

VMware HCX Software Versioning, Skew and Legacy Support

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VMware HCX 4.0

You can find the most up-to-date technical documentation on the VMware website at:

<https://docs.vmware.com/>

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About this Document

This document describes HCX software versioning, interoperability between HCX components, and upgradability and supportability for software version skew scenarios.

Intended Audience

This information is intended for anyone who wants to install, upgrade, or use HCX. The information is written for experienced Windows or Linux system administrators who are familiar with virtual machine technology and datacenter operations.

VMware Technical Publications Glossary

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

Software Versioning, Skew and Legacy Support Policies

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Starting with the HCX 4.0.0 release, HCX releases transition from a cadence of R-named releases to a series of releases based on Semantic Versioning.

This section describes the new version scheme and software lifecycle policy, software skew scenarios between components at the local site, software skew scenarios between paired sites, and HCX policy for vacating legacy vSphere environments.

The following terminology applies throughout this section:

Software Version Skew

Any version drift between HCX components.

Partial Local Upgrade

HCX Manager is upgraded but local Service Mesh appliances are not upgraded.

Complete Local Upgrade

HCX Manager and its local Service Mesh appliances are upgraded.

Site to Site Version Skew

Paired HCX installations are not running the same software version.

Site to Site Compatibility

Compatible sites have the ability to site pair, deploy appliances, and operate HCX Services.

Complete HCX Upgrade

All site paired HCX installations are upgraded (HCX Managers and appliances).

Semantic Versioning

Starting with the HCX 4.0.0 release, software versioning adheres to an x.y.z [Semantic Versioning](#) scheme, where X is the major version, Y is the minor version, and Z is the maintenance version.

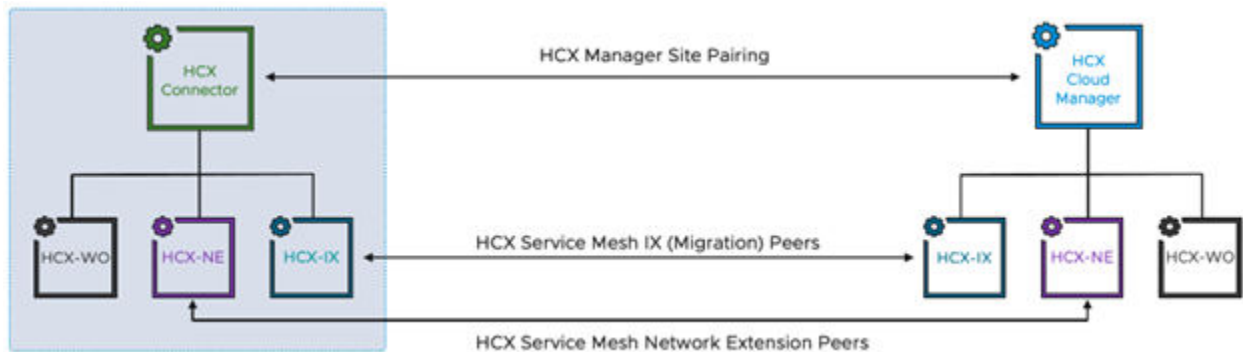
HCX releases with semantic versioning observe the VMware N-2 Lifecycle Policy. To find the End of Support date for a product release, refer to the [VMware Product Lifecycle Matrix](#).

HCX releases prior to 4.0.0 were based on HCX version 3.5.x and were identified as "R" releases, such as R146 and R147. Each R release was associated with a specific build and released on a monthly cadence.

With R releases, HCX supported the four most recent releases, meaning an N-3 lifecycle policy that aligned with the monthly cadence.

