MANAGEMENT GUIDE

# D62 series
# CLI User Guide

Release A6

# ABOUT THIS GUIDE

**PURPOSE** This guide gives specific information on how to operate CLI to manage this switch.

**AUDIENCE** The guide is intended for use by network administrators who are responsible for operating and maintaining network equipment; consequently, it assumes a basic working knowledge of general switch functions, Internet Protocol (IP), and SSH Protocol.

# Revision History

| Release | Date | Revision |
|---|---|---|
| **Initial Release** | **2021/02/04** | **A1** |
| **Revision** | **2022/01/03** | **A2** |
| **Revision** | **2023/03/30** | **A3** |
| **Revision** | **2024/08/06** | **A4** |
| **Revision** | **2025/01/23** | **A5** |
| **Revision** | **2025/12/08** | **A6** |
| | | |

# Content

# Chapter 1 CLI Management

The following description is the brief of the network connection.

-- Attach the RJ45 serial port on the switch's front panel which used to connect to the switch for telnet configuration

-- At "Com Port Properties" Menu, configure the parameters as below: (see the next section)

| | |
|---|---|
| Baud rate | 115200 |
| Stop bits | 1 |
| Data bits | 8 |
| Parity | N |
| Flow control | none |

## 1-1 Login

The command-line interface (CLI) is a text-based interface. User can access the CLI through either a direct serial connection to the device or a Telnet session (Default IP address: **192.168.1.1**). The default uaser and password to login into the Managed Switch are listed below:

**Username:** **admin**

**Password:** **admin**

After you login successfully, the prompt will be shown as “<sys_name>**#**“ . See the following figures. It means you behave as an administrator and have the privilege for setting the Managed Switch. If log as not the administrator, the prompt will be shown as “<sys_name>>”, it means you behave as a guest and are only allowed for setting the system under the administrator. Each CLI command has its privilege

```
Username: admin
Password: admin
D62-084-30-DC#
```

## 1-2 Commands of CLI

The CLI is divided into serveral modes. If a user has enouth privilege to run a particular command, the user has to run the command in the correct mode. To see the commands of the mode, please input "**?**" after the system prompt, then all commands will be listed in the screen. The command modes are listed as belows:

Command Modes

| **MODE** | **PROMPT** | **COMMAND FUNCTION IN THIS MODE** |
|---|---|---|
| exec | <sys_name># | Display current configuration, diagnostics, maintenance |
| config | <sys_name>(config)# | Configure features other than those below |
| config-if | <sys_name>(config-interface)# | Configure ports |
| config-if-range | <sys_name>(config-if-range)# | Configure a range of ports |
| config-vlan | <sys_name>(config-vlan)# | Configure static vlan |

Commands reside in the corresponding modes could run only in that mode. If a user wants to run a particular command, the user has to change to the appropriate mode. The command modes are organized as a tree, and users start to in enable mode. The following table explains how to change from one mode to another.

Change Between Command Modes

| **MODE** | **ENTER MODE** | **LEAVE MODE** |
|---|---|---|
| exec | -- | -- |
| config | Configure terminal | exit |
| config-interfcae | Interface <port-type> <port-number> | exit |
| config-interfcae-range | Interface range <port-type> <port-type-list> | exit |
| config-vlan | vlan <vlan_list> | exit |

## 1-3 Global Commands of CLI

```
D62-084-30# ?
  clear             Reset functions
  clock             Manage the system clock
  configure         Configuration Mode
  copy              Copy from one file to another
  debug             Debug Options
  delete            Delete a file from the flash file system
  end               End current mode and change to enable mode
  erps              Ethernet Ring Protection Switching
  exit              Exit current mode and down to previous mode
  no                Negate command
  ping              Send ICMP ECHO_REQUEST to network hosts
  reboot            Halt and perform a cold restart
  restore-defaults  Restore to default
  save              Save running configuration to flash
  show              Show running system information
  ssl               Setup SSL host keys
  terminal          Terminal configuration
  traceroute        Trace route to network hosts
```

# Chapter 2 CLEAR of CLI

**Table : CLEAR Commands**

| Command | Function |
|---|---|
| interfaces | Interface status and configuration |
| ip | IP information |
| lacp | LACP Configuration |
| line | To identify a specific line for configuration |
| lldp | Reset lldp information |
| logging | Log Configuration |
| mac | MAC configuration |
| port-security | Port Security |
| power | Power-over-Ethernet Configuration |
| spanning-tree | Show running system information |

## 2-1 interfaces

Clear interface status and configuration.

### Syntax

**clear interfaces** GigabitEthernet <port_list> counters

**clear interfaces** LAG <lag_list> counters

### Parameter

| | | |
|---|---|---|
| **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | **<port_list>** | Port List X-Y,Z |
| **LAG** | IEEE 802.3 Link Aggregation interface | |
| | **<lag_list>** | LAG List X-Y,Z |

### Example

```
D62-084-30-DC# clear interfaces GigabitEthernet 1-3,6 counters
D62-084-30-DC# clear interfaces LAG 2-4,6 counters
D62-084-30-DC#
```

## 2-2 ip

Clear IP information.

### Syntax

**clear ip igmp snooping** groups {<cr>|<dynamic>|<static>}

**clear ip igmp snooping** statistics

### Parameter

| | | |
|---|---|---|
| **groups** | IPv4 multicast groups | |
| | **<cr>** | |
| | **dynamic** | dynamic groups |
| | **static** | static groups |
| **statistics** | Clear IGMP snooping statistics | |

### Example

```
D62-084-30-DC# clear ip igmp snooping statistics
D62-084-30-DC# clear ip igmp snooping groups static
D62-084-30-DC# clear ip igmp snooping groups dynamic
D62-084-30-DC#
```

## 2-3 lacp

Clear LACP Configuration.

### Syntax

**Clear lacp** counters

### Parameter

| | |
|---|---|
| **counters** | LAG number |

### Example

```
D62-084-30-DC# clear lacp counters
D62-084-30-DC#
```

## 2-4 line

Clear a specific line for configuration.

### Syntax

**clear line** telnet

### Parameter

| | |
|---|---|
| **telnet** | Telnet daemon configuration |

### Example

```
D62-084-30-DC# clear line telnet
D62-084-30-DC#
```

## 2-5 lldp

Clear lldp information.

### Syntax

**clear lldp** global statistics

**clear lldp** interfaces GigabitEthernet <port_list> statistics

**clear lldp** interfaces LAG <lag_list> statistics

### Parameter

| | | | |
|---|---|---|---|
| **global** | Clear LLDP statistics | | |
| | **statistics** | | |
| **interfaces** | Clear LLDP statistics for specified ports | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |

### Example

```
D62-084-30-DC# clear lldp global statistics
D62-084-30-DC# clear lldp interfaces GigabitEthernet 1-3,6 statistics
D62-084-30-DC# clear lldp interfaces LAG 1-3,6 statistics
D62-084-30-DC#
```

## 2-6 logging

Clear log configuration.

### Syntax

**clear logging** {<buffered>|<file>}

### Parameter

| | |
|---|---|
| **buffered** | Buffered logging |
| **file** | File logging |

### Example

```
D62-084-30-DC# clear logging buffered
D62-084-30-DC# clear logging file
D62-084-30-DC#
```

## 2-7 mac

Clear MAC configuration.

### Syntax

**Clear mac address-table dynamic**

**Clear mac address-table dynamic** interface GigabitEthernet <port_list>

**Clear mac address-table dynamic** interface LAG <lag_list>

**Clear mac address-table dynamic** vlan <vlan_id>

### Parameter

| | | | |
|---|---|---|---|
| **interface** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |
| **vlan** | VLAN configuration | | |
| | **<vlan_id>** | VLAN ID (1-4094) | |

### Example

```
clear mac address-table dynamic
D62-084-30-DC# clear mac address-table dynamic interfaces GigabitEthernet 1-3,6
D62-084-30-DC# clear mac address-table dynamic interfaces LAG 1-3,6
D62-084-30-DC# clear mac address-table dynamic vlan 2
D62-084-30-DC#
```

## 2-8 port-security

Clear port security configuration.

### Syntax

**clear port-security** all {<cr>|<address>|<interface>}

**clear port-security** configured {<cr>|<address>|<interface>}

**clear port-security** dynamic {<cr>|<address>|<interface>}

**clear port-security** sticky {<cr>|<address>|<interface>}

### Parameter

| | |
|---|---|
| **all** | All secure mac addresses |
| **configured** | Configured secure mac addresses |
| **dynamic** | Secure MAC address auto-learned by hardware |
| **sticky** | Secure MAC address either auto-learned or configured |

### Example

```
D62-084-30-DC# clear port-security all
D62-084-30-DC# clear port-security all address 68:8D:B6:00:00:01
D62-084-30-DC# clear port-security all interface GigabitEthernet 1
D62-084-30-DC#
```

## 2-9 power

Clear power-over-ethernet configuration.

### Syntax

clear power inline interfaces GigabitEthernet <port_list> statistics

### Parameter

| | |
|---|---|
| **<port_list>** | Port List X-Y,Z |

### Example

```
D62-084-30-DC# clear power inline interfaces GigabitEthernet 3-6 statistics
D62-084-30-DC#
```

## 2-10 spanning-tree

clear spanning-tree statistics

### Syntax

**clear spanning-tree** interfaces GigabitEthernet <port_list> statistics

**clear spanning-tree** interfaces LAG <lag_list> statistics

### Parameter

| | | |
|---|---|---|
| **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | **<port_list>** | Port List X-Y,Z |
| **LAG** | IEEE 802.3 Link Aggregation interface | |
| | **<lag_list>** | LAG List X-Y,Z |

### Example

```
D62-084-30-DC# clear spanning-tree interfaces GigabitEthernet 1-3,6 statistics
D62-084-30-DC# clear spanning-tree interfaces LAG 1-3,6 statistics
D62-084-30-DC#
```

# Chapter 3 CLOCK of CLI

Manage the system clock.

## Syntax

**clock set** <HH:MM:SS> <month> <day> <year>

## Parameter

| | | |
|---|---|---|
| **set** | Manually set the system clock | |
| | **< HH:MM:SS >** | Current time in hours (24 Hour format), minutes, and seconds. |
| | **<month>** | jan Month January<br>feb Month February<br>mar Month March<br>apr Month April<br>may Month May<br>jun Month June<br>jul Month July<br>aug Month August<br>sep Month September<br>oct Month October<br>nov Month November<br>dec Month December |
| | **<day>** | Current day in the month.Current year |
| | **<year>** | <2000-2035> |

## Example

```
D62-084-30-DC# clock set 16:54:00 jan 7 2022
D62-084-30-DC#
```

# Chapter 4 CONFIGURE Commands of CLI

**Table : CONFIGURE Commands**

| Command | Function |
|---|---|
| aaa | Authentication, Authorization, Accounting |
| boot | Booting Operations |
| clock | Manage the system clock |
| custom | Custom Module configuration |
| dido | Digital I/O Configuration |
| dos | DoS information |
| dot1x | IEEE Standard for port-based Network Access Control |
| do | To run exec commands in current mode |
| end | End current mode and change to enable mode |
| erps | Ethernet Ring Protection Switching |
| errdisable | Error Disable |
| exit | Exit current mode and down to previous mode |
| group | Group |
| hostname | Set system's network name |
| interface | Select an interface to configure |
| ip | IP information |
| ipv6 | IPv6 information |
| jumbo-frame | Jumbo Frame configuration |
| lacp | LACP Configuration |
| lag | Link Aggregation Group Configuration |
| line | To identify a specific line for configuration |
| lldp | Global LLDP configuration subcommands |
| logging | Log Configuration |
| loop-prevention | Loop-prevention configuration |
| mac | MAC configuration |
| management-vlan | Management VLAN configuration |
| mirror | Mirror configuration |
| no | Negate command |
| ntp | Network Time Protocol |
| port-security | Port Security |

```
power             Power-over-Ethernet Configuration
qos               QoS configuration
radius-server     RADIUS configuration
smtp              SMTP Configuration
snmp              SNMP information
spanning-tree     Spanning-tree configuration
system            System information
tacacs-server     TACACS+ server information
username          Local User
vlan              VLAN configuration
voice             Vlan for voice traffic
```

## 4-1 configure

Configure from the terminal.

### Syntax

**configure**

### Example

```
D62-084-30-DC# configure
D62-084-30-DC(config)#
```

## 4-1.1 aaa

Authentication, Authorization and Accounting setting.

### Syntax

**aaa** accounting {<ssh>|<telnet>} tacacs {<cr>>|<commands>} <0-15> {<cr>>|<exec>} <cr>

**aaa** authentication> login {<http>|<https>|<ssh>|<telnet>} local

**aaa** authentication> login {<http>|<https>|<ssh>|<telnet>} {<radius>|<tacacs>}

**aaa** authentication> login {<http>|<https>|<ssh>|<telnet>} {<radius>|<tacacs>} local

**aaa** authentication> login {<http>|<https>|<ssh>|<telnet>} {<radius>|<tacacs>} {<radius>|<tacacs>}

**aaa** authentication> login {<http>|<https>|<ssh>|<telnet>} {<radius>|<tacacs>} {<radius>|<tacacs>} local

### Parameter

| | | | | | | |
|---|---|---|---|---|---|---|
| **accounting** | Accounting | | | | | |
| | {<ssh>\|<telnet>} | Configure SSH/TELNET | | | | |
| | | tacacs | Use tacacs database for accounting | | | |
| | | | <cr> | | | |
| | | | commands | Cmd Lvl (0..15) | | |
| | | | | <0-15> | Cmd Lvl (0..15) | |
| | | | | | <cr> | |
| | | | | | exec | exec |
| **authentication** | Authentication | | | | | |
| | login | Login Authentication | | | | |
| | | {<http>\|<https>\| | Configure HTTP/HTTPS/SSH/TELNET | | | |

<table>
<tr><td></td><td></td><td><ssh>|<telnet>}</td><td>local</td><td colspan="5">Use local database for authentication</td></tr>
<tr><td colspan="4"></td><td><cr></td><td colspan="4"></td></tr>
<tr><td colspan="3"></td><td>{<radius>|<br><tacacs>}</td><td colspan="5"></td></tr>
<tr><td colspan="4"></td><td><cr></td><td colspan="4"></td></tr>
<tr><td colspan="4"></td><td>local</td><td colspan="4">Use local database for authentication</td></tr>
<tr><td colspan="5"></td><td><cr></td><td colspan="3"></td></tr>
<tr><td colspan="4"></td><td rowspan="4">{<radius>|<br><tacacs>}</td><td colspan="4"></td></tr>
<tr><td colspan="5"></td><td><cr></td><td colspan="3"></td></tr>
<tr><td colspan="5"></td><td rowspan="2">local</td><td colspan="3"></td></tr>
<tr><td colspan="6"></td><td><cr></td><td></td></tr>
<tr><td>authorization</td><td colspan="10">Authorization</td></tr>
<tr><td></td><td>{<ssh>|<telnet>}</td><td colspan="9">Configure SSH/TELNET</td></tr>
<tr><td colspan="2"></td><td>tacacs</td><td colspan="8">Use tacacs database for authorization</td></tr>
<tr><td colspan="3"></td><td><cr></td><td colspan="7"></td></tr>
<tr><td colspan="3"></td><td>commands</td><td colspan="7">Cmd Lvl (0..15)</td></tr>
<tr><td colspan="4"></td><td><0-15></td><td colspan="6">Cmd Lvl (0..15)</td></tr>
<tr><td colspan="5"></td><td><cr></td><td colspan="5"></td></tr>
<tr><td colspan="5"></td><td colspan="4">{<config-commands>|<fallback>}</td><td>config-commands<br>/fallback</td></tr>
<tr><td colspan="9"></td><td><cr></td></tr>
</table>

**Example**

```
D62-084-30-DC(config)# aaa authentication login http tacacs radius local
D62-084-30-DC(config)#
```

## 4-1.2 boot

To select booting image.

