



# Cisco/VMware 10GE Best Practice

Cuong Tran – Technical Marketing Engineer

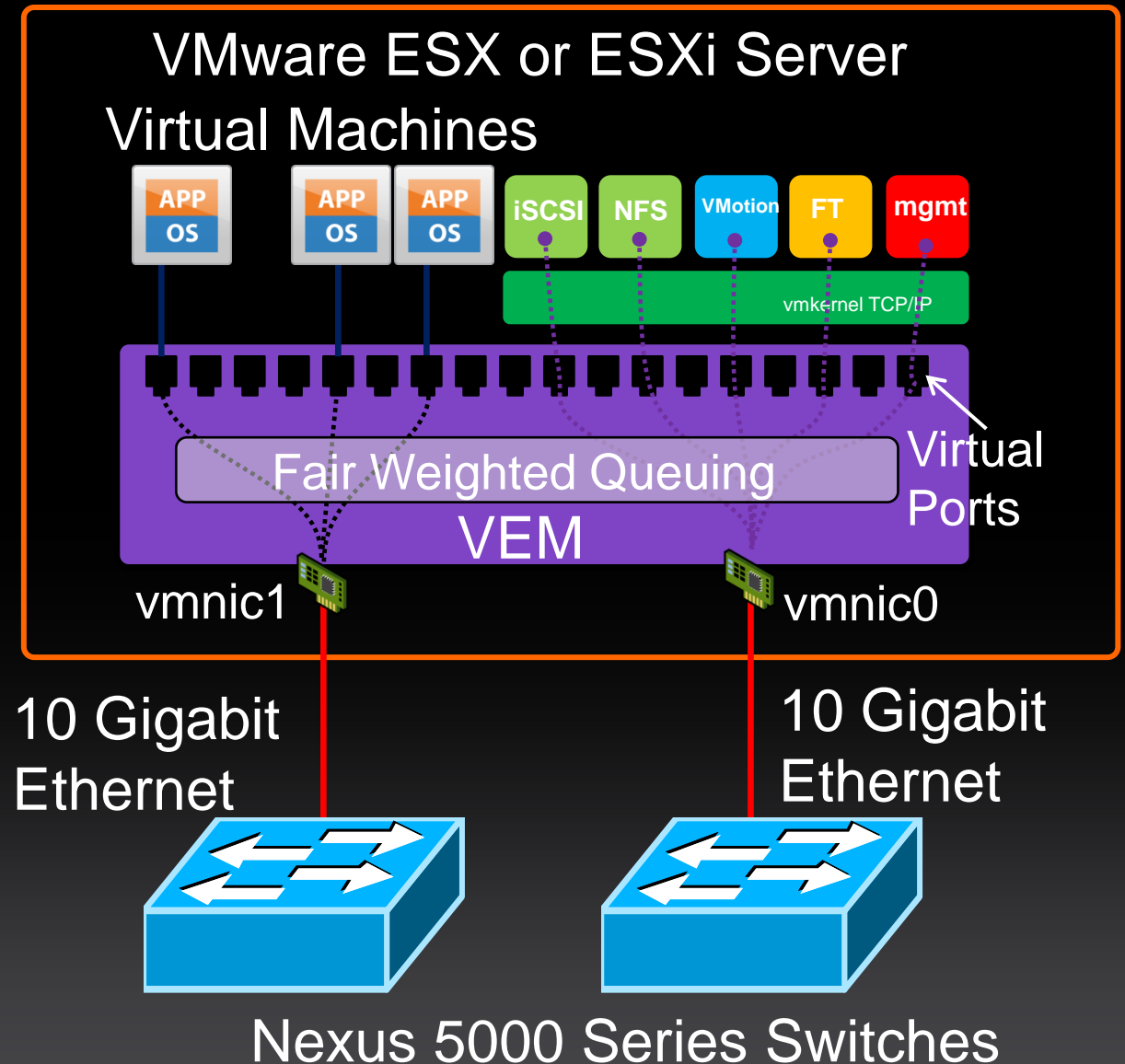
# Agenda

- Traffic Shaping
- Consolidation to 10GE at the Server
- Load Balancing

# Traffic Isolation

## Virtual Lanes

- Utilizes port-profiles to police bandwidth
- Limit bandwidth for specific type of traffic (i.e. vmotion, service console, ip storage, etc.)
- Can be done on a per virtual ethernet interface



