

Hitachi Device Manager

8.1.4-03 Release Notes

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About this document

This document (RN-00HS266-89, June 2015) provides late-breaking information about Hitachi Device Manager v8.1.4-03. It includes information that was not available at the time the technical documentation for this product was published, as well as a list of known problems and solutions.

Intended audience

This document is intended for customers and Hitachi Data Systems partners who license and use Hitachi Device Manager.

Getting help

The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, log on to the Hitachi Data Systems Portal for contact information: <https://portal.hds.com>.

About this release

This release resolves multiple known problems.

Product package contents

Item	Contents	Revision	Release type
Software	Device Manager Server	8.1.4-03	Full Package
Documents	Hitachi Command Suite User Guide	MK-90HC172-20	
	Hitachi Command Suite CLI Reference Guide	MK-90HC176-20	
	Hitachi Command Suite Messages	MK-90HC178-20	
	Hitachi Command Suite Audit Log Reference Guide	MK-92HC213-06	
	Hitachi Command Suite Installation and Configuration Guide	MK-90HC173-20	
	Hitachi Command Suite Administrator Guide	MK-90HC175-20	

New features and important enhancements

For 8.1.4-03

None

For 8.1.4-00

Features and enhancements	Affected components	Affected operating systems
<p>Device Manager can now configure a highly available system (3DC delta resync) by using the following copy pairs in Virtual Storage Platform G1000 storage systems:</p> <p>[Copy pairs]</p> <ul style="list-style-type: none"> - Global-active device - Universal Replicator - Delta resync of Universal Replicator 	<p>Device Manager Server Device Manager CLI</p>	<p>All*</p>
<p>Device Manager agent now supports guest operating systems running on the virtualization server product VMware vSphere ESXi 6.0.</p>	<p>Device Manager Agent</p>	<p>All*</p>
<p>Device Manager agent now supports the following operating systems:</p> <ul style="list-style-type: none"> - Red Hat Enterprise Linux 7.1 - Oracle Linux 7.1 UEK R3 	<p>Device Manager Agent</p>	<p>All*</p>
<p>Host Data Collector now supports the virtualization server product VMware vSphere ESXi 6.0, and guest operating systems running on this virtualization server product as target hosts.</p>	<p>Host Data Collector</p>	<p>All*</p>
<p>Host Data Collector now supports guest operating systems running on the virtualization server product VMware vSphere ESXi 6.0 as a server.</p>	<p>Host Data Collector</p>	<p>All*</p>
<p>Host Data Collector now supports the following operating systems as a target host:</p> <ul style="list-style-type: none"> - Red Hat Enterprise Linux 7.1 - Oracle Linux 7.1 UEK R3 	<p>Host Data Collector</p>	<p>All*</p>
<p>Host Data Collector now supports the following operating system as a server:</p> <ul style="list-style-type: none"> - Red Hat Enterprise Linux 7.1 - SUSE Linux Enterprise Server 12 	<p>Host Data Collector</p>	<p>All*</p>
<p>Device Manager can now perform pool tasks by using pool volumes in Virtual Storage Platform G1000 storage systems that meet the following conditions:</p> <p>HDT pools</p> <ul style="list-style-type: none"> - External parity groups for which the cache mode is disabled. <p>HDP pools</p> <ul style="list-style-type: none"> - A mix of internal and external parity 	<p>Device Manager Server Device Manager GUI Device Manager CLI</p>	<p>All*</p>

