Private Cloud and IT-as-a-Service with Cisco Unified Data Center

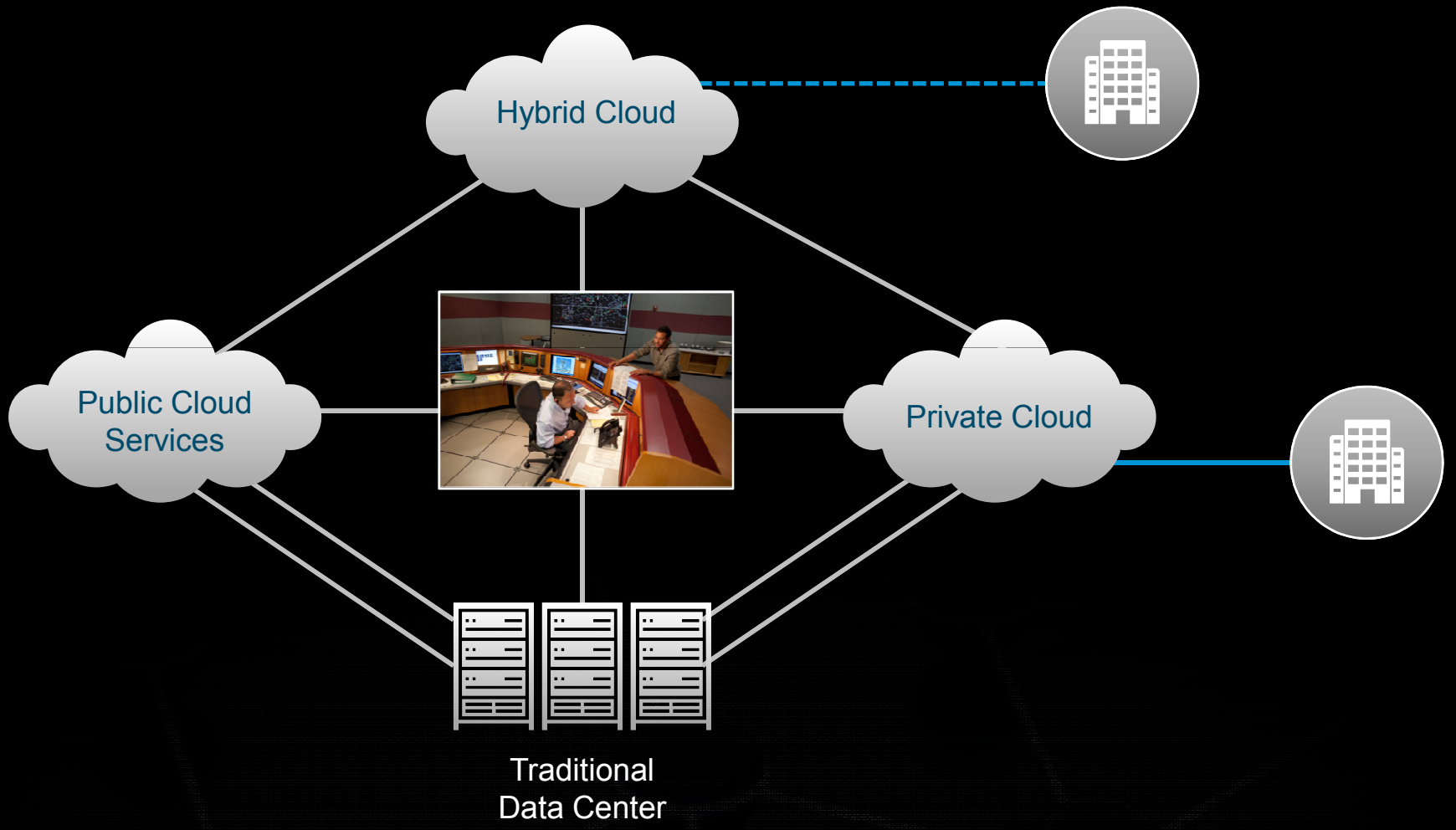
Gartner IT Infrastructure, Operations & Management Summit

Cisco Systems

© 2012 Cisco and/or its affiliates. All rights reserved.

Tomorrow's IT—World of Many Clouds

Enabling Multiple IT Sourcing Models



© 2012 Cisco and/or its affiliates. All rights reserved.

