



Driving Greater Business Outcomes with Next Gen IT

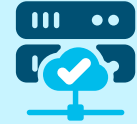
Shankar Srikanta 
Consulting Systems Engineer
24th Jan 2018



Cisco changed the IT landscape with UCS

Simplicity you
can build on

Because it's a system, not a server



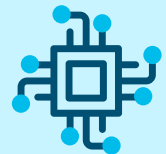
Versatile
performance

One system, all workloads



Future proofed
by design

Unified yet modular architecture



Cisco UCS Rapid Growth

No.1

Integrated infrastructure
(Cisco UCS® and Cisco Nexus®)

130+

World-record
performance benchmark

60,000+

Customers

No.1

WW Market share
in x86 blades

1

Exabyte total
storage deployed

>85%

of Fortune 500 have
invested in Cisco UCS



Source: IDC, 3CQY17, , Vendor Revenue Share

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Trend : Diversity in DC architecture

FREESTANDING INFRASTRUCTURE

INTEGRATED INFRASTRUCTURE

HYPERCONVERGED

SCALE OUT



APPS

Mainstream Business Applications
OLTP, ERP, Database, Collaboration

Virtualized Applications
Desktop Virtualization
Production Cloud

Virtualized Workloads
VDI
Branch/Remote

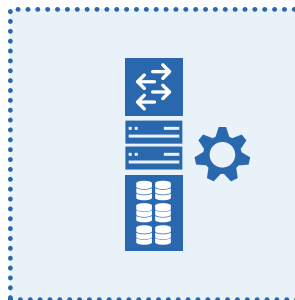
Big Data DevOps
Industrial Grid Cloud
Test/Dev Backup



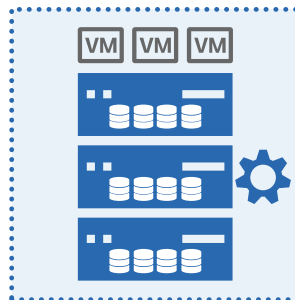
Infrastructure



A La Carte Design
Servers, Networking, SAN



Pre-Engineered with App Sizing
Platform Level Automation
Flexible Resource Ratios



Appliance Model
Fixed Resource ratios
Storage Virtualization



Bare Metal
Ultra High Capacity
Server Side Storage



Attributes

Silos limit speed and efficiency



Utilization



Policy



Security



Automation



Flexibility

Resource Sharing



FREESTANDING
INFRASTRUCTURE



Utilization



Policy



Security

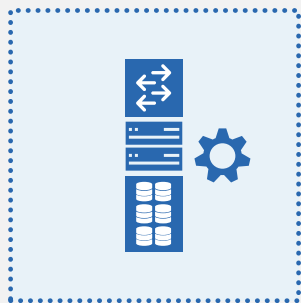


Automation



Flexibility

Resource Sharing



INTEGRATED
INFRASTRUCTURE



Utilization



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Automation



Flexibility

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HYPERCONVERGED



Utilization



Policy



Security

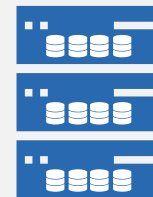


Automation



Flexibility

Resource Sharing



SCALE OUT

Single Framework To Eliminate Silos !

