

Wandering between the virtual and physical network architectural world of HyperFlex.

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@IAmJoost





Agenda

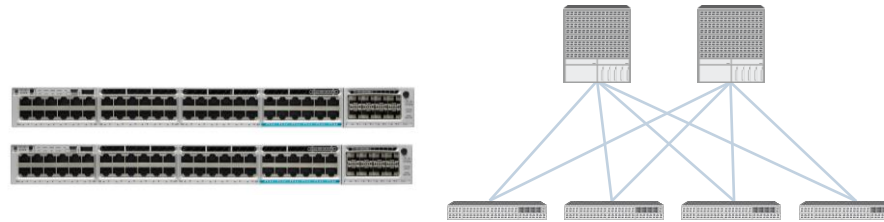
- HyperFlex physical network connections
- Network configuration
- HyperFlex virtual network connections
- HyperFlex Edge
- HyperFlex DC-no-FI
- HyperFlex DC / Stretched Cluster

HyperFlex physical network connections



HyperFlex DC-no-FI

Networking
options

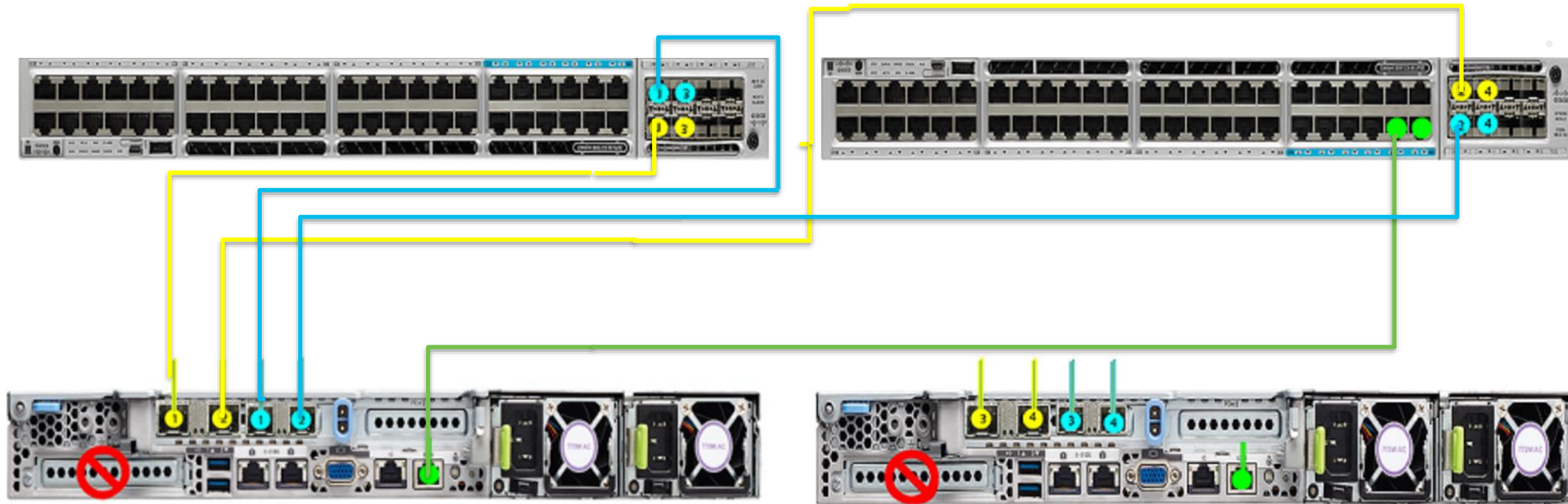


HyperFlex Edge

Networking
options



HyperFlex Edge & DC-no-FI (Quad Port)



Legend

- HX/ESXI MGMT
- HX Storage Data
- CIMC

HyperFlex Edge & DC-no-FI (2x Dual NIC)



Legend

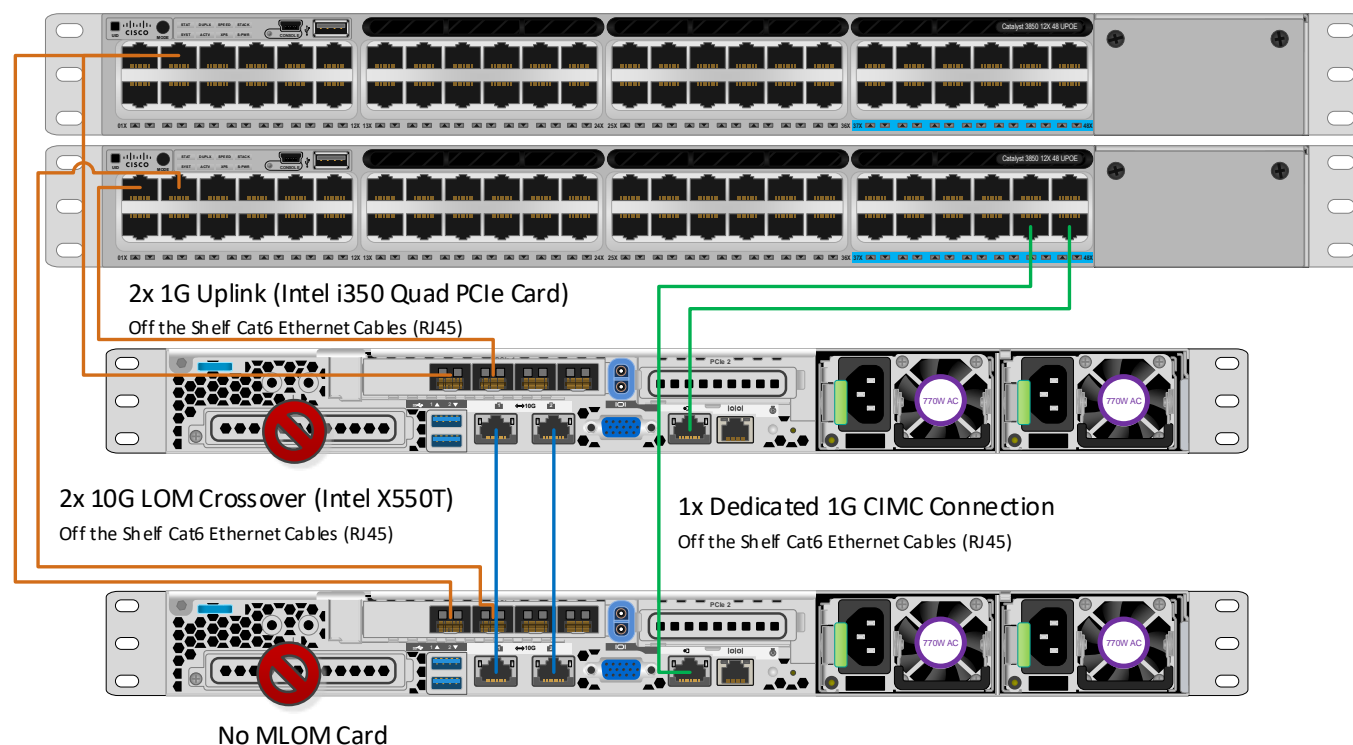
- HX/ESXI MGMT
- HX Storage Data
- CIMC



HyperFlex Edge 2-node

EDGE 2-Node

2 Node Edge – 1G ToR Option



Single or Dual ToR Switches
(If using single switch, all connections made to the same switch)

