

NetEdit 2.1 - Part 3 – Overlays and Solution Deployment

IMPORTANT! THIS GUIDE ASSUMES THAT THE AOS-CX OVA HAS BEEN INSTALLED AND WORKS IN GNS3 OR EVE-NG. PLEASE REFER TO GNS3/EVE-NG INITIAL SETUP LABS IF REQUIRED.

<https://www.eve-ng.net/index.php/documentation/howtos/howto-add-aruba-cx-switch/>

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Lab Objective

This is the first of a NetEdit lab series. At the end of the lab series, you will be able to operate an Aruba AOS-CX Network using Aruba NetEdit 2.1.

Lab Overview

In this third lab of the NetEdit Series, you will configure a Static VXLAN Tunnel using the **Multi-Editor** Tool and use the **Deploy Solution** tool as an alternative way of managing configurations.

This lab requires is the continuation of Lab 1 and assumes that:

- you have completed Lab 1 and Lab 2
- the configuration of the switches is still active
- NetEdit is in the same state as it was at the end of Lab 2

Lab Network Layout

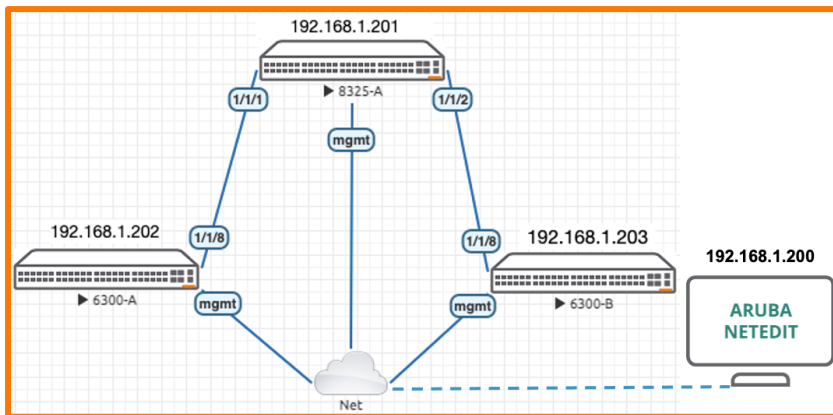


Figure 1. Lab topology and addresses

Lab Task 1. Creating and Visualizing an Overlay

Repeat the steps of Part 2 – Lab Task 2 to create the Change Validation test and

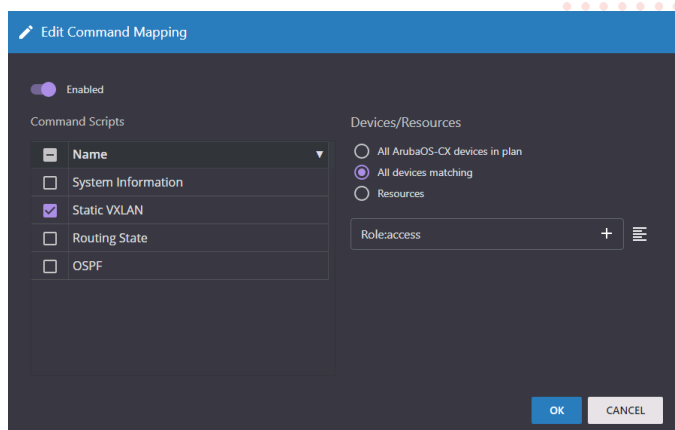
- Create the change validation **Command Script**

Commands

```
show interface vxlan
show interface vxlan vni
show interface vxlan vteps
```

- Create the corresponding **Command Mapping**

Note: The VXLAN change validation will only be applied to the access switches. In the screen capture below, notice the right panel where the **Access query** has been applied. This is one of the most important use cases of the query feature.



Edit Command Mapping

☒ Enabled

Command Scripts

- ☐ Name
- ☐ System Information
- ☒ Static VXLAN
- ☐ Routing State
- ☐ OSPF

Devices/Resources

- ☐ All ArubaOS-CX devices in plan
- ☒ All devices matching
- ☐ Resources

Role: access

OK CANCEL

Configure Static VXLAN

In the **Device** page, select both access switches, and select the **Edit Config** (ACTION).

