

Hitachi Compute Systems Manager

8.1.2-01 Release Notes

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About this document

This document (RN-91HC198-33, February 2015) provides late-breaking information about the Hitachi Compute Systems Manager Software 8.1.2-01. 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 the Hitachi Compute Systems Manager Software.

Getting help

The Hitachi Data Systems Customer Support staff is available 24 hours a day, seven days a week. To reach us, please visit the support website at <http://www.hds.com/services/support/> for current telephone numbers and other

contact information. If you purchased this product from an authorized HDS reseller, contact that reseller for support.

About this release

This release resolves a known problem.

Product package contents

Table 1 Software and Documents in Product Package

Medium	CD-ROM	Revision	Release Type	Service Pack Prerequisite
Software	Hitachi Compute Systems Manager (#1)	8.1.2-01	Full Package	-
Documents	<i>Hitachi Command Suite Compute Systems Manager User Guide</i>	MK-91HC194-11		
	<i>Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide</i>	MK-91HC195-13		
	<i>Hitachi Command Suite Compute Systems Manager CLI Reference Guide</i>	MK-91HC196-02		
	<i>Hitachi Command Suite Compute Systems Manager Messages</i>	MK-91HC197-12		
	<i>Hitachi Command Suite Messages</i>	MK-90HC178-18		

(#1) HCSM with the HCSM Plug-in Trial Pack is installed automatically. Explore all HCSM plug-ins such as N+M Cold Standby and Logical Partitioning Manager free for 120 days. Purchase Permanent plug-in licenses to continue to use a specific plug-in or add capacity to manage additional resources.

New features and important enhancements

For 8.1.2-01

None

For 8.1.2-00

No.	New Features and Enhancements	Applied products	Applied OS
1	Hitachi Compute Systems Manager now includes read-only support for Guest NUMA.	Hitachi Compute Systems Manager	Windows Linux

New features and important enhancements

For 8.1.1-00

No.	New Features and Enhancements	Applied products	Applied OS
1	Hitachi Compute Systems Manager can now manage CB2500 chassis.	Hitachi Compute Systems Manager	Windows Linux
2	Hitachi Compute Systems Manager is compatible with CB500 chassis and CB2500 chassis using IPv6.	Hitachi Compute Systems Manager	Windows Linux
3	Hitachi Compute Systems Manager can now run on Red Hat Enterprise Linux 7.0.	Hitachi Compute Systems Manager	Linux
4	Full support for Single Root I/O Virtualization (SR-IOV).	Hitachi Compute Systems Manager	Windows Linux
5	The all-in-one installer now supports installing the Hitachi Automation Director.	Hitachi Compute Systems Manager	Windows

For 8.1.0-00

No.	New Features and Enhancements	Applied products	Applied OS
1	Hitachi Compute Systems Manager now supports Red Hat Enterprise Linux 7.0 management targets.	Hitachi Compute Systems Manager GUI	Windows Linux
2	Hitachi Compute Systems Manager now includes Multi-tenancy support.	Hitachi Compute Systems Manager GUI	Windows Linux

For 8.0.1-00

No.	New Features and Enhancements	Applied products	Applied OS
1	Read-only support for Single Root I/O Virtualization (SR-IOV).	Hitachi Compute Systems Manager GUI	Windows Linux

For 8.0.0-01

None

For 8.0.0-00

No.	New Features and Enhancements	Applied products	Applied OS
1	Enhanced usability through layout standardization and modernized color scheme.	Hitachi Compute Systems Manager GUI	Windows Linux
2	HCSM can now run on Linux operating systems.	Hitachi Compute Systems Manager	Linux

3	HCSM now supports managing resources using a Linux-based CLI.	Hitachi Compute Systems Manager CLI	Windows Linux
4	Deployment Manager now supports snapshot and deployment for Windows Server 2012 R2.	Hitachi Compute Systems Manager	Windows

System requirements

This section describes the Compute Systems Manager system requirements.

Management server requirements

This section describes the management server requirements.

Hardware Requirements

Installation of Compute Systems Manager requires a computer that satisfies the following hardware requirements.

Computer requirements

The following table describes the management server computer requirements.

Table 2 Management server computer requirements

Item	Windows
Processor	Minimum: Dual-Core Processor Recommended: Quad-Core Processor
Physical memory	Minimum: 2 GB Recommended: 4GB Note: If Compute Systems Manager and other software products are used simultaneously, the amount of the physical memory must be equal to the total memory size of all the software products.
Disk space	Minimum: New installation(Windows): When Deployment Manager is used : 17.6 GB When Deployment Manager is not used : 11.1 GB Overwrite/Upgrade installation(Windows): When Deployment Manager is used : 0.9 GB When Deployment Manager is not used : 0.7 GB New installation(Linux): 5.0 GB

System requirements

Item	Windows
	Overwrite/Upgrade installation(Linux): 0.7 GB Recommended: 20.5 GB
Monitor	XGA (1024 x 768 resolution) or higher
LAN card	10/100 Ethernet LAN card If the computer and the LAN cable are compatible with Gigabit Ethernet, you can use a Gigabit-class card.
DVD drive	Required for installation.

Virtual memory requirements

If adequate virtual memory is not allocated on the management server, the Hitachi Command Suite products and any other installed programs might become unstable or might not start. To ensure stable operation of the management server, in addition to the virtual memory required for the operating system and other programs, the management server also requires additional virtual memory. The following table shows the virtual memory requirements for each product and Common Component in this version.

Table 3 Virtual memory requirements for each product

Product name	Virtual memory requirement (MB)
Compute Systems Manager	When Deployment Manager is used : 6,400 When Deployment Manager is not used : 5,000
Device Manager ^{#1} Tiered Storage Manager Replication Manager ^{#3}	8,200
Tuning Manager ^{#2}	4,000
Global Link Manager	1,000
Automation Director	7,000
Hitachi NAS Manager ^{#4}	512
Hitachi File Services Manager ^{#4}	1,024
Storage Navigator Modular 2 ^{#4}	200
Common Component	2,501



Note: If you plan to install Compute Systems Manager, and if 1,000 MB of virtual memory is already used by the operating system and other programs, you must secure more than 8,501 MB of virtual memory.

5,000 (for Compute Systems Manager) + 2,501 (for Common Component) + 1,000 (already used virtual memory) = 8,501

#1:

If the Device Manager agent is installed on the management server, you must allocate additional virtual memory for it. Specify a value for the virtual memory of the Device Manager agent in the `server.agent.maxMemorySize` property.

#2:

If the Tuning Manager agent is installed on the management server, you must allocate additional virtual memory for it. For details on virtual memory requirements, see the description of memory requirements in the *Hitachi Command Suite Tuning Manager Installation Guide*.

#3:

If Replication Manager Application Agent is installed on the management server, you must allocate additional virtual memory for it. For details on virtual memory requirements, see the *Hitachi Command Suite Replication Manager Configuration Guide*.

#4:

The virtual memory requirements listed in the table are for Hitachi NAS Manager v6.4, Hitachi File Services Manager v3.0.1 and Storage Navigator Modular 2 v11.52. For details on the latest virtual memory requirements, see the documentation for each product.

Disk space requirements

Table 4 Disk space requirements (Windows)

Install type	Item	Default installation Folder	Required disk space
New	Installation folder for Common Component	<code>program-files-folder\HiCommand\Base64^{#1}</code>	When using Deployment Manager: 2,400MB
	Installation folder for Compute Systems Manager	<code>program-files-folder\HiCommand\ComputeSystemsManager</code>	
	Storage folder for Common Component ^{#2} database	<code>program-files-folder\HiCommand\database\x64\SYS</code>	1,000MB
		<code>program-files-folder\HiCommand\database\x64\BASE</code>	

System requirements

Install type	Item	Default installation Folder	Required disk space
	Storage folder for Compute Systems Manager database	<i>program-files-folder</i> \HiCommand\database\x64\HCSM	1,800MB
	Temporary folder ^{#3}	Folder specified by the environment variable <i>TMP</i>	6,200MB
	Installation folder for Deployment Manager	C:\Deploy	200MB
	Installation folder for Deployment Manager SQL Server	Folder used by SQL Server	6,000MB
Overwrite /Upgrade	Installation folder for Compute Systems Manager	<i>program-files-folder</i> \HiCommand\ComputeSystemsManager	When using Deployment Manager: 900MB Without Deployment Manager: 700MB
	Temporary folder ^{#3}	Folder specified by the environment variable <i>TMP</i>	10MB

Table 5 Disk space requirements (Linux)

Install type	Item	Default installation Directory	Required disk space
New	Installation directory for Common Component	/opt/HiCommand/Base64 ^{#1}	2,100MB
		/opt/HiCommand/ComputeSystemsManager	
	Installation directory for Compute Systems Manager	/opt/HiCommand/CSMUninstall	1,000MB
		/var/opt/HiCommand/database/x64/SYS	
	Storage directory for Common Component ^{#2} database	/var/opt/HiCommand/database/x64/BASE	1,800MB
		/var/opt/HiCommand/database/x64/HCSM	
Temporary directory ^{#3}	/tmp	100MB	
	/var/tmp		
Overwrite /Upgrade	Installation directory for Compute Systems Manager	/opt/HiCommand/ComputeSystemsManager	700MB

System requirements

Install type	Item	Default installation Directory	Required disk space
	Manager	/opt/HiCommand/CSMUninstall	
	Temporary directory ^{#3}	/tmp	10MB
		/var/tmp	



Note:

- Note that the *program-files-folder*\HiCommand(Windows) or /opt/HiCommand(Linux) portion of the path can be changed. Read this variable as the directory specified during installation.
- In Windows, *Program-files-folder* are the folders specified in the Windows environment variable %ProgramFiles%.

