



Cisco Small Business IT Webinars

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Fuel My Business

AGENDA

1. Introduction

2. Solution Overview – *HyperFlex*

3. Case Studies

4. Dashboard Walkthrough

5. Q&A

6. Conclusion



Solution Overview:

HyperFlex

One Architecture for Operational Simplicity

UNIFIED MANAGEMENT MODEL

UCS MANAGEMENT



UCS Mini

Fourth Gen. UCS



Mainstream
Computing

CLOUD CENTER



Converged
Infrastructure



HyperFlex Systems



Hyperconverged
Infrastructure

ACI



UCS C240



Software-Defined
Storage

UCS C3000



Scale Out

EDGE

CORE DATA CENTER

CLOUD

Evolving Infrastructure Challenges



Complexity

Hampers speed, security, service delivery, scale



Evolving App Architectures

Microservices and distributed applications on/off premises

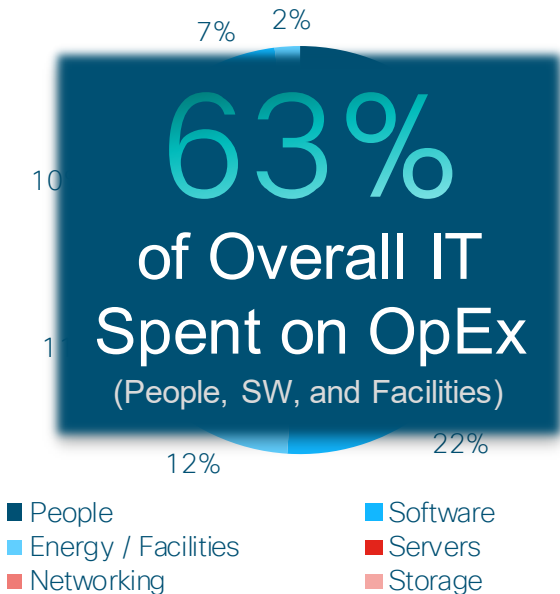


Multicloud Reality

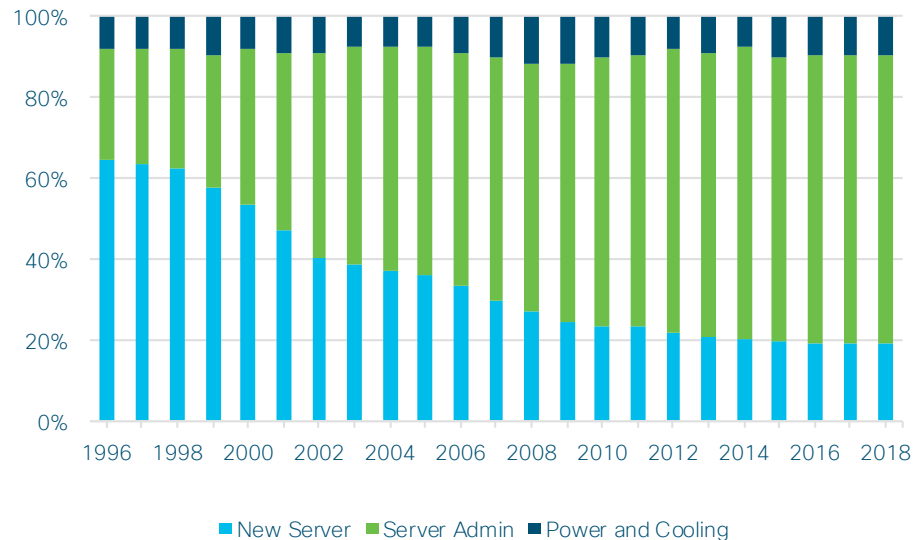
Developers demand choice, business demands economics