**Syntax**

**boot system** {<image0>|<image1>}

**Parameter**

| | |
|---|---|
| **image0** | Runtime image 0 |
| **Image1** | Runtime image 1 |

**Example**

```
D62-084-30-DC(config)# boot system image0
D62-084-30-DC(config)#
```

## 4-1.3 clock

To manage the system clock.

### Syntax

**clock** {<source>|<summer-time>|<timezone>}

### Parameter

| | |
|---|---|
| **source** | Configure an external time source for the system clock |
| **summer-time** | Configure the system to automatically switch to summer time (daylight saving time) |
| **timezone** | Set the time zone for display purposes |

### Example

```
D62-084-30-DC(config)# clock source local
D62-084-30-DC(config)# clock source ntp
D62-084-30-DC(config)#
```

## 4-1.4 custom

To configure custom module.

### Syntax

**custom** enable

### Parameter

### Example

```
D62-084-30-DC(config)# custom enable
D62-084-30-DC(config)#
```

## 4-1.5 dos

To configure DoS.

### Syntax

**dos** {<daeqsa-deny>|<icmp-frag-pkts-deny>|<icmpv4-ping-max-check>|<icmpv6-ping-max-check>|

<ipv6-min-frag-size-check>|<land-deny>|<nullscan-deny>|<pod-deny>|<smurf-deny>|

<syn-sportl1024-deny>|<synfin-deny>|<synrst-deny>|<tcp-frag-off-min-check>|<tcpblat-deny>|

<tcphdr-min-check>|<udpblat-deny>|<udpblat-deny>}

**dos** icmp-ping-max-length <0-65535>

**dos** ipv6-min-frag-size-length <0-65535>

**dos** smurf-netmask <0-32>

**dos** tcphdr-min-length <0-31>

### Parameter

| | |
|---|---|
| **daeqsa-deny** | Destination MAC equals to source MAC |
| **icmp-frag-pkts-deny** | Fragmented ICMP packets |
| **icmp-ping-max-length** | DoS information |
| **icmpv4-ping-max-check** | Check ICMPv4 ping maximum packets size |
| **icmpv6-ping-max-check** | Check ICMPv6 ping maximum packets size |
| **ipv6-min-frag-size-check** | Check minimum size of IPv6 fragments |
| **ipv6-min-frag-size-length** | DoS information |
| **land-deny** | Source IP equals to destination IP |
| **nullscan-deny** | NULL Scan Attacks |
| **pod-deny** | Ping of Death Attacks |
| **smurf-deny** | Smurf Attacks |
| **smurf-netmask** | DoS information |
| **syn-sportl1024-deny** | SYN packets with sport less than 1024 |
| **synfin-deny** | SYN and FIN bits set in the packet |
| **synrst-deny** | SYNC and RST bits set in the packet |
| **tcp-frag-off-min-check** | TCP fragment packet with offset equals to one |
| **tcpblat-deny** | Source TCP port equals to destination TCP port |
| **tcphdr-min-check** | Check minimum TCP header |
| **tcphdr-min-length** | DoS information |
| **udpblat-deny** | Source UDP port equals to destination UDP port |

| | |
|---|---|
| **xma-deny** | Xmascan: sequence number is zero and the FIN, URG and PSH bits are set |

**Example**

```
D62-084-30-DC(config)# dos xma-deny
D62-084-30-DC(config)#
```

## 4-1.6 dot1x

To configure 802.1x.

**Syntax**

**dot1x** {<authentication>|<feature>|<guest-vlan>|<max-reauth-req>|

<re-authentication>|<system-auth-control>|<timeout>}

**dot1x** authentication timer re-authenticate <1-3600>

**dot1x** feature guest-vlan radius-vlan

**dot1x** guest-vlan supplicant

**dot1x** max-reauth-req <1-255>

**dot1x** re-authentication

**dot1x** system-auth-control

**dot1x** timeout tx-period <1-65535>

**Parameter**

| | |
|---|---|
| **authentication** | Authentication |
| **feature** | Globally enables/disables a dot1x feature functionality |
| **guest-vlan** | Guest VLAN |
| **max-reauth-req** | The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN |
| **re-authentication** | Set Re-authentication state |
| **system-auth-control** | Set the global 802.1x state |
| **timeout** | timeout |

**Example**

```
D62-084-30-DC(config)# dot1x authentication timer re-authenticate <1-3600>
D62-084-30-DC(config)#
```

## 4-1.7 do

To run exec commands in current mode.

### Syntax

**do** <command for exec mode>

### Parameter

### Example

```
D62-084-30-DC(config)# do show users
  Username      Protocol        Location
-------------- ------------ ----------------------
      admin      console     0.0.0.0
D62-084-30-DC(config)#
```

## 4-1.8 end

End current mode and change to enable mode.

### Syntax

**end**

### Example

```
D62-084-30-DC(config)# end
D62-084-30-DC#
```

## 4-1.9 erps

Ethernet Ring Protection Switching(ERPS) settings.

### Syntax

**erps** {<cr>|<instance>|<node-id>|<ring>|<vlan-group>}

### Parameter

| | |
|---|---|
| **instance** | ERPS Ring Instance |
| **node-id** | ERPS Node Id |
| **ring** | Name of a specific ERPS ring |
| **Vlan-group** | ERPS Ring Instance |

### Example

```
D62-084-30-DC(config)# erps
D62-084-30-DC#
```

## 4-1.10 errdisable

Error Disable.

### Syntax

**errdisable recovery** cause {<acl>|<all>|<arp-inspection>|<bpduguard>|<broadcast-flood>|
<dhcp-rate-limit>|<psecure-violation>|<selfloop>|
<unicast-flood>|<unknown-multicast-flood>}

**errdisable recovery** interval <interval_time>

### Parameter

| | | |
|---|---|---|
| **cause** | Error Disabled caused reason | |
| | **acl** | Enable timer to recover from acl causes |
| | **all** | Enable timer to recover from all causes |
| | **arp-inspection** | Enable timer to recover from arp rate limit causes |
| | **bpduguard** | Enable timer to recover from bpdu guard causes |
| | **broadcast-flood** | Enable timer to recover from broadcast flood causes |
| | **dhcp-rate-limit** | Enable timer to recover from dhcp rate limit causes |
| | **psecure-violation** | Enable timer to recover from port security causes |
| | **selfloop** | Enable timer to recover from selfloop causes |
| | **unicast-flood** | Enable timer to recover from unicast flood causes |
| | **unknown-multicast-flood** | Enable timer to recover from unknown multicast flood |
| **interval** | Recovery interval | |
| | **<interval_time>** | Interval with the number of seconds (30-86400) |

### Example

```
D62-084-30-DC(config)# errdisable recovery cause unknown-multicast-flood
D62-084-30-DC(config)#
```

## 4-1.11 exit

Exit current mode and down to previous mode.

### Syntax

**exit**

### Example

```
D62-084-30-DC(config)# exit
D62-084-30-DC#
```

## 4-1.12 group

Group privilege setting.

### Syntax

**group name** {<acl>|<dhcp>|<diagnostics>|<erps>|<eventNotify>|<igmp>|
<lldp>|<macTable>|<maintenance>|<poe>|<port>|<qos>|
<rlpp>|<security>|<snmp>|<stp>|<system>|<vlan>} **privilege readOnly** <0-15> **readWrite** <0-15>

### Parameter

| | | |
|---|---|---|
| **name** | Group name | |
| | **acl** | ACL |
| | **dhcp** | DHCP |
| | **diagnostics** | Diagnostics |
| | **erps** | ERPS |
| | **eventNotify** | Event Notification |
| | **igmp** | IGMP Snooping |
| | **lldp** | LLDP |
| | **macTable** | MAC Address Table |
| | **maintenance** | Maintenance |
| | **poe** | PoE Management |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **port** | Ports | | | | |
| | **qos** | QoS | | | | |
| | **rlpp** | Loop Prevention | | | | |
| | **security** | Security | | | | |
| | **snmp** | SNMP | | | | |
| | **stp** | Spanning Tree | | | | |
| | **system** | System | | | | |
| | **vlan** | VLAN | | | | |
| | | **privilege** | | | | |
| | | | **readOnly** | <0-15> | **readWrite** | <0-15> |

**Example**

```
D62-084-30(config)# group name acl privilege readOnly 15 readWrite 15
D62-084-30(config)#
```

## 4-1.13 hostname

To set system's network name.

**Syntax**

**hostname** <system_network_name>

**Parameter**

| | |
|---|---|
| **system_network_name** | System network name (1-32 words) |

**Example**

```
D62-084-30-DC(config)# hostname D62-084-30-DC
D62-084-30-DC(config)#
```

## 4-1.14 interface

Select an interface to configure.

**Syntax**

**interface** GigabitEthernet <port_number>

**interface** LAG <lag_id>

**interface range** GigabitEthernet <port_list>

**interface range** LAG <lag_list>

**Parameter**

| | | | | |
|---|---|---|---|---|
| **GigabitEthernet** | Gigabit ethernet interface to configure | | | |
| | **<port_number>** | Port number | | |
| **LAG** | IEEE 802.3 Link Aggregation interface | | | |
| | **<lag_id>** | LAG id | | |
| **range** | Interface range command | | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | | |
| | | **<port_list>** | Port List X-Y,Z | |
| | | | **acl** | acl |
| | | | **back-pressure** | Enable back-pressure |
| | | | **custom** | Custom Module configuration |
| | | | **description** | Interface specific description |
| | | | **dos** | DoS information |
| | | | **do** | To run exec commands in current mode |
| | | | **duplex** | Configure duplex operation |
| | | | **eee** | EEE configuration |
| | | | **end** | End current mode and change to enable mode |
| | | | **exit** | Exit from current mode |
| | | | **flowcontrol** | Configure flow-control mode |
| | | | **ip** | IP information |
| | | | **lacp** | LACP Configuration |
| | | | **lag** | Link Aggregation Group Configuration |
| | | | **lldp** | LLDP interface subcommands |
| | | | **mac** | MAC configuration |
| | | | **no** | Negate command |
| | | | **port-security** | Port Security |
| | | | **power** | Power-over-Ethernet Configuration |
| | | | **protected** | Configure an interface to be a protected port |
| | | | **qos** | QoS configuration |

| | | | | |
|---|---|---|---|---|
| | | | **rate-limit** | Rate limit configuration of the specified incoming traffic |
| | | | **shutdown** | Shutdown the selected interface |
| | | | **spanning-tree** | Spanning-tree configuration |
| | | | **speed** | Configure speed operation |
| | | | **storm-control** | Storm control configuration |
| | | | **switchport** | Set switching mode characteristics |
| | **LAG** | IEEE 802.3 Link Aggregation interface | | |
| | | **<lag_list>** | LAG List X-Y,Z | |
| | | | **back-pressure** | Enable back-pressure |
| | | | **custom** | Custom Module configuration |
| | | | **description** | Interface specific description |
| | | | **dos** | DoS information |
| | | | **do** | To run exec commands in current mode |
| | | | **duplex** | Configure duplex operation |
| | | | **end** | End current mode and change to enable mode |
| | | | **exit** | Exit from current mode |
| | | | **flowcontrol** | Configure flow-control mode |
| | | | **ip** | IP information |
| | | | **mac** | MAC configuration |
| | | | **no** | Negate command |
| | | | **protected** | Configure an interface to be a protected port |
| | | | **qos** | QoS configuration |
| | | | **shutdown** | Shutdown the selected interface |
| | | | **spanning-tree** | Spanning-tree configuration |
| | | | **speed** | Configure speed operation |
| | | | **switchport** | Set switching mode characteristics |

**Example**

```
D62-084-30-DC(config)# interface GigabitEthernet 1
D62-084-30-DC(config-if)#
```

### 4-1.14.1 acl

Access control list configuration.

#### Syntax

**acl bind ACL_NAME** {<cr>|<seq>}

**no acl bind ACL_NAME**

#### Example

```
D62-084-30-DC(config-if)# acl bind abc
D62-084-30-DC(config-if)# no acl bind abc
D62-084-30-DC(config-if)#
```

### 4-1.14.2 back-pressure

Back-pressure configuration.

#### Syntax

**back-pressure**

**no back-pressure**

#### Example

```
D62-084-30-DC(config-if)# back-pressure
D62-084-30-DC(config-if)# no back-pressure
D62-084-30-DC(config-if)#
```

### 4-1.14.3 custom

Per port custom module configuration

#### Syntax

**custom enable**

**no custom enable**

### Parameter

| | |
|---|---|
| **custom enable** | Enable per port custom function |
| **no custom enable** | Disable per port custom function |

### Example

```
D62-084-30-DC(config-if)# custom enable
D62-084-30-DC(config-if)# no custom enable
D62-084-30-DC(config-if)#
```

## 4-1.14.4 description

Interface specific description

### Syntax

**description** <WORD>

**no description**

### Parameter

| | |
|---|---|
| **WORD** | Description string (1-63 words) |

### Example

```
D62-084-30-DC(config-if)# description desc_word
D62-084-30-DC(config-if)# no description
D62-084-30-DC(config-if)#
```

## 4-1.14.5 dos

Per port DoS-related function configuration

### Syntax

**dos**

**no dos**

### Parameter

| | |
|---|---|
| **dos** | Enable per port DoS function |
| **no dos** | Disable per port DoS function |

### Example

```
D62-084-30-DC(config-if)# dos
D62-084-30-DC(config-if)# no dos
D62-084-30-DC(config-if)#
```

## 4-1.14.6 do

To run exec commands in current mode

### Syntax

**do** <sequence>

### Parameter

| | |
|---|---|
| **sequence** | Exec Command |

### Example

```
D62-084-30-DC(config-if)# do show info
System Name      : D62-084-30-DC
System Location  :
System Contact   :
MAC Address      : 68:8D:B6:00:00:00
IP Address       : 192.168.11.199
Subnet Mask      : 255.255.255.0
Loader Version   : 2.0.0.1
Loader Date      : Jan 11 2022 - 13:46:46
Firmware Version : 2.0.1.3_vk
Firmware Date    : Jan 11 2022 - 13:52:13
System Object ID : 1.3.6.1.4.1.27282.3.2.10
System Up Time   : 0 days, 0 hours, 40 mins, 3 secs
D62-084-30-DC(config-if)#
```

### 4-1.14.7 duplex

Per Port duplex configuration

#### Syntax

**Duplex** {<auto>|<full>|<half>}

#### Parameter

| | |
|---|---|
| **auto** | Enable auto duplex configuration |
| **full** | Force full duplex operation |
| **half** | Force half duplex operation |

#### Example

```
D62-084-30-DC(config-if)# duplex auto
D62-084-30-DC(config-if)#
```

### 4-1.14.8 eee

Per port EEE configuration

### Syntax

**eee**

**no eee**

### Parameter

| | |
|---|---|
| **eee** | Enable per port EEE function |
| **no eee** | Disable per port EEE function |

### Example

```
D62-084-30-DC(config-if)# eee
D62-084-30-DC(config-if)# no eee
D62-084-30-DC(config-if)#
```

## 4-1.14.9 end

End current mode and change to enable mode

### Syntax

**end**

### Example

```
D62-084-30-DC(config-if)# end
D62-084-30-DC#
```

## 4-1.14.10 exit

Exit from current mode

### Syntax

**exit**

### Example

```
D62-084-30-DC(config-if)# exit
D62-084-30-DC(config)#
```

## 4-1.14.11 flowcontrol

Per port flow control configuration

### Syntax

**flowcontrol** {<auto>|<off>|<on>}

### Parameter

| | |
|---|---|
| **auto** | Enable per port auto mode flow control |
| **off** | Disable per port flow control function |
| **on** | Force on per port flow control function |

### Example

```
D62-084-30-DC(config-if)# flowcontrol auto
D62-084-30-DC(config-if)#
```

## 4-1.14.12 ip

Per port IP information.