#1:

If you are installing the Hitachi Command Suite in an environment in which the Common Component is already installed, install it on the same drive.

#2:

This is not required if a Hitachi Command Suite product v4.0 or later is already installed.

#3:

This is required only during installation and is unnecessary after installation.

Required drive space for backing up when installing v8

If you are installing any Hitachi Command Suite(#) v8 software on a system that is currently running v7 or earlier software, the first installation of any v8 product requires backing up all of the data before transferring it to the v8 environment. Therefore, the free space listed here is required in addition to the space listed in the tables 4 and 5.

(#)The following v7 or earlier products require that you back up data before installing any v8 Hitachi Command Suite product:

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

Notes:

Do not delete data back up until you upgrade all existing software to v8.

After you finish all v8 upgrades, delete the backup data by removing the following files and folders:

- Remove the file defined as the "file" item and the folder defined as the exportdir item in the following file: *<Program-Files>\HiCommand\backup\exportpath.txt*
- Remove the exportpath.txt file.

The formula for calculating the required free disk space is as follows:

The formula for calculating the required free space for backing up is as follows:

$$(<Total-database-size\ of_H-C-S-products> + 2.5GB) \times 2$$

It is only necessary to preserve the free space until after the first v8 installer finishes because the backup (including HCSM) already exists.

Calculation example: If you are currently running Systems Manager, Device Manager, Tiered Storage Manager and Replication Manager software on your system, you calculate the required by accumulating the capacities of the following directories:

- Database directory of Compute Systems Manager
- Database directory of Device Manager
- Database directory of Tiered Storage Manager
- Database directory of Replication Manager
- Database directories of HCS Common component: BASE and SYS directories.

Software requirements

The Hitachi Command Suite installation requires a computer that meets the following software requirements.

Operating system requirements

Table 6 Usable management server operating systems (Windows)

OS Name	OS Version	SP	Architecture
Windows Server 2008 R2 (#1)(#3)	Standard Enterprise Datacenter	SP1	x64
Windows Server 2012 (#2) (#3)	Standard Datacenter	No SP	x64
Windows Server 2012 R2 (#2) (#3)	Standard Datacenter	No SP	x64

(#1) Server core is not supported.

(#2) Server core and Minimal Server Interface is not supported.

(#3) Only HCSM distributed by Hitachi, Ltd. , not Hitachi Data Systems, supports Japanese OS.

Table 7 Usable management server operating systems (Linux)

OS Name	OS Version	SP	Architecture	Prerequisite package(#1)
Red Hat Enterprise Linux Server(#2)	6	-	x64	-
	6.1	-	x64	-
	6.2	-	x64	-
	6.3	-	x64	-
	6.4	-	x64	-
	6.5	-	x64	- upstart-0.6.5-13.el6_5.3.x86_64.rpm
	6.6	-	x64	-
7.0	-	x64	- tcsh-6.18.01-7.el7.x86_64.rpm - glibc-2.17-55.el7.x86_64.rpm - glibc-2.17-55.el7.i686.rpm - libgcc-4.8.2-16.el7.x86_64.rpm - libstdc++-4.8.2-16.el7.x86_64.rpm - nss-softokn-freebl-3.15.4-2.el7.x86_64.rpm - alsa-lib-1.0.27.2-3.el7.x86_64.rpm - perl-5.16.3-283.el7.x86_64.rpm - net-tools-2.0-0.17.20131004git.el7.x86_64.rpm	

You cannot select the Minimum package option when installing Red Hat. If you select this option, HCSM cannot function properly because there is a lack of required functionality. Note that HCSM is tested using the default OS installation packages.

(#1) The RPM package(s) shown in the table (or a later version) must be applied. You can check the latest version of the RPM package on the Web site for your operating system.

(#2) Deployment Manager Plug-in is not supported.

Prerequisite software for Deployment Manager

The following table lists the prerequisite software for Deployment Manager.

Table 8 Deployment Manager Prerequisite programs

OS Name	Prerequisite programs
Windows Server 2008 R2	<ul style="list-style-type: none"> - .NET Framework 3.5.1 (#3) - .NET Framework 4.0 (#1) (#6) - Windows Installer 5.0 (#3) - SQL Server 2012 Express (#2) (#7) - Internet Information Services 7.5 (#4)
Windows Server 2012	<ul style="list-style-type: none"> - .NET Framework 3.5.1 (#3) - .NET Framework 4.5 (#3) - Windows Installer 5.0 (#3) - SQL Server 2012 Express (#2) (#7) - Internet Information Services 8 (#4)
Windows Server 2012 R2	<ul style="list-style-type: none"> - .NET Framework 3.5.1 (#3) - .NET Framework 4.5 (#3) - Windows Installer 5.0 (#3) - SQL Server 2012 Express (#2) (#7) - Internet Information Services 8.5 (#4)

(#1) This software is located on the DVD media.

(#2) This software is located on the DVD media and installed automatically during the Deployment Manager installation.

(#3) This software is included with the operating system.

(#4) If you install Internet Information Services (IIS) 7.5, "Static Content", "ASP.NET", "IIS Management Console", and "IIS 6 Metabase Compatibility" must be enabled. If you install IIS 8.0 or 8.5, "Static Content", "ASP.NET 4.5", "IIS Management Console", and "IIS 6 Metabase Compatibility" must be enabled.

(#5) CCATS number G059284 is assigned for .NET Framework 3.5 SP1 (Mass Market).

(#6) CCATS number G076405 is assigned for .NET Framework 4.0 (Mass Market).

(#7) CCATS number G065307 is assigned for SQL Server 2012 Express (Mass Market).

Installed software

The following software is installed automatically during the HCSM installation. When you remove the HCSM software, the following software is not removed. After the removing the HCSM software, you must manually delete the following software if it is no longer required for other components.

	Software	Type	Version	Remarks
For Windows	Visual C++ 2008 SP1 Redistributable Package	x86	9.0.30729.4148	Installed with Deployment Manager only.
			9.0.30729.17	
		x64	9.0.30729.17	
	Visual C++ 2010 SP1 Redistributable Package	x86	10.0.40219.1	
			x64	10.0.40219.1

Related Software

Oracle JDK

You can change the version of Oracle JDK that you use with HCSM after installation. HCSM supports the following Oracle JDK versions:

JDK 7 (1.7.0)

JDK 8 (1.8.0)

External authentication (LDAP) server

The following table lists the supported Authentication methods for using an external authentication server.

Table 9 Requirements when linking to an external authentication server

Authentication method	Requirements
LDAP	The software in use must comply with LDAP v3.

HCS Products

Before starting HCSM services after upgrading to v8, you must ensure that you upgrade all HCS products running on the same system to v8 as follows:

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

Device Manager

When you install HCSM in an environment that uses HCS products, you can centrally manage and operate storage and server resources. If you install HCSM on the same server as HCS, management operation efficiency is improved because host information for resources managed by HCSM and by the Hitachi Device Manager is automatically synchronized.

Management target requirements

Hardware Requirements

The following table lists the supported firmware versions for Hitachi Compute Blades and Hitachi Compute Rack servers.

Table 10 Firmware versions - Hitachi Compute Blade and Rack-mounted Servers

Hardware name		Management module version
Hitachi Compute Blade 500	SVP-FW	A0170 or later (A0205 or later #1) (A0240 or later #2, #3, #4)
	LP-FW	01-80 or later
Hitachi Compute Blade 2000	SVP-FW	A0365 or later (A0375 or later #1,#2)
	LP-FW	59-60 or later (59-70 or later #1,#2)
Hitachi Compute Blade 2000 MP	SVP-FW	A0365 or later (A0375 or later #1,#2)
	LP-FW	79-60 or later (79-70 or later #1,#2)
Hitachi Compute Blade 2500	SVP-FW	A0105 or later (A0110 or later #2,#3, #4)
	LP-FW	02-00 or later
Hitachi Compute Rack	CR220HM CR220SM CR210HM	09.48 or later

(#1) If you display SR-IOV, use this firmware.

(#2) If you change SR-IOV settings, use this firmware.

(#3) If you manage chassis via IPv6 protocol, use this firmware.

(#4) If you use Guest NUMA function, use this firmware.

Software requirements

This section provides system requirements for Management targets.

Operating system requirements

The following table lists the supported operating systems for management targets.