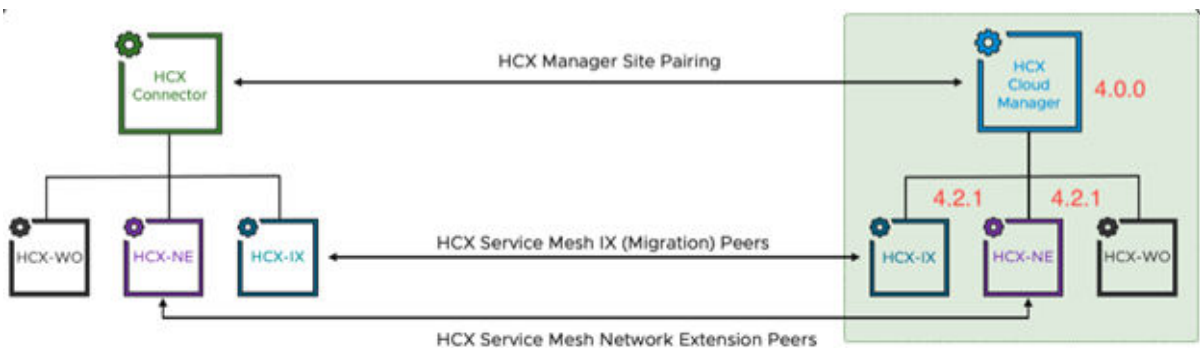
Local Version Skew Policy

The local version skew policy applies to all components that are local to either the source or destination HCX.



Local version skew can happen when upgrading the HCX Manager and Service Mesh component appliances. Local version skew also can happen if the HCX Manager reverted, leaving the Service Mesh appliances at a higher version.

- Reverting HCX Managers (using vSphere snapshots, external backup systems or HCX based backups) after upgrading the HCX Service Mesh results in version skew, where the Service Mesh version is higher. This is an unsupported skew state. The Service Mesh components must be redeployed to return to a supported state.



Local Version Skew During HCX Upgrades

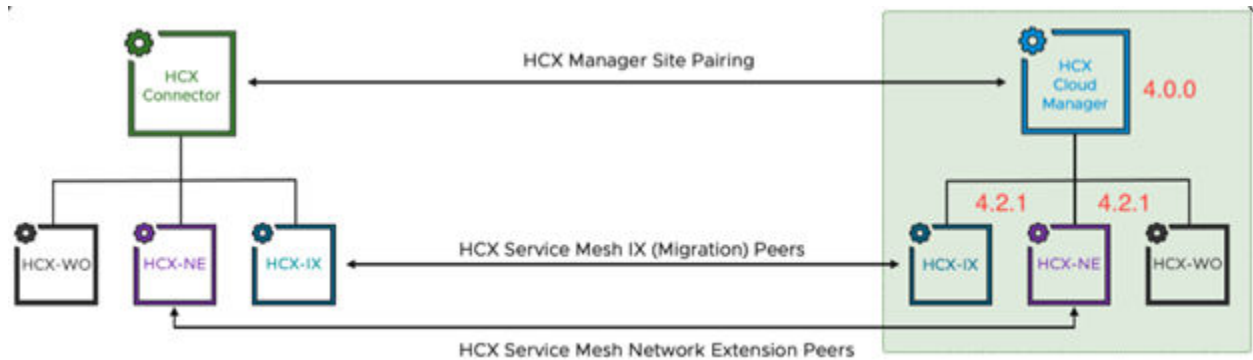
Transient, or temporary, version skew is an expected state during system or appliance upgrades. HCX Manager and Service Mesh appliance versions are interoperable within the following policy:

- In all cases, it is the best practice to execute a complete local upgrade. New features are not supported until a complete upgrade.
- While it is possible to perform the HCX Manager upgrade separately from the Service Mesh upgrade to align with the next available maintenance window, it is the best practice to execute a complete local upgrade. When local version skew exists, only lowest common functionality between the two versions is supported.
- VMware Support may require a complete local upgrade to provide known fixes.
- Local major version skew is not supported, except during upgrade event.
- HCX upgrades are supported to the first release of the next major version. The follow table provides an example of this policy.

