forward delay -1) (4..30)  
 Age in seconds: set so max age does not exceed 2 x (forward delay -1) (6..40)  
 Priority value in range 0 through 61440 (steps of 4096)  
 BPDU per second (1..10) transmit hold count

## Example:

```
lss2200-8p (config)# spanning-tree forward-delay 6
lss2200-8p (config)# spanning-tree max-age 10
lss2200-8p (config)# spanning-tree priority 4096
lss2200-8p (config)# spanning-tree transmit-hold-count 3
lss2200-8p (config)#
```

**Command:** **start**

Description: Start Virtual Cable Test

Mode: Config mode

Parameters:

vct Run Virtual Cable Test on the specified port  
 The 1G switch port type port type (GigabitEthernet)  
 The switch port number, Tab to complete/list port-number  
 1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8

Example:

```
LSS2200-8P (config)# start vct GigabitEthernet 1/1
Cable diagnostics for port : GigabitEthernet 1/1 (Timestamp: 2022-09-09 14:29:32.113456)
=====
| pair   | Status           | Length (meters) |
=====
| A      | Pair Ok          | -                |
| B      | Pair Ok          | -                |
| C      | Pair Ok          | -                |
| D      | Pair Ok          | -                |
LSS2200-8P (config)# start vct GigabitEthernet 1/2
Cable diagnostics for port : GigabitEthernet 1/2 (Timestamp: 2022-09-09 14:31:22.475284)
=====
| pair   | Status           | Length (meters) |
=====
| A      | Pair Ok          | -                |
| B      | Pair Ok          | -                |
| C      | Pair Short       | 0                |
| D      | Pair Short       | 0                |
LSS2200-8P (config)#
```

Messages:

*Interface GigabitEthernet 1/9 does not valid for virtual cable test*

**Command:** **system**

**Description:** Configure system settings. See the Install Guide for related DIO hardware information. The system name supports a simple name (including both '\_' and '.') or a fully-qualified domain name, where a domain name is a dot-delimited series of simple sub-strings. The "system name" supports a maximum length of 63 characters.

**Mode:** Config mode / DIO configuration mode

**Parameters:**

contact	set system contact
DigitalIO	set system digital io
Digital IO number	Digital IO number (1..99) / enter Digital I/O mode
location	set system location
name	set system name
String	system contact
do	To run exec commands in Config mode
exit	Exit from DIO Config mode
input	set system digital input
name	set system DIO name
output	set system digital output
snmp-action	set system dio1 snmp
snmp-trap	set system dio1 snmp
high-to-low	set system dio2 snmp action
low-to-high	set system dio2 snmp action
high	set system dio output high
low	set system dio output low
high-to-low	set system dio2 snmp action
low-to-high	set system dio2 snmp action
disable	set system dio2 snmp disable
enable	set system dio2 snmp enable
do:	! alarm clear clock configure copy debug exit nslookup ping reload show ssh telnet traceroute who

**Example 1:** Set and view system parameters:

```
lss2200-8p (config)# system contact EngSvcS
LSS2200-8P (config)# system location Eng-2ndFloor
LSS2200-8P (config)# system name lss2200-8p
lss2200-8p (config)# do show system config
System Name:      lss2 LSS2200-8P (config)# system location Eng-2ndFloor
Contact:          EngSvcS
Location:         Eng-2ndFloor
lss2200-8p (config)#
```

Example 2: Enter DIO Configuration mode and set DIO parameters:

```

lss2200-8p (config)# system DigitalIO 1
lss2200-8p (config-dio)# ?
  do      To run exec commands in config mode
  exit    Exit from DIO configuration mode
  input   set system digital input
  name    set system DIO name
  output  set system digital output
lss2200-8p (config-dio)# input snmp-action high-to-low
lss2200-8p (config-dio)# input snmp-trap ?
  disable set system dio1 snmp disable
  enable  set system input dio1 snmp enable
  <cr>

lss2200-8p (config-dio)# input snmp-trap enable
lss2200-8p (config-dio)# name DioCfg-1
lss2200-8p (config-dio)# output high

lss2200-8p (config-dio)# exit
lss2200-8p (config)#

LSS2200-8P (config-dio)# do show system Digitalio <tab>
config status
LSS2200-8P (config-dio)# do show system Digitalio config
System Digital IO Configuration
=====
DigitalIO 1:
  Name           : amport_1.3
  IO Type        : output
  IO active      : low
  SNMP trap      : Enabled
  SNMP input action : low-to-high
DigitalIO 2:
  Name           :
  IO Type        : input
  IO active      :
  SNMP trap      : Disabled
  SNMP input action : low-to-high
LSS2200-8P (config-dio)# do show system Digitalio status
System Digital IO Status
=====
DigitalIO 1:
  IO Type        : output
  State          : Low

```



```
DigitalIO 2:
  IO Type      : input
  State        : Low
LSS2200-8P (config-dio)# exit
LSS2200-8P (config)# system DigitalIO ?
  Digital IO number  Digital IO number (1..99)
LSS2200-8P (config)# system DigitalIO <tab>
1 2
LSS2200-8P (config)# system DigitalIO 3
DigitalIO 3 does not exist
LSS2200-8P (config)#
```

**Messages:**

Message: *Error 404: Digital I/O configuration data not found.*

Problem: Digital IO Config and Status break after upgrade from v1.5.0.0R16 to v1.6.0.0R6.

Description: After upgrading from v1.5.0.0R16 to v1.6.0.0R6, the Digital IO webpages stop displaying, and the CLI commands don't return anything.

Recovery: To restore Digital IO functionality:

1. Backup the running config to a remote file.
2. Edit the backup file to remove all "DIO\*" commands.
3. Restore running-config from the edited backup file.
4. If the restore succeeds, then optionally change DigitalIO settings as desired, and then copy running-config to startup-config.

If the above steps fail, try these steps (note that the following procedure would lose all modified config settings):

1. Reload Factory Defaults.
2. Copy the running-config to the startup-config.
3. Reboot the switch.

Message: *DigitalIO x does not exist*

Description: The switch does not recognize the DIO instance.

Recovery: Create the desired DIO instance.

Example:

```
LSS2200-8P (config)# system DigitalIO 99
DigitalIO 99 does not exist
LSS2200-8P (config)#
```

**Command:** **telnet**

**Description:** Enable the Telnet server.

**Mode:** Config mode

**Parameters:**

**Example:**

```
lss2200-8p (config)# telnet server
```

```
Warning: Non-secure Telnet State is enabled.Device is vulnerable to Cleartext Transmission of Sensitive Information.Setup and verify SSH, then disable Telnet.
```

```
lss2200-8p (config)# do show telnet server
```

```
Telnet service enabled
```

```
Warning: Non-secure Telnet State is enabled.Device is vulnerable to Cleartext Transmission of Sensitive Information.Setup and verify SSH, then disable Telnet.
```

```
lss2200-8p (config)#
```

## Config Admin Mode Commands

An Admin user has full access to any and all CLI commands. To enter Config Admin mode from Config mode:

```
lss2200-8p (config)# admin
lss2200-8p (config-admin)#
```

To display the available Config Admin Mode commands:

```
lss2200-8p (config-admin)# ?
  banner      First level of banner commands.
  do          To run exec commands in config mode
  end         Go back to EXEC View
  exit        Exit from configure mode
  firmware    Firmware commands
  no          Negate a command or set its defaults
  password    Change password for the specified user account
  username    Create or modify a local user account
  webserver   upload and install SSL certificate, private key file, and optional passphrase
lss2200-8p (config-admin)#
```

### Command: **banner**

Description: First level of banner commands.

Mode: Config Admin mode

Parameters:

amend	Configure banner line by line.
edit	Enter a new login banner interactively.
none	Remove the whole banner.
String	Configure banner line by line.

Example:

```
lss2200-8p (config-admin)# banner edit

  Input banner then type Ctrl-D to finish, Ctrl-E<Enter> to cancel

^C^E

Banner input was cancelled
Command failed
lss2200-8p (config-admin)#

LSS2200-8P (config-admin)# do show banner
Banner
=====
LSS2200-*P New Banner text
LSS2200-8P (config-admin)#
```

<b>Command:</b>	<b>do</b>
Description:	To run Exec commands in Config mode
Mode:	Config Admin mode
Parameters:	!           Comments
	alarm       Actions for alarm conditions
	clear       Clear or reset status or conditions
	clock       Configure time settings
	configure   Enter configuration mode
	copy        Copy system configuration
	debug       Debug led
	exit        Exit from the CLI
	nslookup    nslookup command for network diagnostics
	ping        Ping command for network diagnostics
	reload       Rebooting or defaulting the device
	show        Show information
	ssh         SSH for secure, encrypted connection
	telnet       Telnet to transfer data in plain text.
	traceroute   Traceroute command for network diagnostics
	who         Show logged in users
	mute        Silence an active alarm notification
	unmute      Clear the muting of an active alarm notification
	Arguments   ignored comment text
	Alarm Name   The name of the alarm, Tab to complete/list
	ip          Clear IP Configuration
	lldp        Clear LLDP counters
	loop-detect   Clear loop detect statistics or condition
	port-security   Clear port-security condition
	reload       Abandon any previous reload in/at request
	statistics    Clear the port statistics on the specified port
	Arguments   ignored comment text
	set          Configure system date and time
	time in HH:MM   HH:MM format system time
	Date in YYYY-MM-DD format   for system date
	terminal      Configure from the terminal
	Web URI or (log (startup temp running default)-config)   source of the copy (uri (startup running default)-config)
	test         Debug led
	all-leds      this command tests all leds in sequence
	led          Select sequence to test all leds
	host         Look up information for host using the current default server
	String       Look up information for host using the current default server
	host         Hostname or IP-address to ping
	interface     Optional source IP-address or interface for sending packets
	repeat       Requests to send count, default is 5

defaults	Set defaults on device			
warm	Reboot the box			
Arguments	ignored comment text			
show commands:				
alarm	banner	ble	clock	consoleflow
ddmi	interface	ip	lldp	log
logging	loop-detect	mac	monitor	nfc
ntp	poe	port-security	qos	reload
rest-server	route	running-config	snmp	snmptrap
spanning-tree	startup-config	system	telnet	uptime
users	version	vlan		
delete	Remove the particular host key from SSH's known_hosts file			
name@hostname/ipaddress	ssh targethost [e.g. ssh name@1.2.3.4]			
host	Host name or IP address to connect			
port	Port number to connect. If no port number is specified, telnet attempts at the standard port 23.			
host	IP address or domain name of the host to trace			
interface	Optional source interface to use for sending packets			
String	IP address or domain name of the host to trace			
String	Source interface to use for sending packets			
Login name for the user account, Tab to complete/list	Login name for the user account to add or modify			
firmware	Show the currently selected firmware bank			

## Example:

```

lss2200-8p (config-admin)# do clear reload
There was no previous reload request to cancel
lss2200-8p (config-admin)# do configure terminal
lss2200-8p (config)# admin
lss2200-8p (config-admin)# do show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
=====
| VLAN 1        | 192.168.10.50/24 | Static   | UP
lss2200-8p (config-admin)# do who
+-----+-----+-----+
| Username | From   | Since           |
+-----+-----+-----+
| root    | console | 2022-04-28 22:48:35 |
| root    | network | 2022-04-30 02:04:18 |
+-----+-----+-----+

lss2200-8p (config-admin)# show firmware
Currently selected bank : a
lss2200-8p (config-admin)#

```

**Command:** **end**

Description: Go back to Exec mode from Config Admin mode

Mode: Config Admin mode

Parameters: None

Example:

```
lss2200-8p (config-admin)# end
LSS2200-8P #
```

**Command:** **exit**

Description: Go back to Config mode from Config-admin mode

Mode: Config Admin mode

Parameters: None

Example:

```
lss2200-8p (config-admin)# exit
lss2200-8p (config)#
```

**Command:** **firmware**

Description: Firmware commands.

Mode: Config Admin mode

Parameters:

update Upload, activate, and reboot to a new firmware image from the specified source

verify Verify a new firmware image from the specified source

URI for update image source of the update (uri) -- URI examples: [tftp://&lt;address&gt;/device\_image.tgz] | [scp://&lt;username&gt;:&lt;password&gt;@&lt;address&gt;/device\_image.tgz]

https: http: scp: tftp: ftp:

URI for update image source of the update (uri)

timeout Maximum allowed time to complete the image file transfer

Image upload timeout Maximum allowed time to complete the image file transfer (10..3600)

Arguments ignored comment text

Example:

```
lss2200-8p (config-admin)# firmware update tftp://192.168.60.30/LSS2200-8P.0R9_image.tgz
Fetching Update
Performing Update-8P_1.5.0.0R15_image.tgz: 47062233 of 4706233 (100%)
lss2200-8p (config-admin)# firmware verify scp://admin:adminadmin192.168.60.1:LSS2200-
8P_1.6.0.0R1_image (1).tgz
Fetching Image for verification
Failed to get :
Cannot open file: Failed to get :
lss2200-8p (config-admin)#
```

Messages:

*Fetching Update**Fetching Image for verification**Failed to get /update.tgz: TFTP response timeout*

*Failed to get contents from: tftp://192.168.10.50/update.tgz*

*Cannot open file: Failed to get /update.tgz: TFTP response timeout*

*Failed to get : Operation timed out after 10000 milliseconds with 0 out of 0 bytes received*

*Cannot open file: Failed to get : Operation timed out after 10000 milliseconds with 0 out of 0 bytes received*

Issue: Firmware backup failed

Recovery:

1. Backup the running config to a remote file.
2. Edit the backup file to remove all "DIO\*" commands.
3. Copy default-config to startup-config.
4. Perform the firmware upgrade.
5. Restore running-config from the edited backup file.
6. If the restore succeeds, then optionally change DigitalIO settings as desired, and then copy running-config to startup-config.

