

# vCloud Air - Hybrid Cloud Manager Release Notes

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# Preface

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This document describes new features, feature improvements, known issues, and fixes in VMware<sup>®</sup> vCloud<sup>®</sup> Air<sup>™</sup> Hybrid Cloud Manager<sup>™</sup> version 2.0, and subsequent upgrades.

## Intended Audience

This document is intended for:

- System administrators familiar with VMware vSphere virtualization, and virtual networking concepts.
- Hybrid Cloud Manager administrators and end users.

## Related Documentation

This document refers to technology covered in the following documentation:

- [vCloud Air Hybrid Cloud Manager Installation and Administration Guide](#)
- VMware vSphere documentation for version [5.5u3](#) or version [6.0u2](#).
- [vCloud Air Advanced Networking Guide](#), including [Direct Connect for vCloud Air](#).
- [vCloud Air Advanced Networking Services Guide](#).
- [vCloud Air Dedicated Disaster Recovery Release Notes](#), and [vCloud Air Dedicated Disaster Recovery User's Guide](#)

## VMware Technical Publications Glossary

VMware Technical Publications provides a glossary of terms that might be unfamiliar to you. For definitions of terms as they are used in VMware technical documentation, go to <http://www.vmware.com/support/pubs>.



# Using the Release Notes

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The Release Notes retain information specific to individual releases and updates. Some release information does not appear in the *Installation and Administration Guide*, which is intended to reflect the last major release. Consult the *Release Notes* before you install or upgrade Hybrid Cloud Manager.

Your installation or upgrade status determines how to use the Release Notes.

- New users

If you are installing for the first time, read about the version 2.0 features in [Chapter 3, “New or Changed Features,”](#) on page 11, and proceed to [Chapter 4, “Known Issues,”](#) on page 17.

- Users upgrading from Hybrid Cloud Manager 1.0 to version 2.0 or higher.

Version 2.0 was a major update in which the appliances changed and resource requirements were increased. Read this entire document.

- Users upgrading to a higher v2.0 version.

Read [Chapter 3, “New or Changed Features,”](#) on page 11 and [Chapter 5, “Fixed Issues,”](#) on page 21. [Chapter 4, “Known Issues,”](#) on page 17 are valid across versions.

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**NOTE** For installation and upgrade information, see [Chapter 2, “Installation and Upgrade Information,”](#) on page 9, and the [VMware vCloud Air Hybrid Cloud Manager Installation and Administration Guide](#).

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# Installation and Upgrade Information

Before installing or upgrading, check the software requirements, installation and upgrade prerequisites, and port settings in this topic. This information applies to all 2.0 releases.

## Version 2 Software Requirements

The basic software requirements are as follows:

- The minimum vCenter 5.5 version is vCenter 5.5u3. Subsequent updates to vCenter 5.5 are supported.
- The minimum vCenter 6 version is vCenter 6.0u2. Subsequent updates to vSphere 6.0 are supported, but vSphere 6.5 is not supported.
- The minimum ESXi version is 5.1.
- vMotion (zero-downtime migration) requires virtual hardware version 9 on the VM.
- If you intend to use cross-cloud vMotion, the same affinity restrictions apply across clouds as they do on-premises. See the [EVC and CPU Compatibility FAQ](#).
- The policy migration feature requires NSX 6.2.x or higher.

## Security Information for All Updates

Before upgrading, you must open the ports you need, as listed in the [VMware vCloud Air Hybrid Cloud Manager Installation and Administration Guide](#), and [Table 2-1](#).

As a convenience to users upgrading an installation, [Table 2-1](#) lists port requirements that have been added since version 1.0. In [Table 2-1](#), H&N is an abbreviation for the Hybridity and Networking service virtual appliance. This virtual machine functions as the management appliance.

**NOTE** Pay attention to the Purpose column. For example, if you are not going to configure vMotion, you do not need to open port 8000.

