

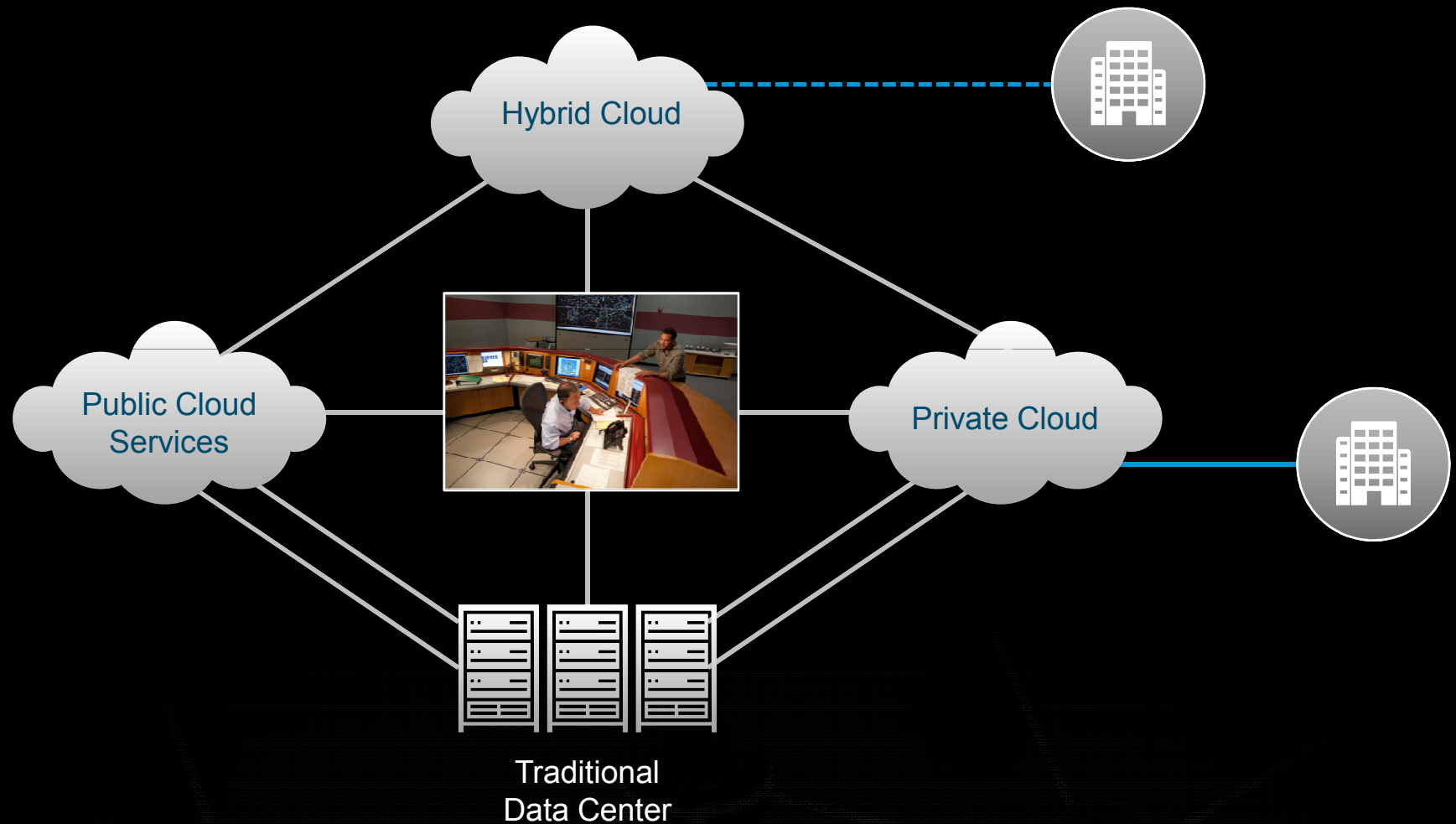
Private Cloud and IT-as-a-Service with Cisco Unified Data Center