Powering Cloud Computing

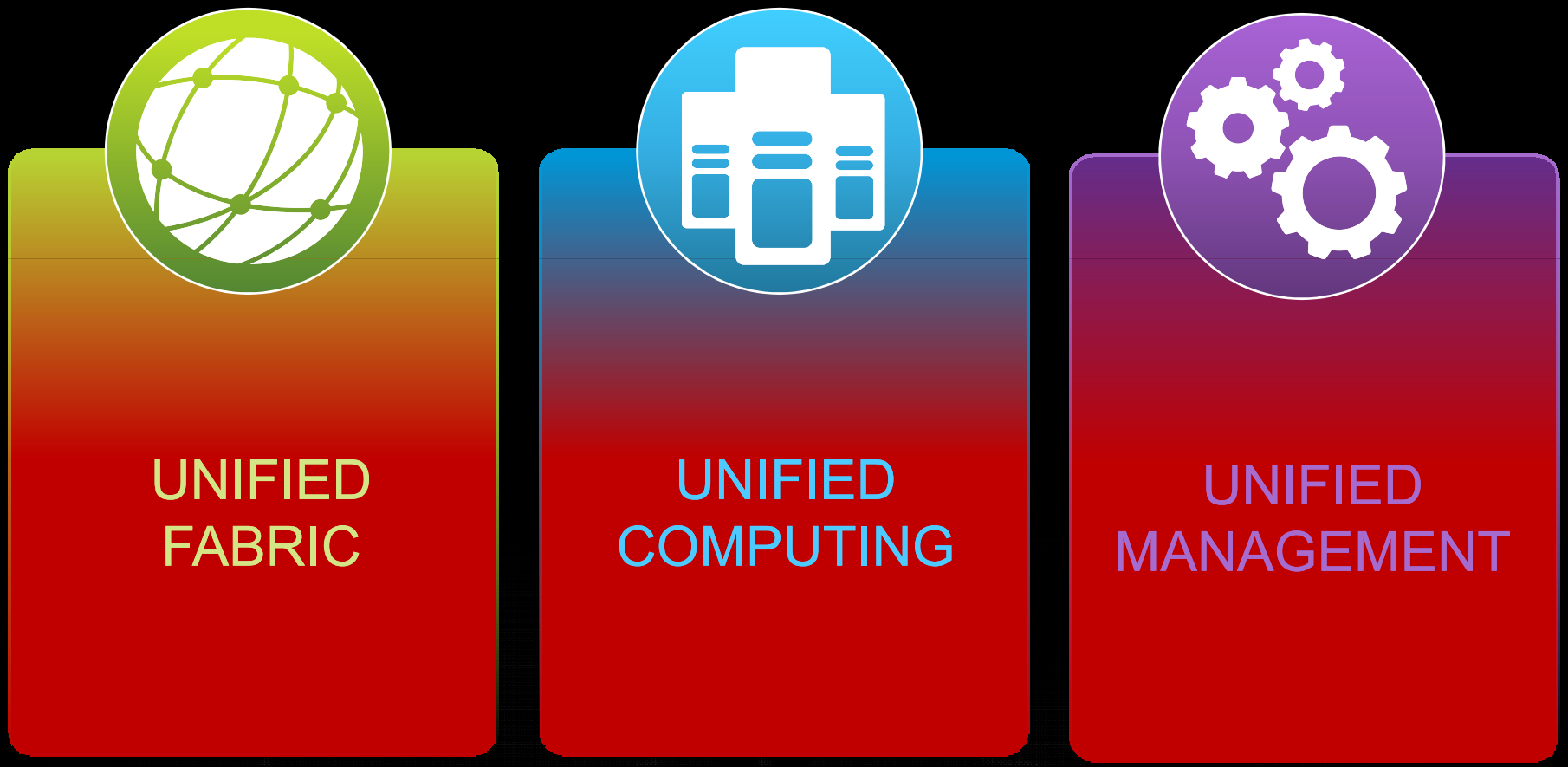
Infrastructure Capabilities Matter More Than Ever

CLOUD REQUIREMENTS		IDEAL INFRASTRUCTURE
Low Cost Operations		• Simplified management • Lower service provisioning cost
Infrastructure as a Service		• Integrated compute, network, and storage resources
Self Service Consumption Model		• Physical resources deployed through API's and policies
Elastic Resource Allocation		• Rapid scalability of virtual and physical • Automated deployment
Shared Pools of Resources		• Virtualization optimized • Resource abstraction

© 2012 Cisco and/or its affiliates. All rights reserved.

Cisco Unified Data Center

The Platform for Delivering IT-as-a-Service

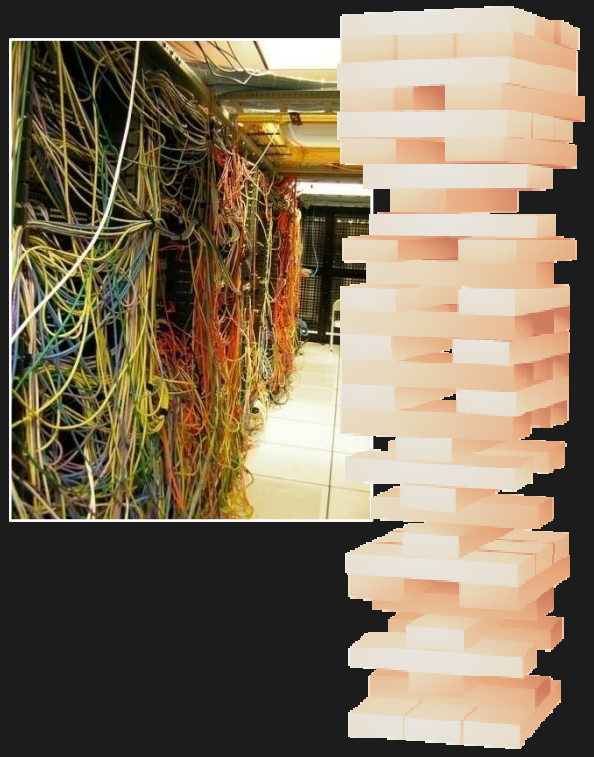


© 2012 Cisco and/or its affiliates. All rights reserved.

