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SNEAK PEEK

# Cisco Support Community Expert Series Webcast

Evolution of Data Center: From Classic Ethernet to VXLAN

May 15<sup>th</sup>, 2018

with Tiago Silva

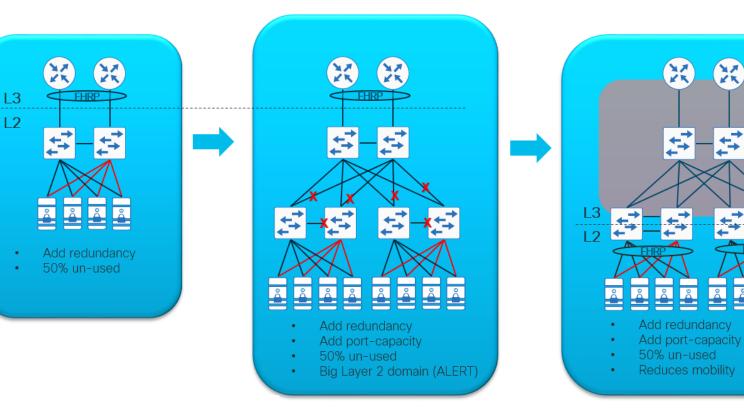
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- Introduction
- Evolution of Data Center Topologies
- Nexus Design and Best Practices
- Troubleshooting Tips for Nexus
- Live Demonstration

### **Topologies Evolution**



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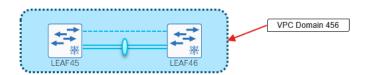
IGP

(OSPF, EIGRP)

## VPC - Configuration steps

#### Step 1: Create VPC Domain

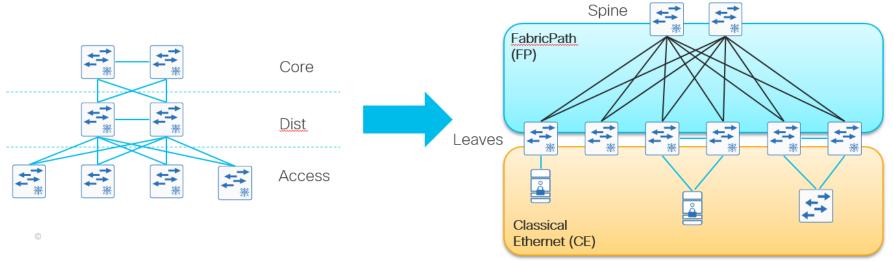
- VPC Domain must match between VPC Peers
- Must be unique in a contiguous Layer 2
- Global configuration
- Automatically creates a unique VPC System MAC address



Configuration			
LEAF45( <u>config</u> )#feature <u>vpc</u> LEAF45( <u>config</u> )# <u>vpc</u> domain 456 LEAF45( <u>config-vpc</u> -domain)#		LEAF46( <u>config</u> )#feature <u>vpc</u> LEAF46( <u>config</u> )# <u>vpc</u> domain 456 LEAF46( <u>config-vpc</u> -domain)#	
Verification			
LEAF45# show <u>ypc</u> role		LEAF46# show <u>vpc</u> role	
<pre>vPC Role status</pre>		<u>vPC</u> Role status	
<pre>vPC role vPC system-mac vPC local system-mac vPC peer system-mac</pre>	: primary : 00:23:04:ee:bf:c8 : a0:e0:af:67:51:6d : a0:e0:af:67:50:cd	<pre>VPC role VPC system-mac VPC local system-mac VPC peer system-mac</pre>	: secondary : 00:23:04:ee:bf:c8 : a0:e0:af:67:50:cd : a0:e0:af:67:51:6d

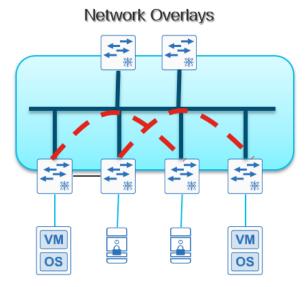
### FabricPath

- Migration of topologies from Layers to CLOS (Leaf-Spine-Leaf)
- ISIS running on the background
- No Spanning-Tree within the Fabric
- Traffic is encapsulated within the Fabric
- MAC Scaling



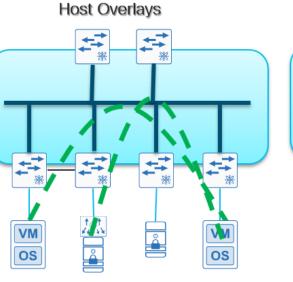


Edge devices

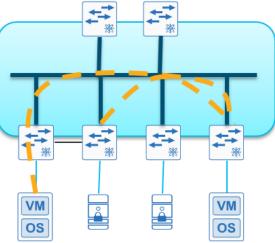


- End-points are physical devices
- Traditional VPNs
- OTV, VPLS, LISP, FP, VXLAN

- Virtual End-Points only
- Single admin domain
- VXLAN, NVGRE

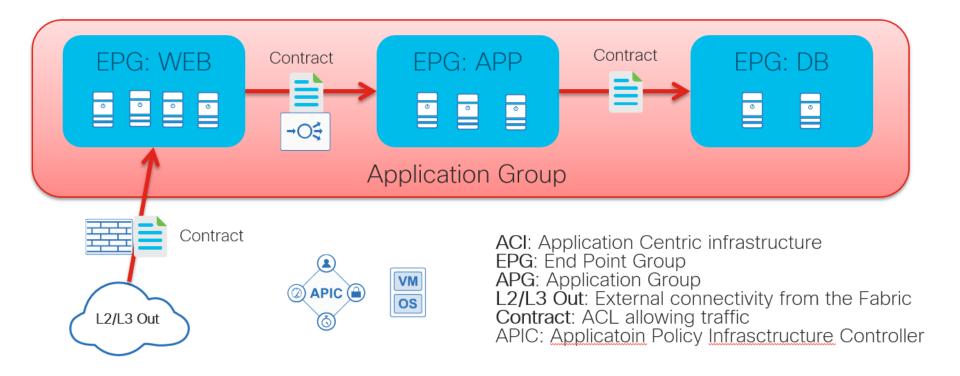


Hybrid Overlays



- Physical and Virtual
- Resilient + Scalable
- Open Standard
- X-Organizations / Federations

#### ACI - Overview



Check out some additional information on Data Center Technologies on the Cisco Support Community or Cisco.com

ACI Upgrade Preparation Best Practice and Troubleshooting

https://supportforums.cisco.com/t5/data-center-documents/aci-upgrade-preparation-best-practiceand-troubleshooting/ta-p/3211109

Chalk Talk: FabricPath, TRILL & VXLAN

https://supportforums.cisco.com/t5/data-center-blogs/chalk-talk-fabricpath-trill-vxlan/bap/3099807

If you are not yet a registered user on the community, <u>Click here</u> to register and become an active participant on the community.



#### Hope you enjoyed this little peek into the webcast. Remember it was just a peek. May 15<sup>th</sup> you get a chance to see the whole thing.



#### Register Now: http://bit.ly/Wecast-DCevolution

At the webcast you will be able to learn so much more and get a chance to submit questions for the expert to answer during the broadcast. We'll see you there!