**Table 2-1.** Hybrid Cloud Manager 2.0 Port Access Requirements

Source	Target	Port	Protocol	Purpose
H&N	vCenter SSO Server	7444	TCP	vSphere Lookup Service
H&N	Cloud Gateway	443	TCP	H&N connection to vMotion mobility agent
Cloud Gateway	vCenter	902	UDP	Host heartbeats from mobility agent to vCenter
Cloud Gateway	ESXi Hosts	8000	TCP	vMotion
ESXi Hosts	Cloud Gateway	8000	TCP	vMotion

**Table 2-1.** Hybrid Cloud Manager 2.0 Port Access Requirements (Continued)

Source	Target	Port	Protocol	Purpose
ESXi Hosts	Cloud Gateway	902	TCP	Cold migrations
Cloud Gateway	ESXi Hosts	902	TCP	Cold migrations
HT-L2C	Cloud Fleet	500, 4500	UDP	Management path when high-throughput Layer 2 concentrator uses the Cloud Gateway

## Installation and Upgrade Prerequisites

The release notes contain the most recent information on upgrading to version 2.0. The installation prerequisites and configuration instructions are available in the [VMware vCloud Air Hybrid Cloud Manager Installation and Administration Guide](#). See the section titled, "Modifying or Uninstalling Hybrid Cloud Manager" for instructions on upgrading your legacy installation.

**NOTE** Contact [VMware Global Support Services](#) (GSS) before starting an installation or an upgrade. If you share your configuration with Support, they can ensure that the vSphere and vCloud Air environments are compatible.

For example, to use cross-cloud vMotion, your vSphere NSX version and your vCloud Air Network Services Platform version must be compatible. If you share your configuration with Support, they can ensure that the vCloud Air environment is compatible before you start the upgrade or installation process.

## Upgrade Best Practices

The following practices support a successful upgrade.

- Before attempting an upgrade, halt or reschedule any near-term migration processes (vR or vMotion).
- After an upgrade, ensure that there are no active migration processes.
- Redeploy your appliances one at a time.
  - You must redeploy a Cloud Gateway or Layer 2 Concentrator appliance before you can stretch a network using the upgraded appliance.
  - If an appliance was used for a stretched network **before** the upgrade, redeploy the appliance and **wait** to verify that the tunnel is restored and active.
- Resume or reschedule your migrations, if necessary.

## New or Changed Features

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This topic introduces new features, updated features, and implementation changes in Hybrid Cloud Manager version 2.0 and its updates.

- [New or Changed in v2.0](#) on page 11  
Version 2.0 was a major release with new features, including an improved Cloud Gateway and high-throughput Layer 2 appliances, feature improvements, and bug fixes. Some of these features changed in subsequent updates.
- [New or Changed in v2.0u1](#) on page 13  
Hybrid Cloud Manager version 2.0, update 1 included vMotion improvements and user interface upgrades.
- [New or Changed in v2.0u2](#) on page 16  
Hybrid Cloud Manager version 2.0, update 2 includes feature changes and enhancements.
- [New or Changed in v2.0u3](#) on page 16  
Hybrid Cloud Manager version 2.0 update 3 includes one new feature and bug fixes.

### New or Changed in v2.0

Version 2.0 was a major release with new features, including an improved Cloud Gateway and high-throughput Layer 2 appliances, feature improvements, and bug fixes. Some of these features changed in subsequent updates.

#### Improved Hybrid Cloud Gateway

The Cloud Gateway is more powerful, and now requires 8 vCPU, 3-GB memory, and 1.5-GB disk space. If you are performing an upgrade, the increased resources are allocated automatically. The appliance incorporates intelligent flow routing and fast boot technology for increased performance.

#### High Throughput Layer 2 Concentrator

The High Throughput service virtual appliance is fully supported in Hybrid Cloud Manager 2.0 and higher.

- As of version 2.0, you can stretch a data path that uses SNAT rules, both to and from vCloud Air. The HT Layer 2 Concentrator supports up to three stretched networks per appliance.
- The HT Layer 2 Concentrator incorporates intelligent flow routing and improved reboot speeds.