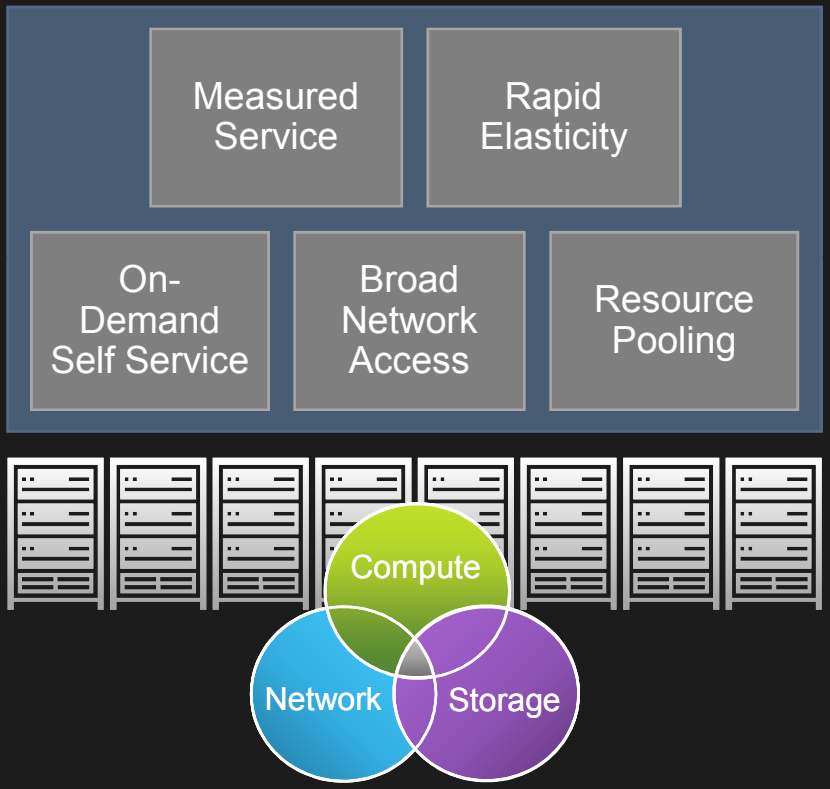
Legacy Management
Slow, Complex, Brittle, Expensive

