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Command Control Interface Release Notes Version 01-47-03/05

Contents

About this document

This document (RN-90RD7194-20, June 2018) provides information about the Command Control Interface (CCI) software product, including supported systems, new features and important enhancements, fixed problems, and information that was not available when the documentation for this product was published.

Intended audience

This document is intended for customers and Hitachi Vantara partners who license and use Command Control Interface.

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About this release

This release adds support for displaying the capacity saving effect of LDEVs provided by dedupe and compression, displaying Dynamic Tiering monitoring cycle, the function for VSP G1x00 and VSP F1500 to automatically add pool volumes to a pool with accelerated compression enabled, syntax check enhancement for replication command, setting and viewing system option modes for VSP G200, G400, G600, G800 and VSP F400, F600, F800, and host reserve release for VSP G200, G400, G600, G800 and VSP F400, F600, F800.

For complete lists of new features and fixes, see New features and important enhancements and Fixed problems.

This document describes the differences between the following versions:

Version	CCI version number	Required microcode/firmware for new features
New version	01-47-03/05	VSP G1x00, VSP F1500: 80-06-41-00/00 or later VSP G350, G370, G700, G900: 88-01-02-x0/00 or later VSP F350, F370, F700, F900: 88-01-02-x0/00 or later VSP G200, G400, G600, G800: 83-05-23-x0/00 or later VSP F400, F600, F800: 83-05-23-x0/00 or later VSP: 70-01-01-00/01 or later HUS VM: 73-01-01-00/00 or later
New version	01-46-03/02	VSP G1x00, VSP F1500: 80-06-21-00/00 or later VSP G200, G400, G600, G800: 83-05-21-x0/00 or later VSP F400, F600, F800: 83-05-21-x0/00 or later

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Version	CCI version number	Required microcode/firmware for new features
		VSP: 70-06-55-00/00 or later HUS VM: 73-03-59-00/00 or later

Applicable products

The information described in this document applies to the following products:

#	Product name
1	Command Control Interface for HP-UX
2	Command Control Interface for Windows NT
3	Command Control Interface for Windows NT/x64
4	Command Control Interface for Solaris
5	Command Control Interface for Solaris/x86
6	Command Control Interface for AIX®
7	Command Control Interface for Tru64 UNIX (Digital UNIX)
8	Command Control Interface for Linux
9	Command Control Interface for Linux/IA64
10	Command Control Interface for IRIX
11	Command Control Interface for OpenVMS
12	Command Control Interface for OpenVMS/IA

Supported storage systems

This version of Command Control Interface supports the following storage systems:

Storage system	Minimum microcode/firmware
Hitachi Virtual Storage Platform G350	88-01-02-20/00 or later

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Storage system	Minimum microcode/firmware
Hitachi Virtual Storage Platform G370, G700, G900	88-01-02-60/00 or later
Hitachi Virtual Storage Platform F350	88-01-02-20/00 or later
Hitachi Virtual Storage Platform F370, F700, F900	88-01-02-60/00 or later
Hitachi Virtual Storage Platform G200	83-01-01-20/00 or later
Hitachi Virtual Storage Platform G400, G600	83-01-01-40/00 or later
Hitachi Virtual Storage Platform G800	83-01-01-60/00 or later
Hitachi Virtual Storage Platform F400, F600	83-02-01-40/00 or later
Hitachi Virtual Storage Platform F800	83-02-01-60/00 or later
Hitachi Unified Storage VM	73-01-01-00/00 or later
Hitachi Virtual Storage Platform G1000	80-01-01-00/00 or later
Hitachi Virtual Storage Platform G1500	80-05-01-00/00 or later
Hitachi Virtual Storage Platform F1500	80-05-01-00/00 or later
Hitachi Virtual Storage Platform	70-01-01-00/01 or later
Hitachi Universal Storage Platform V/VM	60-01-30-00/00 or later
Hitachi TagmaStore USP/NSC	50-09-37-00/00 or later
Hitachi Freedom Storage Lightning 9980V	21-10-00 or later
Hitachi Freedom Storage Lightning 9960	01-16-00 or later
Hitachi Freedom Storage Lightning 7700E	52-47-xx or later

Supported hardware platforms and operating systems

The following table lists the supported hardware platforms and operating system (OS) compatibility for the Command Control Interface installation environment.

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- All OS service packs, update programs, and patches are supported unless otherwise noted.
- Command Control Interface does not support hardware platforms that are not supported by the listed operating system.