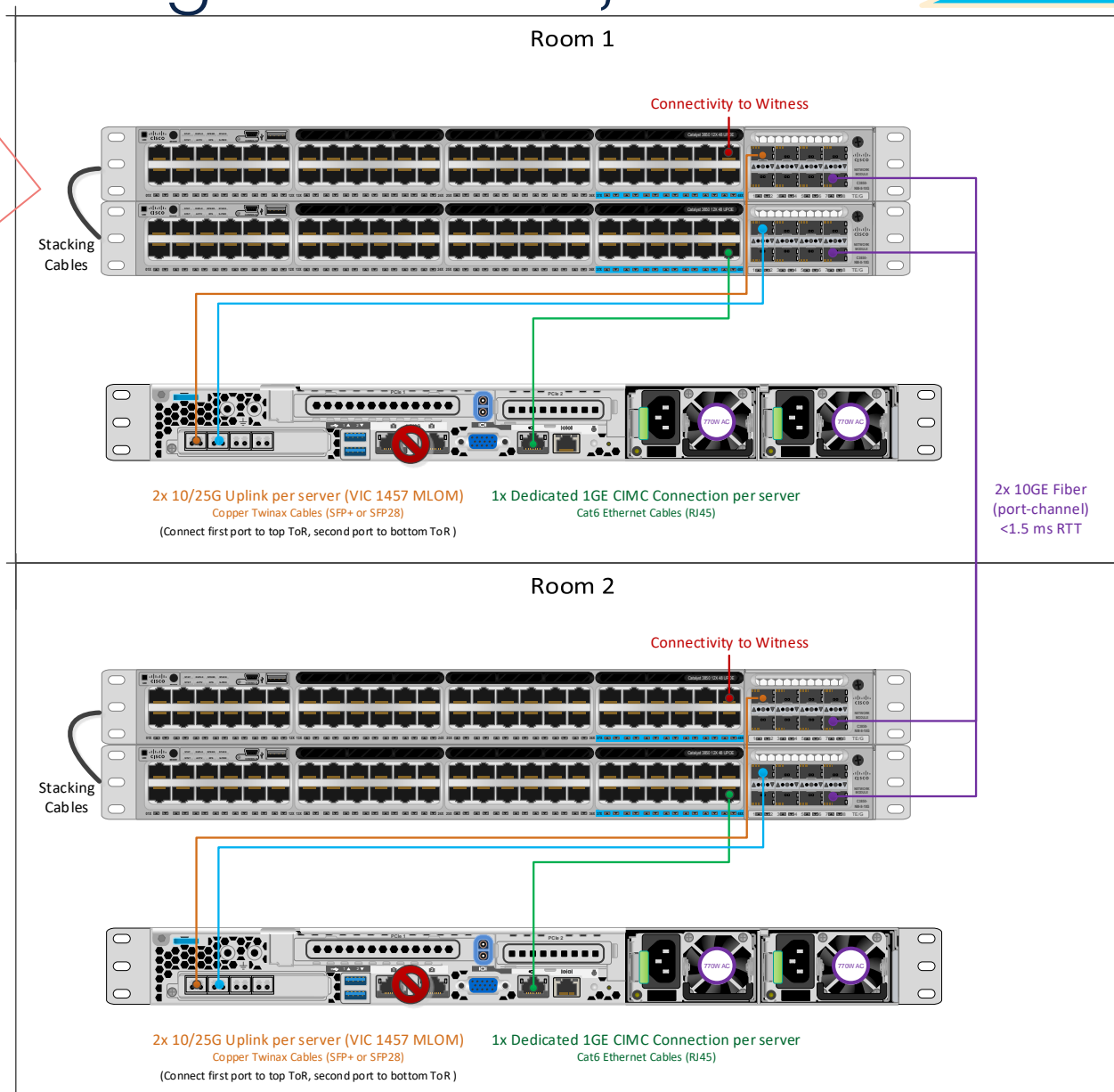
No future expansion capability

IS or containerized
Witness

HyperFlex Edge 2-node, 2-room

EDGE 2-Node

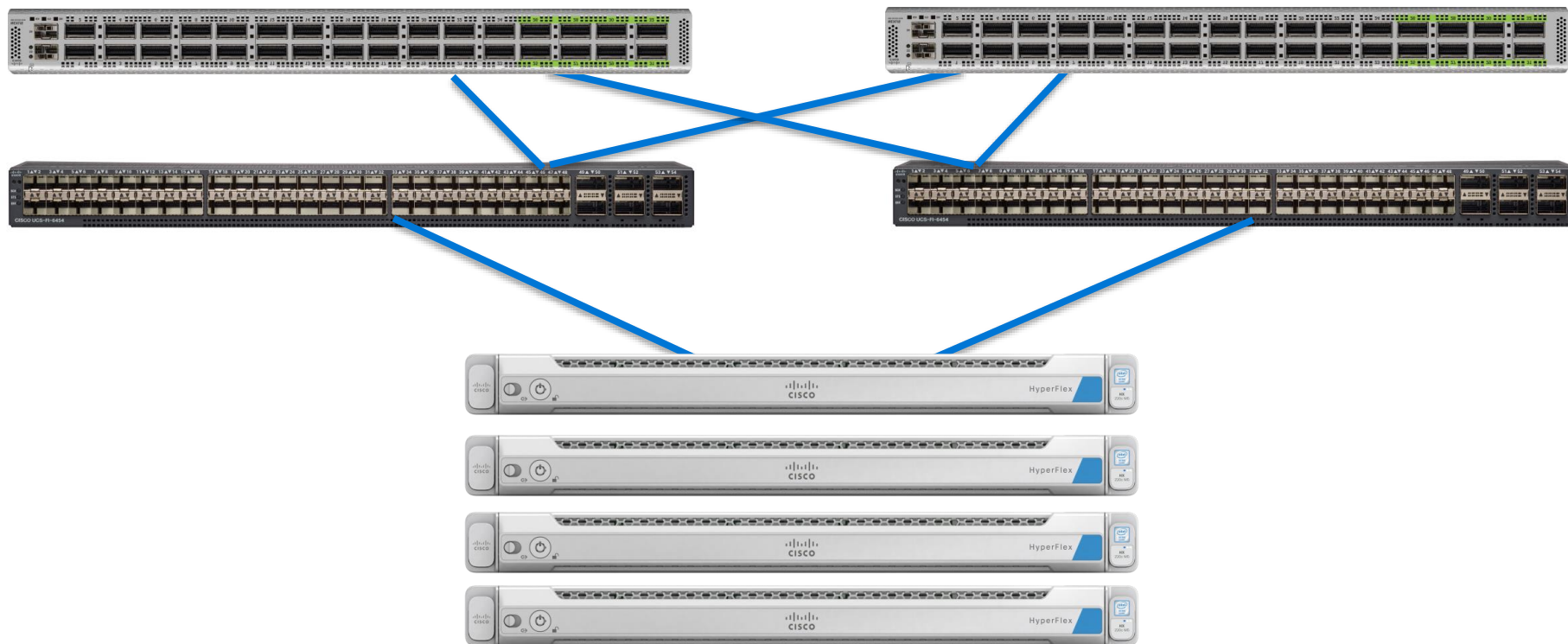
Dual switch per room



IS or containerized
Witness

HyperFlex DC

DC



HyperFlex DC

DC



HyperFlex Installer or Intersight



NTP



DNS



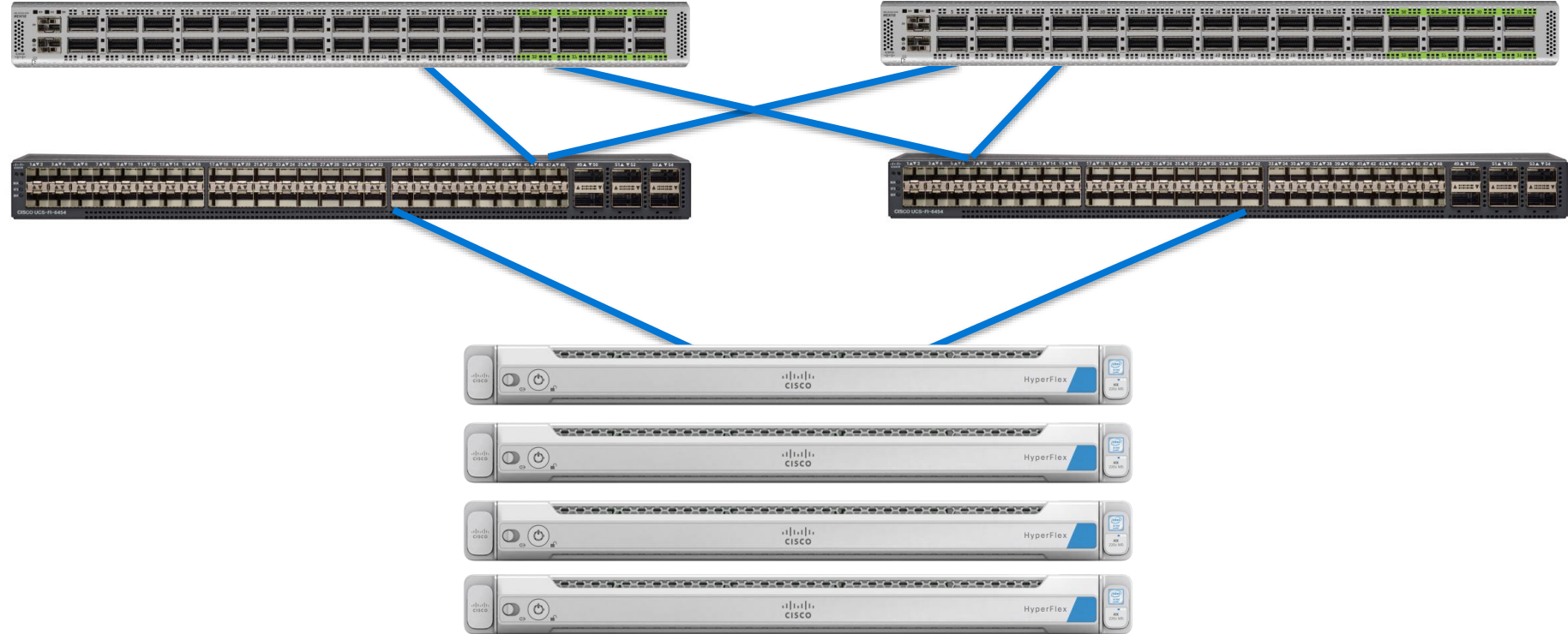
vCenter



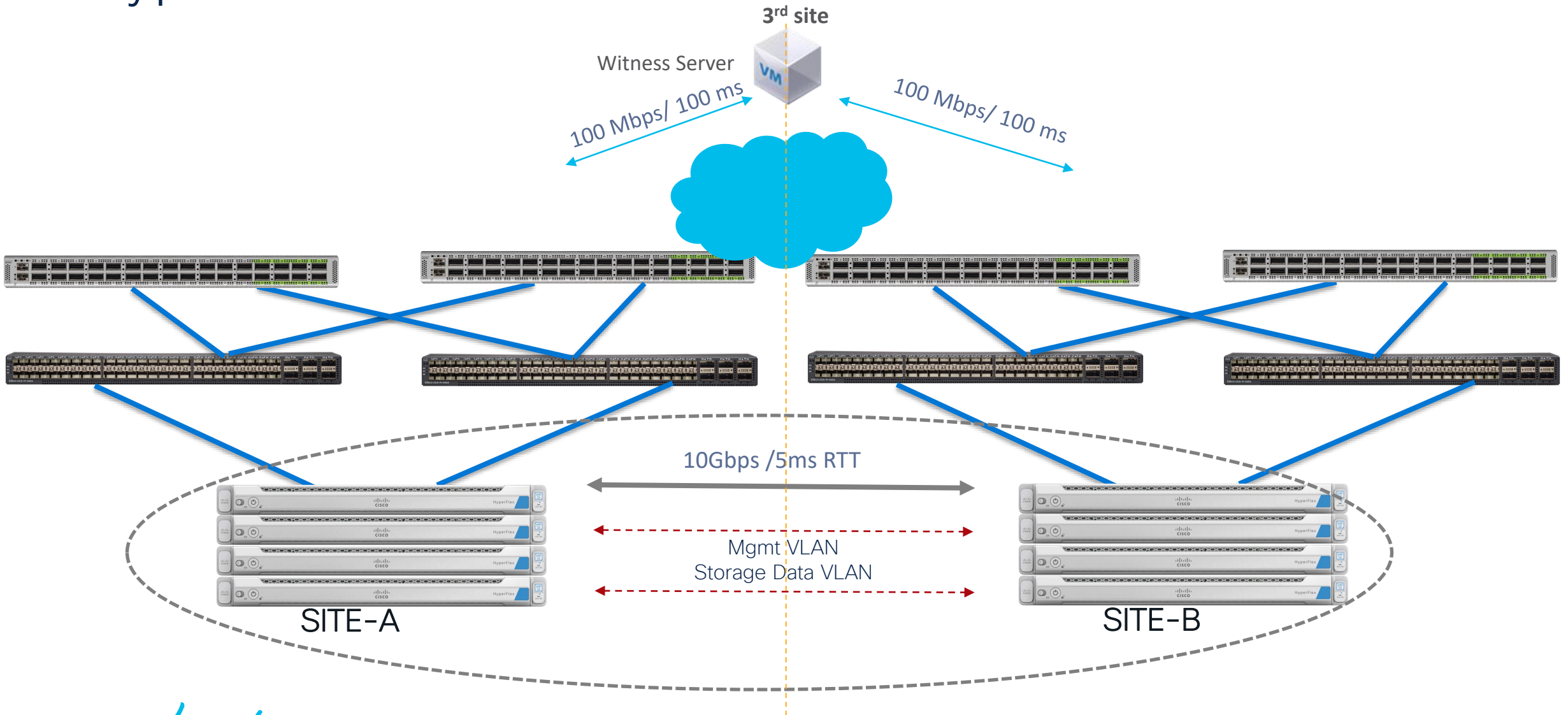
SMTP (Autosupport)



