

What You Make Possible



UCS Management Architecture – Deep Dive

BRKCOM-2001

Agenda

- Introductions
- UCS Architecture, Innovations, Topology
- Physical Building Blocks
- Logical Building Blocks
- Typical Use Cases (Live UCS Demo)
- Programmable Infrastructure
- Model Driven Management

UCS Architectural Goals



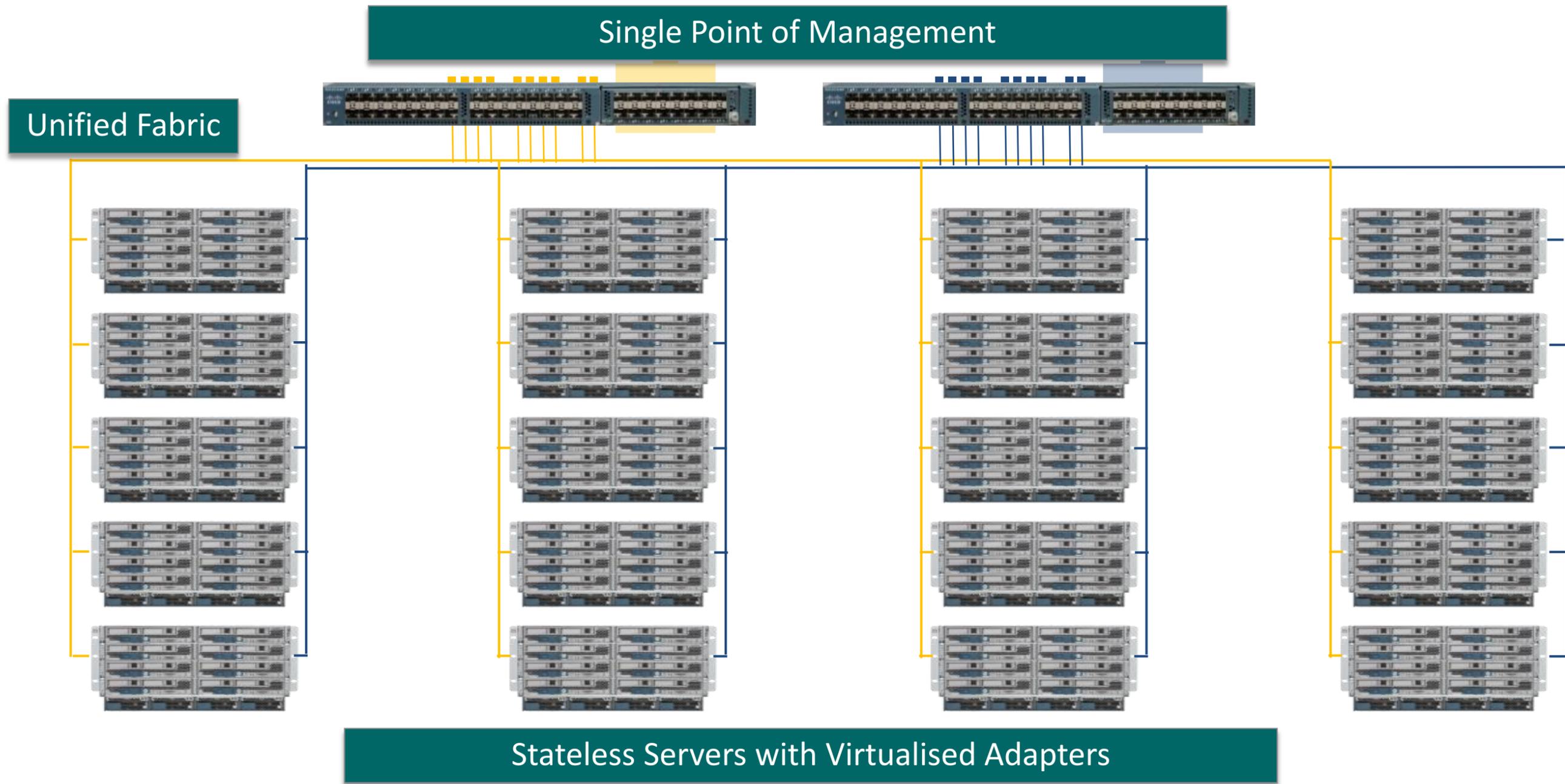
- Administrative “Leverage”
- Deepest possible abstraction of hardware and connectivity
- Reduce “server” provisioning time
 - Both physical and “logical” servers
- Fully programmable