Gartner IT Infrastructure, Operations & Management Summit

Cisco Systems

Tomorrow's IT—World of Many Clouds

Enabling Multiple IT Sourcing Models



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

Cisco Unified Data Center

The Platform for Delivering IT-as-a-Service



UNIFIED
FABRIC



UNIFIED
COMPUTING

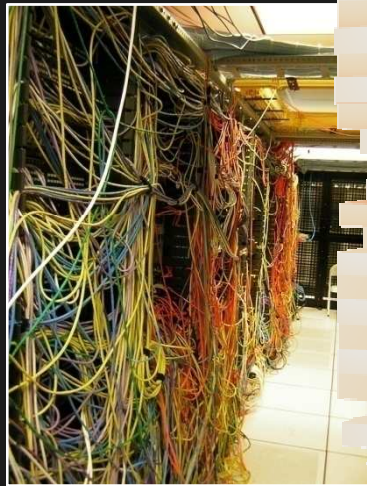


UNIFIED
MANAGEMENT

Legacy Management

Slow, Complex, Brittle, Expensive

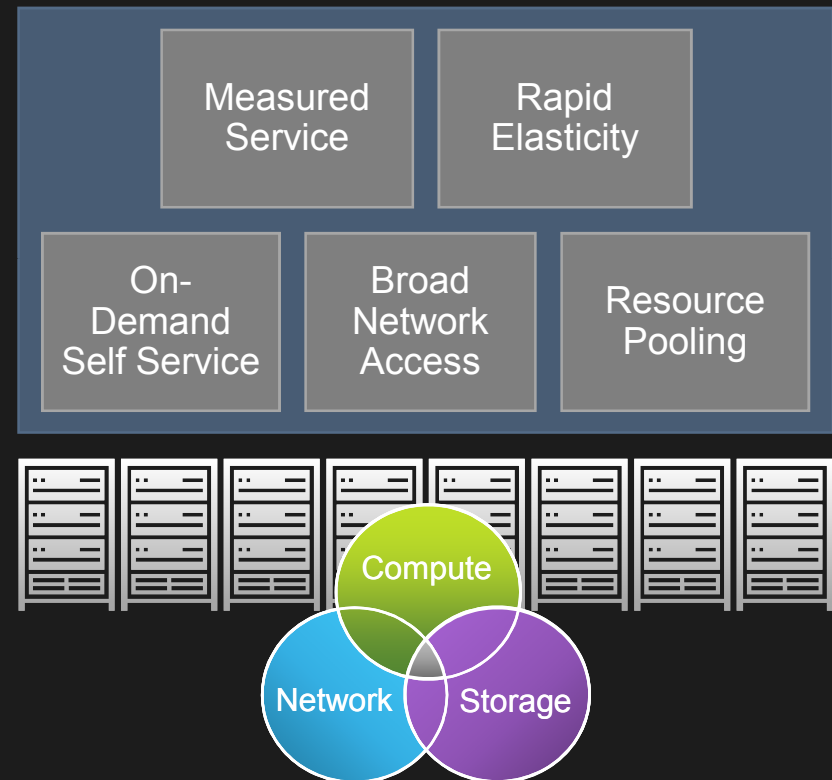
Legacy IT



Cloud Management

Fast, Simple, Flexible, Cost-Effective

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

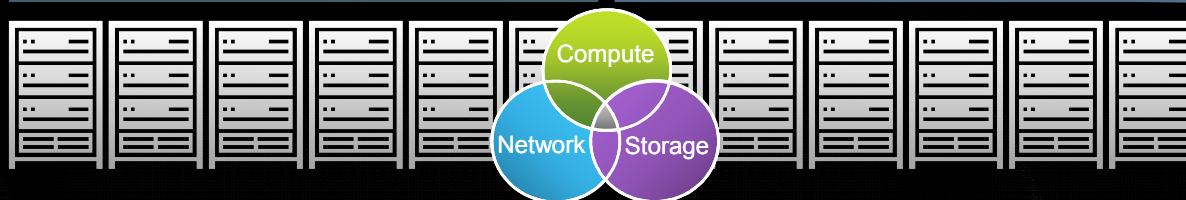
Infrastructure Resource Mgmt

Policy-Based,
Model-Driven
Approach
Reduces TCO

Policy-Based
Compute

Policy-Based
Network

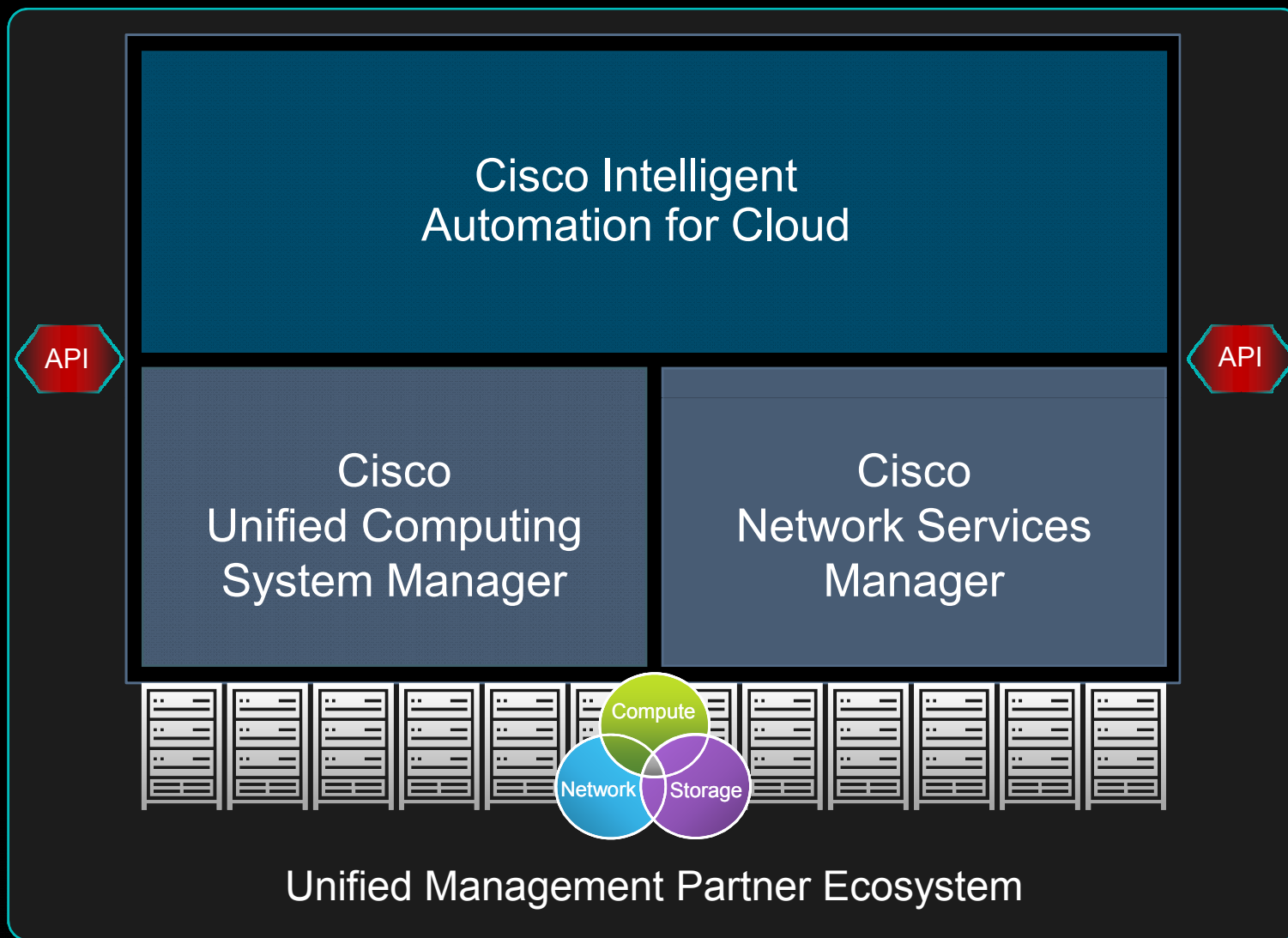
Easiest to Use
and Deploy,
Delivers Faster
Time to Value



