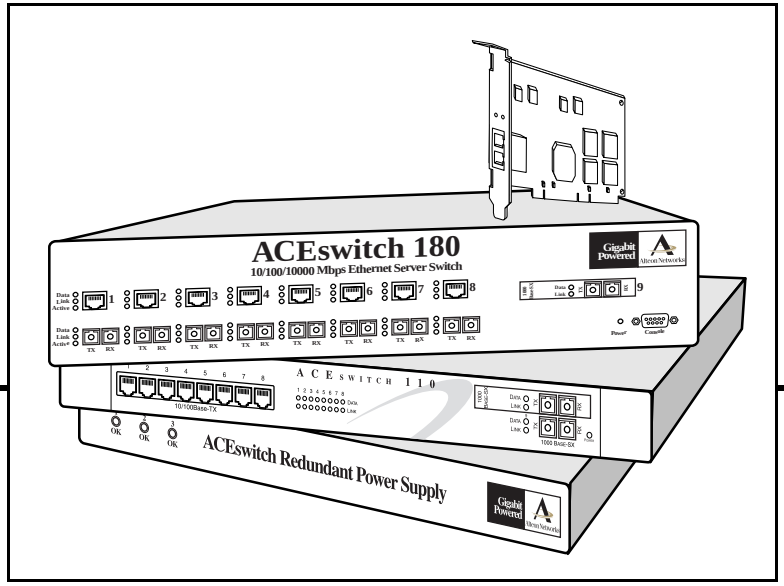
RELEASE NOTES:

Installation and User's Guide



CACHEdirector™

Web Cache Redirection Switch

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Part Number: 050057, Revision A
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Regulatory Compliance

FCC Class A Notice: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference. 2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Do not make mechanical or electrical modifications to the equipment.

VCCI Class 1: The equipment is Type 1 Data Processing Equipment and is intended for use in commercial and industrial districts. It has been tested and found to comply with VCCI technical requirements for the purpose of protection against electronic interference. When used in residential districts or their peripheral areas, radio, and TV receiver units may be subject to radio interference. The operation should be done in accordance with the Instruction Manual.

CE Notice: The CE mark on this equipment indicates that this equipment meets or exceeds the following technical standards: EN50082-1, EN55022, EN60555-2, EN61000-4-1, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5.

Safety Information is included in the *CACHEdirector Installation and User's Guide*.

Release Notes

These release notes provide the latest information regarding your CACHEdirector switch. This supplement modifies information found in the complete documentation:

- *CACHEdirector Installation and User's Guide* (part number 050054, Revision A)
- *ACElerate Switch Software User's Guide* for Release 5 (part number 050044, Revision A)

Please keep this information with your Alteon Networks product manuals.

This document covers the following topics:

CACHEdirector Features

The CACHEdirector uses a subset of ACElerate Release 5 software features optimized for web-cache redirection applications. As such, the features of the switch are different than those described in the *ACElerate Switch Software User's Guide* for Release 5.

For the CACHEdirector, the following replaces the feature information from Chapter 1 of the ACElerate manual.

Overview

The CACHEdirector software offers the following features:

- Concurrent Layer 2 and Layer 4 switching
- Application Redirection software allows the interception and redirection of client/server IP requests

- Cache Load Balancing software provides up to 64 real servers load balanced, with each supporting multiple IP addresses and applications
- Hot Standby Support for Layer 4 Switching
- L3/L4 Filtering to create secure server networks
- VLAN support for up to 16 VLANs per switch
- ACEvision web-based user interface for direct browser-to-switch interaction for configuration and monitoring
- Switching Processor (SP) capability to learn up to 1023 MAC addresses
- Master Forwarding Database supports up to 1023 MAC address entries per switch
- IEEE 802.1d Spanning-Tree Protocol support
- IEEE 802.3x Flow Control support for full-duplex ports
- IEEE 802.1Q Frame Tagging when ports are enabled with VLAN tagging
- SNMP support: RFC 1213 MIB-II, RFC 1493 Bridge MIB, RFC 1398 Ethernet-like MIB, and RFC 1573 Interface Extensions MIB compliant. Alteon Networks Enterprise MIB supporting the configuration and monitoring of all Alteon Networks specific features.
- Configuration and management is performed via local console port (DCE) or Telnet, and the Web-UI, with two levels of password protection
- Command-line interface Setup facility reduces the initial setup time
- TFTP download to Flash memory for software updates and upgrades

Standard Features

Application Redirection Filters

The CACHEdirector software includes the optional Application Redirection feature ***pre-enabled*** at the factory (no software key password is necessary).

