



Secure. Mobile.

Powerfully Simple.



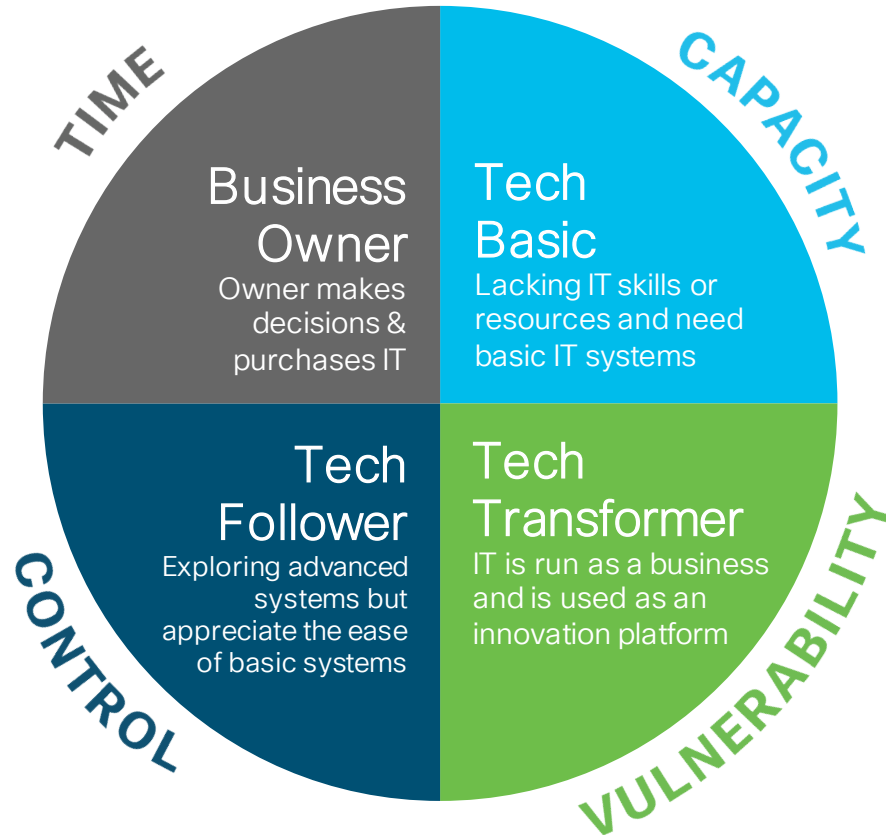
simple. 

Fuel My Business

AGENDA

1. Simple IT Portfolio Overview
2. Solution Overview – HyperFlex
3. Dashboard Walkthrough
4. Q&A
5. Conclusion

One Size Does Not Fit All



What's keeping you up at night?



Secure My Business

“My business had a **security breach**, we heard about the **latest attack**, and have a **new compliance regulation**. We need help ensuring our business is secure.”



Enable My Mobile Workforce

“My business is **growing**, we are **innovating**, and need to **ensure our teams can be productive, collaborative, and secure, anywhere**. We need great tech so we can **attract and retain the best talent**.”



Optimize My Business

“We have **new applications, new devices, and lots of video slowing down the network**, and last week we had an **outage that cost us a ton of money**. It's critical we stay up and running, **securely**.”



Connect My Teams

“We have lots of collaboration applications and devices, but they are **too complex** to bring everyone together in an **effortless manner**. I need a **simple solution** that allows my employees and customers to **connect in their own way**.”



Fuel My Business

Our current infrastructure is **too costly to maintain** and takes **too long to install my applications**. I need to **reduce application deployment time** and make it **easier to scale** my application needs with **sustained performance** for my customers and internal users.”

