IT as a Service with Cisco Prime Service Catalog and UCS Director

Introduction

Businesses value speed and agility, but manual processes in today's data centers can stand in the way. Automation within the data center can replace these manual processes with repeatable, consistent delivery of enterprise applications and their standardized IT within minutes, on demand.

Unfortunately, many of today's automation solutions just add to data center complexity with tools that solve only part of the problem or lock your organization into a proprietary solution. So how can your organization implement automation comfortably while broadly reducing data center complexity?

Cisco can help you to significantly reduce the complexity with a heterogeneous, automated solution that can support your journey from manual to on-demand service delivery. This solution delivers automation at a pace comfortable to your organization while providing a modern user interface that accommodates multiple users.
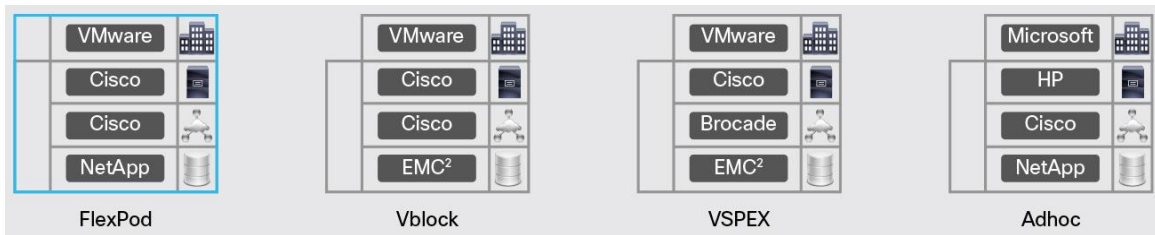
Cisco UCS Director

The first step in any automation journey starts with IT. Cisco UCS® Director radically streamlines the provisioning and management of integrated IT with a centralized user interface that spans geographically distributed data centers. Replacing manual provisioning with Cisco UCS Director can deliver up to an 88%[1] improvement in delivery of IT resources to your business.

Cisco UCS Director replaces manual management with unified provisioning and management at the compute, network, storage, and virtualization layers. This unified approach allows your IT department to manage IT across physical and virtual resources. With Cisco UCS Director, your data center administrators are freed from mundane, repetitive tasks and allowed to focus on new innovative services for your business.

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[1] Principled Technologies Test Report, Manual Provisioning vs. Cisco UCS Director, November 2014.

Figure 1.   Cisco UCS Director Delivers Efficiencies with Unified Provisioning and Management

FlexPod	Vblock	VSPEX	Adhoc
VMware	VMware	VMware	Microsoft
Cisco	Cisco	Cisco	HP
Cisco	Cisco	Brocade	Cisco
NetApp	EMC²	EMC²	NetApp

Cisco UCS Director reduces data center complexity with heterogeneous provisioning and lifecycle management for Cisco and third-party solutions (Figure 1). Data centers are typically heterogenous, so you really need heterogeneous automation and management to experience significant data center efficiency. Cisco UCS Director significantly increases IT productivity by managing your heterogeneous IT elements based on user roles, organizational compliance, security, and approval processes.

With dynamic IT delivery in place, your organization can move to more complex use cases, such as IT as a service, that require isolated environments, or containers, to prevent virtual machine sprawl from reducing the performance of your applications. But creating isolated containers can be a lengthy, manual process that spans operational teams and domains and slows down IT and your business. Once again Cisco automation can help.

Automated Virtual Network Containers

Cisco® Virtual Application Container Services (VACS) replaces manual processes with automation that can deliver secure, isolated containers within minutes. Used in conjunction with Cisco UCS Director, Cisco VACS delivers isolated network containers within minutes via predefined network and security templates. This lets you accelerate onboarding of new applications and users (Figure 2).