Fifth Generation UCS



FREESTANDING
INFRASTRUCTURE



INTEGRATED
INFRASTRUCTURE

HyperFlex Systems



HYPERCONVERGED

S3000



SCALE OUT

**ONE SYSTEM, ONE NETWORK, ONE MANAGEMENT
ENVIRONMENT**

Edge

Core Data Center

Cloud



Cisco UCS
with
Intel® Xeon®
processors

Cisco Hyperflex – Only Complete HCI Platform

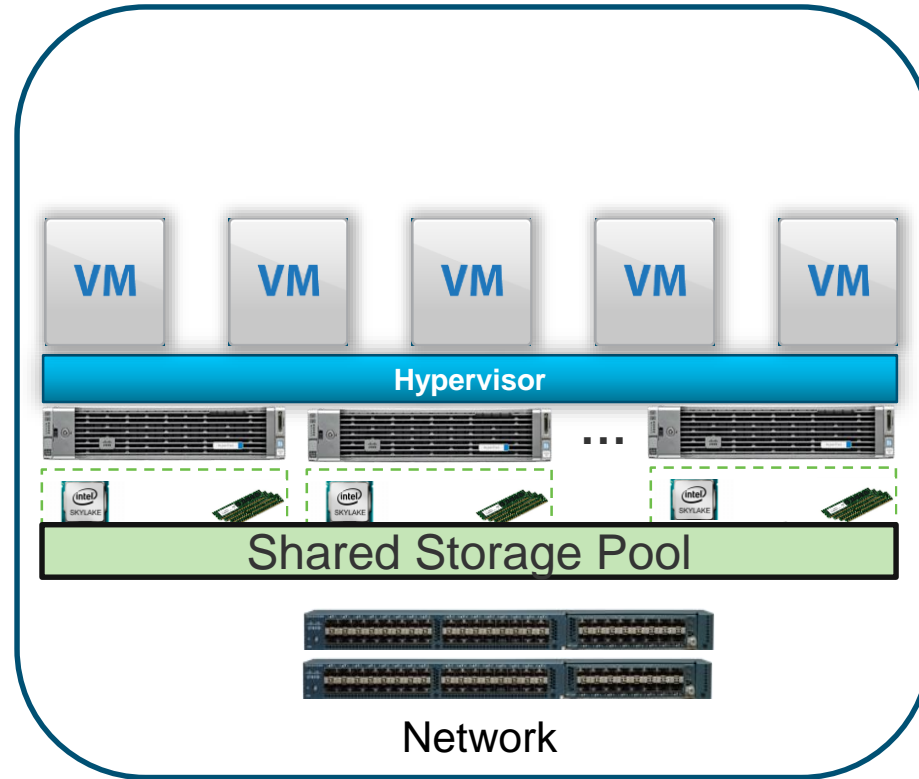
Benefits

Modular

Deploy

Manage

Support



Hyperconvergence Meets Unified Computing

HyperFlex HX-Series

Bundles and
Configure to Order

Annual Subscription
Software Model

Integrated with
vSphere



HX220C

High Performance in
Small Footprint



HX240C

High Density with
Performance



**HX220C &
EDGE**

Smallest Footprint



HX240C

Capacity-Heavy



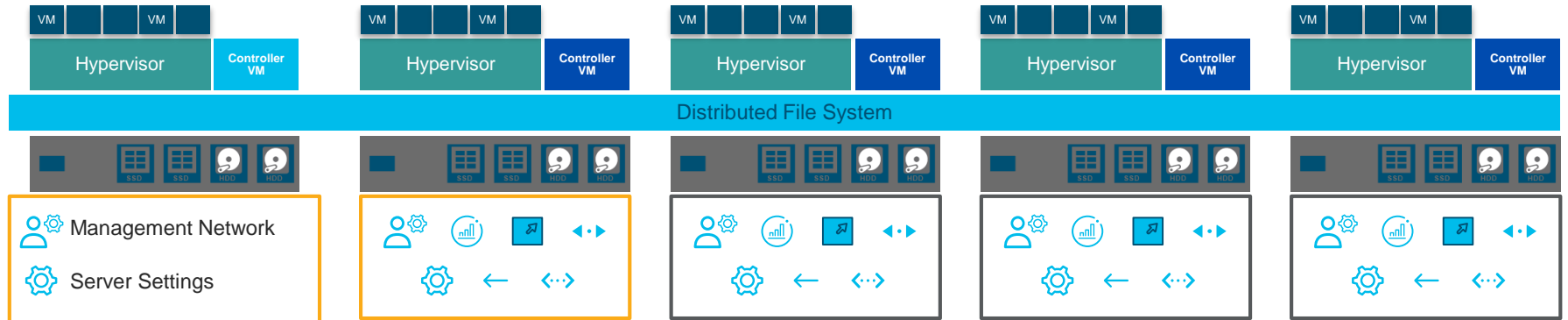
**40 GBPS / 10 GBPS
UCS FABRIC
NETWORKING**

90+ Nodes, Single Fabric,
Single Management
Domain



Networking Tasks Per Node with HCI

Customer experience with other vendors



- Management Network
- Server Settings
- Backup Connectivity
- Controller VM Resources
- External Storage Access
- Virtual Machine Migration
- Distributed Data Paths

Repeat work

More Repeat work

Predictable? Consistent? Efficient?