Cisco Key Innovations

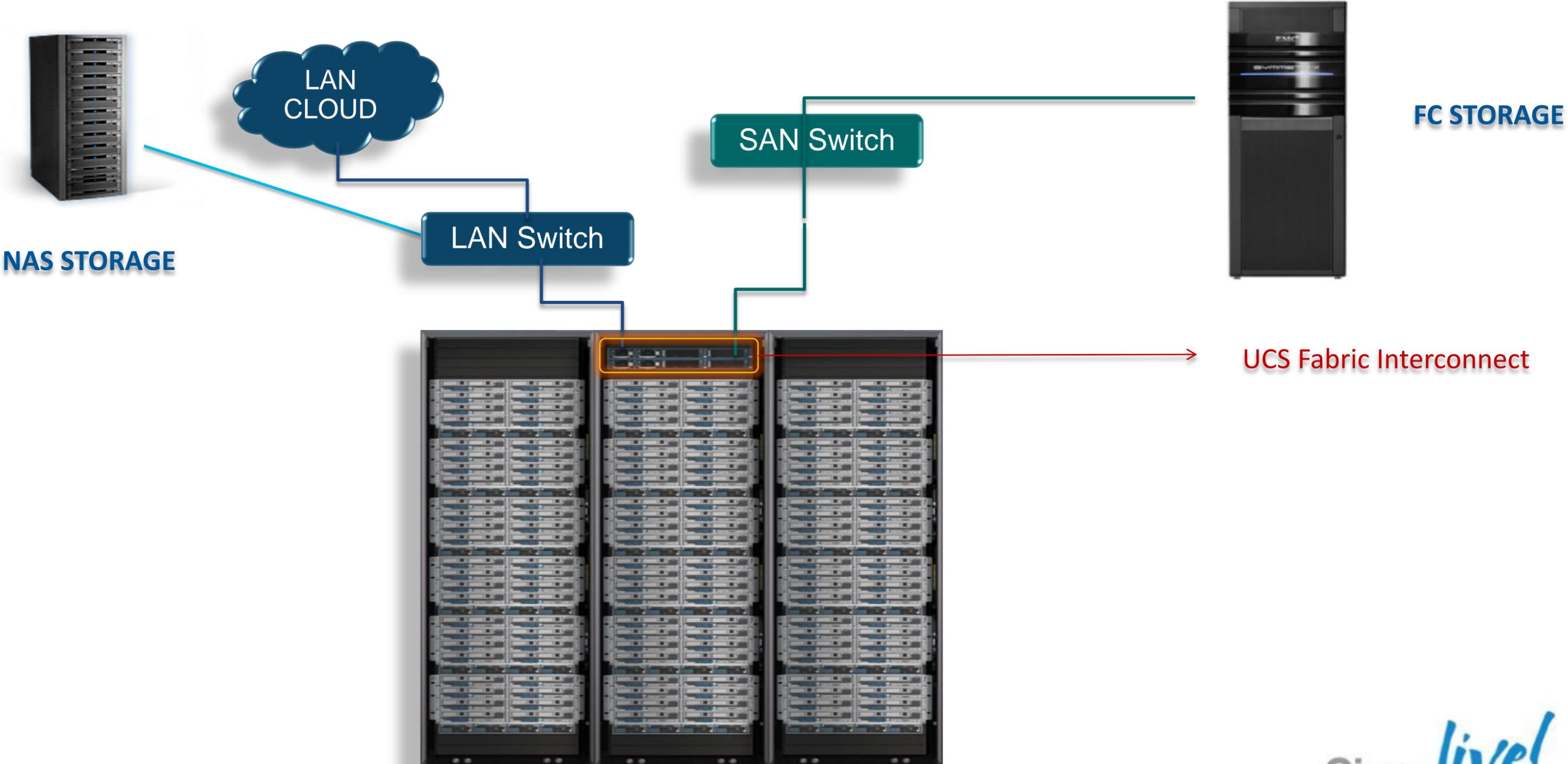
- Unified Fabric
- FEX-Link
 - Fabric Extender
 - Adapter-FEX
 - VM-FEX (aka “VN-Link”, “VN-Tag”)
- Virtualised Adapter
- Extended Memory
- Unified Management