Repeated client access to common web or application content across the Internet can be an inefficient use of network resources. The same filtering system that provides basic network security can also be used to intercept and redirect client traffic to cache and application servers. By redirecting client requests to a local cache or application server, you increase the speed at which clients access the information and free up valuable network bandwidth.

Cache Load Balancing

If multiple cache-servers are available on your network, your CACHEdirector powered switch can balance cache traffic among them. For even greater control, traffic is distributed according to a variety of user-selectable metrics. By helping to eliminate cache-server over-utilization, traffic gets through more easily, reducing user competition for connections on overworked servers.

Intelligent Server Health Checking

Intelligent health checks are performed for DNS, FTP, HTTP, NNTP, POP3 and SMTP services. If any server in a server pool fails, the remaining servers continue to provide access to vital applications and data. The failed server can be brought back up without interrupting access to services. As users are added and the server pool's capabilities are saturated, new servers can be added to the pool transparently.

VLANs

Virtual Local Area Networks (*VLANs*) are commonly used to split up groups of network users into manageable broadcast domains, to create logical segmentation of work groups, and to enforce security policies among logical segments.

The CACHEdirector software supports up to 16 VLANs per switch. IEEE 802.1Q VLAN *tagging* is also supported to allow multiple VLANs per port, and to provide standards-based VLAN support for Ethernet systems.

Filtering

Layer 3 (IP) and Layer 4 (Application/Protocol) filtering gives the network administrator a powerful tool to protect their server networks. Up to 224 filters can be created. Every switch port can have up to 224 of these filters applied.

Each filter can allow or deny traffic and can optionally log results, based on any combination of the following user-specified criteria:

- IP source address, by address and mask
- IP destination address, by address and mask
- Protocol type (IP, UDP, TCP, ICMP and others)
- Application source port, by name, integer or range
- Application destination port, by name, integer or range

The ACEvision Web-User Interface

With ACElerate Switching Software, the network administrator may access all switch configuration and monitoring functions through ACEvision, a web-based switch management interface. ACEvision has all of the same configuration and monitoring functions as the command-line interface, with an intuitive and easy-to-use interface structure.

Alteon Networks SNMP MIB

All configuration and monitoring data is now accessible via an enterprise Alteon Networks MIB, which can be compiled into MIB-based systems such as HP-OpenView.

802.3x Flow Control

The ACElerate software supports 802.3x flow control on a per-port basis, on full-duplex links. 802.3x flow control provides a mechanism for Ethernet end-stations or networking devices to signal a neighbor on a full-duplex link to pause the data transmission for a short period of time. Flow control provides rudimentary capabilities for allowing a device to temporarily suspend data reception so that it can handle any data already in queues.

RFC 1573 Interface Extension MIB Compliance

Without the RFC 1573 MIB, high-speed LAN technologies such as Fast Ethernet can cause frame and octet counters within the MIB-II interface to roll over in a short period of time, ruining their statistical significance.

The CACHEdirector software, version 2.0 and greater, supports the RFC 1573 MIB. This IF Extensions MIB allows for higher speed networking environments, providing 64-bit counters on many MIB-II statistics, plus roll-over counters for 32-bit counters.

CACHEdirector Limitations

The CACHEdirector contains a subset of the ACElerate features found in the *ACElerate Switch Software User's Guide* for Release 5. When referring to the ACElerate manual for your CACHEdirector, please keep the following limitations and restrictions in mind.

Features Not Available for CACHEdirector

Some features discussed in the *ACElerate Switch Software User's Guide* for Release 5 are not available on the CACHEdirector. Disregard the following items in your ACElerate manual.

- Layer 3 IP Routing is not available

1-3	IP Routing feature explanation
3-11	First-time configuration using the Setup program
5-13 to 5-16	IP Routing Information menu
6-3	Route Protocol Statistics display
7-12 to 7-16	IP Static Route, IP Forwarding, RIP, and IP Port Configuration menus
7-49	`sppply` command to enable RIP1 Supply during failover standby
10-9	IP Route Manipulation menu
13-1 to 13-8	IP Routing tutorial

- Default Gateway Load Balancing is not available

7-12	Configuring the Default Gateway Metrics

- Virtual Servers for Server Load Balancing are not available

5-8 to 5-9	Virtual server and port state information
6-3 to 6-9	Virtual Server Statistics display
6-13 to 6-14	SLB Maintenance Statistics for incorrect VIPs and Vports
7-37 to 7-40	Configuring virtual servers
15-9	Server Load Balancing tutorial

- Network Address Translation Filters are not available

7-43, 7-45	`nat` commands for filter direction and action
16-1	Benefits overview
16-20 to 16-22	Network Address Translation Filter examples