Fully Automated deployments

HX FI Domain

Simplified Capacity Expansion

UCS Fabric Interconnects

HyperFlex Nodes

ESXi

vSwitch - Management
vmk0

HX
Controller

vSwitch - Storage Data
vmk1

vSwitch - VM Network

vSwitch - vMotion

HBA
Ports

- ✓ Service profiles and templates
- ✓ Traffic segmentation via dedicated vNICs
- ✓ Storage and management traffic localized to fabric for optimal performance
- ✓ QoS policies for well defined and predictable service
- ✓ QoS policies including "no drop" and jumbo frames for optimal performance
- ✓ Multicast policy for HX cluster needs

HBA
Ports

vSwitch - Management

vSwitch - Storage Data

vSwitch - VM Network

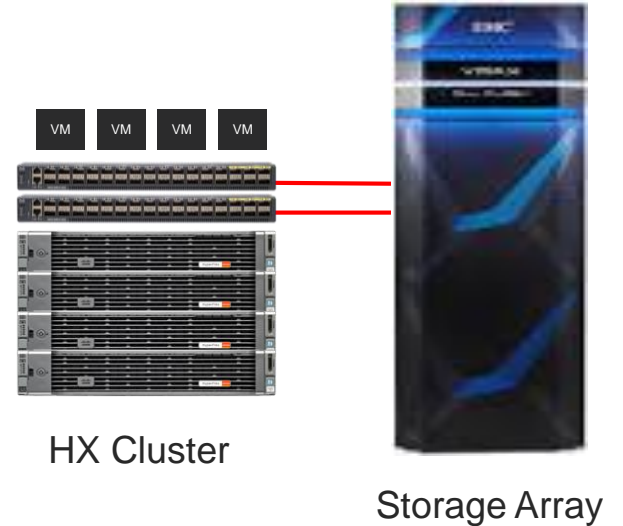
vSwitch - vMotion

HX
Controller

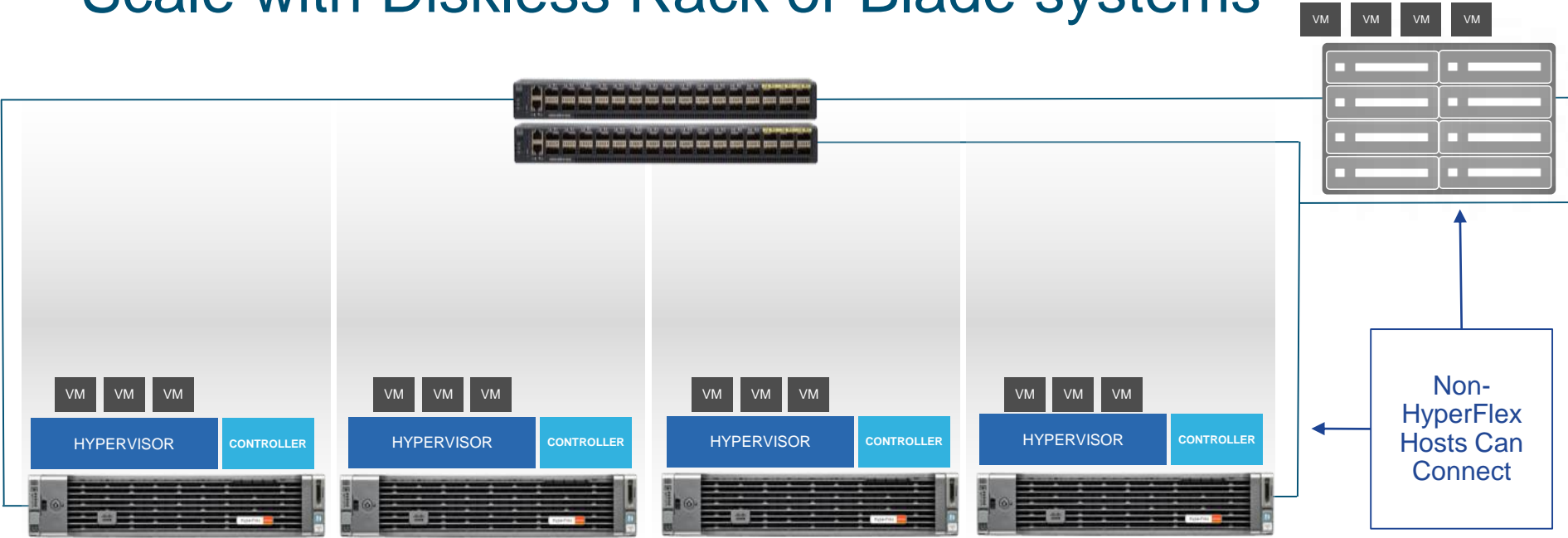


Works with existing Storage

- HX supports multiple storage protocols including NFS, iSCSI and FC
- User Benefits
 - Simpler and easier VM migration and data transfer
 - Use for backup and other application support