**Note 1:** If the above steps fail, then after upgrading from v1.5.0.0R16 to v1.6.0.0R6, reload defaults and save or do a factory reset. This recovery procedure will lose all modified config settings.

**Note 2:** If upgrading from v1.5.0.0R16 to v1.6.0.0R6, reload defaults and save or do a factory reset.

**Note 3:** If upgrading from v1.6.0.0R6 to v1.7.0.0R5, reload defaults is not required; however, backups from v1.6.0.0R6 will be missing the global LLDP command if it had been enabled. The new command would have to be added to backup or a new backup created.

**Command:** **no**

Description: Negate a command or set its defaults

Mode: Config Admin mode

Parameters:

username	Delete or disable a user account
login name for the user account, Tab to complete/list	User account to delete or disable
enable	Do not enable user account (prohibit login)
webserver	Remove web server settings
certificate	Remove current SSL certificate and key files and clear key passphrases

Example:

```
LSS2200-8p (config-admin)# no username BobB
User BobB not found
LSS2200-8P (config-admin)# no username admin enable
LSS2200-8p (config-admin)# no webserver certificate
LSS2200-8P (config-admin)#
```

**Command:** `password`

Description: Change password for the specified user account

Mode: Config Admin mode

Parameters: Login name for the user account, Tab to complete/list    User account to modify

Example:

```
LSS2200-8P (config-admin)# password BobB
User BobB not found
LSS2200-8P (config-admin)# password admin
New password:
Password must be at least 6 characters long.  Retry.
New password:
Confirm password:
LSS2200-8P (config-admin)# password <tab>
admin      PLM1      TechSuppt
LSS2200-8P (config-admin)# password PLM1
New password:
Confirm password:
LSS2200-8P (config-admin)# password Admin123
User Admin123 not found - cannot change password
LSS2200-8P (config-admin)#
```

Messages: *Password must be at least 6 characters long. Retry.*

**Note:** It is generally easier to omit the password when creating a user account, and then immediately follow with the "password <user>" command, which prompts for password entry and does not echo it to the screen.



**Command:** **username**

Description: Create or modify a local user account

Mode: Config Admin mode

## Parameters:

Login name for the user account, Tab to complete/list	Login name for the user account to add or modify
enable	Enable existing user account (allow login)
group	Assign user group for command authorization
password	Encrypted password in MD5 or SHA-256 format
User group (authorization)	Assign user group for command authorization (readonly/config/admin)
Regex pattern for encrypted password in MD5 or SHA-256 format	Encrypted password in MD5 or SHA-256 format.

&lt;cr&gt;

## Example:

```
lss2200-8p (config-admin)# username BobB enable group config password All4One!
Syntax error: Illegal command line
lss2200-8p (config-admin)# username TomT enable
User TomT not found
lss2200-8p (config-admin)# username BobB enable group config password Abcd1234!@#$
Syntax error: Illegal command line
lss2200-8p (config-admin)# username BobB enable group config
Add user BobB succeeded
lss2200-8p (config-admin)# do show users
Local Users:
| Name           | Group          | Status   |
=====
  admin          | admin          | Enabled  |
  BobB           | config         | Enabled  |
lss2200-8p (config-admin)#
```

## Web Server Commands

### SSL Certificate, Private Key file, and optional Passphrase Commands

FW 1.6.0.0R6 adds CLI commands to upload and install a self-signed SSL server certificate, private key file, and optional passphrase if it was used to encrypt the key. The following file combinations are supported:

- Certificate and key in a single file.
- Separate certificate and key files (both may be installed in a single command, or each may be installed in a separate command).
- Optional key encryption with password protection (user must provide the password).
- Users may set one persistent and/or one temporary password. If a temporary password is provided, it takes precedence over a persistent password; however, it will not survive a restart.

Note the following:

- If a key is encrypted with password protection, the current implementation expects a minimum password length of 6 characters.
- A second CLI session for watching the system log is optional. Viewing the log about a minute after installing a certificate and password-protected key is an easy way to check whether the web server files loaded successfully.
- If the web services need a password in order to load the certificate, there is no alarm or visible indication other than log messages. This will be provided in a future release.
- A Lantronix self-signed certificate and private key are used by default, both during initial launch and after removing a custom cert.
- The web proxy and REST server will not load a certificate unless the certificate and key are consistent.
- If the key is password protected, the web proxy and REST server will not load the key unless the (persistent or temporary) passphrase for that key has been entered.
- The web proxy and REST server will not load an installed custom cert and key unless and until the “webservice reload” command is executed.
- Depending on your browser settings (e.g., cache enabled), if you accepted the self-signed cert exception when testing one certificate, you might need to remove the exception in order for the browser to accept a new self-signed cert.
- The Web UI and REST API share the same SSL files. When a certificate and key are installed and reloaded, both servers are updated together. When a new certificate is loaded, current web users and REST API clients must reconnect and login again.

#### Known Issues:

Reloading factory defaults does not remove a customer installed webservice certificate. It can be removed with this command: LSS2200-8P (config-admin)# **no webservice certificate**

## Web Server Config Commands

To display available Web Server commands, at the Config Admin mode prompt, enter a ? (question mark):

```
LSS2200-8P (config-admin)# webserv ?
install-certificate Upload and install a custom SSL certificate from the specified URL,
with optional key file and key encryption password
install-key Upload and install a custom SSL private key from the specified URL,
with optional key encryption password
reload Signal the web server to reload its config and activate new cert
file(s)
set-password Prompt for a key encryption password (persistent over restarts and
firmware updates)
set-temp-password Prompt for a temporary key encryption password (does not survive
restarts)
LSS2200-8P (config-admin)#
```

Command: **webserv install-certificate** <url> [key <url>] [password\_prompt true|false]]

Description: Install a custom certificate file, which may or may not contain a private key. If cert and key files are separate, optionally install the key file too. If password\_prompt is true then prompt for the password needed to decrypt the key. After entering this command, it is suggested to follow up with "**webserv reload**" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

Remote URI (<protocol>://<address>/<file\_or\_path>) Remote URI of the cert file to upload -- URI examples: [tftp://<address>/custom\_cert.pem] | [scp://<username>:<password>@<address>:/custom\_cert.pem]

Protocol: https, http, scp, tftp, ftp

Example:

```
LSS2200-8P (config-admin)# webserv install-certificate https:
//192.168.1.66/customcert@192.168.1.66:customcert.pem
Syntax error: Illegal parameter
LSS2200-8P (config-admin)#
```

Note the typo in the URL in the above example. The following URL would be valid and attempted, although the command will only succeed if there is a web server running on the host at that address and the file name is accessible and contains a certificate: **https://192.168.1.66:customcert.pem**.

Command: **webservers install-key** <url> [password\_prompt true|false]

Description: Install a private key file, which might be encrypted and protected with a password. If password\_prompt is true then prompt for the password needed to decrypt the key. Use this command if the certificate and key files are separate and you installed a certificate without using the option to install the key. After entering this command, it is suggested to follow up with "webservers reload" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

install-key Upload and install a custom SSL private key from the specified URL, with optional key encryption password.

Remote URI (<protocol>://<address>/<file\_or\_path>) Remote URI of the private key file to upload -- URI examples: [tftp://<address>/custom\_key.pem] | [scp://<username>:<password>@<address>/custom\_key.pem]

Example:

```
LSS2200-8P (config-admin)# webservers install-key
scp://admin:adminadmin@192.168.1.66:custom_key.pem
Failed to install SSL certificate from scp://admin:adminadmin@192.168.1.66:custom_key.pem
LSS2200-8P (config-admin)#
```

Command: **webservers reload**

Description: Restart the REST server and signal the web proxy to reload its config. **Note:** Changes do not take effect until this command is executed successfully. After entering this command, it is suggested to follow up with "webservers reload" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

Example:

```
LSS2200-8P (config-admin)# webservers reload
lss2200-8p (config-admin)#
```

Command: **webservers set-password**

Description: Prompt for a persistent password for decrypting the private key. The password is written to the persistent password file, replacing previous contents of that file. After entering this command, it is suggested to follow up with "webservers reload" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

Example:

```
LSS2200-8P (config-admin)# webservers set-password
SSL key password:
Confirm password:
lss2200-8p (config-admin)# webservers set-password
SSL key password:
Confirm password:
lss2200-8p (config-admin)#
```

Messages: *Passwords do not match. Retry.*

Command: **webserver set-temp-password**

Description: Prompt for a temporary password for decrypting the private key. The password is written to the temporary password file, replacing previous contents of that file. After entering this command, it is suggested to follow up with "webserver reload" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

Example:

```
LSS2200-8P (config-admin)# webserver set-temp-password
Temporary SSL key password:
Confirm password:
LSS2200-8P (config-admin)#
lss2200-8p (config-admin)# webserver set-temp-password
Temporary SSL key password:
Confirm password:
Passwords do not match.  Retry.
Temporary SSL key password:
Confirm password:
lss2200-8p (config-admin)#
```

Command: **no webserver certificate**

Description: Remove the current certificate (and associated files) and install the default cert and key files. After entering this command, it is suggested to follow up with "webserver reload" command to apply the newly installed file(s) and optional password.

Mode: Config Admin mode

Parameters:

Example:

```
lss2200-8p (config-admin)# no webserver certificate
lss2200-8p (config-admin)#
```

## Example Showing the Complete Procedure

1. Connect a web browser to the LSS2200-8P Web UI. View the certificate and verify the creation date is 13 Jan 2022 (the LSS2200-8P default cert date).

2. Generate a certificate and private key, optionally setting an encryption password for the key. Examples:

  Password-protected key:

```
openssl req -x509 -days 3650 -newkey rsa:4096 -keyout private_key_pw.pem -out custom_cert.crt
```

  Password-less (add `-nodes` – i.e., no DES encryption):

```
openssl req -x509 -days 3650 -nodes -newkey rsa:4096 -keyout selfsigned.key -out selfsigned.crt
```

3. If needed, copy the cert and key files to where the switch can retrieve them via URL, such as to a tftp server.

4. From the LSS2200-8P CLI, install the certificate and key in a single command, then reload the web server config. Example:

```
lss2200-8p # configure terminal
lss2200-8p (config)# admin
lss2200-8p (config-admin)# webserver install-certificate tftp://192.168.60.101/custom_cert.crt key
tftp://192.168.60.101/private_key.pem password_prompt true
SSL key password:
Confirm password:
lss2200-8p (config-admin)# webserver reload
lss2200-8p (config-admin)#
```

5. Connect a web browser to the LSS2200-8P Web UI. View the certificate and verify the creation date matches the custom cert creation date.

6. Login to verify the REST API is also working. Note that it might take more than one attempt, as the REST server takes a while to load. Depending in your browser, you might also need to remove the exception from when you accepted the previous certificate.

7. Revert to the default certificate:

```
lss2200-8p (config-admin)# no webserver certificate
lss2200-8p (config-admin)# webserver reload
```

8. Connect a web browser to the LSS2200-8P Web UI. View the certificate and verify the creation date is 13 Jan 2022 (LSS2200-8P default certificate date).

9. Login to verify the REST API works.

10. Install the cert and key using separate commands, as in the example below. (You can request a prompt for the passphrase in the same command as the key, or separately using `webserver set-password` or `webserver set-temp-password`. The web proxy logs an error if you install a password-protected key without providing a password, although adding the password later will resolve it. If you set the password before installing the key, then the Web proxy will accept the key right away.)

```
lss2200-8p (config-admin)# webserver install-certificate t<tftp://192.168.60.101/custom_cert.crt>
lss2200-8p (config-admin)# webserver install-key t<tftp://192.168.60.101/private_key.pem>
password_prompt true
SSL key password:
Confirm password:
lss2200-8p (config-admin)# webserver reload
lss2200-8p (config-admin)#
```

11. Connect a web browser to the LSS2200-8P Web UI. View the certificate and verify the creation date matches the custom cert creation date.

12. Login to verify the REST API works.

**IMPORTANT!** : When you are done, make sure your web services come up properly at the next boot. Either (A) revert to the default certificate using either of the command sequences listed below, or (B) if you've installed a custom certificate and password-protected key and want to continue using them, then make sure you have

entered the persistent password needed to decrypt that key. If you only entered a temporary password, it will be lost when the system reboots or shuts down.

```
lss2200-8p (config-admin)# no webserver certificate
lss2200-8p (config-admin)# webserver reload
```

It is possible to view the installed certificate in the web browser. It is presented in different ways. For example, in Firefox, use the View certificate link:



Warning: Potential Security Risk Ahead

Firefox detected a potential security threat and did not continue to **192.168.60.1**. If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details.

[Learn more...](#)

[Go Back \(Recommended\)](#)

[Advanced...](#)

192.168.60.1 uses an invalid security certificate.

The certificate is not trusted because it is self-signed.