- Configure the static VXLAN interface

```

140 interface vxlan 1
141     description VXLAN-interface
142     source ip SEL
143     no shutdown
144     vni 1010
145     vlan 10
146     vtep-peer 10.254.1.2 (ACC1B(10.251.1.5))
147     vtep-peer 10.254.1.3 (ACC1A(10.251.1.4))
  
```

Source IP – Loopback 0

- ACC1A: 10.254.1.2
- ACC1B: 10.254.1.3

VTEP-peer – Peer Loopback 0

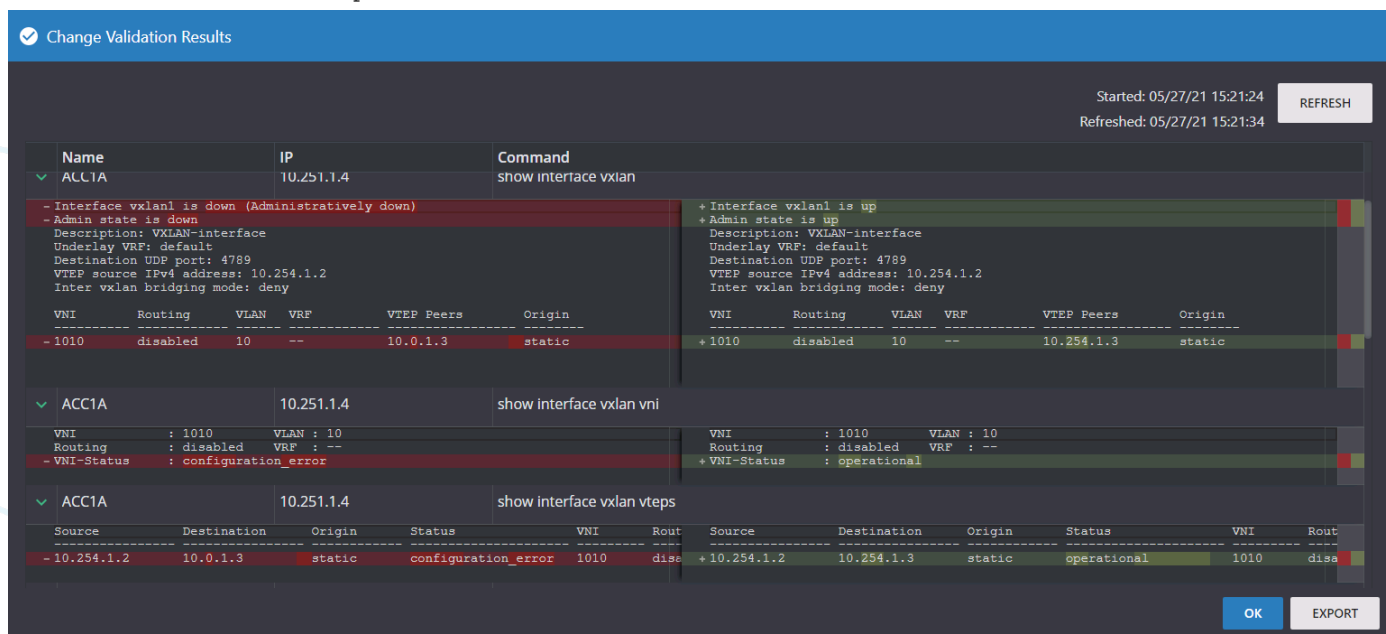
- ACC1A: 10.254.1.3
- ACC1B: 10.254.1.2

Validate the configuration, and deploy.

- At the top of the editor panel find these 3 options **VIEWS** **RETURN TO PLAN** **VALIDATE** and click on **VALIDATE**
- If the validation is successful, **RETURN TO PLAN** and **DEPLOY**
- Open **Change Validation**
- Analyze the outputs of the commands included in the **Static VXLAN** script


```

show interface vxlan
show interface vxlan vni
show interface vxlan vteps
      
```