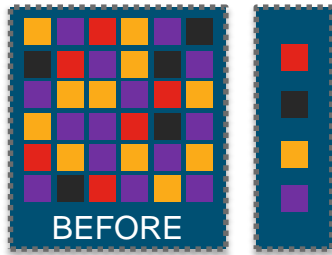
Scale with Diskless Rack or Blade systems



- Use existing systems to scale the Hyperflex cluster
- Need more processing power for a short period

Data Optimization

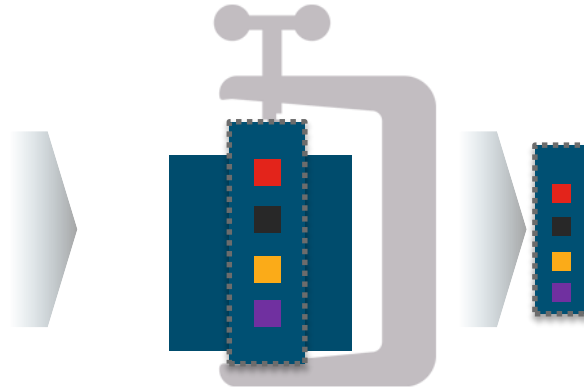
Log-Structured File System Yields More Efficient Data Optimization



Inline Deduplication

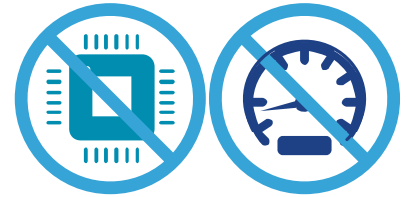
20–30% space savings

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Inline Compression

30–50% space savings



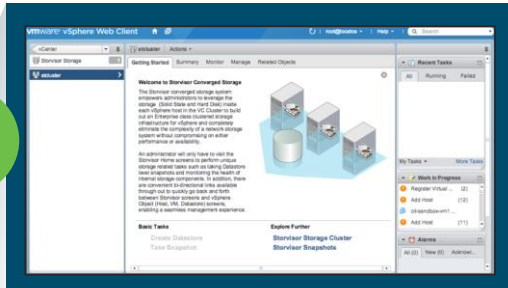
No Special Hardware
No Performance Impact
No Config lock-in
No Additional License

Lower Cost



Complete Management Integration

- vCenter Based Management
- No switching between management consoles
- View storage alerts alongside with ESX alerts/alarms



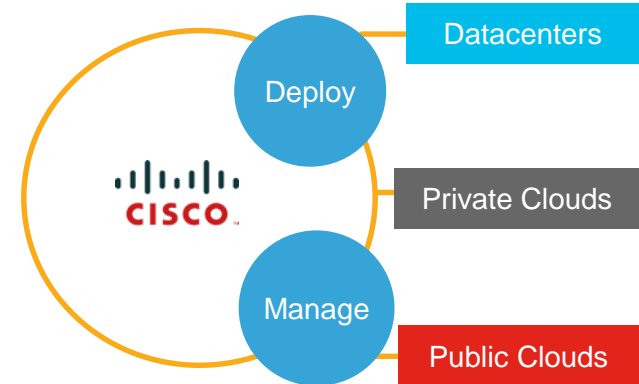
Integrated Management

- UCS Director for complete infrastructure automation
- Policy based IaaS automation
- Management and operational visibility



Private Cloud

- Cloud Center for hybrid cloud management
- Application lifecycle management
- Mobility across clouds