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

Unified Management for Cloud

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



Cisco Intelligent Automation for Cloud IT Self-Service Storefront




Cisco Cloud Portal Example: Cisco IT Deployment—CITEIS Virtual Data Center

Welcome to CITEIS VDC

Your Virtual Data Center

Cisco now offers the option to create your own Virtual Data Center. These services allow you to acquire the virtual resources you need for as long as you need them, with an abundance of supporting services, including additional network and storage capacity.





Sign up and manage a VDC Sign your group up for resources in your own virtual data center.


Register yourself or your group for VDC services

Add units


Add network capacity

Add storage

X



Order new resources Get new vApps, VMs, and related services.



Manage your resources Extend leases, configure, delete, restore VMs...

CITEIS VDC Knowledge Center

Overview Pricing FAQ Maint.

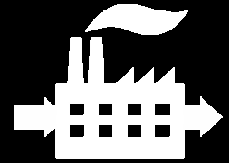
Virtual Data Center Services

- ▶ Pre-paid resource pools
- ▶ Virtual resources **reserved and guaranteed**
- ▶ Tenants allocate and manage resources based on their specific needs
- ▶ Minimum one quarter subscription commitment required

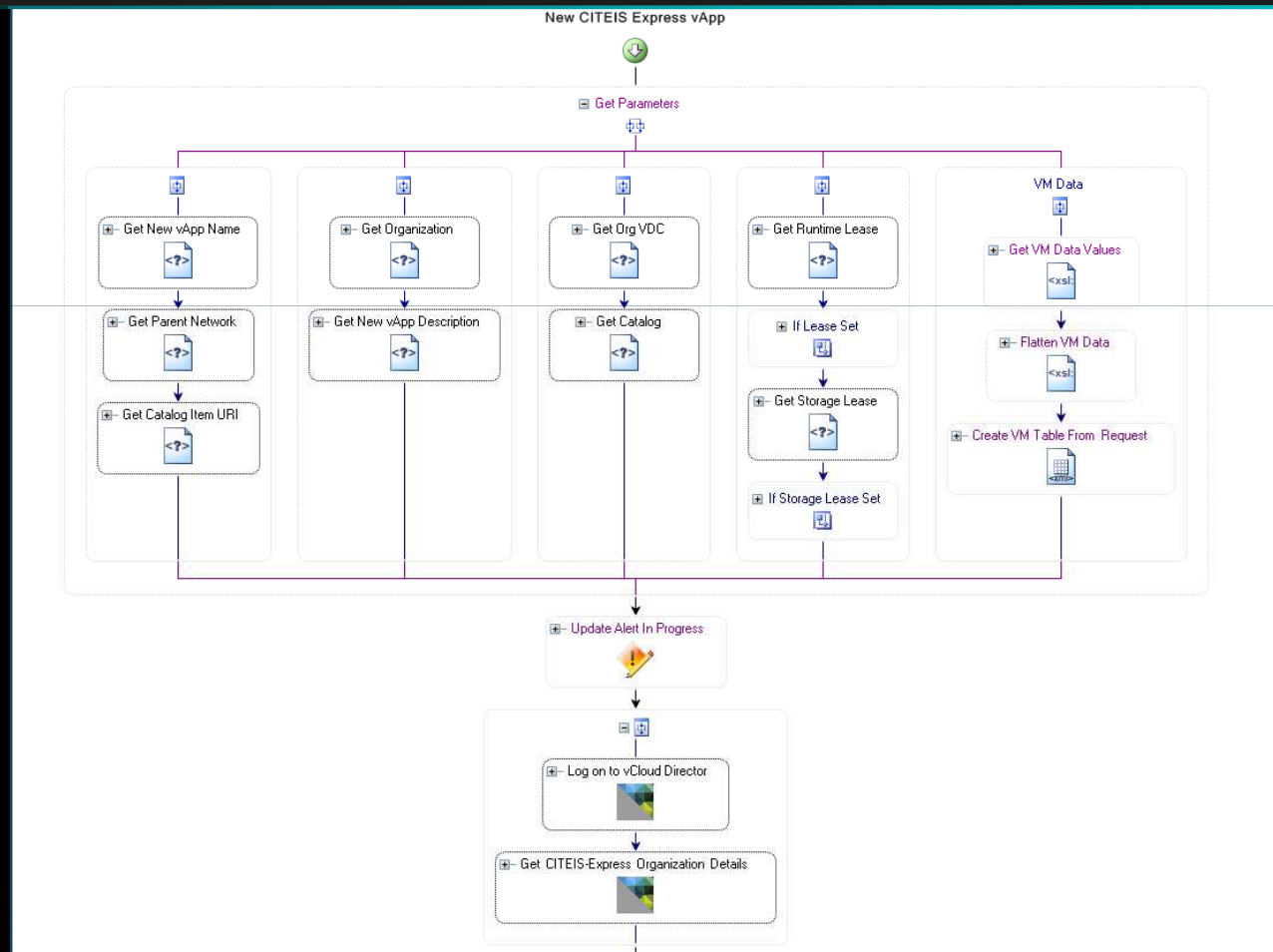
TIP: Scroll down this page to see a list of the virtual resources you already own. Click on one to see a list of services you can order for that resource.