- Port Trunk Groups are not available

1-4	Port Trunk Groups feature explanation
5-11	Port state in FDB information
5-18	Trunk Group information display
7-52	Configuring Port Trunking
14-1 to 14-4	Port Trunking tutorial

- Port Mirroring is not available

1-4	Port Mirroring feature explanation
7-27 to 7-28	Configuring Port Mirroring
8-3 to 8-4	Operation-level port mirroring options

- RMON Lite Support is not available

1-5	RMON Lite feature explanation
6-2	Port statistics display
7-25	Configuring SNMP Parameters
8-2	Operations-level port options

- Distributed Server Load Balancing is not available

1-6	DSLB feature explanation
5-8 to 5-9	DSLB state information
6-10 to 6-12	DSLB statistics display
7-33	DSLB `remot` (remote site configuration) command
7-49 to 7-52	DSLB configuration menu
17-1 to 17-14	DSLB Tutorial

- Software keys are not available

5-18	Enabled Software Keys information display
8-6 to 8-7	Activating or removing optional software

Feature Limitations

Some features discussed in the *ACElerate Switch Software User's Guide* for Release 5 are available in limited form on the CACHEdirector. The following modifies information found in your ACElerate manual.

- Switch IP Interfaces: There is one IP Interface per switch, instead of 256.

3-9 to 3-10	First-time configuration using the Setup program
7-10	Configuring the IP Interface settings

- Default Gateways: There is one default gateway, instead of four.

3-10 to 3-11	First-time configuration using the Setup program
7-11	Configuring Default Gateway settings

- VLANs: The switch supports 16 VLANs, instead of 246.

1-2	VLANs feature explanation
11-1	VLANs tutorial

- Real server support: The switch supports 64 real servers, instead of 256.

7-31, 7-35	SLB real server group configuration

- Real server group support: The switch supports 16 real server groups, instead of 256.

7-34	SLB real server group configuration

- MAC address learning and storage: On the Switch Processor (SP), 1023 MAC addresses can be learned, instead of 4095. The Master Forwarding Database holds 1023 entries per switch, instead of 8192.

First-Time Configuration using Setup

To help with the initial process of configuring your switch, the CACHEdirector software includes a Setup utility. The Setup utility prompts you step-by-step to enter all the necessary information for basic configuration of the switch.

Whenever you log in as the system administrator under the factory default configuration, you are asked whether you wish to run the Setup utility. Setup can also be activated manually from the command-line interface any time after login.

The following material describes how to use the Setup utility and how to change system passwords, and replaces information found in Chapter 3 of your *ACElerate Switch Software User's Guide*. For information on connecting to the switch and logging in, see Chapter 2 of your ACElerate manual.

Information Needed For Setup

Setup requests the following information:

- Basic system information
  - Date & time
  - Whether to use BOOTP or not
  - Whether to use Spanning-Tree Protocol or not
- Optional configuration for each port
  - Speed, duplex, flow control, and negotiation mode (as appropriate)
  - Whether to use VLAN tagging or not (as appropriate)
- Optional configuration for each VLAN
  - Name of VLAN
  - Which ports are included in the VLAN
- Optional configuration of IP parameters
  - IP address, subnet mask, and broadcast address, and VLAN for the IP interface
  - IP address for the default gateway

Starting Setup When You Log In

The Setup prompt appears automatically whenever you login as the system administrator under the factory default settings.

1. **Connect to the switch console.**

   After connecting, the login prompt will appear as shown below.

```
Enter Password:
```

2. **Enter `admin` as the default administrator password.**

   If the factory default configuration is detected, the system prompts:

```
Connected to CACHEdirector
15:38:00 Wed June 17, 1998

The switch is booted with factory default configuration.
  To ease the configuration of the switch, a "Set Up" facility which
  will prompt you with those configuration items that are essential
  to the operation of the switch is provided.
Would you like to run "Set Up" to configure the switch? [y/n]:
```

NOTE – If the default `admin` login is unsuccessful, or if the administrator Main Menu appears instead, the system configuration has probably been changed from the factory default settings. If you are certain that you need to return the switch to its factory default settings, see "Selecting a Configuration Block" on page 9-4 of your *ACElerate Switch Software User's Guide.*

3. **Enter `y` to begin the initial configuration of the switch, or `n` to bypass the Setup facility.**

Stopping and Restarting Setup Manually

To abort the Setup utility, press <Ctrl-C> during any Setup question. When you abort Setup, the system will prompt:

```
Would you like to run from top again? [y/n]
```

Enter **`n`** to abort Setup, or **`y`** to restart the Setup program at the beginning.