Error code: MOZILLA\_PKIX\_ERROR\_SELF\_SIGNED\_CERT

[View Certificate](#)

[Go Back \(Recommended\)](#) [Accept the Risk and Continue](#)

## Interface Config Mode Commands

Interface config mode commands exist for these interfaces:

- 10GigabitEthernet
- GigabitEthernet
- pvlan
- vlan

## 10GbE and GbE Interface Config Mode Commands

To show available Interface Config mode commands for 10GbE and GbE interfaces enter a `?`.

```
lss2200-8p (config)# interface GigabitEthernet 1/2
lss2200-8p (config-if)# ?
auto-negotiate  Enable Auto-negotiate the switch port
description     Update the switch port description
duplex          Update the switch port's duplex
enable          Enable the switch port
end              Go back to EXEC View
exit            Exit from interface configuration mode
flow-control    Update the switch port's flow control
ip              IP Configuration
jumbo-frame     Enable Jumbo-Frame on switch port
lldp            Configure LLDP
lldp-med        Enables LLDP-MED on the interface
loop-detect     Loop Detect Configuration
monitor         Monitoring different system events
no              Negate a command or set its defaults
poe             Enable to configure Power over Ethernet
port-security   Enable port security for the port
pvlan           Set PVLAN membership
qos             QoS configuration for port
sfp-mode        Update the switch port's sfp mode
spanning-tree   Spanning tree port configuration
speed           Update the switch port's speed
switchport      Switching mode characteristics

lss2200-8p (config-if)#
```

**Command:** [admin](#)

**Description:** Enter Config Admin mode. See [Config Admin Mode Commands](#) on page 91.

**Mode:** Interface Config mode for 10GbE and 1GbE ports

**Parameters:** None

**Example:**

```
LSS2200-8P (config-if)# admin
LSS2200-8P (config-admin)#
```



**Command:** **aging-time**

Description: Set MAC address aging time

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: MAC address aging time in seconds Set MAC address aging time (4..956)

Example:

```
LSS2200-8P (config-if)# aging-time 4
LSS2200-8P (config)# interface GigabitEthernet 1/2
LSS2200-8P (config-if)# aging-time 956
LSS2200-8P (config)#
```

**Command:** **alarm**

Description: Set alarms

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters:

```
LSS2200-8P (config-if)# alarm
10GigabitEthernet-1/1-Temperature-high-alarm 10GigabitEthernet-1/1-Temperature-low-alarm
10GigabitEthernet-1/1-Temperature-high-warning 10GigabitEthernet-1/1-Temperature-low-warning
10GigabitEthernet-1/1-Voltage-high-alarm 10GigabitEthernet-1/1-Voltage-low-alarm
10GigabitEthernet-1/1-Voltage-high-warning 10GigabitEthernet-1/1-Voltage-low-warning
10GigabitEthernet-1/1-Bias-high-alarm 10GigabitEthernet-1/1-Bias-low-alarm
10GigabitEthernet-1/1-Bias-high-warning 10GigabitEthernet-1/1-Bias-low-warning
10GigabitEthernet-1/1-Tx-Power-high-alarm 10GigabitEthernet-1/1-Tx-Power-low-alarm
10GigabitEthernet-1/1-Tx-Power-high-warning 10GigabitEthernet-1/1-Tx-Power-low-warning
10GigabitEthernet-1/1-Rx-Power-high-alarm 10GigabitEthernet-1/1-Rx-Power-low-alarm
10GigabitEthernet-1/1-Rx-Power-high-warning 10GigabitEthernet-1/1-Rx-Power-low-warning
10GigabitEthernet-1/2-Temperature-high-alarm 10GigabitEthernet-1/2-Temperature-low-alarm
10GigabitEthernet-1/2-Temperature-high-warning 10GigabitEthernet-1/2-Temperature-low-warning
10GigabitEthernet-1/2-Voltage-high-alarm 10GigabitEthernet-1/2-Voltage-low-alarm
10GigabitEthernet-1/2-Voltage-high-warning 10GigabitEthernet-1/2-Voltage-low-warning
10GigabitEthernet-1/2-Bias-high-alarm 10GigabitEthernet-1/2-Bias-low-alarm
10GigabitEthernet-1/2-Bias-high-warning 10GigabitEthernet-1/2-Bias-low-warning
10GigabitEthernet-1/2-Tx-Power-high-alarm 10GigabitEthernet-1/2-Tx-Power-low-alarm
10GigabitEthernet-1/2-Tx-Power-high-warning 10GigabitEthernet-1/2-Tx-Power-low-warning
10GigabitEthernet-1/2-Rx-Power-high-alarm 10GigabitEthernet-1/2-Rx-Power-low-alarm
10GigabitEthernet-1/2-Rx-Power-high-warning 10GigabitEthernet-1/2-Rx-Power-low-warning
loop-shutdown-GigabitEthernet-1/1 loop-shutdown-GigabitEthernet-1/2
loop-shutdown-GigabitEthernet-1/3 loop-shutdown-GigabitEthernet-1/4
loop-shutdown-GigabitEthernet-1/5 loop-shutdown-GigabitEthernet-1/6
loop-shutdown-GigabitEthernet-1/7 loop-shutdown-GigabitEthernet-1/8
loop-shutdown-10GigabitEthernet-1/1 loop-shutdown-10GigabitEthernet-1/2
port-security-GigabitEthernet-1/1-shutdown port-security-GigabitEthernet-1/1-limit-reached
port-security-GigabitEthernet-1/2-shutdown port-security-GigabitEthernet-1/2-limit-reached
port-security-GigabitEthernet-1/3-shutdown port-security-GigabitEthernet-1/3-limit-reached
port-security-GigabitEthernet-1/4-shutdown port-security-GigabitEthernet-1/4-limit-reached
port-security-GigabitEthernet-1/5-shutdown port-security-GigabitEthernet-1/5-limit-reached
port-security-GigabitEthernet-1/6-shutdown port-security-GigabitEthernet-1/6-limit-reached
port-security-GigabitEthernet-1/7-shutdown port-security-GigabitEthernet-1/7-limit-reached
port-security-GigabitEthernet-1/8-shutdown port-security-GigabitEthernet-1/8-limit-reached
port-security-10GigabitEthernet-1/1-shutdown port-security-10GigabitEthernet-1/1-limit-reached
port-security-10GigabitEthernet-1/2-shutdown port-security-10GigabitEthernet-1/2-limit-reached
CPU-Temperature
```

Example:

```
LSS2200-8P (config-if)# alarm loop-shutdown-GigabitEthernet-1/3
LSS2200-8P (config)#
```

**Command:** **auto-negotiate**

Description: Enable Auto-negotiate on 1GbE and 10GbE (copper) ports.

Mode: 10GbE and GbE Interface Config Modes

Parameters: None

Example:

```
lss2200-8p (config-if)# auto-negotiate
lss2200-8p (config-if)#
lss2200-8p (config-if)# auto-negotiate
WARNING- auto-neg setting fixed by sfp mode
lss2200-8p (config-if)#
```

**Command:** **ble**

Description: Bluetooth Low energy commands

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: broadcast Enable BLE Broadcast  
disconnect ble disconnect

Example:

```
LSS2200-8P (config)# ble disconnect
LSS2200-8P (config)# ble broadcast
lss2200-8p (config)# do show ble broadcast
BLE Broadcast State
=====
Broadcast Status      : Enabled
lss2200-8p (config)# do show ble connection
BLE Software Connection State
=====
Connection State     : BLE Disconnected
lss2200-8p (config)# do show ble mac
BLE MAC Info.
=====
BLE MAC              : 00:0B:57:4E:FD:A1
lss2200-8p (config)# do show ble status
BLE Status
=====
Broadcast Status     : Enabled
Connection State     : BLE Disconnected
BLE Version          : LN BLE 1.0.3
BLE MAC              : 00:0B:57:4E:FD:A1
lss2200-8p (config)# do show ble version
BLE Version Info.
=====
BLE Version          : LN BLE 1.0.3
lss2200-8p (config)#
```

**Command:** `clock`

Description: Configure time settings. **Note:** if system time is changed, any Web UI users and REST API clients must log in again.

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: `timezone` Configure system time zone

String	system timezone	
Africa/Abidjan	Africa/Accra	Africa/Addis_Ababa
Africa/Algiers	Africa/Asmara	Africa/Bamako
Africa/Bangui	Africa/Banjul	Africa/Bissau
Africa/Blantyre	Africa/Brazzaville	Africa/Bujumbura
Africa/Cairo	Africa/Ceuta	Africa/Conakry
Africa/Dakar	Africa/Dar_es_Salaam	Africa/Djibouti
Africa/Douala	Africa/Freetown	Africa/Gaborone
Africa/Harare	Africa/Johannesburg	Africa/Juba
Africa/Kampala	Africa/Khartoum	Africa/Kigali
Africa/Kinshasa	Africa/Lagos	Africa/Libreville
Africa/Lome	Africa/Luanda	Africa/Lubumbashi
Africa/Lusaka	Africa/Malabo	Africa/Maputo
Africa/Maseru	Africa/Mbabane	Africa/Mogadishu
Africa/Monrovia	Africa/Nairobi	Africa/Ndjamena
Africa/Niamey	Africa/Nouakchott	Africa/Ouagadougou
Africa/Porto-Novo	Africa/Sao_Tome	Africa/Tripoli
Africa/Tunis	Africa/Windhoek	America/Adak
America/Anchorage	America/Anguilla	America/Antigua
America/Araguaina	America/Argentina/Buenos_Aires	America/Argentina/Catamarca
America/Argentina/Cordoba	America/Argentina/Jujuy	America/Argentina/La_Rioja
America/Argentina/Mendoza	America/Argentina/Rio_Gallegos	America/Argentina/Salta
America/Argentina/San_Juan	America/Argentina/San_Luis	America/Argentina/Tucuman
America/Argentina/Ushuaia	America/Aruba	America/Asuncion
America/Atikokan	America/Bahia	America/Bahia_Banderas
America/Barbados	America/Belem	America/Belize
America/Boa_Vista	America/Bogota	America/Blanc-Sablon
America/Cambridge_Bay	America/Bogota	America/Boise
America/Caracas	America/Campo_Grande	America/Boise
America/Chicago	America/Cayenne	America/Cancun
	America/Cayman	America/Cancun
	America/Chihuahua	America/Cayman
		America/Costa_Rica



Europe/Zurich	Indian/Antananarivo	Indian/Chagos
Indian/Christmas	Indian/Cocos	Indian/Comoro
Indian/Kerguelen	Indian/Mahe	Indian/Maldives
Indian/Mauritius	Indian/Mayotte	Indian/Reunion
Pacific/Apia	Pacific/Auckland	Pacific/Bougainville
Pacific/Chatham	Pacific/Chuuk	Pacific/Easter
Pacific/Efate	Pacific/Enderbury	Pacific/Fakaofu
Pacific/Fiji	Pacific/Funafuti	Pacific/Galapagos
Pacific/Gambier	Pacific/Guadalcanal	Pacific/Guam
Pacific/Honolulu	Pacific/Kiritimati	Pacific/Kosrae
Pacific/Kwajalein	Pacific/Majuro	Pacific/Marquesas
Pacific/Midway	Pacific/Nauru	Pacific/Niue
Pacific/Norfolk	Pacific/Noumea	Pacific/Pago_Pago
Pacific/Palau	Pacific/Pitcairn	Pacific/Pohnpei
Pacific/Port_Moresby	Pacific/Rarotonga	Pacific/Saipan
Pacific/Tahiti	Pacific/Tarawa	Pacific/Tongatapu
Pacific/Wake	Pacific/Wallis	UTC

Example:

```
LSS2200-8P (config-if)# clock timezone UTC
LSS2200-8P (config)#
```

**Command:** **consoleflow**

Description: Enter ConsoleFlow Config mode and run ConsoleFlow commands.

Mode: Interface Config mode for 10GbE and 1GbE ports

## Parameters:

active_connection	Connection instance to use when connecting to ConsoleFlow
apply_configuration_updates	Apply configuration updates
apply_firmware_updates	Automatically apply new firmware
connection	Configure ConsoleFlow client connection settings
content_check_interval	Sets the firmware and configuration check interval
device_description	Sets the Device Description
device_name	Sets the Device Name
do	To run exec commands in config mode
end	Go back to EXEC view
exit	Go back to Configure view
no	Negate a command or set its defaults
remote_access_local_port	Local port for ConsoleFlow Remote Access. When configured, a total of 16 consecutive ports will be reserved
state	enable the client
status_update_interval	Sets the status update interval
Instance	(connection:1/connection:2)
active_connection:Connection:1	Controls if no configuration updates will be applied <b>or if</b> the device will always apply configuration updates. (never/always)
Instance	(connection:1/connection:2)
host	Hostname or IP address of ConsoleFlow
local_port	Local port for ConsoleFlow client. When configured, a total of 16 consecutive ports will be reserved
mqtt_security	Enable SSL for MQTT
port	Port of ConsoleFlow
secure_port	Enable https for ConsoleFlow client
validate_certificates	Enable server certificate validation on ConsoleFlow client
local_port	port number 0 or in range 1024-65520
Unsigned integer	(1..65535)
time period in minutes	(1..2160)
port number	0 or in range 1024-65520
time period in minutes	status update interval (1..1440)

## Example 1:

```
LSS2200-8P (config)# consoleflow
LSS2200-8P (config-consoleflow)# active_connection connection:1
active_connection:Connection:1
LSS2200-8P (config-consoleflow)# apply_configuration_updates
apply_configuration_updates:always
LSS2200-8P (config-consoleflow)# apply_firmware_updates
apply_firmware_updates:enable
LSS2200-8P (config-consoleflow)# connection connection:1
LSS2200-8P (config-consoleflow-connection:1)# host BobB
host:BobB
```

```

LSS2200-8P (config-consoleflow-connection:1)# local_port 1300
local_port:1300
LSS2200-8P (config-consoleflow-connection:1)#
LSS2200-8P (config-consoleflow-connection:1)# mqtt_security
mqtt_security:enable
LSS2200-8P (config-consoleflow-connection:1)# secure_port
secure_port:enable
LSS2200-8P (config-consoleflow-connection:1)# port 1024
port:1024
LSS2200-8P (config-consoleflow-connection:1)# validate_certificates
validate_certificates:enable
LSS2200-8P (config-consoleflow-connection:1)# exit
LSS2200-8P (config-consoleflow)# content_check_interval 600
content_check_interval:600
LSS2200-8P (config-consoleflow)# remote_access_local_port 1024
remote_access_local_port:1024
LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# status_update_interval 400
LSS2200-8P (config-consoleflow)# exit
LSS2200-8P (config)#

