

# Hitachi Storage Connector for Cisco UCS<sup>®</sup> Director

v02.0.0  
Release Notes

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## About This Document

This document provides the latest information about the Hitachi Storage Connector for Cisco UCS® Director adapter, v02.0.0. It includes information that was not available at the time the technical documentation for this product was published and known problems and solutions.

Revision	Date
Initial Version	August 2015
Patch Release	September 2015
v02.0.0 Release	May 2016

## Intended Audience

This document is intended for customers and Hitachi Ltd. partners who license and use the Hitachi Storage Connector for Cisco UCS® Director adapter.

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**Note**

The use of Hitachi Storage Connector for Cisco UCS® Director and all other Hitachi Data Systems products is governed by the terms of your agreement(s) with Hitachi Data Systems.

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## Getting Help

The Hitachi Data Systems Support Center staff is available 24 hours a day, seven days a week. Provisions for patches and fixes are restricted to normal business hours, 8 a.m. to 5 p.m. PST.

To reach us, please visit the support Web site for current telephone numbers and other contact information:

<http://www.hds.com/services/support/>. If you purchased this product from an authorized HDS reseller, contact that reseller for support.

Before calling the Hitachi Data Systems Support Center, please provide as much information about the problem as possible, including:

- The circumstances surrounding the error or failure.
- The exact content of any error message(s) displayed on the host system(s).

# System Requirements

## Adapter Requirements

The Hitachi Storage Connector for Cisco UCS Director requires the following hardware and software:

- ▣ Supported Hitachi storage, microcode, and licenses
- ▣ Hitachi storage system serial number
- ▣ Storage Navigator (SVP) IP Address
- ▣ Hitachi Storage Navigator user account with administrator rights
- ▣ Software: UCS Director 5.4.0.0
- ▣ Virtualization: VMWare ESXi 5.5 or 6.0
- ▣ Hitachi Storage Agent (a web service that relays requests between Hitachi storage systems and Cisco UCS Director using a REST interface.)

## Hitachi Storage Agent (Powered by Metro) Requirements

- ▣ VMware ESXi 5.5 or 6.0 server with:
  - 1 GB of free memory
  - A Datastore with 1 GB of available space
  - A Command Device from the Hitachi storage system
- ▣ VMware vSphere Client (or vSphere Web Client)
- ▣ A static IPv4 address to assign to the virtual appliance

## Minimum Microcode/Firmware Recommendations

System Model	Microcode/Firmware
VSP G/F800, G/F600, G/F400, G200	83-02-04
VSP G1000	80-03-34
VSP	70-06-35
HUS VM	73-03-44

## About this Release

This is a major release of the Hitachi Storage Connector for Cisco UCS Director. Key updates include support for the Gx00 and Fx00 family of arrays (Block only) and Local Replication features.

## New in this Release

Added the following Local Replication Tasks:

- Create ShadowImage Pair
- Create Thin Image Pair
- Create Snapshot Volume
- Delete/Split Snapshot Group
- Resync/Restore/Split/Delete Pair

Also added in this release:

- Expand/Shrink Pool
- Modify Dynamic Pool. Programmatically modify a pool Subscription Limit, Warning Threshold, and Enable/Disable Multi-Tiering settings.
- Expand Dynamic Provisioned (DP) Volumes
- Set As Command Device. Set LDEVs as Command Devices for use with other Hitachi products.
- Enable/Disable Host Mode Options
- Ability to retrieve log information from the Storage Agent
- Ability to force Inventory Collection from the Storage View
- Collect Hitachi Inventory. Force Cisco UCS Directory to retrieve latest information from the storage before or during a Workflow.

