



Driving Greater Business Outcomes with Next Gen IT

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ASEAN Datacenter Computing Solutions

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Tech from the Star Wars movies are not too far off



What has changed in the last 10 years ?



Hottest Phone – Nokia 8800



APPL : \$till in the teens



Preferred search engine



Top 5 Server Vendors

Cisco changed the IT landscape with UCS

Simplicity you
can build on

Because it's a system, not a server



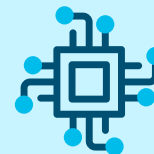
Versatile
performance

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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A close-up photograph of a car's side-view mirror. The mirror's oval frame is black. The reflection inside the mirror shows a multi-lane highway stretching into the distance under a sunset sky with orange and blue clouds. A white car is visible in the distance. To the right of the mirror, a portion of the car's body and a side window are visible. In the background, outside the mirror, a highway overpass sign is visible against the sky. Overlaid on the center of the mirror's reflection is the text "You cannot drive forward by looking in the mirror" in a bold, red, sans-serif font.

**You cannot
drive forward
by looking in
the mirror**

Trend : Diversity in DC architecture

FREESTANDING INFRASTRUCTURE



APPS

Mainstream Business Applications
OLTP, ERP,
Database, Collaboration

INTEGRATED INFRASTRUCTURE

Virtualized Applications
Desktop Virtualization
Production Cloud

HYPERCONVERGED

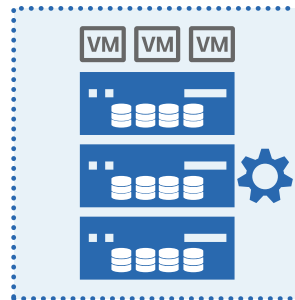
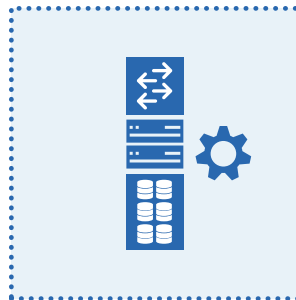
Virtualized Workloads
VDI
Branch/Remote

SCALE OUT

Big Data DevOps
Industrial Cloud
Grid Backup
Test/Dev



Infrastructure



Attributes

A La Carte Design
Servers, Networking, SAN

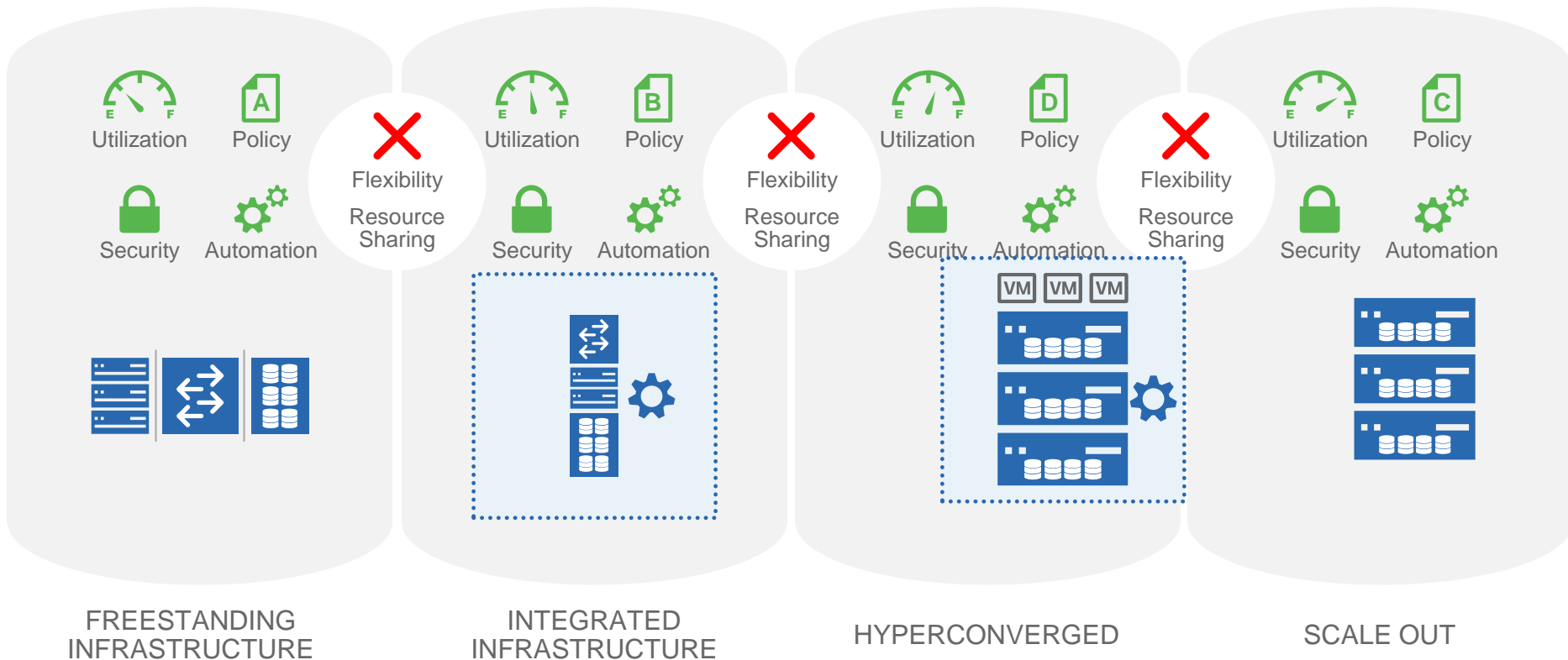
Pre-Engineered with
App Sizing
Platform Level Automation
Flexible Resource Ratios

