



CHAPTER 7

The Operations Menu

The Operations Menu provides commands that immediately affect operation of the switch but do not alter permanent switch configurations.

For example, Operations Menu can be used to immediately disable a port (without applying or saving the change), with the understanding that when the switch is reset, the port returns to its normally configured operation.

To make permanent changes to switch configurations, use the commands described in [Chapter 6, “The Configuration Menu”](#).

/oper

Operations Menu

```
[Operations Menu]
port      - Operational Port menu
sp        - Operational SP menu
lcm       - Operational LCM menu
slb       - Operational Layer 4 menu
vrrp     - Operational Virtual Router Redundancy menu
ip        - Operational IP Menu
swkey    - Enter key to enable software feature
rmkey    - Enter software feature to be removed
```

The commands of the Operations Menu enable you to alter switch operational characteristics without affecting switch configuration.

Table 123 Operations Menu Options (/oper)

Usage

port *<port and slot number, such as b12>*

Displays the Operational Port menu. To view menu options, see [page 257](#).

sp

Displays the Operational Switch Processor menu. To view menu options, see [page 257](#).

lcm

Displays the Operational Line-Card Module menu. To view menu options, see [page 258](#).

slb

Displays the Operational Layer 4 menu. To view menu options, see [page 259](#).

vrrp

Displays the Operational Virtual Router Redundancy menu. To view menu options, see [page 260](#).

ip

Displays the Operation IP menu. To view menu options, see [page 261](#).

swkey *<16-hex-digit key to enable software feature>*

Enter software key to enable software feature. For more information, see [page 262](#).

rmkey *<software feature to be removed>*

Removes the indicated software feature. For more information, see [page 263](#).

/oper/port *<slot-number port-number>*

Operations-Level Port Options

```
[Operations Port 1 Menu]
up      - Bring port up
down    - Shut port down
rmon    - Up/down RMON for port
current - Current port state
```

Operations-level port options are used for temporarily disabling or enabling a port, and for changing RMON status on a port.

Table 124 Operations-Level Port Menu Options (/oper/port)

Command Syntax and Usage

up

Temporarily brings up the port. The port will be returned to its configured operation mode when the switch is reset.

down

Temporarily brings down the port. The port will be returned to its configured operation mode when the switch is reset.

rmon

Temporarily brings up/down RMON on the port. The port will be returned to its configured operation mode when the switch is reset.

current

Displays the current operational status of the port.

/oper/sp

Operations-Level Switch Processor Options

```
[SP Operations Menu]
up      - Bring up one or all SPs
down    - Shut down one or all SPs
post    - Run POST on one or all SPs
```

NOTE – The following commands will bring up or down all ports on the switch processor.

Table 125 Operations-Level Switch Processor Menu Options (/oper/sp)

Command Syntax and Usage

up <SP as port (such as b12) or index (such as x5)>
Temporarily brings up the specified switch processor.

down <SP as port (such as b12) or index (such as x5)>
Temporarily brings down the specified switch processor.

post <SP as port (such as b12) or index (such as x5)>
Runs Power On Self Test (POST) on the specified switch processor.

/oper/lcm <module number> Operations-Level Line Card Module Options

[LCM Operations Menu]
up - Bring an LCM up
down - Shut an LCM down

Table 126 Operations-Level Switch Processor Menu Options (/oper/lcm)

Command Syntax and Usage

up <LCM index (A-D)>
Temporarily brings up the specified line card module (LCM).

down <LCM index (A-D)>
Temporarily brings down the specified line card module.

/oper/slb

Operations Level SLB Options

[Server Load Balancing Operations Menu]	
synch	- Synchronize SLB, FILT, and VRRP configuration on peers
enable	- Enable real server
disable	- Disable real server
clear	- Clear session table on port
current	- Current layer 4 operational state

When the optional Layer 4 software is enabled, the operations-level Server Load Balancing options are used for temporarily disabling or enabling real servers and synchronizing the configuration between the switches.

The options are described in the following table.