<p>groups for which the cache mode is disabled.</p> <ul style="list-style-type: none"> - External parity groups, some of which have the cache mode enabled and some of which have the cache mode disabled. <p>This enhancement begins with microcode version 80-02-4X-XX/XX.</p>		
<p>The Device Manager server, GUI, and CLI now support SUSE Linux Enterprise Server 12.</p>	<p>Device Manager Server</p> <p>Device Manager GUI</p> <p>Device Manager CLI</p>	Linux
<p>The Device Manager server, GUI, and CLI now support the virtualization server product VMware vSphere ESXi 6.</p> <p>For information about guest operating systems, see <i>the Hitachi Command Suite System Requirements</i> (MK-92HC209).</p>	<p>Device Manager Server</p> <p>Device Manager GUI</p> <p>Device Manager CLI</p>	-
<p>For the Device Manager dialog boxes and commands listed, you can now use basic volumes (internal volumes/external volumes) for a global-active device pair in Virtual Storage Platform G1000.</p> <p>Dialog boxes:</p> <ul style="list-style-type: none"> - Allocate Volumes - Allocate Like Volumes - Change to Global-Active Device Volumes <p>Commands:</p> <ul style="list-style-type: none"> - AddConfigFileForReplication - AddReplication - ModifyReplication - DeleteReplication - GetReplicationStatus 	<p>Device Manager Server</p> <p>Device Manager GUI</p> <p>Device Manager CLI</p>	All*
<p>The Analysis tab now supports performance analysis of pair volumes of a global-active device that are configured from basic volumes of Virtual Storage Platform G1000 (internal volumes and external volumes).</p>	<p>Device Manager GUI</p>	All*
<p>The SSL 3.0 protocol, which has a security vulnerability, is no longer used by Host Data Collector for secure communication.</p>	<p>Host Data Collector</p>	All*
<p>The Device Manager server, GUI, and CLI now support Red Hat Enterprise Linux 7.1.</p>	<p>Device Manager Server</p> <p>Device Manager GUI</p> <p>Device Manager</p>	All*

	CLI	
Device Manager server, GUI, and CLI now support Hitachi NAS Platform 12.3.	Device Manager Server Device Manager GUI Device Manager CLI	All*
The Device Manager GUI now supports Adobe Flash Player 17.	Device Manager GUI	Windows
The SSL 3.0 protocol, which has a security vulnerability, is no longer used by Device Manager server for secure communication.	Device Manager Server	All*
The Analysis tab now supports the Identify Performance Problems feature for virtual machines.	Device Manager GUI	All*
Device Manager now adds "process-ID" to the audit events that are output to audit logs.	Device Manager Server	All*
The global-active device I/O mode of a volume is now displayed in the Device Manager GUI.	Device Manager GUI	All*

Note: See *Hitachi Command Suite System Requirements* for details.

*: Applies to all supported operating systems in Device Manager.

System requirements

System requirements can be found in *Hitachi Command Suite System Requirements* (MK-92HC209-17). The requirements are presented in the form of requirements for each type of server, rather than as requirements for individual Hitachi Command Suite components.

When upgrading Hitachi Command Suite products from v7.6.1 or earlier, if the following components are installed, upgrade them to v8.0.0 or later:

- Device Manager
- Tiered Storage Manager
- Replication Manager
- Tuning Manager
- Compute Systems Manager
- Global Link Manager

Resolved problems

From 8.1.4-00 to 8.1.4-03

Corrected problems	Affected products	Affected operating
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		systems
<p>The following problem has been corrected: When all of the following conditions are met, Adding, Refreshing, and Pair operation for Windows host using the Device Manager agent may fail.</p> <p>(1) The OS of the host is Windows Server 2003 or later.</p> <p>(2) A disk (or disks) that meet all of the following conditions exists in the disks being managed by the host described in (1).</p> <ul style="list-style-type: none"> - The disk is a local disk, or a disk device that recognizes a storage device that is supported by the hldutil command of the Device Manager agent. - No file system has been created on the disk, or a drive letter is not allocated for a created file system. 	Device Manager Agent	Windows
<p>The following problem has been corrected: When the user initiates the Identify Performance Problems wizard from the Analytics tab in an attempt to show the following charts on the screen, the charts are not shown, and the KAIC15908-E message appears in the chart display area.</p> <p>Applicable charts:</p> <ul style="list-style-type: none"> - Read Hit chart in the Parity Group window - Write Hit chart in the Parity Group window - Busy Rate chart in the Port window <p>Message: KAIC15908-E An internal error occurred. Contact the support Center (maintenance information=java.lang.NullPointerException)</p>	Device Manager GUI	All*
<p>The following problem has been corrected: The following symptoms occur when using the Identify Performance Problems wizard from the Analytics tab:</p> <p>Symptom 1: In the Port window, only one port from among the ports in the table is displayed in the Busy Rate chart. (*1)</p> <p>Symptom 2: In the Overview window and Summary window, only the port displayed in Symptom 1 can be analyzed.</p> <p>(*1) When multiple storage systems are being analyzed, one port per storage system is displayed in the chart.</p>	Device Manager GUI	All*
<p>The following problem has been corrected: When you use Host Data Collector to add, refresh, or edit a Windows host, the processing may fail.</p>	Host Data Collector	All*
<p>The following problem has been corrected: The Java which is used by Device Manager agent cannot be changed to the latest version even if Oracle JDK or Oracle JRE 1.8.0 update 20 or later is installed on the host when javapath_setup -set new command is executed.</p>	Device Manager Agent	All*