Cisco Intelligent Automation for Cloud

Orchestration-Based Automation



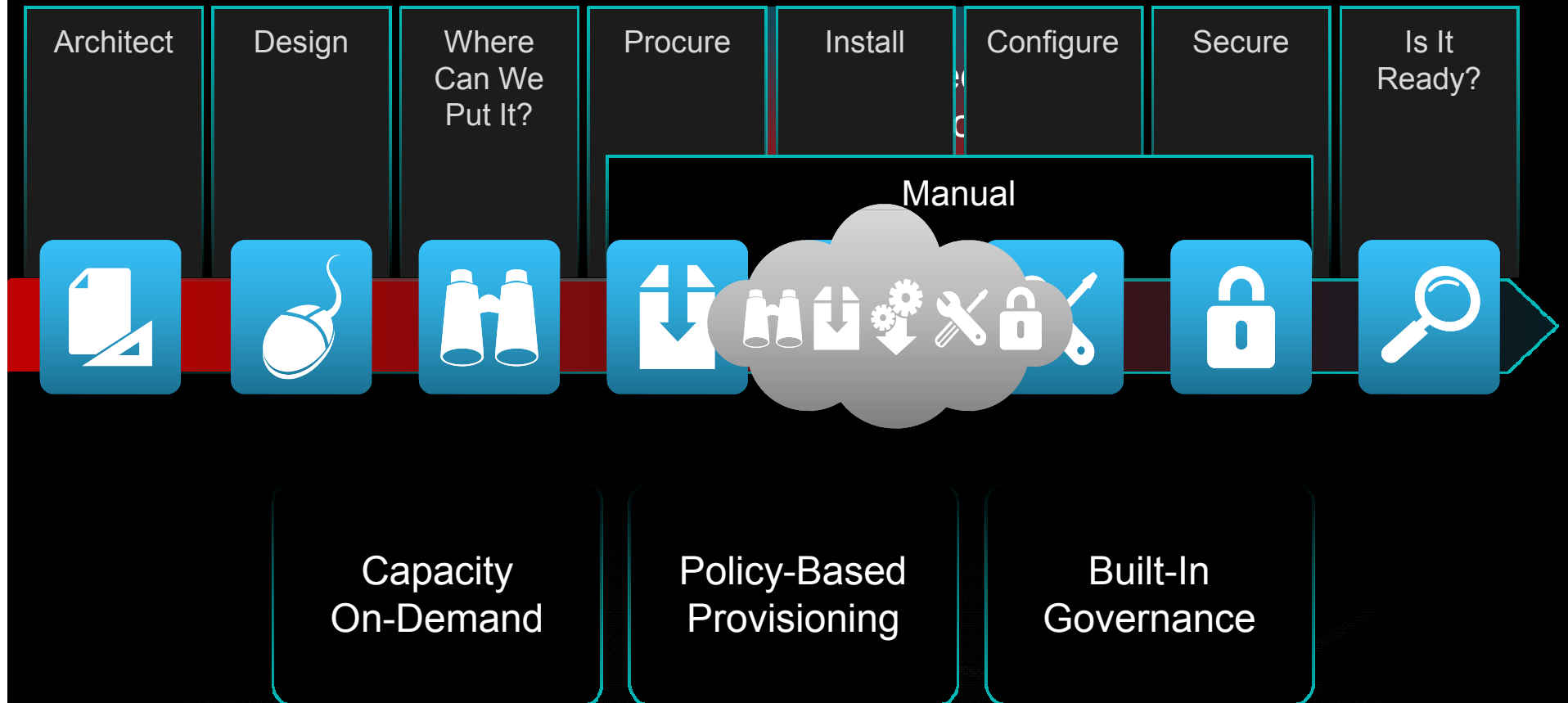
Cisco Process Orchestrator Example: Provision virtual data center (VDC)



