

# VMware Cloud Director Availability

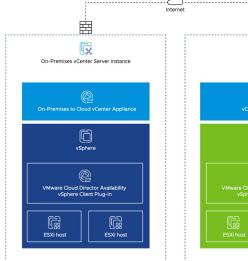
# 4.5 Datasheet update

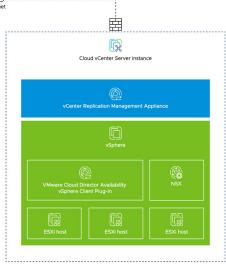


# 4.5 Feature Spotlight

# vSphere DR & Migration Enhancements

Earlier this year 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.

## **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 NEW IN VERSION 4.5

#### vSphere DR & Migration Enhancements

With 4.5, VMware Cloud Director Availability Cloud Providers have the option to disallow outgoing migrations to on-premises sites, pre-configure replication settings, select VM Storage Policy, add external replicators and replicate encrypted VMs.

#### Backup and Restore Automation

VMware Cloud Director
Availability interface has
introduced a new menu called
'Scheduled Backup Archives'
which allows system
administrators to specify backup
schedule and SFTP server where
the encrypted archives will be
uploaded.



# Advanced Recovery Settings

Cloud Providers and their Tenants can enjoy a simple dropdown menu dedicated to recovery processes. Unlock micro features to manage networks, NIC(s) and Guest customization.

#### Additional Improvements Discover new features and operational improvements

- Close a replication policy
- System-wide notification
- VM sizing per replication
- View-only system user role

# Simplified Pairing

Initially pairing between on-premises and cloud required a public endpoint to be available on both sites. With version 4.5, the pairing mechanism has been re-engineered to use reverse tunnelling and authentication. Moving forward, a Tenant can complete this task in a single step via the On-premises to Cloud vCenter Replication Appliance UI. The public endpoint must be accessible only in the context of cloud site pairing. The objective of this improvement is to minimize any security concerns and unethical penetration onto the on-premises data center.



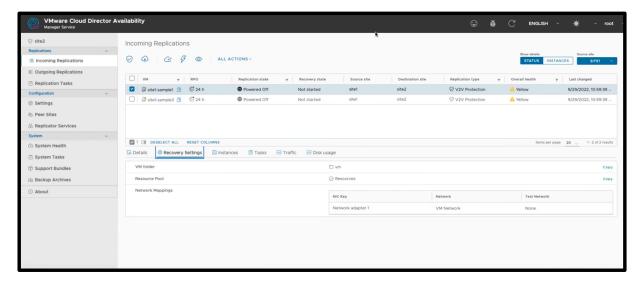
#### Multiple replicators

VMware Cloud Director Availability accepts the addition of external replicators appliances in the provider-hosted vCenter Server instance, provided the vCenter Replication Management Appliances are configured. This feature was developed to support complex deployment topology, adopting a similar practice carried out in the case of C4. The interface displayed below is unified for v2v and c2c deployment and is much quicker than previous interactions.

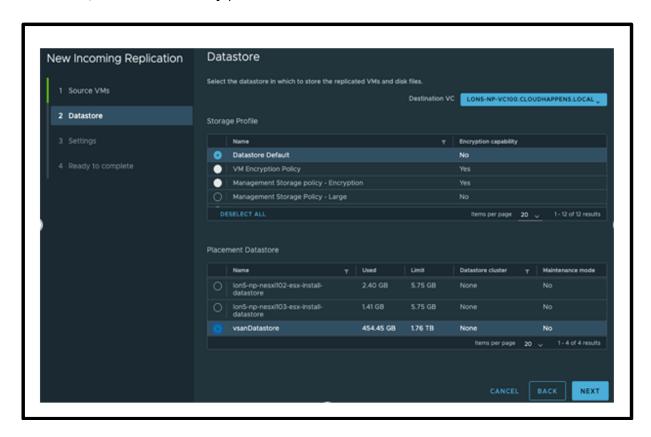


#### **Extended Recovery Setting**

This feature for vSphere DR & Migration has come leaps and bounds by allowing Cloud Providers to preconfigure the recovery settings such as VM location, compute resources and networking mappings. Cloud Providers and their tenants can have different stages in case of test, failover, or migration. This feature is available for both incoming and outgoing replications.