Simple, Secure, Reliable Networking

- ✓ *Designed Your Needs*
- ✓ *Fits Your **Budget***
- ✓ *Grows with Your Business*



Secure My Business

with Secure Branch

- Meraki MX
- ISR 1100
- Umbrella
- NGFW Low
- RV Series
- HyperFlex, UCS + Veeam

Secure against threats & protect your data



Enable My Mobile Workforce

with Secure Wireless

- Meraki MR
- Mobility Express
- Umbrella
- WAP
- WebEx

Increase employee productivity & flexibility



Optimize My Business

with Network Reliability

- Meraki Full Stack
- Cat2K, Mobility Express, ISR 1100
- Umbrella
- SBTG
- HyperFlex, UCS + Veeam
- WebEx

Ensure always-on with simple, smart solutions



Connect My Teams

with Intuitive Collaboration

- WebEx
- WebEx Teams

Connect teams with intuitive collaboration



Fuel My Business

with Converged Infrastructure

- HyperFlex
- UCS + Veeam

Security, simplicity and control of your computing, storage and connectivity



Today's
Webinar Theme:
**Fuel My
Business**
*with Hyperconverged
Infrastructure*

Be Ready: For any app, on any Cloud, at any scale

Continue Running: No business interruptions. No worries about your data.

Hyperconverge: Fully integrated computer, network and storage

Visualize: Manage virtual desktops with one all-encompassing dashboard

Solution Overview

Cisco HyperFlex Systems

Our Speaker...



Dustin Bates – Data
Center a Digital Services
Specialist

One Architecture for Operational Simplicity

UNIFIED MANAGEMENT MODEL

UCS MANAGEMENT



UCS Mini

Fourth Gen. UCS



Mainstream Computing

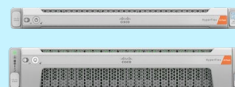
CLOUD CENTER



Converged Infrastructure



HyperFlex Systems



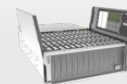
Hyperconverged Infrastructure

ACI



UCS C240

UCS C3000



Software-Defined Storage

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

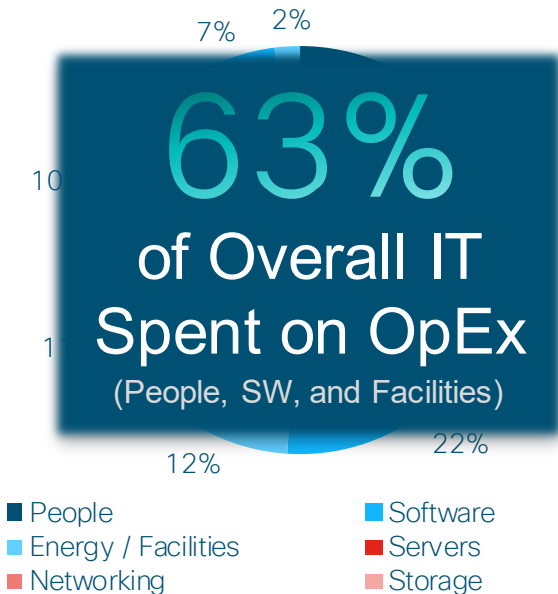


Multicloud Reality

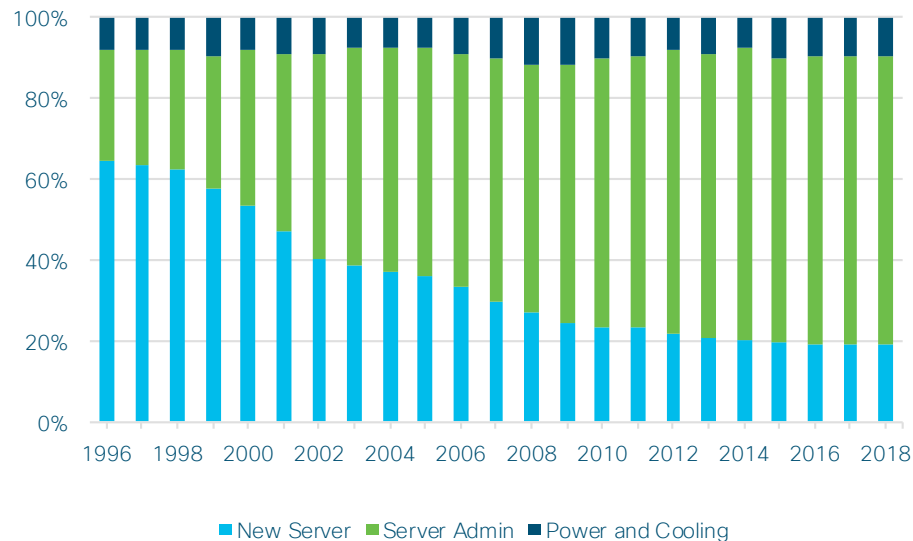
Developers demand choice, business demands economics

