Cisco CloudCenter Solution

Benefits

- **Single Platform:** Avoid cloud lock-in with a management and orchestration solution that works across data center, private cloud, and public cloud environments.
- **Enterprise Ready:** Extend existing investments with a secure, scalable, multitenant solution that includes unified administration and governance.
- **Time to Value:** Reduce setup effort and total cost of ownership with a logical, intuitive management platform. No extended service engagements are needed.
- **Exceptional Security:** Gain precise access control, network isolation, AES-256 encryption, FIPS-compliant cryptography, customer-controlled key vaulting, and more.
- **Applications Support:** The solution works with many types of applications, including batch, N-tier, and clusters such as Hadoop applications, and with technologies such as Ruby on Rails, Java, thick client, .NET, and more.

Any Application. Any Cloud. One Platform.

The Cisco CloudCenter™ solution is an application-centric hybrid cloud management platform that securely provisions infrastructure resources and deploys applications to data center, private cloud, and public cloud environments.

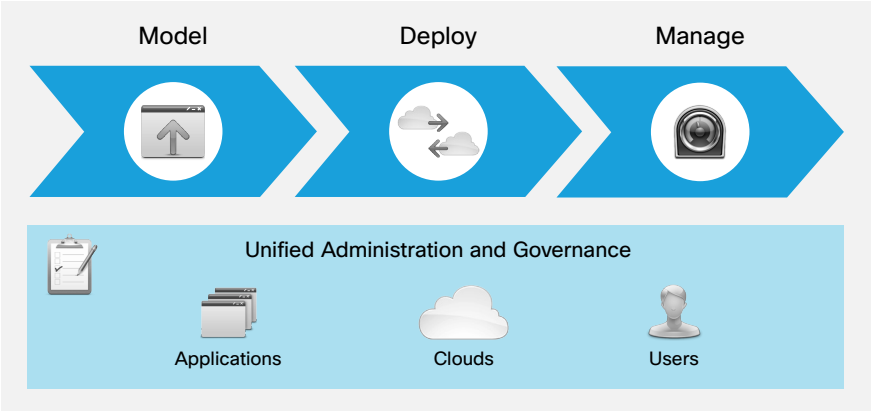
With Cisco CloudCenter breakthrough application-centric technology, users can (Figure 1):

- Model: Quickly and easily build a cloud-independent application profile that defines the deployment and management requirements of an entire application stack.
- Deploy: Use one click to deploy the application profile and related components and data to any data center or cloud environment.
- Manage: Apply a wide range of application lifecycle actions to set policies to enable in-place scaling, support cross-environment bursting or high availability and disaster recovery, and stop the deployment.

Cisco CloudCenter administration and governance spans applications, clouds, and users. Administrators can centrally manage cloud accounts, control costs with financial plans, and report on use. They can also manage tenants and users and provide tag-based governance and role-based access control (RBAC).

IT organizations can pursue a hybrid IT strategy that includes IT as a service (ITaaS), automated DevOps or continuous delivery, temporary capacity augmentation, and permanent application migration.