## Proximity Routing

Proximity Routing ensures symmetrical forwarding between virtual machines connected to stretched and routed networks, both on-premises and in the cloud. This feature requires Advanced Networks Services with Dynamic Routing configured between the cloud and the customer premises.

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**NOTE** VMware tools must be installed on any cloud-side virtual machine that participates in proximity routing. The VMware tools version must be at least 9.

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Proximity routing must be applied when the forwarding path contains stateful firewalls or other inline equipment that must see both sides of the connection. To enforce path symmetry, Hybrid Cloud Manager automatically injects /32 host routes from the cloud to the customer premises. This feature also manages migration, vMotion, and new virtual machine creation use cases.

- When virtual machines are migrated, or are created on the cloud side of a stretched network, Hybrid Cloud Manager injects host routes into the on-premises network.
- When virtual machines are transferred to the cloud using vMotion, the route is not injected until the virtual machine is rebooted. Waiting until after the reboot ensures that the on-premises stateful devices continue to service the existing session until the cloud route is established.

## Intelligent Flow Routing

Intelligent flow routing addresses the problem of "elephant and mice" flows, choosing the best connection based on the Internet path. The flow floods the entire connection so that workloads are moved as fast as possible.

When larger flows, such as backup or replication, cause CPU contention, smaller flows are routed to less busy CPUs, improving interactive traffic performance.

## Cross-Cloud vMotion

Cross-cloud vMotion transfers a live virtual machine from a vSphere vCenter to a vCloud Air virtual data center. This feature is also known as zero-downtime migration, and it is helpful for virtual machines hosting business critical applications. The vMotion transfer captures the active memory, execution state, IP address, and MAC address for the migrated virtual machine.

The minimum environment for Cross-cloud vMotion is a stretched network capable of at least 250-Mbps throughput. If the throughput is lower, you might experience network disruption.

As mentioned in [Chapter 4, "Known Issues,"](#) on page 17, the hardware version for a virtual machine must be at least 9, or cross-cloud vMotion might fail.

In version 2.0, cross-cloud vMotion for virtual machines with Changed Block Tracking was not supported. This issue is fixed in v2.0u1.

## Cold Migration

Cold migration uses the same data plane as cross-cloud vMotion to transfer a powered-off virtual machine over an extended network. Its IP address and MAC address are preserved. The virtual machine requirements and restrictions are the same as for vMotion.

## Security Policy Migration

The Policy Migration feature enables NSX distributed firewall rules to be moved from an on-premises vCenter to a vCloud Air virtual data center. Rules are constantly monitored, so changes to the policy are propagated to all VMs the policy affects in the vCenter and VDC affected by the policy.

Policy Migration is possible when you use low-downtime migration or vMotion to move a virtual machine over a network stretched with the High Throughput Layer 2 Concentrator.

- In vSphere, the security policy is a single NSX Section, which can contain many rules. There can be only one Section (policy) per vCenter.
- You can name a Set of IP addresses or MAC addresses to participate in the policy. The name of the MAC Set or IP Set cannot exceed 218 characters.
- All rules in a Section must have a unique name. Do not leave a rule name blank.
- Hybrid Cloud Manager supports rules that use IP addresses, IP sets, MAC addresses, and MAC sets. Rules that use security groups or application groups are not supported.

## New or Changed in v2.0u1

Hybrid Cloud Manager version 2.0, update 1 included vMotion improvements and user interface upgrades.

### vMotion Improvements

As of version 2.0 update 1, cross-cloud vMotion is possible for virtual machines with Changed Block Tracking (CBT) enabled. CBT is a VMware feature that helps perform incremental backups. VMware Data Recovery uses this technology, which is also useful to backup and recovery software developers.

When CBT is enabled, Hybrid Cloud Manager automatically disables CBT and proceeds with the vMotion transfer. To enable CBT after the migration is complete, consult the following Knowledge Base article: [Changed Block Tracking \(CBT\) on virtual machines \(1020128\)](#).

### User Interface Upgrades

The user interface has been re-designed to better support batch operations. Also, it includes visual tags to differentiate migration and network extension tasks and status. In the vSphere Web Client, select Hybrid Cloud Manager and view the Hybrid Services, Network Extensions, and VM Migration tabs to see the changes.