Change Validation Results

Started: 05/27/21 15:21:24
Refreshed: 05/27/21 15:21:34

Name	IP	Command																								
ACC1A	10.251.1.4	show interface vxlan																								
<div> <div>- Interface vxlan1 is down (Administratively down)</div> <div>- Admin state is down</div> <div>Description: VXLAN-interface</div> <div>Underlay VRF: default</div> <div>Destination UDP port: 4789</div> <div>VTEP source IPv4 address: 10.254.1.2</div> <div>Inter vxlan bridging mode: deny</div> <table border="1"> <thead> <tr> <th>VNI</th> <th>Routing</th> <th>VLAN</th> <th>VRF</th> <th>VTEP Peers</th> <th>Origin</th> </tr> </thead> <tbody> <tr> <td>- 1010</td> <td>disabled</td> <td>10</td> <td>--</td> <td>10.0.1.3</td> <td>static</td> </tr> </tbody> </table> </div> <div> <div>+ Interface vxlan1 is up</div> <div>+ Admin state is up</div> <div>Description: VXLAN-interface</div> <div>Underlay VRF: default</div> <div>Destination UDP port: 4789</div> <div>VTEP source IPv4 address: 10.254.1.2</div> <div>Inter vxlan bridging mode: deny</div> <table border="1"> <thead> <tr> <th>VNI</th> <th>Routing</th> <th>VLAN</th> <th>VRF</th> <th>VTEP Peers</th> <th>Origin</th> </tr> </thead> <tbody> <tr> <td>+ 1010</td> <td>disabled</td> <td>10</td> <td>--</td> <td>10.254.1.3</td> <td>static</td> </tr> </tbody> </table> </div>			VNI	Routing	VLAN	VRF	VTEP Peers	Origin	- 1010	disabled	10	--	10.0.1.3	static	VNI	Routing	VLAN	VRF	VTEP Peers	Origin	+ 1010	disabled	10	--	10.254.1.3	static
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OK EXPORT

- A successful deployment is reflected by:

Command: show interface vxlan

```
Interface vxlan1 is up
Admin state is up
```

Command: show interface vxlan vni

```
VNI-status : operational
```

Command: show interface vteps

Source	Destination	Origin	Status	VNI
10.254.1.3	10.254.1.2	static	operational	1010

If the state is different from operation, ensure that the command “no shutdown” was included in the interface vxlan 1 configuration. By default, the interface is down.

- If the configuration change was successful, **COMMIT** the changes.
- Return to the **Network** page .
- On the left panel, locate the **Segmentation** and enable the display for VNI 1010

Segmentation
☐ Switch to Controller

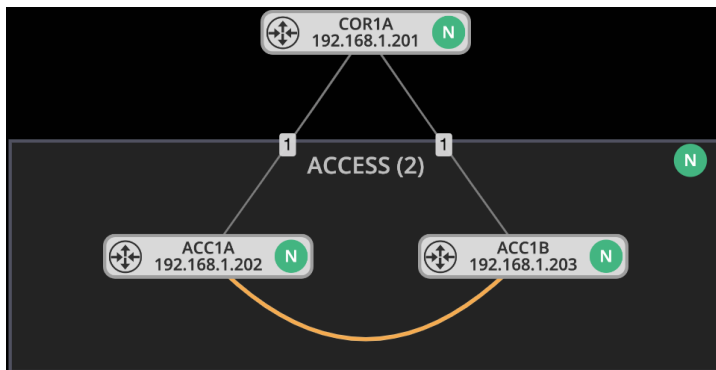
Controller IP

☒ Switch to Switch

1010

Segmentation: enabled
Switch to Switch: Selected
VNI: 1010

The network graph should have changed:



- Click on the yellow link (VXLAN Tunnel)
- On the right panel, locate the **Properties: Link** box
- Verify the information provided

Properties: Link		
↑ 10.251.1.4 ↔ 10.251.1.5		
Segmentation: Switch to Switch		
↑ 10.251.1.4 ↔ 10.251.1.5		
VxLAN Name	vxlan1	vxlan1
VNI	1010	1010
Interface State	up	up
Admin State	up	up
VTEP source address	10.254.1.2	10.254.1.3
VTEP peer address	10.254.1.3	10.254.1.2
Underlay VRF	default	default
VLAN	10	10
Type	static	static
Tunnel State	operational	operational

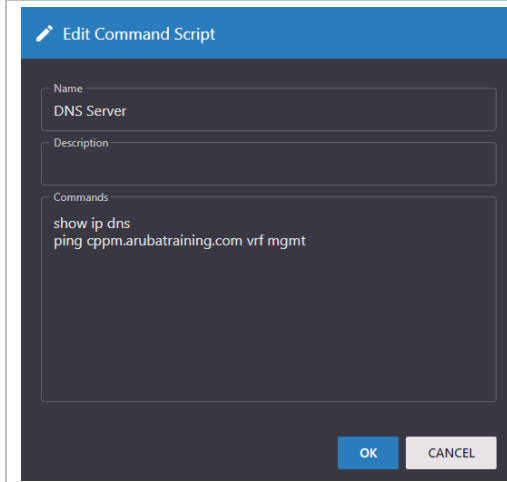
Lab Task 2. Changing Configurations using Deploy Solutions

In this activity, you will use “Deploy Solution” to configure the DNS Server on all switches at once.

As you go through the lab activity, compare the steps with the multi-editor process.

