



VMware HCX 4.1.0 Release Notes

Updated on: 17 JUN 2021

VMware HCX 4.1.0 | 17 JUN 2021 | Build 18180942 (Connector), Build 18180940 (Cloud)

Check for additions and updates to these release notes.

What's in the Release Notes

The release notes cover the following topics:

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About VMware HCX

VMware HCX delivers secure and seamless app mobility and infrastructure hybridity across vSphere 6.0 and later versions, both on-premises and in the cloud. HCX abstracts the distinct private or public vSphere resources and presents a Service Mesh as an end-to-end entity. The HCX Interconnect can then provide high-performance, secure, and optimized multi-site connectivity to achieve infrastructure hybridity and present multiple options for bi-directional virtual machine mobility with technologies that facilitate the modernization of legacy data centers.

For more information, see the [VMware HCX User Guide](#) in the VMware Documentation Center.

Before You Begin

Upgrading to 4.1

Review the following information prior to upgrading from R-based releases to HCX 4.1:

- Upgrading to HCX 4.1.x is supported only from HCX 4.0.x.
- HCX 4.0.0 is the oldest version suitable for upgrade. Customers running older releases are required to upgrade to HCX 4.0.X to support upgrading to HCX 4.1.0
- Assistance with upgrading from out-of-support releases will be on a best-effort basis.
- VMware sends administrative messages to HCX systems that are running out of support and require upgrade.

Early Adoption Features

Early Adoption (EA) denotes an initial release phase of a critical service feature with limited field exposure. While the feature has completed its entire development cycle and it is fully supported in production, due to strong dependencies on the deployment environment, thorough validation and qualification is recommended before activating it.

What's New in this Release

VMware HCX 4.1.0 is a minor release that provides new features, UI enhancements, and fixed issues.

Network Extension Enhancements

- **General Availability for HCX Mobility Optimized Networking**— Mobility Optimized Networking is now fully supported for VMware Cloud Foundation, Google Cloud, Microsoft Azure, and private datacenter HCX deployments, in addition to being already supported VMware Cloud on AWS. The feature allows customers to manage network traffic based on the locality of the source and destination virtual machines. See [HCX Network Extension with Mobility Optimized Networking for NSX-T](#).

Interoperability with VMware vSphere 7.0 Update 2

- With this release, HCX supports vSphere environments running VMware vSphere 7.0 Update 2.
- Interoperability with VMware vSphere 7.0 Update 2 supports Bulk, vMotion, Cold, and Replication Assisted vMotion migrations for virtual machines using HW version 18 and 19.

For more information about supported versions, see [Preparing for HCX Installations](#) and [VMware Product Interoperability Matrix](#).

Migration Enhancements

- **Seed Checkpoint for Bulk Migrations** – By enabling this new option, the migration workflow will retain the data on the target site disks, in the event that the migration is unsuccessful or canceled. When the migration is rescheduled with Seed Checkpoint enabled, the workflow detects migrated data at the target site and attempts to continue the migration from the last checkpoint. Without Seed Checkpoint enabled, the HCX roll back process cleans up the target disks created during the migration and all transferred data is lost. See [Additional Migration Settings](#).
- **Predictive Estimation of Bulk Migration** – For Bulk migrations in Draft state, HCX uses machine learning to get an estimate of the time that may be required to complete the migration. The estimate is shown in the progress bar displayed on the Migration Tracking and Migration Management pages. This feature is currently available for Early Adoption (EA). For more information, see [Monitoring and Estimating Migration with Mobility Groups](#).
- **Support for OSAM Migration of RHEL 7.9 and CentOS 7.9 Virtual Machines on KVM and Hyper-V** – With this release, the HCX OS Assisted Migration service supports migration of virtual machines running RHEL 7.9 64-bit and CentOS 7.9 64-bit on KVM and

Hyper-V hypervisors. See [Supported Guest Operating Systems](#).

- **RAV Support for VMware Cloud Director**– HCX Replication Assisted vMotion (RAV) migrations can now be executed in VMware Cloud Director environments currently supported. For more information about RAV migration, see [Understanding VMware HCX Replication Assisted vMotion](#). For more information about VMware Cloud Director supported environments, see [Software Version Requirements](#).
- **RAV Migration of VMDKs Larger than 2 TB into vSAN**– With this release, HCX RAV supports the migration of virtual machines with vmdks greater than 2TB into a vSAN datastore.
- **New Event Messages for Bulk, vMotion, Cold, and RAV Migrations**– The HCX Migration interface displays detailed event information for each migration operation. With this release, new event messages are added to help with understanding the migration process and diagnosing migration issues. See [Viewing HCX Migration Event Details](#).

vRealize Operations HCX Management Pack 5.2

- vRealize Operations HCX Management Pack 5.2 supports vRealize Operations Manager versions 8.2, 8.3, 8.4, and 8.5. HCX Management Pack 5.2 is supported in environments where the site pair is between one HCX Connector (source) and one HCX Cloud Manager or one VMware Cloud on AWS destination. See [vRealize Operations Management Pack for HCX](#).