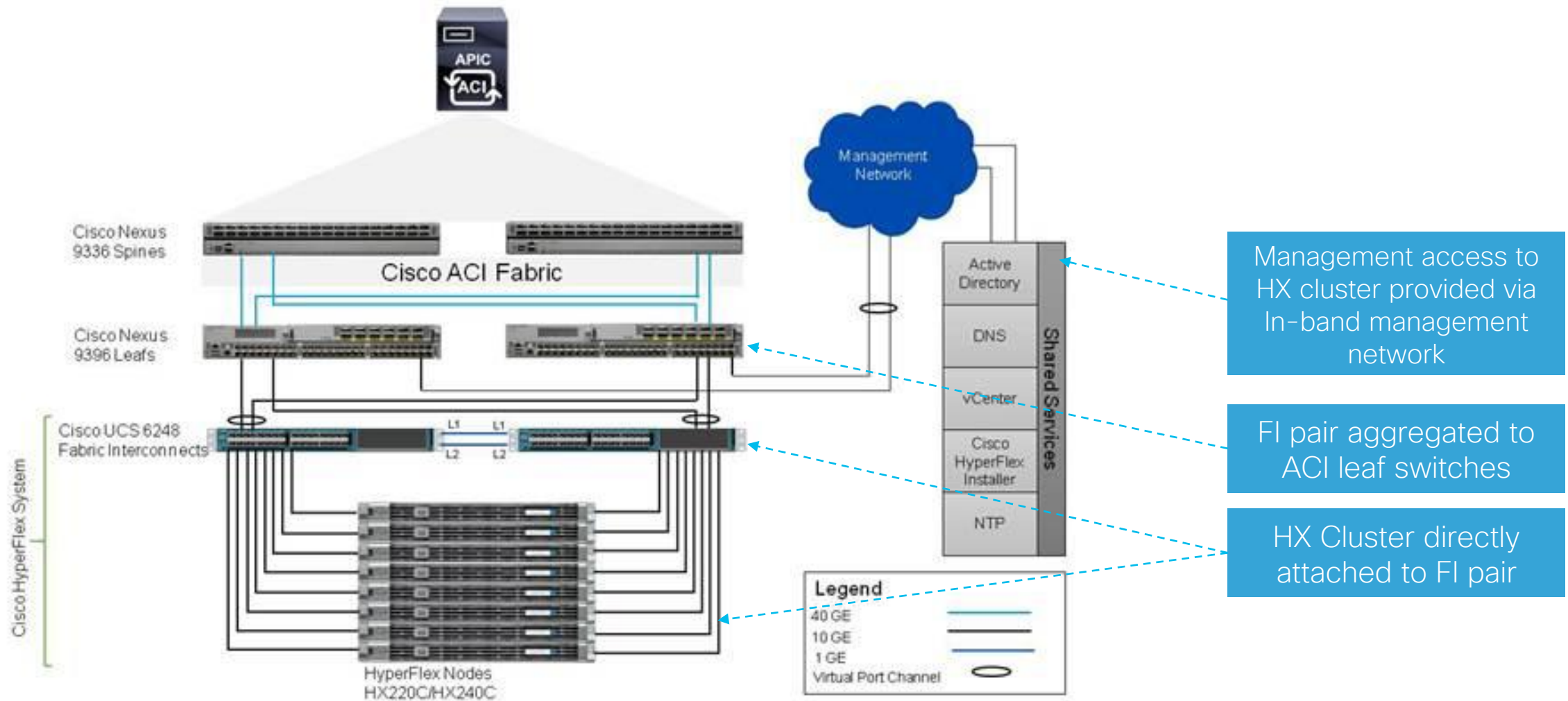
PVA IS



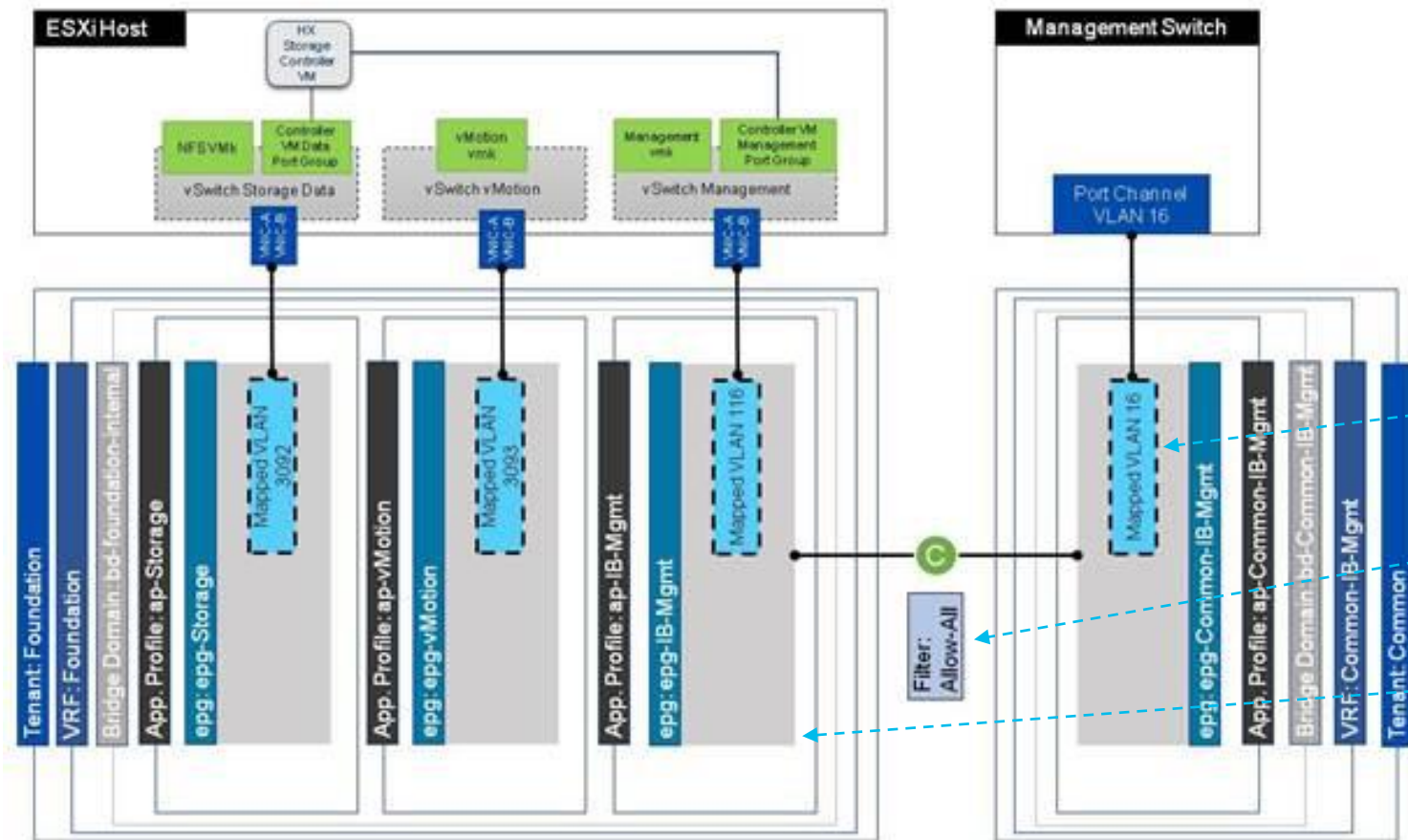
HyperFlex Stretched Cluster



How does HX Fit into an ACI Fabric



ACI Network Modeling for HX



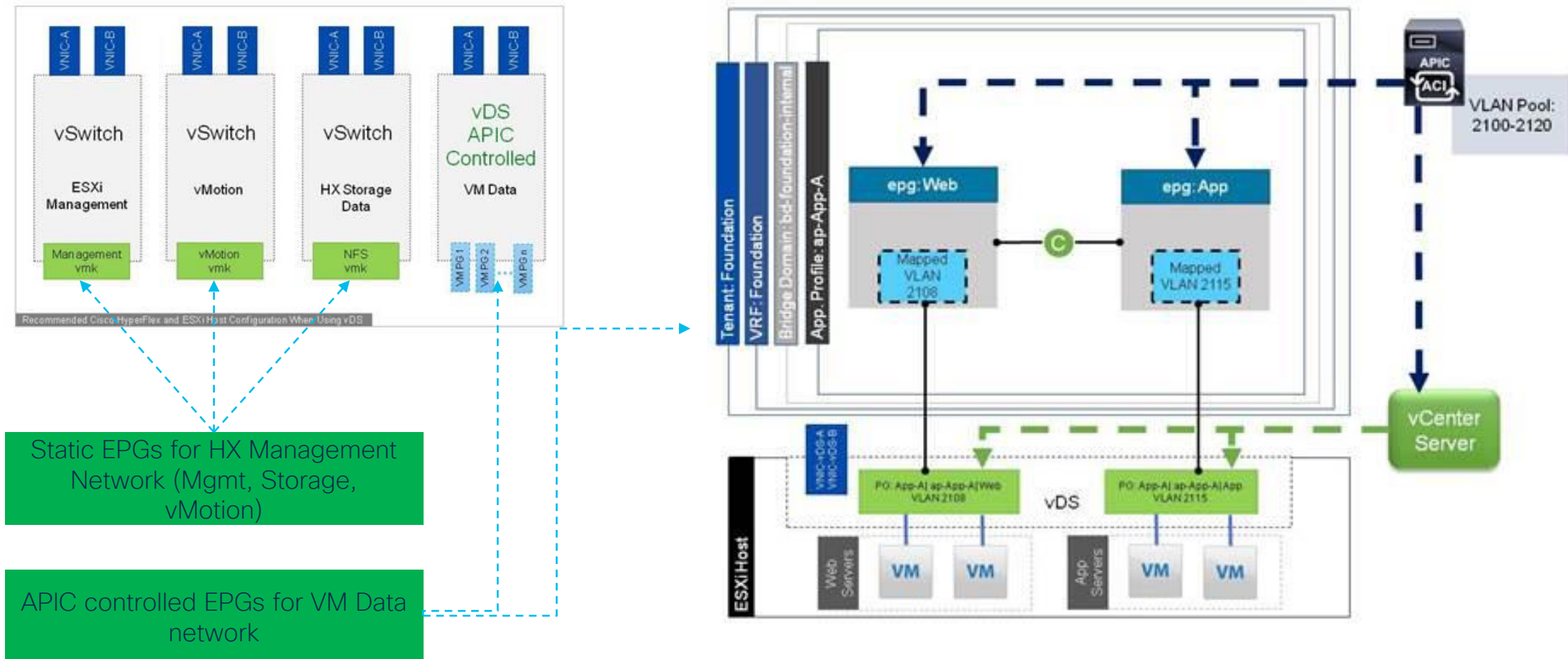
ACI Network Modeling

Management network for access to external management switch

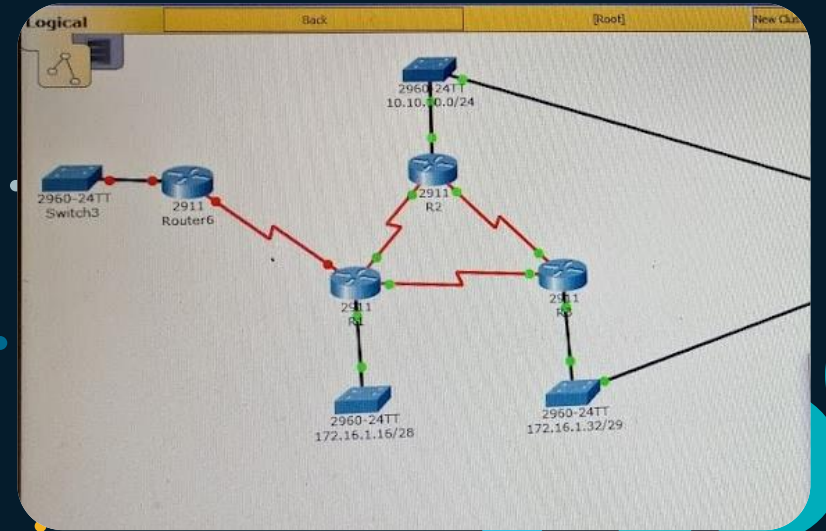
ACI Contract to allow networking between UCS FI mgmt. n/w and ACI mgmt. n/w

Static EPGs for HX Management Network (Mgmt, Storage, vMotion)