Data Center Economics

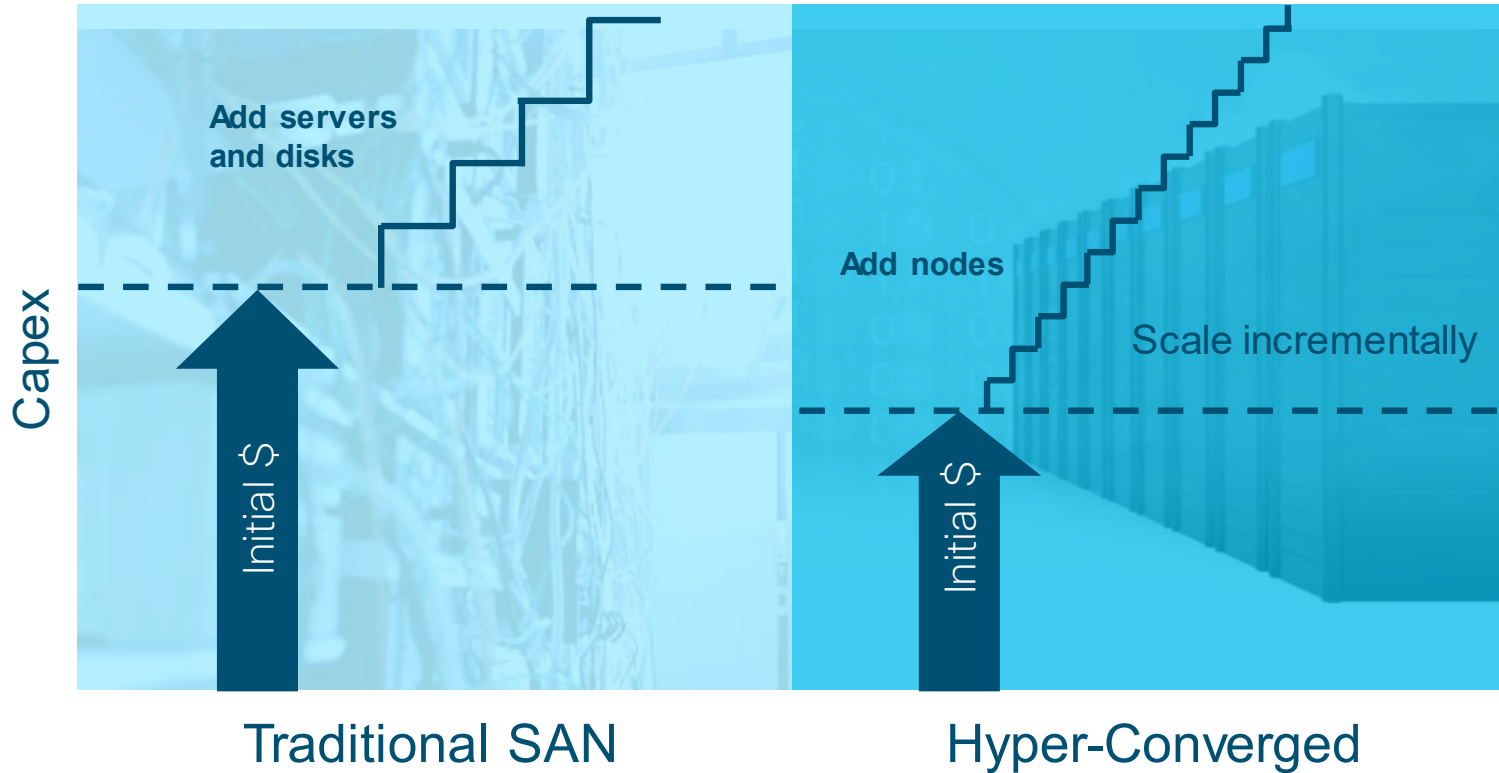
Overall Spend Distribution



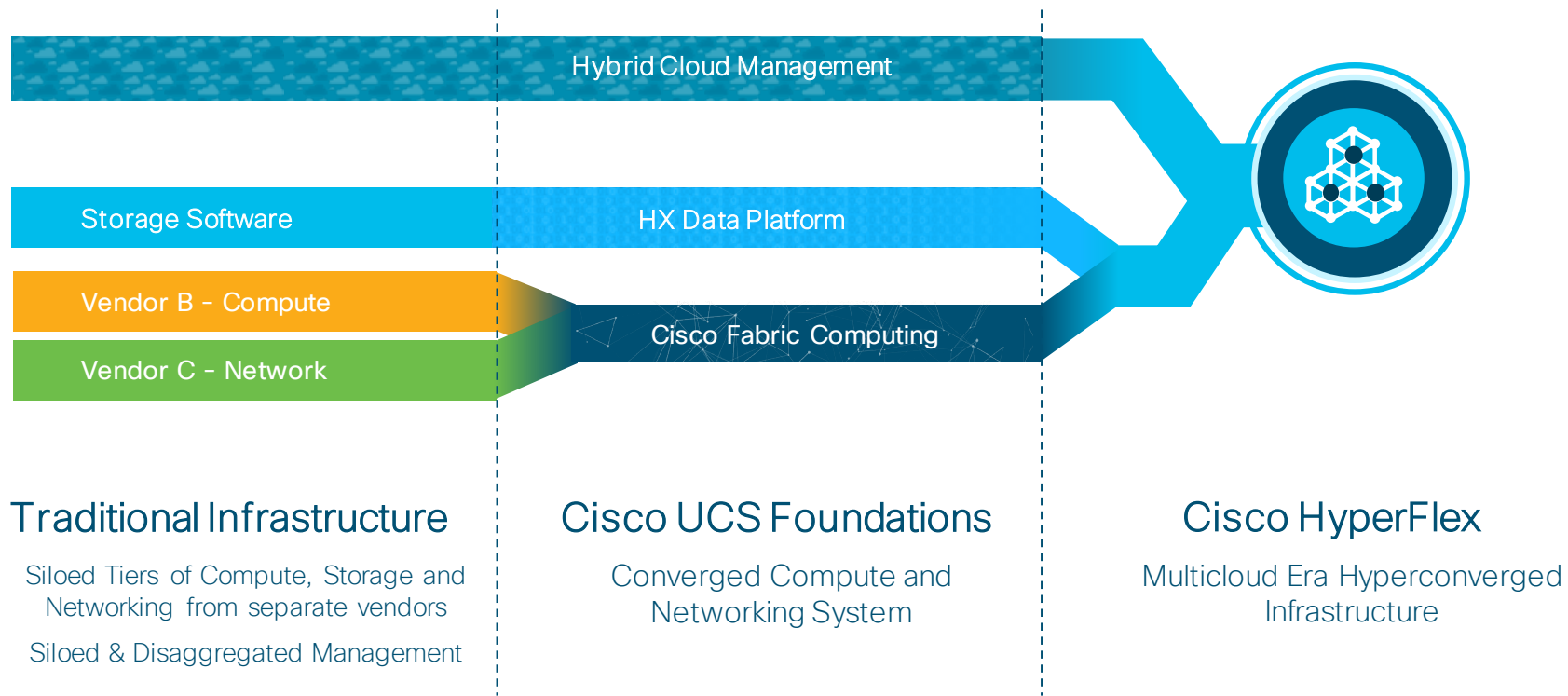
Server-Related Spend WW New Server, Power, Cooling, Management, and Administration Spending Share



HCI changes economics



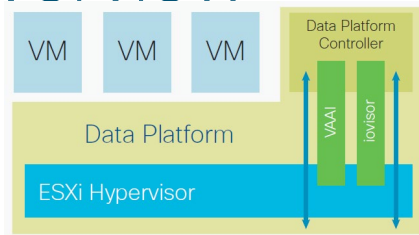
Architectural Approaches to Hyperconvergence



HX Data Platform Overview



**Cisco UCS Servers
Fabric Interconnects**



Cisco HX Data Platform



Cisco HyperFlex Systems

Enterprise Grade



- Robust Data Integrity and Continuous Availability
- Proactive Auto-support
- Custom built file system
- Inline De-duplication and Inline Compression

Maximum Simplicity



- Fast Installation and Configuration
- 100% vCenter based management
- Rapid VM Cloning
- VM/Folder level Snapshots

Economical Scaling



- Scale modularly
- Scale online
- Scale Compute and Storage independently
- Annual Subscription pricing

Primary HyperFlex Use Cases



Virtual Desktop Infrastructure

- Low upfront costs
- Consistent performance
- Predictable scaling



Server Virtualization

- Reduce operational complexity
- Adaptive scaling
- Always-on resiliency



Test and Development

- Agile provisioning
- Frequent iterations
- Instant cloning and snapshots



ROBO & Edge

- Simple deployment
- Centralized management
- No "fly-and-fix" missions



Databases & ERP

- Consistent, low-latency
- High IOPS
- All-flash nodes



Containers

- Simple & seamless customer experience
- Enterprise grade container storage
- Cloud native development on prem