Appliance Model
Fixed Resource ratios
Storage Virtualization

Bare Metal

Ultra High Capacity
Server Side Storage

Silos limit speed and efficiency



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

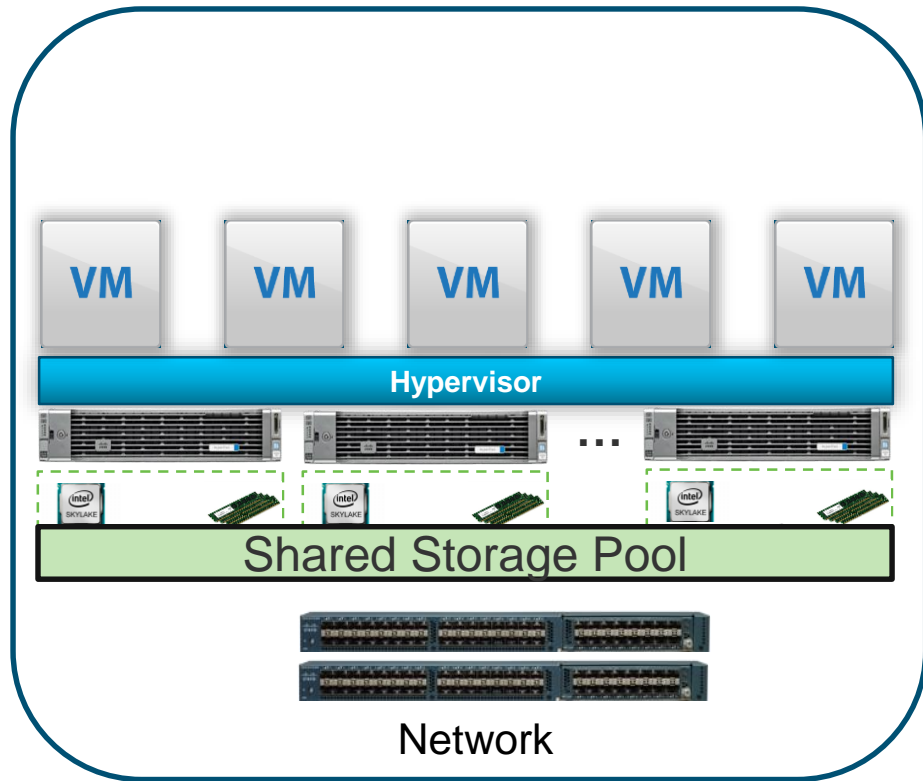
Benefits

Modular

Deploy

Manage

Support



Built on Cisco UCS



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



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

90+ Nodes, Single Fabric,
Single Management
Domain



**HX220C &
EDGE**