#### Hybrid Services

This tab condenses the tunnel information for each appliance connected to the cloud. Tags indicate the appliance type: Cloud Gateway **CGW** and High Throughput Layer 2 Concentrator **HT** (with Proximity Routing **PR**). Other tags show the number of extended networks **EN0/4**, and whether a Layer 2 network is routed through the Cloud Gateway **R-CGW**.

Install service Refresh

Appliance	IP Address	Status	Tunnel
vCenter: wdc-pod3-cialab2-cloudtest1-10-159-128-3.eng.vmware.com - everest-ovdc			
<b>VM Migration Service</b>			
▶ CGW-CORE-everest-or-c3d70451-30b1-31ed-853d-b7e1d1934663 updated: 14 Dec 2016 11:05:20 Pacific Standard Time	CGW Manage: 192.168.4.211/24	Active	(1/1) Tunnel is Up
▶ CGW-WANOPT-everest-org-apjG2 updated: 14 Dec 2016 09:38:41 Pacific Standard Time		Active	
<b>Network Extension Service</b>			
▶ L2C-taggableDvs-hWp0o updated: 14 Dec 2016 19:15:35 Pacific Standard Time	R-CGW EN: 3 Up-link: 192.0.2.3/28	Active	(1/1) Tunnel is Up
▶ L2C-HT-taggableDvs-GuzwL updated: 14 Dec 2016 19:29:07 Pacific Standard Time	HT PR EN: 3 / 4 Manage: 192.168.4.212/24	Active	(6/6) Tunnel is Up

### Network Extension

Stretched networks are tagged when Egress Path Optimization **EGR** or Proximity Routing **PR** are enabled. If the network fails to stretch, you see **ERROR** and an error message in the Status column.

Extend network Refresh

Port Group	VLAN	Powered by	Status	vDC	Cloud Network
vCenter: wdc-pod3-cialab2-cloudtest1-10-159-128-3.eng.vmware.com					
<b>DVS: taggableDvs</b>					
▶ fleet2000	2000	L2C-HT-taggableDvs-GuzwL		everest-ovdc	L2E_fleet2000_vlan-2000-90798bda-51b2-4184-8ec3-07f343036b01
▶ fleet2001	2001	L2C-taggableDvs-hWp0o	EGR	everest-ovdc	I2_fleet2001_275
▶ fleet2002	2002	L2C-HT-taggableDvs-GuzwL	PR	everest-ovdc	I2_fleet2003_656

### VM Migration

The VM migration tab has graphic indicators for the direction and type of the migration. While a migration is in flight, you can see the percentage of complete in the progress column.

Migration direction: to Data Center ← (reverse) **Rev**, Cloud → (forward).

Migration type: vSphere replication **vR**, vMotion transfer **vMO**, cold migration **Cold**.

Start Time	Migrating VM	vDC	Progress	Size	ETA	Status
vCenter: wdc-pod3-cialab2-cloudtest1-10-159-128-3.eng.vmware.com - OnpremDC						
11:35 AM Pacific Standard Time Dec 14 administrator@vsphere.local	vm-0NA9vX	← everest-ovdc	Rev vMO ✓	1.0 GB	11:38 AM Pacific Standard Time Dec 14 4 min	Migration completed
11:24 AM Pacific Standard Time Dec 14 administrator@vsphere.local	vm-0ihWEY	← everest-ovdc	Rev Cold ✓	1.0 GB	11:26 AM Pacific Standard Time Dec 14 3 min	Migration completed
11:16 AM Pacific Standard Time Dec 14 administrator@vsphere.local	centos-mx6mr	→ everest-ovdc	vMO ✓	1.0 GB	11:19 AM Pacific Standard Time Dec 14 4 min	Migration completed
11:11 AM Pacific Standard Time Dec 14 administrator@vsphere.local	centos-5D8a3	→ everest-ovdc	Cold ✓	1.0 GB	11:14 AM Pacific Standard Time Dec 14 4 min	Migration completed
11:01 AM Pacific Standard Time Dec 14 administrator@vsphere.local	vm-05ZbVw	← everest-ovdc	Rev vR ✓	1.0 GB	11:05 AM Pacific Standard Time Dec 14 5 min	Complete

### Migration Cancellation

As of v2.0u1 you can cancel a vSphere Replication (vR) migration. As shown below, the Progress column indicates how the migration is progressing. If the migration appears to stall, clicking the down arrow exposes the Abort Migration option. When the migration is canceled, you see the **ABORT** tag.