Any App

Enterprises Run Mission Critical Apps on HyperFlex

Common HCI apps

Business
Critical Apps

CITRIX®

Exchange

Cisco
webexMicrosoft
SQL Server®ORACLE
DATABASEORACLE®
E-BUSINESS SUITE

Microsoft

SharePoint



MySQL®

SIEBEL®

PeopleSoft®

vmware®

MCKESSON

Epic

MUREX™

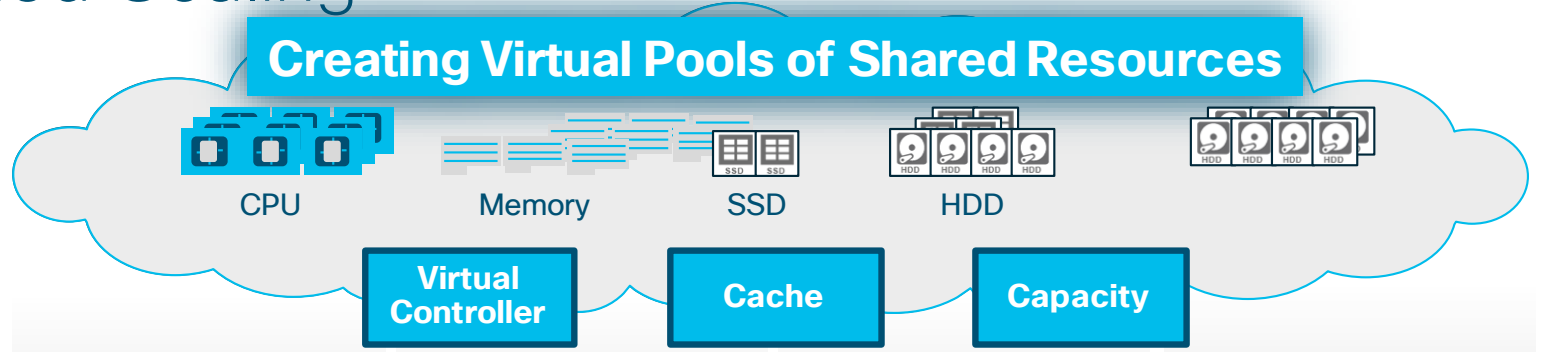
SAP®

kubernetes
by GoogleFirst Generation
Software Only HCI#1 in
PerformanceValidated
DesignsVirtualization and
Container OptionsCisco
HyperFlex

