

Cisco CloudCenter Solution with VMware

Extend VMware, any application, and any cloud

The Cisco CloudCenter™ hybrid cloud management platform securely provisions infrastructure resources and deploys application components and data to more than 19 data center, private cloud, and public cloud environments, including VMware vCenter, vCloud Director, and vCloud Air.

With the Cisco CloudCenter solution, enterprise IT organizations can:

- **Model:** Quickly and easily create a cloud-independent application profile that combines infrastructure and application automation layers into a single deployable blueprint.
- **Deploy:** Use one click to deploy the application profile, using vCenter or vCloud to provision resources, Cisco® Application Centric Infrastructure (Cisco ACI™) to automate network policy objects, and seamlessly orchestrate application deployment.
- **Manage:** Apply a wide range of application lifecycle actions and set policies for horizontal scaling, cross-environment bursting, high availability, and disaster recovery or to stop deployment.

Benefits

- **Fast time-to-value**
Deploy your first application stack in minutes or days, not months. And you don't require a long professional services engagement.
- **Integration and extensibility**
Use an existing front end such as ServiceNow, or integrate with Jenkins for instant developer environments.
- **Enterprise-class platform**
Get a single purpose-built platform—not a suite of products. You won't need to switch among user interfaces or confront the challenges of multiproduct installation and support.

- **Financial controls and visibility**

Get multitenant support, cost-control plans, and bundles, with both aggregated and individualized cost and use reporting.

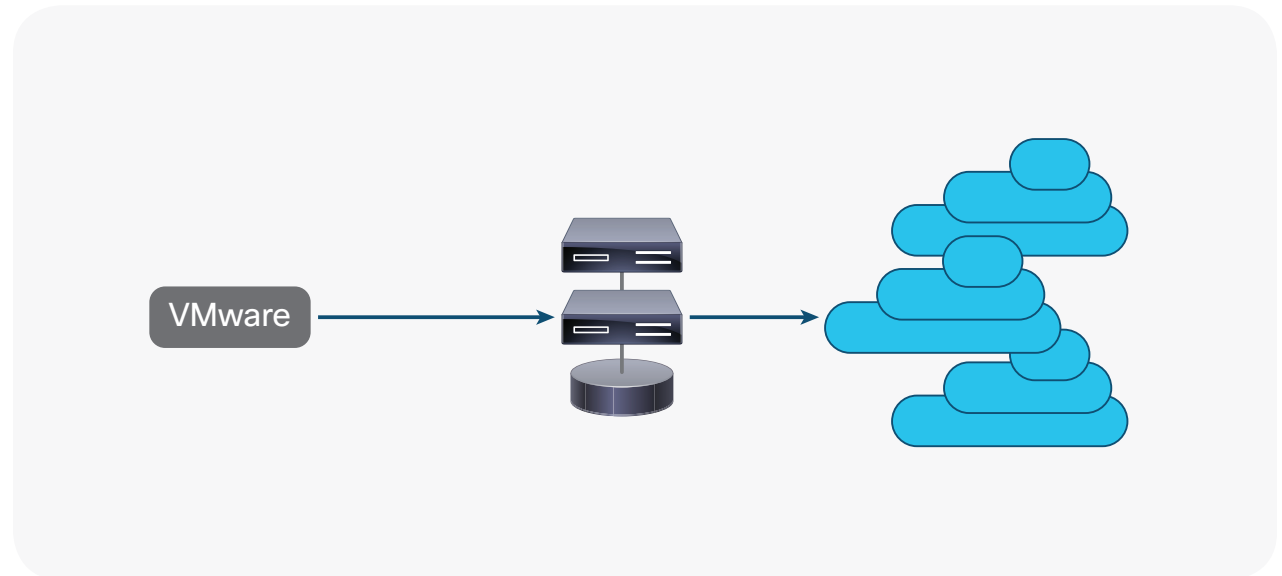
- **Support for many application types**

The solution works with many types of applications, including batch and N-tier, clusters such as Hadoop clusters, and technologies such as Ruby on Rails, Java, thick clients, and .NET.

Cisco CloudCenter administration and governance spans applications, data centers, and clouds and multiple groups 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 perform tag-based governance and Role-Based Access Control (RBAC).

With the Cisco CloudCenter solution, enterprise IT organizations can deploy and manage applications starting with a virtual machine or simple application in the datacenter, or many applications on multiple clouds (Figure 1). They can automate DevOps processes and continuous deployment or implement dynamic capacity augmentation. They can also use the solution as an IT as a service (ITaaS) platform.