You can restart the Setup utility manually at any time by entering the following command at the administrator prompt:

```
# /cfg/setup
```

Setup Part 1: Basic System Configuration

When Setup is started, the system prompts:

```
"Set Up" will walk you through the configuration of
  System Date and Time, BOOTP, Spanning Tree, Port Speed/Mode,
  VLANs, and IP interfaces. [type Ctrl-C to abort "Set Up"]
------------------------------------------------------------

Will you be configuring VLANs? [y/n]
```

1. **Enter y if you will be configuring VLANs. Otherwise enter n.**

   If you decide not to configure VLANs during this session, you can configure them later using the configuration menus, or by restarting the Setup facility. For more information on VLANs issues, see Chapter 11 in your *ACElerate Switch Software User's Guide.*

   Next, the Setup utility prompts you to input basic system information.

2. **Enter the month of the current system date at the prompt:**

```
System Date:
Enter month [6]:
```

   Enter the month as a number from 1 to 12. To keep the current month, press <Enter>.

3. **Enter the day of the current date at the prompt:**

```
Enter day [17]:
```

   Enter the date as a number from 1 to 31. To keep the current day, press <Enter>.

4. **Enter the year of the current date at the prompt:**

```
Enter year [98]:
```

   Enter the last two digits of the year as a number from 00 to 99. "00" is considered 2000. To keep the current year, press <Enter>.

   The system displays the date and time settings:

```
System clock set to 13:56:52 Wed June 17, 1998.
```

5. **Enter the hour of the current system time at the prompt:**

```
System Time:
Enter hour in 24-hour format [13]:
```

   Enter the hour as a number from 00 to 23. To keep the current hour, press <Enter>.

6. **Enter the minute of the current time at the prompt:**

```
Enter minutes [56]:
```

   Enter the minute as a number from 00 to 59. To keep the current minute, press <Enter>.

7. **Enter the seconds of the current time at the prompt:**

```
Enter seconds [52]:
```

Enter the seconds as a number from 00 to 59. To keep the current second, press <Enter>.

The system displays the date and time settings:

```
System clock set to 13:56:52 Wed June 17, 1998.
```

8. **Enable or disable the use of BOOTP at the prompt:**

```
BootP Option:
Current BOOTP usage:            enabled
Enter new BOOTP usage [d/e]:
```

If available on your network, a BOOTP server can supply the switch with IP parameters so that you do not have to enter them manually. Enter **d** to disable the use of BOOTP, or enter **e** to enable the use of BOOTP. To keep the current setting, press <Enter>.

9. **Turn Spanning-Tree Protocol on or off at the prompt:**

```
Spanning Tree:
Current Spanning Tree setting: ON
Turn Spanning Tree OFF? [y/n]
```

Enter **y** to turn off Spanning-Tree, or enter **n** to leave Spanning-Tree on.

Setup Part 2: Port Configuration

1. **Select the port to configure, or skip port configuration at the prompt:**

```
Port Config:
Enter port number: (1-8)
```

If you wish to change settings for individual ports, enter the number of the port you wish to configure. To skip port configuration, press <Enter> without specifying any port and go to "Setup Part 3: VLANs" on page 14.

2. **Configure Ethernet/Fast Ethernet port speed.**

If you selected a port that has an Ethernet/Fast Ethernet connector, the system prompts:

```
Fast Link Configuration:
Port Speed:
Current Port 1 speed setting:   10/100
Enter new speed ["10"/"100"/"any"]:
```

Enter the port speed from the options available, or enter **any** to have the switch auto-sense the port speed. To keep the current setting, press <Enter>.

3. **Configure Ethernet/Fast Ethernet port duplex mode.**

   If you selected a port that has an Ethernet/Fast Ethernet connector, the system prompts:

```
Port Mode:
Current port 1 mode setting:     any
Enter new speed ["full"/"half"/"any"]
```

   Enter **full** for full-duplex, **half** for half-duplex, or **any** to have the switch auto-negotiate. To keep the current setting, press <Enter>.

4. **Configure Ethernet/Fast Ethernet port flow control.**

   If you selected a port that has an Ethernet/Fast Ethernet connector, the system prompts:

```
Port Flow Control:
Current Port 1 flow control setting:    both
Enter new value ["rx"/"tx"/"both"/"none"]:
```

   Enter **rx** to enable receive flow control, **tx** for transmit flow control, **both** to enable both, or **none** to turn flow control off for the port. To keep the current setting, press <Enter>.

5. **Configure Ethernet/Fast Ethernet port auto-negotiation mode.**

   If you selected a port that has an Ethernet/Fast Ethernet connector, the system prompts:

```
Port Auto Negotiation:
Current Port 1 autonegotiation:         on
Enter new value ["on"/"off"]:
```

   Enter **on** to enable auto-negotiation, or **off** to disable it. To keep the current setting, press <Enter>.