Start Time	Migrating VM	vDC	Progress	Size	ETA	Status
vCenter: wdc-pod3-cialab2-cloudtest1-10-159-128-82.eng.vmware.com - OnpremDC						
5:45 PM PST Dec 8 Administrator@VSPHERE.LOCAL	Customcentos-onprem2	→ NA	vR 1%	0.0 / 1.0 GB	(5:49 PM PST) Dec 8 ~4 min	Getting selected vm's disk detail <b>✗ Abort Migration</b>
2:43 PM PST Dec 7 Administrator@VSPHERE.LOCAL	Customcentos-onprem2	→ NA	vR <b>ABORT</b>	1.0 GB	2:43 PM PST Dec 7 1 min	Migration cancelled by user.

### Proximity Routing UI

When you are stretching a network through a high throughput Layer 2 concentrator, the Route column shows the Proximity Routing slider. By default, the feature is disabled: . Click the slider to enable Proximity Routing .

## New or Changed in v2.0u2

Hybrid Cloud Manager version 2.0, update 2 includes feature changes and enhancements.

### High Throughput Cloud Gateway Improved

A Cloud Gateway with the 2.0u2 configuration consumes resources more efficiently, resulting in improved throughput and load balancing. It can automatically configure and manage up to three processes within the tunnel to the registered endpoint. The number of processes depends on load, and the processes are transitory. The ability to manage multiple processes is effective in a fleet configuration where the Cloud Gateway fronts a high throughput Layer 2 concentrator.

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**NOTE** The new configuration does not affect an existing gateway unless you redeploy the appliance.

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If you are satisfied with the performance of your legacy Cloud Gateway, you do not have to do anything. The upgrade sends the new configuration to the legacy Gateway, but does **not** overwrite the current configuration or change the performance.

There is no automatic "conversion" process for an existing Cloud Gateway. You must remove the existing gateway, and use the same IP address to redeploy it.

### Egress Path Optimization Removed

The Egress Path configuration option has been removed. This option was only available with the legacy (standard throughput) appliances.

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**NOTE** If you manually configured egress path optimization in a previous version, the existing configuration remains valid, provided you do not redeploy the appliance.

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### vMotion Supports Larger VMs

Previous versions limited the VM size to 4 TB. This restriction has been removed.

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**NOTE** If you are considering moving VMs larger than 4 TB for the first time, contact [VMware Global Support Services](#). We can help you evaluate your VM and your configuration.

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### Independent Versioning

Starting with version 2.0u2, each service virtual appliance has its own build number and version. Version information is visible in the user interface.

### Usability Enhancements

- If you are not licensed for a feature, it is grayed out in the user interface.
- The interface now shows more information while migrations are in progress.

## New or Changed in v2.0u3

Hybrid Cloud Manager version 2.0 update 3 includes one new feature and bug fixes.

### Reverse Migration Can Be Scheduled

VM migration from Cloud to Data Center can be scheduled in advance.

## Known Issues

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This topic presents known issues in the current release. Some issues remain from previous releases.

### **VMs are in the "Not Active" state, and Hybrid Cloud Manager logs report an invalid password**

If the account you used for cloud registration cannot authenticate, or is locked out because communication has been lost, you must re-register with the cloud.

- If the Hybridity and Networking appliance (the management appliance) and the NSP cannot communicate, the password is cleaned up for security reasons. You must re-register with the existing password.
- If the password for the account used for cloud registration has changed, you must reauthenticate.