### Syntax

**ip igmp** filter <1-128>

**ip igmp** max-groups <0-256>

**ip igmp** max-groups action {<deny>|<replace>}

### Parameter

| | | |
|---|---|---|
| **filter** | IPv4 filter | |
| | <1-128> | IPv4 filter profile index |
| **max-groups** | IGMP snooping max group number 0~256 | |

| | | |
|---|---|---|
| | deny | IGMP max-group action deny |
| | replace | IGMP max-group action replace |

**Example**

```
D62-084-30-DC(config-if)# ip igmp filter 1
D62-084-30-DC(config-if)#
```

### 4-1.14.13 lacp

Per port LACP-related function configuration

**Syntax**

**lacp priority** <1-65535>

**lacp timeout** {<fast>|<slow>}

**no lacp priority**

**no lacp timeout**

**Parameter**

| | | |
|---|---|---|
| **priority** | IEEE 802.3 link aggregation port priority | |
| | <1-65535> | Port-priority value |
| **timeout** | IEEE 802.3 link aggregation port timeout | |
| | fast | Long timeout value |
| | slow | Short timeout value |

**Example**

```
D62-084-30-DC(config-if)# lacp timeout slow
D62-084-30-DC(config-if)#
```

### 4-1.14.14 lag

Per port llnk aggregation group configuration.

**Syntax**

**lag <lag-id> lacp** {<active>|<passive}

**lag <lag-id> mode** static

**no lag**

### Parameter

| | | | |
|---|---|---|---|
| **<lag-id>** | configure port as LAG <lag-id> member port | | |
| | **mode** | Set LAG mode | |
| | | static | Enable Static Only |
| | **lacp** | LACP Configuration | |
| | | active | active mode |
| | | passive | passive mode |

### Example

```
D62-084-30-DC(config-if)# lag 1 lacp active
D62-084-30-DC(config-if)#
```

## 4-1.14.15 lldp

Per port LLDP function configuration

### Syntax

**lldp rx**

**lldp tlv-select** {<TLV>|pvid {<enable>|<disable>}|vlan-name {add <VLAN-LIST>|remove <VLAN-LIST>}}

**lldp tx**

**no lldp rx**

**no tlv-select**

**no tlv-select pvid**

**no lldp tx**

### Parameter

| | |
|---|---|
| **rx** | Enable LLDP reception on interface |

| | | | | |
|---|---|---|---|---|
| **tlv-select** | Selection of LLDP TLVs to send | | | |
| | **TLV** | LLDP optional TLV, pick from: port-desc, sys-name, sys-desc, sys-cap, mac-phy, lag, max-frame-size, management-addr | | |
| | **pvid** | disable | Disable Tx optional-TLV 802.1 PVID | |
| | | enable | Enable Tx optional-TLV 802.1 PVID | |
| | **vlan-name** | Add/remove VLAN for advertise | | |
| | | **add** | <VLAN_LIST> | VLAN List (e.g. 3,6-8): The range of VLAN ID is 0 to 4095 |
| | | **remove** | <VLAN_LIST> | VLAN List (e.g. 3,6-8): The range of VLAN ID is 0 to 4095 |
| **tx** | Enable LLDP transmission on interface | | | |

**Example**

```
D62-084-30-DC(config-if)# lldp tx
D62-084-30-DC(config-if)#
```

### 4-1.14.16 mac

Per port mac address table configuration

**Syntax**

**mac address-table learn** {<auto>|<disable>|<secure>}

**Parameter**

| | |
|---|---|
| **auto** | Learning is done automatically |
| **disable** | No learning |
| **secure** | Only static MAC entries are learned, all other frames are dropped. |

**Example**

```
D62-084-30-DC(config-if)# mac address-table learn secure
D62-084-30-DC(config-if)#
```

### 4-1.14.17 port-security

Per port port-security function configuration.

#### Syntax

**port-security** {<cr>|<address-limit>|<mac-address>|<violation>}

**no port-security** {<cr>|<address-limit>|<mac-address>|<violation>}

#### Parameter

| | |
|---|---|
| **address-limit** | MAC address limitation |
| **mac_address** | Sticky MAC address |
| **violation** | Action to be taken when limitation is reached |

#### Example

```
D62-084-30-DC(config-if)# port-security
D62-084-30-DC(config-if)#
```

### 4-1.14.18 power

Per port power over ethernet (PoE) configuration.

#### Syntax

**power inline** auto

**power inline** auto-check {<action>|<interval>|<ip>|<reboot-max>|<reboot-time>|<retry>|<start-time>}

**power inline** delay initial {<cr>|<0-300>}

**power inline** bt

**power inline** poh

**power inline** force

**power inline** limit <0-30000>

**power inline** never

**power inline** priority {<critical>|<high>|<low>}

**power inline** schedule <schedule_profile_number>

**no power inline** {<delay>|<limit>|<schedule>}

### Parameter

| | | | |
|---|---|---|---|
| **auto** | Turns on the device discovery protocol and applies power to the device. | | |
| **auto_check** | Auto check funtion | | |
| | **action** | ilpower port auto check action | |
| | **interval** | ilpower port auto check interval | |
| | **ip** | ilpower port auto check ip | |
| | **reboot-max** | ilpower port auto check maximum reboot times | |
| | **reboot-time** | ilpower port auto check reboot time | |
| | **retry** | ilpower port auto check retry times | |
| | **start-time** | ilpower port auto check start time | |
| **delay** | **initial** | Initial power enable | |
| | | <0-300> | Specifies the port power delay time in seconds |
| **force** | The switch port will power up the linked PD without any detect/negotiate mechanism | | |
| **bt** | BT Mode | | |
| **poh** | POH Mode | | |
| **limit** | The port limit of the interface from the point of view of inline power management | | |
| | <0-30000> | Specify the port limit in milliwatt | |
| **never** | Turns off the device discovery protocol and stops supplying power to the device | | |
| **priority** | ilpower port priority | | |
| | critical | Specifies that the powered device operation is critical | |
| | high | Specifies that the powered device operation is high | |
| | low | Specifies that the powered device operation is low | |
| **schedule** | Schedule Profile Configuration | | |
| | <1-10> | Schedule Profile number | |

### Example

```
D62-084-30-DC(config-if)# power inline schedule 1
D62-084-30-DC(config-if)#
```

### 4-1.14.19 protected

Per port protected function configuration.

#### Syntax

**protected**

**no protected**

#### Example

```
D62-084-30-DC(config-if)# protected
D62-084-30-DC(config-if)#
```

### 4-1.14.20 qos

Per port QoS-related configuration

#### Syntax

**qos** {<cos>|<queue>|<remark>|<schedule>|<trust>}

#### Parameter

| | |
|---|---|
| **cos** | Configure the default CoS value for a port. Use the no form of the command to return to the default setting. |
| **queue** | Queue configuration |
| **remark** | Configure remarking state of each port |
| **schedule** | QoS scheduling algorithm |
| **trust** | Configure each port to trust state while the system is in basic mode. Use the no form of the command to disable trust state on each port |

#### Example

```
D62-084-30-DC(config-if)# qos schedule wfq
D62-084-30-DC(config-if)#
```

### 4-1.14.21 rate-limit

Per port rate limit configuration

#### Syntax

**rate-limit egress** <16-1000000>

**rate-limit egress queue** <queue_id> <16-1000000>

**rate-limit ingress** <16-1000000>

**no rate-limit egress queue** <queue_id>

**no rate-limit ingress**

#### Parameter

<table>
<tr><td rowspan="6">egress</td><td colspan="4">Rate limit args egress configuration</td></tr>
<tr><td><16-1000000></td><td colspan="3">The average traffic rate in Kbps, must be a multiple of 16</td></tr>
<tr><td rowspan="4">queue</td><td colspan="3">queue configuration</td></tr>
<tr><td rowspan="3"><queue_id></td><td colspan="2">queue id</td></tr>
<tr><td rowspan="2"><16-1000000></td><td rowspan="2">The average traffic rate in Kbps, must be a multiple of 16</td></tr>
<tr></tr>
<tr><td rowspan="2">ingress</td><td colspan="4">Rate limit args ingress configuration</td></tr>
<tr><td><16-1000000></td><td colspan="3">The average traffic rate in Kbps, must be a multiple of 16</td></tr>
</table>

#### Example

```
D62-084-30-DC(config-if)# rate-limit ingress 16000
D62-084-30-DC(config-if)#
```

### 4-1.14.22 shutdown

Shutdown the selected interface

#### Syntax

**shutdown**

**no shutdown**

### Parameter

| | |
|---|---|
| **shutdown** | shutdown the interface |
| **no shutdown** | turn on the interface |

### Example

```
D62-084-30-DC(config-if)# shutdown
D62-084-30-DC(config-if)#
```

## 4-1.14.23 spanning-tree

Per port spanning tree configuration

### Syntax

**spanning-tree**

**spanning-tree bpdu-filter**

**spanning-tree bpdu-guard**

**spanning-tree cost** <0-200000000>

**spanning-tree edge**

**spanning-tree link-type** {<point-to-point>|<shared>}

**spanning-tree mcheck**

**spanning-tree mst** <0-15> **cost** <0-200000000>

**spanning-tree mst** <0-15> **port-priority** <0-240>

**spanning-tree port-priority** <0-240>

### Parameter

| | | |
|---|---|---|
| **bpdu-filter** | Sets the BPDU-Filter for specified port | |
| **bpdu-guard** | Sets the BPDU-Guard for specified port | |
| **cost** | Change an interface's spanning tree path cost | |
| | <0-200000000> | The value of external path cost (0 = Auto) |
| **edge** | Sets the edge-port for specified port | |

| | | | | |
|---|---|---|---|---|
| **link-type** | Specify a link type for spanning tree protocol use | | | |
| | <point-to-point> | Consider the interface as point-to-point | | |
| | <shared> | Consider the interface as shared | | |
| **mcheck** | Set the mcheck for specified port to migrate | | | |
| **mst** | Sets spanning-tree parameters of instance | | | |
| | <0-15> | Instance ID (0~15) | | |
| | | cost | Sets the internal path cost for specified instance | |
| | | | <0-200000000> | The value of internal path cost (0 = Auto) |
| | | port-priority | Sets the priority for specified instance | |
| | | | <0-240> | Priority (0~240) |
| **port-priority** | Sets the priority for specified instance | | | |
| | <0-240> | Priority (0~240) | | |

**Example**

```
D62-084-30-DC(config-if)# spanning-tree link-type point-to-point
D62-084-30-DC(config-if)#
```

### 4-1.14.24 speed

Per port speed configuration

**Syntax**

**speed** {10|100|1000|auto}

**Parameter**

**Example**

```
D62-084-30-DC(config-if)# speed 1000
D62-084-30-DC(config-if)#
```

### 4-1.14.25 storm-control

Per port storm-control configuration

### Syntax

**storm-control** {<cr>|<action>|<broadcast>|<unknown-multicast>|<unknown-unicast>}

**no storm-control** {<cr>|<action>|<broadcast>|<unknown-multicast>|<unknown-unicast>}

### Parameter

| | |
|---|---|
| **action** | Storm control action after exceed threshold |
| **broadcast** | Broadcast storm control |
| **unknown-multicast** | Unknown-multicast storm control |
| **unknown-unicast** | Unknown-unicast storm control |

### Example

```
D62-084-30-DC(config-if)# storm-control
D62-084-30-DC(config-if)#
```

## 4-1.14.26 switchport

Set per port switching mode characteristics.

### Syntax

**switchport** {<access>|<default-vlan>|<forbidden>|<hybrid>|<mode>|<trunk>}

**no switchport** {<access>|<default-vlan>|<forbidden>|<hybrid>|<mode>|<trunk>}

### Parameter

| | |
|---|---|
| **access** | Vlan aware port |
| **default-vlan** | Default VLAN |
| **forbidden** | Forbidden VLAN |
| **hybrid** | Configure switchport in hybrid mode |
| **mode** | VLAN mode |
| **trunk** | Vlan aware port |

### Example

```
D62-084-30-DC(config-if)# switchport mode access
D62-084-30-DC(config-if)#
```

## 4-1.15 ip

Internet Protocol.