Table 11 Supported management target OSs (Windows)

OS Name	OS Version	SP	Architecture
Windows Server 2003(#5)	Standard Edition Enterprise Edition Datacenter Edition	SP2	x86
	Standard x64 Edition Enterprise x64 Edition Datacenter x64 Edition	SP2	x64
Windows Server 2003 R2(#5)	Standard Edition Enterprise Edition Datacenter Edition	SP2	x86
	Standard x64 Edition Enterprise x64 Edition Datacenter x64 Edition	SP2	x64
Windows Server 2008 (#1) (#3)	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	x86
		SP1	x86
		SP2	x86
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64
		SP1	x64
		SP2	x64
Windows Server 2008 R2 (#1) (#3) (#4)	Standard Enterprise Datacenter	No SP	x64
		SP1	x64
Windows Server 2012 (#2) (#3) (#4)	Standard Datacenter	No SP	x64
Windows Server 2012 R2 (#2) (#3) (#4)	Standard Datacenter	No SP	x64

(#1) Server core isn't supported.

(#2) Server core and Minimal Server Interface is not supported.

(#3) Master image deploy and snapshot is not supported in Hyper-V environments.

(#4) Deployment Manager functions are not supported in native VHD boot environments.

(#5) Linux version HCSM is not supported.

Table 12 Supported management target OSs (Linux)

OS Name	OS Version	SP	Architecture	Prerequisite package
Red Hat Enterprise Linux Red Hat Enterprise Linux Advanced Platform	5	-	x86	iscsi-initiator-utils device-mapper sysstat
			x64	
	5.1	-	x86	iscsi-initiator-utils sysstat
			x64	
	5.2	-	x86	
			x64	
	5.3	-	x86	
			x64	
	5.4	-	x86	
			x64	
	5.5	-	x86	
			x64	
	5.6	-	x86	sysstat
			x64	
	5.7	-	x86	
			x64	
	5.8	-	x86	
			x64	
5.9	-	x86		
		x64		
5.10	-	x86		
		x64		
5.11	-	x86		
		x64		
6.0	-	x86	iscsi-initiator-utils pciutils device-mapper-multipath sysstat samba-common dmidecode nfs-utils smartmontools	
		x64		
6.1	-	x86	iscsi-initiator-utils pciutils device-mapper-multipath sysstat samba-common nfs-utils smartmontools	
		x64		
6.2	-	x86		
		x64		
6.3	-	x86		
		x64		
6.4	-	x86		
		x64		
6.5	-	x86		
		x64		
6.6	-	x86		
		x64		

System requirements

OS Name	OS Version	SP	Architecture	Prerequisite package
	7.0	-	x64	net-tools iscsi-initiator-utils pciutils device-mapper-multipath bzip2 sysstat samba-common nfs-utils smartmontools
SUSE Linux Enterprise Server (#1)	11	No SP	x86	open-iscsi sysstat nfs-kernel-server
			x64	
		SP1	x86	
			x64	
		SP2	x86	
			x64	
SP3	x86			
	x64			
	12	No SP	x64	sysstat
Oracle Enterprise Linux (#2)	5.5	-	x86	iscsi-initiator-utils sysstat
			x64	
Oracle Linux (#2)	6	-	x86	iscsi-initiator-utils pciutils device-mapper-multipath sysstat samba-common dmidecode nfs-utils smartmontools
			x64	
	6.1	-	x86	
			x64	
	6.2	-	x86	
			x64	
	6.3	-	x86	
			x64	
	6.4	-	x86	
			x64	
6.5	-	x86		
		x64		
6.6	-	x86		
		x64		
	7.0	-	x64	net-tools iscsi-initiator-utils pciutils device-mapper-multipath bzip2 sysstat samba-common nfs-utils smartmontools

You cannot select the Minimum package option when installing Linux. If you select this option, HCSM cannot function properly because there is a lack of required functionality. Note that HCSM is tested using the default OS installation packages.

(#1) Only Full Sector is supported for Deployment Manager System-level Backup and Snapshot.

(#2) Deployment Manager is not supported.

Table 13 Supported management target OSs (Solaris)

OS Name	OS Version	Architecture	SP
Solaris (#1)(#2)(#3)	10	x64	1/13(10.11)
	11.1	x64	-

Note that HCSM is tested using the default OS installation packages.

(#1) Master image deploy and snapshot is not supported.

(#2) Only Full Sector is supported in System-level Backup.

(#3) Deployment Manager's functions are supported only LPAR or VM environment.

Table 14 Supported management target OSs (VMware ESX/ESXi)

OS Name	OS Version	Update	Architecture
VMware ESXi (#1)	4.1	update1 update2	-
	5.0	no update update1 update2 update3	-
	5.1	no update update1 update2	-
	5.5	no update update1 update2 update3	-
VMware ESX	4.1	update1 update2	-

(#1) VMware vSphere Hypervisor (free edition) is not supported.

GUI requirements

Compute Systems Manager GUI requirements

Table 15 and Table 16 list the supported operating systems and Web browsers for using this version of the Compute Systems Manager GUI. Adobe Flash Player 10 (10.1 or later) is required for all browsers.

JRE 6.0 Update 29 or later is required to manage the Hitachi Compute Blade Server family. For details, refer to the following Hitachi Compute Blade Server documents:

- Hitachi Compute Blade 500 Series Web Console User's Guide
- Hitachi Compute Blade 500 Series Remote Console User's Guide
- Hitachi Compute Blade 2000 User's Guide
- Hitachi Compute Blade 2500 Series Management Module User Guide

JRE 7 (Update 2 or later) is required to manage the Hitachi Compute Rack Server family. For details, refer to the following Hitachi Compute Rack Server documents:

System requirements

- Hitachi Compute Rack 210H/220H Remote Management User's Guide
- Hitachi Compute Rack 220S Remote Management User's Guide

Table 15 Environment for using GUI (Windows)

OS Name	OS Version	SP	Architecture	Web browser
Windows Server 2008 (#1)	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	x86	IE9 or later
		SP1	x86	IE9 or later
		SP2	x86	IE9 or later
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64	IE9 or later
		SP1	x64	IE9 or later
		SP2	x64	IE9 or later
Windows Server 2008 R2 (#1)	Standard Enterprise Datacenter	No SP	x64	IE9 or later
		SP1	x64	IE9 or later
Windows Server 2012 (#2)	Standard Datacenter	No SP	x64	IE10 or later(#3)
Windows Server 2012 R2 (#2)	Standard Datacenter	No SP	x64	IE11 or later(#3)
Windows Vista	Business Edition Enterprise Edition Ultimate Edition	No SP	x86	IE9 or later
			x64	IE9 or later
		SP1	x86	IE9 or later
			x64	IE9 or later
		SP2	x86	IE9 or later
			x64	IE9 or later
Windows 7	Professional Enterprise Ultimate	No SP	x86	IE9 or later
			x64	IE9 or later

System requirements

OS Name	OS Version	SP	Architecture	Web browser
Windows Server 2008 (#1)	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	x86	IE9 or later
		SP1	x86	IE9 or later
		SP2	x86	IE9 or later
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64	IE9 or later
		SP1	x64	IE9 or later
		SP2	x64	IE9 or later
Windows Server 2008 R2 (#1)	Standard Enterprise Datacenter	No SP	x64	IE9 or later
		SP1	x64	IE9 or later
Windows Server 2012 (#2)	Standard Datacenter	No SP	x64	IE10 or later (#3)
Windows Server 2012 R2 (#2)	Standard Datacenter	No SP	x64	IE11 or later (#3)
		SP1	x86	IE9 or later
			x64	IE9 or later
Windows 8	Windows 8 Windows 8 Pro Windows 8 Enterprise	No SP	x86	IE10 or later (#3)
			x64	IE10 or later (#3)
Windows 8.1	Windows 8.1 Windows 8.1 Pro Windows 8.1 Enterprise	No SP	x86	IE11 or later (#3)
			x64	IE11 or later (#3)

(#1) Server core is not supported.

(#2) Server core and Minimal Server Interface is not supported.

(#3) Metro Version is not supported.

Table 16 Environment for using GUI (Linux)

OS Name	OS Version	SP	Architecture	GUI
Red Hat Enterprise Linux Red Hat Enterprise Linux Advanced Platform	5	-	x86	Firefox ESR17 (#1)
	5.1	-	x86	Firefox ESR17 (#1)
	5.2	-	x86	Firefox ESR17 (#1)
	5.3	-	x86	Firefox ESR 17 (#1)
	5.4	-	x86	Firefox ESR17 (#1)
	5.5	-	x86	Firefox ESR17 (#1)
	5.6	-	x86	Firefox ESR17 (#1)
	5.7	-	x86	Firefox ESR17 (#1)
	5.8	-	x86	Firefox ESR17 (#1)
	5.9	-	x86	Firefox ESR17 (#1)
	5.10	-	x86	Firefox ESR17 (#1)
	6	-	x86,x64	Firefox ESR24 and ESR31
	6.1	-	x86,x64	Firefox ESR17,ESR24 and ESR31 (#1)
	6.2	-	x86,x64	Firefox ESR17,ESR24 and ESR31 (#1)
	6.3	-	x86,x64	Firefox ESR17,ESR24 and ESR31 (#1)
	6.4	-	x86,x64	Firefox ESR17,ESR24 and ESR31 (#1)
	6.5	-	x86,x64	Firefox ESR24 and ESR31
6.6	-	x86,x64	Firefox ESR31	
7.0	-	x64	Firefox ESR31	
SUSE Linux Enterprise Server	11	No SP	x86	Firefox ESR17 (#1)
		SP1	x86	Firefox ESR17 and ESR24 (#1)
		SP2	x86	Firefox ESR17 and ESR24 (#1)
		SP3	x86	Firefox ESR24 and ESR 31
			X64	Firefox ESR 31

(#1) If you are using Firefox ESR 17, you must use the latest version. If you use an earlier version, the behavior when executing a full text search is unpredictable.

