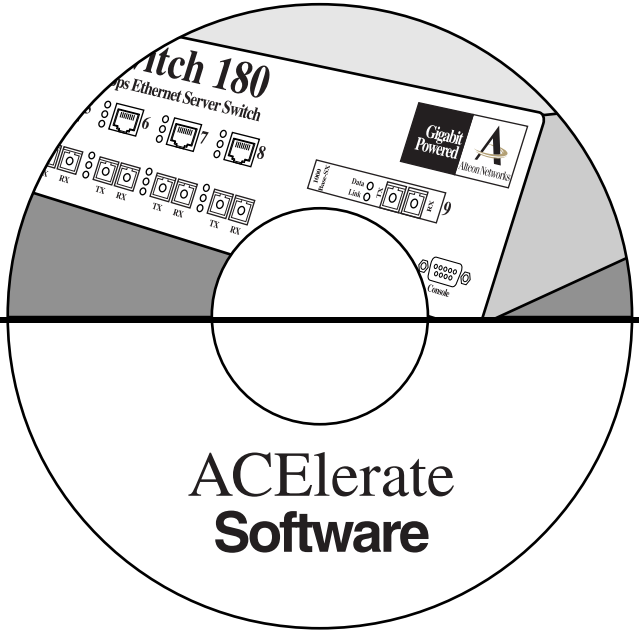
RELEASE NOTES:
User's Guide



Release 4

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Release Notes

These release notes provide the latest information regarding your ACElereate Switch Software, Release 4.0.41 (and above). This supplement modifies information found in the complete documentation: *ACElerate Switch Software User's Guide* for Release 4 (part number 050031, Revision A). Please keep this information with your Alteon Networks manuals.

Additional Load Balancing Metrics

Metrics are discussed on page 7-34 of the *ACElerate Switch Software User's Guide*. Please note the following additional information:

The metric options determine the method for selecting which real server in a real server group will be the target of the next client request. In addition to the `roundrobin` and `leastconns` load balancing metrics, the `minmisses` and `hash` metrics are now available.

The `minmisses` Metric

The `minmisses` metric is optimized for Web Cache Redirection, Firewall Load Balancing and Router Load Balancing. We recommend its use for all Application Redirection situations.

When `minmisses` is specified for a real server group performing Application Redirection, all requests for a specific IP destination address will be sent to the same server. This is particularly useful in caching applications, helping to maximize successful cache hits. Best statistical load balancing is achieved when the IP address destinations of load balanced frames are spread across a broad range of IP subnets.

Minmisses can also be used for Server Load Balancing. When specified for a real server group performing Server Load Balancing, all requests from a specific client will be sent to the same server. This is useful for applications where client information must be retained on the server between sessions. Server load with this metric becomes most evenly balanced as the number of active clients increases.

Metrics are set using the `metrc` command on the Real Server Group Menu. For example:

```
>> # /cfg/slb/group 1                    (Select real server group #1)
>> Real server group 1# metrc minmisses  (Specify the minmisses metric)
```

The `minmisses` metric should also be defined in Step #6 of the web-cache redirection example shown on page 16-4 of your *ACElerate Switch Software User's Guide*.

The `hash` Metric

Like minmisses, the `hash` metric uses IP address information in the client request to select a server. For Application Redirection, all requests for a specific IP destination address will be sent to the same server. This is particularly useful for maximizing successful cache hits. For Server Load Balancing, all requests from a specific client will be sent to the same server. This is useful for applications where client information must be retained between sessions.

The `hash` metric should be used if the statistical load balancing achieved using `minmisses` is not as optimal as the administrator desires. Although the hash metric can provide more even load balancing at any given instance, it can be slower to redistribute load when servers are brought in or out of service.

If the Load Balancing statistics (accessed via the command-line interface, ACEvision, or SNMP) indicate that one server is processing significantly more requests over time than other servers, the administrator should consider using the `hash` metric.