User Interface Enhancements

- **Migration Interface** – In environments with large numbers of virtual machines per mobility group, searching the Migration Management page for a VM now returns the matching result to the top of the page. Previously, search results returned the mobility group, but it was necessary to page through the group entries to find the matching result. See [Monitoring Migration Progress with Mobility Groups](#).
- **Migration Interface** – The Migration interface now displays the Datacenter name alongside the datastore selection. This update can provide clarity in selecting a storage location when there are datastores with same name in different data centers.
- **Inclusive Terminology Updates** – At VMware, we value inclusion. To foster this principle within our customer, partner, and internal community, we are replacing some of the terminology in the system interface and in the published content. These changes have no effect on HCX functionality or operation. For more information about VMware's initiative on using inclusive language, see [Replacing Problematic Terminology](#).
- **Migrate Custom Attribute Values for vMotion** – The Migrate Custom Attributes selection in the Extended Options for vMotion migrations has been enhanced to include the attribute values. Previously, only the attributes were migrated.

Increased Service Mesh and Appliance Maximums

- Service Meshes per HCX Manager: 64
- Network Extension Appliances per HCX Manager: 128

- Total Service Mesh Appliances per HCX Manager (combined Interconnect, Network Extension, WAN Optimization, and Sentinel): 192
- Mobility Agent:
 - Virtual Machine Memory: 24 TB
 - Virtual Machine CPU: 768 vCPU
- RAV Migrations to VSAN: 30 TB (lifted 2 TB limitation)

For a list of settings, see [VMware Configuration Maximums](#).

Resolved Issues

Resolved Interconnect Issues

- PR/2539916 – Network Profiles can be created for networks that are marked as out-of-sync by NSX.
- PR/2539948 – No restriction for selecting out-of-sync Network Profiles while configuring the Uplink network, which may have been in sync while selecting the Management network.
- PR/2621903 – After editing the Compute Profile to change the Uplink network, the user interface specifies editing the Service Mesh instead of Resync as the correct operation.
- PR/2706600 – In VMC deployments, the HCX UI allows for Network Profile DNS entries to be edited. Those should be greyed out instead.
- PR/2733330 – Deleting a Traffic Group Uplink from the Service Mesh and removing the IP allocation from the Network Profile does not delete the Uplink.
- PR/2753721 and 2772827– HCX API call to collect Tech Support bundle may generate "Failed to collect Fleet Logs. JSONObject["moref"] not found" error.
- PR/2757367 – A duplicate interconnect-appliances NSGroup is created in NSX-T for each HCX appliance that is upgraded.
- PR/2759978 – In VMware Cloud on AWS environments, HCX network container shows NVDS while deployed in a CVDS SDDC.
- PR/2448859 – Redeploying the IX appliance succeeds with errors: "Error registering host with the HBR appliance" and "java.lang.NullPointerException: null."

Resolved Mobility Group Issues

- PR/2543926 – In environments with large numbers of virtual machines, searching for a VM in the Migration Management page does not return the matching result to the top of the page.

Resolved Migration Issues

- PR/2763989 – vMotion and RAV migration fail at switchover with an "InsufficientHostMemoryCapacityFault" error.
- PR/2737457 – vMotion migration fails for VMs associated with Audio card.
- PR/2742010 – Upgrading an IX appliance is blocked due ongoing migrations when no migrations are active.
- PR/2750747 – vMotion/Cold migration services become unavailable after the same virtual machine is migrated repeatedly forth and back between source and target data centers.

- PR/2762175 – The Replicate Security Tag migration option fails to apply the original tag to the targeted virtual machine when the tag name exists on the target with a mismatching tag Id.
- PR/2766781 – Metrics collection process for active migration workflows may cause memory exhaustion in HCX database.
- PR/2232175 – When services are not fully started, an ambiguous server message appears.
- PR/2332604 – While configuring the virtual machine migration settings in the Migration wizard's network mapping section, NSX-T stretched networks are not auto loaded for the connected VMs and require manual selection.
- PR/2731737 – When the migration is triggered by PowerCLI, the network mapping is not being displayed in the Migration Tracking page.

Resolved OS Assisted Migration Issues

- PR/2711032 – From the HCX OS Assisted Migration Sentinel Management interface, users can initiate an uninstall or upgrade operation for a Sentinel appliance when the current state of Sentinel appliance does not allow it, resulting in an error.
- PR/2722058 – When a source system mounting a CIFS share in /etc/fstab is migrated, the migration does not succeed.

Deprecation Notices

Deprecation of Migration Dashboards in vROps

Migration Dashboards in vROps are now deprecated and is planned to be removed in the next major release. There is no further development or code fixes for that functionality. All migration related information can be managed at the HCX Migration Dashboard.

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