Built on best-in-class Cisco NX-OS Software and Cisco IOS® Software, your data center can experience consistent and fast delivery of regulatory compliant containers that span multiple hypervisors. Containers are defined by administrators or subject matter experts through a simple process that includes:

- Defining the container size (small, medium, large)
- Identifying if high availability is required
- Identifying the IP pools associated with container
- Identifying VXLAN or VLAN requirements
- Identifying the virtual machine template associated with container

Figure 2.   Deliver Secure Network Containers with Cisco Virtual Application Container Services
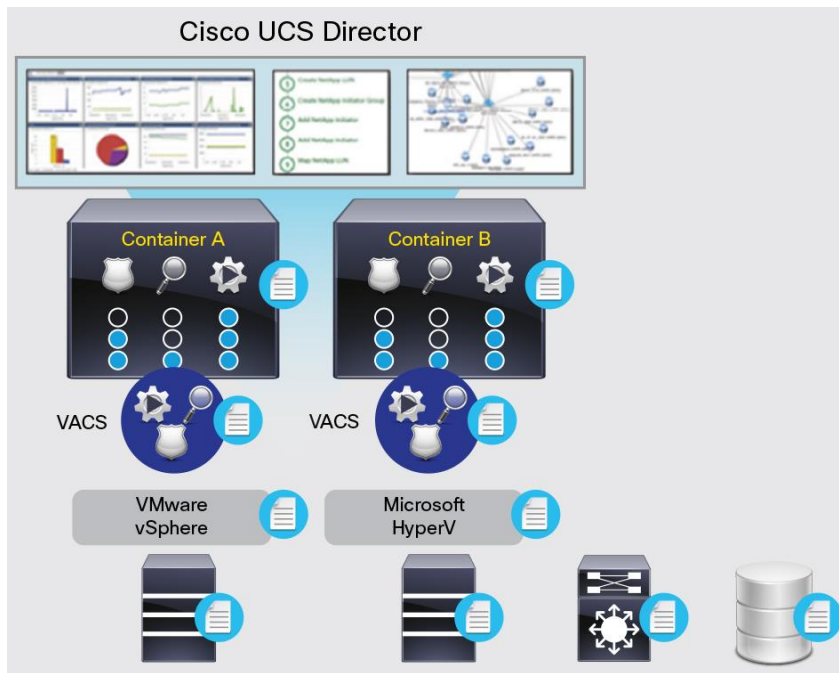
Cisco VACS installation is quick and includes all the steps required to integrate directly into Cisco UCS Director's user interface. With Cisco UCS Director and Cisco VACS, your organization can have consistent, worry-free container deployment that includes routing, edge firewall, zone-based firewall and virtual fabric definitions for your enterprise, collaboration or transactional applications.

Delivering these services in a repeatable, on-demand way requires a user interface that not only simplifies the ordering of data center and business services, but also tracks the lifecycle of these services. This interface can adapt easily to meet the requirements of multiple users, such as line-of-business managers, application developers, and IT professionals.

Cisco Prime Service Catalog

Cisco Prime™ Service Catalog is the essential user interface for organizations using automation to deliver data center and application services. It turns multi-level solutions into a set of standard services that can be ordered and delivered on-demand. Users simply access a menu of services they are entitled to receive and place their orders, which sets the automated delivery processes in motion. The combination of self-service ordering, standardized service options, and automation increases efficiency for everyone.

Cisco Prime Service Catalog supports a wide range of services, including data center IT, cloud applications, platform applications, and business services such as BYOD or device services (Figure 3).