Operating system	Platform
Solaris 9/10/11	SPARC
Solaris 10/11	IA32/x64
OEL6.x (6.2 or later)	IA32/x64
HP-UX 11.1x/11.2x/11.3x	PA-RISC
HP-UX 11.2x/11.3x	IA64
Tru64 UNIX 5.x	Alpha
OpenVMS 8.x (8.3 or later)	IA64
AIX® 6.1	POWER
AIX® 7.1	POWER
z/Linux (SLES 8/9)	zSeries® or S/390® Processor
Windows Server 2008/2008R2	IA32/x64/IA64
Windows Server 2012	x64
Windows Server 2012R2	x64
Windows Server 2016	x64
RHEL 5/ RHEL AP 5	IA32/x64/IA64
RHEL 6	IA32/x64
RHEL 7	IA32/x64
SLES10/11	IA32/x64
SLES12	x64
Ubuntu 14.x (14.04 or later)	x64
Ubuntu 16.x (16.04 or later)	x64

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The following table lists the supported VMs and hardware for the Command Control Interface installation environment.

- All service packs, update programs, and patches of VMs are supported unless otherwise noted.
- Command Control Interface supports an OS listed in the OS compatibility table as a guest OS on which you can install Command Control Interface only when the VM vendor supports the OS.

VM vendor	Product/Version
VMware	ESX Server 2.x (2.5.1 or later)/3.x ESX 3.x/4.x ESXi 3.x/4.x/5.x/6.x
Microsoft	Windows Server 2008/2008R2/2012/2012R2 Hyper-V
IBM®	IBM® VIOS 1.x, VIOS 2.2.0.0. (Support for only AIX® as VIOC)
Oracle	VM Server for SPARC 3.1
HP	HPVM 6.3

New features and important enhancements

#	Description
1	Added support for VSP G130. Target storage systems of the change: VSP G130

2	Supported VSP G130 model type display (indicated in italic below).
	Target storage systems of the change: VSP G130
	`#raidcom get resource -key opt`
	`RS_GROUP  RGID  V_Serial#  V_ID  V_IF  Serial#`
	`meta_resource  0  400001  M850XS  Y  400001`

3	Added a command option to display capacity saving effect of LDEVs by dedupe and compression (indicated in italic below).

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#	Description
	Target storage systems of the change: VSP G1000, G1500; VSP F1500; VSP G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900 `raicom get ldev {-ldev_id <ldev#> … [-cnt <count>] | -grp_opt <group option> -device_grp_name <device group name> [<device name>] | -ldev_list <ldev list option> [-journal_id <journal id> | -pool_id <pool id> | -parity_grp_id <parity group id> | -mp_blade_id <mp#> | -clpr_id <clpr#>]}` ***[-key {software_saving|...}]*** `[{-check_status | -check_status_not} <string> … [-time <time>]] [-tier <tier number>]`

4	Added a column to command output to display DT monitoring cycle (indicated in italic below).
	
	Target storage systems of the change: VSP G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900
	
	`#raidcom get dp_pool -key opt`
	
	`PID POLS MODE STS DAT TNO TL_RANGE TD_RANGE TU_CAP(MB) TT_CAP(MB) T(%) P(%) R(%) B(%) MM` ***MC(h)***
	
	`001 POLN MAN STP VAL 1 00005000 00003000 200000 1000000 80 54 98 40 PM` ***24***
	
	`001 POLN MAN STP VAL 2 00003000 00002000 400000 1000000 80 54 98 30 CM 24`
	
	`001 POLN MAN STP VAL 3 00002000 00002000 600000 1000000 80 54 98 40 PM` ***24***
	
	`002 POLF AUT MON PND 1 - - 500000 1000000 80 54 00 2 PM -`

5	Supported a function for VSP G1000, G1500 and VSP F1500 to automatically add pool volumes to a pool with accelerated compression enabled. Target storage systems of the change: VSP G1000, G1500; VSP F1500 Options that are newly available (indicated in italic below): `raidcom modify pool -pool {<pool ID#> | <pool naming>} { -status {nml| stop_shrinking} | -user_threshold <threshold_1> [<threshold_2>] | -tier <Tier number> [<ratio>][-tier_buffer_rate <%>] | -subscription <%> | -pool_attribute <pool_attribute> | -monitor_mode <Monitor mode> | -blocking_mode <IO blocking mode> | -data_direct_mapping {enable|disable} | -deduplication yes -ldev_id <ldev#>… [-ssids <ssid>…] | -deduplication no | -suspend_tipair {yes | no} | -powersave {spindown -spindown_monitortime <spindown_monitortime>[-poweroff enable poweroff_monitortime <poweroff_monitortime>] |disable}| -delete`