Compute Systems Manager CLI requirements

Platforms for Compute Systems Manager CLI and the Java Runtime Environment

Table 17 and Table 18 lists platforms on which the Compute Systems Manager CLI runs and the supported Java Runtime Environment (JRE) versions.

Table 17 Environment for using Compute Systems Manager CLI (Windows)

OS Name	OS Version	SP	Architecture	Java Runtime Environment
Windows Server 2008 (#1)	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	x86	JRE 6.0, 7.0
		SP1	x86	JRE 6.0, 7.0
		SP2	x86	JRE 6.0, 7.0, 8.0
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64	JRE 6.0, 7.0
		SP1	x64	JRE 6.0, 7.0
		SP2	x64	JRE 6.0, 7.0, 8.0
Windows Server 2008 R2 (#1)	Standard Enterprise Datacenter	No SP	x64	JRE 6.0, 7.0
		SP1	x64	JRE 6.0, 7.0, 8.0
Windows Server 2012 (#2)	Standard Datacenter	No SP	x64	JRE 6.0, 7.0, 8.0
Windows Server 2012 R2 (#2)	Standard Datacenter	No SP	x64	JRE 6.0, 7.0, 8.0
Windows Vista	Business Edition Enterprise Edition Ultimate Edition	No SP	x86	JRE 6.0, 7.0
			x64	JRE 6.0, 7.0
		SP1	x86	JRE 6.0, 7.0
			x64	JRE 6.0, 7.0
		SP2	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
Windows 7	Professional Enterprise Ultimate	No SP	x86	JRE 6.0, 7.0
			x64	JRE 6.0, 7.0
		SP1	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
Windows 8	Windows 8 Windows 8 Pro Windows 8 Enterprise	No SP	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
Windows 8.1	Windows 8.1 Windows 8.1 Pro Windows 8.1 Enterprise	No SP	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0

(#1) Server core is not supported.

(#2) Server core and Minimal Server Interface is not supported.

Table 18 Environment for using Compute Systems Manager CLI(Linux)

OS Name	OS Version	SP	Architecture	Java Runtime Environment
Red Hat Enterprise Linux	6	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.1	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.2	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.3	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.4	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.5	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
	6.6	-	x86	JRE 6.0, 7.0, 8.0
			x64	JRE 6.0, 7.0, 8.0
7.0	-	x64	JRE 6.0, 7.0, 8.0	

License keys

You must register Plug-in licenses to use specific HCSM functions.

Firmware levels

None

Resolved problems

From 8.1.2-00 to 8.1.2-01

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: There are vulnerabilities with multiple cross-site scripting in the HCSM.	Compute Systems Manager SD-EN-HCSM-100	Windows Linux

From 8.1.1-00 to 8.1.2-00

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: Modifying a credential for managing Compute Blade/Compute Rack fails with an unexpected error (KASV40001-E).	Compute Systems Manager SD-EN-HCSM-098	Windows Linux
2	The following problem has been corrected: Physical processor numbers that are reserved for assignment to logical processors are unintentionally changed on the processor configuration screen for an LPAR.	Compute Systems Manager SD-EN-HCSM-094	Windows Linux
3	The following problem has been corrected: If a resource discovery per IP address takes a long time, the discovery task fails with an unexpected error (KASV00028-E).	Compute Systems Manager SD-EN-HCSM-095	Windows Linux
4	The following problem has been corrected: If a resource discovery is performed for an IP address range to which both Linux/Solaris and Hitachi Compute Blade/Rack are specified for the authentication information, the discovery fails with the KASV30042-E error.	Compute Systems Manager SD-EN-HCSM-097	Windows Linux
5	The following problem has been corrected: Incorrect numbers might be displayed for the LPARs to which dedicated NICs or dedicated FCs that are managed by LPAR Manager are assigned.	Compute Systems Manager	Windows Linux
6	The following problem has been corrected: An unexpected error (KASV40001-E) might occur on the Edit LPAR Memory Settings screen.	Compute Systems Manager	Windows Linux
7	The following problem has been corrected: A disk configuration selected in a profile on the Backup System-level Images or the Take a Snapshot wizard is ignored and a different disk configuration is erroneously selected on the successive profile screen.	Compute Systems Manager	Windows Linux
8	The following problem has been corrected:	Compute Systems	Windows

Resolved problems

	A disk configuration selected in a profile on the Restore System-level Images or the Deploy Master Image wizard is ignored and a different disk configuration is erroneously selected on the successive profile screen.	Manager	Linux
9	The following problem has been corrected: An LPAR selected in the Cold Migrate Plan screen is ignored and a different LPAR is erroneously selected on the successive Select LPAR screen.	Compute Systems Manager	Windows Linux
10	The following problem has been corrected: A blade selected in the Enable Logical Partitioning Plan screen is ignored and a different blade is erroneously selected on the successive Select Blade screen.	Compute Systems Manager	Windows Linux
11	The following problem has been corrected: A deployment template selected in the Deploy Master Image screen is ignored and a different deployment template is erroneously selected on the successive Edit Deployment Profile screen.	Compute Systems Manager	Windows Linux

From 8.1.0-00 to 8.1.1-00

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: The management-target chassis disappears from the HCSM window, and operations run on that chassis or on a resource (server, LPAR Manager, or LPAR) on that chassis fail with the message KASV00028-E, KASV10108-E, or KASV10236-E.	Compute Systems Manager SD-EN-HCSM-086	Windows Linux
2	The following problem has been corrected: An upgrade Installation cannot run for Deployment Manager v8 or later.	Compute Systems Manager SD-EN-HCSM-085	Windows
3	The following problem has been corrected: While N+M Cold Standby tasks are running, tasks for other blades in the same chassis or for LPARs on other blades must wait and cannot start immediately.	Compute Systems Manager SD-EN-HCSM-091	Windows Linux
4	The following problem has been corrected: The number of alerts related to the LPAR manager and LPARs might not be added to the Top 3 Resources with Alerts graph in the dashboard.	Compute Systems Manager	Windows Linux
5	The following problem has been corrected: When an N+M failover task runs for a single active blade multiple times, failback to the active blade fails.	Compute Systems Manager	Windows Linux
6	The following problem has been corrected: In the Dashboard, the number of resources on which alerts occurred might be less than the actual number.	Compute Systems Manager	Windows Linux

Resolved problems

7	The following problem has been corrected: An automated N+M Cold Standby test for a blade hosting more than one LPAR fails with the KASV00200-E or the KASV00224-E error.	Compute Systems Manager SD-EN-HCSM-092	Windows Linux
8	The following problem has been corrected: Refreshing information of an LPAR having an assigned dedicated NIC causes a failure of a power operation for a host, or an automated N+M Cold Standby test.	Compute Systems Manager SD-EN-HCSM-093	Windows Linux
9	The following problem has been corrected: The task for shutting down or rebooting a host times out after a time (period) that is different from the maximum allotted time specified on the plan screen.	Compute Systems Manager SD-EN-HCSM-087	Windows Linux
10	The following problem has been corrected: The task to reboot the operating system of a host times out after a time (period) that is different from the maximum allotted time specified on the plan screen.	Compute Systems Manager SD-EN-HCSM-088	Windows Linux
11	The following problem has been corrected: The default value for the maximum allotted time for the task to power on a server is different from the value specified on the Timeout Settings screen.	Compute Systems Manager SD-EN-HCSM-089	Windows Linux
12	The following problem has been corrected: The default value for the maximum allotted time for the task to shut down or reboot the host operating system is different from the time specified in the system settings.	Compute Systems Manager SD-EN-HCSM-090	Windows Linux
13	The following problem has been corrected: If the information about an LPAR on a CB520X blade is output to a CSV file, an incorrect USB status might be stored in the file.	Compute Systems Manager	Windows Linux
14	The following problem has been corrected: The numbers of chassis in the On and Unconnected status might be incorrect in the Resource Status window on the Dashboard tab.	Compute Systems Manager	Windows Linux
15	The following problem has been corrected: When JDK 7 (1.7.0 or a later) is used on the management server, an unexpected error (KASV40001-E) occurs in the display of the host performance data.	Compute Systems Manager	Windows Linux
16	The following problem has been corrected: A Power On task for a server times out after it overruns the allotted time that is specified on the Power On Plan screen.	Compute Systems Manager SD-EN-HCSM-084	Windows Linux

