

# VMware vCloud Director

Complete Software-Defined Datacenter Services Delivered in Minutes

## AT A GLANCE

VMware vCloud™ Director™ orchestrates the provisioning of software-defined datacenter services to deliver complete virtual datacenters for easy consumption in minutes. Software-defined datacenter services and virtual datacenters fundamentally simplify infrastructure provisioning and enable IT to move at the speed of business.

## BENEFITS

- Deliver complete software-defined datacenter services as virtual datacenters
- Enable infrastructure to be ready for easy consumption in minutes
- Ensure workload security and automated resource control

## What Is VMware vCloud Director?

VMware vCloud Director orchestrates the provisioning of software-defined datacenter services as complete virtual datacenters that are ready for consumption in a matter of minutes. Virtual datacenters provide virtualized compute, networking, storage, and security so that administrators can provision the complete set of services necessary to make workloads operational in minutes. Software-defined datacenter service and the virtual datacenters fundamentally simplify infrastructure provisioning, and enable IT to move at the speed of business.

## How Does VMware vCloud Director Work?

### Deliver Complete Software-Defined Services as Virtual Datacenters

VMware vCloud Director applies the principles of pooling, abstraction and automation to all datacenter services like storage, networking, and security. By dramatically simplifying the provisioning of these services, VMware enables IT to provision complete and operationally ready infrastructure without worrying about the physical configuration of hardware.

### Infrastructure ready for consumption in minutes

vCloud Director accelerates and simplifies access to infrastructure. Open Virtualization Format-based vApp templates of multi-tier applications are made available in Web-based catalogs for rapid deployment. This template-based approach also enables applications to be flexibly ported between datacenters.

vCloud Director also leverages VMware vSphere® technology like linked clones and snapshots to dramatically expedite access to infrastructure. This faster infrastructure delivery is also available to third-party technology alliance partners through an expanded API and SDK.

### Infrastructure-as-a-service you can trust

vCloud Director leverages a policy-driven approach to provisioning that embeds software-defined security and resource consumption controls so that pre-configured IT policies are automatically enforced. VMware vCenter™ Single-Sign-On enables SAML tokens generated by any identity provider to be used to login to vCloud Director.

Beyond security, vCloud Director enables authorized consumption using a flexible role-based access control model that enables different users to have different levels of functional access within vCloud Director. Quotas, leases, and limits can also be set to limit consumption that exceeds prescribed boundaries. Integration with VMware vCenter Chargeback™ enables consumption within vCloud Director to be fully accounted for both showback visibility and chargeback billing.



VMware vCloud Director enables a pragmatic approach to automated provisioning by transforming today's datacenter running vSphere into an infrastructure-as-a-service environment you can trust.

## How Is VMware vCloud Director Used?

The virtual datacenter is a new logical container that provides all infrastructure services, including virtualized networking, storage, and security. With virtual datacenters, administrators can provision all infrastructure services necessary to make workloads operational in minutes.

Enterprises also face ever increasing pressure to react quickly that is often constrained by the rate at which IT infrastructure can be provisioned. By accelerating infrastructure delivery, enterprises can ensure that IT moves at the speed of business while maintaining security and control.

## Key Features of VMware vCloud Director

**Virtual datacenters** – Virtual datacenters are complete sets of software-defined services that include compute, storage and networking capacity to enable complete separation between the consumption of infrastructure services and the underlying hardware.

**Snapshot and Revert** – Unwind changes made to a virtual machine for rapid destructive testing without the need to re-provision multiple times.

**Integrated vSphere Profile** – Driven Storage and vSphere Storage DRS™ – Deeper integration with vSphere storage features enable storage in the vCloud Director environment to be tiered and load-balanced to maximize performance and simplify provisioning.

**Security** – Integrated vCloud Networking and Security technologies such as perimeter protection, port-level firewall, and NAT and DHCP services, offer virtualization-aware security, simplify application deployment and enforce boundaries required by compliance standards. Upgrading to the full vCloud Networking and Security offerings adds advanced services such as VXLAN, VPN, firewall high availability, network isolation, and web load balancing.

**vCenter Single Sign-On** – Simplify administration by allowing users to log-in once and then access all instances of vCenter Server and vCloud Director without the need for further authentication.

**Fast provisioning** – Using VMware's unique linked clone technology, end users are able to rapidly clone base vApps into "children" vApps by only storing changes made by children and reading all other data from the base. This enables significant storage savings for IT and acceleration for end users who have highly cloned applications.

**vApp catalog** – Multi-tier applications can be deployed and consumed as pre-configured virtual appliances containing virtual machines, operating system images, and other media with the click of a button from catalogs. This enables IT to standardize offerings, simplifying troubleshooting, patching, and change management.

**Isolated Multi-tenant Organizations** – Administrators can group users into organizations that can represent any policy group such as a business unit, division or subsidiary company. Each has isolated virtual resources, independent LDAP-authentication, specific policy controls, and unique catalogs. These features enable a multi-tenant environment with multiple organizations sharing the same infrastructure.

**Self-service Web portal** – Users have direct access to their catalogs and virtual datacenters through a user-friendly Web portal.

**VMware vCloud API, OVF, and custom extensions** – The vCloud API is an open, REST-based API that allows scripted access to cloud resources, such as vApp upload and download, catalog management, and other operations. The vCloud API makes basic transfer between clouds possible using OVF, which preserves application properties, networking configuration and other settings. Custom extensions enable VMware vCloud Director to send outbound messages to other integrated systems.

## Find Out More

For information or to purchase VMware products, call 877-4-VMWARE, visit [www.vmware.com](http://www.vmware.com), or search online for an authorized reseller. For detailed specifications and requirements, refer to the product documentation.