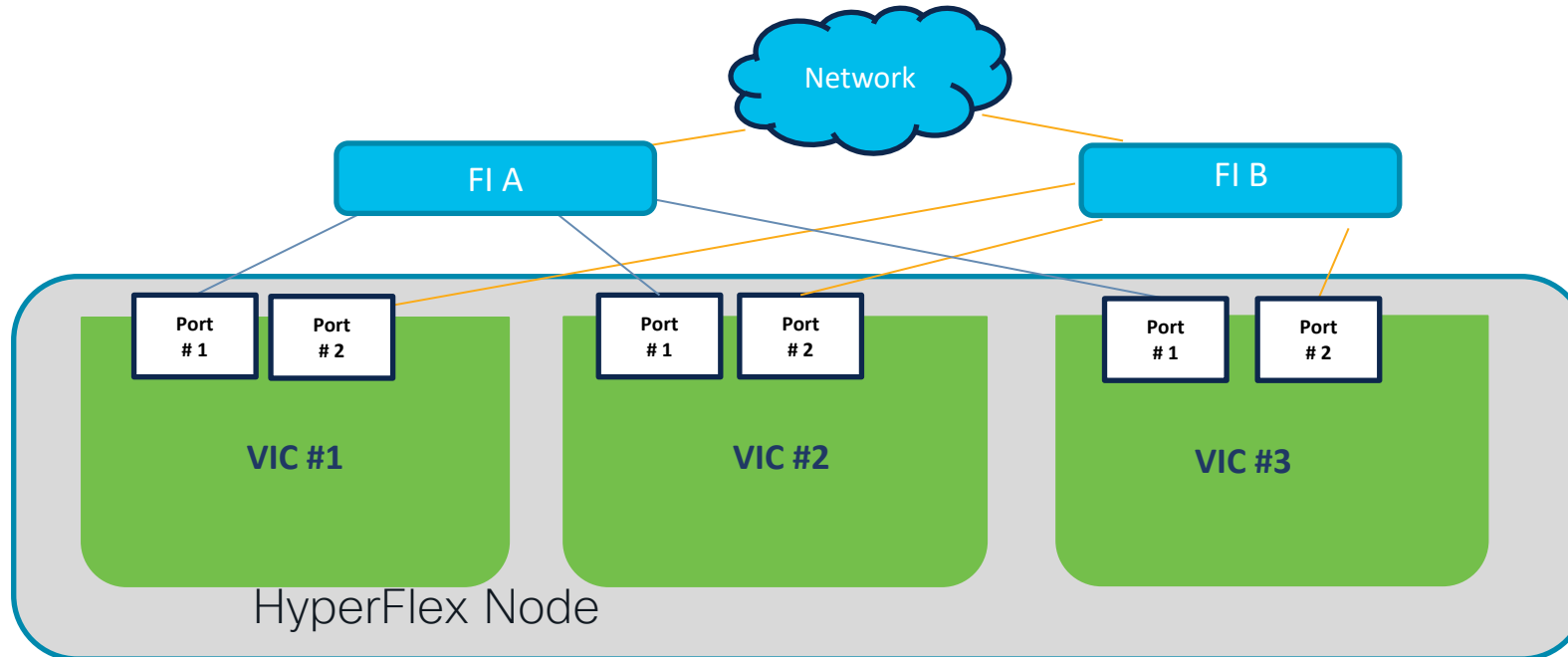
Day 2 network automation with ACI



Network Configuration

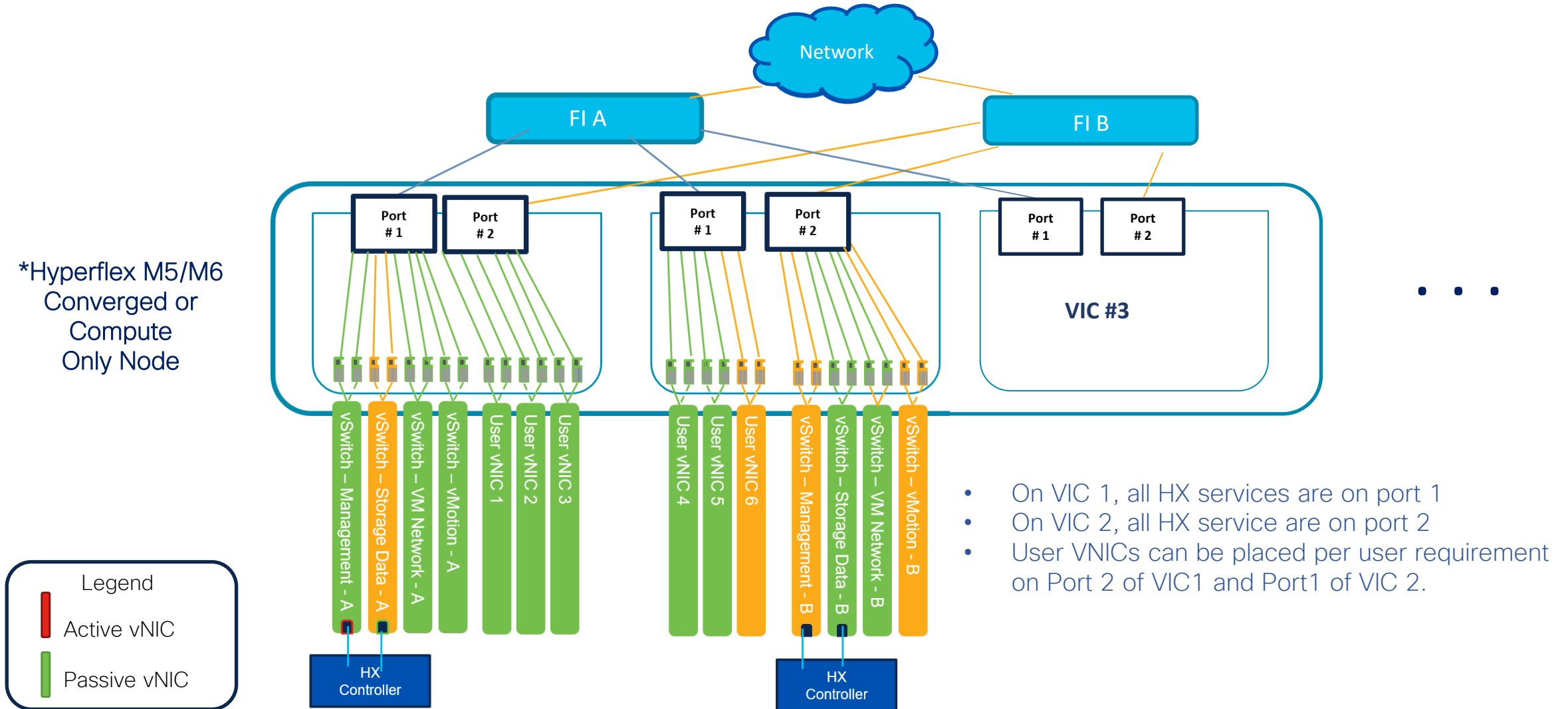


HyperFlex Multi-VIC Support

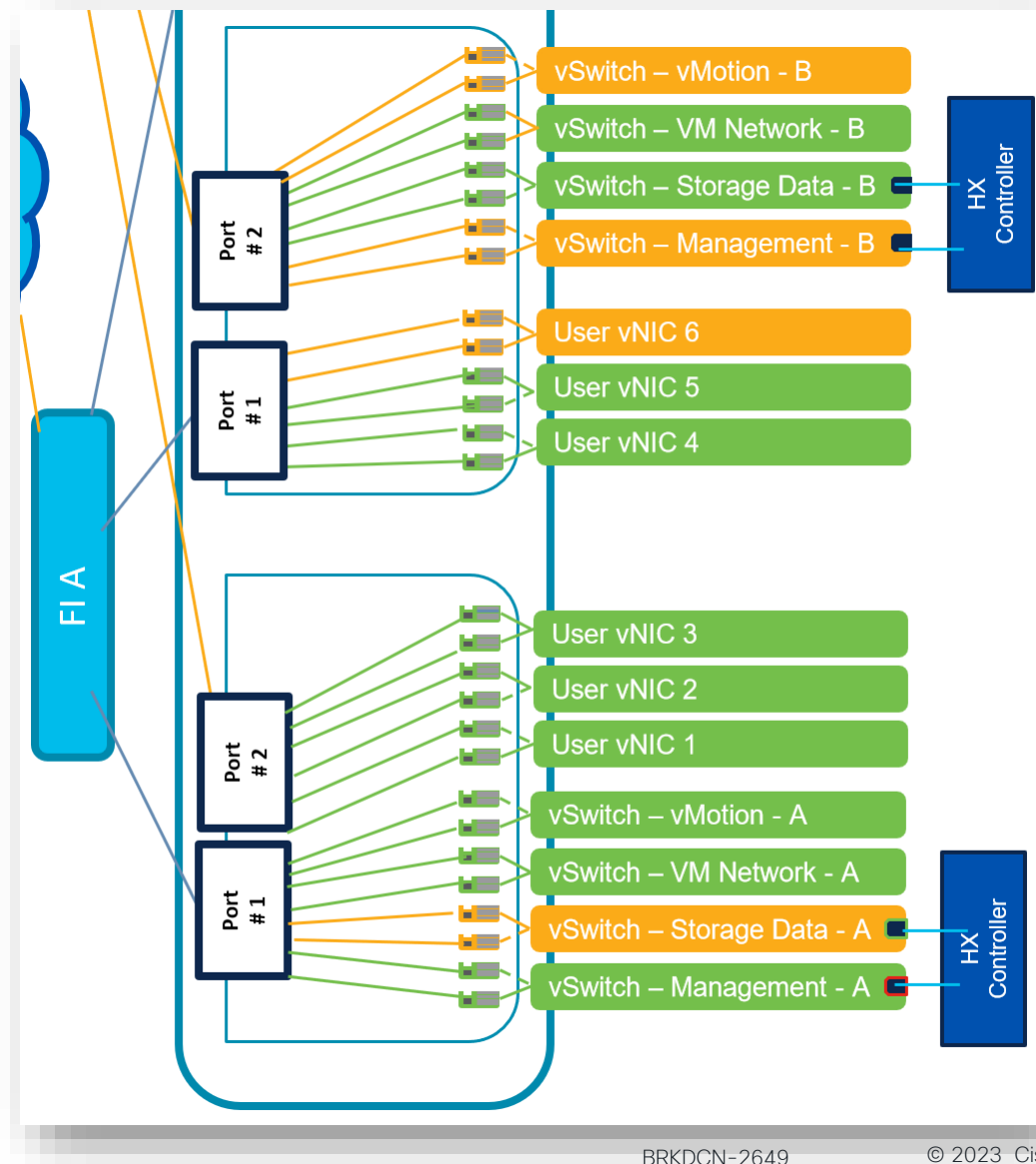