```

Example 2:

```

LSS2200-8P (config-consoleflow)# connection connection:1
LSS2200-8P (config-consoleflow-connection:1)# ?
  connect_to      Connect to cloud or on-premise VM
  do              To run exec commands in config mode
  end            Go back to EXEC View
  exit           Go back to configure view
  host           Hostname or IP address of ConsoleFlow
  local_port     Local port for ConsoleFlow client. When configured, a total of 16
consecutive ports will be reserved
  mqtt_security  Enable SSL for MQTT
  no            Negate a command or set its defaults
  port          Port of ConsoleFlow
  secure_port   Enable https for ConsoleFlow client
  validate_certificates Enable server certificate validation on ConsoleFlow client

LSS2200-8P (config-consoleflow-connection:1)# connect_to ?
  Instance      (Cloud/On-Premise)

LSS2200-8P (config-consoleflow-connection:1)# connect_to Cloud
connect_to:Cloud
LSS2200-8P (config-consoleflow-connection:1)# connect_to On-Premise
connect_to:On-Premise
LSS2200-8P (config-consoleflow-connection:1)#

```

## Example 3:

```
LSS2200-8P (config-consoleflow)# active_connection connection:1
active_connection:Connection:1
LSS2200-8P (config-consoleflow)# apply_configuration_updates ?
  Controls if no configuration updates will be applied, the device will always apply
  configuration updates.  (never/always)

LSS2200-8P (config-consoleflow)# apply_configuration_updates always
apply_configuration_updates:always
LSS2200-8P (config-consoleflow)# apply_firmware_updates
apply_firmware_updates:enable
LSS2200-8P (config-consoleflow)#
LSS2200-8P (config-consoleflow)# content_check_interval ?
  time period in minutes  (1..2160)

LSS2200-8P (config-consoleflow)# content_check_interval 200 ?
  <cr>

LSS2200-8P (config-consoleflow)# content_check_interval 200
content_check_interval:200
LSS2200-8P (config-consoleflow)# remote_access_local_port ?
  port number 0 or in range 1024-65520

LSS2200-8P (config-consoleflow)# remote_access_local_port 1111
remote_access_local_port:1111
LSS2200-8P (config-consoleflow)# state ?
  <cr>

LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# status_update_interval ?
  time period in minutes  (1..1440)

LSS2200-8P (config-consoleflow)# status_update_interval 350
status_update_interval:350
LSS2200-8P (config-consoleflow)#
```

**Command:** **description**

Description: Update the switch port description  
 Mode: 10GbE and GbE Interface Config Modes  
 Parameters: String Port description

Example:

```
lss2200-8p (config-if)# description 10GbE Cu Port1
Syntax error: Illegal command line
lss2200-8p (config-if)# description 10GbECuPort1
lss2200-8p (config-if)#
```

**Command:** **do**

Description: Run Exec mode commands in Interface Config mode.  
 Mode: Interface Config mode for 10GbE and 1GbE ports  
 Parameters:

!	alarm	clear	clock	configure	copy	debug
exit	nslookup	ping	reload	show	ssh	telnet
traceroute	who					
host	Hostname or IP-address to ping					
interface	Optional source IP-address or interface for sending packets					
repeat	Requests to send count, default is 5					
<cr>						

Arguments ignored comment text

Example:

```
LSS2200-8P (config-if)# do show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
=====
| VLAN 1         | 172.27.100.84/24 | DHCP      | UP
LSS2200-8P (config-if)#
```

**Command:** **duplex**

Description: Update the switch port's duplex mode  
 Mode: 10GbE and GbE Interface Config Modes  
 Parameters: full or half Full duplex or Half duplex (full/half)

Example:

```
lss2200-8p (config-if)# duplex half
WARNING : auto_negotiate is set, duplex will not have any effect
1G half-duplex not supported
Validation failed.
lss2200-8p (config-if)# duplex full
WARNING : auto_negotiate is set, duplex will not have any effect
lss2200-8p (config-if)# exit
lss2200-8p (config)# interface 10GigabitEthernet 1/7
Port 10GigabitEthernet 1/7 does not exist
lss2200-8p (config)# interface 10GigabitEthernet 1/1
```

```
lss2200-8p (config-if)# duplex half
WARNING- duplex setting fixed by sfp mode
lss2200-8p (config-if)#
```

**Command:** **enable**

Description: Enable the switch port  
Mode: 10GbE and GbE Interface Config Modes  
Parameters: None  
Example:

```
lss2200-8p (config-if)# enable
lss2200-8p (config-if)#
```

**Command:** **end**

Description: Go to Exec mode from Interface Config mode  
Mode: Interface Config mode for 10GbE and 1GbE ports  
Parameters: None  
Example:

```
LSS2200-8P (config-if)# end
LSS2200-8P #
```

**Command:** **exit**

Description: Exit from this Interface Config mode  
Mode: 10GbE and GbE Interface Config Modes  
Parameters: None  
Example:

```
LSS2200-8P # configure terminal
lss2200-8p (config)# interface GigabitEthernet 1/2
lss2200-8p (config-if)# exit
lss2200-8p (config)#
```

**Command:** **flow-control**

Description: Update the switch port's flow control  
Mode: 10GbE and GbE Interface Config Modes  
Parameters: Directions to enable flow control (none/rx/tx/both)  
Example:

```
lss2200-8p (config-if)# flow-control none
lss2200-8p (config-if)# flow-control rx
lss2200-8p (config-if)#
```



**Command:** **interface**

Description: Select an interface to configure

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters (?):	10GigabitEthernet	Ethernet 10G interface (1/1 1/2)
	GigabitEthernet	Ethernet 1G interface (1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8)
	vlan	VLAN interface
	Switch/Interface number	Ethernet 10G interface number
	Switch/Interface number	Ethernet 1G interface number
	Number in the range 1-4094	VLAN Identifier (1..4094)
	address	Comma separated list of DNS servers

**Example:**

```
LSS2200-8P (config)# interface 10GigabitEthernet 1/1
LSS2200-8P (config-if)#
LSS2200-8P (config-if)# interface vlan 10
LSS2200-8P (config-vlan-if)# ?
  dns      Add to DNS Server list
  end      Go back to EXEC View
  exit     Exit from interface configuration mode
  ignore   Ignore information configured/received
  ip       IPv4 address configuration
  no       Negate a command or set its defaults

LSS2200-8P (config-vlan-if)#

LSS2200-8P (config-vlan-if)# dns address 1.2.3.4,2.4.6.8
libyang[0]: Invalid value "" in "dns" element. (path: /csi-logical-interfaces:dns[.=''])
LSS2200-8P (config-vlan-if)#
LSS2200-8P (config-vlan-if)# exit
LSS2200-8P (config)#
```

**Parameters (tab):**

admin	aging-time	alarm	ble	clock	consoleflow	dns	do	end	exit
interface	ip	lldp	lldp-med	logging	loop-detect	lpm	monitor	nfc	no
ntp	poe								

<b>Command:</b>	<b>ip</b>
Description:	IP Configuration
Mode:	10GbE and GbE Interface Config Modes
Parameters:	<p>dhcp IP DHCP Configuration</p> <p>relay Relay Configuration &lt;displays for a &lt;tab&gt; but not for a ?&gt;</p> <p>server Server Configuration</p> <p>snooping Snooping Configuration &lt;displays for a &lt;tab&gt; but not for a ?&gt;</p> <p>trusted Set Port as Trusted for DHCP Snooping</p> <p>String DHCP Server Name</p> <p>authoritative Set DHCP Server as Authoritative</p> <p>default-router Configure the Default Router Address List for the Pool</p> <p>dns-server Configure the DNS Server Address List for the Pool</p> <p>domain-name Configure the Domain Name for the Pool</p> <p>exit Exit from DHCP Server configuration mode</p> <p>host Configure Host Based IP Address for DHCP Server</p> <p>lease DHCP Address Lease Time</p> <p>netbios-name-server Configure the Netbios Name SERVER Address List for the Pool</p> <p>netbios-node-type Configure the Netbios Node Type</p> <p>netbios-scope Configure the netbios scope option</p> <p>nis-domain-name Configure the NIS Domain Name option</p> <p>nis-server Configure the NIS SERVER Address List for the Pool</p> <p>no Negate a command or set its defaults</p> <p>ntp-server Configure the NTP SERVER Address List for the Pool</p> <p>option Configure the DHCP Option</p> <p>range Configure the DHCP Pool Range</p> <p>server DHCP Server Address List Configuration</p> <p>vendor Configure vendor specific Information</p> <p>A.B.C.D Comma separated list of Default Router Address</p> <p>A.B.C.D Comma separated list of DNS Address</p> <p>String Domain Name</p> <p>client-id Configure Client ID based Fixed IP Address mapping in DHCP Server</p> <p>mac Configure Host MAC Address based Fixed IP Address in DHCP Server</p> <p>String Client Identifier</p> <p>A.B.C.D IP Address</p> <p>hostname Host Name</p> <p>Hostname Host Name</p> <p>time DHCP Address Lease Time</p> <p>DHCP Lease time Lease value (0-365)days/(1-24)hours/(1-60)minutes (1..365)</p> <p>DHCP Lease for Days/Hours/Minutes Lease Type (days/hours/minutes)</p> <p>name NTP Server name</p> <p>address NTP Server address (IPv4 address or DNS domain name)</p> <p>Server NTP Server address (IPv4 address or DNS domain name)</p> <p>DHCP Option Code Option Code (1..254)</p> <p>String Option Value (DHCP)</p>

A.B.C.D	IPv4 DHCP Pool Start Address
A.B.C.D	IPv4 DHCP Pool Start Address
A.B.C.D	IPv4 DHCP Pool End Address
netmask	IPv4 DHCP Pool Netmask
broadcast	IPv4 DHCP Pool Broadcast Address
vendor	Vendor Class Identifier
user	User Class Identifier
lease	DHCP Address Lease Time
A.B.C.D	IPv4 DHCP Pool Broadcast Address
String	Vendor Identifier
address	DHCP Server Listen Address List Configuration
A.B.C.D	Comma separated list of listen Address
specific	Configure vendor specific Information
info	Configure the vendor specific info

## Example:

```
lss2200-8p (config-dhcp)# authoritative
lss2200-8p (config-dhcp)# host client-id client1 1.2.3.4 lease time 300 days
lss2200-8p (config-if)# ip dhcp snooping trusted
lss2200-8p (config-dhcp)# ntp server name NtpSrvr1 address 4.3.2.1
lss2200-8p (config-dhcp)# option 1 DhcpOpt1
Vendor-class-id 1 already exists
lss2200-8p (config-dhcp)# option 100 DhcpOpt100
lss2200-8p (config-dhcp)# option 92 DhcpOpt92
lss2200-8p (config-dhcp)# range 1.2.3.4 1.2.3.9 netmask 255.255.255.0 broadcast 2.3.4.6
vendor ssssss user lease 10
lss2200-8p (config-dhcp)# server address 3.4.5.6
lss2200-8p (config-dhcp)# vendor specific info 60 43
lss2200-8p (config-dhcp)# exit
lss2200-8p (config)#
```

**Command:** [jumbo-frame](#)

Description: Enable Jumbo-Frame on switch port; up to 10K bytes.

Mode: 10GbE and GbE Interface Config Modes

Parameters: None

## Example:

```
lss2200-8p (config-if)# jumbo-frame
lss2200-8p (config-if)#
```

**Command:** **lldp**

Description: Configure LLDP

Mode: 10GbE and GbE Interface Config Modes

Parameters: both LLDP packets are both received and sent on the interface  
receive LLDP packets are received on the interface.  
transmit LLDP packets are sent on the interface

Example:

```
lss2200-8p (config-if)# lldp both
lss2200-8p (config-if)# lldp receive
lss2200-8p (config-if)# lldp transmit
lss2200-8p (config-if)#
```

**Command:** **lldp-med**

Description: Enables LLDP-MED on the interface

Mode: 10GbE and GbE Interface Config Modes

Parameters: None

Example:

```
lss2200-8p (config-if)# lldp-med
lss2200-8p (config-if)#
```

**Command:** **loop-detect**

Description: Loop Detect configuration

Mode: 10GbE and GbE Interface Config Modes

Parameters: action Set Loop Detect Action Type  
Action to take on loop detection Action to take on loop detection (log/shutdown/all)

Example:

```
lss2200-8p (config-if)# loop-detect action log
lss2200-8p (config-if)# loop-detect action shutdown
lss2200-8p (config-if)# loop-detect action all
lss2200-8p (config-if)#
```

**Command:** **monitor**

Description: Monitoring different system events

Mode: 10GbE and GbE Interface Config Modes

Parameters: both Mirror received and transmitted traffic  
rx Mirror received traffic only  
tx Mirror transmitted traffic only

Example:

```
lss2200-8p (config-if)# monitor both
lss2200-8p (config-if)# monitor tx
lss2200-8p (config-if)# monitor rx
lss2200-8p (config-if)#
```

**Command:** **nfc**

Description: Enable Near Field Communication

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: None

Example:

```
LSS2200-8P (config-if)# nfc
LSS2200-8P (config)#
```

**Command:** **no**

Description: Negate a command or set its defaults

Mode: 10GbE and GbE Interface Config Modes

Parameters:	auto-negotiate	Disable Auto-negotiate the switch port
	description	Default the switch port's description to clear
	duplex	Default the switch port's duplex to full
	enable	Disable the switch port
	flow-control	Default the switch port's flow control to none
	ip	IP Configuration
	jumbo-frame	Disable Jumbo-Frame on switch port
	lldp	Clear Interface specific LLDP Configuration
	lldp-med	Disables LLDP-MED on the interface
	loop-detect	Disable loop detection on port.
	monitor	Disable Port Mirroring
	poe	Disable Power over Ethernet
	port-security	Disable port security for the port
	pvlan	Remove PVLAN membership
	qos	Clear QoS configuration for ports
	speed	Default the switch port's speed to 1G
	switchport	Switching mode characteristics
	server	DHCP Server
	snooping	Snooping Configuration
	String	DHCP Server Name
	trusted	Set Port as Untrusted for DHCP Snooping
	apr	Disable PoE APR
	maxpower	Disable supplying maximum power to powered device.
	opermode	Disable PoE operation mode.
	priority	Disable PoE port power priority
	schedule	Remove PoE Scheduling Profile
	access	Set access VLAN to default.
	mode	Set mode to default.
	trunk	Set trunk native VLAN to default.
	vlan	Set access VLAN to default.
	allowed	Set trunk allowed VLANs to default.
	native	Set trunk native VLAN to default.
	failure	Default PoE APR what to do on Failure

interval	Default PoE APR Intervals between Pings
ip	Default PoE APR IP Address of Device
retries	Default PoE APR how many Ping retries

Example:

```
lss2200-8p (config-if)# no auto-negotiate
lss2200-8p (config-if)# no description
lss2200-8p (config-if)# no speed
lss2200-8p (config-if)#
```

**Command:** **ntp**

Description: Enable Network Timing Protocol

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: None

Example:

```
LSS2200-8P (config-if)# ntp
LSS2200-8P (config)#
```

**Command:** **poe**

Description: Enable to configure Power over Ethernet for an interface

Mode: 10GbE and GbE Interface Config Modes

Parameters:

apr	Enable PoE APR
fast_mode	Enable power at boot, do not wait for startup config <shows w/ tab but not ?>
force	Provide max power through interface; no negotiation with powered device. Note: you must disable poe before setting poe forced. <b>Setting the Power Supply Values in Switch Software:</b>

**CAUTION:** Always match the PSx input supply to the Power Supply 1 and Power Supply 2 software setting. Mismatching will cause the LSS2200-8P to think it can draw more power from the external supply than it is capable of providing and results could be detrimental.