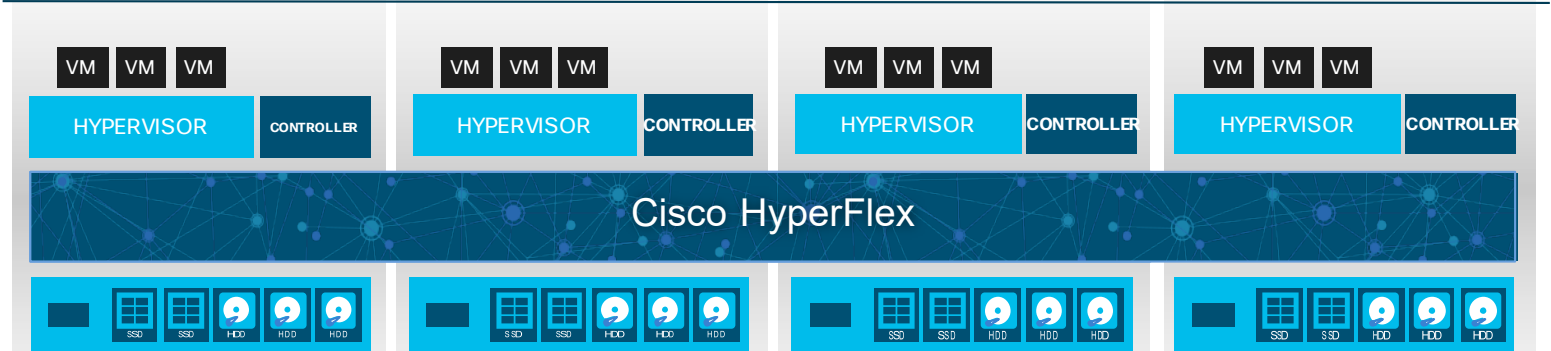
Simplified Scaling

Creating Virtual Pools of Shared Resources

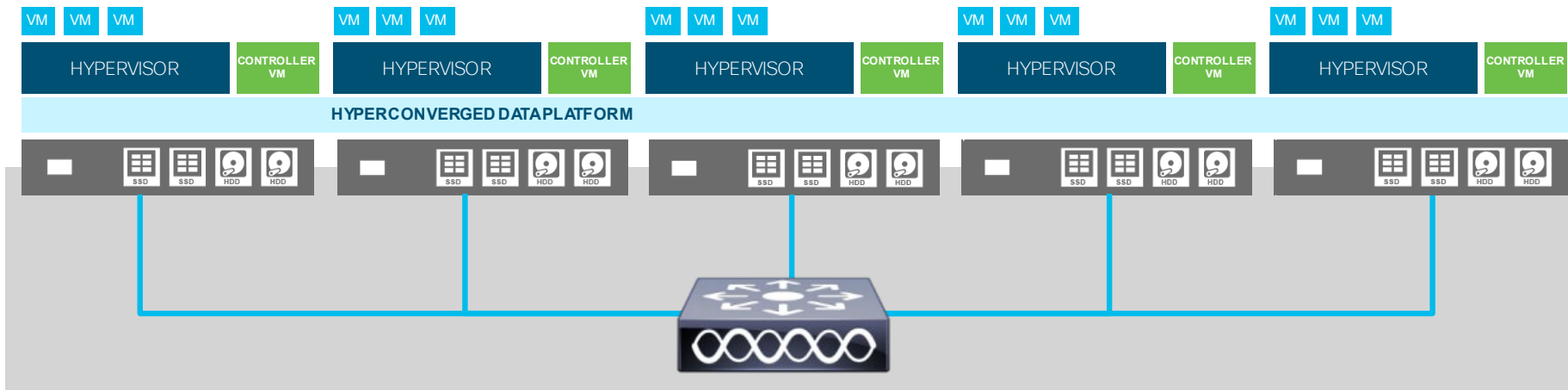
Application View



Physical View



Hyperconverged Scale Out and Distributed File System



Start With as Few
as Three Nodes

Hyperconverged
Data Platform
Installs in Minutes

Add Servers, One
or More at a Time

Linearly Scale
Compute, Storage
and Capacity

Distribute and
Rebalance Data
Across Servers
Automatically

Retire Older
Servers

ESG HCI Performance Testing

Performance to Simplify Business Critical Apps



HYPERFLEX VS. HCI COMPETITION

- 1 **3x higher**
VM density
- 2 **3x reduced**
read/write latency
- 3 **7:1 reduction**
IOPS variability



3x better

TCO

More workloads

On Hyperconverged

Predictable

End User Experience

READ THE FULL ESG REPORT

cisco.com/go/hyperflex

HyperFlex Product Differentiation

Architected to Optimize Across Hardware, Software, Networking and Management.
Integrated Solution with Single Point of Support

High Performance & Scalable Data Platform

#1 Performing HCI platform

Consistent, Low latency performance

3X Lower TCO, 3X Higher VM Density, 64 node scale, linear scale out performance

Enterprise Class Data Services & Storage Optimization



Integrated Dedup & Compression w/ no performance penalty

Seamless integration of Converged & Hyperconverged



Investment protection of existing storage and compute investment

Independent Scaling of Compute & Capacity



Cost optimization through Compute-only node support

Deployment Automation & Simplicity



Out-of-the-box service profiles, install/upgrade automation, automated cluster scaling

Integrated High Performance Network Fabric



10G/40G VIC/Fabric Factory installed, integrated networking, fabric QoS

Data Protection, High Availability & Resiliency



Native replication, backup/DR, Stretch Cluster, Availability Zones, Fault tolerant HA architecture

Cloud based centralized management



Monitoring, Telemetry, Analytics, Policy, Orchestration, Proactive TAC, HX Cluster management

Broad Range Of Supported Workloads

ROBO (Branch, IOT)

VSI (app/web)

VDI (Citrix, Horizon)

Collaboration (UC, HCS)