Figure 1. Deploy and manage applications starting with one application in a environment, or many applications on multiple clouds



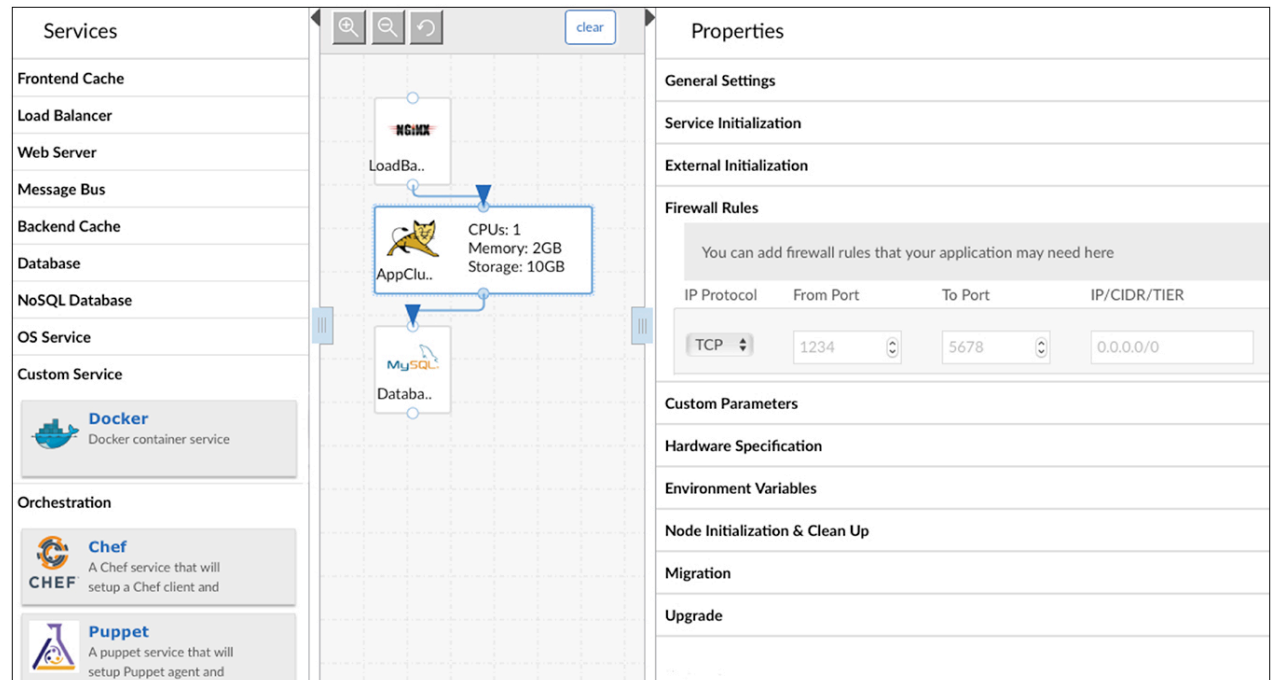
Unique hybrid cloud technology

The power of the Cisco CloudCenter solution comes from its unique technology, which abstracts the application from the infrastructure using a unique combination of innovative and patented technologies.

One profile can be deployed to any environment without lock-in and without environment-specific scripting. One platform provides a common management fabric that delivers powerful governance with visibility with cost and usage control across all environments (Figure 2).

The Cisco CloudCenter solution works with many application types, including batch, N-tier, and cluster (such as Hadoop clusters), and with most common technologies, such as Ruby on Rails, Java, thick clients, and .NET.

Figure 2. Common management fabric across all environments



Six ways to extend VMware vCenter with Cisco CloudCenter solution

You can use the Cisco CloudCenter solution to extend vCenter in several powerful ways:

- **Deploy a virtual machine on demand.** Easily integrate with service catalogs such as ServiceNow, a custom IT front end, or use the CliQr® out-of-the-box enterprise marketplace. Users get self-service on demand without the need to access vCenter or vSphere. The IT organization delivers speed and flexibility, and also controls who can deploy workloads, what workloads can be deployed, and where and how many workloads are deployed.

Hybrid IT options

The Cisco CloudCenter solution provides out-of-the-box support for more than 20 environments and regions (Figure 3), including:

- **Data center:** Management solutions include Cisco UCS® Director, 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:** AWS, AWS GovCloud, Alibaba Cloud, Microsoft Azure, Azure Government Cloud, Google Cloud Platform, Dimension Data, IBM Bluemix, Rackspace, and VMware vCloud Air, among others.

- **Deploy any application stack on demand.** Use one click to deploy the fully configured infrastructure and application stack, including databases, middleware, application and web servers, and load balancers. Easily model application profiles with more than 40 popular application services that can easily be customized, as well as containers and configuration tools. And you can also easily map applications to existing OS images and services.
- **Deploy the application stack to any cloud.** A single application profile can be deployed in vCenter, vCloud Air, and vCloud Director environments, as well as in 10 other public clouds such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud. Each application profile can be deployed in any environment. No cloud-specific scripting is needed, and you don't need to develop an orchestration workflow.
- **Deploy the application stack with VMware NSX.** Deploy the application stack with preset firewall rules to an NSX managed environment,

and get additional network level security with improved machine-level and network-level efficiency.

- **Deploy a DevOps bridge to vCenter.** Deploy a cross-environment DevOps workflow with development and test workloads deployed to the cloud (AWS or OpenStack) and then promoted to staging and production environments in your data center. One deployment and management solution is used for all Systems Development Lifecycle (SDLC) phases and across various data center and cloud environments, reducing the amount of time needed to troubleshoot environments.
- **Data center migration and optimization:** Simplify the management and mapping of images across multiple vCenter deployments and multiple VLANs and the processes needed to support operations at scale. Each application profile includes a logical image that can pull from repositories local to various vCenter instances to prevent duplication in the creation and maintenance of higher-level objects.

Cisco CloudCenter is subscription software delivered as 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.

Figure 3. Cisco CloudCenter supports a wide range of private and public platforms

