

# VMware Cloud Director 10.2 update

## The Leading Cloud Services Platform for Cloud Providers

Q. What is VMware Cloud Director?

A. VMware Cloud Director is VMware's flagship cloud services platform for Cloud Providers. It is a pervasive cloud infrastructure control plane for cloud providers' service-delivery needs, and the management entity for a global VMware cloud estate. VMware Cloud Director is used by some of the world's most popular cloud providers to operate and manage successful cloud-service businesses.

Cloud Director allows seamless provisioning and consumption of cloud computing resources and services to geographically distributed lines of business and IT teams in an API-driven approach. It helps cloud providers derive maximum efficiency from their cloud infrastructure and enables the creation and provisioning of differentiated and value-added cloud services. Cloud Director is available globally for VMware Cloud Providers.

Q. What are the core capabilities of Cloud Director?

A. Cloud Director facilitates:

- **Multi-tenant resource pooling:** Cloud Director helps create virtual datacenters from common or distributed infrastructure to cater to heterogeneous enterprise customer needs. With Cloud Director, a cloud provider can host and serve multiple customers from a single vCenter that may be stretched across distributed physical servers.
- **Cloud-native offerings:** Cloud Director provides an easy on-ramp to cloud-native application development for enterprise DevOps by delivering enterprise-grade native, Project Pacific or Enterprise PKS Kubernetes and VMs within the same virtual infrastructure environment.
- **Deep Automation:** Cloud Director delivers unparalleled infrastructure efficiencies with context-aware automation across workflows. The Terraform provider for Cloud Director enables complete provisioning of compute and network resources as code.
- **Service suite and service stitching:** Cloud Director App LaunchPad provides application Platform as a Service (aPaaS) capabilities. Via this extensibility customers with little or no knowledge of infrastructure can deploy 3rd party or custom applications and providers can expand their portfolio quickly from VMware Cloud Marketplace or custom services.
- **Policy-driven approach to Cloud Management:** Cloud Director ensures enterprises have NSX-T backed secure, isolated virtual resources, independent role-based authentication at the levels of cloud providers and their customers, and fine-grained access control across datacenters, sites, virtual machines, and applications. Moreover, intelligent workload-placement allows cloud providers to drive higher efficiency from their cloud infrastructure while delivering outstanding performance and exceeding SLAs

- **Global hybrid cloud management:** Cloud Director helps cloud providers manage and gain deep visibility into datacenters across sites and geographies, and monitor cloud resources across sites from a single pane of glass. Cloud Director is proven to scale seamlessly across thousands of sites

- **Cloud migration and availability:** Cloud Director helps enable simple, secure VM migration and data center extension with VMware Cloud Director Availability. This allows for secure hybridity, simple connectivity and cold or warm migrations. The integration with VMware Cloud Director Availability makes it easy for cloud providers to run Disaster Recovery & Migration offerings compatible with enterprise environments

- **Operational visibility and insights:** Leveraging integration with VMware vRealize Operations' tenant app for Cloud Director, cloud providers can use multi-layer analytics and predictive remediation to better serve their enterprise customers. The integration also provides visibility into virtual machine costs and accountability to understand granular costs of virtual infrastructure required to support business services

Q. Why would a cloud provider want VMware Cloud Director?

A. Cloud Director offers the following benefits:

- **Operational Efficiency:** Cloud Director enables cloud providers to squeeze extreme operational efficiencies out of their cloud infrastructure, and also reduces operational overheads that come with maintaining silo'd private and multi-cloud environments. Cloud Director significantly reduces time-to-market for cloud providers' services, and scales these services globally without external dependencies and ballooning costs
- **Service-expansion and Monetization:** Cloud Director enables cloud providers to spin up new cloud services on Day 1. Cloud providers can drive more revenue by publishing their own services, or marketplace services from Bitnami, integrated ISV-provided backup, DR, security, migration, and other leading cloud services that are tenant and site-aware. Cloud Director forms a unified management plane for the entire service portfolio of a cloud provider. Cloud Director is a key element to getting the 'Cloud Verified' certification, a mark of the most capable and differentiated VMware Cloud Providers in the world
- **Developer-Readiness:** Cloud Director provides an open platform for cloud providers and customer developers to build on. Using the programmatic interfaces, automation tools, and extensibility frameworks of Cloud Director, cloud providers can not only differentiate themselves by providing unique experiences to their customers but also help them get to application-building faster

Q. What's new with Cloud Director 10.2?

A. Cloud Director 10.2 brings NSX-T parity to provide networking services and security. NSX-T L4-7 firewalling and distributed firewall make the security offerings available within Cloud Director. Other NSX-T services such as VRF-lite, IPv6 and L2VPN are also supported. NSX Advanced load balancer from Avi Networks introduces a replacement for the out of the box NSX load balancer providing superior load balancing and application services.