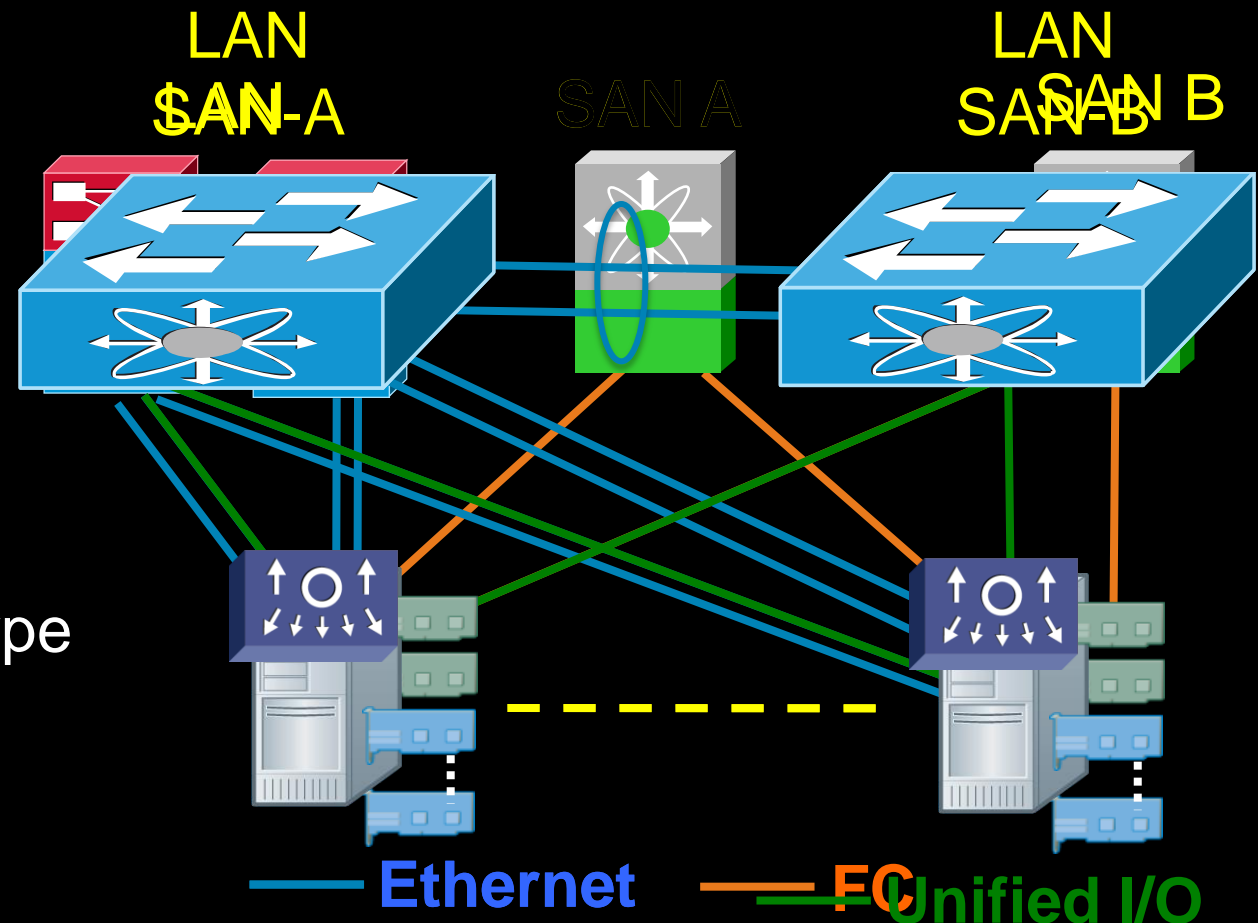
# Consolidation to 10GE with VMWare and Cisco