Smallest Footprint



HX240C

Capacity-Heavy



**HYBRID
CLUSTER**



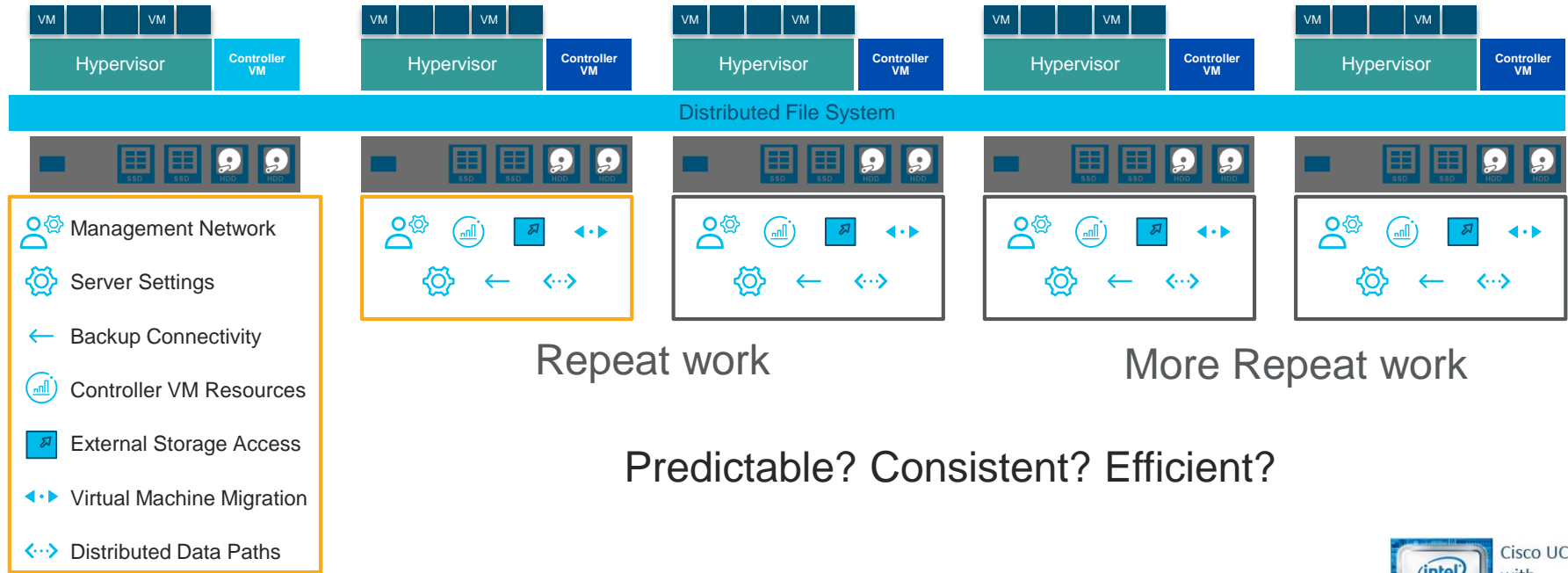
**ALL FLASH
CLUSTER**



Cisco UCS
with
Intel® Xeon®
processors

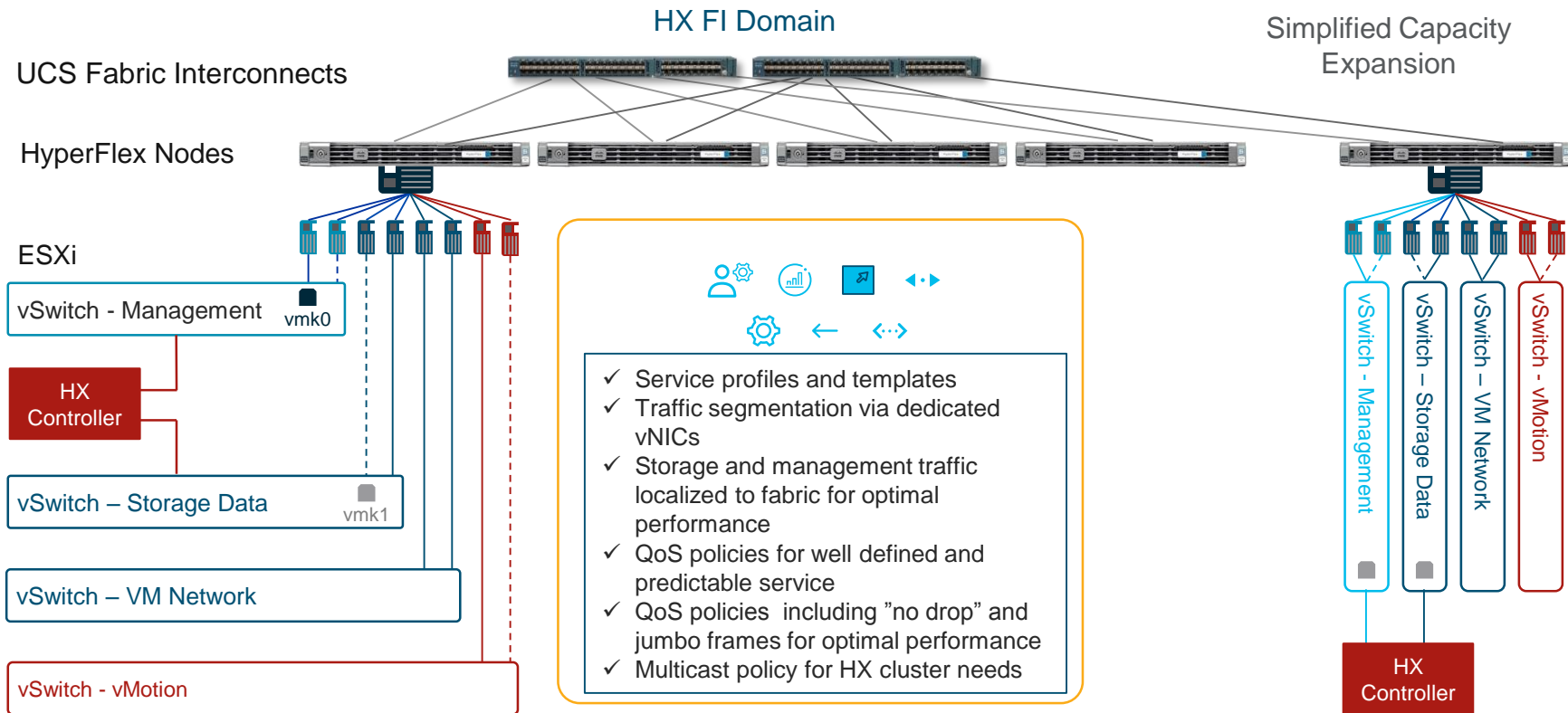
Networking Tasks Per Node with HCI

Customer experience with other vendors



Predictable? Consistent? Efficient?

Fully Automated deployments



Fast and Easy Installation

STEP 0

VMware and HX Data
Performance Software
Installed on Servers at
Factory/Reseller Before
Shipping to Customer