Figure 1 . Cisco CloudCenter Full-Lifecycle Management



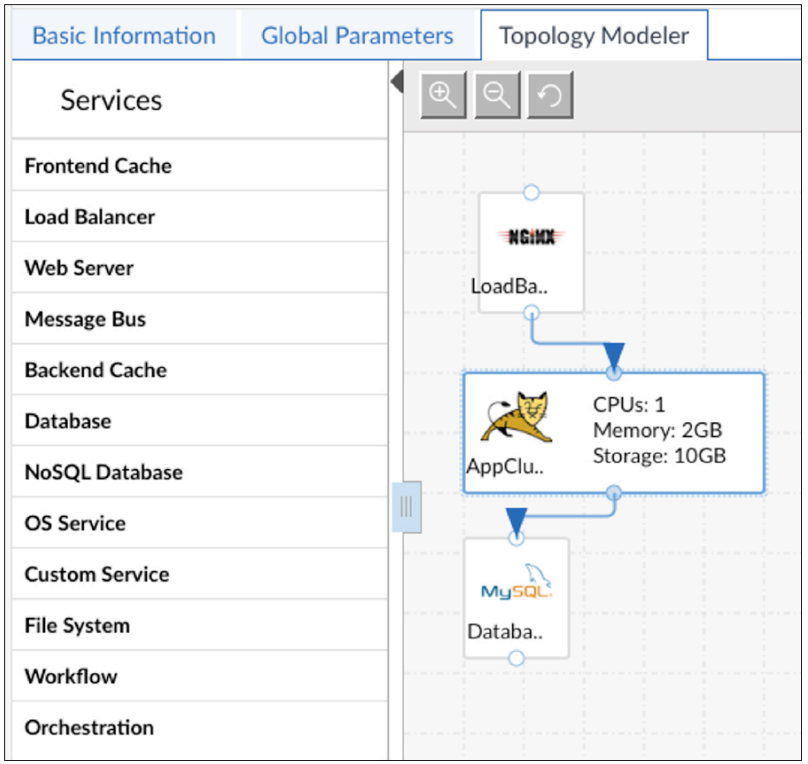
The Cisco CloudCenter Advantage

The Cisco CloudCenter solution's approach to hybrid cloud management abstracts the application from the cloud infrastructure using a unique combination of innovative and patented components:

- Cisco CloudCenter Manager is a management portal that allows users to quickly and easily model, migrate, and manage application stacks on demand, and gives administrators enterprise-class visibility and governance control of applications, clouds, and users.
- The Cisco CloudCenter application profile is a user-created model that defines each application stack's deployment and management requirements in a cloud-independent format. Each application profile is easily created with a simple, visual, drag-and-drop topology modeler using a library of ready-to-use or customized services, images, and containers (Figure 2).
- Cisco CloudCenter Orchestrator provides a cloud-specific, multitenant orchestration tier that is transparent to users and is installed in each environment to coordinate native deployment and ongoing management.

Cisco CloudCenter is an enterprise-class solution that offers a secure, scalable, and extensible multitenant solution that can start simple and scale to meet the needs of the most demanding IT organizations and cloud service providers.

Figure 2 . The Built-in Topology Modeler Creates and Configures Applications Quickly



Grow from Simple to Complex

Enterprise IT solutions often start by automating deployment of OS images or virtual machines in the data center or in one cloud environment. Later, automation is expanded to include complex application stacks in a variety of environments. Many IT organizations add applications and clouds as they gain confidence and demonstrate the business value of a hybrid IT strategy.

- For developers: Cisco CloudCenter boosts productivity and decreases time to market by letting users provision fully configured application stacks for any environment through a self-service system. No longer do users have to learn each underlying cloud environment or manually install and configure environments.

- For DevOps engineers: Cisco CloudCenter plays a foundational role in an integrated tool chain with automated work streams. Engineers can automate the deployment of builds and environments at multiple steps in a continuous delivery flow that may use data center, private cloud, and public cloud resources.
- For IT operations: Cisco CloudCenter increases operation efficiency and improves visibility and control by delivering a single management and orchestration solution that works across multiple applications, clouds, and users. IT can deliver speed and agility for users, while also controlling costs and helping ensure governance control of infrastructure and applications.
- For IT executives: Cisco CloudCenter enables a hybrid IT strategy that delivers a flexible mix of data center and cloud IT services without cloud lock-in and without exit costs as business needs change. Executives can support both business time-to-market needs and cost demands, while also reducing complexity and managing the risk inherent in a hybrid cloud strategy.

Cisco CloudCenter can be delivered as either a software-as-a-service (SaaS) solution or a traditional on-premises packaged application. Deployment does not require a long professional services engagement. Many customers achieve a successful proof-of-concept deployment or deploy their first application in just days, not weeks or months.

Hybrid IT Options

Cisco CloudCenter provides preinstalled support for more than 19 environments (Figure 3), including:

- Data center: Management solutions include Cisco UCS® Director, Cisco® Application Centric Infrastructure (Cisco ACI™), VMware vCenter, and other software-defined infrastructure management solutions.
- Private cloud: A wide range of OpenStack implementations as well as VMware vCloud Director, and Microsoft Azure Pack are supported.
- Public cloud: Supported services include Amazon Web Services (AWS) and AWS GovCloud, Microsoft Azure and Azure Government cloud, Google computing platform, Dimension Data platform, IBM SoftLayer, Rackspace platform, and VMware vCloud Air, among others.

Figure 3 . Cisco CloudCenter Supports a Wide Range of Private and Public Platforms