




# Cisco Connect 2018

Next-Generation Hyperconverged Infrastructure  
Support for Any Application on Any Cloud At Any Scale

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Datacenter Compute Solutions, Cisco Systems*

An aerial, high-angle view of a dense city skyline, likely New York City, with numerous skyscrapers and buildings. The image is overlaid with several white circular icons: a network of three nodes, a traffic light, a smartphone, a cloud, a terminal window with a cursor, a document with a checkmark, and a terminal window with a cursor. There are also several small white dots scattered across the image. The text is centered in the middle of the image.

App is the new business  
Developer is the new Customer  
**Multicloud is the new Data Center**

# Cisco HyperFlex - The Stepping Stone to :



Any App



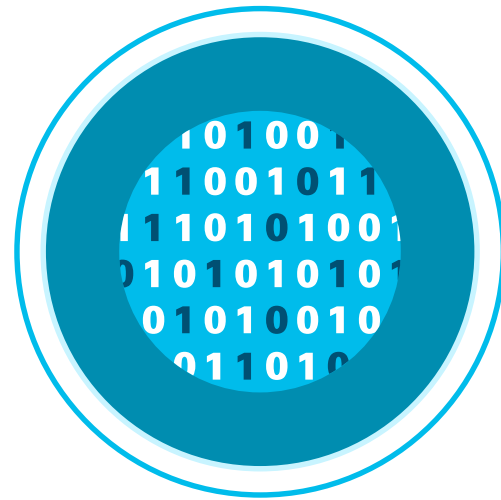
Any Cloud



Any Scale



# CISCO HX DATA PLATFORM



Log-Structured File  
System, Built from  
Scratch for HCI

Dynamic  
Data Distribution

Independent  
Resource Scaling

Advanced  
Data Services and  
Protection

# CISCO UCS PLATFORM



Converged and  
Unified Fabric

Low Latency,  
High Bandwidth  
Fabric

Centralized  
Policy Management

Optimized  
for Virtualization

# HYPERFLEX DYNAMIC DATA FABRIC

HX Data Platform  
Software



Cisco UCS  
Network Fabric

Consistent Performance  
Across All Nodes

Dynamic Data Distribution  
for Sustained  
Low-Latency

Pre-Engineered Traffic  
Segmentation and  
Policies

Guaranteed  
QoS

# Cisco Hyperflex – Engineered on UCS

## 1 Complete Hyperconvergence

Unified Compute and Network Infrastructure

### Engineered on Cisco UCS

The Ideal System for Hyperconvergence

Integrated, High Performance Network Fabric

Programmable Automation of all Hardware

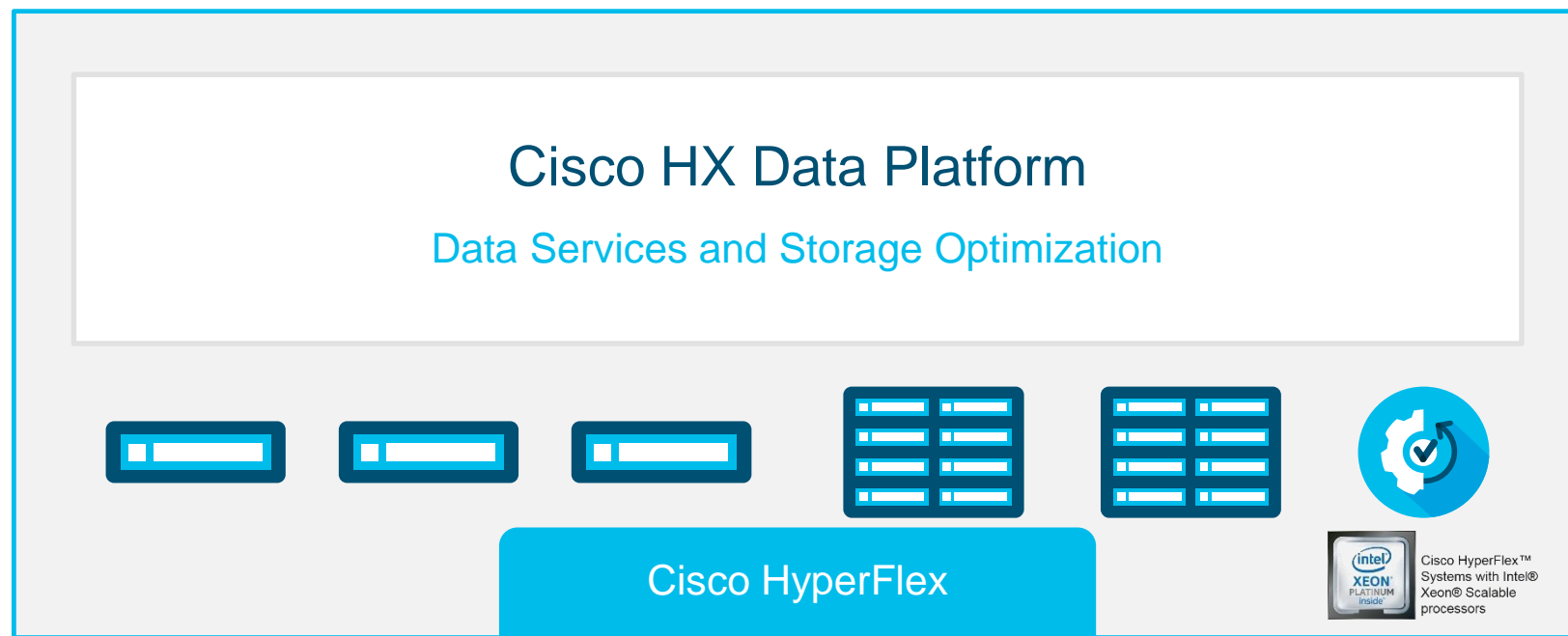


Wide Array of Rack and Blade Form Factors



# Cisco Hyperflex – Engineered on UCS

- 2** Next Gen Data Platform  
Designed for Distributed Storage
- 1** Complete Hyperconvergence  
Unified Compute and Network Infrastructure