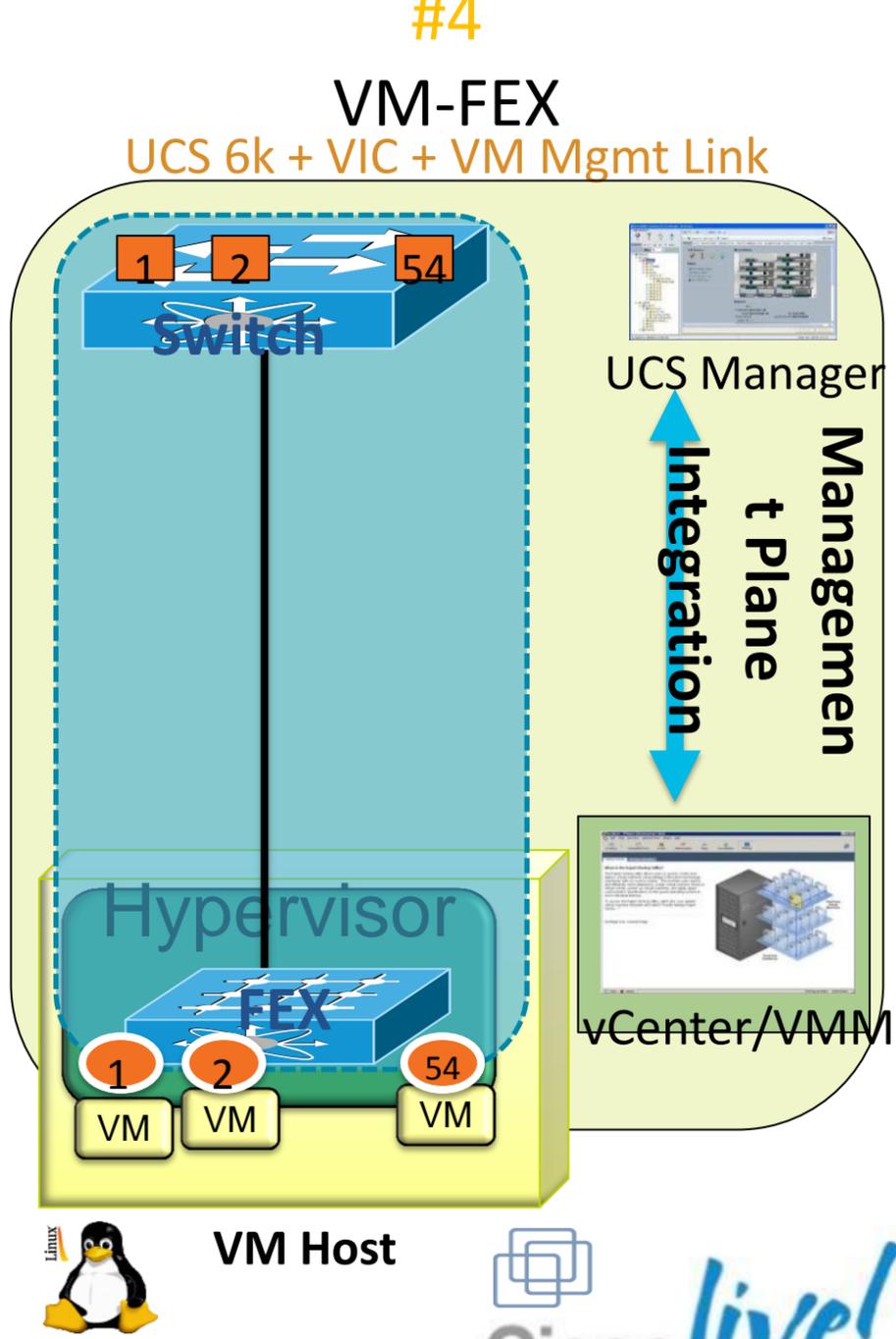
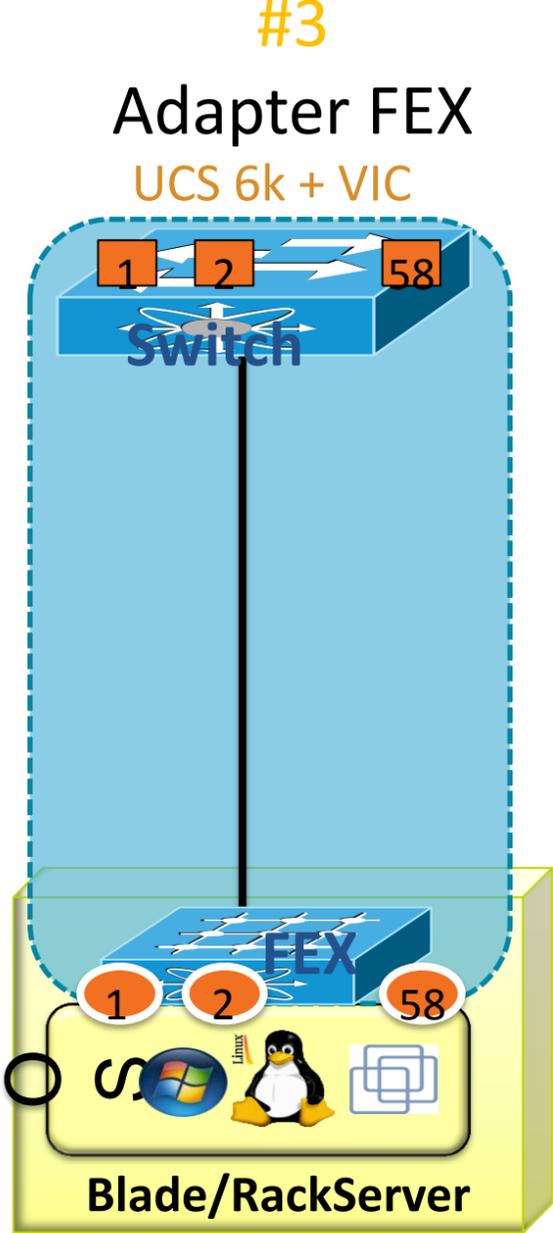