Private Cloud



Cisco Intersight : Cloud Managed Infrastructure



Intuitive Experience



Enhanced Support



Proactive Guidance



Secure and Extensible



**SaaS
Delivered**

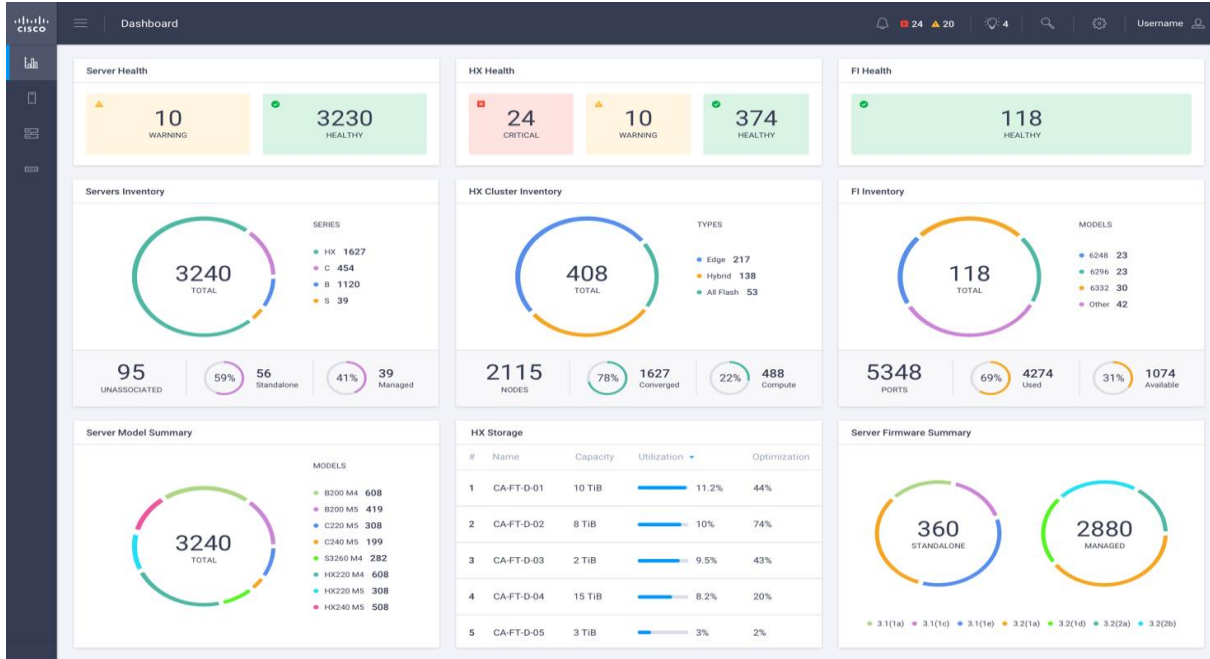
SaaS
Simplicity

Actionable
Intelligence



Cisco UCS
with
Intel® Xeon®
processors

Intersight : Leading the change



Single Mgmt Point

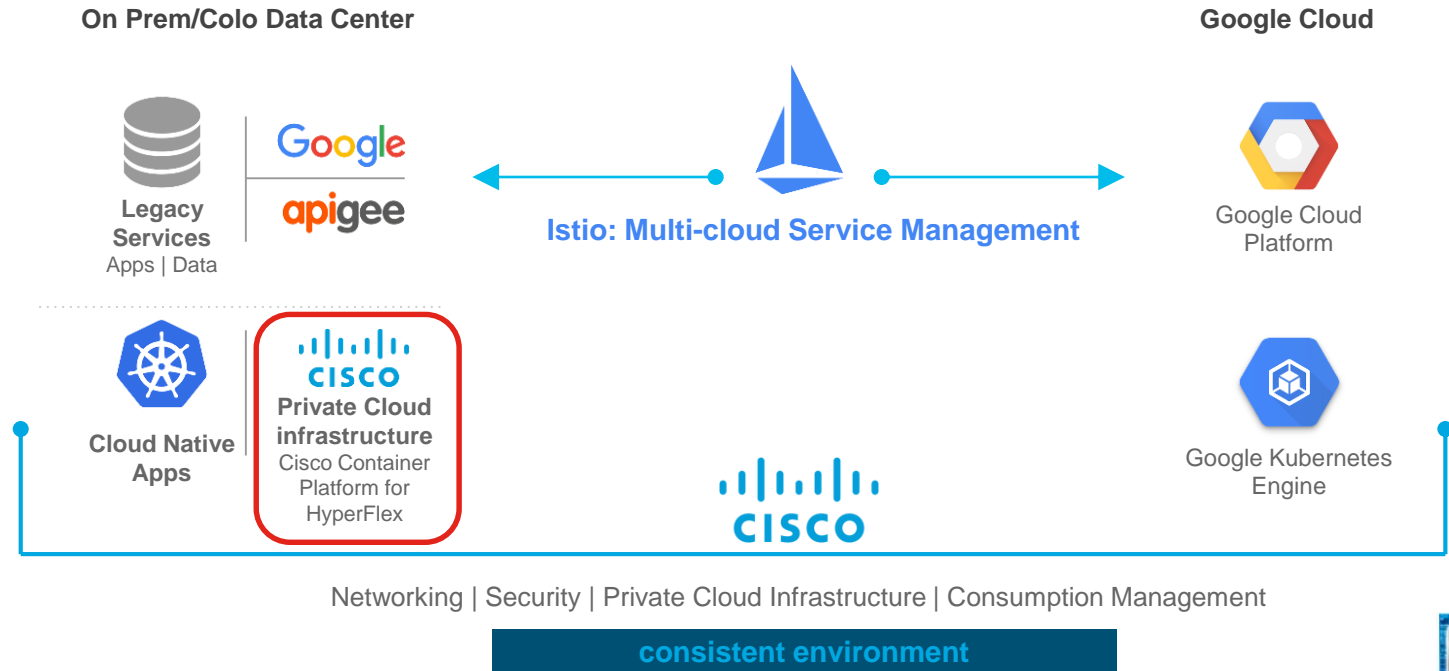
Cloud Install

Central Alerting

Simplified Console



Cisco and Google hybrid cloud solution



Primary Use Cases



Virtual Desktop Infrastructure

- Low upfront costs
- Consistent performance
- Predictable scaling



Server Virtualization /Containers

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



Test and Development

- Agile provisioning
- Frequent iterations
- Instant cloning and snapshots



Databases & Analytics

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



Large Remote Branch Office

- Simple deployment
- Centralized management
- No “fly-and-fix” missions

>2800+