STEP 1

Rack Up Servers, Power
on, and Add to vCenter

Drag and Drop
Configuration (JSON) File

Create, Cluster,
and Datastore

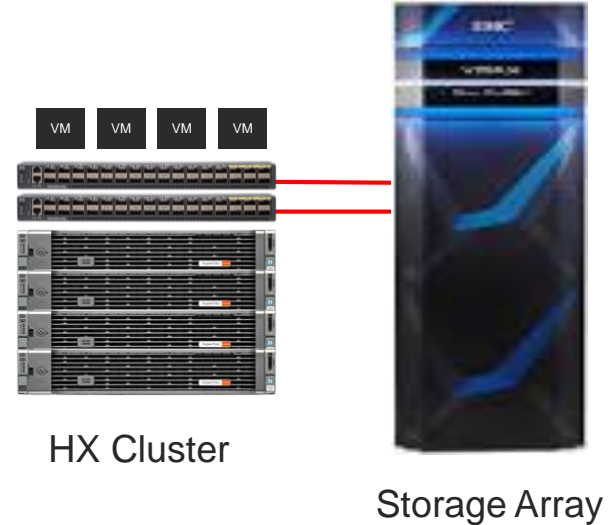
**60 MINUTES
OR LESS**

Start Provisioning VMs

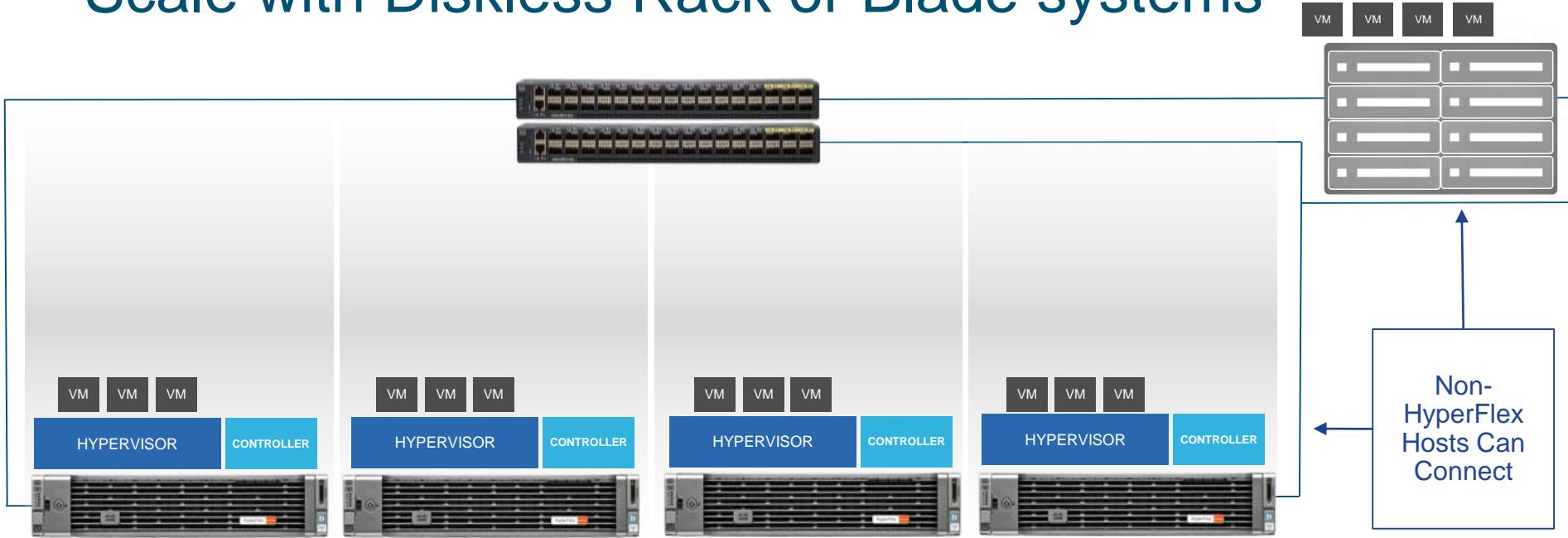


Works with existing Storage

- 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



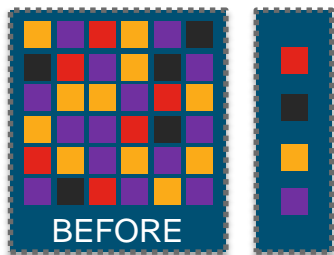
Scale with Diskless Rack or Blade systems



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

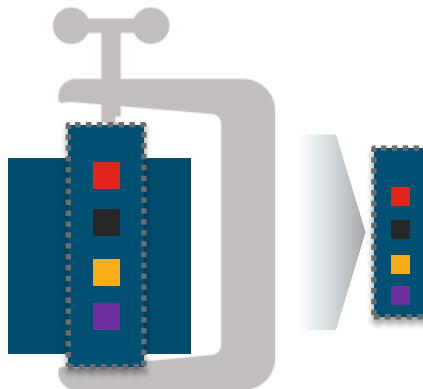
Data Optimization

Log-Structured File System Yields More Efficient Data Optimization



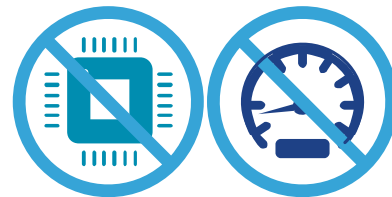
Inline Deduplication

20–30% space savings



Inline Compression

30–50% space savings



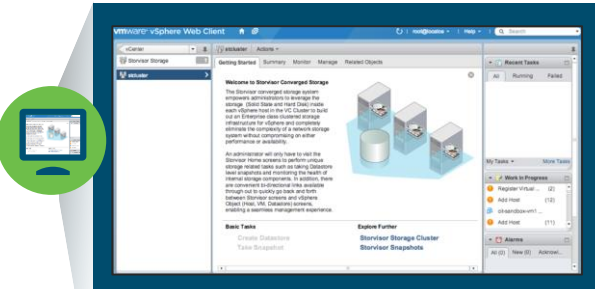
No Special Hardware
No Performance Impact
No Config lock-in
No Additional License