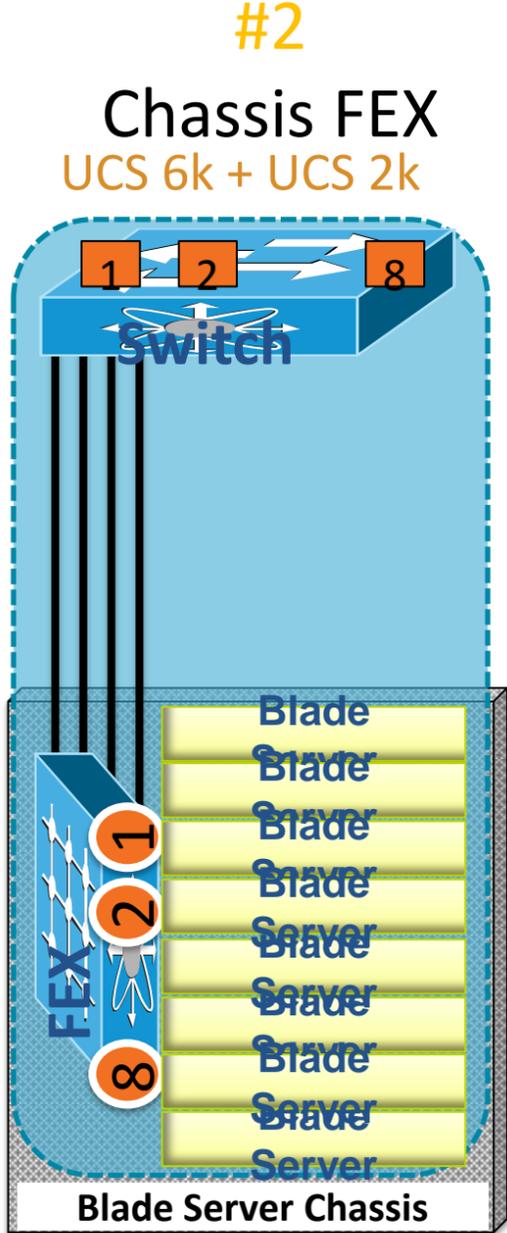