Resolved problems

From 8.0.1-00 to 8.1.0-00

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: LPAR migration cannot run due to the installation position of the NIC specified in the migration path (KASV31575-E).	Compute Systems Manager SD-EN-HCSM-083	Windows Linux
2	The following problem has been corrected: If Solaris in a multipath configuration is monitored, the Disk Load from the performance information is not displayed.	Compute Systems Manager	Windows Linux
3	The following problem has been corrected: If an upgrade installation from v7 to v8 or a new installation does not end normally, installer log files remain in the root directory of the operating system.	Compute Systems Manager	Windows Linux
4	The following problem has been corrected: An Assign or Unassign action on a USB device for which "Dedicaged" is set for LPAR, fails with the error message KASV00028-E or KASV00577-E.	Compute Systems Manager	Windows Linux
5	The following problem has been corrected: If you enter an installation path name that ends with a forward slash (/) in the Linux installer, the path is listed as invalid, and the error message KASV72010-E is displayed.	Compute Systems Manager	Linux

From 8.0.0-01 to 8.0.1-00

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: If you use a feature such as vMotion or DRS to migrate a virtual machine that uses a virtual NIC connected to a vSphere Distributed Switch, an HCSM Power On or Force Power Off process for the host on the migrated virtual machine may fail with the KASV10087-E or KASV10091-E message. In addition, the HCSM GUI cannot display the virtual NIC information. (SD CR#: 16787)	Compute Systems Manager SD-EN-HCSM-076	Windows Linux
2	The following problem has been corrected: In the Linux edition of HCSM, an attempt to power on a host by using WOL (Wake on LAN) fails with the KASV30038-E error message. Note: This problem occurs regardless of OS type installed on the managed host. (SD CR#: 16960)	Compute Systems Manager SD-EN-HCSM-077	Linux

Resolved problems

3	The following problem has been corrected: Upgrading HCSM to v8.x fails in an environment that is running a version of Server Conductor/Deployment Manager that is earlier than v8 and HCSM 7.x is installed. (SD CR#: 17091, 15886)	Compute Systems Manager SD-EN-HCSM-079	Windows
4	The following problem has been corrected: In an environment running HCS 7.x or earlier, if the size of a data export exceeds 2 GB, one of the following symptoms occurs: <ul style="list-style-type: none"> • HCSM Installation fails with the KASV37127-E message. • Exporting data by using the HCSM_Trans.bat command fails with the following message: [E] An error occurred during execute of the "hcmsdbtrans" command. (SD CR#: 17304) 	Compute Systems Manager SD-EN-HCSM-080	Windows Linux
5	The following problem has been corrected: A task for controlling a managed resource on Linux HCSM server, may fail with the KASV10109-E or KASV31413-E message. If these errors are repeated, an error with the KASV30007-E message finally occurs, and HCSM can no longer complete the following functions for the resource: <ul style="list-style-type: none"> • User functions: <ul style="list-style-type: none"> ◦ GUI operations • CLI operations • System functions: <ul style="list-style-type: none"> ◦ GUI operations • CLI operations • Switching for N+M cold standby • Refreshing information automatically (SD CR#: 15492)	Compute Systems Manager SD-EN-HCSM-073	Linux
6	The following problem has been corrected: In Windows Server 2012 R2, if Hyper-V cannot connect to the disk on which the Hyper-V virtual machine resides, resource discoveries or refreshes for Windows Server 2012 R2 fail with the message KASV30031-E. (SD CR#: 14935)	Compute Systems Manager	Windows Linux
7	The following problem has been corrected: If the management server OS locale is not English, commas (,) might be displayed for decimal points in the CPU clock rate, memory size, and other displayed values. (SD CR#: 15697)	Compute Systems Manager	Windows Linux
8	The following problem has been corrected: The [OK] button is sometimes disabled in the Add Resources window for a scripted command when a managed resource is added and deleted in the window without applying changes. (SD CR#: 15772)	Compute Systems Manager	Windows Linux
9	The following problem has been corrected: When a Hypervisor and a host operating on a virtual machine on that Hypervisor are discovered, the association between the virtual machine and host might	Compute Systems Manager	Windows Linux

Resolved problems

	be displayed even after the Hypervisor is excluded as a management target. (SD CR#: 15808)		
10	The following problem has been corrected: When Deployment Manager is uninstalled as part of an HCSM uninstallation or over-write installation process, the following folder is not deleted. If HCSM is installed in the default location: C:\Program Files (x86)\HiCommand\ComputeSystemsManager\DPMEDIA (SD CR#: 15840)	Compute Systems Manager	Windows
11	The following problem has been corrected: If you change the SNMP Trap reception port number in the detailed settings window when completing an upgrade installation from HCSM v7.x, the installer ignores the change and the existing value is used. (SD CR#: 15848)	Compute Systems Manager	Windows
12	The following problem has been corrected: The following tasks fail with KASV00200-E error if the LPAR Manager Auto Shutdown option is enabled on target LPAR Managers. <ul style="list-style-type: none">• Test N+M Cold Standby• Fail Over To Standby Blade• Fail Back To Active Blade tasks (SD CR#: 15862)	Compute Systems Manager SD-EN-HCSM- 072	Windows Linux
13	The following problem has been corrected: The message KASV31636-E is sometimes erroneously displayed even though the LPAR migration status was successfully recovered. If a hyphen (-) is displayed as the LPAR migration status on the Resources tab, no further action is needed. (SD CR#:15864)	Compute Systems Manager	Windows Linux
14	The following problem has been corrected: If Tuning Manager on another server is connected to the HCS database when the user installs HCSM, the message KASV36200-W appears and processing cannot continue until the Tuning Manager connection is terminated. However, the message does not make it clear to the user that the connection from Tuning Manager is the reason that processing cannot continue. (SD CR#: 15932)	Compute Systems Manager	Windows
15	The following problem has been corrected: While an LPAR task is running, chassis cannot be unmanaged or removed as HCSM managed resources(SD CR#: 16265)	Compute Systems Manager	Windows Linux
16	The following problem has been corrected: In each N+M cold standby window, the value displayed for the number of I/O cards on a double-width blade is doubled, and duplicated I/O cards are displayed in a tooltip. (SD CR#: 16306)	Compute Systems Manager	Windows Linux
17	The following problem has been corrected: When running an upgrade installation on a Windows	Compute Systems	Windows

Resolved problems

	management server, the HCSM installer shows [Repair] as the installation mode, although the upgrade installation runs normally. (SD CR#: 16371)	Manager	
18	The following problem has been corrected: The resource screen may not correctly display information of a CB520X blade that runs an LPAR Manager. Also, setting or operating the USB on the CB520X may not operate correctly either. (SD CR#: 16401)	Compute Systems Manager	Windows Linux
19	The following problem has been corrected: Starting and Stopping tasks for the Power Capping function cannot send any e-mail notifications to inform user about start or fail events. (SD CR#: 17398)	Compute Systems Manager SD-EN-HCSM-081	Windows Linux
20	The following problem has been corrected: HCSM installation may fail when a Visual C++ redistributable package already exists and is older than the version that is bundled with HCSM. (SD CR#: 17574)	Compute Systems Manager SD-EN-HCSM-082	Windows
21	The following problem has been corrected: During an upgrade or overwrite installation, with Deployment Manager option, "80" is always displayed as the IIS Web site port number.	Compute Systems Manager	Windows Linux

From 8.0.0-00 to 8.0.0-01

No.	Corrected Problems	Applied products	Applied OS
1	You can use the Hitachi Command Suite All-in-One Installer for upgrade and overwrite installation as well as a new installation because the following problem has been corrected: The Hitachi Command Suite All-in-One Installer supports a new installation only.	Compute Systems Manager	Windows
2	The following problem has been corrected: Either of the following problems occurs in an HCS environment that uses a user-specified Java version: (1) HCSM installation fails with the KASV37019-E message that says the JDK is not found. (2) HCSM removal shows the KASV36207-W message that says that the removal cannot be completed.	Compute Systems Manager SD-EN-HCSM-074	Windows

From 7.6.1-02 to 8.0.0-00

No.	Corrected Problems	Applied products	Applied OS
1	The following problem has been corrected: During a Compute Blade management module failover,, the following HCSM tasks might fail: - Discovering chassis	Compute Systems Manager SD-EN-HCSM-	Windows

Known problems

	<ul style="list-style-type: none"> - Refreshing chassis - Setting the chassis as the management target - Controlling the power of the blade - Controlling LID functions - Launching Element Manager - Using N+M Cold Standby (failover/failback/test) - Updating firmware - Using LPAR manager and LPAR operations (including LPAR migrations) 	069	
2	<p>The following problem has been corrected:</p> <p>In some cases, when an alert is received, it is not displayed in the HCSM window and no email is sent.</p>	<p>Compute Systems Manager</p> <p>SD-EN-HCSM-067</p>	Windows
3	<p>The following problem has been corrected:</p> <p>When a communication error with a Compute Blade or Compute Rack occurs while HCSM is starting or HCSM is attempting to modify a credential, HCSM may not be able to receive alerts.</p>	<p>Compute Systems Manager</p> <p>SD-EN-HCSM-068</p>	Windows
4	<p>The following problem has been corrected:</p> <p>When a standby blade in an N+M cold standby group is deleted, applying the settings of N+M cold standby group fails with the KASV40001-E message.</p>	<p>Compute Systems Manager</p> <p>SD-EN-HCSM-063</p>	Windows
5	<p>The following problem has been corrected:</p> <p>Pressing the [View Additional Information] button for chassis details repeatedly causes failure when showing information for each module, and subsequent GUI operations are disabled</p>	<p>Compute Systems Manager</p>	Windows
6	<p>The following problem has been corrected:</p> <p>A power management task for a deleted or unmanaged resource is not skipped, and an incomplete subtasks list is displayed in the task details window.</p>	<p>Compute Systems Manager</p>	Windows
7	<p>The following problem has been corrected:</p> <p>Incorrect LPAR Manager information is included in a CSV file that was generated from the logical group window.</p>	<p>Compute Systems Manager</p>	Windows

Known problems

- Keyboard operations are disabled on tables with embedded radio buttons because the HCSM Server misunderstands the selected items when a keyboard is used.
- When the following conditions are met, the *Used Capacity* and *Available Capacity* values of the network drive allocated to managed Host A are not displayed correctly(SD CR#: 8181):

(1) The folder, to which Disk Quota is set, is network-shared with Host B (Windows).