Read the release notes and installation guide for caveats

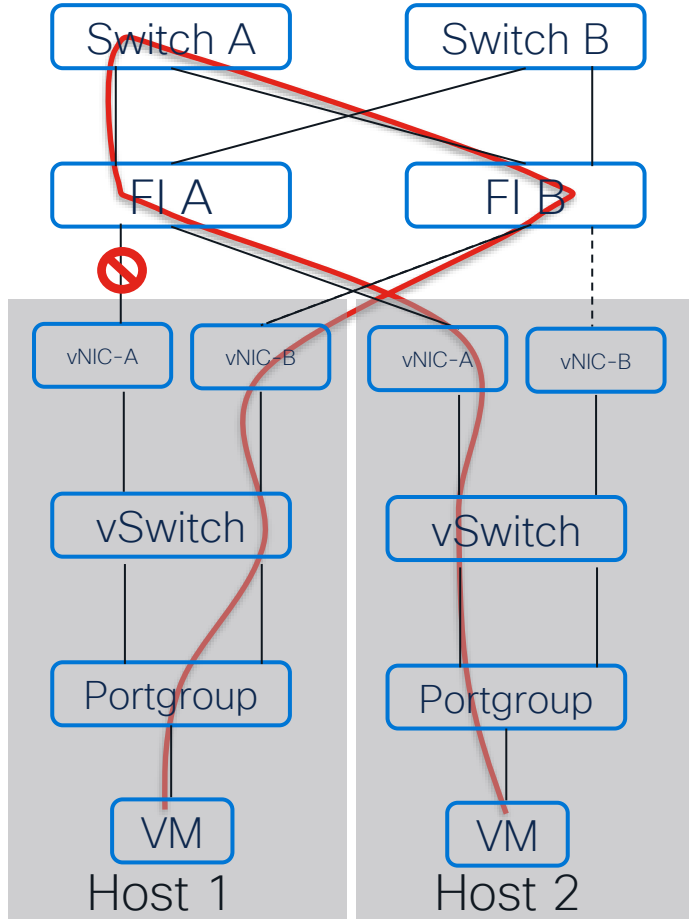
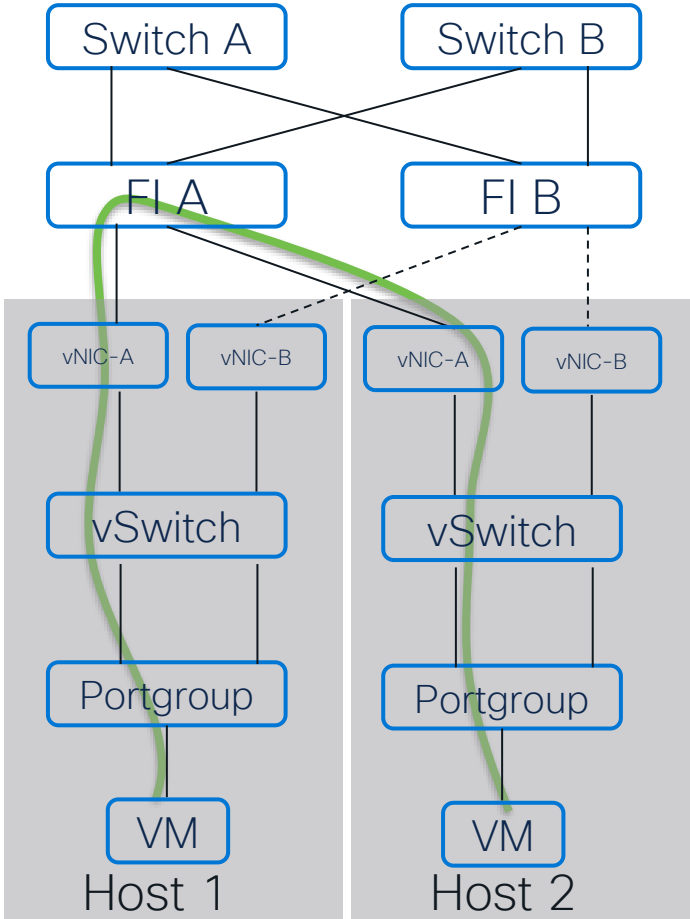
HyperFlex Multi-VIC Support with Auto-failover