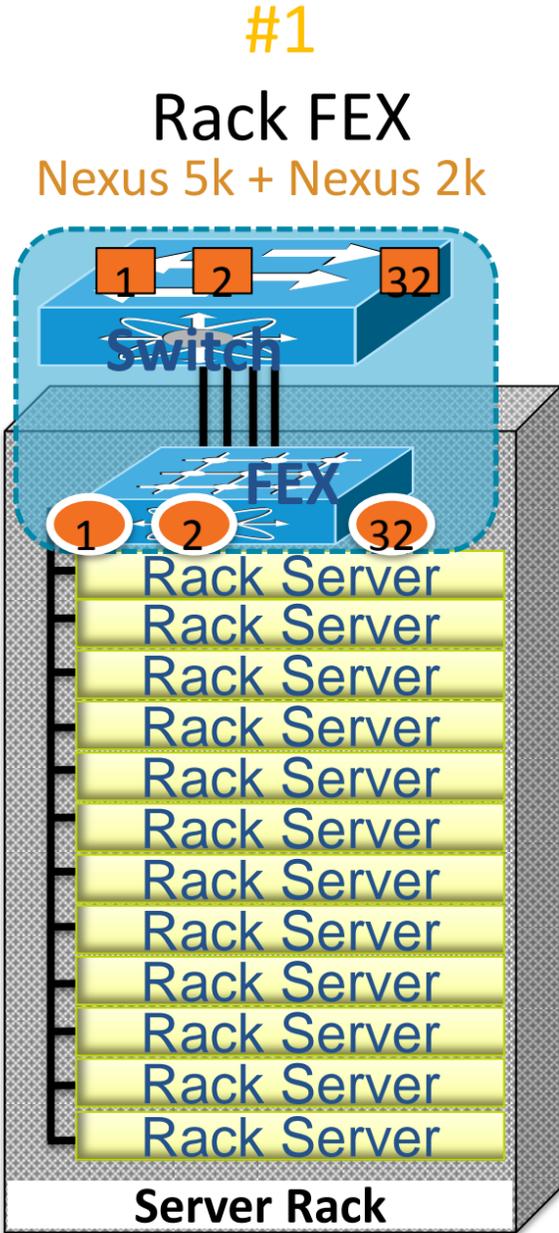
Unified Computing System (UCS)