## 10 GE Consolidation

- Reduces Cabling
- Reduces Power Consumption
- Simplifies Network Management

## Virtualized Management

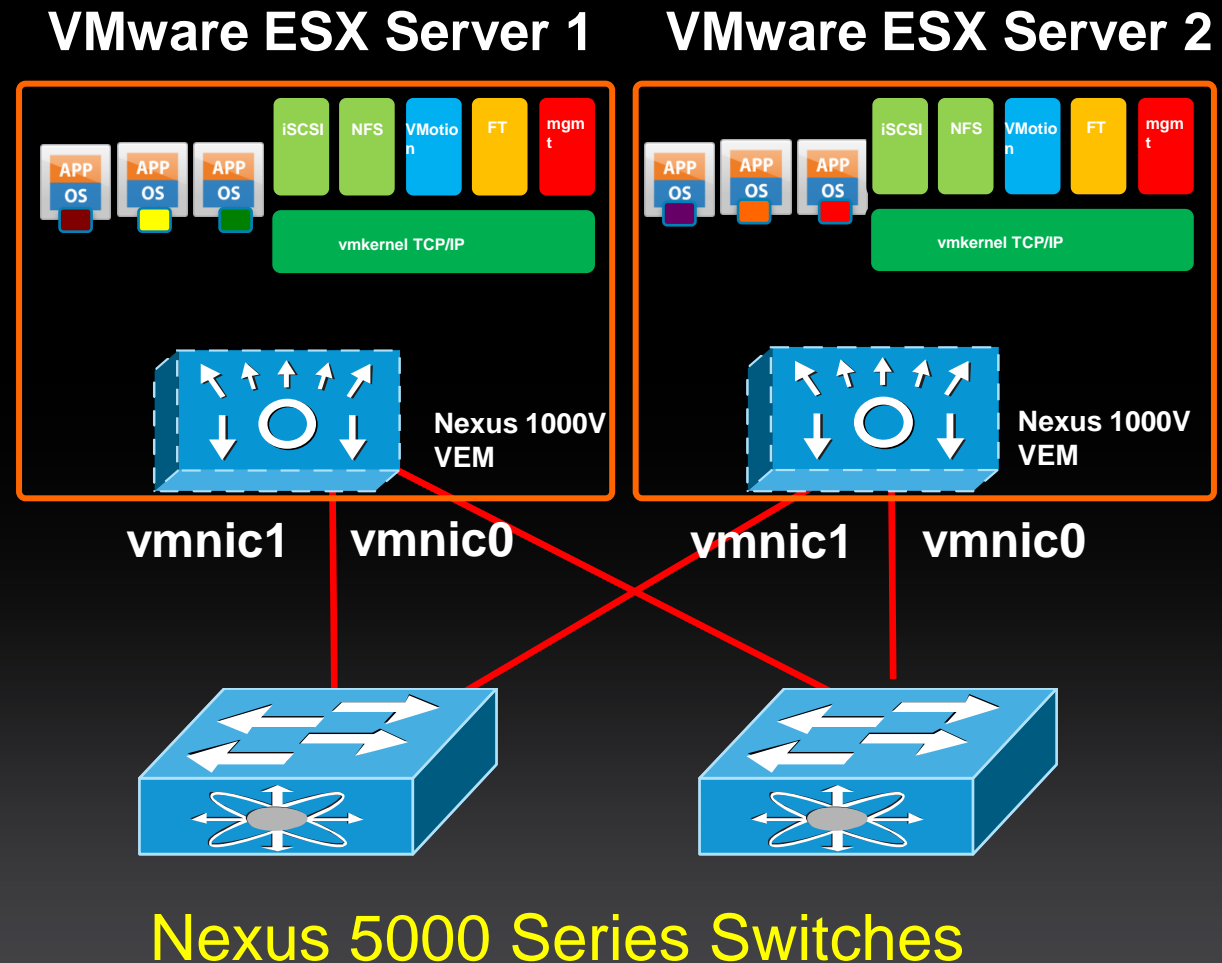
- Nexus 1000V single point of virtualized network management
- Traffic shaping for various traffic type



## Nexus 1000V Load-Balancing

### - Mac Pinning

- Provide increase bandwidth utilization
- Allows for basic load-balancing
- Flows based upon mac address of VM
- Independent of upstream capabilities or protocol support (i.e. LACP)