HyperFlex Multi-VIC Support with Auto-failover



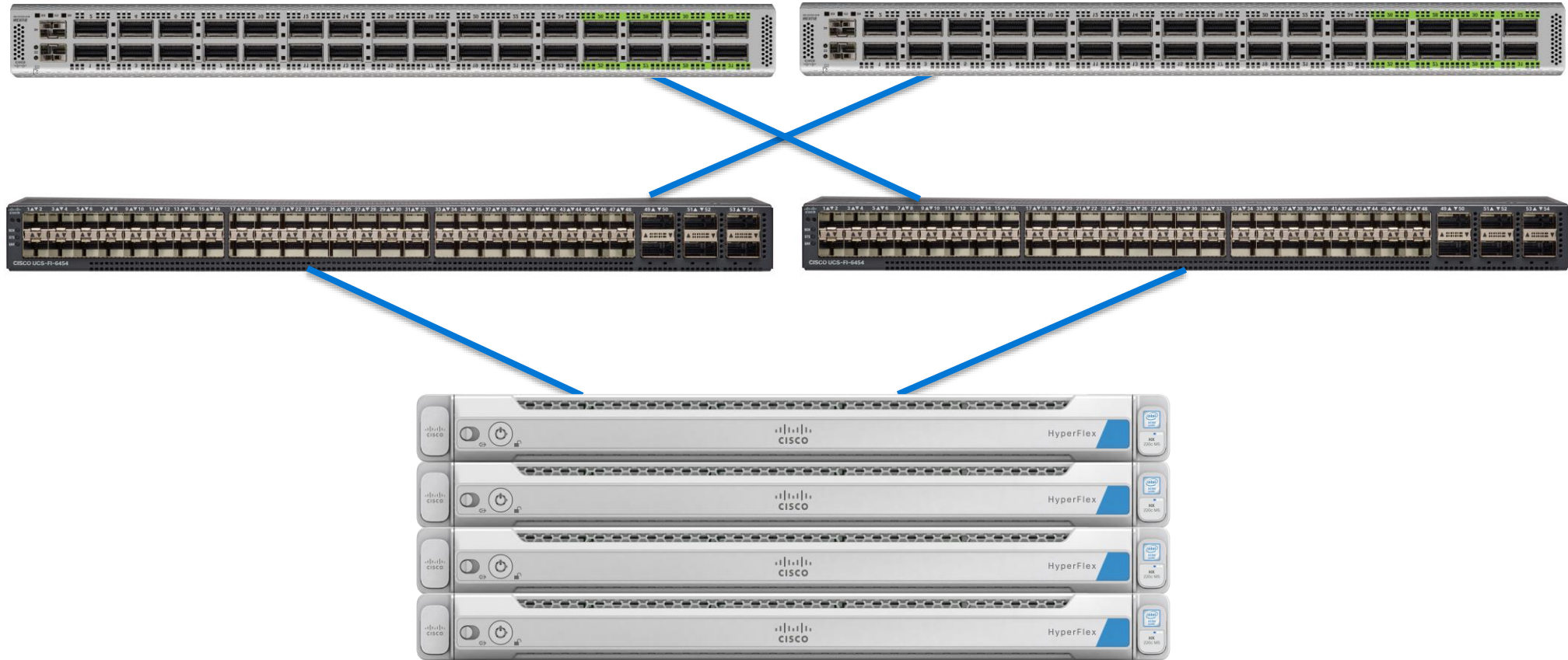
Failover Scenario



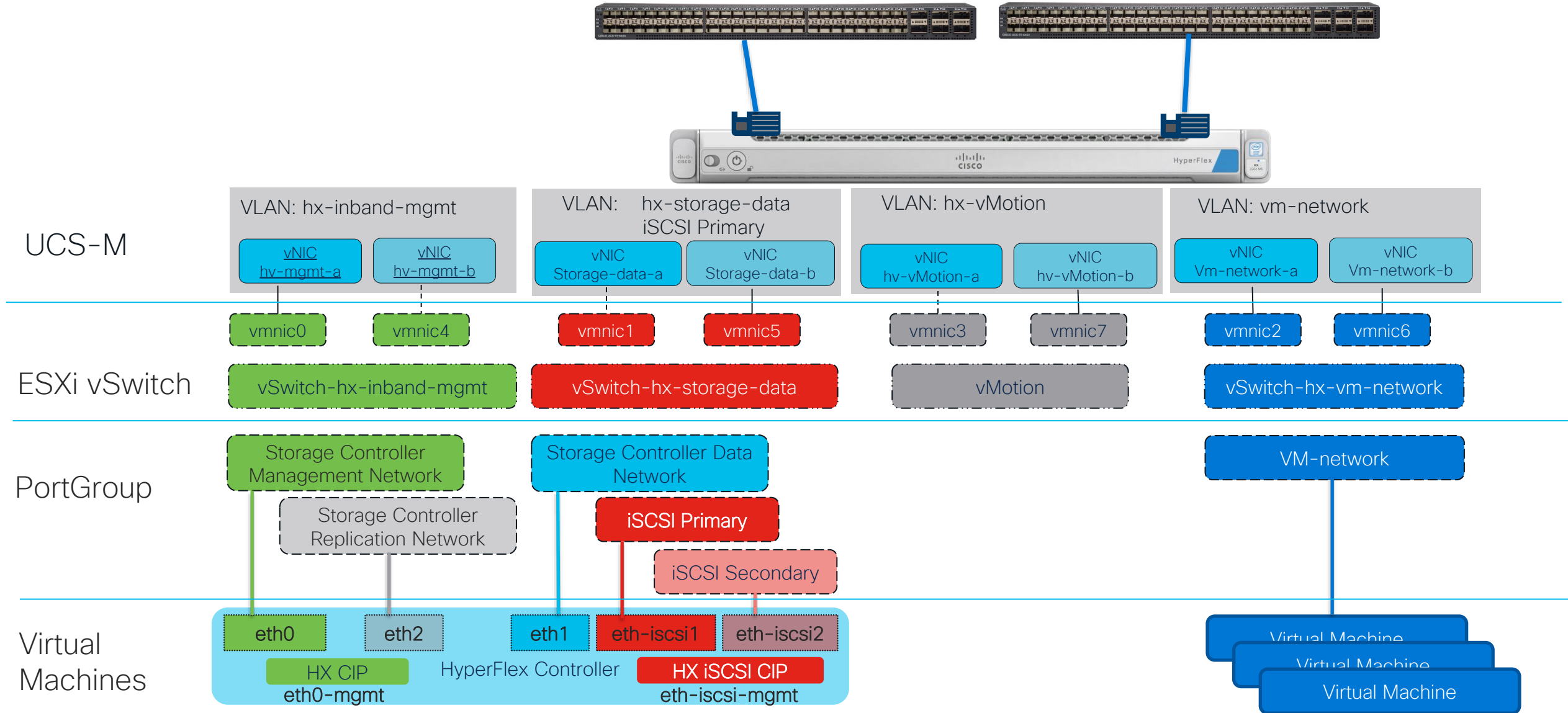
Virtual Connections



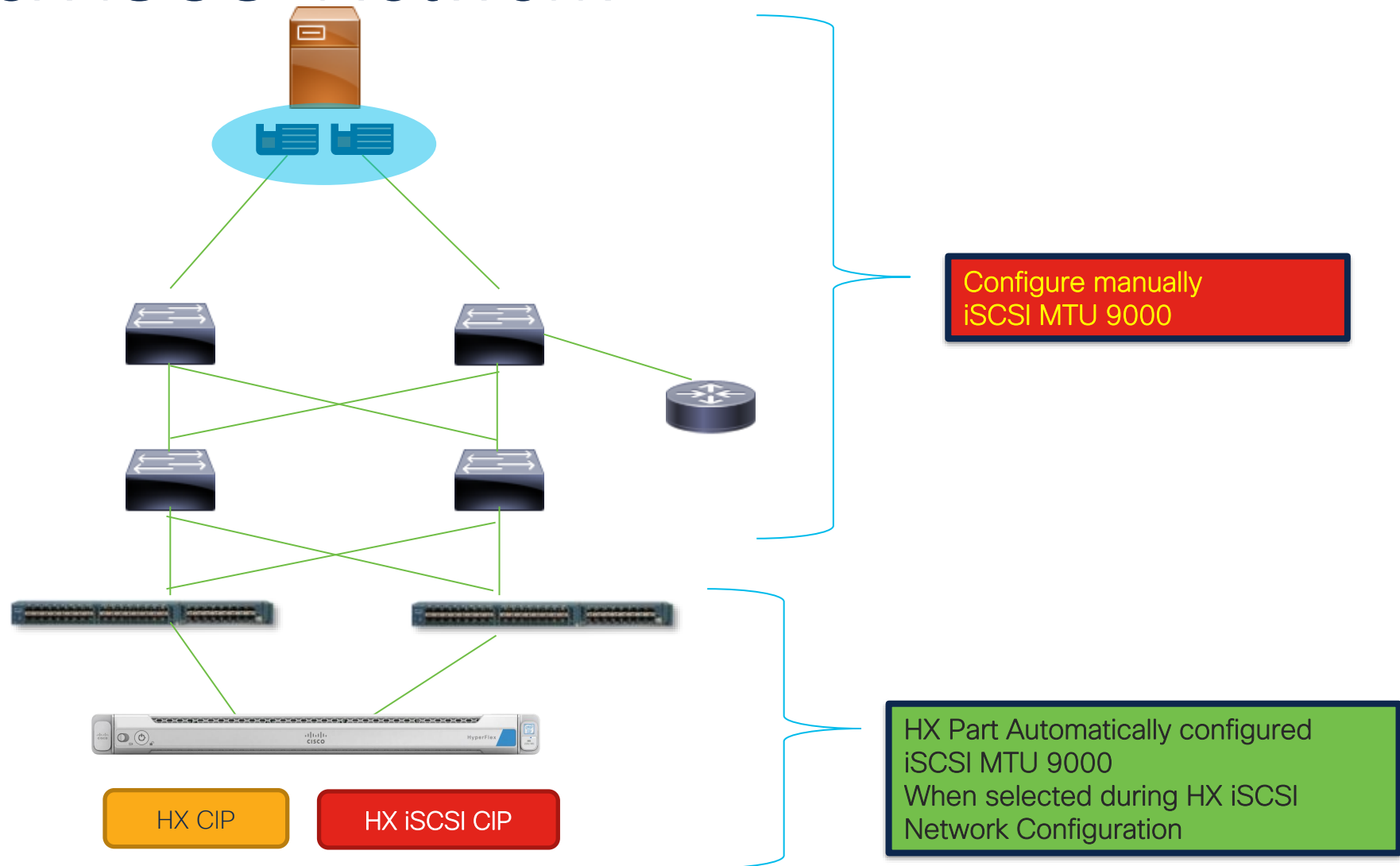
HyperFlex Virtual Networking



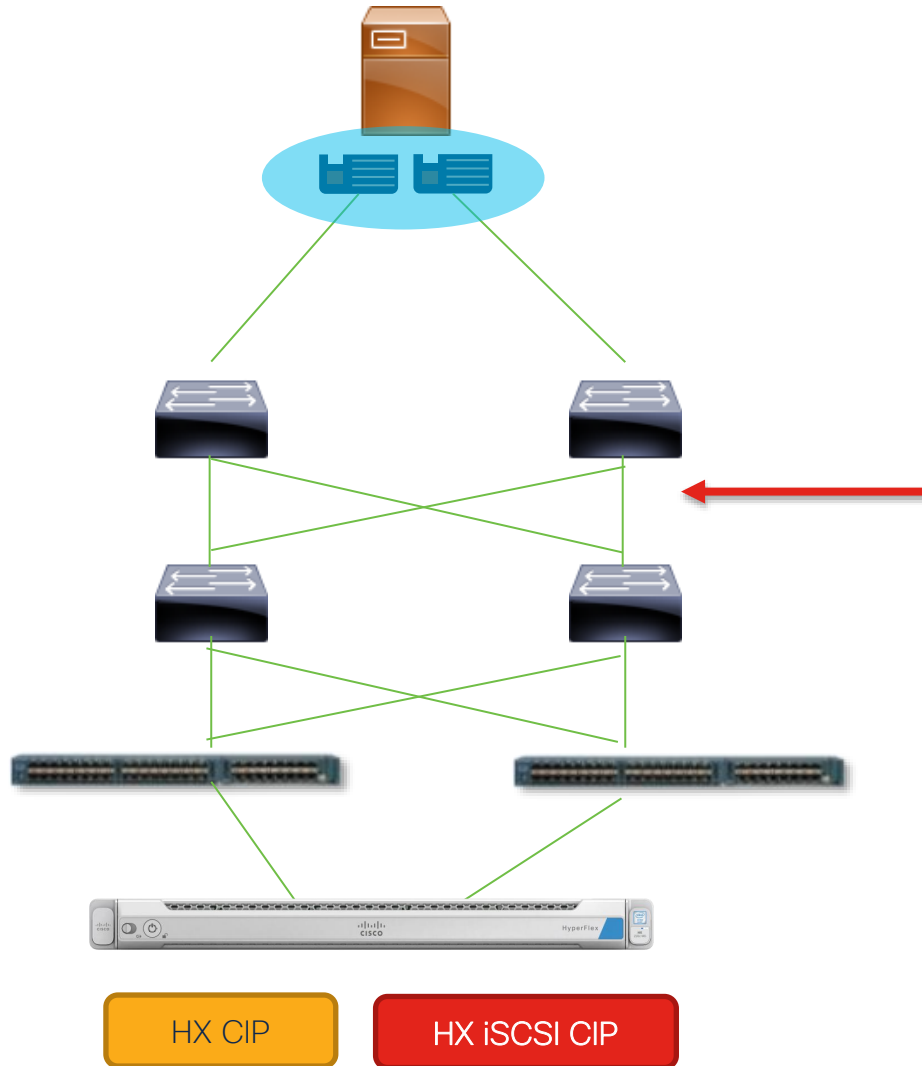
HyperFlex Virtual Networking



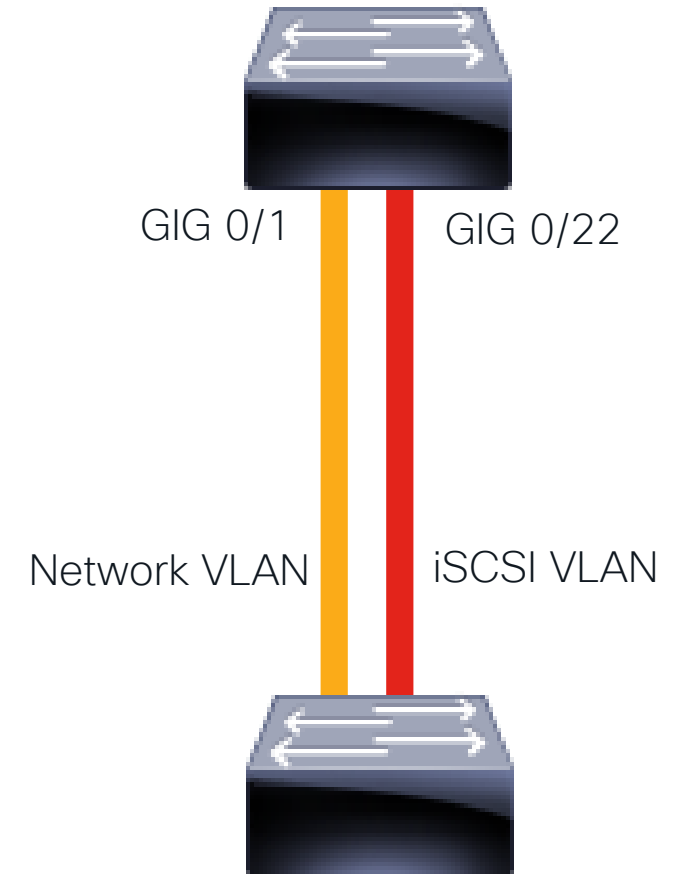
HyperFlex iSCSI Network



Separate paths in network



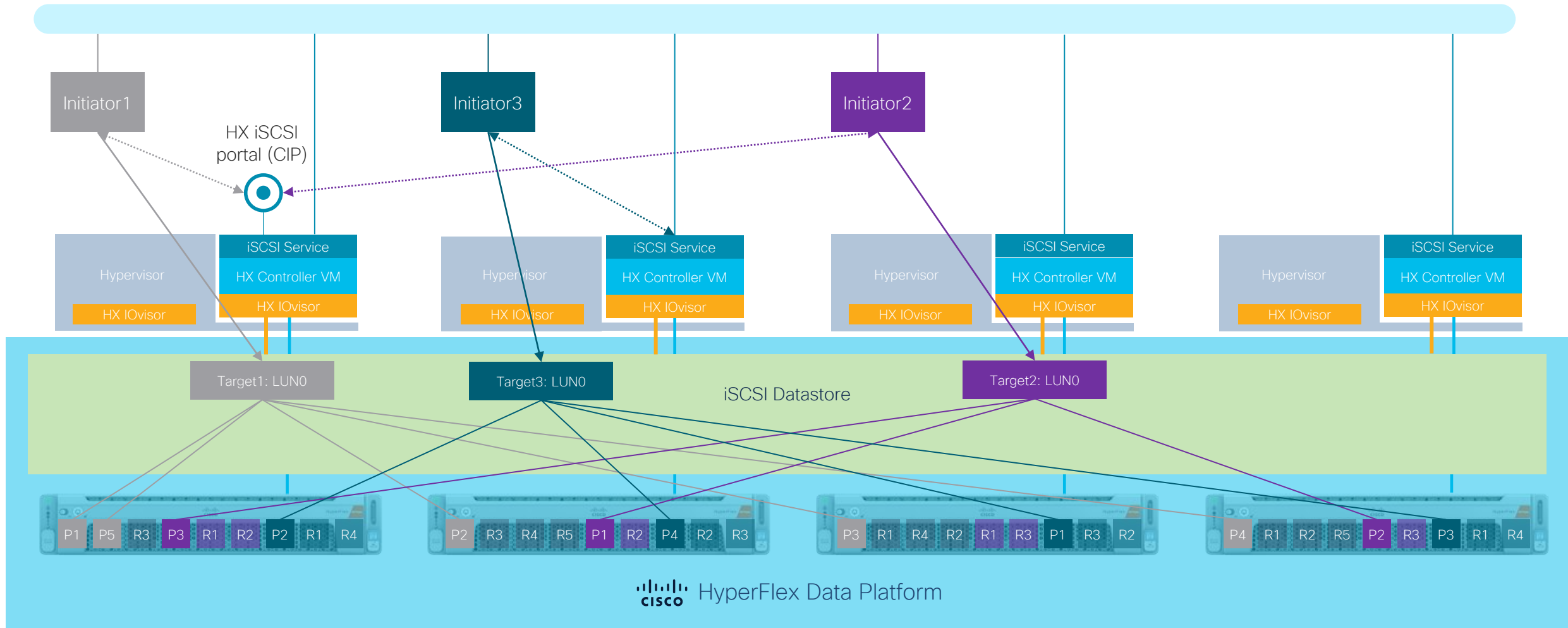
OR



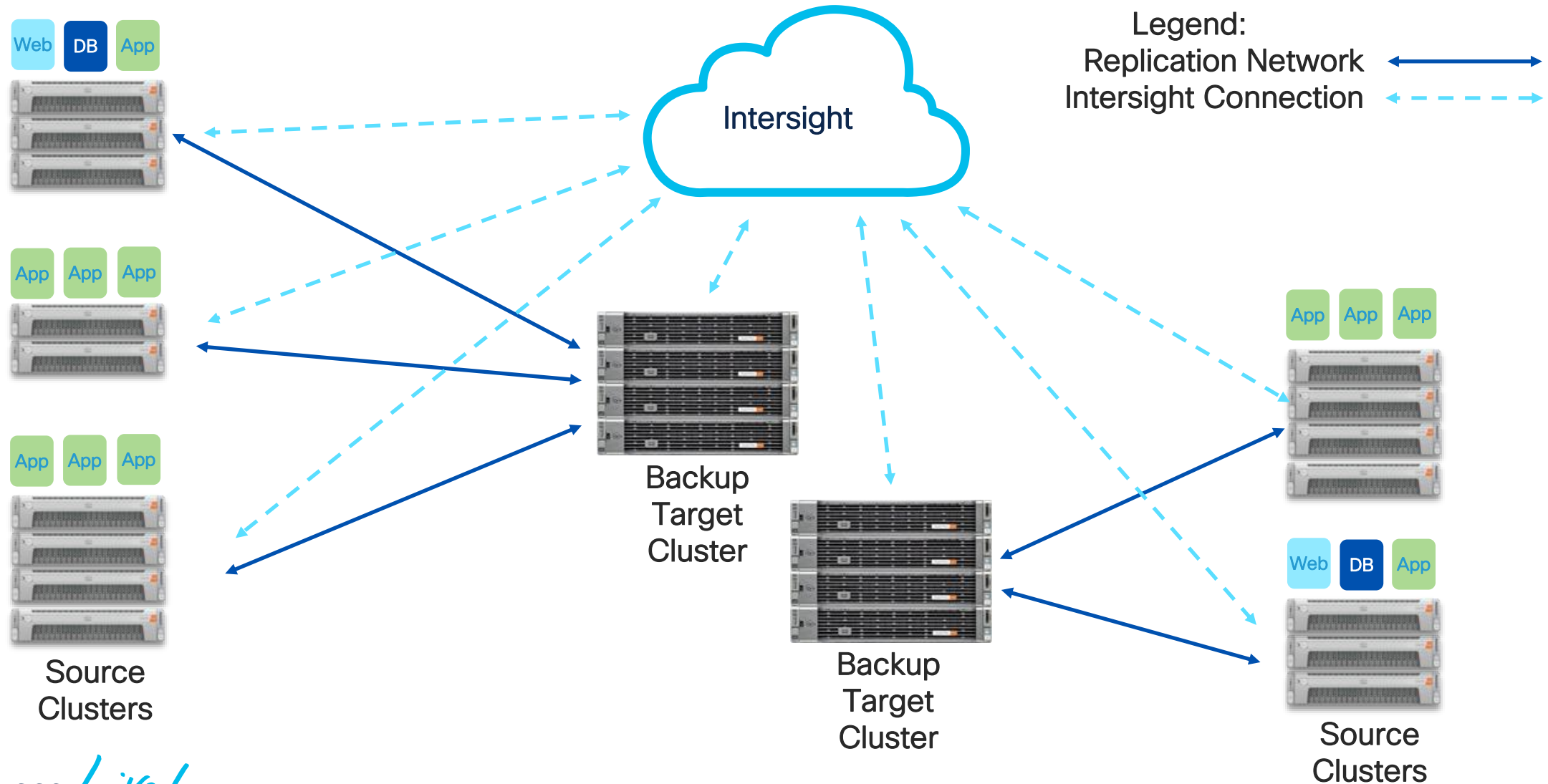