Cloud Management
Fast, Simple, Flexible, Cost-Effective

Legacy IT



IT-as-a-Service



Unified Management for Cloud

IT-as-a-Service Requires a New Management Approach

Automation

Intelligence

Flexibility

Self-Service Portal and Orchestration

On-Demand, Self-Service Provisioning of IT Resources

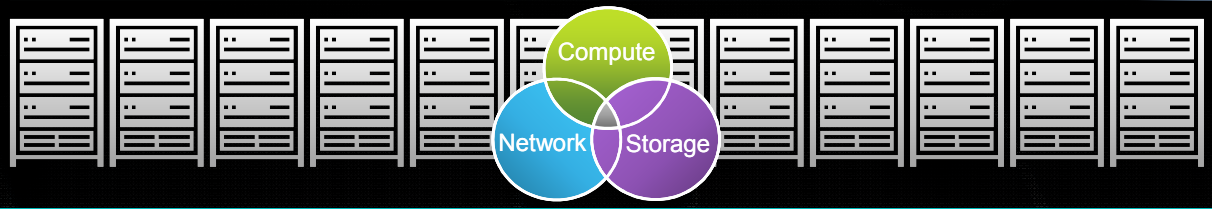
Infrastructure Resource Mgmt

Policy-Based, Model-Driven Approach Reduces TCO

Policy-Based Compute

Policy-Based Network

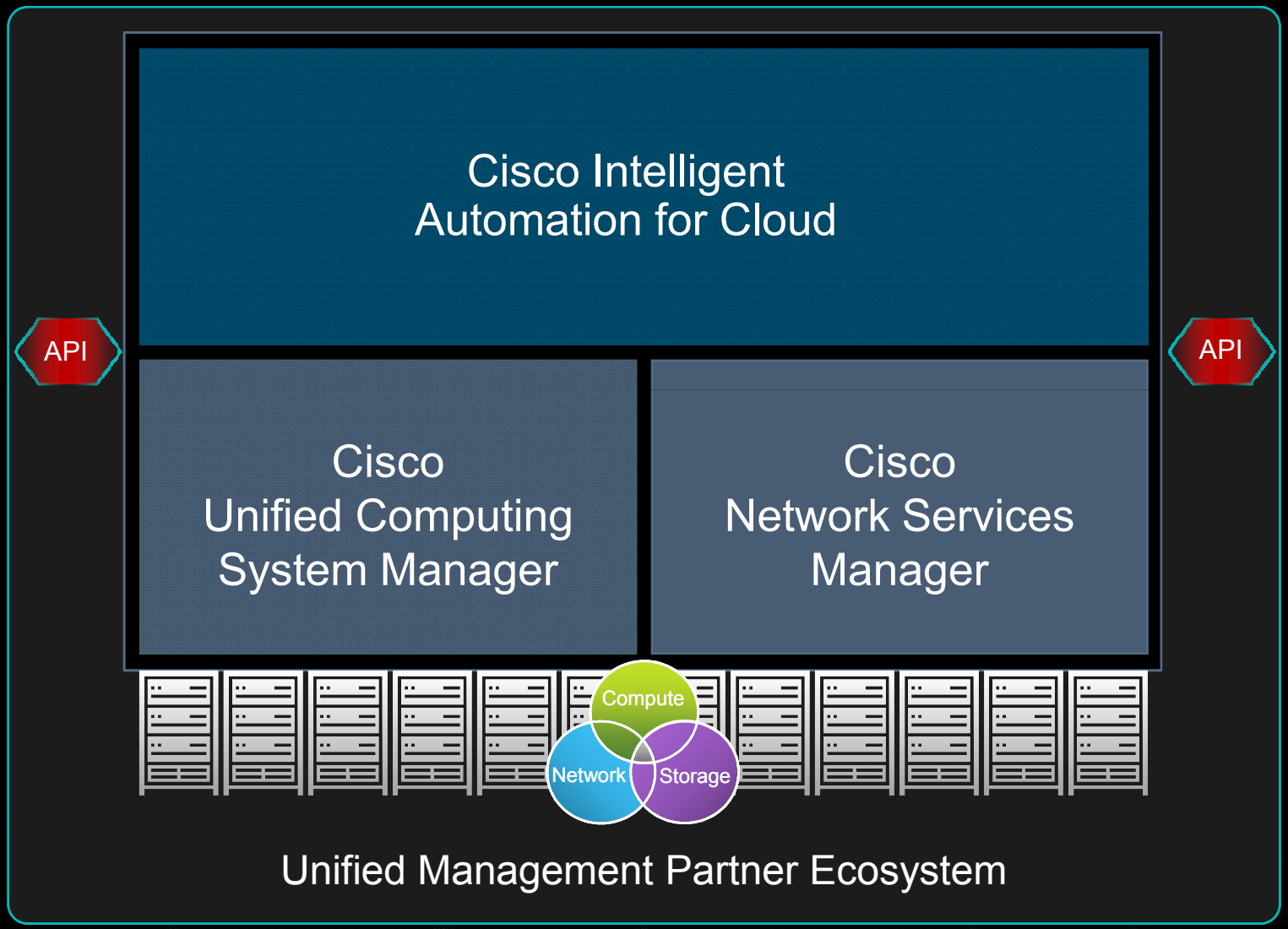
Easiest to Use and Deploy, Delivers Faster Time to Value



Optimized for Cisco Architectures,
Complements Existing IT Systems and Management Tools

