Datasheet

VMware Cloud Director Availability

4.6 Datasheet update

At a Glance
VMware Cloud Director Availability offers simple, secure, and cost-effective onboarding, migration, and disaster recovery as a service (DRaaS) to or between multitenant VMware Cloud Director and vSphere clouds.

Key Benefits
Version 4.6
vSphere DR & Migration Enhancements
With 4.6, VMware Cloud Director Availability Cloud Providers can create recovery plans to define the failover orders of the replicated VMs, apply bandwidth throttling on a specific tunnel NIC, and leverage public API.

Tunnel High Availability
VMware Cloud Director Availability can provision a second Tunnel Appliance to ensure high availability and prevent failure. This new architecture is optional.

4.6 Feature Spotlight
vSphere DR & Migration Enhancements
In 2022, VMware Cloud Director Availability announced a ground-breaking feature which extended Disaster and Migration capability for vSphere-based clouds. This feature is available for dedicated vSphere Cloud Provider vCenter endpoint instances. VMware Cloud Director Availability can now replicate tenant vSphere workloads between an on-premises vCenter Server instance and a provider-hosted vCenter Server instance or between provider-hosted vCenter Server instances. These setups require a new deployment topology. See the Installation and Configuration Guide On-Premises for information about deploying and pairing the latest appliances.

In terms of interoperability, this feature is compatible with vSphere 7x and higher and Usage Meter 4.5 and higher. For successful workload replication, all sites need to have a valid vSphere license assigned which includes the vSphere Replication feature. The latest release improvements were made to enrich the security, scalability, and availability of vSphere DR & Migration capability.
Recovery Settings
Manage recovery settings across On-premises to Cloud, Cloud to Cloud and vSphere to vSphere use cases. This feature now has a unified look and feel therefore, it’s seamless across all use cases.

vApp Template Replication
vApp Template modification is covered to a greater degree in version 4.6. Cloud Providers can check for template changes and perform and automated migration.

NSX-T vApp Edges Support
Support for vApp Template modification is extended for version 4.6. Cloud Providers can configure VMware Cloud Director Availability to check for template changes and perform an automated actions.

Additional Improvements
Discover new features and operational improvements
• Improved Event Notification
• Guest customization Global Setting

Recovery Plans
In this case, all the Cloud-to-Cloud capabilities are emulated for vSphere to vSphere deployment scenario. Cloud Providers can create, manage, and validate recovery plan with ease. This feature also allows users to generate execution reports and pin recovery plan execution PITs.

To elaborate, plans and steps within the plans can be listed, created, renamed, cloned and suspended. The steps within a plan can have VMs or vApps attached to them. Plans can be set up for failover, testing, test clean up and migration. Furthermore, these plans can also be suspended because of an error or by user request.

Bandwidth throttling
Global traffic caps can be set up to enforce traffic limits on a specific network interface of the Tunnel appliance. This feature is available for inbound traffic and supports external replicators only.
vSphere DR and Migration Public API

vSphere DR and Migration Public API guide will be offered to Cloud Providers from version 4.6. Until now, the public API was available only when replicating to Cloud Director clouds. The API programming guide includes a step-by-step guide on configuring a deployed appliance through the API. The Open API client is exposed in the vSphere to vSphere UI. For more details, please check out https://develper.vmware.com/

Recovery Setting Enhancement

VMware Cloud Director Availability introduces significant enhancement for on-premises to cloud replications. Cloud Providers can now map the source and destination networks per selected replications which is similar to cloud-to-cloud replications. To learn more, please visit Configure the network settings for on-premises to cloud replications.
NSX-T vApp Edges Support

In the early stages of NSX-T support within VMware Cloud Director, only limited vApp network features were available. For example, routed vApps were unavailable and isolated vApps networks did not support DHCP. However, with the release of version 4.6, DHCP service on vApp isolated networks, routed vApp networks and vApp network services are now supported for cloud running VMware Cloud Director 10.3 or newer versions.

Please Note: To configure a routed vApp network and use any of the vApp network services, including the DHCP service on vApp isolated networks, the organization virtual data centre must be configured with an edge cluster.

Tunnel Appliance High Availability

VMware Cloud Director Availability 4.6 will offer multiple tunnel appliances to strengthen resiliency and availability within its infrastructure. Prior to this release, only a single tunnel appliance was supported and there were concerns around the efficiency and delivery of the DR services. With the introduction of the second tunnel appliance, the replication traffic is load balanced between tunnels appliance from the pool. And all other traffic from local VCDA manager and replicators will be sent directly to a tunnel appliance without traversing through the LB. The two tunnels can be operated in Active/Active mode and require an external load balancer (i.e., VMware NSX Advanced Load Balancer).
Advanced vApp Template Replication

In the previous version of VMware Cloud Director Availability, Cloud Providers could migrate templates from one catalog to another in the same or a remote VMware Cloud Director cloud. In the latest version, Cloud Providers can configure VMware Cloud Director Availability to check for template changes and perform and automated migration if a modification is detected. The ‘track source for change’ check box can be marked to detect overwrite changes of the source template and automatically start a new protection for the new version of the template. With that, the protection for the old version will be deleted automatically.

Additional features an operational improvements

Improved Event Notification

Version 4.6 introduces multiple ways to keep track of the management events, replications, and other system activities. Cloud Providers and tenants can receive replication management events by using the email delivery channel. For more, event notification can be sent by using the email delivery channel. Once the email delivery channel is configured, both tenants and providers can subscribe to a weekly summary email. Beyond the two features mentioned above, there’s also the option to see the activity summary report in HTML.

Please Note: To run this feature, it is mandatory to set up a policy with a custom SLA.
Guest customization replication settings

In version 4.6, copying of guest customization on failover settings can be activated or deactivated depending on the requirements.

Note: Slide right to copy the source settings (Activated). This setting needs to be manually changed on each replication.