Figure 3. Cisco Prime Service Catalog Covers a Broad Range of IT and Business Services
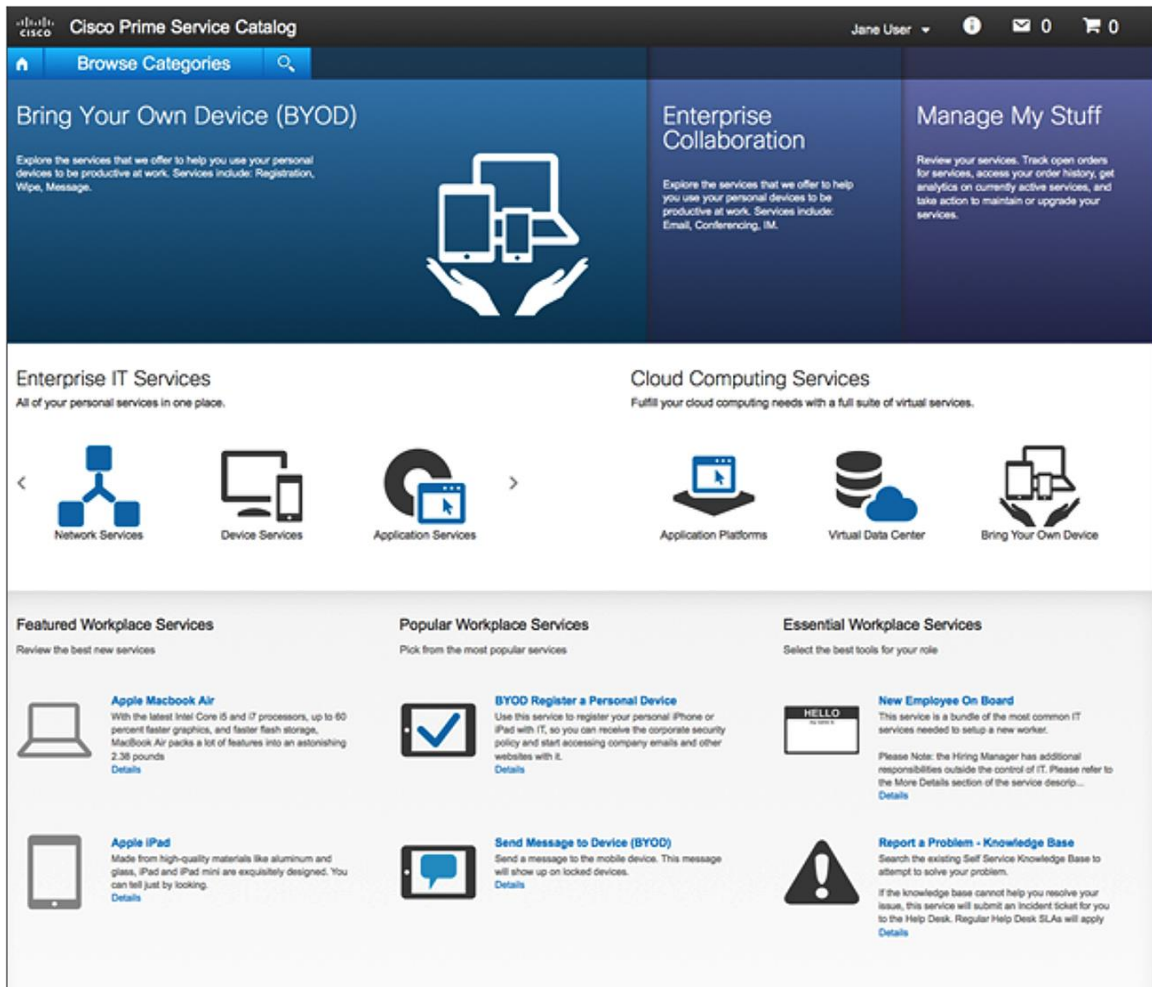
Users can quickly track open orders or access order history as well as obtain analytics on currently active services. When approved by administrators, users can complete upgrade or maintenance services by clicking on the appropriate service.

Cisco Prime Service Catalog supports your IT governance and approval guidelines with:

- Built-in policy-based approval processes
- Dashboards to quickly establish user entitlements or role-based access to services by administrators
- Lifecycle management and tracking through the service lifecycle
- Financial and demand management with pricing, quota and lease management set at the time of service order

If your business values speed, Cisco can deliver the tools to accelerate your business. Cisco UCS Director can be the cornerstone to your automation journey, with Cisco VACS delivering secure, isolated network containers tailored to your enterprise, collaboration, or transactional applications. Cisco Prime Service Catalog completes this solution by allowing your users to easily order and receive unified, standardized IT resources with consistency and agility.

To learn more about Cisco UCS Director, visit http://www.cisco.com/go/ucsdirector.

To learn more about Cisco Virtual Application Container Services, visit http://www.cisco.com/go/vacs.

To learn more about Cisco Prime Service Catalog, visit http://www.cisco.com/go/service-catalog.