**Note:** The power supply wattage value(s) must be manually set in the software by the user to match the connected external power supply(ies). The LLSS2200-8P uses this wattage as the "PSE Power Available" to determine if enough power is available during PoE PD classification to power up connected PDs. See additional details on power requirements in the Install Guide.

maxpower	Configure maximum power to supply to powered device based on opermode.
opermode	Configure PoE operation mode.
priority	Configure PoE port power priority
pse	Set power supply delivery budgets <shows w/ tab but not ?>
Power supply (ps1/ps2)	Power supply identifier ('ps1', 'ps2')
Power budget (30..1600)	Power supply budget in Watts (30..1600)
Power supply identifier ('ps1', 'ps2')	Power supply (ps1/ps2)
schedule	Configure PoE scheduling profile.
failure	Configure PoE APR what to do on Failure

interval	Configure PoE APR Intervals between Pings
ip	Configure PoE APR IP Address of Device
retries	Configure PoE APR how many Ping retries
PoE APR Failure	Log and Trap on Error or also reset device (LogTrap/ResetLogTrap)
PoE APR Interval (in Secs)	Ping Interval Gap (10..120)
A.B.C.D	Device's IP Address
PoE APR Retries	No. of Ping Retries (1..5)
force	Provide max power through interface; no negotiation with powered device
PoE Power	Maximum power value in Watts (00.00-90.00)
PoE Operation Mode	Operation mode value (IEEE-802.3af/IEEE-802.3at/IEEE-802.3bt)
PoE Priority	Port power priority value (low/high/critical)
String	Scheduling Profile Id

Example:

```
lss2200-8p (config-if)# poe <tab>
apr      fast_mode    force    maxpower  opermode  priority  pse    schedule
lss2200-8p (config-if)# poe apr failure logtrap
lss2200-8p (config-if)# poe apr failure resetlogtrap
lss2200-8p (config-if)# poe apr interval 20
lss2200-8p (config-if)# poe apr ip 192.168.10.23
lss2200-8p (config-if)# poe apr retries 3
lss2200-8p (config-if)# poe apr
lss2200-8p (config-if)# poe force
lss2200-8p (config-if)# poe fast_mode
Fast PoE is Enabled
lss2200-8p (config-if)# poe maxpower 60.00
lss2200-8p (config-if)# poe maxpower 45.25
lss2200-8p (config-if)# poe opermode IEEE-802.3af
lss2200-8p (config-if)# poe opermode IEEE-802.3at
lss2200-8p (config-if)# poe opermode IEEE-802.3bt
lss2200-8p (config-if)# poe priority low
lss2200-8p (config-if)# poe priority high
lss2200-8p (config-if)# poe priority critical
lss2200-8p (config-if)# poe schedule Profile1
lss2200-8p (config-if)#
```

Messages: *WARNING- PoE not valid on 10 Gig Port.*

**Command:** `port-security`

Description: Enable port security for the port

Mode: 10GbE and GbE Interface Config Modes

Parameters:

learn-limit MAC address learn limit Maximum number of MAC-addresses (1..1023)

violation-mode Protect against unknown traffic or shutdown the port

Port security violation mode options Violation mode to be configured (protect/shutdown)

Example:

```
lss2200-8p (config-if)# port-security violation-mode protect
lss2200-8p (config-if)# port-security violation-mode shutdown
lss2200-8p (config-if)#
```

**Command:** `pvlan`

Description: Set port VLAN membership. A virtual LAN provides a method to restrict communication between switch ports. At layer 2, the network is partitioned into multiple, distinct, mutually isolated broadcast domains. Starting in v 1.7.0.0R5, interfaces can be part of PVLAN in the interface config itself.

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: String List of PVLANS separated by commas and ranges are specified with dash separating lower and upper bound. VLAN ID should be between 1 and Max number of ports on the switch.

Example:

```
LSS2200-8P # configure terminal
LSS2200-8P (config)# interface GigabitEthernet 1/1
LSS2200-8P (config-if)# pvlan 10
LSS2200-8P (config-if)# interface GigabitEthernet 1/2
LSS2200-8P (config-if)# pvlan 10
LSS2200-8P (config-if)# interface GigabitEthernet 1/3
LSS2200-8P (config-if)# pvlan 15
Invalid vlan range
LSS2200-8P (config-if)# pvlan 9
LSS2200-8P (config-if)# exit
LSS2200-8P (config)# do show pvlan ?
  interface Display Interface PVLAN configuration
  <cr>
```

```
LSS2200-8P (config)# do show pvlan
PVLAN      Ports
=====
  1         GigabitEthernet 1/1
           GigabitEthernet 1/2
           GigabitEthernet 1/3
           GigabitEthernet 1/4
           GigabitEthernet 1/5
           GigabitEthernet 1/6
           GigabitEthernet 1/7
           GigabitEthernet 1/8
           10GigabitEthernet 1/1
           10GigabitEthernet 1/2
```



```
    9      GigabitEthernet 1/3
   10     GigabitEthernet 1/1
         GigabitEthernet 1/2
LSS2200-8P (config-if)# interface GigabitEthernet 1/3
LSS2200-8P (config-if)# no pvlan 1,10
LSS2200-8P (config-if)# no pvlan 9
Port should be part of at least one PVLAN
LSS2200-8P (config-if)# do show pvlan
 PVLAN          Ports
=====
    1      GigabitEthernet 1/2
           GigabitEthernet 1/4
           GigabitEthernet 1/5
           GigabitEthernet 1/6
           GigabitEthernet 1/7
           GigabitEthernet 1/8
           10GigabitEthernet 1/1
           10GigabitEthernet 1/2
    9      GigabitEthernet 1/3
   10     GigabitEthernet 1/1
LSS2200-8P (config-if)#
```

Messages:

*Invalid vlan range*

*Port should be part of at least one PVLAN*

**Command:** **qos**

Description: QoS configuration for port

Mode: 10GbE and GbE Interface Config Modes

Parameters:	egress	QoS configuration for egress
	ingress	QoS configuration for ingress
	schedule	QoS queuing method used to service the egress queues
	Egress rate limit (64..1000000)	Egress rate limit in kilobits/second
	Egress rate limit in kilobits/second	Egress rate limit (64..1000000)
	default	Configure Queue/Frame priority value for the port
	limit	QoS ingress rate limit for ports
	priority-mode	Configure Ingress priority mode
	vlan	Map Ingress vlan-priority onto a egress queue number
	queue	Queue priority
	frame	Frame priority
	Queue priority (0..7)	Indicates Priority value for a queue
	Frame priority (0..7)	Indicates Priority value for a frame
	Ingress rate limit in kilobits/second (64..10000000)	
	Ingress Priority mode	Ingress Priority modes (port/vlan-port/ip-port/vlan-ip-port/ip-vlan-port)
	Indicates Priority value	vlan priorities 0-7 (0..7)
	queue	Egress queue number corresponding to vlan priority
	Indicates Priority value	Egress queue number corresponding to vlan priority (0..7)
	QoS queue scheduling method options	QoS queuing method (WRR/SP)

## Example:

```

lss2200-8p (config-if)# qos egress limit 50000
lss2200-8p (config-if)# qos ingress default queue 2 frame 0
lss2200-8p (config-if)# qos ingress limit 100000
lss2200-8p (config-if)# qos ingress priority-mode port
lss2200-8p (config-if)# qos ingress priority-mode vlan-port
lss2200-8p (config-if)# qos ingress vlan 2 queue
lss2200-8p (config-if)# qos ingress vlan 2 queue 0
lss2200-8p (config-if)# qos schedule wrr
lss2200-8p (config-if)# qos schedule sp
lss2200-8p (config-if)#

```

**Note:** The QoS Ingress limit valid range is 64 to 10000000; however, setting the ingress rate limiting to a value below 50 has no effect.

**Command:** **rest-server**

Description: Enable the Rest API server

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: None

## Example:

```

LSS2200-8P (config-if)# rest-server
LSS2200-8P (config)#

```

**Command:** **route**

Description: Create Static route. Creates network routes.

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters:

name	Name of static route to add
address	Destination network ip/prefix. Routes created with network address.
gateway	The network gateway
interface	The route interface
Name	Name of static route to add (VLAN ID)
Interface Name	The route interface

Example:

```
LSS2200-8P (config-if)# route name Route-1 address 172.27.100.55 gateway 172.27.100.0
interface RteInt
Syntax error: Illegal parameter
LSS2200-8P (config-if)# route name Route-1 address 172.27.100.55 gateway 172.27.100.0
interface VLAN10
Failed to add static route
LSS2200-8P (config-if)#
```

Messages: *Syntax Error: Incomplete Command - Require Target address*

**Command:** **sfp-mode**

Description: Update the switch port's SFP mode. USXGMII mode is only used when P #9 and/or P #10 are set to the expansion port and the 2x10GBase-T expansion card (future release) is installed. If detected, this mode will be selected automatically by the software. When using the TN-SFP-10G-T, the port mode should be set to 10GBase-R.

Mode: 10GbE Interface Config Mode only

Parameters: 1000BASE-X, SGMII, 2500BASE-X, 5G-BASE-R, 10G-BASE-R, USXGMII

Select the mode compatible with the inserted SFP module (1000BASE-X/SGMII/2500BASE-X/5G-BASE-R/10G-BASE-R/USXGMII)

Example:

```
lss2200-8p (config-if)# sfp-mode 1000BASE-X
lss2200-8p (config-if)# sfp-mode SGMII
lss2200-8p (config-if)# sfp-mode 2500BASE-X
lss2200-8p (config-if)# sfp-mode 5G-BASE-R
lss2200-8p (config-if)# sfp-mode 10G-BASE-R
lss2200-8p (config-if)#
```

Messages: *WARNING- sfp mode not applicable, ignored*

**Command:** **snmp**

Description: Set SNMP parameters.

Mode: Interface Config mode for 10GbE and 1GbE ports

## Parameters:

community	Create SNMP v2c community
user	Create SNMP v3 user
view	Create SNMP v3 view
The name of the SNMP v2c community	Tab to complete/list SNMP v2c community string for read-only access
host-access	Host/network access for community
restrict-oid	Restrict community to the specified OID
String	Restrict community to the specified OID
A.B.C.D[/mask]	Host/network access for community
The name of the SNMP v3 user,	Tab to complete/list SNMP v3 user name
security-level	Security levels of group which defines their access right
auth-protocol	Authentication type of the user
auth-key	Private key to use with authentication protocol
priv-protocol	Type of privacy protocol
priv-key	Associated key to use with the privacy protocol
view-name	MIB view to which this user belongs to
SNMP v3 user security level	Security levels of group which defines their access right (noAuthNoPriv / authNoPriv / authPriv)
The name of the SNMP v3 view,	Tab to complete/list SNMP v3 MIB view identifier
oid	The OID to include or exclude from this view
type	MIB view type
String	The OID to include or exclude from this view
SNMP v3 MIB view type	MIB view type (included/excluded)

## Example:

```
LSS2200-8P (config-if)# snmp community public host-access 172.27.100.33 restrict-oid .1
LSS2200-8P (config-if)# snmp view View3 oid .1 type included
LSS2200-8P (config-if)# snmp user SnmpV3User-1 security-level authPriv auth-protocol md5
auth-key XXXXXXXXXXXX priv-protocol DES priv-key XXXXXXXXXXXX
libyang[1]: Value "SnmpV3User-1" does not satisfy the constraint "[a-zA-Z0-9_]+" (range, length, or pattern).
(path: /csi-snmp:userName)
LSS2200-8P (config)# do show snmp config
SNMP global Configuration
=====
Enable: Disabled

SNMP v2c Configuration
=====
| Community | Access | Host/Network | Restricted OID |
=====
| public | read-only | 172.27.100.33 | .1 |

SNMP v3 User Configuration
=====
| User name | Security level | Auth Protocol | Priv Protocol | View name |
```

```
=====
SNMP v3 View Configuration
=====
```

View name	Type	OID
View3	included	.1

```
LSS2200-8P (config-if)#
```

**Command:** `snmptrap`

Description:

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters:	authentication-failure	Authentication trap enable
	link-up-down	Link Up / Link Down trap enable
	server	SNMP v2c Traps Sink server
	A.B.C.D	IP address of SNMP v2c Traps Sink server