Create the Change Validation test.

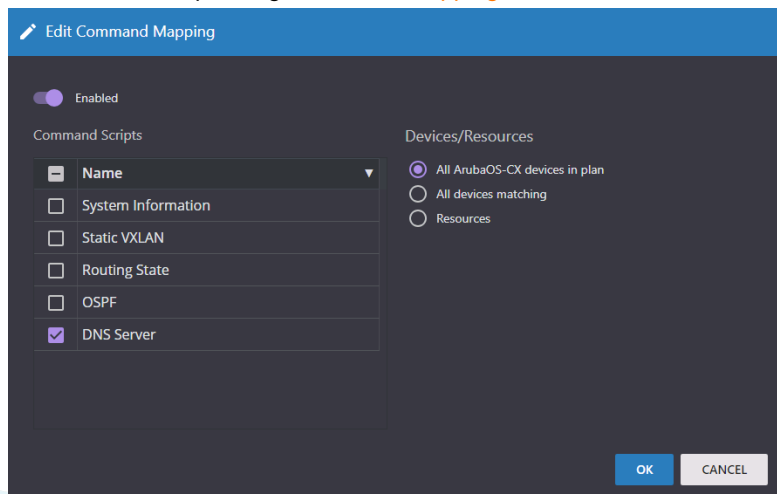
- Create the change validation **Command Script**




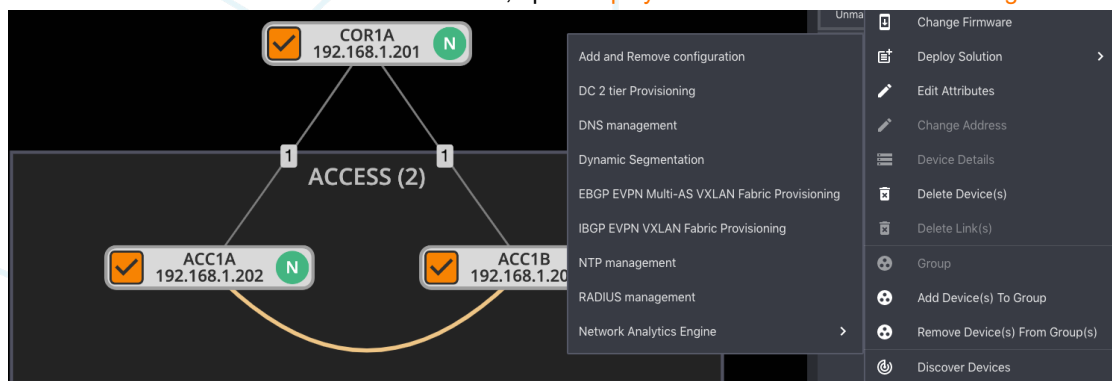
Commands

```
show ip dns
ping cppm.arubatraining.com vrf mgmt
```

- Create the corresponding **Command Mapping**



- Return to the **Network** page .
- Select all 3 switches and in the **ACTION** menu, open **Deploy Solutions** and select **DNS management**



- In the **Deploy Solution** form enter

DNS Server IPs: 10.253.1.254

VRF: mgmt

Leave all other parameters in default state.

- PREVIEW**

147 + 1p dns server-address 10.253.1.254 vrf mgmt

Scroll down to verify that the right command is ready for deployment. Click OK.

- CREATE**

- If all the validation is successful, **DEPLOY**

- Open **Change Validation** and look for the result of the ping command

```
✓ COR1A 10.251.1.2 ping cppm.arubatraining.com vrf mgmt
-ping4: cppm.arubatraining.com: Temporary failure in name resolution
+PING cppm.arubatraining.com (10.253.1.100) 100(128) bytes of data:
+108 bytes from 10.253.1.100: icmp_seq=1 ttl=63 time=0.354 ms
+108 bytes from 10.253.1.100: icmp_seq=2 ttl=63 time=0.249 ms
+108 bytes from 10.253.1.100: icmp_seq=3 ttl=63 time=0.265 ms
+108 bytes from 10.253.1.100: icmp_seq=4 ttl=63 time=0.271 ms
+108 bytes from 10.253.1.100: icmp_seq=5 ttl=63 time=0.234 ms
+
+--- cppm.arubatraining.com ping statistics ---
+ 5 packets transmitted, 5 received, 0% packet loss, time 4108ms
+rtt min/avg/max/mdev = 0.234/0.274/0.354/0.041 ms
```

- COMMIT

Important: Keep the lab as it is at this point for the NetEdit 2.1 Part 4