- iSCSI Traffic on separate VLANS
- iSCSI Traffic on dedicated paths

HyperFlex iSCSI Feature

iSCSI VLAN



N:1 Replication Topology



Key Takeaways



Key Takeaways

Know the Architectures

Different environments can have different architectural structures. Know the HyperFlex architectures and when to use it.

Do not change settings

In an automated world, all settings are already provided. Don't change the virtual network settings

Multi VIC

It is possible, and it changes the virtual architecture.

Do not get confused

Understand the Virtual and Physical network are different worlds, and they need each other

Cisco Webex App

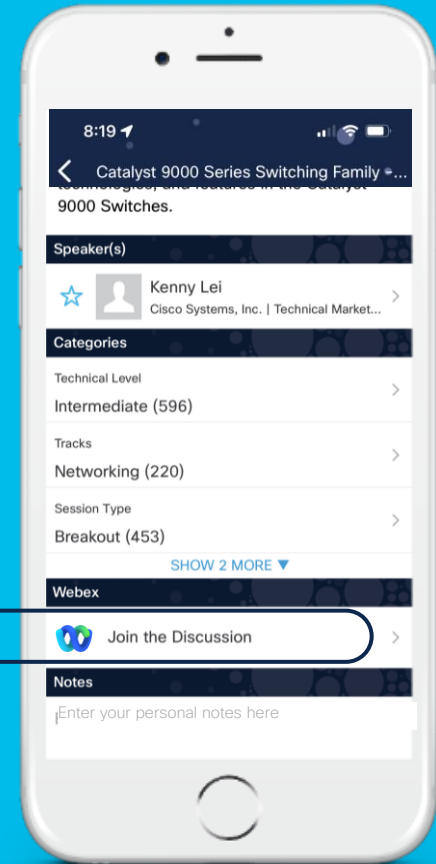
Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
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The bridge to possible

Thank you



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physical network architectural world of
HyperFlex.

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HCI on UCSX TME
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