6. **If configuring VLANs, turn VLAN tagging on or off for the port.**

   If you have selected to configure VLANs back in Part 1, the system prompts:

```
Port VLAN tagging config (tagged port can be a member of multiple VLANs)
Current TAG flag:               disabled
Enter new TAG flag [d/e]:
```

   Enter **e** if the port uses VLAN tagging. Enter **d** if the port does not use VLAN tagging. To keep the current setting, press <Enter>.

7. **The system prompts you to configure the next port:**

```
Enter port number: (1 to 8)
```

When you are through configuring ports, press <Enter> without specifying any port. Otherwise, repeat the steps in this section.

Setup Part 3: VLANs

If you chose to skip VLANs configuration back in Part 1, skip to "Setup Part 4: IP Configuration" on page 15.

1. **Select the VLAN to configure, or skip VLAN configuration at the prompt:**

```
VLAN Config:
Enter VLAN number from 2 to 4094, NULL at end:
```

If you wish to change settings for individual VLANs, enter the number of the VLAN you wish to configure. To skip VLAN configuration, press <Enter> without typing a VLAN number and go to "Setup Part 4: IP Configuration" on page 15.

2. **Enter the new VLAN name at the prompt:**

```
VLAN is newly created.
Pending new VLAN name: "VLAN 2"
Enter new VLAN name, without quotes:
```

3. **Enable or disable Jumbo Frame support for the VLAN at the prompt:**

```
VLAN Jumbo Frame Support:
Current Jumbo Frame support:            disabled
Enter new Jumbo Frame support [d/e]:
```

Enter **d** to disable Jumbo Frame support for the VLAN, or enter **e** to enable Jumbo Frame support for the VLAN. To keep the current setting, press <Enter>.

NOTE – This setting is ignored by the CACHEdirector. Although Jumbo Frames support is included in the switch software, the CACHEdirector does not presently have any Gigabit Ethernet ports, and cannot take advantage of the feature.

---

4. **Enter the VLAN port numbers.**

   The system prompts you to define the first port in the VLAN:

```
Define ports in VLAN:
Current VLAN 2: empty
Enter port numbers one per line, NULL at end:
```

   Type the first port number to add to the current VLAN and press <Enter>. The right angle prompt appears:

```
>
```

   For each additional port in the VLAN, type the port number and press <Enter> to move to the next line. Repeat this until all ports for the VLAN being configured are entered. When you are finished adding ports to this VLAN, press <Enter> without specifying any port.

5. **The system prompts you to configure the next VLAN:**

```
VLAN Config:
Enter VLAN number from 2 to 4094, NULL at end:
```

   Repeat the steps in this section until all VLANs have been configured. When all VLANs have been configured, press <Enter> without specifying any VLAN.

Setup Part 4: IP Configuration

If BOOTP was enabled back in Part 1, skip to "Setup Part 5: Final Steps" on page 17. Otherwise, if you disabled BOOTP, the system prompts for IP parameters.

IP Interfaces

The IP interface defined the subnets to which the switch belongs, and provides the switch with an IP presence on your network. The interface can be used for connecting to the switch for remote configuration, and for routing between subnets and VLANs (if used).

1. **For the IP interface, enter the IP address in dotted decimal notation:**

```
IP Config:

IP interfaces:
Current IP address:     0.0.0.0
Enter new IP address:
```

   To keep the current setting, press <Enter>.

2. **At the prompt, enter the IP subnet mask in dotted decimal notation:**

```
Current subnet mask:            0.0.0.0
Enter new subnet mask:
```

To keep the current setting, press <Enter>.

3. **At the prompt, enter the broadcast IP address in dotted decimal notation:**

```
Current broadcast address:      0.0.0.0
Enter new broadcast address:
```

To keep the current setting, press <Enter>.

4. **If configuring VLANs, specify a VLAN for the interface.**

This prompt appears if you selected to configure VLANs back in Part 1:

```
Current VLAN:     1
Enter new VLAN:
```

Enter the number for the VLAN to which the interface belongs, or press <Enter> without specifying a VLAN number to accept the current setting.

5. **At the prompt, enter `y` to enable the IP interface, or `n` to leave it disabled**:

```
Enable IP interface? [y/n]
```

Default Gateway

1. **At the prompt, enter the IP address for the default gateway:**

```
IP default gateways:
Current IP address:     0.0.0.0
Enter new IP address:
```

Enter the IP address in dotted decimal notation, or press <Enter> without specifying an address to accept the current setting.

