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Alteon
34.x

Alteon Level 1 Lab Manual Switching & Routing

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Objectives

After viewing the online module **Switching and Routing** and completing this lab, you should be able to:

- Set up Alteon to operate as a router: configure VLANs.
- Define IP interfaces.
- Set up a default gateway.
- Back up (export) your configuration.
- Modify and import your configuration.

Overview

In this lab, you will set up the switching and routing for Layer 2 and Layer 3 of the OSI Model.
You will save this configuration as STANDARD SETUP for your virtual lab configuration.
You will reuse this STANDARD SETUP configuration throughout the training lab exercises.
At RDP desktop is folder AlteonConfigFiles. You can use instead of setting up by yourself AlteonA_Basic_Configuration_...tgz. **We recommend you should do by yourself.**
After completing standard setup configuration, you should know how to enable, apply, and save your settings for future use. Remember to use this EASY acronym to help correctly save your work. Command-line interface (CLI) is EASY to use!

- E = Enable
- A = Apply
- S = Save
- Y = Yes to confirm the save

Configuration Details

When you perform implementation in real life scenario, it is important to collect information in preparation of your work.

Configure L2 VLANs		
Physical Port	**VLAN ID**	**Description**
1	11	External VLAN
2	14	Internal VLAN

Configure L3 IP Interfaces					
IF ID	**IP of Alteon A**	**IP of Alteon B**	**Mask**	**Gateway**	**VLAN ID**
1	192.168.175.11	192.168.175.12	255.255.255.0	192.168.175.254	11
2	10.200.1.11	10.200.1.12	255.255.255.0		14

LAB Preparation: Access Alteon

Before you begin this lab, you should access Alteon and login. Keep in mind, using Cyber Controller require locking

Lab Activities

Here is a summary of what you will be doing in lab:

1. Configure basic setup
   - Setup Layer 2 VLANS
   - L2 Advanced Configuration (Optional)
   - Define L3 IP interfaces
   - Set default gateway
2. Validate your configuration

Configure Basic Setup

Use Web GUI:

1. Configure Layer 2 (L2) VLANS.

Configure L2 VLANs		
Physical Port	**VLAN ID**	**VLAN Name**
1	11	Client_Net
2	14	Server_Net

a) **Configuration → Network → Layer 2 → VLAN**
b) Click **+** [to add] …
c) Fill in the information
   i. **Check** "Enable VLAN"
   ii. Enter **VLAN ID**
   iii. Enter **VLAN Name**
   iv. Select port for the VLAN and click **>** (arrow to the right) to move the port to "Selected"
   v. **Submit**
d) Repeat step i. to v. for next VLAN.
e) Click on "**Diff**" and **"Diff"** again and **"Show"** to verify changes you did.
f) Remember to activate change by **Apply** and save it by **Save**

2. Turn off Spanning Tree Group (STG 1).

You can configure up to 16 different Spanning Tree Groups. All VLANs are added by default to group number 1.

In the lab STG 1 is already turned off, but you can do the below activity to verify.

Go to **Configuration → Network → Layer 2 → Spanning Tree → Spanning Tree Group →** check if Group # 1 status is disabled.
If not,

a) Select Spanning Group ID 1
b) Click on the pencil icon
c) Uncheck the Enable Spanning Tree Group checkbox
d) Submit
e) Remember to Apply change

3. Define Layer 3 (L3) IP interfaces for both VLANs.

Configure L3 IP Interfaces						
IF ID	**IP of Alteon A**	**IP of Alteon B**	**Mask**	**Gateway**	**VLAN ID**	**Description**
1	192.168.175.11	192.168.175.12	255.255.255.0	192.168.175.254	11	Client_Net
2	10.200.1.11	10.200.1.12	255.255.255.0		14	Server_Net

a) **Configuration → Network → Layer 3 → IP Interfaces**
b) Click **+** [add IP address]
c) Fill in the information
   i. Check the "**Enable IP Interface**"
   ii. Enter "**Interface ID**"
   iii. Enter "**Description**"
   iv. Enter "**IP Address of Alteon A**"
   v. Enter "**Mask**"
   vi. Select "**VLAN**" from the drop down menu.
   vii. Enter "**IP Address of Alteon B**" as Peer IP
d) Click "**Diff**" to verify pending changes
e) **Submit** and **Apply** changes

