

Jan 31 2016

Ref: OTV ==>Source: <http://www.infraworld.eu/cisco-nexus-7000-otv-configuration/>

The network layout in this testlab looks like this:



Let's add a few test VLANs on switch 1 and 2 and a SVI for VLAN2:

```
1 switch1(config)# vlan 1-4,99
2 switch1(config-vlan)# exit
```

Repeat the same steps for switch2!

Creating a SVI:

```
1 switch1(config)# feature interface-vlan
2 switch1(config)# int vlan 2
3 switch1(config-if)# ip add 10.0.0.1 255.255.255.0
4
5 switch2(config)# feature interface-vlan
6 switch2(config)# int vlan 2
7 switch2(config-if)# ip add 10.0.0.2 255.255.255.0
```

Because of the fact that we're using a SVI on a VLAN we want to extend, we have to create a VDC for the OTV configuration and allocate some ports to this VDC:

```
1 switch1(config)#vdc otv1
2 switch1(config-vdc)#allocate interface Ethernet1/25,Ethernet1/27,Ethern
3 switch1(config-vdc)#allocate interface Ethernet10/2
```

Repeat the same steps for switch2!

Let's add start the configuring the OTV configuration itself.

First, enter the VDC otv1:

```
1 | switch1(config)# switchto vdc otv1
```

We're in a new prompt:

switch1-otv1#

First, enable the otv feature

```
1 | switch1-otv1(config)#feature otv
```

Prepare the join interface:

```
1 | switch1-otv1(config)# interface Ethernet1/25
2 | switch1-otv1(config-if)# ip address 192.168.1.1/24
3 | switch1-otv1(config-if)# ip igmp version 3
4 | switch1-otv1(config-if)#no shutdown
```

Switch2-otv2 will be configured with ip address 192.168.1.2/24

Create a overlay interface:

```
1 | switch1-otv1(config)# interface overlay 1
2 | switch1-otv1(config-if-overlay)# otv join-interface Ethernet1/25
3 | switch1-otv1(config-if-overlay)# otv control-group 239.1.1.1
4 | switch1-otv1(config-if-overlay)# otv data-group 232.1.1.0/28
5 | switch1-otv1(config-if-overlay)# otv extend-vlan 2-99
6 | switch1-otv1(config-if-overlay)# no shutdown
```

The overlay configuration is identical for switch2-otv2.

We've extended vlan range 2-99 to the other site.

Last but not least, configure a site-id. This site-id is local per site! Configure on each site a different site-id.

```
1 | switch1-otv1(config)# otv site-identifier 0x1
2 | switch2-otv2(config)# otv site-identifier 0x2
```

Don't forget to create a trunk between the OTV VDC and the primary VDC for the extended vlans.

And we're done!

Let's verify:

```
1 switch1-otv1(config)# sh otv overlay 1
2
3 OTV Overlay Information
4 Site Identifier 0000.0000.0002
5
6 Overlay interface Overlay1
7
8 VPN name          : Overlay1
9 VPN state         : UP
10 Extended vlans    : 2-99 (Total:98)
11 Control group     : 239.1.1.1
12 Data group range(s) : 232.1.1.0/28
13 Join interface(s) : Eth1/25 (192.168.1.1)
14 Site vlan         : 100 (up)
15 AED-Capable       : Yes
16 Capability        : Multicast-Reachable
17
18 switch2-otv1(config)# sh otv route
19
20 OTV Unicast MAC Routing Table For Overlay1
21
22 VLAN MAC-Address      Metric  Uptime    Owner      Next-hop(s)
23 -----
24 2 4055.3906.9341      1      01:56:34  site      Ethernet10/2
25 2 64a0.e73f.3e41      42     01:56:34  overlay   switch1-otv2
```

And try a end to end ping between the two SVIs:

```
switch2(config)# ping 10.0.0.1
PING 10.0.0.1 (10.0.0.1): 56 data bytes
64 bytes from 10.0.0.1: icmp_seq=0 ttl=254 time=1.421 ms
64 bytes from 10.0.0.1: icmp_seq=1 ttl=254 time=0.891 ms
64 bytes from 10.0.0.1: icmp_seq=2 ttl=254 time=0.86 ms
64 bytes from 10.0.0.1: icmp_seq=3 ttl=254 time=0.863 ms
64 bytes from 10.0.0.1: icmp_seq=4 ttl=254 time=0.813 ms— 10.0.0.1 ping statistics —
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.813/0.969/1.421 ms
```