# Cisco Hyperflex – Engineered on UCS

## 3 Part of a Complete Data Center Strategy

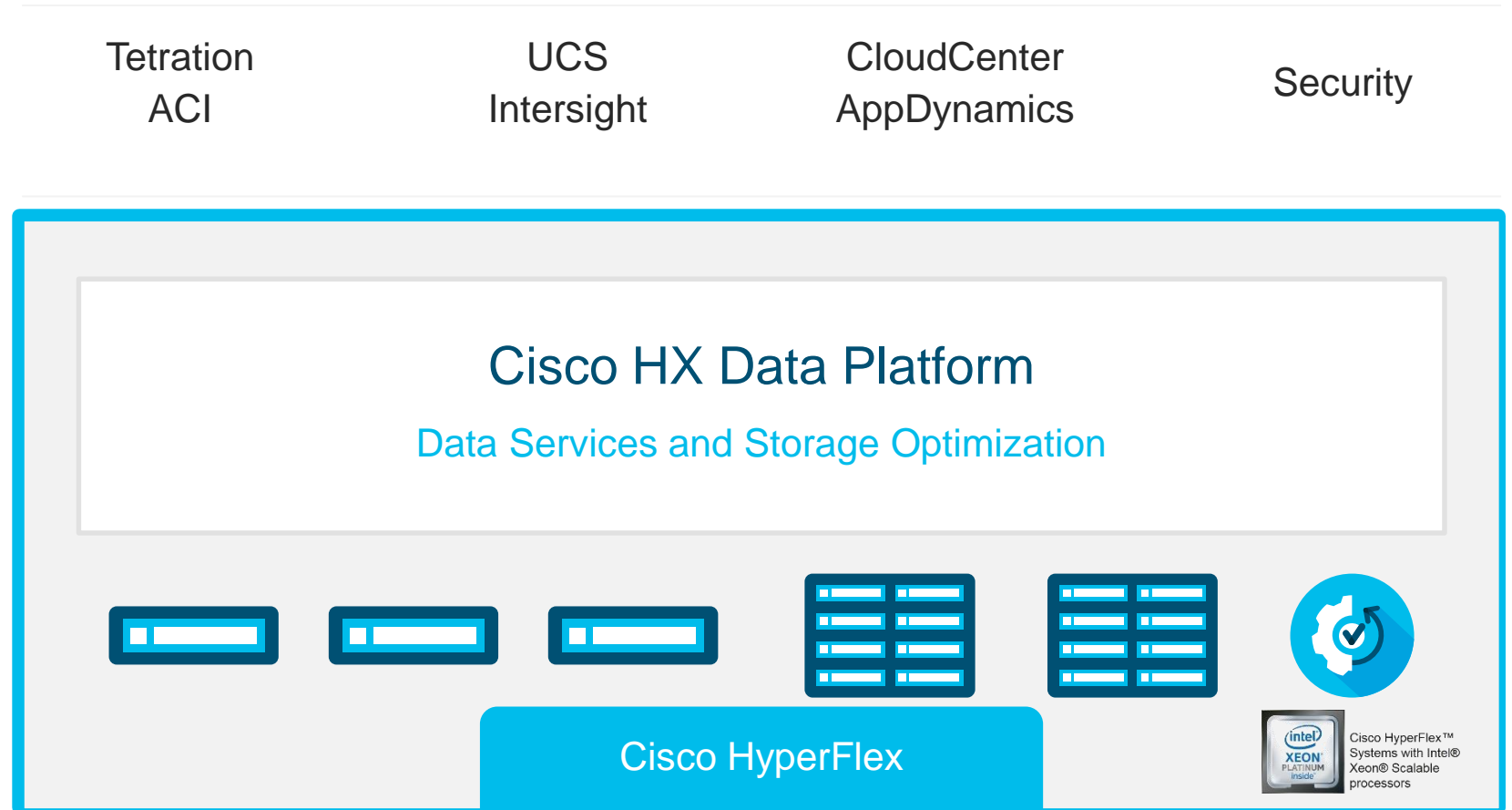
Elastic and Secure at Enterprise Scale

## 2 Next Gen Data Platform

Designed for Distributed Storage

## 1 Complete Hyperconvergence

Unified Compute and Network Infrastructure



# HyperFlex Delivers Real Business Benefits

## Independent Scaling and Scale Out Architecture

Scale with rackless racks or blades  
No HyperFlex nodes needed

Connect to existing storage  
Multiprotocol support including FC & iSCSI  
Great for VM migration / backup

## Unified Architecture

## Enterprise Storage Features

Snapshots / Replication / Deduplication  
Inline deduplication

Choice of RAID configurations  
Guaranteed performance

Single support

## Integrated Networking



**PERFORMANCE**



Cisco HyperFlex™  
Systems with Intel®  
Xeon® Scalable  
processors

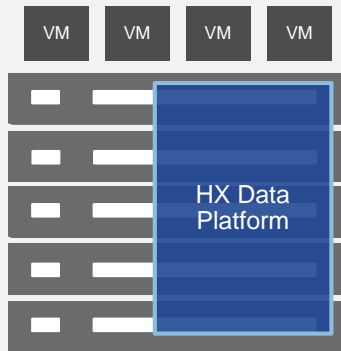
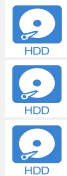
# Industry's Only Adaptive Infrastructure

