



Prerequisites and Guidelines

- [Prerequisites for Upgrading HyperFlex Software, on page 1](#)
- [Upgrade Recommendations, on page 3](#)

Prerequisites for Upgrading HyperFlex Software

The following tasks should be performed prior to beginning the upgrade process:



Important Using VMware Update Manager (VUM) or VMware Lifecycle Manager (vLCM) for upgrading the ESXi on HyperFlex node is not supported. Using these upgrade methods may delete Cisco custom drivers and cause cluster outages. We recommend using Cisco Intersight or HyperFlex Connect for ESXi upgrades including the security patches from VMware or manually installing patches using the offline zip bundle with ESXCLI commands.



Important **Upgrades to HXDP Release 5.0(2e)**- Refer to HX [Field Notice](#) and apply the mitigation before upgrading the cluster to HXDP Release 5.0(2e). Any cluster running HXDP Release 5.0(2a), 5.0(2b), 5.0(2c), or 5.0(2d) may be affected by the field notice and should apply the mitigation before upgrade to 5.0(2e) to avoid the issue. Mitigation is not required for upgrades to HXDP Release 5.0(2g) or later.

- Ensure Storage I/O Control (SIOC) is completely disabled on each HyperFlex datastore and the local datastore on each ESXi host in the HyperFlex cluster. This can be confirmed through the vCenter Web Client:

Datastores -> <datastore name> -> Configure -> General -> Datastore Capabilities -> Storage I/O Control -> Verify > both Status and Statistics Collection is set to Disabled.



Note Please refer to the VMware documentation site for more details and steps to disable SIOC.

Datstore Requirements:

- Clusters running HXDP Release 4.5(2a) or later can upgrade directly to 6.0(1a).

- Clusters running HXDP Release 4.0(2x) through 4.5(1x) can upgrade directly to 5.5(1a).
- HXDP Release 5.0 supports ESXi version 6.5 U3 and later only. If your current ESXi version is earlier than 6.5 U3, make sure to perform a combined upgrade of HXDP and ESXi to a target level 6.5 U3 or later. M6 nodes require a minimum of ESXi 6.7 U3 or later supported version.
- Review the Cisco HyperFlex Upgrade Guidelines in the [Recommended Cisco HyperFlex HX Data Platform Software Releases - for Cisco HyperFlex HX-Series Systems](#).
- Beginning with Cisco HXDP Release 5.0(2a), full feature functionality and configuration changes require a valid Cisco HyperFlex Software License. HX Connect users with expired or insufficient licenses at the end of the evaluation or the grace period after the license compliance date, view a prominent countdown banner that alerts the user to the license compliance need and provides a link to the license renewal page until the license expiration is remedied.

In the event a license passes both the license expiration date and the grace period countdown, the current configurations will operate as expected with limited information. Renewing the license allows a user to resume full feature functionality, and make configuration changes. For details and examples of the banners, see the [License Compliance and Feature Functionality](#) section of the Cisco HyperFlex Systems Ordering and Licensing Guide.

- **SCVM Support**

- SCVM VMware Tools upgrade: not supported
 - SCVM Hardware Version upgrade: not supported
 - SCVM VMware Tools are used when creating HX native snapshots using the quiesce option.
- vCenter version check: Verify that the vCenter meets the minimum requirement for the ESXi version being upgraded to. See, [VMware Product Interoperability Matrices](#) to ensure compatibility between vCenter and ESXi.
 - Ensure all VM network port groups exist on all nodes in the cluster for vMotion compatibility.
 - Ensure that the management and storage data VLANs are configured on the top-of-rack network switches to ensure uninterrupted connectivity during planned fabric failover.
 - If using jumbo frames in your environment, ensure jumbo frames are enabled on the vMotion and data networks on the top of rack switch.
 - Verify that the ESXi hosts are not in lockdown mode and SSH service is enabled and set to start and stop with the host for the duration of the upgrade. Lockdown mode can be re-enabled after the upgrade is complete along with disabling SSH service.
 - Blade Package and Rack Package versions are not displayed in the Host Firmware Package: **HyperFlex-m5-con** and **HyperFlex-m6-con** for M6 nodes.
 - Upgrading the VM compatibility version or hardware version of the Storage Controller Virtual Machine (SCVM) is not supported and should not be performed. This action is detrimental to the SCVM and will require a rebuild of the SCVM if performed.
 - If you are using HX CSI then contact TAC.

Upgrade Recommendations

For upgrading supported releases, see the [Recommended Cisco HyperFlex HX Data Platform Software Releases - for Cisco HyperFlex HX-Series Systems](#).

If you want to upgrade from a release that is no longer supported, see the [Cisco HyperFlex Systems Upgrade Guide for Unsupported Cisco HX Releases](#).