The following problem has been corrected: When a volume is created from a DP pool, the CLPR number for the volume becomes 0 when it should be assigned with the CLPR number of the DP pool.	Device Manager GUI	All*
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From 8.1.3-01 to 8.1.4-00

Corrected problems	Affected products	Affected operating systems
The following problem has been corrected: When allocating volumes by using hosts and storage systems that have both an FC and iSCSI interface, the paths displayed automatically are only the paths of the FC interface.	Device Manager GUI	All*
The following problem has been corrected: When you use the hdvmagt_setting command of the Device Manager agent in Windows to set information for a Device Manager server, the KAIC28203-W, KAIC28311-E, or KAIC28312-E error may occur.	Device Manager Agent	Windows
The following problem has been corrected: The following problems sometimes occur on a host that is managed by a Device Manager agent: <ul style="list-style-type: none"> - The process used by the Device Manager agent does not end, and the CPU usage rate increases. - The process used by the Device Manager agent causes a memory access violation and is forcibly terminated. 	Device Manager Agent	Windows
The following problem has been corrected: When you run the hdc_ssltool command of Host Data Collector for Windows with a string that contains a percentage sign (%) or a caret (^) in an argument, the command may not work properly.	Host Data Collector	Windows
The following problem has been corrected: When the Device manager CLI command GetStorageArray (subtarget = ReplicationInfo) is run for a Thin Image pair to which no S-VOL is allocated, invalid values are output for the following elements in the command execution results: <ul style="list-style-type: none"> - "65,535" is output for the svolDevNum element. - "00:FF:FF" is output for the displaySvolDevNum element. - "Unknown" is output for the replicationFunction element. 	Device Manager Agent	All*
The following problem has been corrected: Volume virtualization fails with the error message KAIC03006-E.	Device Manager Server	All*
The following problem has been corrected: After a volume for which the drive type is SSD or a DP volume is specified and then volume virtualization is implemented, the error dialog box (KAIC16114-E) is	Device Manager GUI	All*

displayed several times when an external storage system is specified in the volume virtualization window.		
The following problem has been corrected: If you open the Copy Group Details dialog box in the Replication tab, an unexpected error occurs (KAIC16993-E) in the copy pair information area.	Device Manager GUI	All*
The following problem has been corrected: The following symptoms occur on XML format output when the "-f" or "--format" option with xml is specified in the GetStorageArray command of the Device Manager CLI. <ul style="list-style-type: none"> - The XML is output improperly without an equal sign ("=") between attribute name and its value for reservedCapacityInKB attribute of the Pool or LDEV element. - If the SnapshotSummary element is a child element of the LogicalUnit element, which is not allowed, the XML is output in improper form (the LogicalUnit element has no end tag). 	Device Manager Server	AIX, HP-UX, Windows, Linux, Solaris
The following problem has been corrected: If a storage system with an externally connected volume of a SMI-S enabled storage system is registered with Device Manager, displaying the list of volumes and searching from the Search dialog box might fail with KAIC16993-E.	Device Manager GUI	All*
The following problem has been corrected: If Device Manager has been upgraded or configured from earlier than 8.1.1-00 to the version described in Products And Versions Affected, the Refresh Hosts task for each VMware ESXi Servers managed by a VMware vCenter Server may fail with KAIC63503-E. When this problem occurs, the task for each VMware ESXi Servers fail with KAIC15001-E. However, the task status for the target VMware vCenter Server and VMware ESXi Servers remains as if they are In Progress even though the tasks for each VMware ESXi Servers has already been failed. Once the problem occurs, re-doing the task in different ways fails with the same error.	Device Manager GUI	All*
The following problem has been corrected: Launching Maintenance Utility for VSP G200, G400, G600 fails with KAIC00825-E. The corrected DKC microcode version: 83-01-04-xx/00 or later	Device Manager GUI	All*