A. New to the platform is support for modernized IaaS delivered via Container Service Extension 3.0. New multi-tenant safe vSphere Kubernetes container management capability using open-standards based k8s leveraging vSphere Kubernetes (Project Pacific) for k8s cluster life cycle management

A. VCD is now integrated with vSphere Storage Policy-based IOPS configuration allowing the configuration and management of vSphere Storage I/O Control for Storage I/O resources on a per VM basis from the VCD provider admin UI. VCD now also provides shared disks to enable Microsoft and Oracle clustering use cases and container persistent volumes.

A. Object Storage improvements in Object Storage Extension (OSE) 2.0 provide tenant users the ability to use OSE UI to visit AWS S3 service. With AWS integration, a vCD provider can invite an existing tenant AWS account for object storage use, associating the AWS account to the tenant Org unit. Also, in OSE 2.0 there is Cloudian support for 7.2 and Dell ECS 3.4. OSE's interoperability model is now open for storage vendors to implement an adapter for their solutions if required.

A. Appliance improvements are seen with appliance backup automation and further validation of user input during OVA deployment in a custom deployment UI and CLI to eliminate user errors.

A. App Launchpad 2.0 brings enhanced end point support so that tenant Users can launch apps into the relevant infrastructure (Org VDC or K8S cluster) automatically.

A. You will always find the latest updates in Cloud Director [here](#). The latest demos, walkthroughs, and tutorials are available [here](#).

Q. What are the benefits that Cloud Director offers to enterprise end-customers?

A. Cloud Director facilitates:

- Infrastructure-as-a-Service: Consume turnkey cloud services, including the full VMware Software-Defined Datacenter, as a service from a trusted VMware Cloud Provider using multiple flexible consumption modes.
- Application Platform as a service: delivering customers only the applications they need in a simple wizard driven point and click catalog. Customers need not know about the underlying infrastructure, nor be concerned about security as this is all provisioned automatically.
- Cloud as you want it - VMware Cloud Director provides multiple consumption models, ensuring the customer pays for what they need. Providing the customer visibility into performance, capacity and consumption in a single view.

- Easy-to-Provision and Easy-to-Consume VMware Cloud: Experience a single access point for all your virtual datacenters via an intuitive UI or APIs. Enjoy easy, self-service consumption and provisioning of cloud services, including 3rd-party services through a single pane of glass. Leverage simplified workflows and container services to build better and faster

- Easy Workload Migration Across Virtual Datacenters: Backup, evacuate, or replicate VMs or entire datacenters in a few clicks to a resilient vCD-powered cloud

- Fast Path to Hybrid Services: Cloud Director provides a feature-rich, self-service and modern cloud environment with on-demand elasticity, streamlined on-boarding and hybrid cloud operations

Q. How is Cloud Director packaged and how may it be purchased?

A. Cloud Director licenses are fulfilled through the VMware Cloud Provider Program, with a specific number of licenses available at each contract level. Once enrolled in the program, the product can be downloaded from My VMware.

Q. Are there any customer success stories on Cloud Director?

A. Cloud Director has been part of many Cloud Provider and customer successes. Check out what Cloud Providers say about Cloud Director [here](#)! Please visit the [Cloud Director product page](#) on vmware.com, or visit [vcpp.cloud](#) to see more.

Q. How much does Cloud Director cost?

A. Cloud Director is fulfilled through the VMware Cloud Provider Program. Please reach out to your VMware rep for pricing, and to learn how to enroll. Cloud Director is charged by consumption, as metered by VMware Cloud Usage Meter, so as to eliminate shelf-ware and unused license volumes.

Q. Where can I learn more about Cloud Director?

A. Please visit the product page <https://www.vmware.com/products/cloud-director.html>

Q. Is VMware Cloud Director compatible with other VMware products? Which ones? Can it be applied to large VMware environments?

A. Cloud Director is fully-compatible with VMware's core software-defined datacenter products, as well as with most other VMware products and offerings. For a compatibility matrix, please visit: [https://www.vmware.com/resources/compatibility/sim/interop\\_matrix.php](https://www.vmware.com/resources/compatibility/sim/interop_matrix.php).

Cloud Director also has compatibility with 3rd-party software vendors, which are maintained on the [VMware Solutions Exchange](#).

Cloud Director is purpose-built for large cloud provider environments and is extensively tested for scale and interoperability. Cloud Director is an integral part of the [VMware Validated Designs for Cloud Providers. 10.1](#)