### **Service appliance status is "Unknown"**

After you upgrade Hybrid Cloud Manager, there is a possibility the Layer 2 Concentrator tunnel and the Hybrid Cloud Gateway tunnel status is "unknown."

After upgrading to 2.0, the Cloud Gateway and high throughput L2C appliances must be redeployed once before using Hybrid Cloud Manager features. Appliances perform as expected after the deployment.

### **While a stretch or unstretch task is in progress, "Unstretch" might remain enabled in the UI**

When a stretch or unstretch operation is in progress for a given Network Distributed Port Group (dvPortGroup), the UI does not update.

Wait for the operation to complete before performing any other hybridity operation on the same dvPortGroup.

### **Unstretching a network with proximity routing enabled causes routing conflicts**

See the following Knowledge Base article for a discussion of what to expect when you unstretch a network: [Unstretching a Hybrid Cloud Manager Extended Network](#).

## Cross-cloud vMotion requires VM hardware version 9 or higher

VMs moved with cross-cloud vMotion must have a hardware version of 9 or higher. Lower versions might fail to migrate. There are two ways to work around the version problem:

- Upgrade the hardware version on the virtual machine before attempting vMotion migration. The upgrade triggers a reboot.
- Migrate the VM using low-downtime migration.

## vMotion transfer cannot be canceled

Once a vMotion job is initiated, it cannot be canceled. Contact vCloud Air [VMware Global Support Services](#) if you must cancel an in-flight or scheduled migration.

## Migration hangs if an update occurs during the migration

Stop or reschedule all migrations before performing an update or redeploying an updated appliance.

## Migration hangs if you reconfigure the VM while migration is in progress

Migration cannot progress if you reconfigure a VM while a migration is underway. If you accidentally reconfigure a VM during migration, contact [VMware Global Support Services](#) (GSS) to abort the migration.

## IP Set, MAC Set, or policy rule source or destination names must not exceed 218 characters

The values for IP Set and MAC Set can be defined in the source and destination text boxes for L3 and L2 rules, respectively. These values must not exceed 218 characters.

## In a multi-section policy, copying or moving rules among sections is not supported

If you have multiple VDCs, your policy has a section for each one, and the rules are specific to the VDC. Copying might appear successful, but Hybrid Cloud Manager does not process rules from a different section. Instead, create a rule in the target section.

## If the policy is not named, or is not uniquely named within a section, policy migration fails

If the policy that is not properly named, the VM migration succeeds, but the policy silently fails to migrate.

## Policy migrates successfully but is not enabled on the cloud side

To work around this problem, follow these steps:

- 1 Log in to the cloud organization and choose the Manage and Monitor tab.
- 2 Select Organization vDCs.
- 3 Right-click the vDC, and choose Manage Firewall from the context menu.
- 4 In the Applied To column, specify the virtual wire or org network for the stretched network, and enable the rule.

## **If "Retain MAC" is disabled, VMs migrated with low-downtime migration do not have connectivity**

Make sure that Retain MAC is checked for vR migration.

## **During VM migration, vCenter generates a false alarm that the new VM has a MAC address conflict**

This alarm occurs even when "Retain MAC address" is not checked. In fact, there is no conflict. The alarm is most likely when a virtual machine has been migrated several times.

## **User interface lets you stretch the management network, and network outage results**

Do not stretch the management network. The management network is the on-premises communication path between the Hybridity and Networking appliance (the management appliance) and the Cloud Gateway or Layer 2 concentrators. Stretching the management network overloads the communication channels automatically established during deployment.

## **User interface lets you initiate migration when an appliance is being deployed**

If any appliance is being deployed, do not initiate a migration. Conversely, if a migration is in flight, do not deploy or redeploy any appliance.

## **User interface does not block all unlicensed choices**

Not all license-related features are blocked in the user interface.



## Fixed Issues

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This topic describes fixes and implementation changes in version 2 and subsequent updates.