*: Applies to all supported operating systems in Device Manager.

Known problems

- Unallocating the volumes of a global-active device pair

To unallocate of a volume by selecting a P-VOL of a global-active device pair that belongs to a consistency group, follow these steps. If you do not follow this procedure, the task might fail with the KAIC07762-E message.

1. In the tree view of the Device Manager GUI on the Resources tab, right-click the secondary storage system, and then open the Remote Replication window.
2. On the GAD Consistency Groups tab in the Remote Replication window, , select the CTG ID of the volume, and then run the Suspend Consistency Groups task.
3. When the status of the CTG ID changes to "SSWS," close the Remote Replication window.
4. In the Open-Allocated window of the storage system, verify that GAD Pair Status for the P-VOL and S-VOL is "Split".

- Creating multiple volumes

If creating multiple volumes fails, the following problems might occur:

- Even if the volume status displayed in Task Details is not "Completed", some volumes might have been created in the storage system.
- Even if the volume status displayed in Task Details is "Completed", some volumes might not have been created in the storage system.
- If an initial value of the volume labels is specified, the volume label numbers might not be in sequence.

When creating multiple volumes fails, refresh the storage system that is supposed to include the created volumes. Then, in the Open-Unallocated volumes list of the storage system, check whether the volumes have been created. Re-create any volumes that were not created.

If necessary, modify the volume labels.

- Displaying information about the primary volume in the secondary site tab of the global-active device

If the user performing a global-active device task in the following windows does not have the necessary permissions for the resource group of the DP pool or parity group, information about the primary volume is not displayed in the secondary site tab.

- Allocate Volumes
- Allocate Like Volumes
- Change to Global-Active Device Volumes

If this occurs, try the operation again as a user who has one of following permissions for the resource group of the DP pool or parity group to which the volume belongs.

- Admin
- Modify
- Storage Administrator (Provisioning)
- Allocating volumes of an external parity group

If you select an external parity group and open the Allocate Volume dialog box, the KAIC15023-W message is displayed and you cannot continue the task.

To allocate volumes of an external parity group, start the Allocate Volume dialog box from the General Tasks or Action menu, and then select the external parity group.
- Allocating a global-active device volume of a parity group

If you select a parity group whose emulation type is not OPEN-V and try to allocate a global-active device volume, the secondary site tab incorrectly displays the message KAIC15023-W.

In Device Manager, if you create a global-active device pair for a parity group, the emulation type must be OPEN-V.
- Allocating a global-active device pair from a DP pool

If you select a DP volume and try to create a global-active device pair in the Allocate Volume dialog box, the secondary site might display the KAIC16601-W warning message.

Use either of the following methods for this task:

 - Check the drive characteristics (drive type, drive speeds, and so on) of the drives that make up the DP pool used by the primary and secondary site. If the drive characteristics are valid, continue the task.
 - Start the Allocate Volume dialog box from the General Task or Action menu, and then select the volume.