Data Center Economics

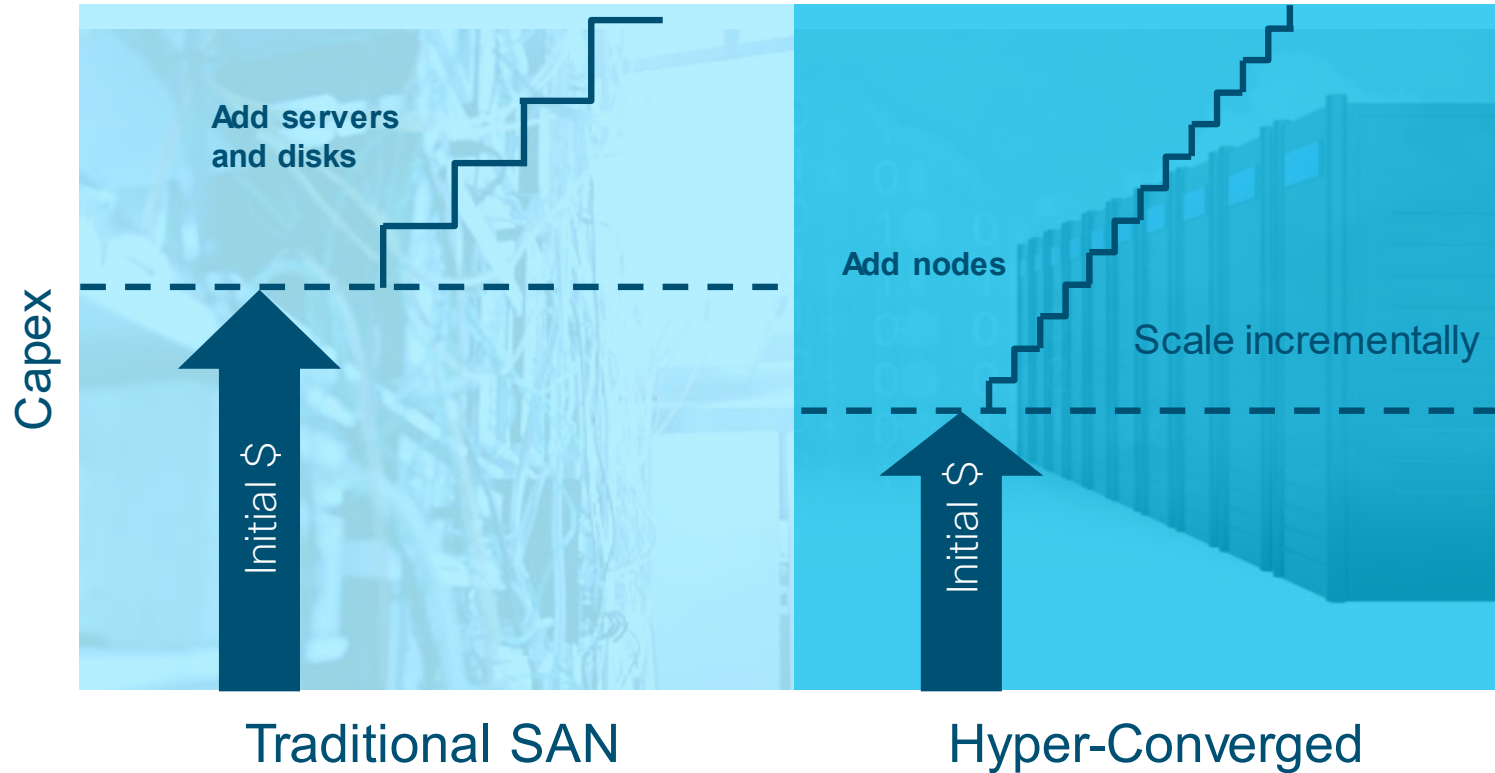
Overall Spend Distribution



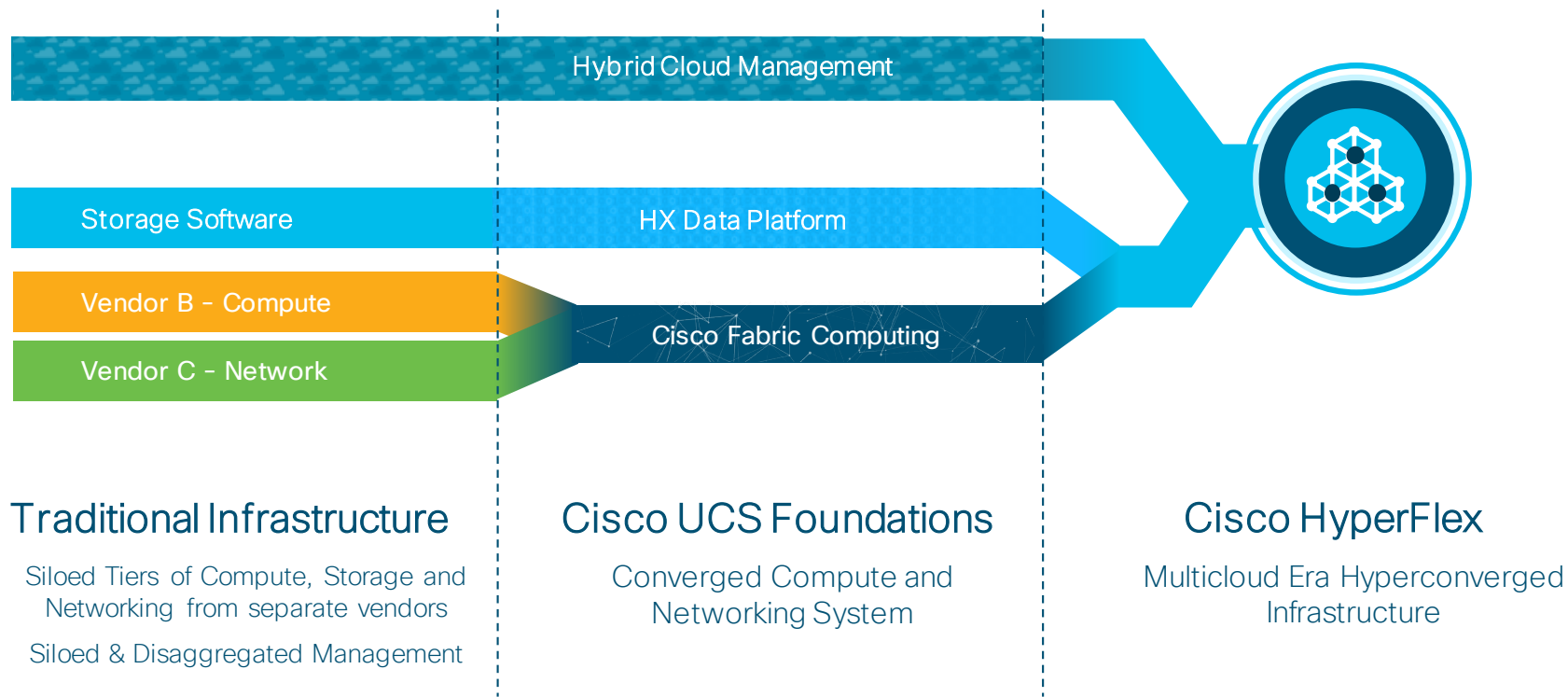
Server-Related Spend
WW New Server, Power, Cooling, Management,
and Administration Spending Share



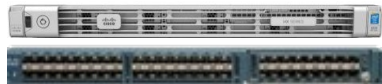
HCI changes economics



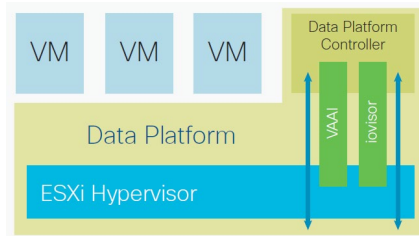
Architectural Approaches to Hyperconvergence