Lower Cost



Complete Management Integration

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



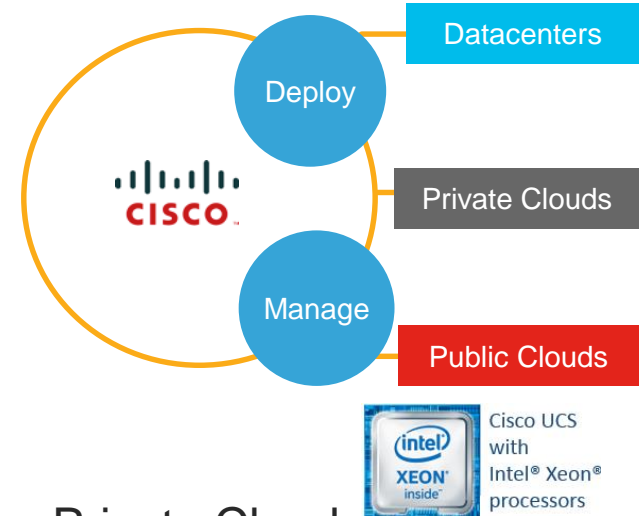
Integrated Management

- 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

Primary 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



Databases & Analytics

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



Large Remote Branch Office

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



Cisco UCS
with
Intel® Xeon®
processors



>2800+

NEW HYPERFLEX CUSTOMERS



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Cisco UCS
with
Intel® Xeon®
processors

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

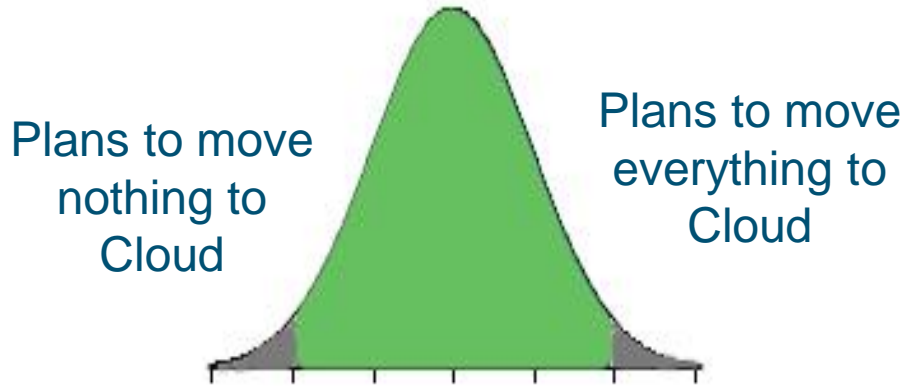


Databases



Cisco UCS
with
Intel® Xeon®
processors

Trend : Cloud “First” Approach & Use of AI



A corporate “no-cloud” policy will be as rare as a “no-internet” policy is today by 2020.

Jeffrey Mann, Research VP at Gartner – June 2016



Example:

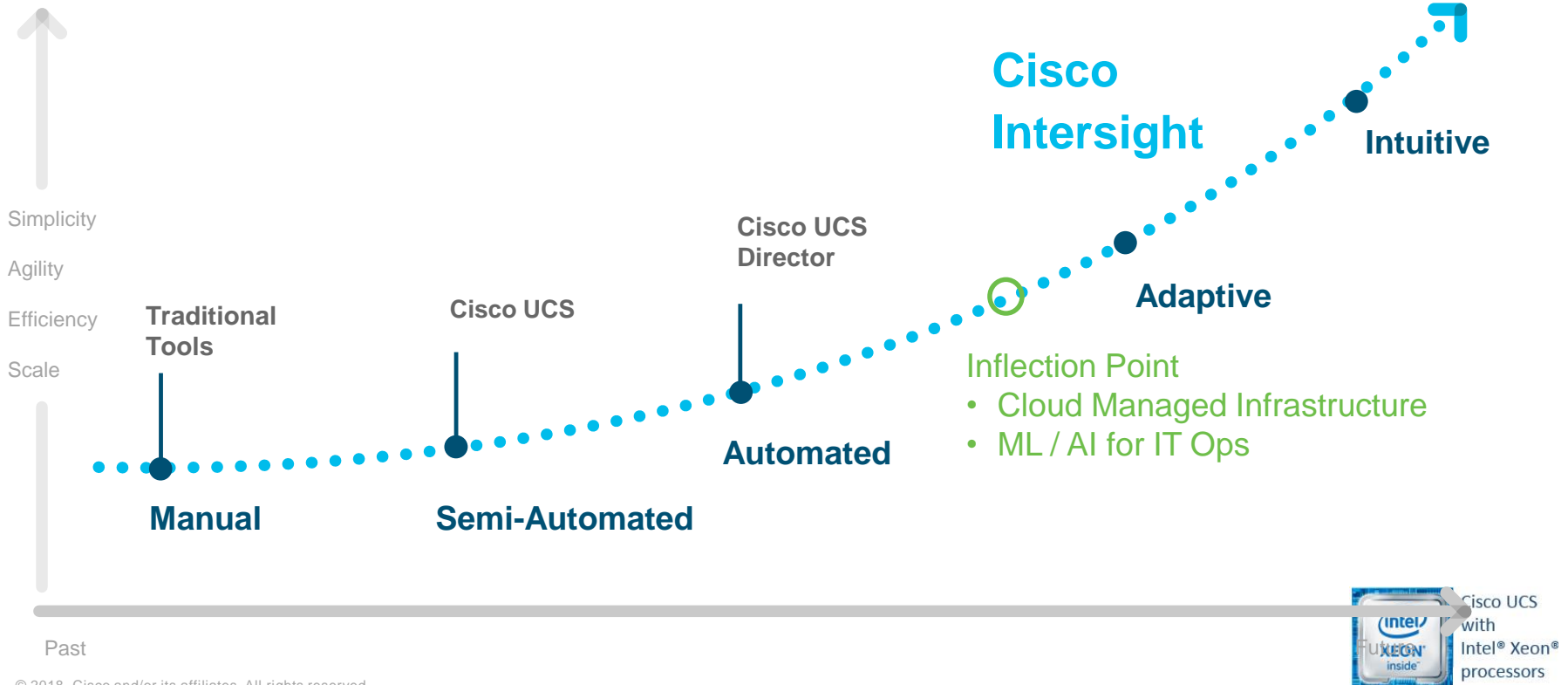
Advanced Driver

Assistance Systems (ADAS)

Definition: Automate, adapt and enhance driver activities for better driving and safety

Examples: blind spot monitor, collision warning, lane departure warning, automated parking, etc.