Unified UCSM Management for both HyperFlex and Existing SAN

Compute Nodes can be Shared Across HCI and CI Applications

UCS Director and Cloud Center for Orchestration and Hybrid Cloud

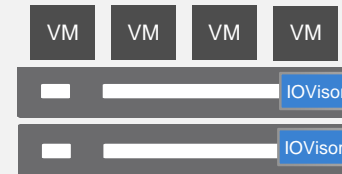
Scale Storage only  
HDD/SSD



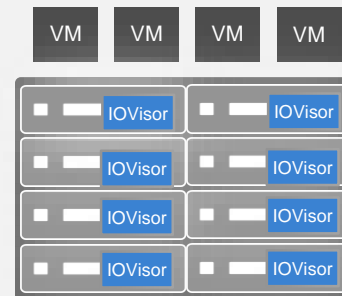
Scale HX Cluster  
Nodes

Hyperconverged

Scale  
CI  
Racks



Scale  
Compute-Only  
Blades



Common Compute Nodes

Storage Arrays  
SAN/NAS



Traditional Storage

Common Management Framework and Network Fabric

# HyperFlex Native Data Protection and Security

## Protect against Site Failure

Native Replication of Snapshots across Sites

Disaster Recovery Protection

## Data-At-Rest Loss Prevention

Data-At-Rest Encryption thru Self-Encrypting Drives