(2) The network shared folder in (1) is allocated to the network drive in Host A (Windows).

- When the managed host is Windows and multiple IP addresses are mapped in the network adapter, the correct relationship of the Port and Alias might not be displayed in [IP Network]-[Type] of the host information. (SD CR#: 8205)
- When creating or editing a performance profile, the screen becomes gray and may not continue operation. In this case, log in to HCSM again.
- The HCSM screen might become grayed out when the following operations are performed:
 - Displaying the graph of Performance Data or Power Data multiple times.
 - Displaying the graph of Performance Data or Power Data with a long Display Time Range.

In this case, log in to HCSM again.

- In some cases, the same host appears twice in the Resource Tab Host list. This situation can occur when you run the discovery task and specify an IP address range that includes a previously discovered host.

When this situation occurs:

- Each Refresh and Power-Management task can be executed from either host. However, alerts are received for the newly discovered host only.
- Even after deleting the corresponding host, host information remains in the host list.
- You cannot Manage, Unmanage, or Remove the hosts remaining in the host list.

This situation occurs when all the following conditions exist:

- (1) An additional IP address is allocated to a previously discovered host.
- (2) A Refresh (including auto update) is not completed for the Host to which the IP address is added.
- (3) Discovery is run on an IP address range which includes the newly added IP address and the target criteria is set to "All."

Therefore, when you add an IP address to a host that is already discovered in HCSM, you must also run Host Refresh (with Auto Refresh).

- The Deployment Manager process may fail if the task specifies more than 1000 Blades, Rack-mounted servers, or VMs as targets in a Deployment task.
- The restriction on modifying the LOM IP address:

When modifying the LOM IP address that is used by the Scheduled Power Control task, the contents of the LOM IP address displayed on the Task Details screen is not updated.

This occurs during the following operations.

(1) When the scheduled task is any one of the following:

- Power On task
- Shutdown OS task
- Reboot OS task
- Force Power Off task

(2) The LOM IP address currently used is changed after scheduling the task listed in step (1).

(3) When you refer to the Task Details screen on the scheduled task of (1) or refer to the Task details screen after task execution, the displayed LOM IP address content is not updated, but the task is executed with the modified LOM IP address.

To confirm whether the LOM IP address is updated, verify that the same LOM IP address displayed in the Hosts list of the Resource screen or the Set LOM screen.

- When a VMware High Availability (VMware HA) hypervisor is managed, the information of the virtual machine on which VMware FT is enabled is not displayed correctly. Therefore, do not use VMware FT.
- Do not run tasks other than refresh for ESX/ESXi and any virtual machine that uses vCloud, vApp. If you run other tasks, unexpected issues might occur in vCloud, vApp, and HCSM.
- The HCSM screen might be grayed out during the following tasks:
 - Displaying the View Topology dialog by clicking View Topology.
 - Displaying the View Topology dialog by selecting View Topology from the Actions menu.
 - Displaying the Detailed Alert Information dialog by clicking Respond to Alert.

In this case, you must delete any unused virtual machines associated with Hyper-V or VMware hypervisors managed by HCSM. After deleting the unused machines, log in to HCSM again.

- When ESX/ESXi information is updated from HCSM when the VM configuration is changing, HCSM deletes the VM management information and the VM tasks fails. In this case, wait until the VM configuration information changes are complete, refresh the information, and then register the VM tasks again.
- Resource backup and restore settings are retained when backup or restore is run again. The Image file storage location and image file restoration paths are not reflected regardless of whether you changed the default image storage location path in the Deployment Setting screen. When running backup or restore after changing the image file storage location path, confirm the backup and restore settings.
- When the Deployment Manager installation is interrupted by another installation program in which you specified an installation path other than the

default, the files that were installed during the first attempt remain in the path specified during the installation. This means that before you reinstall, you must delete any files that exist in the installation path specified during the original installation.

- Hyper-V management, which uses the Hyper-V Replica function of Hyper-V3.0, is not supported. When Hyper-V3.0 is set as a management target, HCSM displays the primary VM and replica VM as a single VM. In such cases, management cannot function correctly.
- The same Server is displayed multiple times in the Rack-mounted Server list on the Resource Tab.

These symptoms may occur when all the following conditions are met:

- (1) The host that is operating on the rack-mounted server is the HCSM management target.
- (2) The rack-mounted server host IP address is modified.
- (3) The rack-mounted host is discovered by specifying the modified IP address.

When these symptoms occur, delete the host IP address before making any address modifications.

- When the Deployment Manager installation is interrupted by other programs, the installed files remain in the path specified during the installation. In this case, run the installation again using the same path specified when the installation was interrupted.
- The number of plot data points is less than expected in the Power Monitoring Dashboard when all the following conditions are met:
 - (1) The Power Monitoring Profile for Chassis/Blade or Rack-mounted server is registered.
 - (2) Data Collection is enabled in the Power Monitoring Settings for Chassis/Blade or Rack-mounted servers.
 - (3) All Chassis is selected from the [Logical Group] drop down list in the Power Monitoring Dashboard.
- When a large amount of power data is retained, refreshing the Power Monitoring Dashboard may run slower. To resolve this problem, delete unnecessary old power data manually.
- When a large amount of power data is retained, refreshing the Power Data screen generates an error message with Message-ID: KASV50005-E. To resolve this problem, delete unnecessary old power data manually. There is no need to take the action recommended by the message displayed with this symptom.
- Deleting a large amount of performance or power data manually may generate an error with Message-ID: KASV50302-E. However, the deletion is successful. There is no need to take the action recommended by the message displayed with this symptom.

Known problems

- Exporting a large amount of performance or power data may fail with a warning dialog. To resolve this problem, delete all unnecessary old performance or power data manually.
- There is incorrect message text in the following messages: KASV00222-E, KASV00223-E, KASV00224-E, and KASV00225-E. These messages may mention that shutting down an Active Blade has failed, however the target of the failed shut down is a Standby Blade.
- After running a task to turn off power on for a LPAR, the task to turn on power might successfully complete without confirming that the operating system started.
- When a Restore Assignment task is run for a blade in Failback Failed status, the status becomes Failover Successful. However, the detailed information in the balloon text displayed from the link from the status is not updated, and still shows information about the previous failure. Ignore the balloon text because the Restore Assignment task is finished.
- When HDvM coexists with HCSM on a management server and you run an Add Host task for a host running an operating system that is not supported by HCSM, HCSM fails to import the host information and the credential referred by the failed task cannot be deleted. (SD CR#: 14378)
- When a large amount of alert data is retained, clicking a pagination button to refer an alert may generate the error message with Message-ID: KASV00061-E in the All Alerts screen or the Unresolved Alerts screen. To avoid this problem, use the sort functionality or filter functionality to refer to an alert. There is no need to take the action recommended in the message.
- If you initialize a source or destination LPAR Manager configuration after LPAR migration, the hosts running on the migrated LPAR might be duplicated in the hosts list on the Resources tab. In this case, remove the chassis that is (or was) associated with the duplicated hosts on the migrated LPAR, and then rediscover the chassis to correct the hosts list. (SD CR#: 14864)
- If a CSV file is output by selecting [Export to CSV] from the following windows, the extension of the file (.csv) might not be added. (SD CR#: 15506)
 - Resources list
 - Performance information
 - Power monitoring data
- If the location of a logical group is changed, the location of the logical group displayed in the crumb trail might not change. This problem is only associated with the display of the crumb trail. The location of the logical group is changed accurately so you can use it without modification. (SD CR#: 14778)
- If the location hierarchy of the logical group is deep, the KASV50005-E error might occur. (SD CR#: 15456)
- If the window moves after using a keyboard operation, the KASV50005-E error might occur. In this case, use a mouse when making changes in the window. It is not necessary to deal with the KASV50005-E error. (SD CR#: 14974)

- An unavailable LPAR hosted on the removed blade is incorrectly displayed in the task target list. If you select the LPAR as a target of system-level backup or restore, snapshot, master image deployment, or disk configuration check, and then attempt to register a task, the KASV40001-E error occurs. To avoid the error, verify LPAR status on the list of licensed resources of Deployment Manager, and then perform a task for an LPAR that does not have NG status. (SD CR#: 14510)
- An HCSM operation for a virtual machine may fail with the KASV00275-E or KASV10205-E message, indicating that the virtual machine has been unmanaged or deleted, even though the virtual machine exists. Reregister the task, and then run it again. (SD CR#: 9737)
- If the locale of the operating system installed on the management server is set to Turkish, Azerbaijani, or Lithuanian, HCSM does not operate normally. If this problem occurs, an error message, such as KASV37301-E or KASV50014-E, is displayed. Install HCSM on a management server running an operating system for which the locale is not set to Turkish, Azerbaijani, or Lithuanian. (SD CR#: 16759)
- The displayed tooltip may remain on the screen. In this case, log in to HCSM again. (SD CR#: 7497,15190,17268)
- If HCSM retains a large number of alerts, the following problems might occur:
 - The KASV40001-E error occurs on the alert display screen and no alerts are displayed (SD CR#: 17842). If this problem occurs, reduce the number of alerts that HCSM retains.
 - A temporary database error (KASV00018-E) frequently occurs when the screen is automatically refreshed (SD CR#: 18365). If this problem occurs, have all logged-in users minimize or close the alert status report in the dashboard. Alternatively, reduce the number of alerts that HCSM retains.