Unified Management for Cloud

Automation and Orchestration Designed for IT-as-a-Service



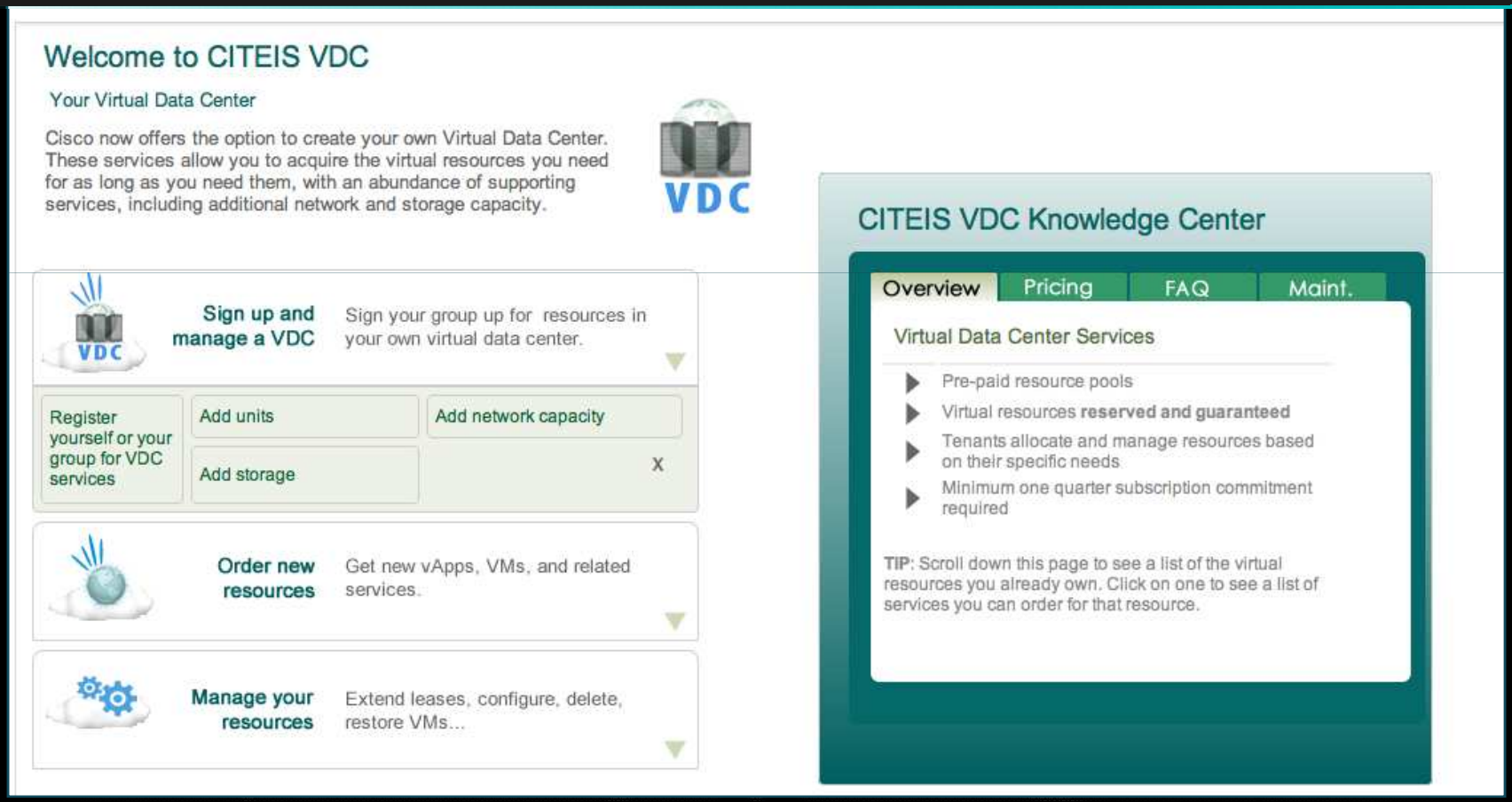
© 2012 Cisco and/or its affiliates. All rights reserved.

Cisco Intelligent Automation for Cloud

IT Self-Service Storefront

Cisco Cloud Portal Example:

Cisco IT Deployment—CITEIS Virtual Data Center

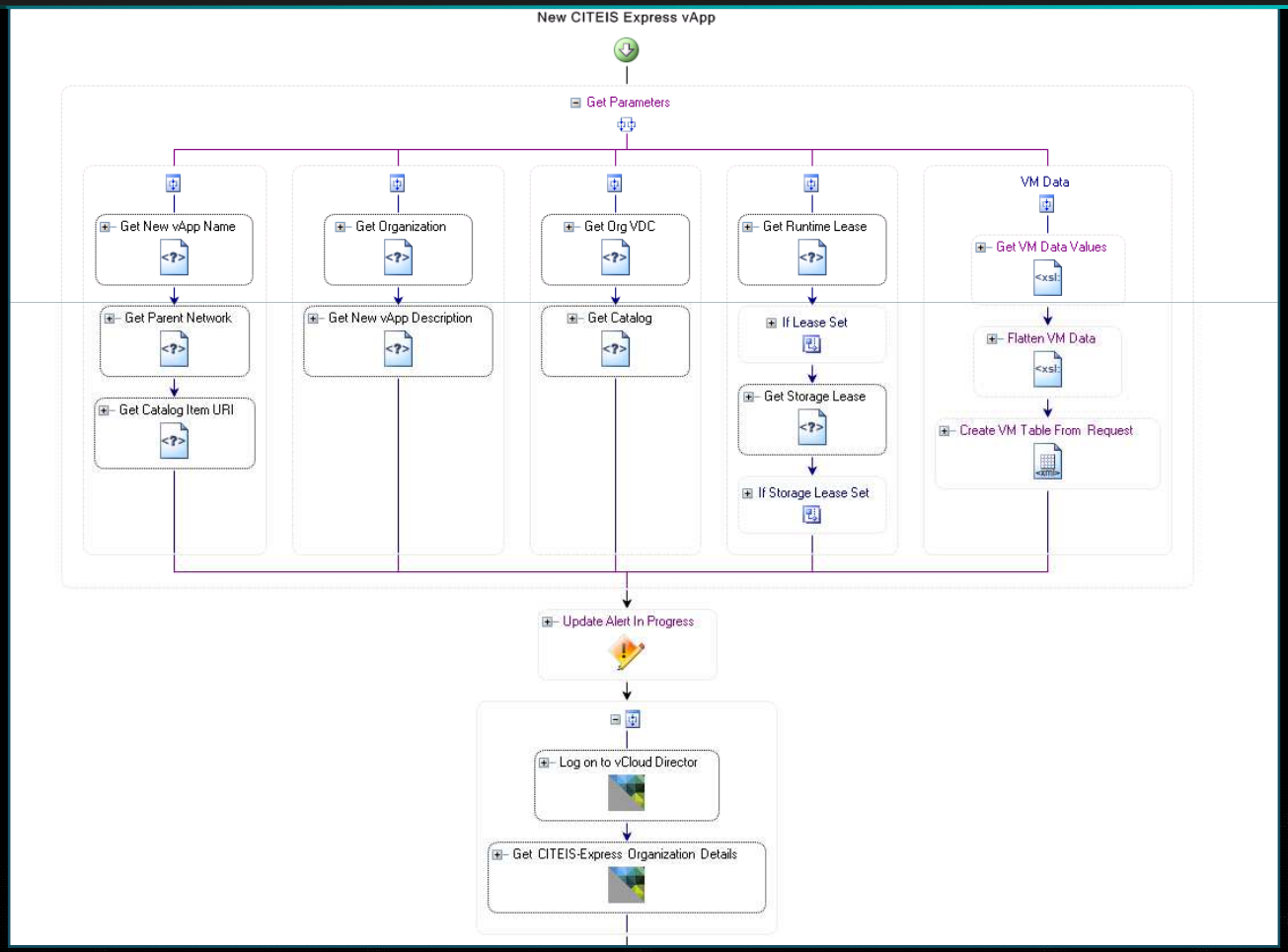


© 2012 Cisco and/or its affiliates. All rights reserved.

Cisco Intelligent Automation for Cloud

Orchestration-Based Automation

Cisco Process Orchestrator Example:
Provision virtual data center (VDC)

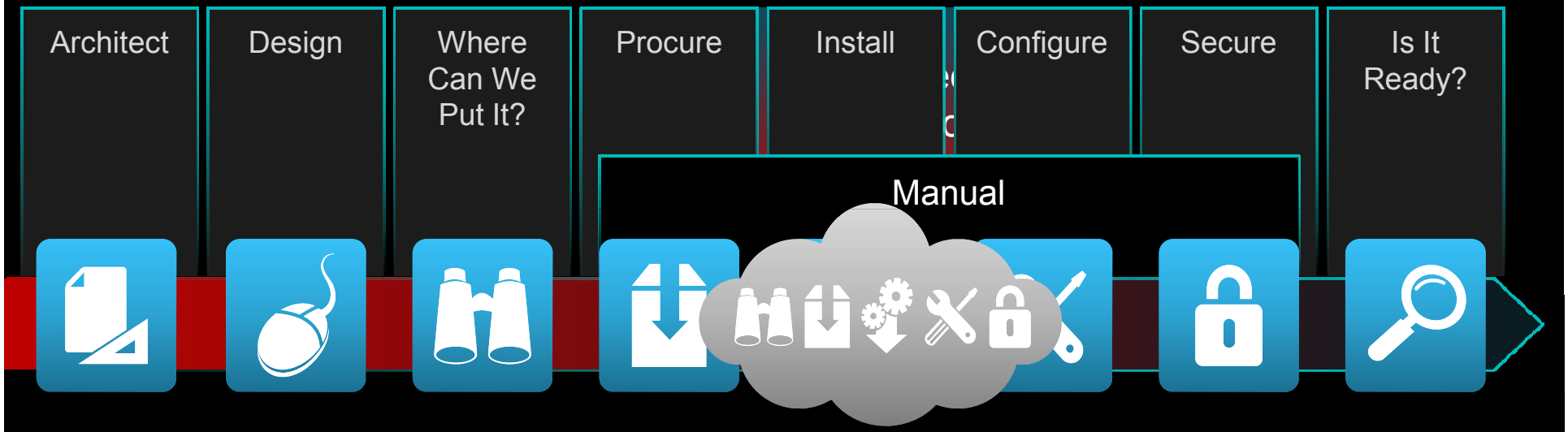


© 2012 Cisco and/or its affiliates. All rights reserved.

Cisco Intelligent Automation for Cloud

Unified Management – Automated Self-Service Provisioning

FROM 8 WEEKS TO 15 MINUTES



Capacity On-Demand

Policy-Based Provisioning

Built-In Governance

© 2012 Cisco and/or its affiliates. All rights reserved.

CITEIS: Cisco IT's Cloud Journey

Server Virtualization

Image Repository
Service Catalog
Show / Chargeback
Change Management

OVF OVA

PaaS
- Web Server
- Application Server
- Database Server
- Integration Services

Unified Infrastructure → Virtualization → Automation → Self-service → Multi-tenancy → Elasticity

Cisco IT Elastic Infrastructure Service (CITEIS)

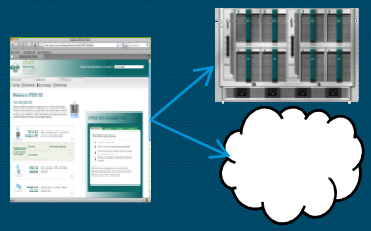
Cisco Nexus

Cisco UCS x86

Cisco Intelligent Automation for Cloud

Logical Segmentation Control, Security and Fault Isolation

Cisco Intercloud Hybrid



*OVF = Open Virtualization Format

© 2012 Cisco and/or its affiliates. All rights reserved.