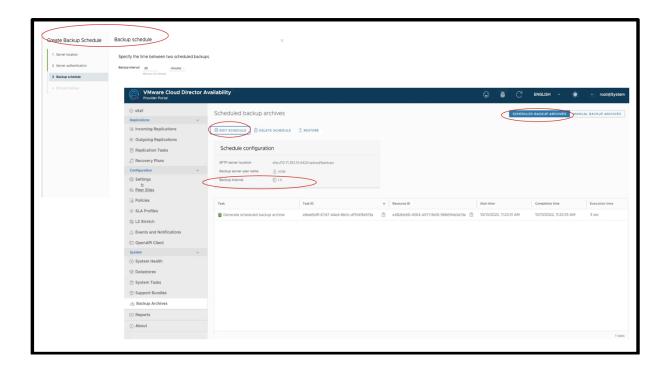
With this improvement to the replication configuration, a Storage Profile can be selected along with the Datastore, which was already possible in 4.4.



This feature permits choosing encryption policies too, which allows support for replicating encrypted VMs. It is indicated in the UI whether a VM is encrypted, and only the relevant Storage Profiles are available for selection.

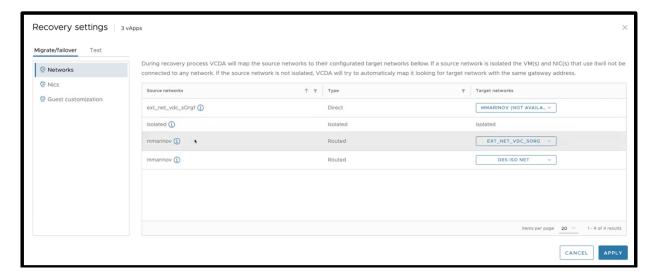
# Backup and Restore Automation

The primary purpose behind this feature is to support Cloud Providers to automate backup generation by configuring a schedule and remote file server, which will restore the generated backup files. The solution currently supports two authentication methods for the backup schedule, using either server credentials or a public key. From a new menu called Scheduled Backup Archives, Cloud Providers and Tenants can define backup intervals and specify an SFTP server where encrypted archives will be uploaded. The minimum backup interval is 30 minutes, while the maximum is one week.



# Advanced Recovery settings

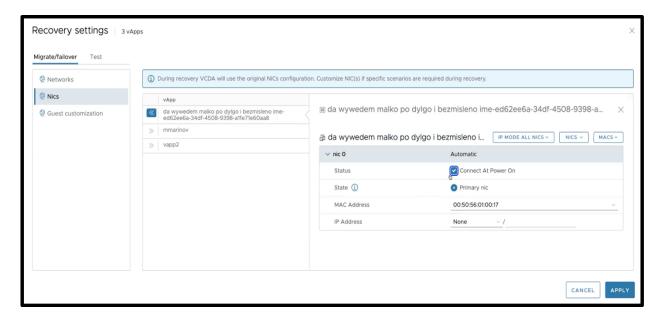
Networking and Guest Customization settings: Cloud Providers and Tenants using the recovery settings will notice a significant improvement in the wizard menu, which is more intuitive and designed for easy configuration, connecting networks, preparing NIC(s), guest customization, etc. A quick drop-down menu allows users to map the source network to their configured target networks from a list.



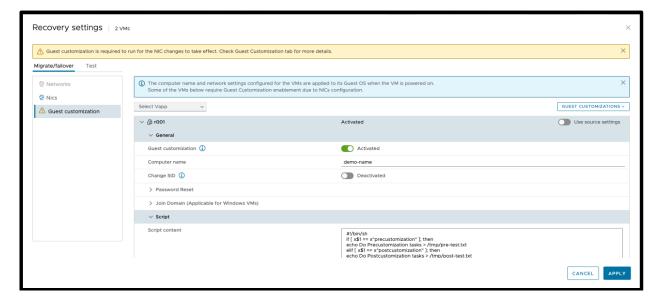
Note: If the source network is isolated, the VM(s) and NIC(s) that use it will not be connected to any network. VCDA will automatically try to map to a target network based on the gateway address if the source network is not isolated.



Furthermore, in the NIC(s) tab within the recovery setting wizard, users can find a list of vApps & VMs, and drill down to the list of NICs per vApp. Note: Users will have to trigger the change via the guest customization portal for any new NIC details changes and edits, such as IP address and MAC address.



The network selection and adapter settings, such as IP address and MAC reset, are still there, but there is a significant extension to the list of available guest customization actions. All the properties available in VMware Cloud Director can be customized for each replication, including the option to add a script to be executed.