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#	Description
	dsd_volumes} | *-auto_add_poolvol enable* [-password <One Time Password>] | *-auto_add_poolvol disable* [-password <One Time Password>]} Command outputs that are newly available: raidcom get pool [-key <keyword>] [-fx] [-pcap] New command option (indicated in italic below): raidcom add dp_pool {{-pool_id <pool ID#> [-pool_name <pool naming>] | -pool_name <pool naming>[-pool_id <pool ID#>]} | -pool_id <pool ID#> -pool_name <pool naming>} {-parity_grp_id <gno-sgno> [-resource_id <resource group_id>] | -ldev_id <ldev#> …[-cnt <count>] | -grp_opt <group option> -device_grp_name <device group name> [<device name>]} [-user_threshold <threshold_1> [<threshold_2>]] [-suspend_tipair {yes | no}] *[-auto_add_poolvol {enable|disable}]* raidcom add snap_pool {{-pool_id <pool ID#> [-pool_name <pool naming>] | -pool_name <pool naming>[-pool_id <pool ID#>]} | -pool_id <pool ID#> -pool_name <pool naming>}} {-parity_grp_id <gno-sgno> [-resource_id <resource group_id >]| -ldev_id <ldev#> …[-cnt<count>] | -grp_opt <group option> -device_grp_name <device group name> [<device name>]} [-user_threshold <%>] [-thinsnap] *[-auto_add_poolvol {enable|disable}]* New command: raidcom get ssid
6	Added support for servers managed by Storage Advisor Embedded. Target storage systems of the change: VSP G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900 New commands: raidcom add server -server_name <name> -request_id auto raidcom delete server {-server_id <id>|-server_name <name>} -request_id auto raidcom modify server {-server_id <id>|-server_name <name>} -request_id auto {-server_operation {add_host_grp|delete_host_grp} -port <port> [<host group name>]} raidcom get server [-key <keyword> [-server_id <id>|-server_name <name>]] New command option (indicated in italic below): raidcom get host_grp {-port <port> [<host group name>] | -allports} [-key {*server*|…}]

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#	Description
7	Enhanced the syntax check for the `-g` option of the `pairsplit` command. With the enhancement, the command works as follows when two or more parameters are specified for the `-g` option of the `pairsplit` command. Target storage systems of the change: VSP G1000, G1500; VSP F1500; G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900; VSP G200, G400, G600, G800; VSP F400, F600, F800; VSP; HUS VM <When HORCC_CHECK_PAIRSPLIT_GOPTION environment variable is set> The command outputs EX_INVARG error and stops the processing. <When HORCC_CHECK_PAIRSPLIT_GOPTION environment variable is not set> The command outputs a warning message and continues the processing.
8	Enhanced the syntax check for replication command. With the enhancement, the replication command outputs EX_INVARG error and stops the processing when any character codes other than those defined by ASCII are specified for command options or parameters. To enable the syntax check enhancement, the HORCC_CHECK_CHARACTER_CODE environment variable needs to be set. Target storage systems of the change: VSP G1000, G1500; VSP F1500; G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900; VSP G200, G400, G600, G800; VSP F400, F600, F800; VSP; HUS VM

9	Supported commands to set and view system option modes for VSP G200, G400, G600, G800 and VSP F400, F600, F800.
	
	Target storage systems of the change: VSP G200, G400, G600, G800; VSP F400, F600, F800
	
	`raidcom modify system_opt {-system_option_mode {system|<clpr#>} -mode_id <Mode ID> -mode <enable|disable> -password <One Time Password>}`
	
	`raidcom get system_opt -key mode -lpr {system|<clpr#>}`

10	Supported a command option to release host reserve for VSP G200, G400, G600, G800 and VSP F400, F600, F800 (indicated in italic below). Target storage systems of the change: VSP G200, G400, G600, G800; VSP F400, F600, F800 `raidcom modify lun -port <port> [<host group name>] -lun_id {all | <lun#>} {-asymmetric_access_state {optimized | non_optimized} | *-reservation release}*`

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Fixed problems

- Fixed the problem in which the `raidcom add lun` command for Windows Server x64 fails with a segment fault when it is run with the `-device_grp_name <device group name>` option.

  Target storage systems of the change: VSP G1000, G1500; VSP F1500; G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900; VSP G200, G400, G600, G800; VSP F400, F600, F800; VSP; HUS VM

- Fixed the problem in which the following commands cannot be completed if a user who does not have permission to access a resource group to which any of the pool volumes in the storage system belong runs the commands.

  ```
  raidvchkscan -v pidb
  raidcom get pool -key basic
  ```

  Target storage systems of the change: VSP G1000, G1500; VSP F1500; G130, VSP G350, G370, G700, G900; VSP F350, F370, F700, F900; VSP G200, G400, G600, G800; VSP F400, F600, F800

Installation prerequisites

Before using any of the following software, you must install the RAID Manager/LIB that is located in the `../RL` directory on the installation CD.

- RAID management software provided by Hitachi or other vendor
- BMC Enterprise Snapshot software

Documentation

This release includes the following user documentation:

Title	Number and revision	Issue date
Command Control Interface Installation and Configuration Guide	MK-90RD7008-24	June 2018
Command Control Interface Command Reference	MK-90RD7009-37	June 2018
Command Control Interface User Guide	MK-90RD7010-37	June 2018

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