2. **At the prompt, enter `y` to enable the default gateway, or `n` to leave it disabled:**

```
Enable default gateway? [y/n]
```

Setup Part 5: Final Steps

1. **When prompted, decide whether to restart Setup or continue:**

```
Would you like to run from top again? [y/n]
```

Enter **y** to restart the Setup utility from the beginning, or **n** to continue.

2. **When prompted, decide whether you wish to review the configuration changes:**

```
Review the changes made? [y/n]
```

Enter **y** to review the changes made during this session of the Setup utility. Enter **n** to continue without reviewing the changes. We recommend that you review the changes.

3. **Next, decide whether to apply the changes at the prompt:**

```
Apply the changes? [y/n]
```

Enter **y** to apply the changes, or **n** to continue without applying. Changes are normally applied.

4. **At the prompt, decide whether to make the changes permanent:**

```
Save changes to flash? [y/n]
```

Enter **y** to save the changes to flash. Enter **n** to continue without saving the changes. Changes are normally saved at this point.

5. **If you do not apply or save the changes, the system prompts whether to abort them:**

```
Abort all changes? [y/n]
```

Enter **y** to discard the changes. Enter **n** to return to the "`Apply the changes?`" prompt.

NOTE – After initial configuration is complete, it is recommended that you change the default passwords as shown in the Chapter 3 of your ACElerate manual.

The CACHEdirector Menus

For information on connecting to the switch and logging in, see Chapter 2 of your ACElerate manual.

Menu Summary

- **Information Menu**

  Provides sub-menus for displaying information about how the switch is set up: from basic system settings to VLANs, Layer 4 settings, and more.

- **Statistics Menu**

  Provides sub-menus for displaying switch performance statistics. Included are port, IF, IP, ICMP, TCP, UDP, SNMP, ARP, and Layer 4 statistics.

- **Configuration Menu**

  This menu is available only from an administrator login. It includes sub-menus for configuring every aspect of the switch. Changes to configuration are not active until explicitly applied. Changes can be saved to non-volatile memory.

- **Operations Command Menu**

  This menu is available only from an administrator login. Operations-level commands are used for making immediate and temporary changes to switch configuration. This menu is used for bringing ports temporarily in and out of service, and enabling or disabling Server Load Balancing functions. It is also used for activating or deactivating optional software packages.

- **Boot Options Menu**

  This menu is available only from an administrator login. This menu is used for downloading new software into the switch, selecting configuration blocks, and for resetting the switch when necessary.

- **Maintenance Menu**

  This menu is available only from an administrator login. This menu is used for debugging purposes. Chiefly, you can generate a dump of the critical state information in the switch, and clear entries in the forwarding database and the ARP tables.

Menu Map

The following illustrates the administrator menu hierarchy:

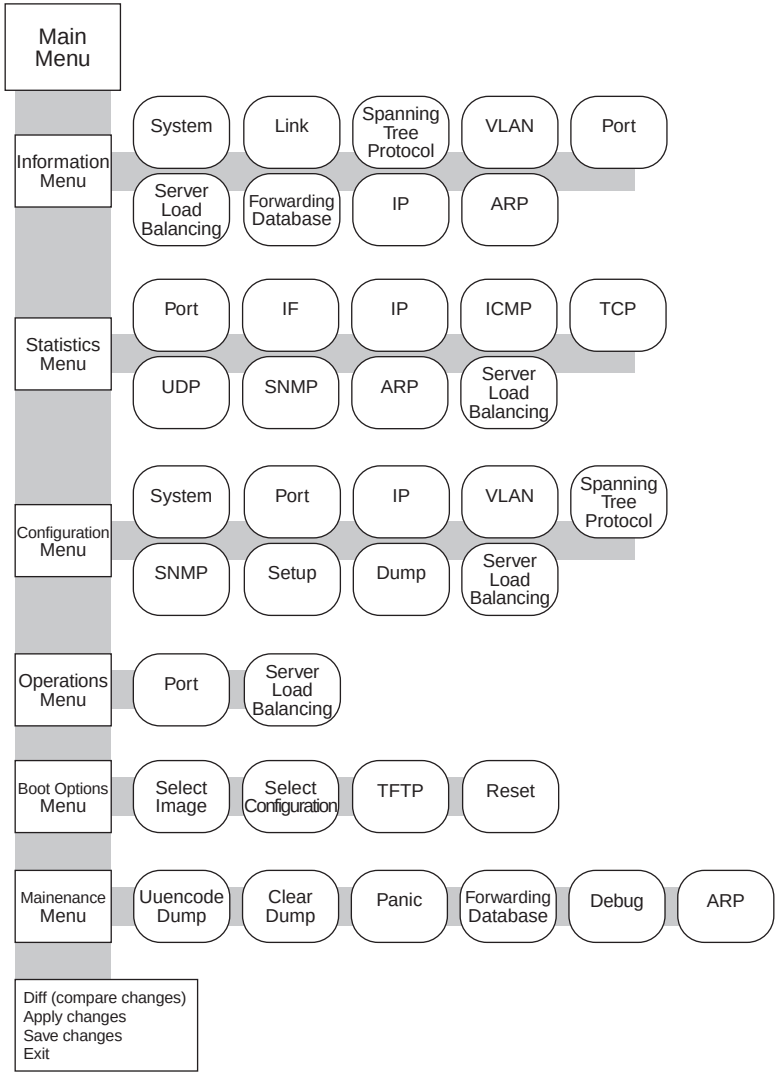

Figure 1 Administrator Menu Hierarchy

Menus and Commands Unavailable for CACHEdirector

The CACHEdirector uses a subset of ACElerate Release 5 menus and commands. The following commands described in the *ACElerate Switch Software User's Guide* for Release 5 are not available on the CACHEdirector.

Table 1 Unavailable ACElerate Release 5 Commands

Command	Item
`/info/route`	IP Routing Information Menu
`/info/route/find`	Show a single route by destination IP address
`/info/route/gw`	Show routes to a single gateway
`/info/route/type`	Show routes of a single type
`/info/route/tag`	Show routes of a single tag
`/info/route/if`	Show routes on a single interface
`/info/route/dump`	Show all routes
`/info/trunk`	Show Trunk Group information
`/info/swkey`	Show enabled software features
`/stats/port/rmon`	RMON port statistics
`/stats/route`	Route protocol statistics
`/stats/dns`	DNS protocol statistics
`/stats/slb/virt`	Virtual server statistics
`/stats/slb/dist`	Distributed SLB statistics
`/stats/slb/port` *n*`/virt`	Port virtual server statistics
`/stats/slb/dist`	Distributed SLB Statistics Menu
`/stats/slb/real`	Real server distributed statistics
`/stats/slb/group`	Real server group distributed statistics
`/stats/slb/virt`	Virtual server distributed statistics
`/stats/slb/maint`	Distributed maintenance statistics
`/cfg/port` *n*`/pref`	Set preferred physical connector
`/cfg/port` *n*`/back`	Set backup physical connector
`/cfg/port` *n*`/gig`	Gigabit Physical Connector Menu
`/cfg/port` *n*`/gig/speed`	Set the link speed
`/cfg/port` *n*`/gig/mode`	Set the duplex mode
`/cfg/port` *n*`/gig/fctl`	Set the flow control
`/cfg/port` *n*`/gig/auto`	Set autonegotiation mode
`/cfg/port` *n*`/gig/cur`	Show the current gig phy settings
`/cfg/port` *n*`/rmon`	Enable/Disable RMON for port

Table 1 Unavailable ACElerate Release 5 Commands

Command	Item
/cfg/ip/route	IP Static Route Menu
/cfg/ip/route/add	Add static route
/cfg/ip/route/rem	Remove static route
/cfg/ip/route/cur	Display current static routes
/cfg/ip/frwd	IP Forwarding Menu
/cfg/ip/frwd/lnet	Set local IP network for route cache
/cfg/ip/frwd/lmask	Set local IP netmask for route cache
/cfg/ip/frwd/on	Globally turn IP Forwarding ON
/cfg/ip/frwd/off	Globally turn IP Forwarding OFF
/cfg/ip/frwd/cur	Display current static routes
/cfg/ip/rip1	Routing Information Protocol Menu
/cfg/ip/rip1/spply	Enable/disable supplying route updates
/cfg/ip/rip1/lsten	Enable/disable listening to route updates
/cfg/ip/rip1/deflt	Enable/disable listening to default routes
/cfg/ip/rip1/statc	Enable/disable supplying static routes
/cfg/ip/rip1/poisn	Enable/disable poisoned reverse
/cfg/ip/rip1/updat	Set update period
/cfg/ip/rip1/on	Globally turn RIP ON
/cfg/ip/rip1/off	Globally turn RIP OFF
/cfg/ip/rip1/cur	Display current RIP configuration
/cfg/ip/port	IP Port Menu
/cfg/ip/port *n*/on	Turn IP Forwarding ON
/cfg/ip/port *n*/off	Turn IP Forwarding OFF
/cfg/ip/port *n*/cur	Display current port configuration
/cfg/ip/metrc	Set default gateway metric
/cfg/mirr/port	Port Mirroring Menu
/cfg/mirr/port/to	Set monitoring port
/cfg/mirr/port/from	Set mirrored port
/cfg/mirr/port/dir	Set direction
/cfg/mirr/port/tmout	Set mirroring timeout value
/cfg/mirr/port/dis	Disable Port Mirroring
/cfg/mirr/port/ena	Enable Port Mirroring
/cfg/mirr/port/cur	Display current Port Mirroring configuration
/cfg/slb/real *n*/remot	Enable/disable remote site operation