Triggers for refreshing the screen:

- Receipt of alerts
- Periodic automatic refreshing of the dashboard
- Change in the management statuses of resources (addition of resources as management targets, exclusion of resources from management targets, and deletion of resources)
- Addition, edition, and deletion of resource groups
- Addition of blade servers as logical partitioning targets
- Creation, editing, or deletion of logical groups
- Assignment of persons in charge of alerts
- Deletion of alerts

Notes:

This problem occurs in the following environment:

Management server specifications:

OS: Windows Server 2008 R2 Enterprise

CPU: Intel Core i7-3770 CPU 3.40GHz

Memory: 2 GB

Number of alerts: 500,000

Trigger for refreshing the screen: Receipt of alerts

- The dashboard takes a long time to display the alert status report (SD CR#: 18436). If this problem occurs, reduce the number of alerts HCSM retains.

To delete alerts, log in as a user who has the Admin role for all resources, and do the following:

(1) In the **Administration** tab, select **System Settings**, and then display the **Alert** window.

(2) Click **Edit Settings** to open the Edit Alert Settings dialog box.

(3) In the Edit Alert Settings dialog box, specify the following settings:

- Select the **Use custom settings** radio button.
- **Maximum number of stored alerts:** 150000
- **Number of alerts to keep after deletion:** 100000
- Select the **Delete alerts immediately** check box.

(4) Click **OK**.

After you complete these steps, when the number of alerts exceeds 150,000, the system automatically reduces the number of alerts to approximately 100,000.

Although this process takes several minutes, you can continue to use HCSM in the meantime.

If a temporary measure to change properties files has already been taken, do the following to revert the property settings:

- (1) Stop the HCSM server.
- (2) Delete the properties from the following file.

File:

In Windows:

```
<HCSM-installation-folder>\ComputeSystemsManager\  
system\sysconf\system.hcsm.properties
```

In Linux:

```
<HCSM-installation-directory>/ComputeSystemsManager/  
system/sysconf/system.hcsm.properties
```

Properties:

```
modifier.alert.maxCount  
modifier.alert.keepCount
```

(3) Start the HCSM server.

- In the btrfs file system (used by default in SUSE Linux Enterprise Server 12), multiple mount points are associated with one device (example: /dev/sda2). However, the File System tab of HCSM displays only one of the mount points. (SD CR#: 18435)
- The [Go to Scripted Command Screen] check box may erroneously appear on the SVP Detailed Alert Information dialog that is opened by a user without Admin role for All Resources. (SD CR#:18583) Do not select the check box to avoid a permission error.
- A selection in a check box list may be lost and moved to different lines when a dialog box or balloon dialog box launched from a hyper link in the list is closed. (SD CR#:18589) If you this problem occurs, select necessary lines again.
- Do not run an LPAR migration (*) from the LPAR details screen because it erroneously indicates unselectable LPAR Managers as selectable. Use the [General Tasks] or the LPARs screen to run an LPAR migration. (SD CR#: 18619)
(*) An LPAR migration without down time or an LPAR cold migration.
- When an image file that does not exist is selected on the Edit Restore Profile dialog or the Edit Deployment Profile dialog, and the [OK] button is pressed, no screen change or transition happens. An invisible KASV10206-E error occurs behind the scenes and no message is displayed on the dialog. To recover to a normal state, select an existing file, and then press **OK**. If you resize the dialog and press **OK** without selecting an existing file, the KASV10206-E error appears.(SD CR#: 18615)

Installation precautions

Management server

- Refer to the *Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide*.
- HDvM and HCSM must reside on the same server to remain synchronized.
- To install HCSM in an environment in which Remote Desktop Session Host is installed, follow the procedure below:

(1) In the command prompt, run `CHANGE USER /INSTALL`.

(2) Install HCSM.

(3) In the command prompt, run `CHANGE USER /EXECUTE`.

- If Deployment Manager and Compute Systems Manager software are already installed, neither is reinstalled or upgraded through the all-in-one Installer. To install these products, you must run the Hitachi Compute Systems Manager installer.
- After an installation or removal, a shortcut folder named "programs" might be incorrectly created under the Windows Start menu. This symptom is temporary, and the shortcut folder no longer appears after you log off and log on to Windows.
- Deployment Manager cannot be installed on a domain controller.
- After installing Deployment Manager on a server, do not promote that server to a domain controller. Deployment Manager cannot be installed if the disk on the installation destination is compressed or encrypted. If DPMDBI instance exists on SQL Server, Deployment Manager will overwrite that instance. Deployment Manager should not be installed in this condition.
- The ODBC data source entitled "DPM" is added to the system on which you install Deployment Manager. Do not install Deployment Manager on a system on which the data source entitled "DPM" is already installed by an application other than DPM.
- To install Deployment Manager in an environment in which Microsoft SQL Server is installed, set the startup type for SQL Server Browser to something other than Disable, and then install Deployment Manager. After installation is complete, change the startup type back to its original value.
- Install Deployment Manager by using the local built-in Administrator account.
- If you are upgrading from HCSM v7.5.1-01 or later, the existing SNMP Trap reception port setting might be erased. If SNMP Trap reception is enabled when you upgrade, you must enter a valid SNMP Trap reception port number on the advanced settings screen during the installation. If you do not enter a valid SNMP trap port number, the HCSM service receives SNMP traps using the default port number of 162.

To specify a different port number after finishing the installation, complete the following procedure:

(1) Stop the HCSM service and HCS services by selecting the following:

**Select Start > All Programs > Hitachi Command Suite >
Compute Systems Manager > Stop - HCSM**

(2) Using a text editor, open the user.properties file in the HCSM property file folder (#1) and enter the SNMP Trap reception port number. The following example shows a case in which 22601 is set as the SNMP Trap reception port number.

```
#Hitachi Compute Systems Manager User Configuration File

snmp.trap.receive.port=22601

...
```

(3) If you stopped the services in the step 1, start the HCSM service and HCS services by selecting the following:

Select Start > All Programs > Hitachi Command Suite > Compute Systems Manager > Start - HCSM

(#1) The location of the HCSM properties file folder depends on your environment.

The default folder on a system with C: as a system drive:

"C:\Program Files\HiCommand\ComputeSystemsManager\conf"

- Never stop the HiRDB/EmbeddedEdition _HD0 and HiRDB/EmbeddedEdition _HD1 services if the services are on the Windows [Service] window because these services must remain running.
- An installation of Hitachi Command Suite product v8 or later may take few hours in an environment that is running v7 or earlier products because backup data is processed for the existing products before the v8 upgrade process begins.
- To perform operations for a Tuning Manager server by remotely connecting to Device Manager, in an environment in which Computes Systems Manager and Device Manager are installed on the same Linux machine, use Device Manager 8.1.1 or later. If you use a version of Device Manager earlier than 8.1.1, Tuning Manager server fails to start services with the KATN15014-E message.
- After installing HCSM in Red Hat Enterprise Linux 6.x, you cannot upgrade to Red Hat Enterprise Linux 7.x. Use the following procedure to upgrade the operating system.
 - (1) Back up HCSM.
 - (2) Uninstall HCSM.
 - (3) Upgrade the operating system.
 - (4) Install HCSM.
 - (5) Restore the backed up settings and database.

Management server (Service Pack)

After you install HCSM, you must install any available HCSM server service packs as follows:

- (1) Before installing the service pack, you must stop all existing HCSM server and HCS services that are running on the management server by selecting the following:

Start > All Programs > Hitachi Command Suite > Compute Systems Manager > Stop - HCSM

(2) Install the service pack.

(3) After installing the service pack, you must start the HCSM server and HCS services on the management server by selecting the following:

Start > All Programs > Hitachi Command Suite > Compute Systems Manager > Start - HCSM

CLI

Refer to the *Hitachi Command Suite Compute Systems Manager CLI Reference Guide*

Usage precautions

Note on registering multiple licenses

An error might occur when you register multiple licenses for one specific plug-in. Only the latest issued licenses for each plug-in are valid. Ignore the error and register the latest license for each plug-in.

Note on the SNMP Trap version

HCSM supports SNMP Trap version v1/v2c only. V3 is not supported.