### Syntax

**ip acl** <ACLNAME>

**ip** address <ipv4_addr> {<cr>|mask <ipv4_mask>}

**ip** default-gateway <ipv4_addr>

**ip** dhcp

**ip** dhcp server

**ip** dhcp server dhcp-range <pool_start_ipv4_addr> <pool_end_ipv4_addr>

**ip** dhcp server lease-time <0-864000000>

**ip** dns <ipv4_addr>

**ip** http

**ip** http port <1-65535>

**ip** http session-timeout <0-65535>

**ip** https

**ip** https port <1-65535>

**ip** https session-timeout <0-65535>

**ip** igmp profile <1-128>

**ip** igmp snooping {<cr>|<forward-method>|<report-suppression>|<unknown-multicast>|<version>|<vlan>}

**Parameter**

| | | | | | |
|---|---|---|---|---|---|
| **acl** | This command creates an ACL, which perform classification on layer 3 fields and enters ip-access configuration mode. | | | | |
| | do | To run exec commands in current mode | | | |
| | exit | Exit from current mode | | | |
| | icmp | ICMP | | | |
| | ip-protocol | IP protocol | | | |
| | no | Negate command | | | |
| | sequence | Specify sequence of access control entry | | | |
| | show | Show running system information | | | |
| | tcp | TCP | | | |
| | udp | UDP | | | |
| **address** | IPv4 Address | | | | |
| | A.B.C.D | IP Address format is A.B.C.D where (A/B/C/D = 0 ~ 255) | | | |
| | | **mask** | A.B.C.D | | |
| **default-gateway** | Set default gateway IP address | | | | |
| | A.B.C.D | Default gateway IP address | | | |
| **dhcp** | DHCP configuration | | | | |
| | **server** | dhcp server configuration | | | |
| | | **dhcp-range** | IPv4 range | | |
| | | | A.B.C.D | IPv4 start address | A.B.C.D IPv4 end address |
| | | **lease-time** | lease time | | |
| | | | <0-864000000> | 0-864000000 seconds (0: infinite) | |
| **dns** | DNS | | | | |
| | A.B.C.D | IP Address format is A.B.C.D where (A/B/C/D = 0 ~ 255) | | | |
| **http** | HTTP server configuration | | | | |
| | **port** | Configure port | | | |
| | | <1-65535> | port number | | |
| | **session-timeout** | Session timeout configuration | | | |
| | | <0-65535> | Timeout after specified minutes (0 means no timeout) | | |
| **https** | HTTPS server configuration | | | | |
| | **port** | Configure port | | | |
| | | <1-65535> | port number | | |
| | **session-timeout** | Session timeout configuration | | | |
| | | <0-65535> | Timeout after specified minutes (0 means no timeout) | | |
| **igmp** | IGMP Configuration | | | | |
| | **profile** | IGMP profile | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | <1-128> | Profile index | | | |
| | **snooping** | IGMP Snooping Configuration | | | | |
| | | forward-method | Forward method | | | |
| | | | dip | DIP method | | |
| | | | mac | MAC method | | |
| | | report-suppression | IGMP v1/v2 report suppression | | | |
| | | unknown-multicast | Unknown multicast | | | |
| | | | action | Action on receiving unknown multicast packets | | |
| | | | | drop | Drop the packets | |
| | | | | flood | Flood the packets | |
| | | | | router-port | Forward to router ports | |
| | **version** | IGMP Snooping Operation Version | | | | |
| | | 2 | IGMP Operation Version is v2 | | | |
| | | 3 | IGMP Operation Version is v3 | | | |
| | **vlan** | VLAN configuration | | | | |
| | | VLAN-LIST | VLAN List (e.g. 3,6-8): The range of VLAN ID is 1 to 4094 | | | |
| | | | forbidden-port | IPv4 forbidden port configuration | | |
| | | | forbidden-router-port | Forbidden mrouter port configuration | | |
| | | | immediate-leave | IGMP snooping immediate-leave function | | |
| | | | last-member-query-count | Last Member Query Count | | |
| | | | last-member-query-interval | Last Member Query Interval | | |
| | | | querier | IGMP snooping querier function | | |
| | | | query-interval | Query Interval | | |
| | | | response-time | Response Time | | |
| | | | robustness-variable | Robustness Variable | | |
| | | | router | IGMP snooping router | | |
| | | | static-group | Static group configuration | | |
| | | | static-port | IPv4 static port configuration | | |
| | | | static-router-port | Static mrouter port configuration | | |
| **ssh** | SSH daemon configuration | | | | | |
| | **port** | Configure port | | | | |
| | | <1-65535> | port number | | | |
| **telnet** | Telnet daemon configuration | | | | | |
| | **port** | Configure port | | | | |
| | | <1-65535> | port number | | | |

### Example

```
D62-084-30-DC(config)# ip address 192.168.11.1
D62-084-30-DC(config)# ip dhcp server dhcp-range 192.168.11.100 192.168.11.200
D62-084-30-DC(config)# ip dhcp server
D62-084-30-DC(config)# ip dns_address 8.8.8.8
D62-084-30-DC(config)#
```

## 4-1.16 ipv6

IPv6 configuration commands.

### Syntax

**Ipv6**

**ipv6** address <ipv6_address> prefix <0-128>

**ipv6** default-gateway <ipv6_address>

**ipv6** dhcp

### Parameter

<table>
<tr><td>address</td><td colspan="4">Set IPv6 address and prefix</td></tr>
<tr><td rowspan="2"></td><td rowspan="2"><ipv6_addr></td><td rowspan="2">prefix</td><td colspan="2">prefix length</td></tr>
<tr><td><0-128></td><td>lengh value</td></tr>
<tr><td>autoconfig</td><td colspan="4">Enable Ipv6 auto-configuration</td></tr>
<tr><td>default-gateway</td><td colspan="4">Set IPv6 gateway</td></tr>
<tr><td></td><td><ipv6_addr></td><td colspan="3">IPv6 gateway</td></tr>
<tr><td>dhcp</td><td colspan="4">Set IPv6 DHCP Client</td></tr>
</table>

### Example

```
D62-084-30-DC(config)# ipv6 address FC00:: prefix 8
D62-084-30-DC(config)#
```

## 4-1.17 jumbo-frame

Jumbo frame configuration.

### Syntax

**jumbo-frame** {<cr>|<1518-10000>}

### Example

```
D62-084-30-DC(config)# jumbo-frame
D62-084-30-DC(config)#
```

## 4-1.18 lacp

Lacp system configuration.

### Syntax

**lacp** sys-priority <1-65535>

### Parameter

| | | |
|---|---|---|
| **sys-priority** | LACP priority for the system | |
| | <1-65535> | Priority value |

### Example

```
D62-084-30-DC(config)# lacp sys-priority 1
D62-084-30-DC(config)#
```

## 4-1.19 lag

Link aggregation group configuration.

### Syntax

**lacp** load-balance {<src-dst-mac>|<src-dst-mac-ip>}

### Parameter

| | | |
|---|---|---|
| **load-balance** | Configure load balancing policy of the trunk | |
| | src-dst-mac | LAG load balancing is based on source and destination MAC address |
| | src-dst-mac-ip | LAG load balancing is based on source and destination of MAC and IP address |

### Example

```
D62-084-30-DC(config)# lag load-balance src-dst-mac
D62-084-30-DC(config)#
```

## 4-1.20 line

To identify a specific line for configuration.

### Syntax

**line** {<console>|<ssh>|<telnet>}

### Parameter

| | |
|---|---|
| console | Console terminal line |
| ssh | Virtual terminal for secured remote console access (SSH) |
| telnet | Virtual terminal for remote console access (Telnet) |

### Example

```
D62-084-30-DC(config)# line console
D62-084-30-DC(config)#
```

## 4-1.21 lldp

LLDP configuration.

### Syntax

**lldp** holdtime-multiplier <2-10>

**lldp** lldpdu {<filtering>|<bridging>|<flooding>}

**lldp** reinit-delay <1-10>

**lldp** tx-delay <1-8192>

**lldp** tx-interval <5-32767>

### Parameter

| | | |
|---|---|---|
| **holdtime-multiplier** | Configuration of multiplier used for calculating the LLDP discovery packet hold time | |
| | <2-10> | Multiplier used for calculating the LLDP discovery packet hold time |
| **lldpdu** | Configure the action on LLDPDU upon disabled LLDP | |
| | bridging | Bridging LLDP PDU to VLAN member ports |
| | filtering | Drop LLDP PDU |
| | flooding | Flooding LLDP PDU to all ports (VLAN unawared) |
| **reinit-delay** | Delay (in sec) for LLDP initialization on any interface | |
| | <1-10> | Specify the delay (in secs) for LLDP to initialize |
| **tx-delay** | Delay between successive LLDP frame transmission | |
| | <1-8192> | LLDP Tx-delay time in seconds |
| **tx-interval** | Specify the rate at which LLDP packets are sent (in sec) | |
| | <5-32768> | Rate at which LLDP packets are sent (in sec) |

### Example

```
D62-084-30-DC(config)# lldp holdtime-multiplier 5
D62-084-30-DC(config)# lldp tx-delay 1
D62-084-30-DC(config)# lldp tx-interval 5
D62-084-30-DC(config)#
```

## 4-1.22 logging

Log Configuration.

### Syntax

**logging** {<cr>|<buffered>|<console>|<file>} severity <0-7>

**logging** host

**logging** host {<ipv4_addr>|<hostname>|<ipv6_addr>} facility <local0-local7>

**logging** host {<ipv4_addr>|<hostname>|<ipv6_addr>} port <1-65535>

**logging** host {<ipv4_addr>|<hostname>|<ipv6_addr>} port <1-65535> facility <local0-local7>

**logging** host {<ipv4_addr>|<hostname>|<ipv6_addr>} port <1-65535> severity <0-7>

**logging** host {<ipv4_addr>|<hostname>|<ipv6_addr>} port <1-65535> severity <0-7> facility <local0-local7>

### Parameter

<table>
<tr><td rowspan="3">buffered / console / file</td><td colspan="3">Buffered logging / Console logging / File logging</td></tr>
<tr><td rowspan="2">severity</td><td colspan="2">Specify logging level</td></tr>
<tr><td><0-7></td><td>Minimum severity <0-7> (EMEGR-DEBUG)</td></tr>
<tr><td rowspan="5">host</td><td colspan="3">Remote syslog host</td></tr>
<tr><td rowspan="4"><ipv4_addr> /<br>Hostname /<br><ipv6_addr></td><td colspan="2">Valid IP v4 Address / Host name / Valid IP v6 Address</td></tr>
<tr><td>facility</td><td>Specify facility parameter for syslog messages</td></tr>
<tr><td>port</td><td>Remote server port, default 514</td></tr>
<tr><td>severity</td><td>Specify logging level</td></tr>
</table>

### Example

```
D62-084-30-DC(config)# logging host 10.10.10.1 facility local7
D62-084-30-DC(config)# logging console severity 5
D62-084-30-DC(config)#
```

## 4-1.23 loop-prevention

Loop prevention configuration.

### Syntax

**loop-prevention**

### Example

```
D62-084-30-DC(config)# loop-prevention
D62-084-30-DC(config)#
```

## 4-1.24 mac

MAC address table configuration.

### Syntax

**mac** acl <ACLNAME>

**mac** address-table {<aging>|<aging-time>|<static>}

### Parameter

| | | | |
|---|---|---|---|
| acl | This command enters the extended MAC ACL configuration in order to create layer 2 extended ACL. | | |
| | do | To run exec commands in current mode | |
| | etype-value | Ether type value | |
| | exit | Exit from current mode | |
| | no | Negate command | |
| | sequence | Specify sequence of access control entry | |
| | show | Show running system information | |
| | smac | Source MAC address field | |
| address-table | aging | aging state | |
| | aging-time | aging time of the address table | |
| | | <10-630> | Aging-time range in seconds indicating how long an entry remain in mac address table |
| | static | Static MAC address | |

### Example

```
D62-084-30-DC(config)# mac address-table aging
D62-084-30-DC(config)#
```

## 4-1.25 management vlan

Management VLAN configuration.

### Syntax

**management-vlan** vlan <1-4094>

### Parameter

| | |
|---|---|
| <1-4094> | VLAN ID |

### Example

```
D62-084-30-DC(config)# management-vlan vlan 1
D62-084-30-DC(config)#
```

## 4-1.26 mirror

Mirror configuration.

### Syntax

**mirror** session <1-4> source interface GigabitEthernet <port_id> {<both>|<tx>|<rx>}

**mirror** session <1-4> source interface LAG <lag_id> {<both>|<tx>|<rx>}

**mirror** session <1-4> destination interface GigabitEthernet <port_id> {<cr>|<allow-ingress>}

### Parameter

| | |
|---|---|
| session | Mirror Session configuration |

| | | | |
|---|---|---|---|
| | <1-4> | Session ID (e.g. 1-4)configuraton | |
| | | destination | Mirror destination configuration |
| | | source | Mirror Source configuration |

**Example**

```
D62-084-30-DC(config)# mirror session 1 destination interface GigabitEthernet 1
allow-ingress
D62-084-30-DC(config)#
```

## 4-1.27 no

Negate a command or set its defaults.

**Table : configure – no Commands**

| Command | Function |
|---|---|
| aaa | Authentication, Authorization, Accounting |
| clock | Manage the system clock |
| custom | Custom Module configuration |
| dido | Digital I/O Configuration |
| dos | DoS information |
| dot1x | IEEE Standard for port-based Network Access Control |
| errdisable | Error Disable |
| ip | IP information |
| ipv6 | IPv6 information |
| jumbo-frame | Jumbo Frame configuration |
| lacp | LACP Configuration |
| lag | Link Aggregation Group Configuration |
| lldp | Global LLDP configuration subcommands |
| logging | Log Configuration |
| loop-prevention | Loop-prevention configuration |
| mac | MAC configuration |
| management-vlan | Management VLAN configuration |
| mirror | Mirror configuration |
| ntp | Network Time Protocol |
| port-security | Port Security |
| power | Power-over-Ethernet Configuration |
| qos | QoS configuration |

| | |
|---|---|
| radius-server | RADIUS configuration |
| smtp | SMTP Configuration |
| snmp | SNMP information |
| spanning-tree | Spanning-tree configuration |
| tacacs-server | TACACS+ server information |
| username | Local User |
| vlan | VLAN configuration |
| voice | Vlan for voice traffic |

## 4-1.28 ntp

Configure NTP.

### Syntax

**ntp host** {<ip_address>|<hostname>} port <1-65535>

### Parameter

| | |
|---|---|
| **ip_address** | Valid IP v4 address |
| **hostname** | Host name |

### Example

```
D62-084-30-DC(config)# ntp host 118.163.81.61 port 123
D62-084-30-DC(config)#
```

## 4-1.29 port-security

Port security configuration.

### Syntax

**port-security**

**port-security** rate-limit <1-600>

### Parameter

| | | |
|---|---|---|
| **rate-limit** | Rate limiter to protect the CPU against excessive load | |
| | <1-600> | Rate in packet per second (pps) |

### Example

```
D62-084-30-DC(config)# port-security rate-limit 300
D62-084-30-DC(config)#
```

## 4-1.30 power

Power over Ethernet (PoE) configuration.

### Syntax

**power** inline auto-check

**power** inline limit-mode {<class>|<port>}

**power** inline schedule <1-10> name <profile_name>

**power** inline schedule <1-10> weekday <1-7> {<start>|<end>} hour <0-23> minute <0-59>

### Parameter

| | | |
|---|---|---|
| **auto-check** | The auto refresh function of the interface from the point of view of inline power management | |
| **limit-mode** | PoE power limit mode of the system | |
| | class | The power limit of a port is fixed regardless of the class of the discovered PD |
| | port | The power limit of a port is based on the class of the PD as detected during the classification process |
| **schedule** | Schedule Profile Configuration | |

### Example

```
D62-084-30-DC(config)# power inline limit-mode class
D62-084-30-DC(config)#
```

## 4-1.31 qos

Quality of Service.