NEW HYPERFLEX CUSTOMERS



Hyperflex Customers

INDUSTRIES



Financial Services



Government



Education



IT Software and Services



Retail



Pharmaceutical



Health Care



High Tech/
Industrial Mfg.



USE CASES



Virtual Desktop
Infrastructure



Server
Virtualization



Test and
Development



Large Remote
Branch Office



Databases



Cisco UCS
with
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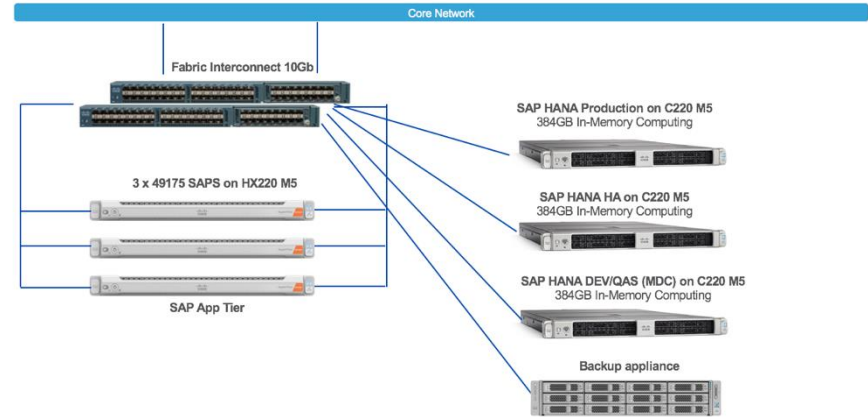
Innovating with HyperFlex for SAP S4HANA

Customer Profiles

- Oil & Gas company in Indo-China
- Need new infrastructure for SAP S/4HANA and HANA Deployment
- Support at least concurrent 100 users as initial phase and able to scale in the future
- Able to support other workloads within same infrastructure without performance impact

Cisco HyperFlex Advantage

- Faster performance
- Improved ROI
- Reduced Footprint
- Integrated Solution



Future of Next Gen IT Infrastructure

- Hybrid Infrastructure
- Cloud Based Management
- Analytics / Telemetry Based