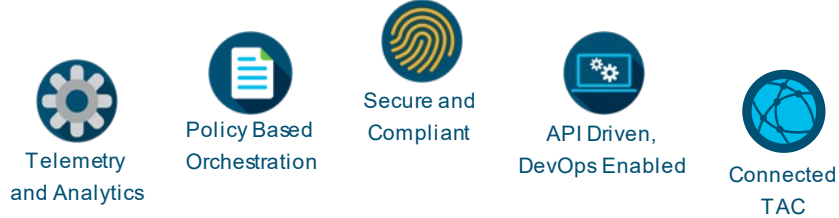
Databases (Oracle, SQL)

Mission Critical & ERP (SAP)

Analytics (Splunk)

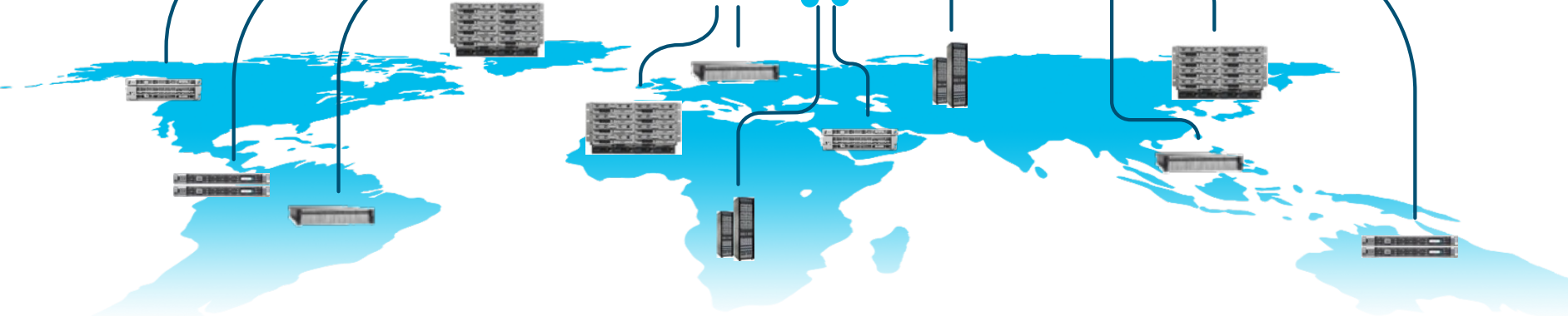
Cloud-Native Apps (Docker, Kubernetes)

Cisco Intersight Intelligent Centralized Management



SaaS
Simplicity

Actionable
Intelligence





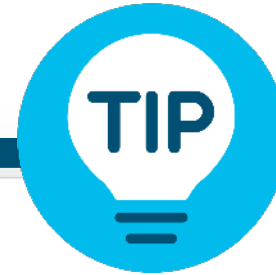
Case Studies

Rx Retail Chain - HyperFlex Cures Multisite Management



Client Challenges

- Small Pharma Retail
- 32 locations across South
- Recent Acquisition
- Looking to Centralize and Virtualize
- Limited Partner
- Multiple locations