4. Set default gateway 192.168.175.254

a) **Configuration → Network → Layer 3 → Gateway**
b) Click on **+** to add
c) Fill in the information
   i. Check "**Enable Gateway**"
   ii. Enter "**1**"
   iii. Enter "**192.168.175.254**"
d) Click "**Submit**"
e) Click "**Diff**" to verify pending changes.
f) Click "**Apply** Required"
g) Validate your configuration, see next page
h) Click "**Save Required**"

Reminder: Don't forget to Apply your changes! Save command you should use after doing all setup and have verified your configuration. In case you are not happy 'Revert Apply" can remove all changes without any issue. If you have already saved your config only "Configuration Management" Next Boot Configuration Block "Backup" undo last saved change. This requires a Alteon reboot. In case you did a couple of save commands you can remove changes only manually.

Validate Your Configuration

Make sure all your changes are reflected in the configuration of the device. Use mRemoteNG **Alteon-A_SSH** and connect to Alteon-A by SSH.

CLI:

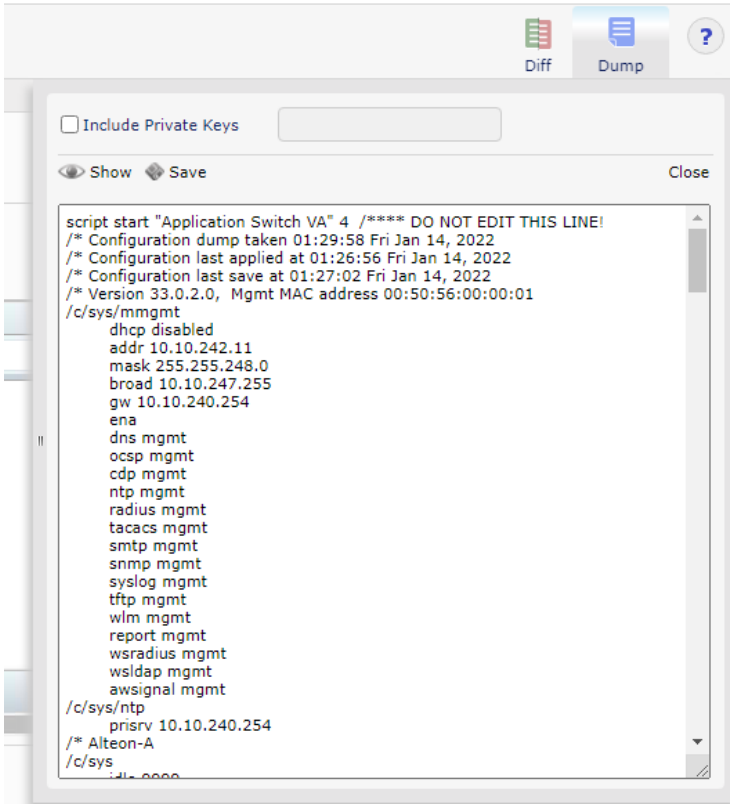
```
cc <enter>
>> Team01 - Management Port# cc
script start "Application Switch VA" 4  /**** DO NOT EDIT THIS LINE!
/* Configuration dump taken 08:36:05 Mon Nov 15, 2021
/* Configuration last applied at 07:55:15 Mon Nov 15, 2021
/* Configuration last save at 05:54:23 Mon Nov 15, 2021
/* Version 33.0.2.0,  Mgmt MAC address 00:50:56:00:00:01
/c/sys/mmgmt
        dhcp disabled
        addr 10.10.242.11

...
//c/l3/if 1
        ena
        ipver v4
        addr 192.168.175.11
        vlan 11
        peer 192.168.175.12
        descr "Client_Net"
/c/l3/if 2
        ena
        ipver v4
        addr 10.200.1.11
        mask 255.255.255.0
        broad 10.200.1.255
        vlan 14
        peer 10.200.1.12
        descr "Server_Net"
/c/l3/gw 1
        ena
        ipver v4
        addr 192.168.175.254/c/sys/access/https/cert WebManagementCert
...

/c/sys/access/https/https e
/
script end  /**** DO NOT EDIT THIS LINE!
```

GUI will display the exact same info:

- Click “Dump”
- Click “Show”



