

Cisco UCS Director Version 5.0



Introduction

CIOs and IT managers are focused on business agility and operational efficiency. They realize that the ways and means of IT deployment distinguish an efficient, successful organization from an ineffective one. And they also see that effectiveness is hampered as IT support is growing for application workloads that serve business operations and drive competitive differentiation.

Cisco UCS Director enables stronger ways and means for IT because it unifies and automates end-to-end IT converged infrastructure management processes by abstracting the complexity of individual devices, hypervisors, and virtual machines. Cisco UCS Director reduces the complexity of data centers, allowing IT staff to shift from manually managing infrastructure to developing new services for the business.

Application-Centric and Application-Ready Infrastructure

Business applications today typically work together in a tiered fashion and require compute, network, and storage resources as foundational support. Often, virtual machines are spun up in minutes, yet the remaining infrastructure stack required for the application is deployed manually and takes time. Cisco UCS Director solves that problem. It delivers programmable application containers across compute, network, and storage that are configured to the needs of the specific application to reduce manual processes and extend automation benefits to the entire infrastructure stack.

Benefits of Cisco UCS Director and Cisco Application Policy Infrastructure Controller:

- Working in conjunction with the Cisco Application Policy Infrastructure Controller (**APIC**), Cisco UCS Director interprets the requirements of applications into policies to deliver consistent application-aware infrastructure. The business outcome for IT is to deliver application-aware infrastructure containers.
- Cisco UCS Director bonds with APIC and UCS service profiles to ensure that all infrastructure elements are in synch with the application's needs
- End-to-end infrastructure provisioning and management supports workloads through their complete lifecycle – inception through discontinuance
- Cisco UCS Director can support a diverse range of workloads from testing and development to production
- Customers can manage existing non-application centric infrastructure (ACI) and ACI-based infrastructure from a single pane of glass, eliminating the need for multiple management consoles and providing smoother migration

Resource Management

Cisco UCS Director 5.0 delivers the industry's first physical and virtual infrastructure resource management solution with the creation of resource groups across physical and virtual resource pools. With this capability, IT administrators can distribute resources across tenants in a shared or dedicated model and help ensure that the appropriate numbers of resources are assigned to specific groups, further maximizing resource utilization.

Extensible Platform with Open Automation

Third-party hardware and solution vendors support Cisco UCS Director using a publically available SDK with open APIs that can be downloaded. The SDK contains all of the required APIs and management functionality for the third-party hardware or solution to snap directly into the Cisco UCS Director's management model.

Enriched Task Library

Cisco UCS Director's task library has been expanded to over 800 out-of-the-box tasks, representing the equivalent of 2400 person days of development effort. These task libraries save organizations the cost and time of separate professional service engagements for developing automation workflows across heterogeneous hardware vendors. Cisco UCS Director's task-based workflow orchestration represents significant time savings over solutions using script-based orchestration. Each task comes with its own API code attached, allowing customers to run the workflow immediately after validation or to save and publish it to the self-service catalog.

Simplified Bare-Metal Agent

Cisco UCS Director's enhanced bare-metal agent is managed directly from the Cisco UCS Director administrator user interface to provision and configure bare-metal instances, eliminating the need for command line and manual launching of PXE images.

Virtual Application Container Services

Cisco UCS Director 5.0 provides orchestration and management capabilities for Virtual Application Container Services (VACS). VACS allow data centers to be more agile and reduce the cost of setting up network services across multiple applications and tenants. The combination of VACS with Cisco UCS Director enables customers to combine company-compliant network containers and their services within minutes.



Virtual Application Container Services (*continued*)

VACS allow server administrators to align their UCS servers with the network services required for specific applications and have them delivered in minutes. With VACS, server administrators no longer need to understand all of the complex technical details of network services. Cisco UCS Director and VACS automatically provision the network and services within minutes.

Available August 2014, VACS will be sold as a value add-on to any new or existing Cisco UCS Director license. More licensing and bundling information will become available in the summer of 2014.

Benefits at Each Level of the IT Organization

Senior executives including CIOs and CTOs can receive:

- Investment protection with single management control point for heterogeneous infrastructure solutions
- Operational efficiency from maximum utilization of both infrastructure and human resources for maximum uptime for the business
- Heterogeneous management that delivers choice of server, storage, and hypervisor options to meet the needs of diverse projects
- IT better aligns with the needs of the business with application-aware infrastructure to increase collaboration between IT operations and application developers

Heads of IT infrastructure can receive:

- Operational efficiency from eliminating administrator silos, which sparks innovation by encouraging teamwork and collaboration
- Visibility of utilization and potential problems before they affect application and business performance
- Heterogeneous management that provides flexibility for IT to rapidly adapt to changing business requirements
- Agility and speed from fast, consistent infrastructure service delivery, resulting in increased confidence in IT's ability to deliver required services

Benefits at Each Level of the IT Organization (*continued*)

IT administrators can receive:

- Single-purpose solution delivers one architecture and API base, making integration into third-party solutions straight forward
- Operational efficiency with role-based user interface allowing administrators to view and manage only those resources under their control
- Visibility from utilization and consumption reports increases confidence of end-users in IT's ability to maintain a stable and reliable environment

Why Cisco?

Cisco UCS Director improves business agility and increases efficiency by improving infrastructure management and services delivery. It provides unified infrastructure provisioning and automation across compute, network and storage resources to drastically reduce complexity for IT operators and administrators.

Bonding with Cisco UCS service profiles and ACI delivers integrated infrastructure solutions through a single pane of glass across compute, network and storage elements into secure tenant containers. With application aware infrastructure containers; applications, as your business, run at maximum performance.

For More Information

Learn more about Cisco UCS Director at: cisco.com/go/ucsdirector