Cisco Intelligent Automation for Cloud

Unified Management – Automated Self-Service Provisioning

FROM 8 WEEKS TO 15 MINUTES



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

CITEIS: Solution Components

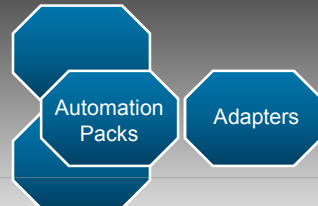
Cisco Intelligent Automation for Cloud

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



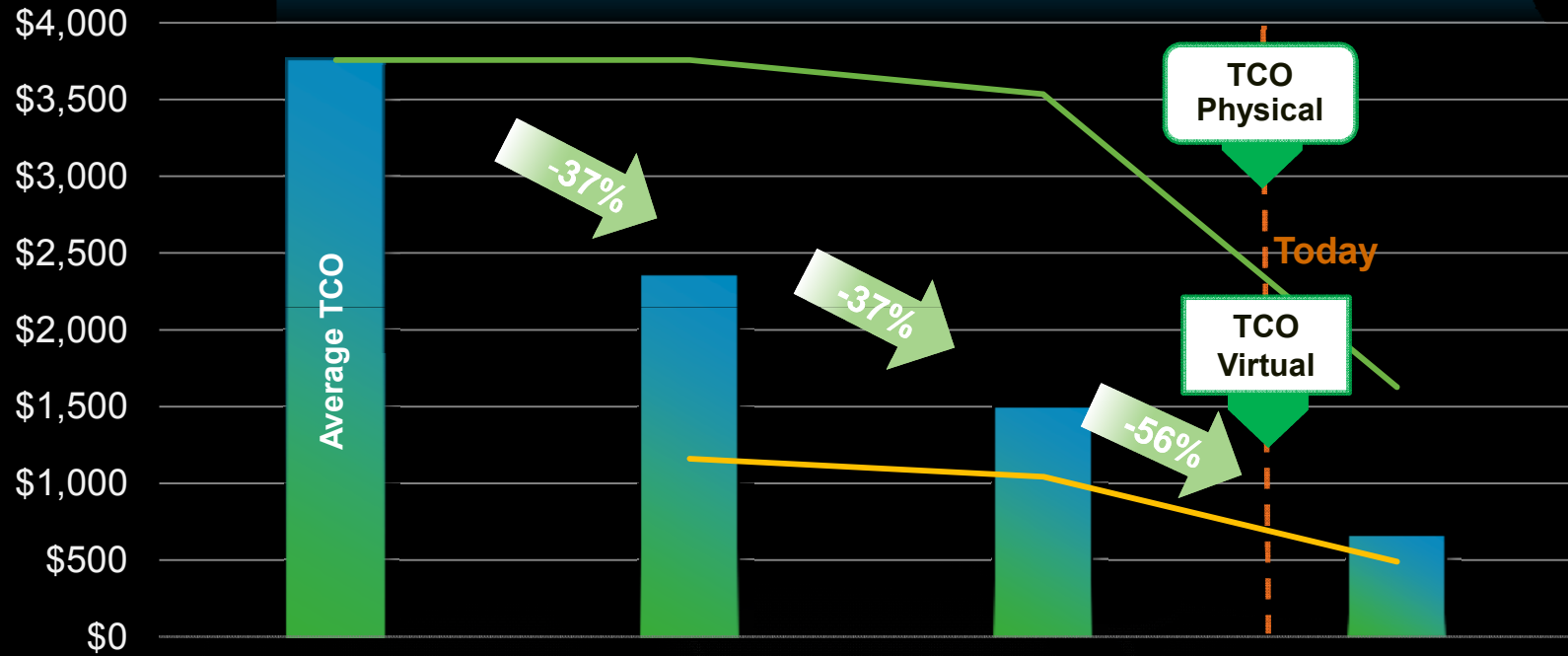
Network Resources



CITEIS Deployment—Cost Analysis

Compute TCO
(\$/Qtr/OS instance)

Virtualization > Unified Computing > Cloud



Legacy (rackmount); all physical

Legacy; medium virtualization (54%)

Current State
20/80% Legacy/UCS
82% Virtualization

Target State
100% UCS/Cloud
90% virtualization

2008

2010

2012

Future

Delivery Time

6–8 Weeks

2–3 Weeks
(Manual)

15 Minutes VM
(2–9 Days E2E)

15 Minutes
(Self-Service)



Cisco Intelligent Automation for Cloud Starter Edition



Introducing

Cisco Intelligent Automation for Cloud Starter Edition

Cisco Intelligent Automation for Cloud Starter Edition

Order Servers | Site Homepage | System Setup

Edit Passwords | Set as Homepage | Refresh Portlets

Virtual or Physical?

Ordering a new server is as easy as picking from one of the options below. Virtual machines provide a choice between a preconfigured template to configure your server, or starting from scratch and choosing the operating system of your choice. The physical server option always offers a choice of operating system.

- Order a Virtual Machine from a Template** [Go](#)
Order a new virtual machine from a template you select.
- Order a Virtual Machine and Install an OS** [Go](#)
Order a new virtual machine running either the Windows or Linux operating system.
- Order a Physical Server** [Go](#)
Order a physical server from the cloud pool, running either the Windows or Linux operating system.

About the Starter Edition

With the Cisco Intelligent Automation for Cloud *Starter Edition*, you can order a virtual machine or a physical server (if you have the right permissions) and get it ready in minutes.

Just select the VM template or OS image to install, and enter settings like root password and VLAN. Once your order is complete, you'll get an email with access details to your server.

Overview | Compare | Frequently Asked Questions

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

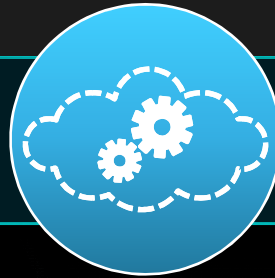
Pre-Built Portal
Content and
Workflows to
Accelerate Time
to Cloud



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



Thank you.