Example:

```
LSS2200-8P (config-if)# snmptrap authentication-failure
LSS2200-8P (config-if)# snmptrap link-up-down
LSS2200-8P (config-if)# snmptrap server 172.27.100.34
LSS2200-8P (config-if)#
```

**Command:** **spanning-tree**

Description: Spanning tree port configuration

Mode: 10GbE and GbE Interface Config Modes

## Parameters:

admin-edge	Sets initial port state as connected directly to an edge device
auto-edge	Automatically detects whether connected device is an edge device
auto-path-cost	Enable automatic calculation of path cost
forward-delay	Delay in seconds: set so max age does not exceed 2 x (forward delay -1) (4..30)
max-age	Age in seconds: set so max age does not exceed 2 x (forward delay -1) (6..40)
path-cost	Path cost when auto-calculation disabled
point-to-point	Configures detection of connection to a point-to-point link
priority	Priority, lower value favours port
restricted-role	Prevents the port from having root role; <b>Warning:</b> can cause lack of spanning tree connectivity
restricted-tcn	Prevents the port from propagating received topology change; <b>Warning:</b> can cause temporary loss of spanning tree connectivity
path-cost	Port path cost when automatic calculation disabled (1..200000000)
point-to-point	Force point-to-point true / Force point-to-point false / Auto-detect (force-true/force-false/auto)
transmit-hold-count	BPDUs per second (1..10)

## Example:

```
lss2200-8p (config-if)# spanning-tree admin-edge
lss2200-8p (config-if)# spanning-tree auto-edge
lss2200-8p (config-if)# spanning-tree auto-path-cost
lss2200-8p (config-if)# spanning-tree path-cost 750000
lss2200-8p (config-if)# spanning-tree max-age 15
lss2200-8p (config-if)# spanning-tree forward-delay 8
lss2200-8p (config-if)# spanning-tree point-to-point force-true
lss2200-8p (config-if)# spanning-tree point-to-point force-false
lss2200-8p (config-if)# spanning-tree point-to-point auto
lss2200-8p (config)# spanning-tree transmit-hold-count 5
lss2200-8p (config-if)#
```

**Command:** **speed**

Description: Update the switch port's speed

Mode: 10GbE and GbE Interface Config Modes

Parameters: 10 100 1000 port speed in Mbps

Example:

```
lss2200-8p (config-if)# speed 10
lss2200-8p (config-if)# speed 100
lss2200-8p (config-if)# speed 1000
lss2200-8p (config-if)#
```

**Command:** **start**

Description: Run Virtual Cable Test on the specified port

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: vct Run Virtual Cable Test on the specified port  
 The 1G switch port type port type (GigabitEthernet)  
 The switch port number, Tab to complete/list port-number (1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8)

Example:

```
LSS2200-8P (config-if)# start vct GigabitEthernet 1/2
Cable diagnostics for port : GigabitEthernet 1/2 (Timestamp: 2022-09-16 15:22:14.373980)
=====
| pair      | Status          | Length (meters) |
=====
| A         | Pair Ok         | -                |
| B         | Pair Ok         | -                |
| C         | Pair Short      | 0                |
| D         | Pair Short      | 0                |
LSS2200-8P (config-if)#
```

**Command:** **switchport**

Description: Switching mode characteristics

Mode: 10GbE and GbE Interface Config Modes

## Parameters:

access	Set access mode characteristics of the interface
mode	Set mode of the interface
trunk	Set trunk mode characteristics of the interface
vlan	Set VLAN when interface is in access mode
Number in the range 1-4094	Native VLAN Id (1..4094)
Mode of the interface	Access or Trunk (access/trunk)
allowed	Set allowed VLANs when interface is in trunk mode
native	Set native VLAN
vlan	Set allowed VLAN characteristics when interface is in trunk mode
VLAN IDs list/range	Set Allowed VLANs. List of VLANs separated by commas and ranges are specified with dash separating lower and upper bound. Each VLAN ID should be between 1 and 4094.
vlan	Set native VLAN when interface is in trunk mode
Number in the range 1-4094	Trunk Native VLAN Id (1..4094)

## Example:

```

lss2200-8p (config-if)# switchport access vlan 100
lss2200-8p (config-if)# switchport mode access
lss2200-8p (config-if)# switchport mode trunk
lss2200-8p (config-if)# switchport trunk allowed vlan 100,200
lss2200-8p (config-if)# switchport trunk allowed vlan 100-300
lss2200-8p (config-if)# switchport trunk native vlan 100
lss2200-8p (config-if)# switchport trunk native vlan 100,200
Syntax error: Illegal parameter
lss2200-8p (config-if)# switchport trunk native vlan 100-300
Syntax error: Illegal parameter
lss2200-8p (config-if)#
LSS2200-8P (config-if)# switchport trunk allowed vlan 100
Invalid config for Access mode. Mode should be Trunk.
LSS2200-8P (config-if)#
LSS2200-8P (config-if)# switchport mode trunk
LSS2200-8P (config-if)# switchport trunk native vlan 100
LSS2200-8P (config-if)#

```



**Command:** **system**

Description: Configure system settings

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters:

contact	set system contact
DigitalIO	set system digital io
Digital IO number	Digital IO number (1..99)
do	To run exec commands in config mode
exit	Exit from DIO configuration mode
input	set system digital input
name	set system DIO name
output	set system digital output
snmp-action	set system dio1 snmp
snmp-trap	set system dio1 snmp
high-to-low	set system snmp action
low-to-high	set system snmp action
disable	set system dio1 snmp disable
enable	set system input dio1 snmp enable
high	set system dio output high
low	set system dio output low
location	set system location
name	set system name
input	set system digital input 1
name	set system DIO1 name
output	set system digital output
snmp-action	set system dio1 snmp
String	system DIO2 name
high	set system dio2 output high
low	set system dio2 output low
String	system contact (the space character is not allowed)
String	system location (the space character is not allowed)
String	System name must be alphanumeric and may be hyphenated (max length 63) (the space character is not allowed)

## Example:

```
LSS2200-8P (config-if)# system name lss2200-8p
lss2200-8p (config-if)# system name LSS2200-8P
LSS2200-8P (config-if)# system location Minn-Engineering Lab
Syntax error: Illegal command line
LSS2200-8P (config-if)# system location Minn-EngineeringLab
LSS2200-8P (config-if)#
LSS2200-8P (config)# system DigitalIO 1
LSS2200-8P (config-dio)# ?
  do      To run exec commands in config mode
  exit    Exit from DIO configuration mode
  input   set system digital input
  name    set system DIO name
  output  set system digital output
LSS2200-8P (config-dio)#
```

```

LSS2200-8P (config-dio)# input snmp-action high-to-low
LSS2200-8P (config-dio)# input snmp-action low-to-high
LSS2200-8P (config-dio)# input snmp-trap disable
LSS2200-8P (config-dio)# input snmp-trap enable
LSS2200-8P (config-dio)# name amport_1.3
LSS2200-8P (config-dio)# output high
LSS2200-8P (config-dio)# output low

LSS2200-8P (config-dio)#

LSS2200-8P (config-dio)# do show system DigitalIO config
System Digital IO Configuration
=====
DigitalIO 1:
  Name           : amport_1.3
  IO Type        : output
  IO active       : low
  SNMP trap      : Enabled
  SNMP input action : low-to-high
DigitalIO 2:
  Name           :
  IO Type        : input
  IO active       :
  SNMP trap      : Disabled
  SNMP input action : low-to-high
LSS2200-8P (config-dio)# do show system DigitalIO status
System Digital IO Status
=====
DigitalIO 1:
  IO Type        : output
  State          : Low
DigitalIO 2:
  IO Type        : input
  State          : Low
LSS2200-8P (config-dio)#

```

Parameters <tab>:

```

LSS2200-8P (config-dio)# do <tab>
!          alarm      clear      clock      configure  copy       debug
exit      nslookup    ping      reload     show       ssh        telnet
traceroute who
LSS2200-8P (config-dio)# no

LSS2200-8P (config-dio)# no <tab>
aging-time alarm      ble        clock      interface
ip         lldp        lldp-med   logging    loop-detect
lpm        monitor     nfc        ntp        poe
qos        rest-server route      snmp       snmptrap
spanning-tree system    telnet
LSS2200-8P (config-dio)# end
LSS2200-8P #

```

**Note:** At FW v 1.6.0.0R6 the Digital IO command syntax changed "system DIO1" to "system DigitalIO 1"

**Command:** `telnet`

Description: Configure the Telnet server. **Warning:** Non-secure Telnet State is enabled. Device is vulnerable to Cleartext Transmission of Sensitive Information. Setup and verify SSH, then disable Telnet.

Mode: Interface Config mode for 10GbE and 1GbE ports

Parameters: `server` Enable the Telnet server

**Example:**

```
LSS2200-8P (config-if)# telnet server
LSS2200-8P (config)#
LSS2200-8P (config-if)# telnet ?
  <cr>
```

```
LSS2200-8P (config-if)# telnet server
```

```
Warning: Non-secure Telnet State is enabled. Device is vulnerable to Cleartext Transmission
of Sensitive Information. Setup and verify SSH, then disable Telnet.
```

```
LSS2200-8P (config)#
```

## vlan Interface Config Mode Commands

To display available Interface Config mode commands for VLAN interfaces, enter a ? (question mark) and hit Enter:

```
lss2200-8p (config)# interface vlan 10
lss2200-8p (config-vlan-if)# ?
  dns      Add to DNS Server list
  end      Go back to EXEC View
  exit     Exit from interface configuration mode
  ignore   Ignore information configured/received
  ip       IPv4 address configuration
  no       Negate a command or set its defaults

lss2200-8p (config-vlan-if)#
```

**Command:** [admin](#)

Description: Enter Config Admin mode. See the [Config Admin Mode Commands](#) on page 91.

Mode: vlan Interface Config Mode

Parameters:

banner	First level of banner commands.
do	To run exec commands in config mode
end	Go back to EXEC View
exit	Exit from configure mode
firmware	Firmware commands
no	Negate a command or set its defaults
password	Change password for the specified user account
username	Create or modify a local user account

Example:

```
LSS2200-8P (config-vlan-if)# admin
LSS2200-8P (config-admin)# ?
  banner   First level of banner commands.
  do       To run exec commands in config mode
  end      Go back to EXEC View
  exit     Exit from configure mode
  firmware Firmware commands
  no       Negate a command or set its defaults
  password Change password for the specified user account
  username Create or modify a local user account

LSS2200-8P (config-admin)#
```

**Command:** [aging-time](#)

Description: Set MAC address aging time in seconds

Mode: vlan Interface Config Mode

Parameters: MAC address aging time in seconds Set MAC address aging time (4..956)

Example:

```
LSS2200-8P (config-vlan-if)# aging-time 300
LSS2200-8P (config)#
```

**Command:** **alarm**

Description: Set alarm parameters

Mode: vlan Interface Config Mode

Parameters: alarm Enable alarm

10GigabitEthernet-1/1-Temperature-high-alarm	10GigabitEthernet-1/1-Temperature-low-alarm
10GigabitEthernet-1/1-Temperature-high-warning	10GigabitEthernet-1/1-Temperature-low-warning
10GigabitEthernet-1/1-Voltage-high-alarm	10GigabitEthernet-1/1-Voltage-low-alarm
10GigabitEthernet-1/1-Voltage-high-warning	10GigabitEthernet-1/1-Voltage-low-warning
10GigabitEthernet-1/1-Bias-high-alarm	10GigabitEthernet-1/1-Bias-low-alarm
10GigabitEthernet-1/1-Bias-high-warning	10GigabitEthernet-1/1-Bias-low-warning
10GigabitEthernet-1/1-Tx-Power-high-alarm	10GigabitEthernet-1/1-Tx-Power-low-alarm
10GigabitEthernet-1/1-Tx-Power-high-warning	10GigabitEthernet-1/1-Tx-Power-low-warning
10GigabitEthernet-1/1-Rx-Power-high-alarm	10GigabitEthernet-1/1-Rx-Power-low-alarm
10GigabitEthernet-1/1-Rx-Power-high-warning	10GigabitEthernet-1/1-Rx-Power-low-warning
10GigabitEthernet-1/2-Temperature-high-alarm	10GigabitEthernet-1/2-Temperature-low-alarm
10GigabitEthernet-1/2-Temperature-high-warning	10GigabitEthernet-1/2-Temperature-low-warning
10GigabitEthernet-1/2-Voltage-high-alarm	10GigabitEthernet-1/2-Voltage-low-alarm
10GigabitEthernet-1/2-Voltage-high-warning	10GigabitEthernet-1/2-Voltage-low-warning
10GigabitEthernet-1/2-Bias-high-alarm	10GigabitEthernet-1/2-Bias-low-alarm
10GigabitEthernet-1/2-Bias-high-warning	10GigabitEthernet-1/2-Bias-low-warning
10GigabitEthernet-1/2-Tx-Power-high-alarm	10GigabitEthernet-1/2-Tx-Power-low-alarm
10GigabitEthernet-1/2-Tx-Power-high-warning	10GigabitEthernet-1/2-Tx-Power-low-warning
10GigabitEthernet-1/2-Rx-Power-high-alarm	10GigabitEthernet-1/2-Rx-Power-low-alarm
10GigabitEthernet-1/2-Rx-Power-high-warning	10GigabitEthernet-1/2-Rx-Power-low-warning
loop-shutdown-GigabitEthernet-1/1	loop-shutdown-GigabitEthernet-1/2
loop-shutdown-GigabitEthernet-1/3	loop-shutdown-GigabitEthernet-1/4
loop-shutdown-GigabitEthernet-1/5	loop-shutdown-GigabitEthernet-1/6
loop-shutdown-GigabitEthernet-1/7	loop-shutdown-GigabitEthernet-1/8
loop-shutdown-10GigabitEthernet-1/1	loop-shutdown-10GigabitEthernet-1/2
port-security-GigabitEthernet-1/1-shutdown	port-security-GigabitEthernet-1/1-limit-reached
port-security-GigabitEthernet-1/2-shutdown	port-security-GigabitEthernet-1/2-limit-reached
port-security-GigabitEthernet-1/3-shutdown	port-security-GigabitEthernet-1/3-limit-reached
port-security-GigabitEthernet-1/4-shutdown	port-security-GigabitEthernet-1/4-limit-reached
port-security-GigabitEthernet-1/5-shutdown	port-security-GigabitEthernet-1/5-limit-reached
port-security-GigabitEthernet-1/6-shutdown	port-security-GigabitEthernet-1/6-limit-reached
port-security-GigabitEthernet-1/7-shutdown	port-security-GigabitEthernet-1/7-limit-reached
port-security-GigabitEthernet-1/8-shutdown	port-security-GigabitEthernet-1/8-limit-reached
port-security-10GigabitEthernet-1/1-shutdown	port-security-10GigabitEthernet-1/1-limit-reached
port-security-10GigabitEthernet-1/2-shutdown	port-security-10GigabitEthernet-1/2-limit-reached
CPU-Temperature	

