

Command Control Interface Release Notes

Version 01-48-03/03

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About this document

This document (RN-90RD7194-21, October 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.

Getting help

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About this release

This release adds support for quorum disks without using LDEVs and an option to display the data reduction efficiency. This release also provides a modification of the iSCSI Target function for external storage systems as well as an error message modification.

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	01-48-03/03	VSP G1x00, VSP F1500: 80-06-61-00/00 or later VSP G130, G/F350, G/F370, G/F700, G/F900: 88-03-01-x0/00 or later VSP G200, G/F400, G/F600, G/F800: 83-05-25-x0/00 or later VSP: 70-01-01-00/01 or later HUS VM: 73-01-01-00/00 or later
Previous version	01-47-03/05	VSP G1x00, VSP F1500: 80-06-41-00/00 or later VSP G/F350, G/F370, G/F700, G/F900: 88-01-02-x0/00 or later VSP G200, G/F400, G/F600, G/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

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 G130	88-02-01-00/00 or later
Hitachi Virtual Storage Platform G350	88-01-02-20/00 or later
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

Storage system	Minimum microcode/firmware
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.

- 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

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	<p>Added a column to command output to display TCP port number of iSCSI Target (indicated in italic below).</p> <p>Target storage systems of the change: VSP G1x00, VSP F1500; VSP G130, G/F350, G/F370, G/F700, G/F900; VSP G200, G/F400, G/F600, G/F800</p> <pre>#raidcom get external_iscsi_name</pre> <table><tr><th>PORT</th><th>Serial#</th><th>IP_ADDR</th><th>IQN</th><th>WWN(pseudo)</th><th>AMD</th><th>D</th><th>CHAP_user</th></tr><tr><th>Sec</th><th>ISCSI_VP_ID</th><th><i>IP_PORT#</i></th><th></th><th></th><th></th><th></th><th></th></tr><tr><td>CL4-E</td><td>63528</td><td>158.214.135.100</td><td>iqn.z1</td><td>50060e80070a3640</td><td>CHAP</td><td>D</td><td>Win_SQL_EX</td></tr><tr><td>*</td><td>-</td><td><i>3260</i></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CL2-E</td><td>63528</td><td>158.214.135.100</td><td>iqn.z2</td><td>50060e80070a3641</td><td>CHAP</td><td>S</td><td>-</td></tr><tr><td>-</td><td>1</td><td><i>3260</i></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CL2-E</td><td>63528</td><td>158.214.135.102</td><td>iqn.z3</td><td>50060e80070a3642</td><td>CHAP</td><td>S</td><td>-</td></tr><tr><td>-</td><td>1</td><td><i>3260</i></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CL4-E</td><td>63528</td><td>158.214.135.100</td><td>iqn.z2</td><td>50060e80070a3643</td><td>CHAP</td><td>S</td><td>-</td></tr><tr><td>-</td><td>-</td><td><i>3260</i></td><td></td><td></td><td></td><td></td><td></td></tr></table>	PORT	Serial#	IP_ADDR	IQN	WWN(pseudo)	AMD	D	CHAP_user	Sec	ISCSI_VP_ID	<i>IP_PORT#</i>						CL4-E	63528	158.214.135.100	iqn.z1	50060e80070a3640	CHAP	D	Win_SQL_EX	*	-	<i>3260</i>						CL2-E	63528	158.214.135.100	iqn.z2	50060e80070a3641	CHAP	S	-	-	1	<i>3260</i>						CL2-E	63528	158.214.135.102	iqn.z3	50060e80070a3642	CHAP	S	-	-	1	<i>3260</i>						CL4-E	63528	158.214.135.100	iqn.z2	50060e80070a3643	CHAP	S	-	-	-	<i>3260</i>					
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	<p>CL4-E 63528 158.214.135.102 iqn.z3 50060e80070a3644 CHAP S - - 3260</p> <p>CL4-E 63528 158.214.135.102 iqn.z4 50060e80070a3645 NONE S - - 3260</p> <p>CL4-E 63528 158.214.135.102 iqn.z5 50060e80070a3646 NONE S - - 3260</p>
2	<p>Added an option to specify iSCSI name of iSCSI Target and IP address (indicated in italic below).</p> <p>Target storage systems of the change: VSP G1x00, VSP F1500; VSP G130, G/F350, G/F370, G/F700, G/F900; VSP G200, G/F400, G/F600, G/F800</p> <p><code>raidcom check external_iscsi_name [-port <port> <i>[-iscsi_name <external iscsi name> -address <external IP address>] [-iscsi_virtual_port_id <iSCSI virtual port ID>]</i></code></p>
3	<p>Modified the error message displayed when unused IDs cannot be obtained automatically by the <code>raidcom add host_grp</code> and <code>raidcom add lun</code> commands. With the modification, the message below is displayed when unused IDs cannot be obtained automatically.</p> <p>Target storage systems of the change: VSP G1x00, VSP F1500; VSP G130, G/F350, G/F370, G/F700, G/F900; VSP G200, G/F400, G/F600, G/F800; VSP; HUS VM</p> <p><code>raidcom: [EX_RSIDEX] There is no available ID.</code></p>
4	<p>Added support for quorum disks without using LDEVs.</p> <p>Target storage systems of the change: VSP G1x00, VSP F1500; VSP G130, G/F350, G/F370, G/F700, G/F900; VSP G200, G/F400, G/F600, G/F800</p> <p>New commands:</p> <p><code>raidcom add quorum -quorum_id <quorum id> -request_id auto -remote_storage <serial#> <id> [-ldev_id <ldev#>]</code></p> <p><code>raidcom delete quorum -quorum_id <quorum id> -request_id auto</code></p> <p>New command output:</p> <p><code>raidcom get quorum [-quorum_id <quorum id>] [-fx]</code></p>
5	<p>Added a function to display the list of mounted quorum disks to <code>raidcom get quorum</code> command. The support of the function allows <code>-quorum_id <quorum id></code> to be omitted (indicated in italic below).</p> <p>Target storage systems of the change: VSP G1x00, VSP F1500; VSP G130, G/F350, G/F370, G/F700, G/F900; VSP G200, G/F400, G/F600, G/F800</p> <p><code>raidcom get quorum <i>[-quorum_id <quorum id>]</i> [-fx]</code></p>

#	Description
6	<p>Added a command option to display data reduction efficiency (indicated in <i>italic</i> below).</p> <p>Target storage systems of the change: VSP G130, G/F350, G/F370, G/F700, G/F900</p> <pre>raidcom get pool [-key {<i>efficiency</i> ...}] [-fx] [-pcap] [-time_zone <time zone>]</pre> <pre>raidcom get system [-key {<i>efficiency</i> ...}] [-time_zone <time zone>]</pre>

Fixed problems

None.

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-90RD7009-38	October 2018
Command Control Interface User Guide	MK-90RD7010-38	October 2018

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