UCS Connectivity



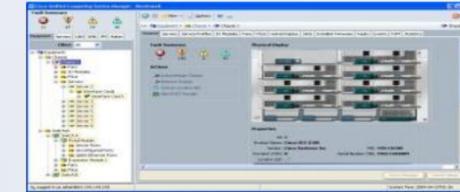
4 Deployments of Cisco's FEX Technology



UCS Physical Building Blocks

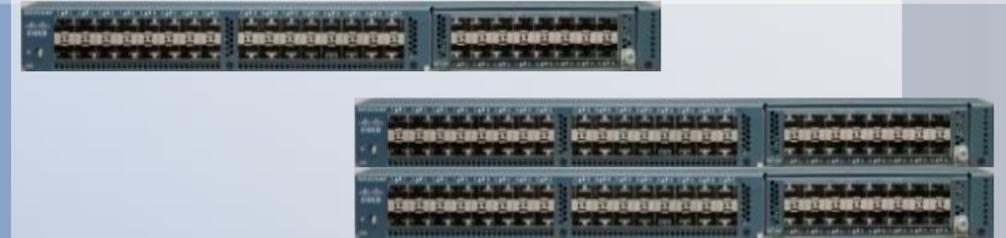
UCS Manager

Embedded— manages entire system



UCS Fabric Interconnect

48 or 96 Port 10Gb FCoE with Unified Ports



UCS Fabric Extender

Remote line card

4 x 10GE or 8 x 10GE



UCS Blade Server Chassis

Flexible bay configurations



UCS Server

Industry-standard architecture

Blade and rack-mount, 2 and 4 socket

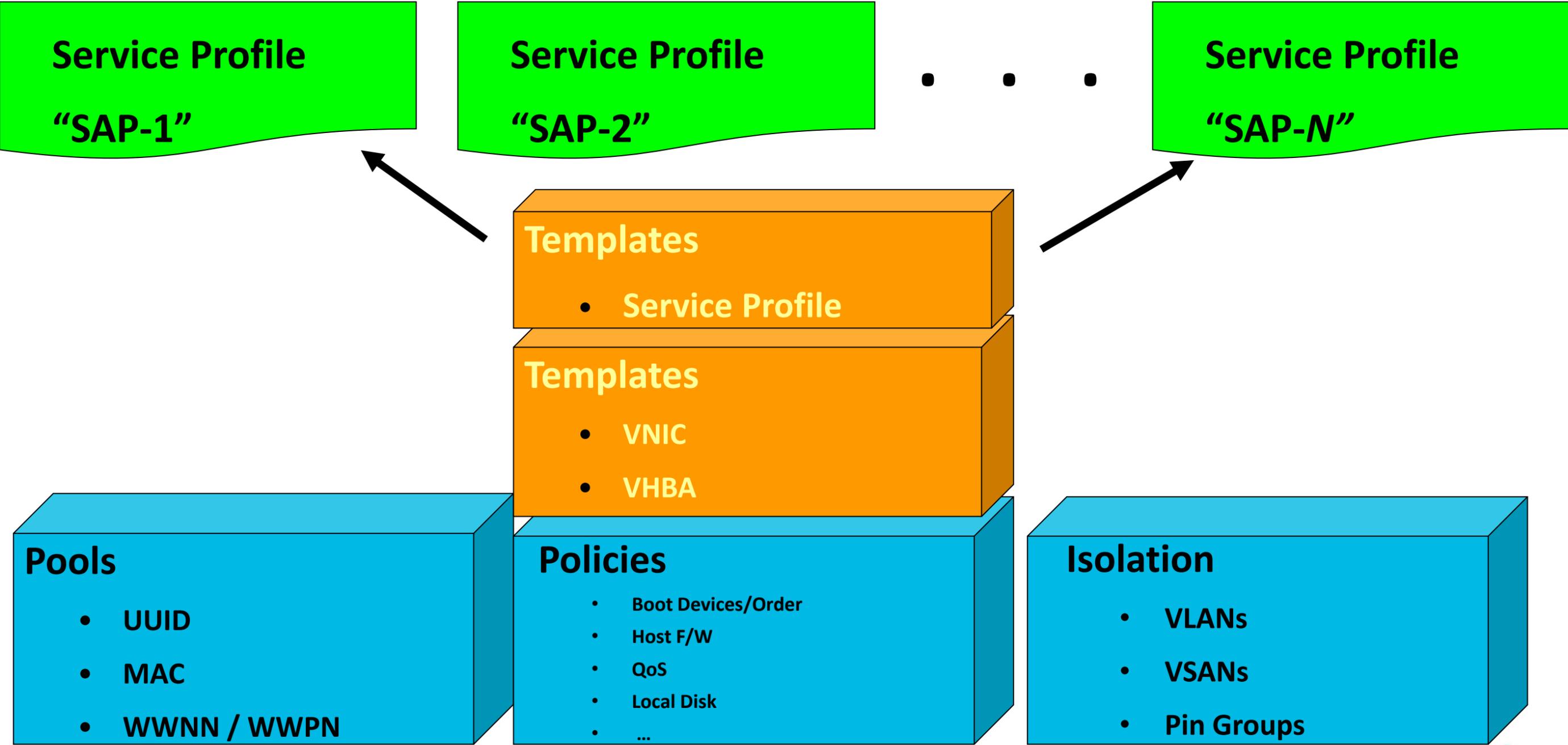


UCS Virtual Adapters

Choice of multiple adapters



UCS Logical Building Blocks



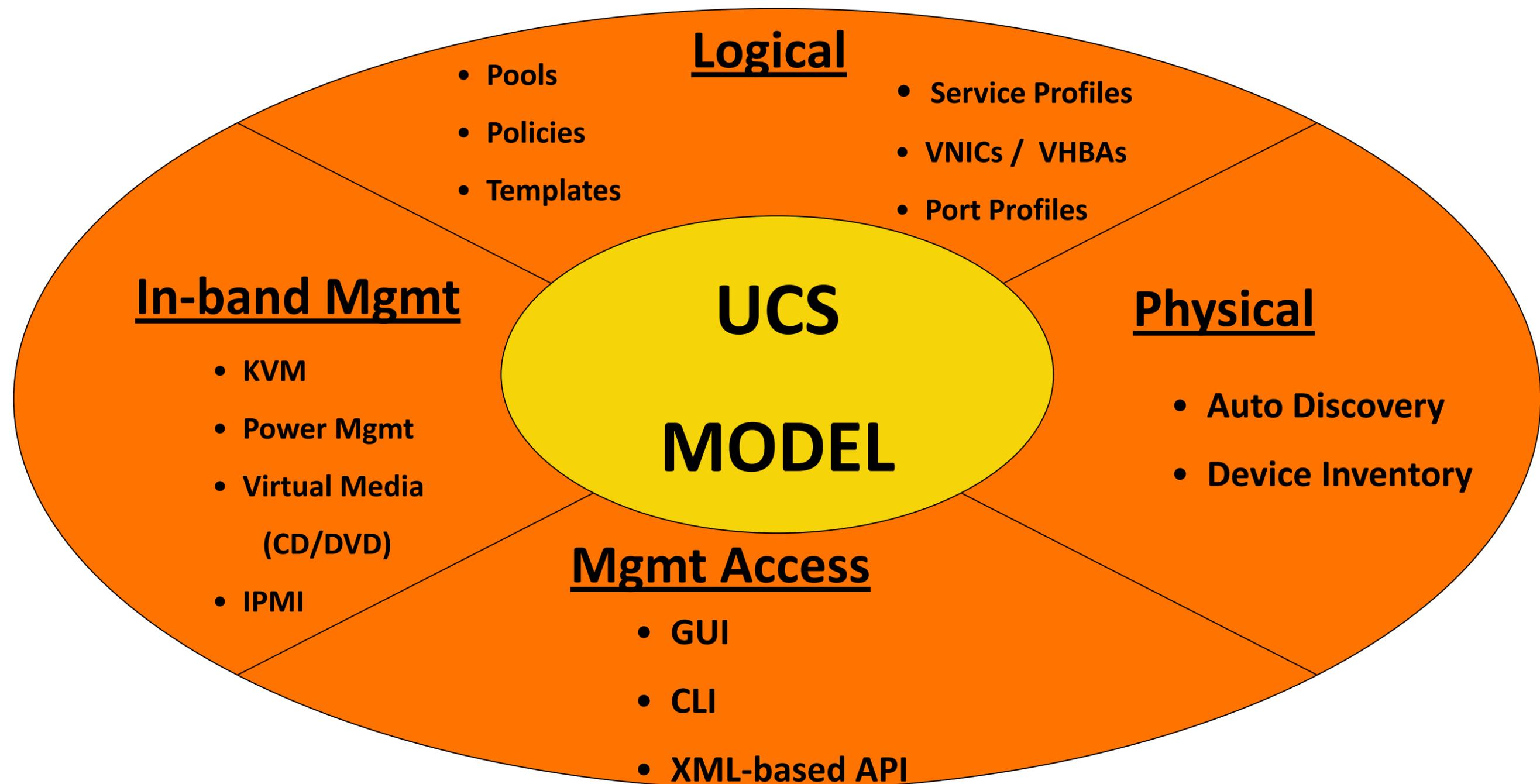
Live UCS Demonstration (No PPT!)

- (60 min duration)
- < Hardware Abstractions >
- < Instantiating from Template >
- < Pre-provisioning Infrastructure >
 - - Combining Domain Managers (UCS, SAN, Storage)
- < Server Pool Policy Qualifications >

Live UCS Demonstration (No PPT!)

- < UCS Manager GUI Trace >
- < UCS Backups >
- < PowerShell Provider Examples >
- < Python Programming Examples >
- < UCS Platform Emulator >
- < UCS Central >

UCS is “Model Driven”



developer.cisco.com

- UCS Powershell Library
- UCS Python SDK
- UCSPE: UCS Platform Emulator that fully exports the XML API
- SNMP/MIB
- SCOM

Final Thoughts

- Get hands-on experience with the Walk-in Labs located in World of Solutions, booth 1042
- Come see demos of many key solutions and products in the main Cisco booth 2924
- Visit www.ciscoLive365.com after the event for updated PDFs, on-demand session videos, networking, and more!
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Q & A



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