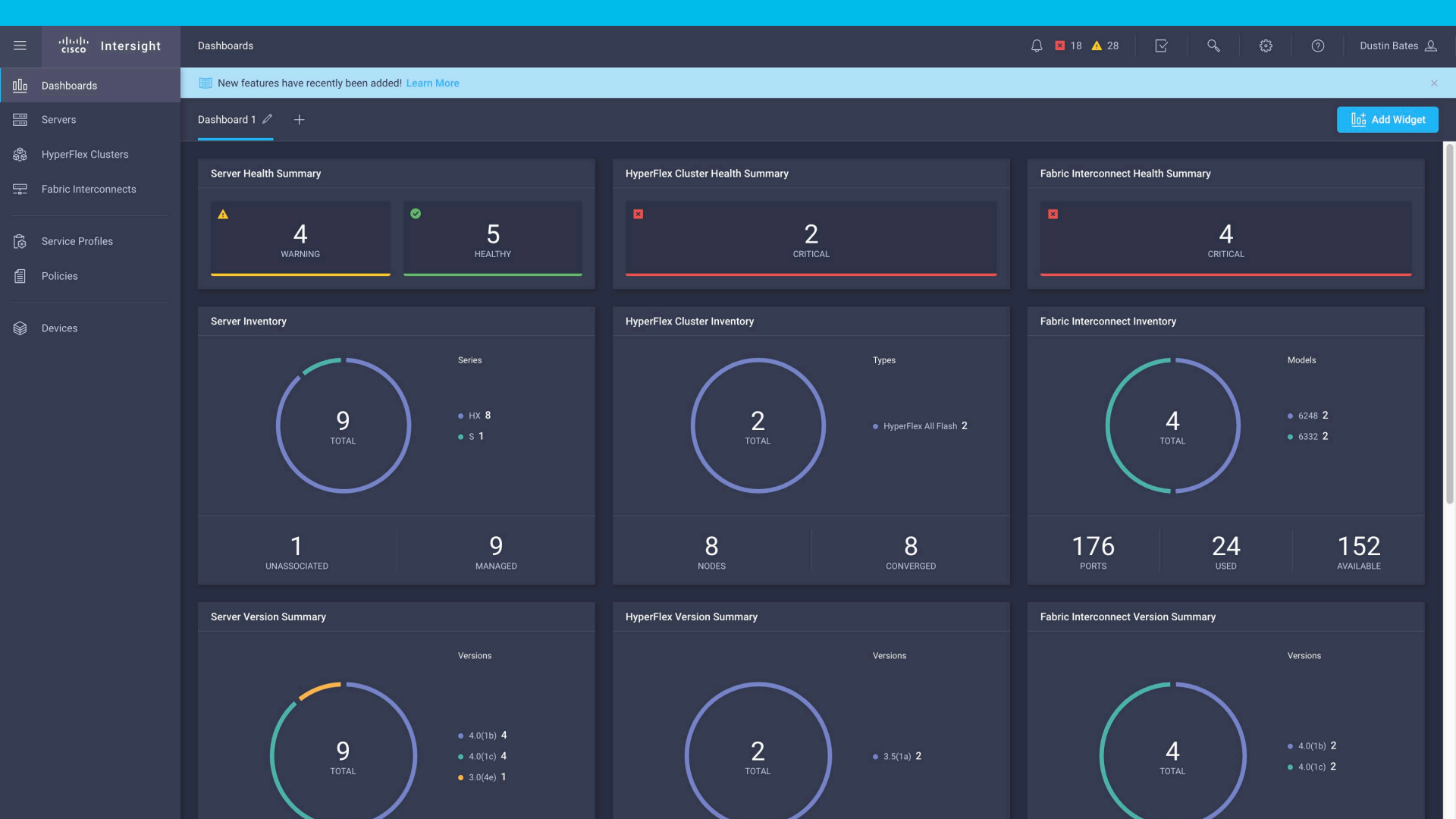


The Solution

- HyperFlex 3 C240
- Mentored Install
- Security AMP for End Point
- Single Server Sites managed through



Dashboard Walkthrough



HX Connect Dashboard



OPERATIONAL STATUS

Online ⓘ

SITE A

📶 Online

SITE B

📶 Online

WITNESS

👁️ Online



RESILIENCY STATUS

Healthy ⓘ



1 Site failure can be tolerated

» «



CAPACITY

10TB

STORAGE
OPTIMIZATION

✓ 19% Compression

✓ 97% Deduplication



NODES

32

SITE A
168 HX220C-M45
Converged8 UCSB-B200-M4
ComputeSITE B
168 HX220C-M45
Converged8 UCSB-B200-M4
Compute