Systems Management Evolution



Strategy for Next-Generation Systems Management



Use the Cloud

1

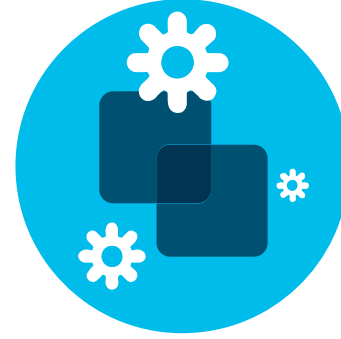
Connect Everything



Analyze the
Telemetry

2

Create Actionable Insight



Combine Insight
with Automation

3

Have Machines
Manage Machines



Cisco UCS
with
Intel® Xeon®
processors

Cisco Intersight : Cloud Managed Infrastructure



Intuitive Experience



Enhanced Support



Proactive Guidance



Secure and Extensible

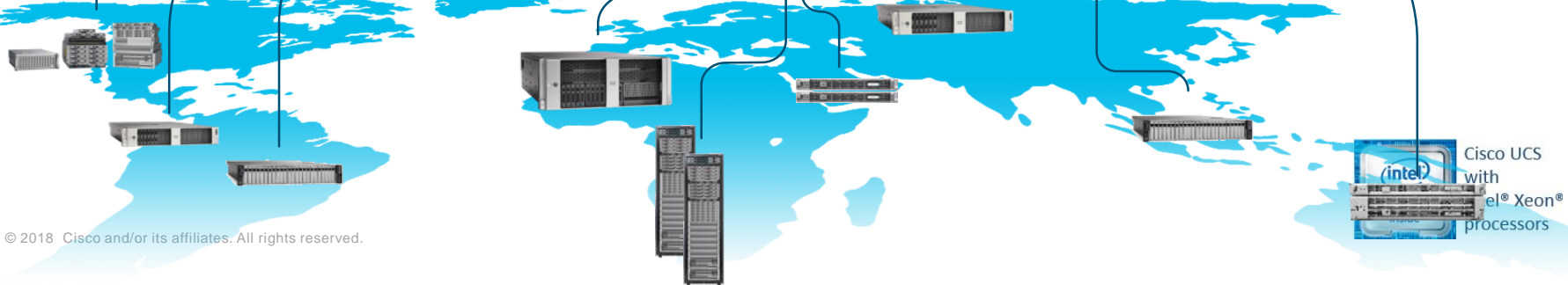


**SaaS
Delivered**

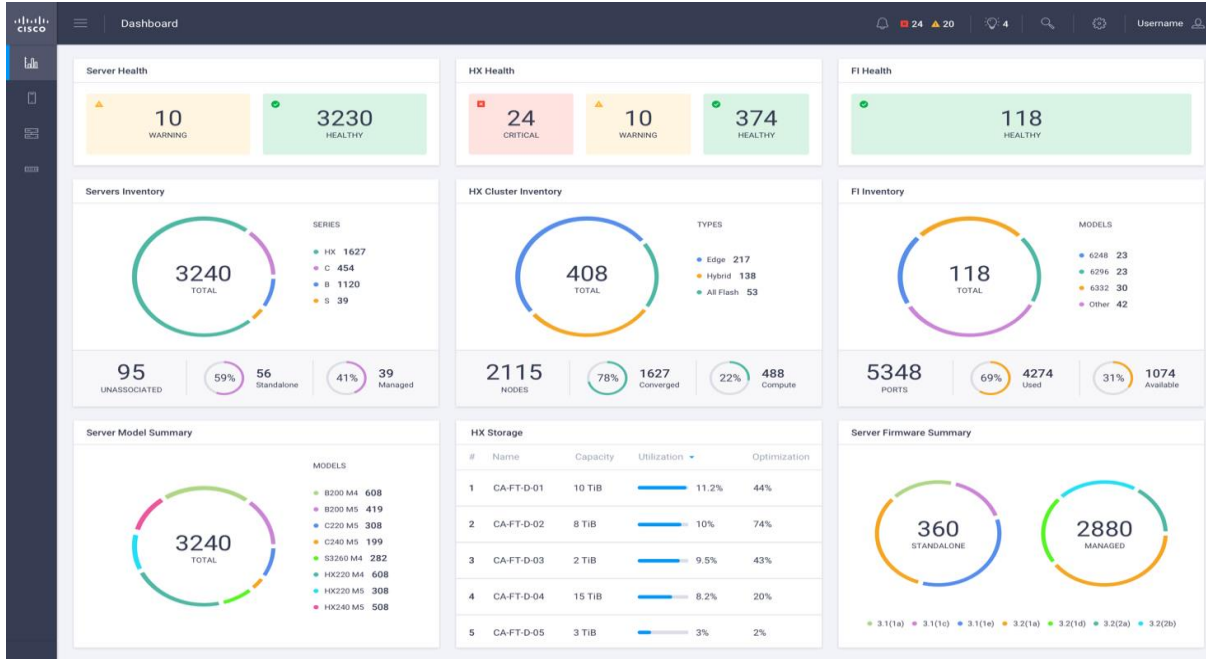
SaaS
Simplicity

Actionable
Intelligence

**CISCO
Intersight**



Intersight : Leading the change



1 Interface

1 API

1 Mgmt Point

Simplified Console

Benefits of Intersight



Unified Management

Single pane of glass, consistent operations model and experience for managing all systems and solutions



Recommendations

Embedded recommendation platform with insights sourced from across Cisco installed base and tailored to each customer



SaaS/Subscription

Hosted management will free customers from care/feeding of management tools and eliminate upgrade dependencies



Enhanced Support Experience

Hosted platform allows Cisco to address issues platform-wide and experience extends into TAC supported platforms



Programmability

End to end programmability with native API, SDK's and popular DevOps toolsets will enable customers to consume natively



No-Impact Transition

IMC/UCSM/HX embedded connector will allow customers to start consuming benefits without forklift upgrade

The background is a deep blue gradient with a large, glowing white and yellow circular arc. Inside the arc, there is a faint, stylized cloud shape containing several interlocking gears. The text "Cisco Intersight" is written in a large, bold, white sans-serif font, and "Be anywhere, act everywhere" is written below it in a smaller, white sans-serif font.

Cisco Intersight

Be anywhere, act everywhere

Future of Next Gen IT Infrastructure

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