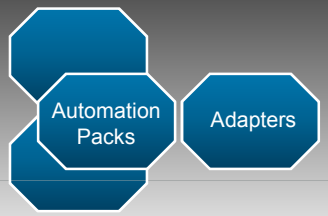
CITEIS: Solution Components

Cisco Intelligent Automation for Cloud

Cisco Cloud Portal

Self-Service—Service Catalog

Cisco Process Orchestrator



Provisioning—Integration

Resource Managers

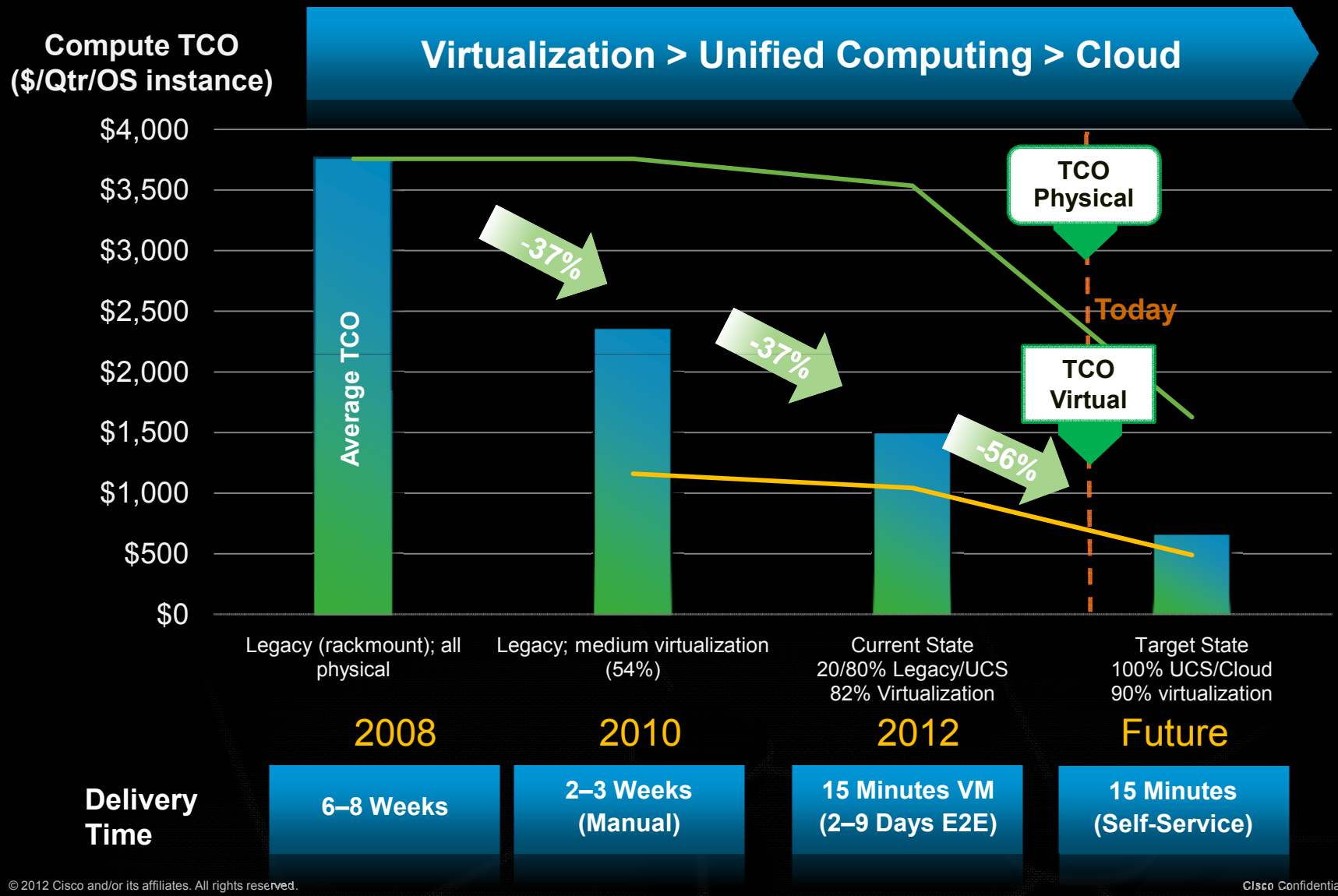
- Cisco UCS Manager
- System IP Address Mgmt — Host Mgmt
- Remedy Incident Mgmt— Change Mgmt
- VDC Resource Mgmt vCloud —vSphere — vCenter
- Active Directory Group Mgmt — Profile Mgmt
- rPath Image Mgmt — PaaS Image Library
- Cisco Network Services Manager

Cisco UCS

Network Resources

© reserved.