Cisco Container Platform Deployment through vCenter

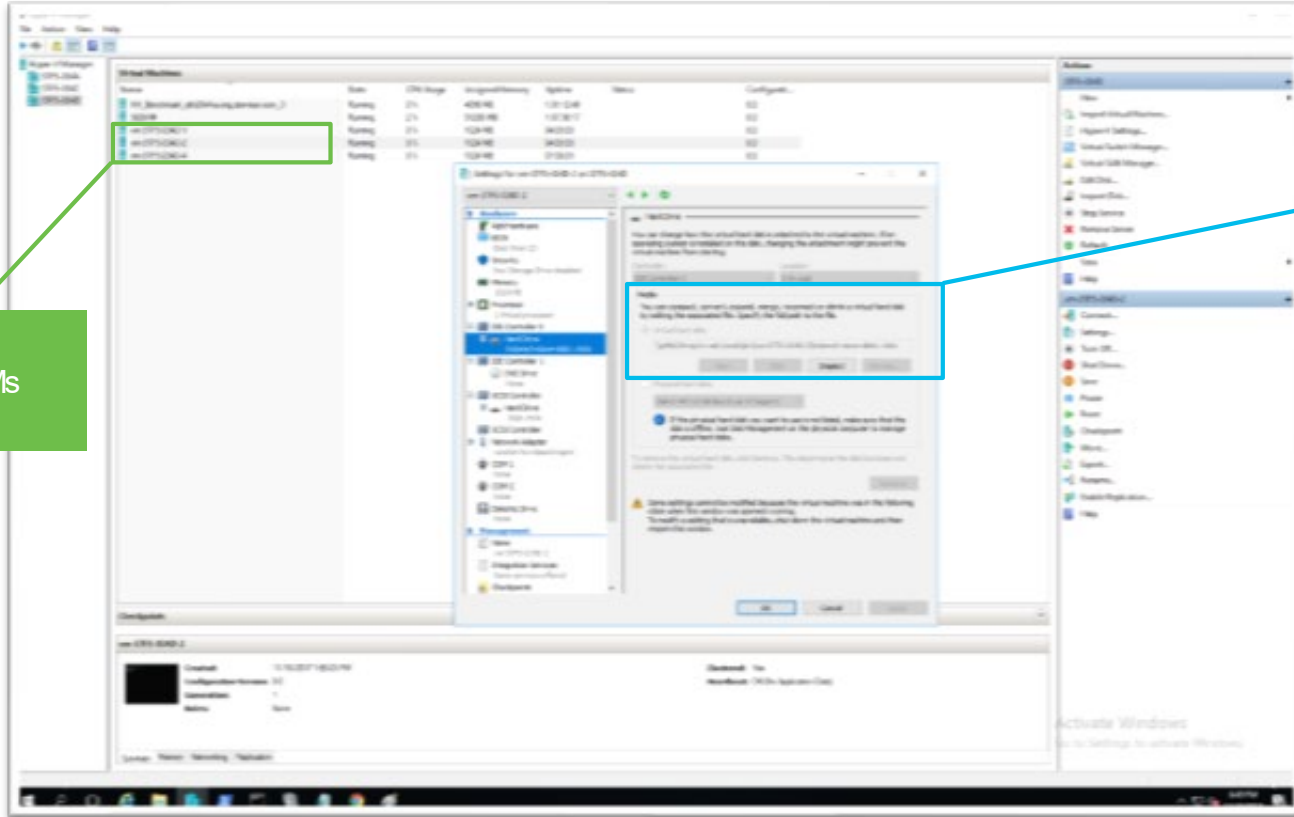
The screenshot displays the VMware vSphere Web Client interface. The main view shows a folder named 'CCP070one' containing three vApps: 'kcp-0-f0d23268-a6cf-40fa-bd97-e619f...', 'kcp-1-0a9c405e-d43e-477e-b3a3-3f34...', and 'kcp-2-08f43de6-a77d-46df-a3e9-4d04...'. All three vApps are in a 'Powered On' state with a 'Normal' status and have been provisioned with 40 GB of space.

Name	State	Status	Provisioned Space
kcp-0-f0d23268-a6cf-40fa-bd97-e619f...	Powered On	Normal	40 GB
kcp-1-0a9c405e-d43e-477e-b3a3-3f34...	Powered On	Normal	40 GB
kcp-2-08f43de6-a77d-46df-a3e9-4d04...	Powered On	Normal	40 GB

The interface also shows a 'Recent Tasks' pane at the bottom, indicating a task 'Move into resource pool' was completed successfully for the vApp 'kcp-0-f0d23268-a6cf-40fa-bd97...'. The task was initiated by 'VSPHERE LOCALIL...' and completed in 6 ms on 1/17/1...

Hyper-V Manager

App VMs



SMB Fileshare

Want a **live, personal demo** of what you saw here today?

Click [the link](#) in the chat window!



Q&A



Before we go...

Some other links to check out...

Find them in the chat window!

- [HyperFlex Home Page](#)
- [HyperFlex At-A-Glance](#)
- [HyperFlex Video](#)
- [ESG Lab Validation Case Study](#)
- [Personal Demo Request Form](#)

Click [here](#) to view all Data Center resources for partners

We Appreciate
Your
Feedback!

Please take a moment to let us know if this session met your needs and expectations.

The confidential evaluation survey will open once the event window is closed.