### Syntax

**qos**

**qos** map {<cos-queue>|<dscp-queue>|<precedence-queue>|<queue-cos>|<queue-dscp>|

<queue-precedence>}

**qos** queue strict-priority-num <0-8>

**qos** queue weight <1-8>

**qos** trust {<cos>|<cos-dscp>|<dscp>|<precedence>}

### Parameter

| | | |
|---|---|---|
| **map** | Configure the QoS maps | |
| | cos-queue | Map assigned CoS values to select an egress queue. Use the command no form to return to the default values. |
| | dscp-queue | Modify the DSCP to queue map. |
| | precedence-queue | Modify the IP Precedence to queue map. |
| | queue-cos | Modify the queue to CoS map. |
| | queue-dscp | Modify the queue to DSCP map. |
| | queue-precedence | Modify the queue to ip precedence map. |
| **queue** | Queue configuration | |
| | strict-priority-num | Configure the number of strict priority queues |
| | weight | Configure weights to egress queues. Use no form to return to default values |
| **trust** | Configure the global trust mode . Use the no form to return untrusted state. | |
| | cos | Specify trust mode cos. |
| | cos-dscp | Specify trust mode Cos-DSCP. |
| | dscp | Specify trust mode DSCP. |
| | precedence | Specify trust mode precedence |

### Example

```
D62-084-30-DC(config)# qos
D62-084-30-DC(config)#
```

## 4-1.32 radius-server

RADIUS configuration

### Syntax

**radius-server attribute** 32 <WORD<1-255>>

**radius-server attribute** 4 <A.B.C.D>

**radius-server attribute** 95 <X:X::X:X>

**radius-server attribute deadtime** <1-1440>

**radius-server attribute host** {<ipv4_addr>|<hostname>|<ipv6_addr>}

{<auth-port>|<acc-port>} <0-65535> {<key>|<retransmit>|<timeout>}

{<radius_key>|<retransmit_num>|<timeout_time>}

**Parameter**

| | | |
|---|---|---|
| **attribute** | RADIUS Attribute | |
| | 32 | NAS-Identifier |
| | | WORD<1-255> |
| | 4 | NAS-IP-Address |
| | | A.B.C.D |
| | 95 | NAS-IPv6-Address |
| | | X:X::X:X |
| **deadtime** | Time to stop using a RADIUS server that doesn't respond | |
| | <1-1440> | |
| **host** | RADIUS server host | |
| | <ipv4 address> | |
| | <hostname> | |
| | <ipv6 address> | |
| **key** | Set RADIUS encryption key | |
| | WORD<1-63> | |
| | encrypted | Specifies an ENCRYPTED key will follow |
| | | WORD<1-128> |
| **retransmit** | Specify the number of retries to active server | |
| | <1-1000> | |
| **timeout** | Time to wait for a RADIUS server to reply | |
| | <1-1000> | |

**Example**

```
D62-084-30-DC(config)# radius-server host 192.168.11.183 retransmit 10
D62-084-30-DC(config)#
```

## 4-1.33 smtp

SMTP Configuration

### Syntax

**smtp** <cr>

**smtp class** {<auth-failed>|<batteryLowVoltage>|<cold-start>|<deviceOffline>|<deviceOnline>|<di>|<do>|
<inputPowerChange>|<linkUpDown>|<poe-Fail>|<poe-OnOff>|<warm-start>}

**smtp** {<email_1>|<email_2>|<email_3>|<email_4>|<email_5>|<email_6>} <email_addressWORD<0-48>>

**smtp mail-server** <WORD<0-48>>

**smtp password** <WORD<0-32>>

**smtp return-path** <WORD<0-48>>

**smtp sender** <WORD<0-48>>

**smtp username** <WORD<0-32>>

### Parameter

| | |
|---|---|
| **class** | SMTP event class setting |
| | auth-failed |
| | batteryLowVoltage |
| | cold-start |
| | deviceOffline |
| | deviceOnline |
| | di |
| | do |
| | inputPowerChange |
| | linkUpDown |
| | poe-Fail |
| | poe-OnOff |
| | warm-start |
| **email_<1-6>** | WORD<0-48> |
| **mail-server** | Set SMTP mail server address |

| | |
|---|---|
| | WORD<0-48> |
| **password** | Set SMTP password |
| | WORD<0-32> |
| **return-path** | Set SMTP return address |
| | WORD<0-48> |
| **sender** | Set SMTP sender address |
| | WORD<0-48> |
| **username** | Set SMTP user name |
| | WORD<0-32> |

### Example

```
D62-084-30-DC(config)# smtp
D62-084-30-DC(config)#
```

## 4-1.34 snmp

SNMP server's configuration.

### Syntax

**snmp**

**snmp** community <community_string> (ro | rw)

**snmp** host {<ipv4_addr>|<hostname>|<ipv6_addr>}

**snmp trap**

### Parameter

| | | | |
|---|---|---|---|
| **community** | Set community or security name string | | |
| | <community_string> | Community name (maximum length is 20 characters) | |
| | | ro | Set community access read_only |
| | | rw | Set community access read_write |
| **host** | Trap or inform host | | |
| **trap** | SNMP trap setting | | |
| | auth | Set snmp authentication failure trap | |

| | | |
|---|---|---|
| | cold-start | Set snmp bootup cold start-up trap |
| | linkUpDown | Set snmp link up and down trap |
| | warm-start | Set snmp bootup warm start-up trap |

**Example**

```
D62-084-30-DC(config)# snmp
D62-084-30-DC(config)# snmp community abcd rw
D62-084-30-DC(config)#
```

## 4-1.35 spanning-tree

Spanning Tree protocol.

**Table : configure –spanning-tree Commands**

| Command | Function |
|---|---|
| mst configuration | Enter MST configuration submode |

**Syntax**

**spanning-tree**

**spanning-tree** bpdu (filtering | flooding)

**spanning-tree** forward-delay <4-30>

**spanning-tree** hello-time <1-10>

**spanning-tree** max-hops <1-40>

**spanning-tree** maximum-age <6-40>

**spanning-tree** mode [ stp | rstp | mstp ]

**spanning-tree** mst <0-15> priority <0-61440>

**spanning-tree** pathcost method (long | short)

**spanning-tree** priority <0-61440>

**spanning-tree** tx-hold-count <1-10>

### Parameter

| | |
|---|---|
| **bpdu** | Configure default bpdu action. |
| **filtering** | BPDU packets are filtered on STP-disable ports. |
| **flooding** | BPDU packets are flooding to all ports when STP-disable. |
| **forward-delay** | Configure forward-delay parameter. |
| **<4-30>** | Forward-delay time in seconds. |
| **hello-time** | Configure hello-time parameter. |
| **<1-10>** | Configure hello time in seconds. |
| **max-hops** | Configure MSTP bridge max hop count. |
| **<1-40>** | Configure maximum number of hops. |
| **maximum-age** | Configure the age time for receiving control packet from root switch. |
| **<6-40>** | Age time of control packet from root switch. |
| **mode** | Spanning tree protocol type |
| **mst** | MSTP bridge instance |
| **<0-15>** | MST instance ID , 0 is for CIST (0..15) |
| **priority** | Priority of the instance |
| **spanning-tree** | Enable spanning-tree protocol. |
| **tx-hold-count** | Configure tx-hold-count in seconds. |
| **<1-10>** | Tx-hold counts. |

### Example

```
D62-084-30-DC(config)# spanning-tree mode stp
D62-084-30-DC(config)#
```

## 4-1.35.1 mst configuration

STP bridge instance configuration submenu.

### Syntax

**spanning-tree mst configuration**

**instance** <0-15> vlan <vlan_list>

**name** <word32>

**revision** <0-65535>

### Parameter

| | |
|---|---|
| **mst configuration** | Enter MST configuration submode. |
| **Instance** | Sets spanning-tree parameters of instances. |
| **<0-15>** | MST instance ID , 0 is for CIST (0..15) |
| **vlan** | Add the MSTI-to-VLAN mapping. |
| **<vlan_list>** | List of VLAN numbers, 1~4094. |
| **name** | Name keyword |
| **<word32>** | Name of the bridge (word32) |
| **revision** | Set revision level. |
| **<0-65535>** | Revision level (0..65535) |

### Example

```
D62-084-30-DC(config)# spanning-tree mst 7 vlan 10
D62-084-30-DC(config)#
```

## 4-1.36 system

Set the system information configuration.

### Syntax

**system** contact <word255>

**system** location <word255>

**system** name <word32>

### Parameter

| | | |
|---|---|---|
| **contact** | Set host contact | |
| | <word255> | contact string (word255) |
| **location** | Set host location | |
| | <word255> | location string (word255) |
| **name** | Set host name | |
| | <word32> | name string (word32) |

### Example

```
D62-084-30-DC(config)# system contact ”Contact here”
D62-084-30-DC(config)#
```

## 4-1.37 tacacs-server

TACACS+ server information

### Syntax

**tacacs-server host** {<ipv4_addr>|<hostname>|<ipv6_addr>} {<key>|<port>|<timeout>}

**tacacs-server key** <WORD<1-63>>

**tacacs-server key encrypted** <WORD<1-128>>

**tacacs-server timeout** <X:X::X:X>

### Parameter

| | | |
|---|---|---|
| **host** | TACACS+ server host | |
| | <ipv4 address> | |
| | <hostname> | |
| | <ipv6 address> | |
| **key** | Set TACACS+ encryption key | |
| | WORD<1-63> | |
| | encrypted | Specifies an ENCRYPTED key will follow |
| | | WORD<1-128> |
| **timeout** | Time to wait for a TACACS+ server to reply | |

| | |
|---|---|
| | <1-1000> |

**Example**

```
D62-084-30-DC(config)# tacacs-server timeout 10
D62-084-30-DC(config)#
```

## 4-1.38 username

Enable telnet server.

**Syntax**

**username** WORD<0-32> {<encrypted>|<password>} <PASSWORD>

**Example**

```
D62-084-30-DC(config)# username ”user_1” password ”pwd_1”
D62-084-30-DC(config)#
```

## 4-1.39 vlan

VLAN configuration.

**Syntax**

**vlan** {<vlan_list>|<ip-subnet>|<mac>|<protocol>}

**Parameter**

| | |
|---|---|
| **<vlan_list>** | VLAN List (e.g. 3,6-8): The range of VLAN ID is 1 to 4094 |
| **<ip-subnet>** | IP subnet based VLAN commands |
| **<mac>** | MAC-based VLAN commands |
| **<protocol>** | Protocol-based VLAN commands |

### Example

```
D62-084-30-DC(config)# vlan 3,6-8
D62-084-30-DC(config)#
```

## 4-1.40 dido

Digital I/O Configuration.

### Syntax

**dido** di {<abnormal>|<normal>} event-description <event_description>

**dido** di normal-mode {<high>|<low>}

**dido** di trigger-mode {<off>|<on>}

**dido** do auto-recovery

**dido** do mode {<close>|<open>}

**dido** do normal-mode {<close>|<open>}

**dido** do pulse-duration <1-300>

**dido** do value> {<close>|<open>}

### Parameter

| | | | | |
|---|---|---|---|---|
| **di** | Digital Input (DI) Configuration | | | |
| | abnormal / normal | DI Abnormal Event Description Configuration / DI Abnormal Event Description Configuration | | |
| | | event-description | DI event Configuration | |
| | | | event_description | DI event description |
| | normal-mode | DI Normal Mode Configuration | | |
| | | high | Define DI High as Normal Mode | |
| | | low | Define DI Low as Normal Mode | |
| | trigger-mode | DI trigger mode configuration | | |
| | | off | Off | |
| | | on | On | |
| **do** | Digital Output (DO) Configuration | | | |

| | | | |
|---|---|---|---|
| | auto-recovery | DO auto recovery | |
| | mode | DO Normal Mode Configuration | |
| | | close | Define DO Close as Normal Mode |
| | | open | Define DO Open as Normal Mode |
| | normal-mode | DO Normal Mode Configuration | |
| | | close | Define DO Close as Normal Mode |
| | | open | Define DO Open as Normal Mode |
| | pulse-duration | Timer interval with the number of seconds | |
| | | <1-300> | Timer interval range in seconds |
| | value | DO Normal Mode Configuration | |
| | | close | Define DO Close as Normal Mode |
| | | open | Define DO Open as Normal Mode |

**Example**

```
D62-084-30-DC(config)# dido do auto-recovery
D62-084-30-DC(config)#
```

## 4-1.41 voice vlan

Vlan for voice traffic

**Syntax**

**voice vlan oui** <A:B:C> {**description** <WORD<1-32>>}

**voice vlan vid** <1-4094> {**aging-time** <10-10000000> {**class** <0-7>}}

**Parameter**

| | | | |
|---|---|---|---|
| **oui** | OUI configuration | | |
| | <A:B:C> | OUI value | |
| | | **description** | Set description for the OUI |
| | | | WORD<1-32> |
| **vid** | Set a entry VLAN ID | | |
| | <1-4094> | | |
| | | **aging-time** | Set a entry secure learning aging time |
| | | | <10-10000000> |

| | | | | |
|---|---|---|---|---|
| | | | **class** | Set a entry traffic class |
| | | | | <0-7> |

**Example**

```
D62-084-30-DC(config)# voice vlan vid 1 aging-time 10 class 6
D62-084-30-DC(config)#
```

## 4-1.42 solar

P server's configuration.

**Syntax**

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} action {<none>|<reboot>}

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} interval <10-120>

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} ip <ipv4_address>

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} reboot_max <0_10>

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} reboot_time <3_120>

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} retry <1_5>

**solar** auto-check {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} start-time <30_180>

**solar** power {12V_P1|12V_P2|24V_P1|24V_P2|24V_P3|24V_P4}

**solar** power-cycle {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} start enable

**solar** power-cycle {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} time <1-300>

**solar** power-description {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} <WORD<1-63>>

**solar** power-max {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} limit <1-32000>

**solar** power-schedule {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>}

**solar** power-schedule {<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>} profile <1-6>

**solar** schedule <1-6> name PROFILENAME

**solar** schedule <1-6> item <1-7> <end|start> weekday <1-7> hour <0-23> minute <0-59>

**Parameter**

| | | | |
|---|---|---|---|
| **auto-check** | Power Auto check function | | |
| | {<12V_P1>\|<12V_P2>\|<24V_P1>\|<24V_P2>\|<24V_P3>\|<24V_P4>} | Set DC Output Port number | |
| | | action | power auto check action |
| | | | <none\|reboot> |
| | | interval | power auto check interval |
| | | | <10-120> |
| | | ip | power auto check ip |
| | | | <ipv4_address> |
| | | reboot-max | power auto check maximum reboot times |
| | | | <0_10> |
| | | reboot-time | power auto check reboot time |
| | | | <3_120> |
| | | retry | power auto check retry times |
| | | | <1_5> |
| | | start-time | power auto check start time |
| | | | <30_180> |
| **power** | Extend Power setting | | |
| | {12V_P1\|12V_P2\|24V_P1\|24V_P2\|24V_P3\|24V_P4} | | |
| **power-cycle** | Power cycle function | | |
| | {<12V_P1>\|<12V_P2>\|<24V_P1>\|<24V_P2>\|<24V_P3>\|<24V_P4>} | Set DC Output Port number | |
| | | start | The Extend Power cycle start |
| | | | enable |
| | | time | The Extend Power cycle time |
| | | | <1-300> |
| **power-description** | Power descriptio | | |
| | {<12V_P1>\|<12V_P2>\|<24V_P1>\|<24V_P2>\|<24V_P3>\|<24V_P4>} | Set DC Output Port number | |
| | | <WORD<1-63>> | |
| **power-max** | Power limit function | | |
| | {<12V_P1>\|<12V_P2>\|<24V_P1>\|<24V_P | Set DC Output Port number | |
| | | limit | The Extend power limit |

<table>
<tr><td></td><td>2>|<24V_P3>|<24V_P4>}</td><td colspan="4"></td><td><1-32000></td></tr>
<tr><td rowspan="4">power-schedule</td><td colspan="6">Power schedule Configuration</td></tr>
<tr><td rowspan="3">{<12V_P1>|<12V_P2>|<24V_P1>|<24V_P2>|<24V_P3>|<24V_P4>}</td><td colspan="5">Set DC Output Port number</td></tr>
<tr><td><cr></td><td colspan="4"></td></tr>
<tr><td>profile</td><td colspan="4">Schedule Profile Configuration</td></tr>
<tr><td colspan="5"><1-6></td><td>Schedule Profile number</td></tr>
<tr><td rowspan="6">schedule</td><td colspan="6">Power Schedule Profile Configuration</td></tr>
<tr><td rowspan="5"><1-6></td><td colspan="5">Schedule Profile number</td></tr>
<tr><td rowspan="4">item</td><td colspan="4">Schedule Item</td></tr>
<tr><td rowspan="3"><1-7></td><td colspan="3">Set Schedule Item</td></tr>
<tr><td><end|start></td><td colspan="2">Weekday start/end</td></tr>
<tr><td colspan="2">weekday <1-7> hour <0-23> minute <0-59></td></tr>
</table>

**Example**

```
D62-084-30-DC(config)# solar power 12V_P1
D62-084-30-DC(config)# solar auto-check 12V_P1 action reboot
D62-084-30-DC(config)#
```

# Chapter 5 COPY Commands of CLI

Copy from source to destination.