Enterprise Key Management Support

Vormetric

SafeNet

## Secure Platform

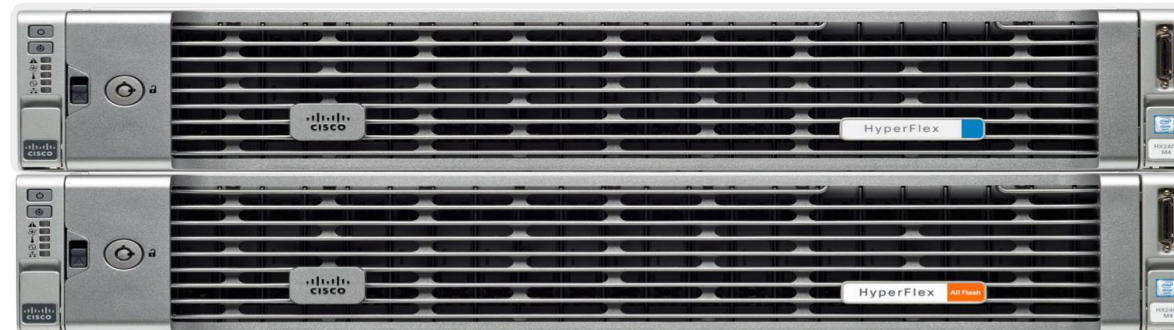
Vulnerability Assessments and Hardening

Role-based access control and Auditing

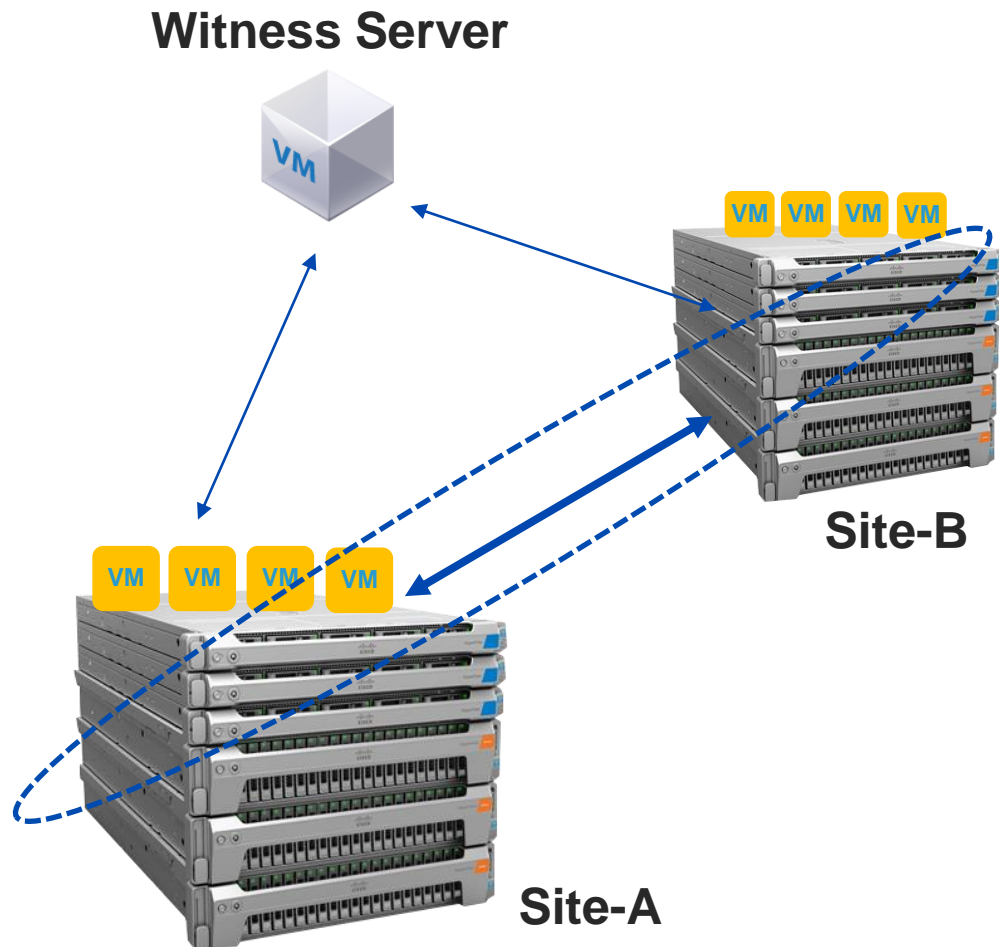
## Regulatory Compliance

Certifications starting with FIPS, Common Criteria

Compliance for Data Privacy (GDPR, HIPAA, PCI-DSS etc.)



# Increased Availability - Stretched Cluster



- Single stretched cluster across 2 sites
- Active – Active
- Non disruptive rolling upgrade
- Recover from local failure or site failure
- Witness server – to handle split brain



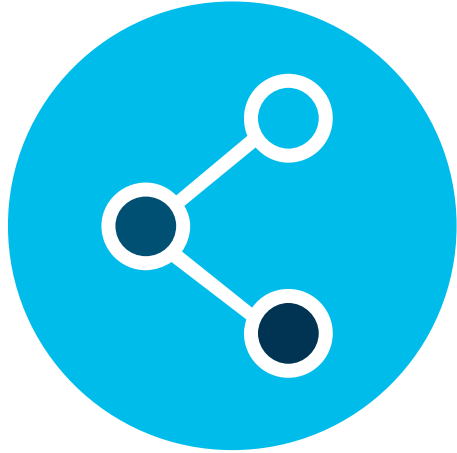
Cisco HyperFlex™  
Systems with Intel®  
Xeon® Scalable  
processors