This metric is set using the `metrc` command on the Real Server Group Menu. For example:

```
>> # /cfg/slb/group 1                    (Select real server group #1)
>> Real server group 1# metrc hash       (Specify the hash metric)
```

Server Health Checks with TCP `FIN-ACK`

Layer 4 health checks determine the operational status of servers in a Real Server Group for Server Load Balancing and Application Redirection. Some servers may require Layer 4 health checks to include a TCP `FIN-ACK` response. If you have activated Layer 4 TCP-based server health checking, and the switch incorrectly classifies a server or server group as "`FAILED`," you can enable TCP `FIN-ACK` for Layer 4 health checking on the specific Real Server Group.

To enable TCP `FIN-ACK` on health checks for a Real Server Group, use these commands:

```
>> # /cfg/slb/group 1                    (Select real server group #1)
>> Real server group 1# finac enable     (Activate FIN-ACK health checks)
```

To disable TCP `FIN-ACK` on health checks for a Real Server Group, use these commands:

```
>> # /cfg/slb/group 1                    (Select real server group #1)
>> Real server group 1# finac disable    (Return to normal health checks)
```

Default Filters

Default filters are discussed on page 16-4 of the *ACElerate Switch Software User's Guide*. Please note the following additional information:

Although recommended when configuring filters for IP traffic control and redirection, default filters are not required. Using default filters can increase session performance, but takes some of the session binding resources. If you experience an unacceptable number of binding failures as shown in the Server Load Balancing Maintenance Statistics (`/stats/slb/maint`), you may wish to remove some of the default filters.

Use of Port Mirroring and Layer 4 Services

Port Mirroring cannot be used simultaneously with Layer 4 services (Server Load Balancing or Application Redirection) on any switch port connected to a server either directly, or through another switch or hub. For Server Load Balancing, this applies to any switch port configured in the "`server`" state. For Application Redirection, this applies to any switch port that has a cache server attached to it directly or indirectly.

Use your network analyzer with a full-duplex pass-through connection or an Ethernet hub when troubleshooting a switch port for a server used for Layer 4 services.

Downloading Configuration Files to the Console Port

Under certain conditions, when downloading a long list of configuration commands from a saved file into the switch console port, some input data may be lost. This can cause configuration errors. This problem can be resolved as follows: If the switch has been configured with it own IP address, you can use Telnet to establish a connection to the switch's administration session and download the configuration file.

ACEvision Limitations

There are some features available using the Command Line Interface which are not yet available using the ACEvision web-based interface:

- Configuring filters
- Display of MAC or Layer 2 forwarding database (FDB) entries
- Traceroute and `ping`
- When configuring real servers, the Backup Server ID field does not function.

Errata for Filtering Example

A number of corrections should be noted for the Security Example shown in Chapter 16 of the *ACElerate Switch Software User's Guide*. In the example, the `sip`, `dip` and `dmask` for filters #3, #7, and #9 are reversed. The correct configuration information follows.

On page 16-7, Step #4, Filter #3, replace the `sip`, `dip`, and `dmask` with the following:

```
>> Filter 3# dip any                    (To any destination IP address)
>> Filter 3# sip 205.177.15.3           (From mail-server source IP address)
>> Filter 3# smask 255.255.255.255      (Fill mask for exact source address)
```

On page 16-9, Step #7, Filter #7, replace the `sip`, `dip`, and `dmask` with the following:

```
>> Filter 7# dip any                    (To any destination IP address)
>> Filter 7# sip 205.177.15.4           (From local Domain Name Server)
>> Filter 7# smask 255.255.255.255      (Fill mask for exact source address)
```

On page 16-9, Step #7, Filter #9, replace the `sip`, `dip`, and `dmask` with the following:

```
>> Filter 9# dip any                    (To any destination IP address)
>> Filter 9# sip 205.177.15.4           (From local Domain Name Server)
>> Filter 9# smask 255.255.255.255      (Fill mask for exact source address)
```

Late-Breaking News and Support

Web access: `www.alteon-networks.com`

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