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

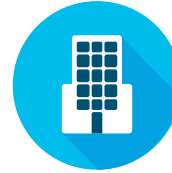


Test and Development

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

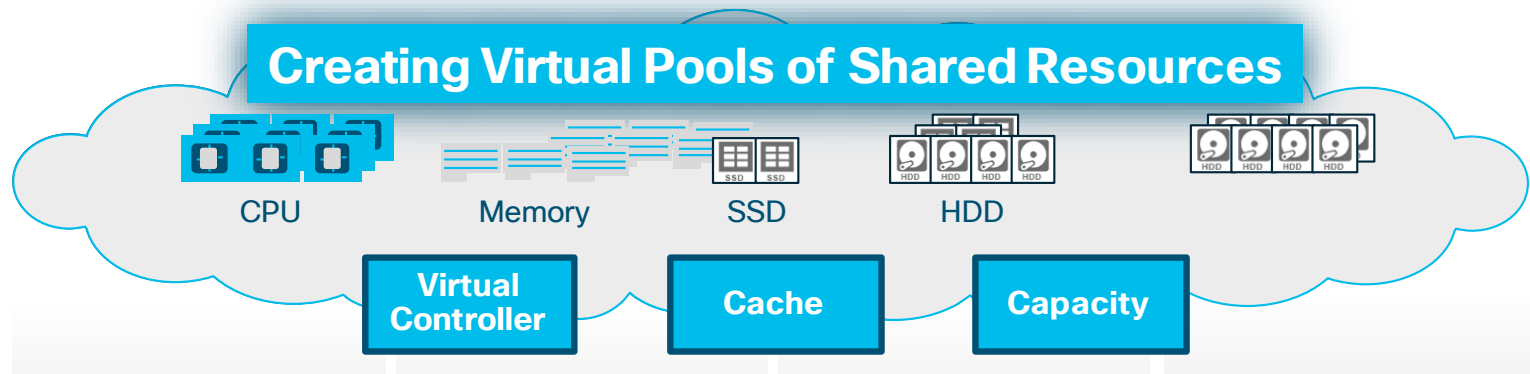
MUREX™

SAP®

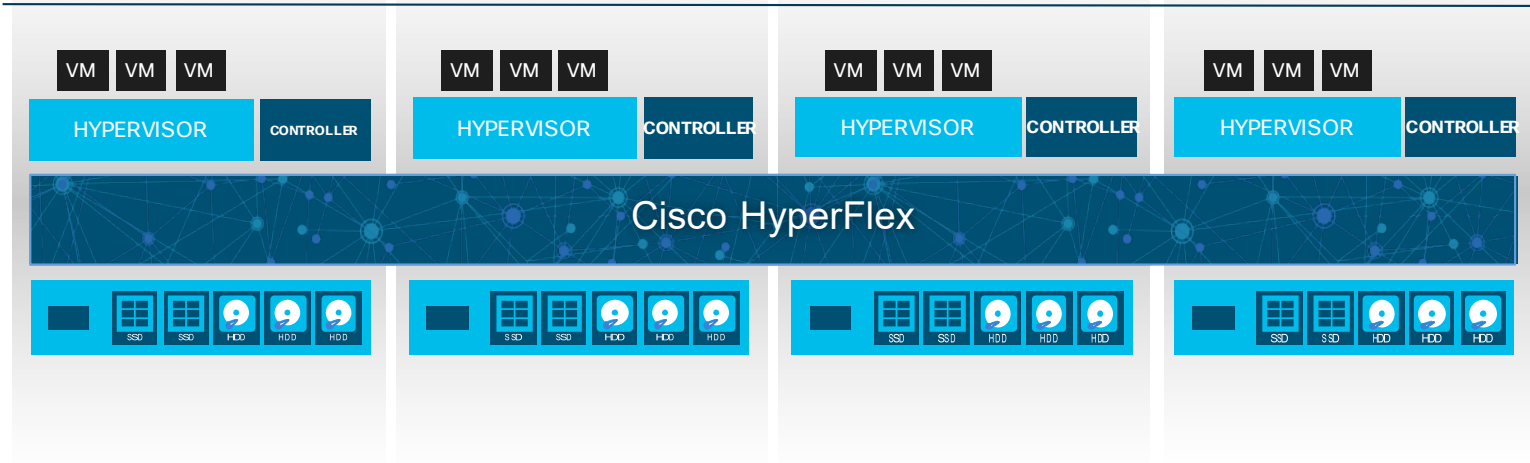
kubernetes
by GoogleFirst Generation
Software Only HCI#1 in
PerformanceValidated
DesignsVirtualization and
Container OptionsCisco
HyperFlex