**>2400+**  
New Hyperflex  
Customers



# Infrastructure Management Challenges



Distributed  
Apps and IT

Physical and Virtual  
Sprawl, IoT,  
Microservices



Human  
Limitations

Scale, Speed, Complexity in  
Modern Data Centers is  
Unmanageable



Traditional  
Management

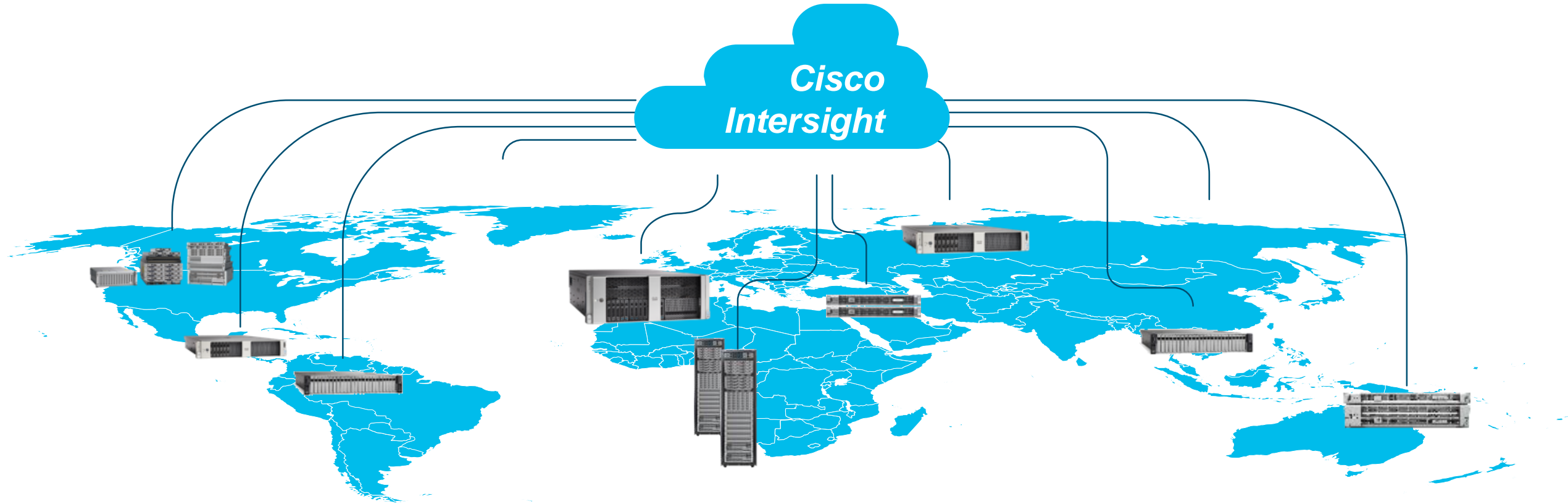
Building a Monster to  
Manage the Monster

Automated



Automatic

# Intersight : Manage Anywhere & Everywhere



Cloud Based Management  
Global / Multi-site / Datacenter / Edge  
Real time analytics & Machine Learning

Continuous Integration  
Continuous Delivery  
Continuous Monitoring



# User Benefits



# Increased Choice of Workloads



Enterprise workloads, Validated solutions



VMware vCenter



Integrated Management



Hyper-V , VMware & Containers

HyperFlex Data Platform



Complete Hyperconvergence

# Google + Cisco : Hybrid Container in a Box

Best of both Worlds =  + 



Optimize your cloud with Cisco and Google to achieve unprecedented business agility and investment protection



Cisco HyperFlex™  
Systems with Intel®  
Xeon® Scalable  
processors

# Summary - New IT Operation Models Require New Consumption Models



## Moving at the Speed of Business

Consumption of Infrastructure Adds Time, Cost and Inefficiency



## Operationalizing Speed and Simplicity

Proliferation of Solutions Creating Silos that Complicates Operations



## CFOs Expect a Cloud Economics On-Premise

Expectation of Pay-as-you-go Economics with Scaling On-Demand

The image features a blue background with a white network diagram at the bottom. The diagram consists of various sized grey nodes connected by thin grey lines, forming a complex web. A large white chevron shape points downwards from the top, framing the text. The text 'Cisco Connect' is in a white sans-serif font, underlined, and '2018' is in a larger white sans-serif font, also underlined.

Cisco Connect  
2018

IT's All You