### Syntax

**copy** backup-config {<running-config>|<startup-config>|<tftp://server/path-to-file>}

**copy** flash:image {<flash:image>|<tftp://server/path-to-file>}

**copy** running-config {< backup-config>|<startup-config>|<tftp://server/path-to-file>}

**copy** startup-config {<running-config>|<backup-config>|<tftp://server/path-to-file>}

**copy** tftp://server/path-to-file {<backup-config>|<flash:image>|<running-config>|<startup-config>|<tftp://server/path-to-file>}

### Parameter

| | |
|---|---|
| **backup-config** | Backup configuration. |
| **flash:image** | Copy from flash: file system |
| **running-config** | Running configuration |
| **startup-config** | Startup configuration |
| **tftp://server/path-to-file** | Copy from tftp: file system |

### Example

```
D62-084-30-DC# copy tftp://192.168.137.100/vmlinux.bix flash://image
Downloading file. Please wait...
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Correct FW[D62-084-30-DC_v1.2.3.7] for model[D62-084-30-DC]
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Upgrade firmware success. Do you want to reboot now? (y/n)y
```

# Chapter 6 DEBUG of CLI

**Table : DEBUG Commands**

| Command | Function |
|---|---|
| acl | acl |
| igmp | igmp |
| l2 | l2 |
| lag | lag |
| lldp | lldp |
| platform | platform |
| power | power-over-ethernet configuration |
| psecure | port security |
| spanning-tree | spanning-tree configuration |
| time | time |
| vlan | vlan |

# Chapter 7 DELETE Commands of CLI

Delete a file from the flash file system.

### Syntax

**delete** {<backup-config>|<flash:image>|<startup-config>|<system>}

### Parameter

| | | |
|---|---|---|
| **backup-config** | Backup configuration. | |
| **flash:image** | Delete a file from the flash file system | |
| **startup-config** | Startup configuration | |
| **system** | Run time firmware image | |
| | **image0** | Runtime image 0 |
| | **image1** | Runtime image 1 |

### Example

```
D62-084-30-DC# delete flash://startup-config
Delete flash://startup-config [y/n] y
*Dec 04 2020 11:10:35: %SYSTEM-5: System restore to default
Do you want to reload the system to take effect? [y/n]
```

# Chapter 8 DISABLE of CLI

Turn off privileged mode command.

### Syntax

**disable**

### Example

```
D62-084-30-DC# disable
```

# Chapter 9 END of CLI

End current mode and change to enable mode.

### Syntax

**end**

### Example

```
D62-084-30-DC# end
```

# Chapter 10 EXIT of CLI

Exit current mode and down to previous mode.

### Syntax

**exit**

### Parameter

### Example

```
D62-084-30-DC# exit
```

# Chapter 11 NO of CLI

Turn off debug mode.

### Syntax

**no debug** {<acl>|<igmp>|<l2>|<lag>|<lldp>|<platform>|<power>|<psecure>|<spanning-tree>|<time>|<vlan>}

### Parameter

**Table : DEBUG Commands**

| Command | Function |
|---|---|
| acl | acl |
| erps | Ethernet Ring Protection Switching |
| igmp | igmp |
| l2 | l2 |
| lag | lag |
| lldp | lldp |
| platform | platform |
| psecure | port security |
| spanning-tree | spanning-tree configuration |
| time | time |
| vlan | vlan |

### Example

```
D62-084-30-DC# no debug l2
```

# Chapter 12 PING Commands of CLI

Send ICMP ECHO_REQUEST to network hosts

### Syntax

**ping** {<ipv4_addr>|<HOSTNAME>|<ipv6_addr>} {<cr>|<count>} <1-65535>

### Parameter

| | |
|---|---|
| **<ipv4_addr>** | Valid ipv4 address. |
| **HOSTNAME** | Host name |
| **<ipv6_addr>** | Valid ipv6 address. |

### Example

```
D62-084-30-DC# ping 1.1.1.1 count 2
PING 1.1.1.1 (1.1.1.1): 56 data bytes
64 bytes from 1.1.1.1: icmp_seq=0 ttl=54 time=20.0 ms
64 bytes from 1.1.1.1: icmp_seq=1 ttl=54 time=10.0 ms

--- 1.1.1.1 ping statistics ---
2 packets transmitted, 2 packets received, 0% packet loss
round-trip min/avg/max = 10.0/15.0/20.0 ms
D62-084-30-DC#
```

# Chapter 13 REBOOT Commands of CLI

Halt and perform a cold restart.

### Syntax

**reboot**

### Example

```
D62-084-30-DC# reboot
*Dec 04 2020 14:11:15: %SYSTEM-4: System reboot
```

# Chapter 14 RESTORE-DEFAULTS Commands of CLI

Restore to default.

## Syntax

**restore-defaults**

**restore-defaults interfaces** GigabitEthernet <port_list>

**restore-defaults interfaces** LAG <lag_list>

## Parameter

| | | |
|---|---|---|
| **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | **<port_list>** | Port List X-Y,Z |
| **LAG** | IEEE 802.3 Link Aggregation interface | |
| | **<lag_list>** | LAG List X-Y,Z |

## Example

```
D62-084-30-DC# restore-defaults
*Dec 04 2020 14:12:25: %SYSTEM-5: System restore to default
System: restore factory defaults. Do you want to reboot now? (y/n)y
Rebooting now...
```

# Chapter 15 SAVE of CLI

Save running configuration to flash.

### Syntax

**save**

### Example

```
D62-084-30-DC# save
```

# Chapter 16 Show Commands of CLI

**Table : SHOW Commands**

| Command | Function |
|---|---|
| aaa | Authentication, Authorization, Accounting |
| acl | Display not empty access control lists (ACLs) configured on the switch |
| backup-config | Backup configuration |
| bootvar | Show boot attributes |
| cable-diag | Cable Diagnostics |
| clock | Display the time and date from the system clock |
| cpu | Displays information about the system CPU utilization. |
| custom | Custom Module configuration |
| debugging | Debugging information |
| dido | Display Digital I/O Configuration |
| dos | DoS information |
| dot1x | IEEE Standard for port-based Network Access Control |
| errdisable | Error Disable |
| fiber-transceiver | Fiber ports diagnositics |
| flash | Flash Operations |
| group | Group Name |
| history | List the last several history commands |
| info | Basic information |
| interfaces | Interface status and configuration |
| ip | IP information |
| ipv6 | IPv6 information |
| lacp | LACP Configuration |
| lag | Link Aggregation Group Configuration |
| line | To identify a specific line for configuration |
| lldp | LLDP information |
| logging | Log Configuration |
| loop-prevention | Loop-prevention configuration |
| mac | MAC configuration |
| management-vlan | Management VLAN configuration |
| memory | Memory statistics. |

| | |
|---|---|
| mirror | Mirror configuration |
| ntp | Simple Network Time Protocol (NTP) information |
| port-security | Port Security |
| power | Power-over-Ethernet Configuration |
| qos | QoS configuration |
| radius-server | RADIUS configuration |
| running-config | Running configuration |
| smtp | SMTP Configuration |
| snmp | SNMP information |
| spanning-tree | Show running system information |
| startup-config | Startup configuration |
| storm-control | Storm control configuration |
| tacacs-server | TACACS+ server information |
| username | Local User |
| users | Display information about users |
| version | System hardware and software status |
| vlan | VLAN configuration |
| voice | show voice |

## 16-1 aaa

To show Authentication, Authorization and Accounting setting

### Syntax

**show** aaa

### Example

```
D62-084-30-DC# show aaa
 Client  Method1  Method2  Method3 Service Port
------- -------- -------- -------- ------------
 telnet    local
    ssh    local
   http    local
  https    local

Authorization :
 Client Method Cmd Lvl Cfg Cmd Fallback
------- ------ ------- ------- --------
 telnet     no       0
    ssh     no       0

Accounting :
 Client Method Cmd Lvl Exec
------- ------ ------- ----
 telnet     no       0
    ssh     no       0
D62-084-30-DC#
```

## 16-2 acl

Display not empty access control lists (ACLs) configured on the switch.

### Syntax

**show** acl {<cr>|<bind>}

### Example

```
D62-084-30-DC# show acl
MAC access list 222

MAC access list acc

IP access list abc

IP access list 111
D62-084-30-DC#
```

## 16-3 backup-config

Backup configuration

### Syntax

**show** backup-config

### Example

```
D62-084-30-DC# show backup-config
```

## 16-4 bootvar

Boot attributes.

### Syntax

**show** bootvar

### Example

```
D62-084-30-DC# show bootvar
Image  Version     Date                  Status      File Name
-----  ----------  --------------------  ----------  ----------
0      D62-084-30-DC_v2.0.1.3_vk  2022-01-11 13:52:13    Active*
1      D62-084-30-DC_v2.0.1.3_vk  2022-01-11 13:52:13    Not active

"*" designates that the image was selected for the next boot
D62-084-30-DC#
```

## 16-5 cable-diag

Cable Diagnostics.

### Syntax

**show** cable-diag interfaces GigabitEthernet <port_list>

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |

### Example

```
D62-084-30-DC# show cable-diag interfaces GigabitEthernet 1
 Port   |  Speed | Local pair | Pair length | Pair status
--------+--------+------------+-------------+---------------
  gi1   |  auto  |    Pair A  |     0.52    | Open
                  Pair B  |     0.50    | Open
                  Pair C  |     0.51    | Open
                  Pair D  |     0.51    | Open
D62-084-30-DC#
```

## 16-6 clock

The time and date from the system clock.

### Syntax

**show** clock {<cr>|<detail>}

### Parameter

| | |
|---|---|
| **detail** | Show timezone and summertime configuration |

### Example

```
D62-084-30-DC# show clock
2022-01-01 08:35:52
Time set manually
D62-084-30-DC#  show clock detail
2022-01-01 08:35:59
Time set manually
Time zone:
Acronym is
Offset is UTC+8
D62-084-30-DC#
```

## 16-7 cpu

CPU information.

### Syntax

**show** cpu input rate

**show** cpu utilization

### Parameter

| | | |
|---|---|---|
| **input** | Show rate of input frames to CPU. | |
| | rate | Show rate of input frames to CPU |
| **utilization** | Displays information about the system CPU utilization | |

**Example**

```
D62-084-30-DC# show cpu input rate
Input Rate to CPU is 0 pps
D62-084-30-DC# show cpu utilization
CPU utilization
---------------
Current: 53%
D62-084-30-DC#
```

## 16-8 custom

Custom Module configuration.

**Syntax**

**show** custom enable

**show** custom enable interface GigabitEthernet <port_list>

**show** custom enable interface LAG <lag_list>

**Parameter**

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |

**Example**

```
D62-084-30-DC# show custom enable interfaces GigabitEthernet 3,6-8
  Port  |  Status
--------+----------
    gi3 | disabled
    gi6 | disabled
    gi7 | disabled
    gi8 | disabled
D62-084-30-DC#
```

## 16-9 debugging

Debugging information.

### Syntax

**show** debugging

### Example

```
D62-084-30-DC# show debugging
D62-084-30-DC#
```

## 16-10 dos

DoS information.

### Syntax

**show** dos

**show** dos interface GigabitEthernet <port_list>

**show** dos interface LAG <lag_list>

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |

**Example**

```
D62-084-30-DC# show dos
   Type                    | State (Length)
-----------------------------+---------------------------------
  DMAC equal to SMAC        | enabled
  Land (DIP = SIP)          | enabled
  UDP Blat (DPORT = SPORT)  | enabled
  TCP Blat (DPORT = SPORT)  | enabled
  POD (Ping of Death)       | enabled
  IPv6 Min Fragment Size    | enabled  (1240 Bytes)
  ICMP Fragment Packets     | enabled
  IPv4 Ping Max Packet Size | enabled  (512 Bytes)
  IPv6 Ping Max Packet Size | enabled  (512 Bytes)
  Smurf Attack              | enabled  (Netmask Length: 0)
  TCP Min Header Length     | enabled  (20 Bytes)
  TCP Syn (SPORT < 1024)    | enabled
  Null Scan Attack          | enabled
  X-Mas Scan Attack         | enabled
  TCP SYN-FIN Attack        | enabled
  TCP SYN-RST Attack        | enabled
  TCP Fragment (Offset = 1) | enabled
D62-084-30-DC#
```

## 16-11 dot1x

Debugging information.

**Syntax**

**show dot1x** statistics {<all>|<eapol>|<radius>}

**show dot1x** statistics {<all>|<eapol>|<radius>} interfaces GigabitEthernet <port_number>

**show dot1x** status

### Example

```
D62-084-30-DC# show dot1x statistics all interfaces GigabitEthernet 1
                   Rx      Tx      Rx      Tx      Rx      Tx      Rx      Rx      Rx
Interface            Total   Total   RespId  ReqId   Resp    Req     Start   Logoff  Error
---------------------  ------  ------  ------  ------  ------  ------  ------  ------
-----
gi1                 0       0       0       0       0       0       0       0       0

                   Rx Access   Rx Other    Rx Auth.    Rx Auth.    Tx         MAC
Interface            Challenges  Requests    Successes   Failures    Responses   Address
---------------------  ----------  ----------  ----------  ----------  ----------  -------
gi1                 0          0          0          0          0

D62-084-30-DC#
```

## 16-12 erps

Ethernet Ring Protection Switching.

### Syntax

**show instance** {<cr>|<WORD<1-12>>}

**show ring** {<cr>|<WORD<1-12>>}

**show vlan-group** {<cr>|<WORD<1-12>>}

### Example

```
D62-084-30# show erps vlan-group
ERPS Status           : disabled
ERPS node-id          : 68:8D:B6:00:00:00
Number of ERPS Vgroup  : 0
D62-084-30-DC#
```

## 16-13 errdisable

Error Disable.

### Syntax

**show** errdisable recovery

### Example

```
D62-084-30-DC# show errdisable recovery
ErrDisable Reason       | Timer Status
-------------------------+--------------
             bpduguard | disabled
              selfloop | disabled
        broadcast-flood | disabled
  unknown-multicast-flood | disabled
          unicast-flood | disabled
                    acl | disabled
       psecure-violation | disabled
         dhcp-rate-limit | disabled
          arp-inspection | disabled

Timer Interval : 300 seconds

Interfaces that will be enabled at the next timeout:

Port |  Error Disable Reason    | Time Left
-----+--------------------------+------------
D62-084-30-DC#
```

## 16-14 fiber-transceiver

Fiber ports diagnositics.