Release	4.0.Z	4.1.Z	4.2.Z	4.3.Z	5.0.Z	5.Y.Z	6.0.Z	6.Y.Z
R147	✓	✗	✗	✗	✗	✗	✗	✗
4.0.Z	✓	✓	✓	✓	✓	✗	✗	✗
4.1.Z		✓	✓	✓	✓	✗	✗	✗
4.2.Z			✓	✓	✓	✗	✗	✗
4.3.Z				✓	✓	✗	✗	✗
5.0.Z					✓	✓	✓	✗

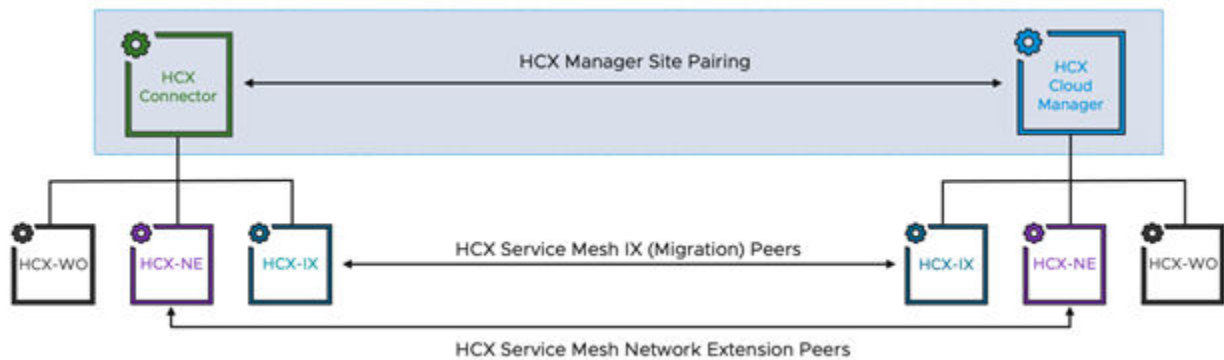
Local Version Skew Due to Reverted HCX Manager

Reverting HCX Managers (using vSphere snapshots, external backup systems or HCX based backups) after upgrading the HCX Service Mesh results in version skew, where the Service Mesh version is higher. This is an unsupported skew state. The Service Mesh components must be redeployed to return to a supported state.



Site to Site Version Skew Policy

Site to site version skew happens when the site paired HCX Managers are not running the same software version.



Version skew is not typical in simple site-to-site HCX deployments where the HCX Connector version matches HCX Cloud.

Version skew is more likely in large scale HCX deployments with many installations happening at various time. This also can happen in multi-public-cloud deployments, where distinct public cloud providers manage the initially deployed HCX Cloud version, resulting in mismatches.

Version skew can affect the compatibility of paired sites. HCX Manager and Service Mesh appliances versions are compatible within the following policy:

- An HCX installation is compatible with another HCX installation of all minor versions within the same major version.
- An HCX Installation is compatible with the first release of the next major version (only in the forward direction for R147 transition to 4.0.Z).
- When the minor version is different, compatibility is provided at the lower version for two paired HCX installations.
- VMware does not test compatibility between installations in a partial local upgrade state.
- The HCX Cloud installation should be an equal or higher version than any connected HCX Connector system.

	HCX Cloud installation						
	Release	R-147 (3.5.3)	4.0.Z	4.1.Z	4.2.Z	4.3.Z	5.0.Z
HCX Connector installation	R147 (3.5.3)	✓	✓	✗	✗	✗	✗
	4.0.Z	✗	✓	✓	✓	✓	✗
	4.1.Z	✗	✗	✓	✓	✓	✗
	4.2.Z	✗	✗	✗	✓	✓	✗
	4.3.Z	✗	✗	✗	✗	✓	✗
	5.0.Z	✗	✗	✗	✗	✗	✓

HCX Support Policy for Vacating Legacy vSphere Environments

One of the key use cases for VMware HCX is to give users a supported and consistent option for vacating legacy vSphere environments. Customers can use this option to avoid complex upgrades and accelerate the adoption of a modern vSphere based public or private cloud.

A legacy vSphere environment is defined as any vSphere installation that has exceeded the General Availability support phase but is within Technical Support Guidance. Refer to [VMware Product Lifecycle Matrix](#) for version-specific vSphere lifecycle information.

The following support policy applies:

- If the environment is under Technical Guidance
 - HCX supports migrations from legacy vSphere environments. (HCX Connector only.)
 - HCX does not support migration to legacy vSphere environments.
- If the environment is out of Technical Guidance
 - Legacy vSphere environments exceeding the End of Technical Guidance date are not supported under this policy.

This policy applies to all HCX deployments for any on-premises or cloud environment.