CITEIS Deployment—Cost Analysis



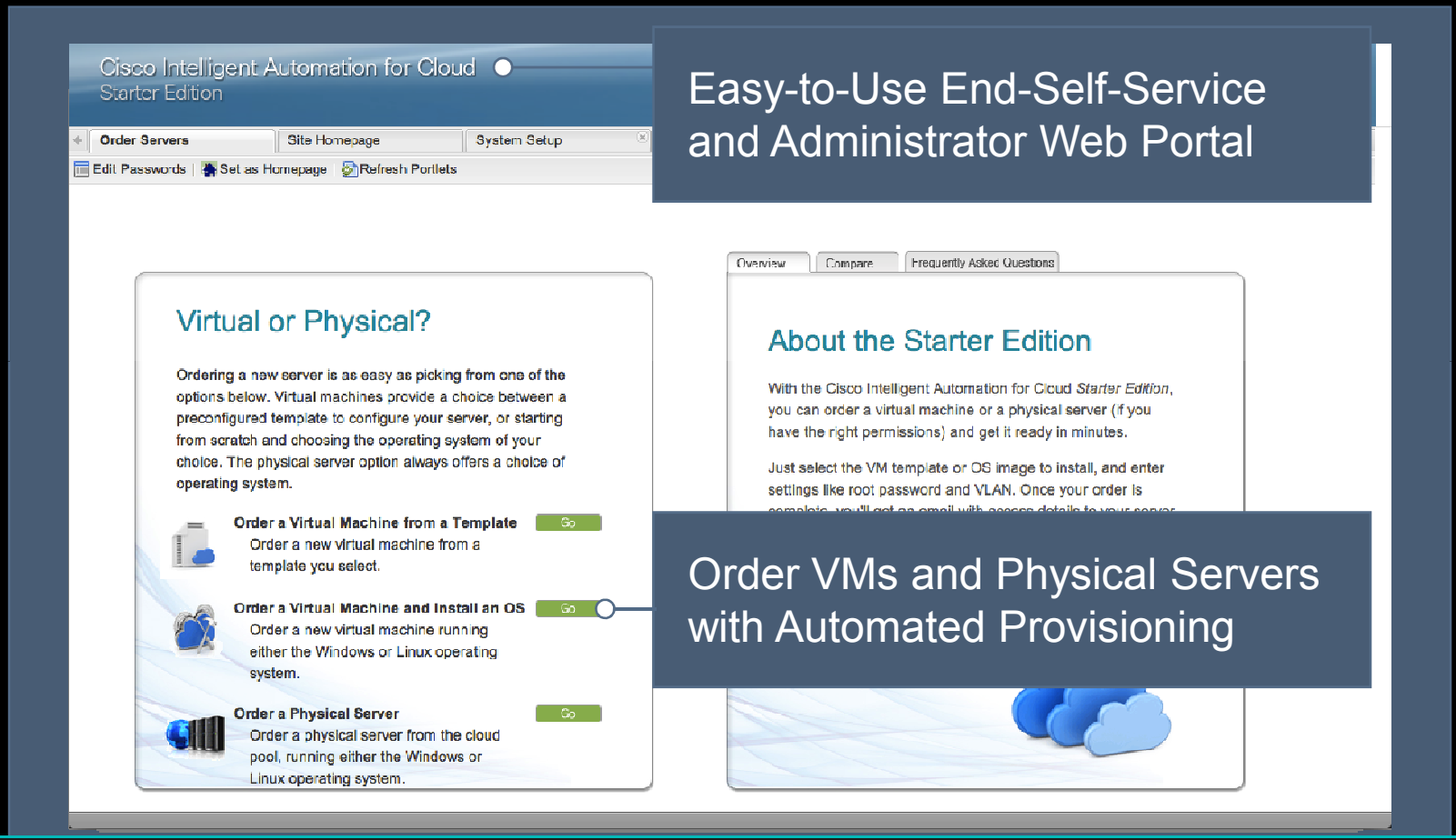
© 2012 Cisco and/or its affiliates. All rights reserved.

Cisco Intelligent Automation for Cloud
Starter Edition

© 2012 Cisco and/or its affiliates. All rights reserved.

Introducing

Cisco Intelligent Automation for Cloud Starter Edition



Easy-to-Use End-Self-Service and Administrator Web Portal

Order VMs and Physical Servers with Automated Provisioning

A Starting Point for your Cloud Journey with Cisco UCS

Cisco Intelligent Automation for Cloud

Starter Edition – Features & Benefits

Pre-Built Portal Content and Workflows to Accelerate Time to Cloud	Deployment of Compute-as-a-Service on **Cisco UCS** to Improve Agility	Self-Service Provisioning and Automation for both Virtual and Physical	Control Over Resources and Consumption with Lifecycle Management	Ability to Grow Deployment and Expand to New Use Cases with Upgrade Path

© 2012 Cisco and/or its affiliates. All rights reserved.

Thank you.

© 2012 Cisco and/or its affiliates. All rights reserved.