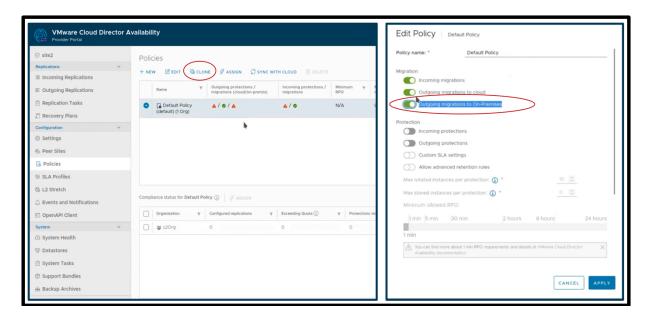


Notes: In case a guest overrides settings, users can revert to the source set to override the new input in case of any errors.

# Additional features and operational improvements

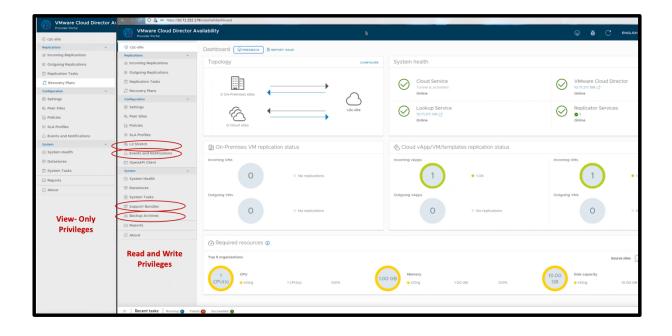
# Extended control and management of replication policies

This feature offers granular control over outgoing migrations from the cloud. Cloud Administrators can find a new property in the replication policy to disallow outgoing cloud migrations to on-premises from cloud-to-cloud migrations.



# View-only system user role

VMware Cloud Director Availability 4.5 introduces a new view-only (i.e., read-only) user role that is perfect for users to monitor replications or administrators to monitor the system health and the replications. Previously every user was granted read and write permission, which was a cause for concern from a security point of view. The view-only interface has limited privileges, as highlighted in the screenshot below.



#### LEARN MORE

For more information visit:

https://www.vmware.com/products/cloud-director-availability.html

#### 4.5 Release Notes:

https://docs.vmware.com/en/
VMware-Cloud-DirectorAvailability/4.5/rn/vmware-clouddirector-availability-45-release-notes/
index.html

#### Provider download:

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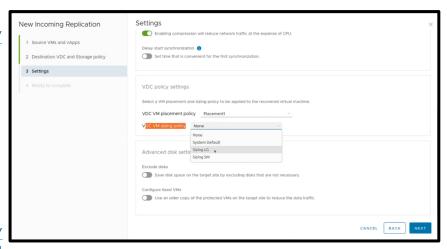
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# VM Sizing Per Replication

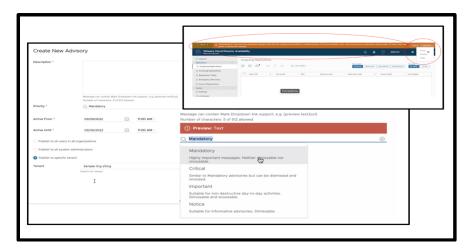
VMware Cloud Director 10.3.2 extended features on 'sizing' policies (which can 'shape' the VM, e.g., Memory, CPU, etc.) and now VMware Cloud Director Availability is replicating that feature in version 4.5 so Cloud Providers can define compute resource allocation for virtual machines within an organization VDC.

Cloud Providers previously had the option to select VM placement policy, and in 4.5, they can also choose VDC sizing policy, i.e., None, System Default, Sizing LG, Sizing SM. VM sizing policy and placement policy can always be changed later.



atacenter\_cloud\_infrastructu re/ System-wide Notifications to peer sites

This feature highlights a mechanism for displaying short system-wired notifications for the specified time. Cloud Administrators using cloud-to-cloud use cases can configure this capability from VMware Cloud Director.



The notices are published on top of the VMware Cloud Director Availability user interface, and each piece of information can be arranged per their hierarchy, i.e., mandatory, and critical. The notifications can be targeted to different user segments. This feature also comprises the ability to snooze the notice for 1 hour, 3 hours or one day.



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