**Example:**

```
LSS2200-8P (config)# alarm loop-shutdown-GigabitEthernet-1/6
LSS2200-8P (config)#
```

**Command:** **ble**

Description: Bluetooth Low Energy commands

Mode: vlan Interface Config Mode

Parameters: broadcast Set BLE broadcast  
disconnect Set BLE disconnect

Example:

```
LSS2200-8P (config-vlan-if)# ble broadcast
LSS2200-8P (config)# int vlan 10
LSS2200-8P (config-vlan-if)# ble disconnect
LSS2200-8P (config)#
```

**Command:** **clock**

Description: Set clock time zone

Mode: vlan Interface Config Mode

Parameters: clock timezone  
String system timezone (case-sensitive)

Africa/Abidjan	Africa/Accra	Africa/Addis_Ababa
Africa/Algiers	Africa/Asmara	Africa/Bamako
↓↓↓		
Africa/Porto-Novo	Africa/Sao_Tome	Africa/Tripoli
Africa/Tunis	Africa/Windhoek	America/Adak
America/Anchorage	America/Anguilla	America/Antigua
America/Kentucky/Monticello	America/Kralendijk	America/La_Paz
America/Lima	America/Los_Angeles	America/Lower_Princes
Asia/Dhaka	Asia/Dili	Asia/Dubai
Asia/Dushanbe	Asia/Famagusta	Asia/Gaza
Asia/Hebron	Asia/Ho_Chi_Minh	Asia/Hong_Kong
Asia/Hovd	Asia/Irkutsk	Asia/Jakarta
Asia/Jayapura	Asia/Jerusalem	Asia/Kabul
Asia/Kamchatka	Asia/Karachi	Asia/Kathmandu
Etc/GMT-3	Etc/GMT-4	Etc/GMT-5
Etc/GMT-6	Etc/GMT-7	Etc/GMT-8
Etc/GMT-9	Europe/Amsterdam	Europe/Andorra
Europe/Astrakhan	Europe/Athens	Europe/Belgrade
↓↓↓		
Pacific/Port_Moresby	Pacific/Rarotonga	Pacific/Saipan
Pacific/Tahiti	Pacific/Tarawa	Pacific/Tongatapu
Pacific/Wake	Pacific/Wallis	UTC

Example:

```
LSS2200-8P (config)# clock timezone america toronto
Syntax error: Illegal command line
LSS2200-8P (config)# clock timezone America/Toronto
LSS2200-8P (config)#
```

**Command:** **consoleflow**

Description: Set ConsoleFlow parameters in ConsoleFlow Config mode.

Mode: vlan Interface Config Mode

## Parameters:

active_connection	Connection instance to use when connecting to ConsoleFlow
apply_configuration_updates	Controls if no configuration updates will be applied, <b>or</b> the device will always apply configuration updates. (never/always)
apply_firmware_updates	Automatically apply new firmware
connection	Configure ConsoleFlow client connection settings
content_check_interval	Sets the firmware and configuration check interval
device_description	Sets the Device Description
device_name	Sets the Device Name
do	To run Exec commands in Config mode
end	Go back to EXEC View
exit	Go back to configure view
no	Negate a command or set its defaults
remote_access_local_port	Local port for ConsoleFlow Remote Access. When configured, a total of 16 consecutive ports will be reserved
state	enable the client
status_update_interval	Sets the status update interval
connection	connection:1 connection:2
time period in minutes	(1..2160) for Content Check Interval
port number	0 or in range 1024-65520
time period in minutes	Status Update Interval (1..1440 minutes)

## Example:

```
LSS2200-8P (config-vlan-if)# consoleflow
LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# active_connection connection:1
active_connection:Connection:1
LSS2200-8P (config-consoleflow)# active_connection connection:2
active_connection:Connection:2
LSS2200-8P (config-consoleflow)# apply_firmware_updates
apply_firmware_updates:enable
LSS2200-8P (config-consoleflow)# state
state:enable
LSS2200-8P (config-consoleflow)# apply_firmware_updates
apply_firmware_updates:enable
LSS2200-8P (config-consoleflow)# apply_configuration_updates never
apply_configuration_updates:never
LSS2200-8P (config-consoleflow)# apply_configuration_updates always
apply_configuration_updates:always
LSS2200-8P (config-consoleflow)# remote_access_local_port 2000
remote_access_local_port:2000
```

**Command:** **do**

Description: To run Exec commands in Config mode

Mode: vlan Interface Config Mode

Parameters: ! alarm clear clock configure copy debug exit nslookup  
ping reload show ssh telnet traceroute who

Example:

```
LSS2200-8P (config-consoleflow)# do show ip interface brief
| Interface      | IPv4/Netmask    | IP Origin | Status
=====
| VLAN 1        | 172.27.100.84/24 | DHCP      | UP
LSS2200-8P (config-consoleflow)#
```

**Command:** **dns**

Description: Add to DNS Server list

Mode: vlan Interface Config Mode

Parameters: address Comma separated list of DNS servers  
A.B.C.D Comma separated list of DNS servers

Example:

```
lss2200-8p (config-vlan-if)# dns ?
  address Comma separated list of DNS servers
lss2200-8p (config-vlan-if)# dns address 1.2.3.4
libyang[0]: Invalid value "" in "dns" element. (path: /csi-logical-interfaces:dns[.=''])
lss2200-8p (config-vlan-if)#
```

**Command:** **end**

Description: Go back to EXEC View

Mode: vlan Interface Config Mode

Parameters: None

Example:

```
lss2200-8p (config-vlan-if)# end
LSS2200-8P #
```

**Command:** **exit**

Description: Exit from interface configuration mode

Mode: vlan Interface Config Mode

Parameters: None

Example:

```
lss2200-8p (config-vlan-if)# exit
lss2200-8p (config)#
```



Command: **ignore peer-dns-server**

Description: Ignore DHCP provided name servers and use in-house or static DNS Servers. This command lets you change DNS server priority or delete the servers which came from DHCP and use only those manually configured. Added at FW v 1.7.0.0R5.

Mode: VLAN Interface Config Mode

Parameters: peer-dns-server Ignore DNS Server received via DHCP on this Interface

Example:

```
LSS2200-8P (config-vlan-if)# ignore peer-dns-server
LSS2200-8P (config-vlan-if)# exit
LSS2200-8P (config)# end
LSS2200-8P # ping host testsite.com
Ping: bad address 'testsite.com'
LSS2200-8P # ping host 111.22.333.444
PING 111.22.333.444 (111.22.333.444): 56 data bytes
64 bytes from 111.22.333.444: seq=0 ttl=54 time=40.710 ms
64 bytes from 111.22.333.444: seq=1 ttl=54 time=40.108 ms
64 bytes from 111.22.333.444: seq=2 ttl=54 time=46.972 ms
64 bytes from 111.22.333.444: seq=3 ttl=54 time=39.235 ms
64 bytes from 111.22.333.444: seq=4 ttl=54 time=40.317 ms

--- 111.22.333.444 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 39.235/41.868/46.972 ms
LSS2200-8P
```

Command: **no ignore peer-dns-server**

Description: Do not ignore DHCP provided name servers and use in-house or static DNS Servers. Added at FW v 1.7.0.0R5.

Mode: VLAN Interface Config Mode

Parameters:

Example: Change from ignore DNS server to no ignore DNS server showing ping results:

```
LSS2200-8P # ping host testsite.com
Ping: bad address 'testsite.com'
LSS2200-8P # ping host 111.22.333.444
PING 111.22.333.444 (111.22.333.444): 56 data bytes
64 bytes from 111.22.333.444: seq=0 ttl=54 time=40.710 ms
64 bytes from 111.22.333.444: seq=1 ttl=54 time=40.108 ms
64 bytes from 111.22.333.444: seq=2 ttl=54 time=46.972 ms
64 bytes from 111.22.333.444: seq=3 ttl=54 time=39.235 ms
64 bytes from 111.22.333.444: seq=4 ttl=54 time=40.317 ms

--- 111.22.333.444 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 39.235/41.868/46.972 ms
LSS2200-8P # ping host testsite.com
ping: bad address "testsite.com"
LSS2200-8P # configure terminal
LSS2200-8P (config)# interface vlan 1
LSS2200-8P (config-vlan-if)# no ignore peer-dns-server
LSS2200-8P (config-vlan-if)# exit
```

```
LSS2200-8P (config)# exit
LSS2200-8P # ping host testsite.com
PING testsite.com (111.22.333.444): 56 data bytes
64 bytes from 111.22.333.444: seq=0 ttl=54 time=41.710 ms
64 bytes from 111.22.333.444: seq=1 ttl=54 time=46.108 ms
64 bytes from 111.22.333.444: seq=2 ttl=54 time=39.972 ms
64 bytes from 111.22.333.444: seq=3 ttl=54 time=38.235 ms
64 bytes from 111.22.333.444: seq=4 ttl=54 time=38.317 ms

--- testsite.com ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 38.235/39.868/41.972 ms
LSS2200-8P #
```

**Command:** [interface](#)

Description: Select an interface to configure

Mode: vlan Interface Config Mode

Parameters:	10GigabitEthernet	Ethernet 10G interface
	GigabitEthernet	Ethernet 10G interface number
	vlan	VLAN Identifier
	Switch/Interface number	Ethernet 10G interface number
	Switch/Interface number	Ethernet 1G interface number
	Number in the range 1-4094	VLAN Identifier (1..4094)

Example:

```
LSS2200-8P (config-consoleflow)# interface vlan 10
LSS2200-8P (config-vlan-if)# ?
  dns      Add to DNS Server list
  end      Go back to EXEC View
  exit     Exit from interface configuration mode
  ignore   Ignore information configured/received
  ip       IPv4 address configuration
  no       Negate a command or set its defaults

LSS2200-8P (config-vlan-if)#
```

**Command:** **ip**

Description: Set IPv4 address configuration

Mode: vlan Interface Config Mode

Parameters:

address	Set the IP address of a management VLAN interface
dhcp	Set the IP address mode of a management VLAN interface to DHCP
A.B.C.D	IPv4 address
netmask	IPv4 netmask
relay	Set DHCP Relay parameters
server	Set DHCP Server parameters
snooping	Set DHCP Snooping parameters
address server	IP address of a management VLAN interface
String	DHCP Server Name
A.B.C.D	Local IPv4 address to listen for DHCP Requests
A.B.C.D	IPv4 netmask

Example:

```
LSS2200-8P (config-vlan-if)# ip dhcp snooping
lss2200-8p (config-vlan-if)# ip address 1.2.3.4 netmask 255.255.255.0
lss2200-8p (config-vlan-if)# ip address dhcp
lss2200-8p (config-vlan-if)#
```

**Command:** **lldp**

Description: Set Link Level Discovery Protocol parameters.

Mode: vlan Interface Config Mode

Parameters:

holdtime	LLDP Hold Time. The time that an LLDP device maintains neighbor information before aging it.
txinterval	LLDP transmit interval. The interval (in seconds) at which LLDP packets are sent to neighbors.
Tx Hold Time	In seconds (2..10). The "actual" Hold Time equals the Tx Interval multiplied by this TX Hold Time value.
Tx Interval	interval (in seconds) at which LLDP packets are sent to neighbors (5..120). The default value is 30 seconds.

Example:

```
LSS2200-8P (config-vlan-if)# lldp holdtime 4
LSS2200-8P (config-vlan-if)# lldp txinterval 45
LSS2200-8P (config)#
```

In the example above, the '4' actually means 4 x 30 (Tx Interval) = 120 seconds.

**Command:** **logging**

Description: Set Syslog parameters

Mode: vlan Interface Config Mode

Parameters:	buffer-size	Syslog buffer size
	host	Syslog host's IP address
	severity	Syslog severity setting
	Unsigned integer	Syslog buffer size (1..65535)
	A.B.C.D	IP address of Syslog server
	Syslog severity level choice	(emergency/alert/critical/error/warning/notice/info/debug)
	transport	Syslog server transport protocol
	port	Syslog server port
	Unsigned integer	Syslog server port (1..65535)
	Syslog severity level choice	Syslog Syslog output severity level (emergency/alert/critical/error/warning/notice/info/debug)

Example:

```
LSS2200-8P (config)# logging buffer-size 9000
LSS2200-8P (config)# logging host 192.168.60.2 transport tcp port 943
LSS2200-8P (config)# logging host 192.168.60.2 transport udp port 8500
LSS2200-8P (config)# logging severity critical
LSS2200-8P (config)#
```

**Command:** **loop-detect**

Description: Set Loop detection parameters.