Simplified Scaling

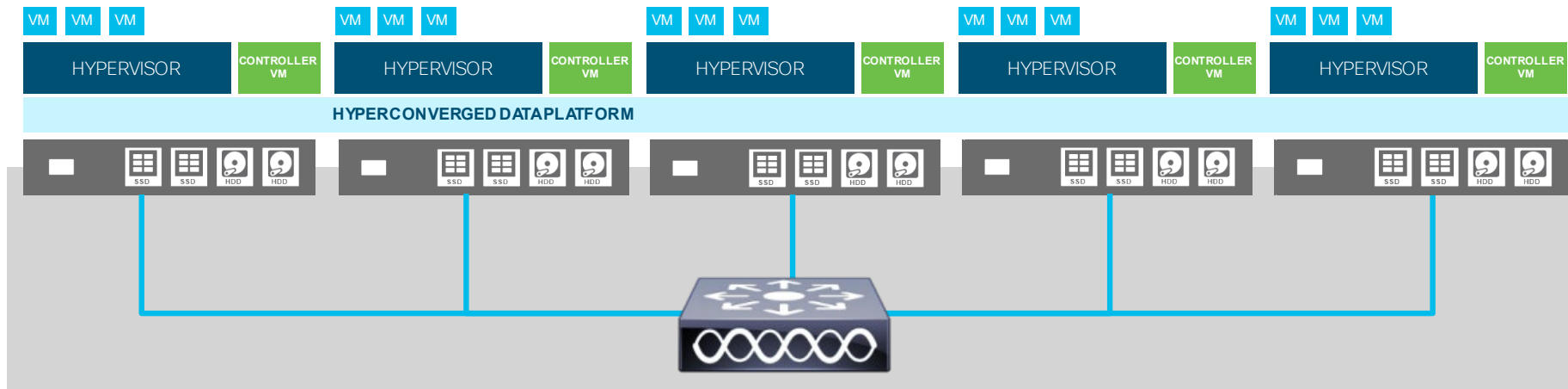
Application
View



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



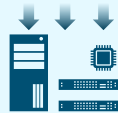
Investment protection of existing storage and compute investment