- Full allocation at a secondary site when allocating global-active device volumes

If both of the following conditions are met, the KAIC15874-E message is output at the secondary site, and you cannot set up the full allocation:

1. You select either of the following volumes, and then open the Allocate Volumes dialog box:
 - HDT volume
 - Multiple HDT volumes that belong to the same pool
2. For the secondary site, Volume Selection is Automatic.

If this occurs, set Volume Selection to Manual and then select the volumes. Or start allocating volumes from the General Tasks or Action menu.

- The email notification of a Health Check result in the Analytics Tab

If all of the following conditions are met, private logical groups are not displayed for Affected Logical Groups in a Health Check Report attached to an email message.

- A user managed by an external authorization server performs a HealthCheck immediately or executes Health Checks on a schedule.
- A user managed by an external authorization server specifies the following items for performing a Health Check:
 - Selects Send a notification email
 - Inputs Email Address
 - Selects Attach a Health Check
- A Health Check is completed normally.

If a user is not managed by an external authorization server, this problem does not occur.

If a user managed by an external authorization server confirms affected logical group, confirm them using either of the following methods:

- Verify them from a Health Check Report directly after login to Device Manager.
 - Verify them after exporting a Health Check Report as PDF or CSV form.
- Sorting and filtering

The following columns might not be sortable, or if they are sorted, they might not be sorted correctly:

Columns on volumes:

- Volume Attribute
- RAID Level
- Drive Speed (RPM)
- Chip Type
- Drive Capacity
- Copy Information (P-VOL)
- Copy Information (S-VOL)
- Capacity
- Parity Group

- No. of Paths
- Filesystem
- Filesystem Used %
- Vendor
- Used %
- No. of LUN Paths
- Host
- WWN
- Virtual LDEV ID
- Migration Restrictions
- Full Allocation
- Reserved Capacity

Columns on parity groups:

- Parity Group
- Cache Mode
- RAID Level
- Drive Speed (RPM)
- Chip Type
- Total Capacity
- Unallocated Capacity
- Free Capacity
- Usable Volumes
- No. of Volumes
- Form Factor

Columns on DP pools:

- Pool Type
- Subscription
- No. of Parity Groups
- Total Capacity
- Drive Type
- Drive Speed (RPM)
- Chip Type
- Form Factor

Columns on tiers:

- Parity Group
- Free Capacity
- Tier No
- Volume Location
- Drive Type
- Drive Speed
- No. of Parity Groups
- Total Capacity

Column on file servers:

- Model

Column on storage systems:

- Model

Column on data collection tasks:

Target Type

- Storage Systems

Column on host:

- Data Collector

The following restrictions apply only to the Analytics tab.

The following columns cannot be sorted:

Columns on volumes:

- Virtual LDEV ID
- Virtual Host Group ID
- Pool of Ext. Volume
- Ext. Storage Series

Columns on parity groups:

- H/W Tier No.
- Pool

Column on ports:

- No. of Volumes

The following restrictions apply only to Migration Projects on the Mobility tab.

The following columns cannot be sorted:

Columns on migration projects:

Columns about target resource Group of the setting window of Resource Group Mappings:

- Name
- Description
- Number of User Groups to Be Assigned

Column about storage port mappings of the setting window of Port Mapping:

- Target Storage Port

Columns on migration jobs:

- No. of Volumes
- Capacity
- Config File Migration Status
- Aggregated Copy Pair Status

Columns on data migration status:

- Step 1
- Step 2
- Step 3
- Step 4
- Step 5

The following column in the task details of Migrate Config Files:

- Message

The following columns in the task details of Nondisruptive Migration:

- Status
- Estimated Time
- Remaining Time
- Elapsed Time
- Message

The filtering result of the following columns might not be correct:

Columns on volumes:

- No. of LUN Paths
- No. of Paths
- Filesystem
- Filesystem Used %
- Vendor
- GAD Pair Status
- GAD CTG ID
- GAD I/O Mode

Column on parity groups:

- Total Capacity

Columns on DP pools:

- Subscription

- Total Capacity
- Chip Type

Columns on hosts:

- OS
- IP Address"

The following restrictions apply only to the Analytics tab.