### Syntax

**show** fiber-transceiver interfaces GigabitEthernet <port_list>

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |

### Example

```
D62-084-30-DC# show fiber-transceiver interfaces GigabitEthernet 1-5
Port   | Temperature  | Voltage     | Current      | Output power | Input power |
OE-Present | LOS
       | [C]          | [Volt]      | [mA]         | [mWatt]      | [mWatt]     |
==========================================================================================
=================
  gi1   |
  gi2   |
  gi3   |
  gi4   |
  gi5   |

 Temp        - Internally measured transceiver temperature
 Voltage     - Internally measured supply voltage
 Current     - Measured TX bias current
 Output Power - Measured TX output power in milliWatts
 Input Power  - Measured RX received power in milliWatts
 OE-Present   - SFP Presetn or Not Present
 LOS         - Loss of signal
 N/A - Not Available, N/S - Not Supported, W - Warning, E - Error
D62-084-30-DC#
```

## 16-15 flash

Flash Operations.

### Syntax

**show** flash

### Example

```
D62-084-30-DC# show flash
       File Name           File Size       Modified
------------------------ ---------------- ------------------------
 startup-config          948              2022-01-01 00:08:49
 ssl_cert                1277             2022-01-01 00:00:59
 image0 (active)         10448078         2022-01-11 13:52:13
 image1 (backup)         10448078         2022-01-11 13:52:13
D62-084-30-DC#
```

## 16-16 group

Group Name.

### Syntax

**show group privilege** <cr>

### Example

```
D62-084-30# show group privilege
     Group Name     | Priv(Read-Only)  | Priv(Read-Write)
--------------------+------------------+------------------
System              |        5         |       10
Port                |        5         |       10
PoE                 |        5         |       10
VLAN                |        5         |       10
IGMP                |        5         |       10
LLDP                |        5         |       10
LoopPrevention      |        5         |       10
Security            |        5         |       10
AccessControl       |        0         |       15
SNMP                |        5         |       10
ERPS                |        5         |       10
EventNotify         |        5         |       10
QoS                 |        5         |       10
STP                 |        5         |       10
MACTable            |        5         |       10
DHCP                |        5         |       10
Diagnostics         |        5         |       10
Maintenance         |       15         |       15
D62-084-30#
```

## 16-17 history

Show CLI command history.

### Syntax

**show** history

### Example

```
D62-084-30-DC# show history
Maximun History Count: 128
------------------------------------------------------------
1. conf
D62-084-30-DC#
```

## 16-18 info

Basic information.

### Syntax

**show** info

### Example

```
D62-084-30-DC# show info
System Name      : D62-084-30-DC
System Location  :
System Contact   :
MAC Address      : 68:8D:B6:01:02:03
IP Address       : 192.168.11.199
Subnet Mask      : 255.255.255.0
Loader Version   : 2.0.0.1
Loader Date      : Jan 11 2022 - 13:46:46
Firmware Version : 2.0.1.3_vk
Firmware Date    : Jan 11 2022 - 13:52:13
System Object ID : 1.3.6.1.4.1.27282.3.2.10
System Up Time   : 0 days, 2 hours, 18 mins, 54 secs
D62-084-30-DC#
```

## 16-19 interface

Interface status and configuration.

### Syntax

**show** interfaces GigabitEthernet <port_list> {<cr>|<protected>|<status>}

**show** interfaces LAG <lag_list> {<cr>|<protected>|<status>}

**show** interfaces switchport GigabitEthernet <port_list>

**show** interfaces switchport LAG <lag_list>

### Parameter

| | | | | |
|---|---|---|---|---|
| **interfaces** | Interface status and configuration | | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | | |
| | | **<port_list>** | Port List X-Y,Z | |
| | | | protected | Configure an interface to be a protected port |
| | | | status | Port status information |
| | **LAG** | IEEE 802.3 Link Aggregation interface | | |
| | | **<lag_list>** | LAG List X-Y,Z | |
| | | | protected | Configure an interface to be a protected port |
| | | | status | Port status information |
| | **switchport** | Set switching mode characteristics | | |
| | | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | | **<port_list>** | Port List X-Y,Z |
| | | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | | **<lag_list>** | LAG List X-Y,Z |

### Example

```
D62-084-30-DC# show interfaces GigabitEthernet 2-3 status
Port  Status     Duplex  Speed    Type
gi2   notconnect  auto    auto    Copper
gi3   notconnect  auto    auto    Copper
D62-084-30-DC#
```

## 16-20 ip

Internet Protocol.

### Syntax

**show** ip

**show** ip acl {<cr>|<NAME>}

**show** ip dhcp {<cr>|<server>}

**show** ip http

**show** ip https

**show** ip igmp filter

**show** ip igmp filter interfaces GigabitEthernet <port_list>

**show** ip igmp filter interfaces LAG <lag_list>

**show** ip igmp max-group

**show** ip igmp max-group action {<cr>|interfaces GigabitEthernet <port_list>|interfaces LAG <lag_list>}

**show** ip igmp max-group interfaces GigabitEthernet <port_list>

**show** ip igmp max-group interfaces LAG <lag_list>

**show** ip igmp profile {<cr>|<1-128>}

**show** ip igmp snooping {<cr>|<forward-all>|<groups>|<querier>|<router>|<vlan>}

### Parameter

| | | |
|---|---|---|
| **acl** | Display not empty access control lists (ACLs) configured on the switch | |
| | NAME | |
| **dhcp** | DHCP information | |
| | **server** | DHCP Server |
| **http** | HTTP server configuration | |
| **https** | HTTPS server configuration | |
| **igmp** | Interface status and configuration | |
| | **filter** | IGMP port filter |

| | | | |
|---|---|---|---|
| | **max-group** | IGMP port group limit num | |
| | **profile** | IGMP profile configuration | |
| | **snooping** | IGMP Snooping Configuration | |
| | | <forward-all> | IPv4 forward all |
| | | <groups> | IPv4 multicast groups |
| | | <querier> | Querier information |
| | | <router> | IPv4 multicast routers |
| | | <vlan> | VLAN configuration |

### Example

```
D62-084-30-DC# show ip dhcp server
DHCP Server State : disabled
Start IPv4 Address: 0.0.0.0
End   IPv4 Address: 0.0.0.0
Client Lease Time : 86400 seconds
D62-084-30-DC#
```

## 16-21 ipv6

IPv6 configuration commands.

### Syntax

**show** ipv6

### Example

```
D62-084-30-DC# show ipv6
###### Config ######
         State: enabled
    Auto Config: enabled
        DHCPv6: disabled
       Gateway: ::

###### Status ######
     IP Address: fe80::6a8d:b6ff:fe00:0/64
Default Gateway: ::
D62-084-30-DC#
```

## 16-22 lacp

Lacp configuration.

### Syntax

**show** lacp

### Example

```
D62-084-30-DC# show lacp
Status: C - current,  E - expired, D - defaulted
       a - attached, d - detached
State:  A - activity,     T - timeout(fast), G - aggregation
       S - synchronized, C - collecting,    D - distributing
       F - defaulted,    E - expired

LAG Port  Status         Sys ID           Port ID Sys Pri Port Pri Key     State
--- ----- ------         ------------------ ------- ------- -------- -------- --------
D62-084-30-DC#
```

## 16-23 lag

Link Aggregation Group Configuration.

### Syntax

**show** lag

### Example

```
D62-084-30-DC# show lag
Load Balancing: src-dst-mac.

 Group ID |  Type  |         Ports
----------+--------+-----------------------------------------------
   1      | ------ |
   2      | ------ |
   3      | ------ |
   4      | ------ |
   5      | ------ |
   6      | ------ |
   7      | ------ |
   8      | ------ |
D62-084-30-DC#
```

## 16-24 line

A specific line for configuration.

### Syntax

**show** line {<cr>|<console>|<ssh>|<telnet>}

### Parameter

| | |
|---|---|
| **console** | Access CLI from console |
| **ssh** | Access CLI from ssh |
| **telnet** | Access CLI from telnet |

### Example

```
D62-084-30-DC# show line
Console ==============================
    Session Timeout : 10 (minutes)
    History Count   : 128
    Password Retry  : 3
    Silent Time     : 0 (seconds)
Telnet ===============================
    Telnet Server   : disabled (23)
    Session Timeout : 10 (minutes)
    History Count   : 128
    Password Retry  : 3
    Silent Time     : 0 (seconds)
SSH ==================================
    SSH Server      : disabled (22)
    Session Timeout : 0 (minutes)
    History Count   : 128
    Password Retry  : 0
    Silent Time     : 0 (seconds)
D62-084-30-DC#
```

## 16-25 lldp

show lldp configuration.

### Syntax

**show** lldp

**show** lldp interface GigabitEthernet <port _list>

**show** lldp interface GigabitEthernet <port _list> {<local-device>|<neighbor>|<statistics>|<tlvs-overloading>}

**show** lldp local-device

**show** lldp neighbor

**show** lldp statistics

### Parameter

| | | | | |
|---|---|---|---|---|
| **interfaces** | Interface status and configuration | | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | | |
| | | **<port_list>** | Port List X-Y,Z | |
| | | | local-device | LLDP information that is advertised from a specific port |
| | | | neighbor | Information about neighboring devices discovered using Link Layer Discovery Protocol |
| | | | statistics | LLDP Statistics information |
| | | | tlvs-overloading | LLDP TLVs overloading information |
| **local-device** | LLDP information that is advertised from a specific port | | | |
| **neighbor** | Information about neighboring devices discovered using Link Layer Discovery Protocol | | | |
| **statistics** | LLDP Statistics information | | | |

### Example

```
D62-084-30-DC# show lldp neighbor

 Port |   Device ID       |     Port ID      |      SysName      | Capabilities  |  TTL
 ---- + ----------------- + ---------------- + ----------------- + ------------- + -----
  gi8 | 00:68:8D:B6:51:04 |              6 |    H51-044-90-250 |        Bridge |   117
D62-084-30-DC#
```

## 16-26 logging

Log Configuration.

### Syntax

**show** logging

**show** logging {<buffered>|<file>}

### Parameter

| | |
|---|---|
| **buffered** | Buffered logging |
| **file** | File logging |

### Example

```
D62-084-30-DC# show logging

Logging service is enabled

Console Logging: level notice
Buffer Logging : level notice
File Logging   : disabled

Buffer Logging
--------------
*Jan 01 2000 00:00:31: SYSTEM-5: New console connection for user admin,
source async ACCEPTED
*Jan 01 2000 00:00:26: PORT-5: Interface GigabitEthernet10 link up
*Jan 01 2000 00:00:15: PORT-5: Interface GigabitEthernet9 link up
*Jan 01 2000 00:00:13: SYSTEM-5: Cold startup
D62-084-30-DC#
```

## 16-27 loop-prevention

Show loop prevention

### Syntax

**show** loop-prevention

**show** loop-prevention interfaces GigabitEthernet <port_list>

**show** loop-prevention interfaces LAG <lag_list>

### Parameter

| | |
|---|---|
| **interfaces** | Interface status and configuration |

| | | | |
|---|---|---|---|
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |

### Example

```
D62-084-30-DC# show loop-prevention
Loop Prevention:                Disabled
Loop Prevention Tx Interval:      2
Loop Prevention Recovery Interval: 16
Loop Prevention switch_priority:   0x800000
Loop Prevention hop cnt max:      10
Loop Prevention is root:         Ture
Loop Prevention Root Port:        N/A

D62-084-30-DC#
```

## 16-28 mac

Mac Address Table information.

### Syntax

**show** mac acl {<cr>|<NAME>}

**show** mac address-table

**show** mac address-table interface (GigabitEthernet <port_list> | LAG <lag_list>)

**show** mac address-table vlan <vlan_id>

**show** mac address-table vlan <vlan_id> interface (GigabitEthernet <port_list> | LAG <lag_list>)

### Parameter

| | | |
|---|---|---|
| **acl** | Display not empty access control lists (ACLs) configured on the switch | |
| | NAME | Name of the ACL |
| **interfaces** | Interface status and configuration | |

| | | | |
|---|---|---|---|
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |

**Example**

```
D62-084-30-DC# show mac address-table
VID  | MAC Address       | Type              | Ports
------+-------------------+-------------------+----------------
   1 | 68:8D:B6:00:00:00 | Management        | CPU
   1 | 00:33:33:33:33:33 | Dynamic           | gi15
   1 | 94:C6:91:FA:13:05 | Dynamic           | gi11
   1 | F0:2F:74:0A:D8:CC | Dynamic           | gi11

Total number of entries: 4
D62-084-30-DC#
```

## 16-29 management-vlan

Management VLAN configuration.

**Syntax**

**show** management-vlan

**Example**

```
D62-084-30-DC# show management-vlan
  Management VLAN-ID : default(1)
D62-084-30-DC#
```

## 16-30 memory

Memory statistics

### Syntax

**show** memory statistics

### Parameter

| | |
|---|---|
| **statistics** | Memory statistics |

### Example

```
D62-084-30-DC# show memory statistics
         total(KB)     used(KB)     free(KB)   shared(KB)   buffer(KB)    cache(KB)
--------------------+------------+------------+------------+------------+------------
Mem:         125836       43608       82228           0           0           0
-/+ buffers/cache:         43608       82228
Swap:            0           0           0
D62-084-30-DC#
```

## 16-31 mirror

Show mirror configuration

### Syntax

**show** mirror

**show** mirror session> <1-4>

### Example

```
D62-084-30-DC# show mirror

Session 1 Configuration
Mirrored source   : Not Config
Destination port  : Not Config

Session 2 Configuration
Mirrored source   : Not Config
Destination port  : Not Config

Session 3 Configuration
Mirrored source   : Not Config
Destination port  : Not Config

Session 4 Configuration
Mirrored source   : Not Config
Destination port  : Not Config
D62-084-30-DC#
```

## 16-32 ntp

Simple Network Time Protocol (NTP) information.

### Syntax

**show ntp**

### Example

```
D62-084-30-DC# show ntp
NTP is Disabled
NTP Server address:
NTP Server port: 123
D62-084-30-DC#
```

## 16-33 port-security

show port security.

### Syntax

**show port-security** {<cr>|<address>|interface GigabitEthernet <port _list>}

### Parameter

| | | | |
|---|---|---|---|
| **address** | All port security related MAC addresses | | |
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |

### Example

```
D62-084-30-DC# show port-security
Port Security: Disabled
Rate Limit: 100 pps
D62-084-30-DC#
```

## 16-34 power

Power over Ethernet (PoE) configuration.

### Syntax

**show power** inline

**show power** inline consumption

**show power** inline consumption interface GigabitEthernet <port_list>

**show power** inline interface GigabitEthernet <port_list>

### Parameter

| | | | | | |
|---|---|---|---|---|---|
| **inline** | Inline Power | | | | |
| | **consumption** | Power consumption | | | |
| | | interfaces | Interface status and configuration | | |
| | | | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | | | **<port_list>** | Port List X-Y,Z |
| | **interfaces** | Interface status and configuration | | | |
| | | **GigabitEthernet** | Gigabit ethernet interface to configure | | |
| | | | **<port_list>** | Port List X-Y,Z | |

**Example**

```
D62-084-30-DC# show power inline interfaces GigabitEthernet 1
Port State Status    Priority Class   Max.Power (Admin) Device
                                      (mW)
---- ----- ---------- -------- ------- ----------------- ----------------
gi1  Auto  searching  high     class0  30000 (30000)     N/A

Port Overload     Short Current  Power Denied  MPS Absent    Invalid Sig.
---- ------------ ------------- ------------- ------------- -------------
gi1  0            0             0             0             0
D62-084-30-DC#
```

## 16-35 qos

Show Quality of Service configuration.