- [Fixed in v2.0](#) on page 21  
Version 2.0 focused on new features and feature improvements.
- [Fixed in v2.0u1](#) on page 21  
This topic describes significant fixes in version 2.0 update 1.
- [Fixed in v2.0u2](#) on page 22  
This topic describes issues fixed in version 2.0, update 2.
- [Fixed in v2.0u3](#) on page 23  
This topic describes issues fixed in version 2.0, update 3.

### Fixed in v2.0

Version 2.0 focused on new features and feature improvements.

The one major fix in version 2.0 was the ability to migrate a virtual machine from the resource pool.

### Fixed in v2.0u1

This topic describes significant fixes in version 2.0 update 1.

#### **vMotion transfer supports VMs with changed block tracking**

Version 2.0 introduced cross-cloud vMotion, however, vMotion was not supported for virtual machines with Changed Block Tracking (CBT) enabled. As of v2.0u1, Hybrid Cloud Manager automatically disables CBT so that vMotion transfer can take place.

To enable CBT after the migration is complete, consult the following Knowledge Base article: [Changed Block Tracking \(CBT\) on virtual machines \(1020128\)](#).

#### **Low-downtime migration can be aborted**

As of version 2.0u1, you can abort a low-downtime migration task (also called vR migration).

## Fixed in v2.0u2

This topic describes issues fixed in version 2.0, update 2.

### **Fleet configuration could not register with multiple clouds**

In a fleet configuration, the appliances for the Layer 2 tunnel and the WAN Optimization appliance both use the Cloud Gateway appliance for network access. Previously, when the fleet was registered with more than one cloud, WAN optimization only worked for one of them. As of version 2.0u2, WAN optimization is supported when you register with multiple clouds.

### **High throughput L2C upgraded from 2.0 to 2.0u1 did not support a new stretched network**

Incorrect IP address issue has been resolved.

### **A network stretched through a high throughput L2C could not reach the Internet if you disabled proximity routing**

This behavior occurred if you disabled proximity routing, and proximity routing filtering remained enabled. Now, if you disable proximity routing, filtering is also disabled.

### **IPSec tunnel did not come up after you redeployed appliances**

If the tunnel did not come up, the workaround was to restart the on-premises IPSec tunnel manually. A restart is no longer necessary.

### **VM migrations fail intermittently during a vApp import to a virtual data center**

Problem manifested as a hung task, without a proper error message. A race condition with the VCD adapter caused this problem.

### **Elephant and mouse flows caused latency and retransmits**

Flow balancing code has been enhanced to address this issue.

## Fixed in v2.0u3

This topic describes issues fixed in version 2.0, update 3.

### **With NAT between vSphere and vCloud Air, connectivity could be lost between the on-premises Layer 2 Concentrator or Core Gateway and the Cloud appliances**

As of version v2.0u3, NAT is handled without losing connectivity.

### **On-premises, standard Layer 2 Concentrator unexpectedly reset**

An unplanned Layer 2 Concentrator reset was a rare occurrence, and v2.0u3 addresses the cause.

### **The management appliance had a small memory leak, and eventually had to be rebooted**

The memory link has been addressed. In some deployments, performance issues were noticed after a few weeks, but others ran for months before rebooting.

### **Replication-based migration from vCloud Air to vSphere hung in rare cases**

In version 2.0u3, replication-based migration from vCloud Air to vSphere succeeds.

### **If the dvSwitch uplink had two physical NICs, VMs on stretched networks could not communicate**

A Layer 2 Concentrator was wired to a dvSwitch uplink using an enhanced LACP active/active configuration with two physical NICs. When the network was stretched, the trunk port group created for the L2C did not inherit the uplink's teaming policy.

To work around the problem, administrators had to edit the port group teaming policy manually so it matched the uplink's policy. Editing the teaming policy is no longer necessary.

### **Could not stretch VXLANs using unicast replication mode**

You can now stretch VXLANs with unicast replication mode. In previous versions, you could only stretch a VXLAN if the replication mode was multicast.

### **In a configuration with two Direct Connects, each having greater than 70-ms latency, the Cloud Gateway used only one Direct Connect**

As of v2.0u3, the Cloud Gateway distributes load over both Direct Connects.