The following columns cannot be filtered:

Columns on volumes:

- Ext. Storage Series
- Used %

Column on parity groups:

- H/W Tier No.

Column on ports:

- No. of Volumes

The following items cannot be filtered in the Select DP Pool dialog box:

- Used Capacity
- Subscription

The error occurs when the following columns are selected on the filter for the volume list.

- Copy Info (P-VOL) and Copy Info (S-VOL)
- Volume Attribute and Storage System
- Volume Attribute and Copy Info (P-VOL)
- Volume Attribute and Copy Info (S-VOL)
- Volume Attribute and Pool

The following restrictions apply only to Migration Projects of the Mobility tab.

The following columns cannot be filtered:

Columns on migration jobs:

- No. of Volumes
- Capacity
- Config File Migration Status

- Aggregated Copy Pair Status

Columns on data migration status:

- Step 1
- Step 2
- Step 3
- Step 4
- Step 5

The following column in the task details of Migrate Config Files:

- Message

The following columns in the parity groups of Prepare Target Secondary Volumes, and Nondisruptive Migration:

- No. of Volumes
- Ext. Storage System

Installation precautions

When you install Hitachi Command Suite, some components require that you take some precautions. The following table lists the components and the location of the precaution information:

Component	Reference
Device Manager Server	See "Installing" in the <i>Hitachi Command Suite Installation and Configuration Guide</i> .
GUI	See the online help.
CLI	See "Requirements for CLI Operations" in the <i>Hitachi Command Suite CLI Reference Guide</i> .
Device Manager Agent	See Installing the Device Manager Agent in Windows and Installing the Device Manager Agent in Linux in the <i>Hitachi Command Suite Installation and Configuration Guide</i> .

Usage precautions

After you run the AddReplication or ModifyReplication command of the Device Manager CLI

To check the values of the pvIOMode and the svIOMode attributes of the ReplicationInfo instance, update the configuration information of the storage systems by using Device Manager.

If the information is not updated, the values of the attributes will be incorrect.

Upgrading Device Manager when using Tuning Manager

If you upgrade Device Manager from 8.0.0 to 8.0.1 or later, you must also upgrade Tuning Manager to 8.0.1 or later.

If you do not upgrade Tuning Manager, the Main Console of Tuning Manager displays an incorrect value in the "Virtual Model" column of the VSP G1000 volume information. For more information about the incorrect values, see Table 1-1.

This problem occurs if you do not upgrade Tuning Manager and if the following conditions are met:

- The Main Console of Tuning Manager is monitoring a virtual storage machine for which USP VM, USP V, or NSC55 is set for the virtual model of the VSP G1000 storage system.
- The system is operating with the following combination of products:
 - Tuning Manager 8.0.0
 - Device Manager 8.0.1 or later

Table 1-1: Correct and incorrect values for the "Virtual Model" column

#	Storage type of the virtual model	Correct value	Incorrect value
1	USP VM	USP VM	USP_V
2	USP V	USP V	USP_V
3	NSC55	NSC	USP

To check the correct virtual model name of a virtual storage machine, see the name that is displayed in the "Virtual Model" column of the volume list on the Resources tab of Device Manager.

Creating a NAS Platform storage pool

For Hitachi NAS Platform v12.3 or later, if you use only one parity group for creating a storage pool, create at least four volumes from that parity group in advance.

Documentation

Available documents

Manual Name	Manual No.	Issue Date
Hitachi Command Suite User Guide	MK-90HC172-20	May 2015
Hitachi Command Suite CLI Reference Guide	MK-90HC176-20	May 2015
Hitachi Command Suite Messages	MK-90HC178-20	May 2015
Hitachi Command Suite Audit Log Reference Guide	MK-92HC213-06	May 2015
Hitachi Command Suite Installation and Configuration Guide	MK-90HC173-20	May 2015
Hitachi Command Suite Administrator Guide	MK-90HC175-20	May 2015

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