**Syntax**

**show qos**

**show qos** interface GigabitEthernet <port_list>

**show qos** interfaces LAG <lag_list>

**show qos** map {<cr>|<cos-queue>|<dscp-queue>|<precedence-queue>|

<queue-cos>|<queue-dscp>|<queue-precedence>}

**show qos** queueing

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |
| **map** | Configure the QoS maps | | |
| | cos-queue | CoS to Queue mapping | |
| | dscp-queue | DSCP to Queue mapping | |
| | precedence-queue | IP Precedence to Queue mapping | |
| | queue-cos | Queue to CoS mapping | |
| | queue-dscp | Queue to DSCP mapping | |
| | queue-precedence | Queue to IP Precedence mapping | |
| **queueing** | Display quality of service (QoS) queuing information | | |

### Example

```
D62-084-30-DC# show qos
QQoS Mode: basic
Basic trust: cos
D62-084-30-DC#
```

## 16-36 radius-server

Show RADIUS configuration.

### Syntax

**show radius-server** <cr>

### Example

```
D62-084-30# show radius-server
Global RADIUS Server Timeout     : 3 seconds
Global RADIUS Server Retransmit   : 3 times
Global RADIUS Server Deadtime    : 1 minutes
Global RADIUS Server Key         :
Global RADIUS Server Attribute 4  :
Global RADIUS Server Attribute 95 :
Global RADIUS Server Attribute 32 :
RADIUS Server #1:
Host name  : 1.1.1.1
Auth port  : 1812
Acct port  : 1813
Timeout    :
Retransmit : 10 times
Key        :
Status     : ready

RADIUS Server #2:
Host name  : 1.1.11.111
Auth port  : 1812
Acct port  : 1813
Timeout    :
Retransmit : 10 times
Key        :
Status     : ready

D62-084-30#
```

## 16-37 running-config

Running configuration.

### Syntax

**show running-config**

**show running-config** interface GigabitEthernet <port_list>

**show running-config** interface LAG <lag_list>

**Example**

```
D62-084-30-DC# show running-config
SYSTEM CONFIG FILE ::= BEGIN
! System Description: AETEK PoE SW 24P-MA-POE-D Switch
! System Version: v2.0.1.3_vk
! System Name: 24P-MA-POE-D
! System Up Time: 0 days, 5 hours, 40 mins, 32 secs
!
!
!
system name "24P-MA-POE-D"
ip address 192.168.11.199 mask 255.255.255.0
ip default-gateway 192.168.11.1
username "admin" encrypted password
MjEyMzJmMjk3YTU3YTVhNzQzODk0YTBlNGE4MDFmYzM=
!
!
!
!
!
!
spanning-tree mst configuration
 name "68:8D:B6:00:00:00"
!
!
!
!
--More--
D62-084-30-DC#
```

## 16-38 smtp

Show SMTP configuration.

### Syntax

**show smtp** {<cr>|<event>}

### Parameter

| | |
|---|---|
| **event** | Display smtp class of event enable or disable |

### Example

```
D62-084-30# show smtp event
SMTP auth failed event  : Enable
SMTP linkUpDown event   : Enable
SMTP cold-start event   : Enable
SMTP warm-start event   : Enable
SMTP D/I event         : Enable
SMTP D/O event         : Enable
SMTP PoE PD On/Off event: Enable
SMTP PoE PD Fault event : Enable
SMTP NTS Device Online event: Disable
SMTP NTS Device Offline event: Enable
D62-084-30#
```

## 16-39 snmp

Display SNMP configurations.

### Syntax

**show snmp**

**show snmp** trap

### Parameter

| | |
|---|---|
| **trap** | Display snmp class of trap enable or disable |

### Example

```
D62-084-30-DC# show snmp
SNMP is disabled.
Community Name         Access Right
----------------------------------------

Total Community Entries: 0
Server           Community Name   Notification Version    Notification Type
--------------------------------------------------------------------------------

Total Trap Entries: 0
D62-084-30-DC#
```

## 16-40 spanning-tree

Show spanning tree protocol configuration.

### Syntax

**show spanning-tree**

**show spanning-tree** brief

**show spanning-tree** interface {GigabitEthernet <port_list> | LAG <lag_list>}

**show spanning-tree** interface {GigabitEthernet <port_list> | LAG <lag_list>} statistics

**show spanning-tree** mst <0-15>

**show spanning-tree** mst <0-15> interface {GigabitEthernet <port_list> | LAG <lag_list>}

**show spanning-tree** mst configuration

### Parameter

| | | | | |
|---|---|---|---|---|
| **brief** | Displays spanning-tree brief information | | | |
| **interfaces** | Interface status and configuration | | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | | |
| | | **<port_list>** | Port List X-Y,Z | |
| | | | statistics | Statistics for specified ports |

| | | | | | |
|---|---|---|---|---|---|
| | **LAG** | IEEE 802.3 Link Aggregation interface | | | |
| | | **<lag_list>** | LAG List X-Y,Z | | |
| | | | statistics | Statistics for specified ports | |
| **mst** | Multiple spanning trees | | | | |
| | <0-15> | Instance ID (0~15) | | | |
| | | **interfaces** | Interface status and configuration | | |
| | | | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | | | **<port_list>** | Port List X-Y,Z |
| | | | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | | | **<lag_list>** | LAG List X-Y,Z |
| | configuration | MST current region configuration | | | |

**Example**

```
D62-084-30-DC# show spanning-tree
Spanning tree enabled mode MSTP
Default port cost method:  long
Gathering information ..........
###### MST 0 Vlans Mapped:
CST Root ID    Priority    32768
               Address     00:68:8d:b6:51:08
               This switch is root for CST and IST master
               Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
               Max hops    20
  Name     State   Prio.Nbr   Cost    Sts   Role EdgePort      Type
--------- -------- -------- -------- ------ ---- -------- -----------------
###### MST 1 Vlans Mapped: 1-4094
Root ID       Priority    32768
               Address     00:68:8d:b6:51:08
               This switch is the regional Root
Interfaces
Name      State     Prio.Nbr   Cost      Sts  Role  EdgePort  Type
--------   --------  --------   --------- ---- ----  --------  ----------
gi7       enabled   128.7     20000     Frw  Desg  No       P2P Intr
gi8       enabled   128.8     20000     Blk  Bckp  No       P2P Intr
D62-084-30-DC# show spanning-tree mst 1 interfaces GigabitEthernet 2
 MST Port Information
============================================================
 Instance Type : MSTI (1)
------------------------------------------------------------
     Port Identifier : 128/2
   Internal Path-Cost : 0       /20000
------------------------------------------------------------
    Regional Root Bridge : 0/00:00:00:00:00:00
     Internal Root Cost : 0
      Designated Bridge : 0/00:00:00:00:00:00
 Internal Port Path Cost : 20000
               Port Role : Disabled
              Port State : Disabled
  ------------------------------------------------------------
D62-084-30-DC#
```

## 16-41 startup-config

Startup configuration.

### Syntax

**show** startup-config

### Example

```
D62-084-30-DC# show startup-config
SYSTEM CONFIG FILE ::= BEGIN
! System Description: AETEK PoE SW 24P-MA-POE-D Switch
! System Version: v2.0.1.3_vk
! System Name: 24P-MA-POE-D
! System Up Time: 0 days, 0 hours, 9 mins, 46 secs
!
!
!
system name "24P-MA-POE-D"
ip address 192.168.11.199 mask 255.255.255.0
ip default-gateway 192.168.11.1
username "admin" encrypted password
MjEyMzJmMjk3YTU3YTVhNzQzODk0YTBlNGE4MDFmYzM=
!
!
!
!
!
!
spanning-tree mst configuration
 name "68:8D:B6:00:00:00"
!
!
!
!
--More--
D62-084-30-DC#
```

## 16-42 storm-control

show storm-control configuration.

### Syntax

**show storm-control**

**show storm-control** interfaces GigabitEthernet <port_list>

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |

### Example

```
D62-084-30-DC# show storm-control interfaces GigabitEthernet 1-5

  Port    | State |  Broadcast  |  Unkown-Multicast  | Unknown-Unicast |
Action
        |       |     kbps    |       kbps         |      kbps       |
----------+-------+-------------+--------------------+----------------
-|-----------
  gi1     disable Off(  10000)   Off(  10000)        Off(  10000)
Drop
  gi2     disable Off(  10000)   Off(  10000)        Off(  10000)
Drop
  gi3     disable Off(  10000)   Off(  10000)        Off(  10000)
Drop
  gi4     disable Off(  10000)   Off(  10000)        Off(  10000)
Drop
  gi5     disable Off(  10000)   Off(  10000)        Off(  10000)
Drop

D62-084-30-DC#
```

## 16-43 tacacs-server

Show TACACS+ information.

### Syntax

**show tacacs-server** <cr>

### Example

```
D62-084-30# show tacacs-server
Global TACACS+ Server Timeout     : 10 seconds
Global TACACS+ Server Key         :
D62-084-30#
```

## 16-44 username

Local user information.

### Syntax

**show username**

### Example

```
D62-084-30-DC# show username
Priv   |  Type  |    User Name  |         Password
------+--------+---------------+---------------------------------
 admin | secret |     admin     | MjEyMzJmMjk3YTU3YTVhNzQzODk0YTBlNGE4MDFmYzM=
D62-084-30-DC#
```

## 16-45 user

Information about users.

### Syntax

**show users**

### Example

```
D62-084-30-DC# show users
   Username      Protocol         Location
--------------- ------------ ----------------------
      admin      console           0.0.0.0
D62-084-30-DC#
```

## 16-46 version

System hardware and software status.

### Syntax

**show version**

### Example

```
D62-084-30-DC# show version
Loader Version   : 2.0.0.1
Loader Date      : Jan 11 2022 - 13:46:46
Firmware Version : 2.0.1.3_vk
Firmware Date    : Jan 11 2022 - 13:52:13
D62-084-30-DC#
```

## 16-47 vlan

VLAN information.

### Syntax

**show vlan**

**show vlan** <VLAN-LIST>

**show vlan** <VLAN-LIST> interfaces GigabitEthernet <port_list> membership

**show vlan** <VLAN-LIST> interfaces LAG <lag_list> membership

**show vlan** dynamic

**show vlan** static

**show vlan** {<ip-subnet>|<mac>|<protocol>}

### Parameter

| | | | |
|---|---|---|---|
| **interfaces** | Interface status and configuration | | |
| | **GigabitEthernet** | Gigabit ethernet interface to configure | |
| | | **<port_list>** | Port List X-Y,Z |
| | **LAG** | IEEE 802.3 Link Aggregation interface | |
| | | **<lag_list>** | LAG List X-Y,Z |
| **dynamic** | Display dynamic entries | | |
| **static** | Display static entries | | |
| **ip-subnet** | Show VLAN ip-subnet entries | | |
| **mac** | Show VLAN MAC entries | | |
| **protocol** | Protocol-based VLAN status | | |

### Example

```
D62-084-30-DC# show vlan
  VID  | VLAN Name |  Untagged Ports | Tagged Ports | Type
------+-----------+-----------------+--------------+--------
    1 |   default |    gi1-28,lag1-8 |          --- | Default
D62-084-30-DC#
```

## 16-48 dido

Display Digital I/O Configuration.

### Syntax

**show dido**

### Example

```
D62-084-30-DC# show dido
DIDO Check Interval: 2 seconds

 DO Auto Recovery Mode: enable

--------+---------------------------------
   DI      Event Description:
--------+---------------------------------
Normal  |"normal_event"
Abnormal|"abnormal_event"

------+-----------+--------------------
 DIDO | Direction | Value | Normal Mode
------+-----------+--------------------
    DI|        IN|     1|       high
    DO|       OUT|     0|       open

D62-084-30-DC#
```

## 16-49 voice

Show voice vlan information.

### Syntax

**show voice vlan** <cr>

### Example

```
D62-084-30# show voice vlan
OUI       Description
---------  --------------------------------
AA:BB:CC

VID    Class   Aging Time
-----  ------  ------------
1      6       10

Port   VID    Mode     Security   Discovery Protocol
-----  -----  -------  ---------  -------------------
gi1    0      force    disabled   oui
gi2    0      force    disabled   oui
gi3    0      force    disabled   oui
gi4    0      force    disabled   oui
gi5    0      force    disabled   oui
gi6    0      force    disabled   oui
gi7    0      force    disabled   oui
gi8    0      force    disabled   oui
gi9    0      force    disabled   oui
gi10   0      force    disabled   oui
gi11   0      force    disabled   oui
gi12   0      force    disabled   oui
lag1   0      force    disabled   oui
lag2   0      force    disabled   oui
lag3   0      force    disabled   oui
lag4   0      force    disabled   oui
lag5   0      force    disabled   oui
lag6   0      force    disabled   oui
lag7   0      force    disabled   oui
lag8   0      force    disabled   oui
D62-084-30#
```

## 16-50 solar

Display Solar Configuration.

### Syntax

**show solar power** <cr>

### Example

```
D62-084-30-DC# show solar power

Solar 24V_P1 power status
Description:
----------------------------
Power[W]    : 0.00
Current[mA] : 0
Status      : On

Solar 24V_P2 power status
Description:
----------------------------
Power[W]    : 0.00
Current[mA] : 0
Status      : On

Solar 24V_P3 power status
Description:
----------------------------
Power[W]    : 0.00
Current[mA] : 0
Status      : On

Solar 24V_P4 power status
Description:
----------------------------
Power[W]    : 0.00
Current[mA] : 0
Status      : On

. . . . . .
D62-084-30-DC#
```

# Chapter 17 SSL of CLI

Setup SSL host keys.

### Syntax

**ssl**

### Parameter

### Example

```
D62-084-30-DC# ssl
Generating a RSA private key
.....................................................................+++++
.............................................+++++
writing new private key to '/mnt/ssh/ssl_key.pem_tmp'
-----
D62-084-30-DC#
```

# Chapter 18 TERMINAL Commands of CLI

Terminal configuration.

### Syntax

**terminal** length <0-24>

### Parameter

| | | |
|---|---|---|
| **length** | Terminal length | |
| | <0-24> | Length value. 0 means no limit |

### Example

```
D62-084-30-DC# terminal length 24
```

# Chapter 19 TRACEROUTE of CLI

Trace route to network hosts.

## Syntax

**traceroute** <hostname>

**traceroute** <hostname> max_hop <2-255>

## Parameter

| | | | |
|---|---|---|---|
| hostname | The IP address or hostname address to trace | | |
| | max_hop | The number of maximun hop.(Default:30) | |
| | | <2-255> | Maximum hop range |

## Example

```
D62-084-30-DC# traceroute 1.1.1.1 max_hop 2
traceroute to 1.1.1.1 (1.1.1.1), 2 hops max, 38 byte packets
 1  192.168.11.1 (192.168.11.1)  0.000 ms  0.000 ms  0.000 ms
 2  10.135.91.1 (10.135.91.1)  0.000 ms  0.000 ms  0.000 ms
D62-084-30-DC#
```