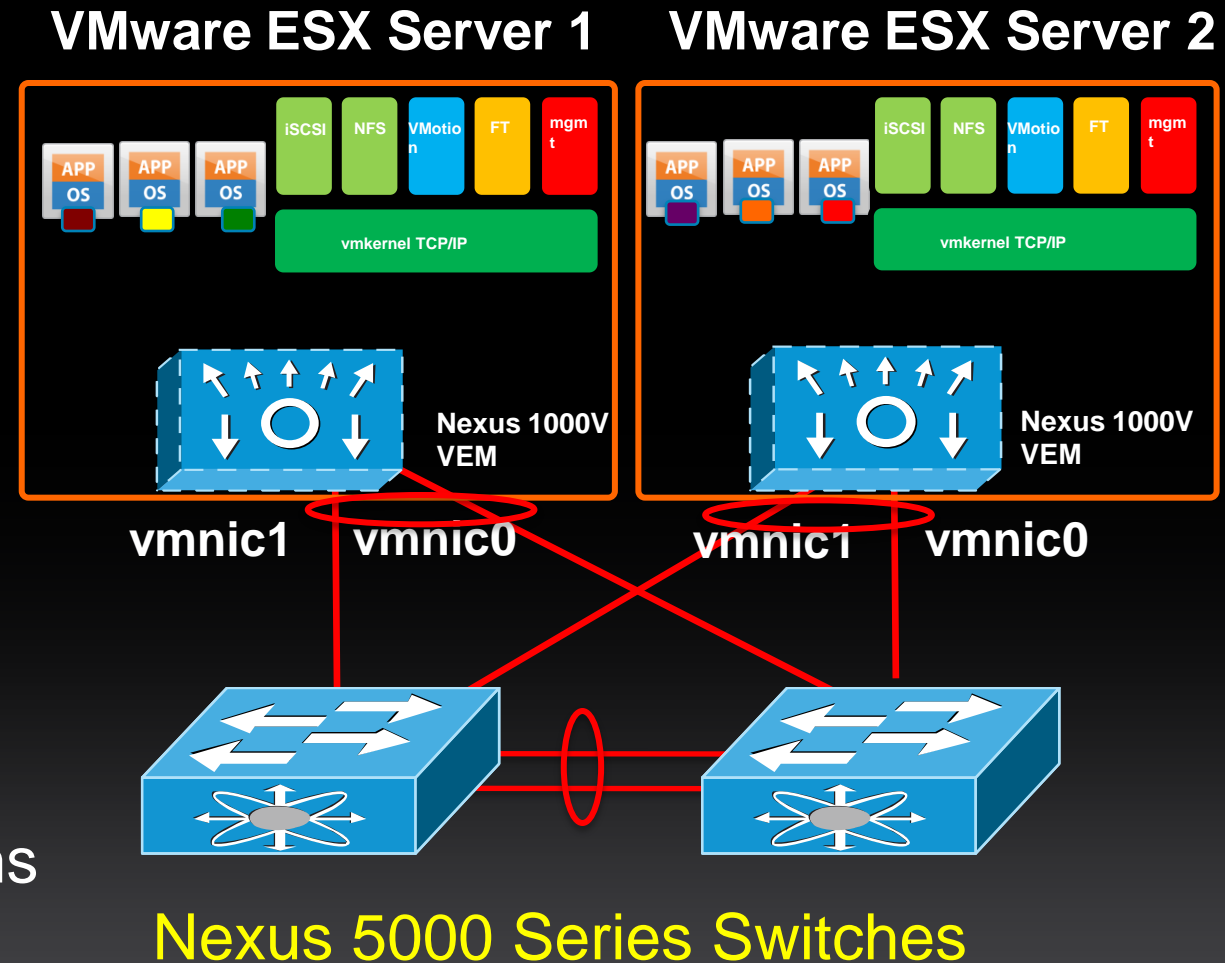


## Multi-Chassis Etherchannel (MCEC)

- Nexus virtual port-channel (vPC)
- Catalyst 6000 VSS
- Increased bandwidth utilization
- Mitigates Spanning-Tree

## Nexus 1000V Load-Balancing – LACP

- Requires upstream LACP support
- Requires MCEC support
- Allows for enhance load-balancing
- Utilizes 16 different hashing algorithms





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