## Tasks from v01.0.1 and Modifications

The adapter supports the following tasks. Some tasks have been updated with new functionality:

- Create LDEV
  - **New** – Create multiple LDEVs at once
  - **New** – Support for LDEV naming
  - **New** – Specify MP Unit/Blade
- Create Pool
  - **New** – Specify Warning and Depletion Thresholds; Subscription Limit
  - **New** – Enable/Disable Multi-Tiering
- Delete Pool
  - **New** – Optionally format underlying Pool Devices on rollback
- Delete LDEV
- Format LDEV
- Add Host to Host Group
  - **New** – Support for adding colon delimited WWNs
- Add LUN Path to Host Group
- Create / Delete Host Group
- Remove Host from Host Group
- Remove LUN Path from Host Group
- Set Host Mode for Host Group
  - **New** – Support for individual Host Mode Options
- Associate LUN as Datastore
- Delete Datastore

 Get Storage Port WWPN

## Known Problems and Limitations

**Edit LDEV Name:** LDEV Names in this release cannot be cleared or set to <blank>.

**ShadowImage:** In this release Copy Pace is not changeable from the default of Medium.

**Multiple User Accounts:** Multiple storage accounts from a single Hitachi Storage array using the same Storage Agent are not supported at this time. As a workaround, you may provision additional Storage Agents on separate ESXi servers. This is also diagrammed in the *User's Guide* for clarity.

**Resource Locking:** Using Cisco UCS Director in parallel with other Hitachi products, such as Hitachi Command Suite, may cause operations to timeout. In the event that the storage platform is locked (marked as "Resource Locked") in Storage Navigator or Hitachi Device Manager, the software now warns that a lock is present and asks the user to clear the lock before proceeding.

**Command Devices:** Command Device sharing between the Storage Agent and other Hitachi products is not supported and may produce undesired results. The Storage Agent must have exclusive access to the assigned Command Device.

**Format LDEVs:** In this release, only Quick Formatting is supported for new LDEVs. As with all other Hitachi products, Quick Formatting may have storage performance implications.

**Summary/Storage Tabs:** Under the Physical Storage menu, clicking on the Pod in the left pane will give you Summary and Storage Account tabs. In these views the following items will be blank: Reachable, Last Status Message, Last Polled time and User Id. This is due to a limitation in the Cisco UCS Director SDK.

**First LUNs Added to be added to an HBA:** One of the features of VMware ESXi is the ability to select an HBA and tell ESXi to "rescan" for newly attached LUNs. That method works when adding new LUNs to an HBA that already contains LUN paths from the array. However, the rescan fails to recognize LUNs when they are the first to be presented to the HBA. To correct this, either reboot ESXi or remove and re-add the members of the SAN zone of the HBA.

**Host Mode Change on Command Device Ports:** Performing Host Mode Changes on the storage port that contains the Command Device belonging to the Storage Agent will fail. Perform the changes from Hitachi Storage Navigator or Hitachi Command Suite.

**Inventory Collection:** When inventory is running in the background, some reports or operations may not complete successfully. Report columns' data is set after all the other inventory objects (ex: ldev, snapshot groups) are done. This is especially true for Local Replication; during this time the LDEV name column or snapshot group column may be empty.

## Documentation

*Hitachi Storage Connector for Cisco UCS® Director User's Guide, MK-92ADPTR089-02*

*Metro REST API Specification Version 3.0.0, SDK-95REST001-01*

## Related Documents

#	Name	Description
1	<i>Unified Compute Platform with Cisco UCS Deployment Guide, December 2013 Version 1</i>	Detailed description and instructions for system configurations. Hitachi internal document.
2	<i>Hitachi Virtual Storage Platform: Documentation Roadmap, MK-90RD7039-06</i>	Describes all the tasks required for installation, setup, configuration, and maintenance. Lists documents by task.
3	<i>Hitachi Virtual Storage Platform G1000: Product Overview, MK-92RD8051</i>	Gives an overview of VSP G1000 hardware and software features, overview of setup and configuration. Lists documents by task.
4	<i>Hitachi Unified Storage VM: Product Overview Guide, MK-92HM7003</i>	Gives an overview of HUS VM hardware and software features, overview of setup and configuration. Lists documents by task.
5	<i>Product Overview for Hitachi Virtual Storage Platform Gx00 and Fx00 Models, MK-94HM8013</i>	Gives an overview of Gx00 and Fx00 hardware and software features, overview of setup and configuration. Lists documents by task.





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