Table 1 Unavailable ACElerate Release 5 Commands

Command	Item
`/cfg/slb/virt`	Virtual Server Menu
`/cfg/slb/virt` *n*`/vip`	Set IP addr of virtual server
`/cfg/slb/virt` *n*`/dname`	Set domain name of virtual server
`/cfg/slb/virt` *n*`/layr3`	Enable/disable layer 3 only balancing
`/cfg/slb/virt` *n*`/add`	Add virtual port and real server group
`/cfg/slb/virt` *n*`/rem`	Remove virtual port
`/cfg/slb/virt` *n*`/map`	Map virtual port to real port
`/cfg/slb/virt` *n*`/hname`	Set hostname of virtual port
`/cfg/slb/virt` *n*`/udp`	Enable/disable UDP balancing for virtual port
`/cfg/slb/virt` *n*`/pbind`	Enable/disable persistent bindings for virtual port
`/cfg/slb/virt` *n*`/ena`	Enable virtual server
`/cfg/slb/virt` *n*`/dis`	Disable virtual server
`/cfg/slb/virt` *n*`/del`	Delete virtual server
`/cfg/slb/virt` *n*`/cur`	Display current virtual configuration
`/cfg/slb/filt` *n*`/actio nat`	Specify filter action for generic Network Address Translation
`/cfg/slb/filt` *n*`/nat`	Set which addresses are network address translated
`/cfg/slb/fail/spply`	Enable/disable RIP1 Supply when standby
`/cfg/slb/dist`	Distribute SLB Menu
`/cfg/slb/dist/site`	Remote Site Menu
`/cfg/slb/dist/site/prima`	Set primary switch IP address of remote site
`/cfg/slb/dist/site/secon`	Set secondary switch IP address of remote site
`/cfg/slb/dist/site/updat`	Enable/disable remote site updates
`/cfg/slb/dist/site/ena`	Enable remote site
`/cfg/slb/dist/site/dis`	Disable remote site
`/cfg/slb/dist/site/del`	Delete remote site
`/cfg/slb/dist/site/cur`	Display current remote site configuration
`/cfg/slb/dist/dns`	Enable/disable DNS handoffs
`/cfg/slb/dist/ttl`	Set Time To Live of DNS resource records
`/cfg/slb/dist/http`	Enable/disable HTTP redirects
`/cfg/slb/dist/intr`	Set interval between remote site updates
`/cfg/slb/dist/on`	Globally turn Distributed SLB ON
`/cfg/slb/dist/off`	Globally turn Distributed SLB OFF
`/cfg/slb/dist/cur`	Display current distributed SLB configuration
`/cfg/trunk`	Trunk Group configuration menu
`/cfg/trunk` *n*`/add`	Add port to trunk group
`/cfg/trunk` *n*`/rem`	Remove port from trunk group
`/cfg/trunk` *n*`/ena`	Enable trunk group
`/cfg/trunk` *n*`/dis`	Disable trunk group
`/cfg/trunk` *n*`/del`	Delete trunk group
`/cfg/trunk` *n*`/cur`	Display current Trunk Group configuration

Table 1 Unavailable ACElerate Release 5 Commands

Command	Item
`/oper/port` *n*`/rmon`	Enable/disable RMON for port
`/oper/mirr`	Operations-level Port Mirroring Menu
`/oper/mirr/to`	Set monitoring port
`/oper/mirr/from`	Set mirrored port
`/oper/mirr/dir`	Set direction
`/oper/mirr/tmout`	Set mirroring timeout value
`/oper/mirr/dis`	Disable Port Mirroring
`/oper/mirr/ena`	Enable Port Mirroring
`/oper/mirr/cur`	Display current Port Mirroring configuration
`/oper/swkey`	Enter key to enable software feature
`/oper/rmkey`	Enter software feature to be removed
`/maint/route`	IP Route Manipulation Menu
`/maint/route/find`	Show a single route by destination IP address
`/maint/route/gw`	Show routes to a single gateway
`/maint/route/type`	Show routes of a single type
`/maint/route/tag`	Show routes of a single tag
`/maint/route/if`	Show routes on a single interface
`/maint/route/dump`	Show all routes

Performance Notes

Establishing a Link at Near Line Rate

The switch ports may have trouble establishing a link if a connecting device is transmitting at or near line rate.

Late-Breaking News and Support

Web access: http://www.alteon-networks.com

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