

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

v01.0.0  
Release Notes

## Contents

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About This Document.....	2
Intended Audience .....	2
Getting Help .....	2
System Requirements .....	3
About this Release.....	3
Known Problems and Limitations .....	4
Documentation .....	6

## About This Document

This document provides the latest information about the Hitachi Storage Connector for Cisco UCS® Director adapter, v01.0.0 or later. 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

## 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 5.3.0.0
- Virtualization: VMWare ESXi 5.5
- Hitachi Storage Agent (a web service that relays requests between Hitachi storage systems and Cisco UCS Director using a REST interface.)

## Hitachi Storage Agent Requirements

- VMware ESXi 5.5 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 Requirements

System Model	Microcode/Firmware
HUS VM	73-03-09-00/00
VSP	70-06-21-00/00
VSP G1000	80-02-01-00/00

## About this Release

This is the initial release of the Hitachi Storage Connector for Cisco UCS® Director adapter.

## Workflows and Tasks

The Adapter provides the following workflows:

- Provision storage to an existing host
- Provision Datastore on a new LDEV (requires VMware vSphere 5.5)
- Extend a Datastore with a new LDEV (requires VMware vSphere 5.5)

The Adapter supports the following tasks:

- Create LDEV
- Create Pool
- Delete Pool
- Delete LDEV
- Format LDEV
- Add Host to Host Group
- Add LUN Path to Host Group
- Create Host Group
- Delete Host Group
- Remove Host from Host Group
- Remove LUN Path from Host Group
- Set Host Mode for Host Group
- Associate LUN as Datastore
- Delete Datastore
- Get Storage Port WWPN

## Known Problems and Limitations

**LDEV IDs and Resource Groups:** In this release LDEV IDs assigned to Resource Groups may result in a "Permission Denied" error when trying to perform a Create LDEV operation. Resource Groups are not fully supported. As a

workaround, manually select an LDEV ID that is available to the Resource Group of the Storage User assigned to UCS Director.

**Delete Pool Task:** In order to avoid a race condition after Deleting a pool, the pool is not removed from the Inventory list until the next Inventory cycle is run (default is 1 hour). You may run Inventory Collection manually from System Tasks to see this update immediately.

**Multiple User Accounts:** Multiple storage accounts from a single Hitachi Storage array using the same Storage Agent is 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 the Storage is locked (marked as "Resource Locked") in Storage Navigator or Hitachi Device Manager, we retry the operation for up to 10 minutes. If the lock is not released, the operation fails. You may retry after the lock is released. Note that the UCS Director interface stops checking after 2 minutes and does not report success even if the operation succeeded.

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

**Displaying Small LDEVs:** In the LDEV tab, devices smaller than 100mb show as 0.0, due to a limitation in this version that prevents carrying out to two places after the decimal.

**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 being able 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. Either a reboot of ESXi or remove/re-adding the members of the SAN zone of the HBA is required to correct this.

## Documentation

*Hitachi Storage Connector for Cisco UCS® Director User's Guide, MK-92ADPTR089-00*

## 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.

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