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


Telemetry
and Analytics


Policy Based
Orchestration


Secure and
Compliant


API Driven,
DevOps Enabled


Connected
TAC

SaaS
Simplicity

Actionable
Intelligence





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
16

8 HX220C-M45
Converged



8 UCSB-B200-M4
Compute



SITE B
16

8 HX220C-M45
Converged



8 UCSB-B200-M4
Compute



Cisco Container Platform Deployment through vCenter

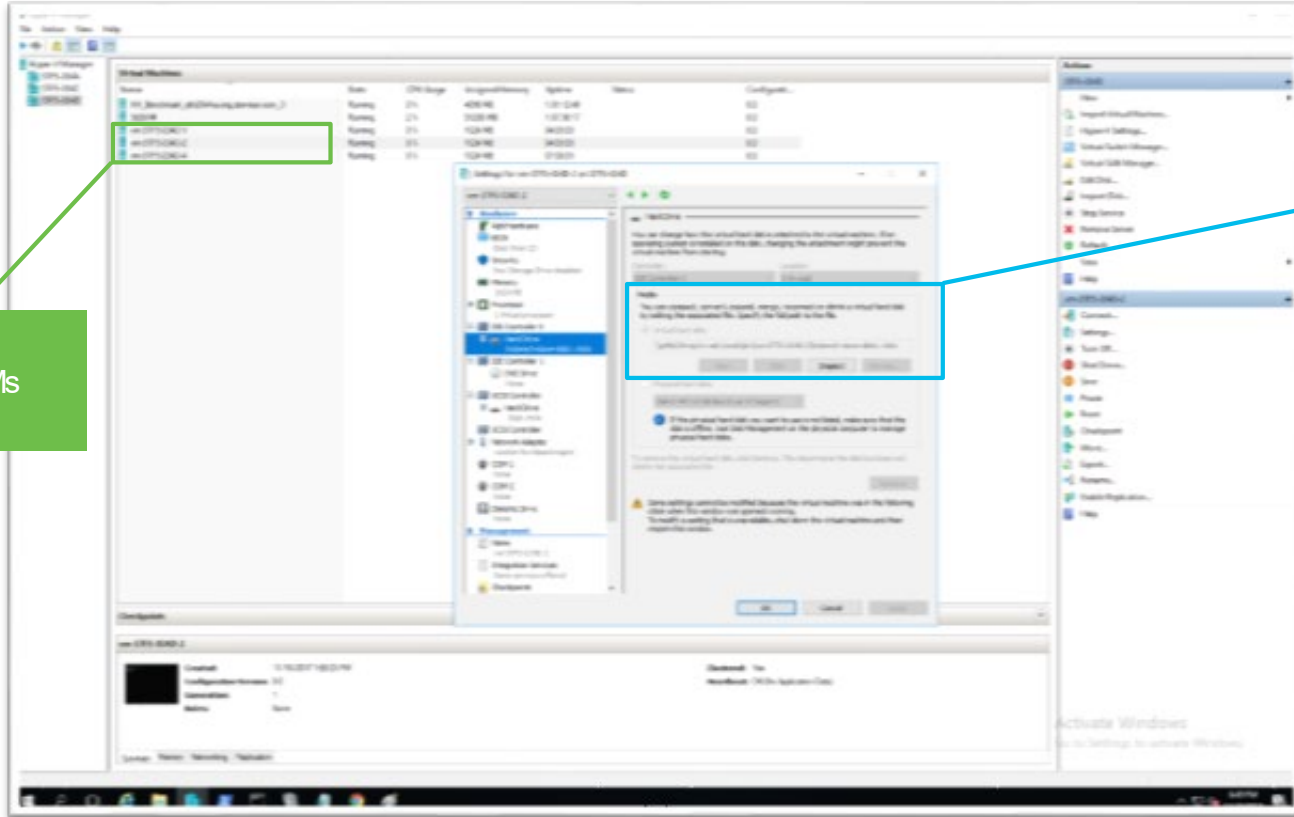
The screenshot displays the VMware vSphere Web Client interface. The left-hand 'Navigator' pane shows a tree view of the vCenter environment, with the 'CCP070one' folder selected. The main pane shows the 'Virtual Machines' view for the 'vApp' type, displaying a table of three vApps. The 'Recent Tasks' pane at the bottom shows a task 'Move into resource pool' completed successfully.

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

Task Name	Target	Status	Initiator	Queued For	Start Time
Move into resource pool	Misc	Completed	VSPHERE LOCALI...	6 ms	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...

- ✓ Your *Needs*
- ✓ Your *Budget*
- ✓ Your *Business*

Simple, Secure, Reliable Networking



Secure My Business

Secure against threats & protect your data



Enable My Mobile Workforce

Increase employee productivity & flexibility



Optimize My Business

Ensure always-on with simple, smart solutions



Connect My Teams

Connect teams with intuitive collaboration



Fuel My Business

Security, simplicity and control of your computing, storage and connectivity

SECURITY, MOBILITY, COLLABORATION, NETWORKING, AND DATA CENTER SOLUTIONS

Check Out Our Solution Selector Tool

Simple guidance for choosing the perfect SMB network solutions for you!

You're running a business, and evaluating technology solutions and doing proof of concepts isn't your top priority. That's why we provide a simple tool to help you choose which products are best suited for your environment – switching, wireless, routing, and security – with just a few simple questions.

Try it now at

<http://bit.ly/ciscoselectortool>



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](#)

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.