Table 127 Server Load Balancing Operations Menu Options (/oper/slb)

Command Syntax and Usage

synch

Synchronizes the SLB, filter, and VRRP configuration on a peer switch (a switch that owns the IP address). To take effect, VRRP must be globally enabled on the peer switch.

enable <real server number (1-1024)>

Temporarily enables a real server. The real server will be returned to its configured operation mode when the switch is reset.

disable <real server number (1-1024)>

Temporarily disables a real server, removing it from operation within its real server group and virtual server. Sessions are not sent to the real server and old sessions are retained. The real server will be returned to its configured operation mode when the switch is reset.

clear <port as slot and port, such as b12>

Clears the session table for a specific port, and allow port filter changes to take effect immediately. Note: This disrupts current Server Load Balancing and Application Redirection sessions.

current

Displays the current SLB operational state.

/oper/vrrp

Operations-Level VRRP Options

[VRRP Operations Menu] back - Set virtual router to backup

This menu is used to force a master virtual router to become backup router.

Table 128 Virtual Router Redundancy Operations Menu Options (/oper/vrrp)

Command Syntax and Usage

back <virtual router number (1-1024)>

Forces the specified master virtual router on this switch into backup mode. This is generally used for passing master control back to a preferred switch once the preferred switch has been returned to service after a failure. When this command is executed, the current master gives up control and initiates a new election, by temporarily advertising its own priority level as 0 (lowest). After the new election, the virtual router that had been forced into backup mode by this command, will resume master control in the following cases:

- This switch owns the virtual router (the IP addresses of the virtual router and its IP interface are the same)
 - This switch's virtual router has a higher priority and preemption is enabled.
 - There are no other virtual routers available to take master control.
-

/oper/ip

Operations Level IP Options

```
[IP Operations Menu]
  bgp      - Operational Border Gateway Protocol Menu
```

Table 129 Operations Level Ip Options (/oper/ip)

Command Syntax and Usage

bgp

Displays the Border Gateway Protocol menu. To view the menu options, see [page 261](#).

/oper/ip/bgp

Operations Level BGP Options

```
[Border Gateway Protocol Operations Menu]
  start    - Start peer session
  stop     - Stop peer session
  current  - Current BGP operational state
```

Table 130 Operations Level BGP Options (/oper/ip/bgp)

Command Syntax and Usage

start <peer number (1-16)>

Temporarily starts the peer session. The peer will be returned to its configured operation mode when the switch is reset.

stop <peer number (1-16)>

Temporarily stops the peer session. The peer will be returned to its configured operation mode when the switch is reset.

current

Displays the current state of the Border Gateway Protocol.

`/oper/swkey` Activating Optional Software

The `swkey` option is used for activating any optional software you have purchased for your switch.

Before you can activate optional software, you must obtain a software license from your Alteon WebSystems representative or authorized reseller. One software license is needed for each switch where the optional software is to be used. You will receive a Licence Certificate for each software license purchased.

To obtain a software key, you must register each License Certificate with Alteon WebSystems, and provide the MAC address of the Web OS switch that will run the optional software. Alteon WebSystems will then provide a License Password.

NOTE – Each License Password will work only on the specific switch which has the MAC address you provided when registering your Licence Certificate.

Once you have your License Password, perform the following actions:

1. **After the switch reboots, connect to the switch’s command line interface and log in as the administrator (see [Chapter 1, “The Command Line Interface”](#)).**
2. **At the `Main#` prompt, enter:**

```
Main# oper
```

3. **At the `Operations#` prompt, enter:**

```
Operations# swkey
```

4. **When prompted, enter your 16-digit software key code. For example:**

```
Enter Software Key: 123456789ABCDEF
```

If the correct code is entered, you will see the following message:

```
Valid software key entered.  
Software feature enabled.
```


`/oper/rmkey` Removing Optional Software

The `rmkey` option is used for deactivating any optional software. Deactivated software is still present in switch memory and can be reactivated at any later time.

To deactivate optional software, enter the following at the Operations Menu:

```
Operations# rmkey
```

When prompted, enter the code for software to be removed. For example:

```
Enter Software Feature to be removed [L4]: 14
```

