radware

Alteon
34.x

Alteon Level 1 Lab Manual Troubleshooting

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Overview

Alteon supports a diverse range of network architectures and protocols; some are used to maintain and monitor connectivity and isolate the connectivity faults. The types of problems that typically occur with networks are connectivity and performance.

This section provides conceptual information about the methods and tools used for troubleshooting the ADC VA (Alteon Virtual Appliance) and isolating problems in the Alteon. It will help you to use the common commands to check Alteon status and to ensure successful Alteon maintenance activities.

After completing this lab, you will understand the uses of various commands that can be used to validate the configuration or operation of the Alteon Switch.

You will learn to use different commands to check critical Alteon functions and cultivate the ability to spot errors in your configuration.

You will also be familiarized with the techniques to gather Alteon statistical data for troubleshooting.

This section provides conceptual information about the methods and tools used for troubleshooting and problem isolation in Alteon.

Objectives

After viewing training modules on troubleshooting and completing this lab, you should be able to describe various commands that can be used to validate the configuration or operation of the Alteon

Lab Activities

Here is a summary of tasks in this lab:

1. ADC VA Troubleshooting
2. Technical Support

Troubleshooting ADC VA

Reconnect to ADC VA using ssh and WebUI or Cyber Controller.

1. Use the **diff** and **revert** command.
   Add a new configuration (for example a new IP interface) but do not apply it. Use the **diff** command.

CLI:

```
diff
```

GUI:

- **Diff** is on the top menu right side.
- Click **Diff** and **Show** to display pending changes.
  a. Revert the configuration back to previous (applied) configuration.

CLI:

```
revert
```

GUI:

- **Revert** is on the top menu in the middle.
- Click **Revert** and choose **Revert** from the selection.

b. Apply a new configuration (for example a new IP interface) but do not save it. Use the **diff flassh** command to see configuration not yet saved.

CLI:

```
diff flash
```

GUI:

- **Diff** is on the top menu right side.
- Click **Diff Flash** and **Show** to display pending changes.

c. Revert the configuration back to previous (saved) configuration.

CLI:

```
revert apply
```

GUI:

- **Revert** is on the top menu in the middle.
- Click **Revert** and choose **Revert Apply** from the selection.

Some commands are global and can be used at any menu level. For assistance, use **help <command>**.

2. Use the Port Menu

View settings and statistics for individual physical ports.

CLI:

```
/cfg/port/cur <port number>
/i/port <port number>
/st/port/link <port number>
/st/port/ether <port number>
/st/port/if <port number>
```

GUI:

- Configuration -> Network -> Physical Ports -> Port Settings

- Monitoring -> Network -> Physical Ports
- Monitoring -> network -> Layer 2 -> FDB

This menu displays traffic statistics on the physical port. Use clear to reset values. Traffic statistics include SNMP Management Information Base (MIB) objects. The displayed interval is from the last ADC reboot or counter reset until the present.

3. View Server Load Balancing statistics

 **CLI:**

```
/stats/slb/real <server ID>
/stats/slb/group <group ID>
/stats/slb/virt <virt ID>
/i/port 1
```

 **GUI**:

- Monitoring -> Application Delivery -> Server Resources -> Real Servers
- Monitoring -> Application Delivery -> Server Resources -> Server Groups
- Monitoring -> Application Delivery -> Virtual Servers

4. Use the Information Menu to view STG (Spanning Tree Group) information.

 **CLI:**

```
/info/l2/stg
```

 **GUI**:
Monitoring -> Network -> Layer 2 -> STG
View information on the real server.

 **CLI:**

```
/info/slb/real <server ID>
```

 **GUI**:

- Monitoring -> Application Delivery -> Server Resources -> Real Servers
- Monitoring -> Network -> Later 2 -> FDB

Note IP, MAC address, VLAN, etc.

5. Identify logical loops in the network

NOTE: When multiple paths exist on a network, Spanning Tree Protocol (STP) configures the network so that an ADC uses only the most efficient path. STP detects and eliminates logical loops in a bridged network. STP forces redundant data paths into a standby (blocked) state. If the most efficient path fails, STP automatically sets up another active path on the network to sustain network operations. Thus, STP is used to prevent loops in the network topology.

a. Display Spanning Tree Group (STG) settings.

INFO: Alteon Operating System supports the IEEE 802.1p Spanning Tree Protocol (STP) and supports up to 16 instances of spanning trees or groups. Default STP group (1) is turned on and can have more than one VLAN. Each VLAN can be placed in only one Spanning Tree group per ADC except for the default Spanning Tree group (STG 1). All other Spanning Tree groups (2-16) can have only one VLAN associated with it. Spanning Tree can be enabled or disabled for each port. Multiple Spanning Trees can be enabled on tagged or untagged ports.

CLI:

```
/cfg/l2/stg <number> <option>
/c/l2/stg/cur
/i/l2/stg
```

GUI:
Monitoring -> Network -> Layer 2 -> STG

Technical Support

1. Technical Support Dump (tsdmp) has been requested

INFO: After contacting Radware support, a tsdmp is often requested. To get this important data, turn ON capture on your terminal emulation to record the large amount of data.

Upload to your TFTP server

CLI:

```
/maint/tsdmp
/maint/pttsdmp

/m/techdata
```

INFO: /maint/tsdump dumps all Alteon information, statistics, and configuration to your CLI screen.
You can log the tsdump output into a file, and send it to Radware Technical Support for debugging purposes.

GUI:
Monitoring -> System -> Maintenance -> Technical Support Data

2. Core panic dump, if available

The Alteon can create a panic dump if a critical event happens. This causes the ADC to immediately dump state information to flash memory and automatically reboot. Technical support may request a panic dump for analysis of an open case, if a coredump was created by the Alteon.

Use CLI to transmit the system coredump to a TFTP, FTP, or SCP server and store it in a file.

Dumps data to a server specified by **hostname**. Data is stored in a **filename**. Transport protocol is FTP, TFTP, or SCP via a management or data port.

 **CLI:**

```
/maint/coredump/list
/maint/coredump/upload
```

 **GUI:**

Monitoring -> System -> Maintenance -> Core File Management

For questions, contact training@Radware.com