Mode: vlan Interface Config Mode

Parameters:	shutdown	Loop detect shutdown time
	tx	Loop Detect frame transmission interval
	Loop Detect Shutdown Time	In seconds (0..604800)
	Loop Detect frame transmit interval	in seconds (1..10)

Example:

```
LSS2200-8P (config-vlan-if)# loop-detect shutdown 30000
LSS2200-8P (config-vlan-if)# loop-detect tx 3
LSS2200-8P (config)#
```

**Command:** **lpm**

Description: Enable LPM (Discovery) Tool (Lantronix Provisioning Manager) parameters. LPM is currently enabled by default and cannot be configured.

Mode: vlan Interface Config Mode

Parameters: None.

Example:

```
LSS2200-8P (config-vlan-if)# lpm
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# do show lpm status
LPM status
=====
Status: Running
Queries:
  Valid: 0
  Unknown: 0
Erroneous Packets: 0
Errors: 0
Last Connection: 0.0.0.0/0
LSS2200-8P (config-vlan-if)#
```

**Command:** **monitor**

Description: Set monitor mirror parameters

Mode: vlan Interface Config Mode

Parameters: destination

egress

ingress

The switch port type Gigabit Ethernet Port Type (GigabitEthernet/1GigabitEthernet)

The switch port type Gigabit Ethernet Port Type (GigabitEthernet/10GigabitEthernet)

GigabitEthernet The switch port number, Tab to complete/list Gigabit Ethernet Port Number (1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8)

10GigabitEthernet The switch port number, Tab to complete/list 10Gigabit Ethernet Port Number (1/1 1/2)

Example:

```
LSS2200-8P (config-vlan-if)# monitor destination egress GigabitEthernet 1/4
LSS2200-8P (config)#
LSS2200-8P (config-vlan-if)# monitor destination egress 10GigabitEthernet 1/2
LSS2200-8P (config)#
LSS2200-8P (config-vlan-if)# monitor destination ingress 10GigabitEthernet 1/1
LSS2200-8P (config-vlan-if)#
```

**Command:** **nfc**

Description: Set Near Field Communication parameters.

Mode: vlan Interface Config Mode

Parameters:

Example:

```
LSS2200-8P (config-vlan-if)# nfc ?
  <cr>
LSS2200-8P (config-vlan-if)# nfc
LSS2200-8P (config)#
```

**Command:** **no**

Description: Negate a command or set its defaults

Mode: vlan Interface Config Mode

Parameters: dns Remove from DNS Server list  
 address Comma separated list of DNS servers  
 A.B.C.D Comma separated list of DNS servers

Parameters (tab):

aging-time	alarm	ble	clock	dns	interface	ip
lldp	lldp-med	logging	loop-detect	lpm	monitor	nfc
ntp	poe	qos	rest-server	route	snmp	snmptrap
spanning-tree	system	telnet				

Example:

```
lss2200-8p (config-vlan-if)# no aging-time
lss2200-8p (config-vlan-if)# no dns
lss2200-8p (config)# interface vlan 10
lss2200-8p (config-vlan-if)# no monitor destination egress
lss2200-8p (config-vlan-if)# no monitor destination ingress
lss2200-8p (config)# interface vlan 10
lss2200-8p (config-vlan-if)# no loop-detect
lss2200-8p (config)#
```

**Command:** **ntp**

Description: Set Network Timing Protocol parameters for a VLAN interface

Mode: vlan Interface Config Mode

Parameters:

server	Add an NTP Server or modify its address
name	Server name
address	Server address (IPv4 address or DNS domain name)
Server	Server address (IPv4 address or DNS domain name)
String	Server name
Server	Server address (IPv4 address or DNS domain name)

Example:

```
LSS2200-8P (config-vlan-if)# ntp server address 1.2.3.4
LSS2200-8P (config)#
```

**Command:** **poe**

Description: Set Power over Ethernet parameters for a VLAN interface

Mode: vlan Interface Config Mode

Parameters:

fast_mode	Enable power at boot, do not wait for startup config
pse	Power supply identifier ('ps1', 'ps2')
schedule	Power over Ethernet Scheduling Profile
Power supply identifier ('ps1', 'ps2')	Power supply (ps1/ps2)
Power supply budget in Watts (0..1600)	Power budget (0..1600)
String	PoE Schedule Profile Name
day	Day of Week
hour	Hour HH
min	Minute MM
action	Scheduled Action
PoE Schedule Day of Week	Day of Week (sun/mon/tue/wed/thu/fri/sat)
PoE Schedule Hour	Hour HH (0..23)
PoE Schedule Action Type	Scheduled Action (on/off/reset)
PoE Schedule Minute	Minute MM (0..59)

Example:

```
LSS2200-8P (config-vlan-if)# poe fast_mode
Fast PoE is Enabled
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# poe pse ps1 1200
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config)# poe schedule Profile1 day sat hour 1 action reset min 30
LSS2200-8P (config)#
```

**Command:** **qos**

Description: Set Quality of Service parameters

Mode: vlan Interface Config Mode

Parameters:	weights	QoS queue weights distribution mode
	QoS queue weights distribution mode options	QoS queue weights distribution mode (even/default/custom)
	even	Use even QoS queue weights
	default	Use default QoS queue weights
	custom	Set custom QoS queue weights
	Queue weights for queues 0-7	Weight for Queue 0 (1..16)

## Example:

```
LSS2200-8P (config-vlan-if)# qos weights even
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# qos weights default
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# qos weights custom 1 2 3 4
Syntax error: Incompleted command
LSS2200-8P (config-vlan-if)# qos weights custom 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Syntax error: Illegal command line
LSS2200-8P (config-vlan-if)# qos weights custom 0
LSS2200-8P (config-vlan-if)# qos weights custom 0 1
Syntax error: Illegal parameter
LSS2200-8P (config-vlan-if)#
```

**Command:** **rest-server**

Description: Set REST API server parameters

Mode: vlan Interface Config Mode

Parameters:

## Example:

```
LSS2200-8P (config-vlan-if)# rest-server
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config)# do show rest-server config
REST API Server Configuration
=====
REST Server Enabled: Enabled
REST Server Port: 8000
LSS2200-8P (config)#
```



**Command:** `route`

Description: Create Static route. Creates network routes.

Mode: vlan Interface Config Mode

Parameters:

<code>name</code>	Name of static route to add
<code>address</code>	Destination network ip/prefix. Routes created with network address.
<code>gateway</code>	The network gateway
<code>interface</code>	The route interface
<code>Name</code>	Name of static route to add
<code>A.B.C.D[/mask]</code>	Destination network ip/prefix. Routes created with network address.
<code>A.B.C.D</code>	The network gateway
<code>Interface Name</code>	The route interface

## Example:

```
LSS2200-8P (config-vlan-if)# route name SRoute1 address 1.2.3.4 gateway 2.3.4.5 interface vlan
Syntax error: Illegal parameter
LSS2200-8P (config-vlan-if)# route name SRoute1 address 1.2.3.4 gateway 2.3.4.5 interface SRoute1
Syntax error: Illegal parameter
LSS2200-8P (config-vlan-if)# route name SRoute1 address 1.2.3.4 gateway 2.3.4.5 interface eth1.1
Syntax error: Illegal parameter
LSS2200-8P (config-vlan-if)#
```

**Command:** **snmp**

Description: Set SNMP parameters for a VLAN interface

Mode: vlan Interface Config Mode

## Parameters:

community The name of the SNMP v2c community, Tab to complete/list SNMP v2c community string for read-only access

user The name of the SNMP v3 user, Tab to complete/list SNMP v3 user name

view The name of the SNMP v3 view, Tab to complete/list SNMP v3 MIB view identifier

public SNMP v2c community string for read-only access

private SNMP v2c community string for read-write access

host-access Host/network access for community

restrict-oid Restrict community to the specified OID

A.B.C.D[/mask] Host/network access for community

String Restrict community to the specified OID

security-level Security levels of group which defines their access right

auth-protocol Authentication type of the user

auth-key Private key to use with authentication protocol

priv-protocol Type of privacy protocol

priv-key Associated key to use with the privacy protocol

view-name MIB view to which this user belongs

SNMP v3 user security level Security levels of group which defines their access right (noAuthNoPriv/authNoPriv/authPriv)

SNMP v3 user authentication type Authentication type of the user (MD5/SHA)

String Private key to use with authentication protocol

SNMP v3 user privacy protocol Type of privacy protocol (DES/AES)

String Associated key to use with the privacy protocol

view-name The name of the SNMP v3 view, Tab to complete/list MIB view to which this user belongs to

## Example:

```
LSS2200-8P (config-vlan-if)# snmp community public host-access 1.2.3.4 restrict-oid
.1.2.3.4.5.6.7.8
LSS2200-8P (config)#
LSS2200-8P (config-vlan-if)# snmp user BobB security-level authPriv auth-protocol MD5 auth-
key ACG486 priv-protocol DES priv-key ACG486 view-name TomR
<cr>

LSS2200-8P (config-vlan-if)# snmp user BobB security-level authPriv auth-protocol MD5 auth-
key ACG486 priv-protocol DES priv-key ACG486 view-name TomR
Authentication key is under minimum length of 8
LSS2200-8P (config)#
```

**Command:** **snmptrap**

Description: Set SNMP Trap parameters for a VLAN interface

Mode: vlan Interface Config Mode

Parameters: authentication-failure Authentication failed trap  
link-up-down Link up / Link down trap  
server SNMP trap server  
A.B.C.D IP address of SNMP v2c Traps Sink server

Example:

```
LSS2200-8P (config-vlan-if)# snmptrap authentication-failure
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# snmptrap link-up-down
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# snmptrap server 2.4.6.8
LSS2200-8P (config)#
```

**Command:** **spanning-tree**

Description: Set STP parameters

Mode: vlan Interface Config Mode

Parameters:

forward-delay Delay in seconds: set so max age does not exceed 2 x (forward delay -1) (4..30)  
max-age Age in seconds: set so max age does not exceed 2 x (forward delay -1) (6..40)  
priority Priority value in range 0 through 61440 (steps of 4096)  
transmit-hold-count BPDU per second (1..10)

Example:

```
LSS2200-8P (config-vlan-if)# spanning-tree forward-delay 20
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# spanning-tree max-age 25
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# spanning-tree priority 4096
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# spanning-tree transmit-hold-count 5
LSS2200-8P (config)#
```

**Command:** **start**

Description: Begin VCT diagnostic. Run Virtual Cable Test on the specified GbE port.

Mode: vlan Interface Config Mode

Parameters: vct Virtual Cable Test  
 GigabitEthernet The 1G switch port type  
 1/1 1/2 1/3 1/4 1/5 1/6 1/7 1/8 port number (GigabitEthernet)

## Example:

```
LSS2200-8P (config-vlan-if)# start vct GigabitEthernet 1/1
Cable diagnostics for port : GigabitEthernet 1/1 (Timestamp: 2022-09-30 20:11:51.628054)
=====
| pair   | Status          | Length (meters) |
=====
| A      | Pair Open       | 0                |
| B      | Pair Open       | 0                |
| C      | Pair Open       | 0                |
| D      | Pair Open       | 0                |
LSS2200-8P (config)#

LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# start vct GigabitEthernet 1/2
Cable diagnostics for port : GigabitEthernet 1/2 (Timestamp: 2022-09-30 20:16:35.205812)
=====
| pair   | Status          | Length (meters) |
=====
| A      | Pair Ok         | -                |
| B      | Pair Ok         | -                |
| C      | Pair Short      | 0                |
| D      | Pair Short      | 0                |
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config)# start vct GigabitEthernet 1/8
Cable diagnostics for port : GigabitEthernet 1/8 (Timestamp: 2022-09-30 20:31:38.783682)
=====
| pair   | Status          | Length (meters) |
=====
| A      | Pair Open       | 0                |
| B      | Pair Open       | 0                |
| C      | Pair Open       | 0                |
| D      | Pair Open       | 1                |
LSS2200-8P (config)#
```

**Command:** **system**

Description: Set system parameters.

Mode: vlan Interface Config Mode

Parameters:

contact	set system contact
DigitalIO	set system digital io
Digital IO number	Digital IO number (1..99)
location	set system location
name	set system name
String	system contact
String	system location
high-to-low	set system snmp action
low-to-high	set system snmp action
disable	set system dio1 snmp disable
enable	set system input dio1 snmp enable
input	set system digital input 2
name	set system DIO2 name
output	set system digital output
String	System name must be alphanumeric and may be hyphenated (max length 63)
snmp-action	set system dio1 snmp
snmp-trap	set system dio1 snmp
high-to-low	set snmp action from high to low
low-to-high	set snmp action from low to high
String	system DIO1 name
high	set system dio output high
low	set system dio output low
do	To run exec commands in config mode
exit	Exit from DIO configuration mode
input	set system digital input
name	set system DIO name
output	set system digital output

## Example:

```
LSS2200-8P (config-vlan-if)# system contact S.M.L.
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# system DIO2 output high
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# system DIO1 output low
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# system DIO1 output high
LSS2200-8P (config)# interface vlan 10
LSS2200-8P (config-vlan-if)# system name BobB@Engineering
Syntax error: Illegal parameter
LSS2200-8P (config-vlan-if)# system name BobB-Engineering
BobB-Engineering (config)#
```

**Command:** **telnet**

Description: Configure the Telnet server

Mode: vlan Interface Config Mode

Parameters: Server enable telnet server

Example:

```
LSS2200-8P (config-vlan-if)# telnet server
```

**Warning:** Non-secure Telnet State is enabled. Device is vulnerable to Cleartext Transmission of Sensitive Information. Setup and verify SSH, then disable Telnet.

```
LSS2200-8P (config)#
```

## **4. 4. Troubleshooting**

See the LSS2200-8P Install Guide for more troubleshooting information.

## **5. 5. Regulatory Agency Information**

See the LSS2200-8P Install Guide for all regulatory agency information.

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