

Cisco UCS Director: Infrastructure Automation and Multicloud Foundation

Open orchestration and infrastructure as a service

Cisco UCS® Director provides an open foundation for private cloud Infrastructure as a Service (IaaS). It is a heterogeneous management platform that features multivendor task libraries with more than 2500 out-of-the-box workflow tasks for end-to-end servers, network, storage, converged, and hyperconverged infrastructure stack automation. UCS Director provides an open and modular means of implementing multicloud.

You can extend your capabilities to:

- Automate provisioning, orchestration, and management of Cisco and third-party infrastructure resources
- Order resources and services from an intuitive self-service portal
- Support multiple hypervisors and bare-metal environments
- Enable consistent end-to-end infrastructure provisioning and management to support workloads through their complete lifecycle
- Automate security and isolation models to provide repeatable services

Benefits

- An open platform for private cloud IaaS and orchestration anywhere, across Cisco® and third-party infrastructure
- Accelerated time to market for applications through self-service portals
- Modular, cost-effective means of implementing multicloud using existing hardware and processes
- Automatic updates and proactive problem resolution with Cisco Intersight™

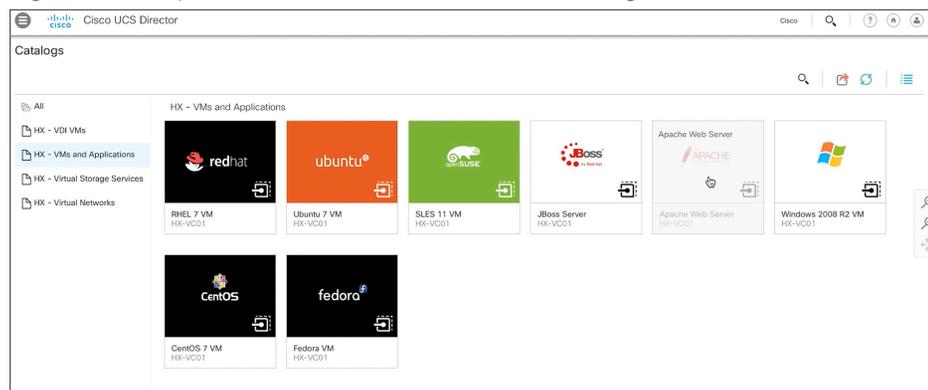
Greater flexibility and choice

Cisco has partnered with many hardware vendors and independent software vendors to establish a heterogeneous framework for IaaS. Cisco UCS Director supports bare-metal and virtualized environments. It supports multiple hypervisors, so you don't get locked into one vendor. This open orchestration platform provides provisioning and lifecycle management for Cisco and third-party infrastructure.

Cisco UCS Director unifies and automates end-to-end IT infrastructure management processes by abstracting the complexity of individual devices, hypervisors, and virtual machines. This abstraction reduces complexity and enables both physical and virtual resource groups across resource pools. With this capability, IT administrators can distribute resources in any data center, edge, branch, or disaster-recovery location. It works across tenants in a shared or dedicated model by enabling you to efficiently and cost-effectively deploy on-premises infrastructure for private cloud.

Users can access infrastructure resources using the UCS Director self-service catalog (Figure 1). The chargeback module offers metering and visibility into the costs of the virtual infrastructure. It allows the definition of cost models and their assignment to policies within departments and organizations. Summary and comparison reports of costs and resource usage for the virtual infrastructure can be easily generated.

Figure 1. Example of Cisco UCS Director service catalogs



Cisco UCS Director and Cisco Intersight: better together

While Cisco UCS Director remains a strategic platform for private cloud IaaS, Cisco is creating a path forward to allow customers to [transition to Cisco Intersight](#) in the future. This evolution will take time to implement, but we have started the process by introducing a UCS Director connector to Intersight. Cisco UCS Director can be claimed as a managed device in Intersight, similar to Cisco Unified Computing System™ (Cisco UCS) servers and Cisco HyperFlex™ hyperconverged infrastructure (Figure 2). Updates to UCS Director can be implemented automatically. The integration of Cisco Intersight with the Cisco Technical Assistance Center (TAC) allows problems to be addressed quickly. The new Cisco Intersight Advantage edition, part of the Cisco Enterprise Agreement Data Center Enrollment, preserves your investment in UCS Director and helps facilitate the transition to Cisco Intersight.

Figure 2. Cisco Intersight manages Cisco UCS Director, Cisco UCS, and Cisco HyperFlex



This IaaS platform provides advanced automation for Cisco and third-party servers, storage, network, and [hyperconverged](#) and [converged infrastructure](#). You can define infrastructure policies and automate complex end-to-end workflows of Cisco UCS servers, Cisco HyperFlex, and Cisco

Cisco's modular approach to multicloud lets you begin with your private cloud and grow to include hybrid cloud management. Subscription-based licensing simplifies license and support management for easier compliance, lowers up-front costs, and shifts spending to an operating budget.

Cisco UCS Director is a foundational component of the Intersight Advantage edition, part of the Cisco Enterprise Agreement Data Center Enrollment. The Cisco Enterprise Agreement software-buying program helps organizations buy, consume, and manage Cisco technology across the software portfolio.

For more information

To learn more about the Cisco Enterprise Agreement, visit www.cisco.com/go/ea

Nexus® switches. In addition, you can efficiently deploy and manage the converged infrastructure solutions Cisco has developed with our storage partners, including NetApp's [FlexPod](#), Pure's [FlashStack](#), IBM's [VersaStack](#), and Dell EMC's [VxBlock](#).

Cisco Application Centric Infrastructure (Cisco ACI) and Multicloud

Working in conjunction with the [Cisco Application Policy Infrastructure Controller](#) (APIC), Cisco UCS Director builds and manages the fabric. It allows you to extend the fabric to onboard necessary compute and storage resources. Cisco UCS Director bonds with APIC and Cisco UCS service profiles to ensure that all infrastructure elements are synchronized with the application's needs. This end-to-end infrastructure provisioning and management supports workloads through their complete lifecycle: inception through discontinuance.

Cisco UCS Director also supports Cisco ACI™ Anywhere, enabling automation via the Cisco ACI Multi-Site Controller (Figure 3). The configuration of ACI Multi-Site allows consistency across remote sites, disaster-recovery sites, and the public cloud through policy replication and centralized policy management, as well as centralized tenancy and application profiles.

Figure 3. Overview of Cisco ACI Multi-Site Controller and Cisco UCS Director