Test Device Connectivity

1. Test connectivity to the devices connected to Alteon using **`/info/l3/ip`**

 **CLI:**

```
/info/l3/ip
IP information:
  Router ID: 0.0.0.0,  AS number 0, IP fragtbl 20k,, IP tnltbl 1k

,Interface information:
  1: IP4 192.168.175.11  255.255.255.0   192.168.175.255, vlan 11, up, BFD off
  2: IP4 10.200.1.11     255.255.255.0   10.200.1.255   , vlan 14, up, BFD off

IPv6 Link Local Address Information:

Default gateway information: metric strict
  1: 192.168.175.254,                              vlan any,  up

Current IP forwarding settings: ON, dirbr disabled, noicmprd disabled, rtcache
enabled

Current local networks:
None
------------------------------------------------
Current IPv6 local networks:

Current IP port settings:
  All other ports have forwarding ON

Current network filter settings:
  none

Current route map settings:
```

2. Test connectivity to the devices connected to Alteon using Ping. Test DefGw and both Web Server.

CLI:

```
ping 192.168.175.254 [to gateway]
[host 192.168.175.254, max tries 5, delay 1000 msec]
192.168.175.254: #1 ok, RTT 2 msec.
192.168.175.254: #2 ok, RTT 2 msec.
192.168.175.254: #3 ok, RTT 1 msec.
192.168.175.254: #4 ok, RTT 3 msec.
192.168.175.254: #5 ok, RTT 1 msec.
Ping finished.

ping 10.200.1.100 [Web Server 1]
ping 10.200.1.200 [Web Server 2]
```

3. Export (save) the configuration.

Export configuration using CLI "put config" command and TFTP server.
Before you start, make sure on the RDP Client the 3CDaemon is started, by clicking on this Icon

CLI:

```
/cfg/ptcfg
10.10.240.1
STANDARD_SETUP.tgz
<enter>
y
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<enter>
```

```
>> Alteon-A - Layer 3# /cfg/ptcfg
Enter hostname (and IP version) or IP address of FTP/TFTP/SCP server: 10.10.240.1
Enter name of .tgz file and path on FTP/TFTP/SCP server or hit return for automatic file name:
STANDARD_SETUP.tgz
Enter username for FTP/SCP server or hit return for TFTP server:
Include private keys? [y/n]: y
Enter passphrase:
Reconfirm passphrase:
Enter "mansync" to get real/group/virt internal index config:
Preparing configuration file. Please wait.
Connecting to 10.10.240.1...

Current config successfully transferred to 10.10.240.1:STANDARD_SETUP.tgz

>> Alteon-A - Configuration#
```

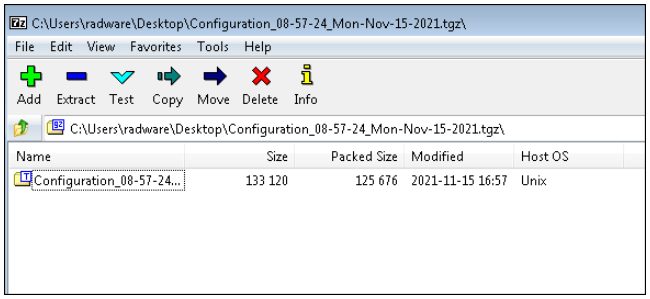
More comfortable is WEB GUI. This is working in browser only or Cyber Controller GUI.

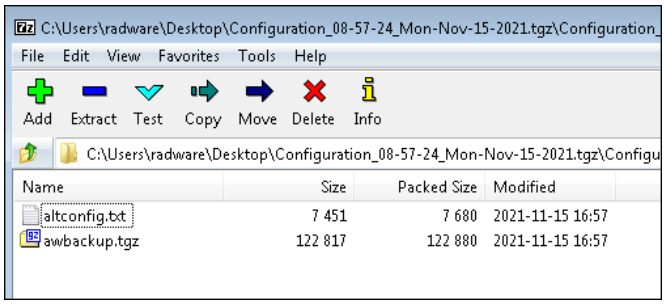
GUI.

a. Method 1:
   i. Click “**Dump**” icon right top corner
   ii. Check “**Include Private Keys**”
   iii. Enter **password** for private keys encryption
   iv. Click “**Save**”

b. Method 2:
   i. **Configuration → System → Configuration Management**
   ii. Select **Export the Configuration**
   iii. Check “**Include Private Keys**”
   iv. Enter “**Passphrase**” and “**Confirm Passphrase**” by a same password
   v. Click “**Export**”

In case of creating a backup, you get always a tgz file containing configuration of Alteon and Appwall.
Open altconfig.txt using Notepad++





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For questions, contact training@Radware.com