Note on using an External Authorization Server

HCSM does not support an External Authorization Server.

Note on changing the access port number of the HBase 64 Storage Mgmt Web Service

To change the access port number of the HBase 64 Storage Mgmt Web Service, do not specify the following ports:

1(tcpmux)

7(echo)

9(discard)

11(systat)

13(daytime)

15(netstat)

17(qotd)
19(chargen)
20(FTP Data)
21(FTP Control)
22(ssh)
23(telnet)
25(smtp)
37(time)
42(name)
43(nickname)
53(domain)
77(privrjs)
79(finger)
87(ttylink)
95(supdup)
101(hostriame)
102(iso-tsap)
103(gppitnp)
104(acrnema)
109(pop2)
110(pop3)
111(sunrpc)
113(auth)
115(sftp)
117(uucp-path)
119(nntp)
123(ntp)
135(loc-srv / epmap)
139(netbios)
143(imap2)
179(bgp)
389(ldap)
465(smtp+ssl)
512(print / exec)

513(login)
514(shell)
515(printer)
526(tempo)
530(courier)
531(chat)
532(netnews)
540(uucp)
556(remotefs)
563(nntp+ssl)
587(smtp)
601(syslog)
636(ldap+ssl)
993(ldap+ssl)
995(pop3+ssl)
2049(nfs)
4045(lockd)
6000(x11)

Note on Port Number change

Do not use the following Port Numbers:

For Windows Server 2003:

1025 - 5000

For Windows Server 2008:

49152 - 65535

For Windows Server 2012:

49152 - 65535

Note on installing HDvM on an HCSM Management Server

When installing HDvM on an HCSM management server, you must use v8.0 or later.

Note on unexpected errors

If you receive an Unexpected Error message while using the user interface or while running a task, retry the action.

Note on the locale settings of the CLI

The output data when using the CLI may not be correct when the locale settings of the machine running the CLI and Managed Host are different. In this case, set the CLI output format to UTF-8 (#1) and redirect the output result into a file.

(#1) From the console command prompt or in the batch file used for running CLI commands, implement the following settings.

```
set _JAVA_OPTIONS=-Dfile.encoding=UTF-8
```

Note on scripted commands and e-mail notification

When an alert is received in the following order, the Scripted Command related to the alert is not run and the E-mail notification is not sent:

- (1) An alert occurs on the blade or chassis when a network failure occurs or HCSM does not start.
- (2) HCSM receives the alert after recovery from the state in step 1.

Note on forcing server power OFF

When a server is forcibly Powered OFF, the Power Status displayed in the following screens may not match for a temporary period of time:

- Select Resource tab > Chassis & Servers > All Chassis and select Chassis from the Chassis list. The Power Status is displayed in the Condition tab of the Server Blades tab.
- Select Resource tab > Chassis & Servers > All Servers and then click Blade. The Power Status is displayed in the Blade list.

When the above situation occurs, select the corresponding server and refresh the information by using the Refresh Server option. (SD CR#: 7956)

Note on the timing of information collection

Depending on the timing of information collection, it may not be possible to acquire some information from the management target host. In such cases, you must use the refresh option for the relevant management target host.

Note on the virtualization platform environment

- Virtual machine migration

After migrating virtual machines, you must refresh the hypervisor in the following sequence:

- (1) Migration destination hypervisor
- (2) Migration source hypervisor

- Maintenance mode

Do not operate Hypervisors and virtual machines when the Hypervisor is in maintenance mode. In maintenance mode, any HCSM operations for virtual machines might result in failure. In such cases, cancel the maintenance mode and run the operation.

- Hypervisor using a shared disk

When multiple hypervisors share the same disk, the total value of the shared disk capacity identified by each hypervisor is displayed on the Storage of All VMware Summary, All Hyper-V Summary. This means that a value more than the actual capacity may be displayed.

- Resource names in Topology View

The wrong resource name is sometimes displayed in Topology View. You can display the correct resource name by clicking the resource name link. (SD CR#: 17783)

Notes on a VMware environment

- Lock down mode

ESXi, which uses the lock down mode, cannot be managed in HCSM.

- VM name encoding

If a VM name includes particular characters, the characters are encoded before they are displayed. The following table shows the characters and associated encoded string:

Table 19 Map of characters and displayed strings

No.	Character	Displayed string
1	%	%25
2	/	%2f
3	\	%5c

- SNMP traps

ESX/ESXi SNMP traps are not recognized as alerts.

Notes on N+M cold standby

When configuring N+M Standby in a virtualized platform environment, note the following:

VMware environments

- Auto-start settings

When HSCM must start a virtual machine after the fail over of the Standby system blade and fail back of the Active system blade, the virtual machine must be configured to start automatically when the associated hypervisor starts. You configure Auto-start settings using the vSphere Client.

- UUID settings

To maintain the virtual machine UUID after a fail over and fail back, you must set the UUID settings as "Always Keep". You configure UUID settings using the vSphere Client. Ensure that the virtual machine configuration parameter [uuid.action] is set as "keep". If you cannot find this configuration parameter, add it. If the UUID cannot be inherited, the confirmation dialog UUID change opens during virtual machine startup, and the startup is not completed.

- VMware High Availability (VMware HA)

You cannot use VMware High Availability (VMware HA) in the same virtualization platform in which you plan to use N+M cold standby. After the standby system fail over, it may not be possible to start the virtual machine.

- Storage vMotion

You cannot use any Storage vMotion functions if you are using N+M cold standby.

Hyper-V environments

- Auto-start action setting

When HSCM must start a virtual machine after the fail over of the Standby system blade and fail back of the Active system blade, the virtual machine must be configured to start automatically. You configure the Auto-start action settings using the Hyper-V manager.

Notes on displaying the HCSM GUI after an upgrade

Before accessing the HCSM GUI after an upgrade, restart the browser or clear the browser temporary cache and log in to HCSM again. If you do not complete one of these actions, the GUI may not operate.

Notes on Deployment Manager

Notes on managing a VM on Hyper-V with Deployment Manager

The Hardware Driver Group is updated in v7.6.1-01.

You cannot use system-level backup images or snapshot images that you collected using a version previous to 7.6.1-01. Apply the new version, and then complete the following tasks:

1. Delete the system-level backup images and snapshot images that were collected in the previous version.
2. Remove all of the VMs on Hyper-V that are registered with Hardware Driver Group 1 from the license targets for deployment.
3. After applying the new version, specify Hardware Driver Group 4 for the VMs on Hyper-V, and then register the VMs as license targets for deployment.
4. After completing step 3, collect system-level backup images and snapshot images again as necessary.

- Supported Virtual Disk

When using v7.6.1-01 or later, Disk Configuration Check Results include SCSI Disk information. However, deployment features only support the IDE Disk. Therefore, you cannot specify SCSI Disk to a deployment target disk.

Notes on managing an LPAR with Deployment Manager

Because the system detects only shared NICs for use during a Deployment Manager PXE boot operation, you must ensure that virtual or dedicated NICs on the LPAR are not configured to run PXE boot using the following procedures:

1. Boot an LPAR with a shared NIC that is enabled with PXE boot.
2. Add the LPAR as a licensed resource of Deployment Manager.
3. Verify that the LPAR MAC address of the shared NIC is listed in the Deployment Resources screen on the Management Tab.
4. If the other LPAR MAC address is detected, disable PXE boot on the shared and dedicated NICs on the LPAR, and complete the procedure again.

Notes on PXE Boot Settings

If the following extended NIC is used with a network (PXE) boot on a managed server, the network boot for all ports is enabled.

- Broadcom extended NIC
GG-CN3M1G2X1-Y/GG-CN3M1G3X1-Y

To enable deployment targets, there must be a single port for communication with HCSM through network boot. Configure the DHCP server setting so that IP addresses are only leased to MAC addresses used by the Deployment Manager so that the IP addresses have one fixed port for PXE boot.

When using this configuration, a PXE boot timeout occurs for ports different from those described above. This results in an extended start-up time of one minute per port.

System-level Backup and Snapshot

- Restrictions for hardware and operating systems

The applications, which are affected by hardware specific values (such as MAC address) and operating system specific settings, may not work when Restore or Deploy is run after hardware replacement. In this case, uninstall the application before taking a Snapshot and reinstall it after using the Deploy task.

The following environments are not supported.

- Dynamic disks changed from Windows RE or a maintenance partition which made 2 or more numbered partitions
- Operating system or application level RAID environment (hardware or firmware level is supported)
- A logical disk/volume/partition consisting of multiple storage regions (such as spanning volume) is not supported.
- Encryption technology (such as BitLocker)
- Disks used in a storage pool function on Windows Server 2012
- Red Hat Enterprise Linux environments in which the boot loader is not installed in MBR in the BIOS boot environment
- Windows environment in which the VHD is configured for native boot
- Two or more machines with the same BI GUID (GUID used during PXE boot) cannot be set as Deployment Manager targets.

For example, this situation occurs when the VM of Hyper-V is exported or imported and a copy is created.

- Snapshot and master image deployment, which targets the Windows environment where Hyper-V is installed, is not supported.
- Specifying Entire or Full sector

You must specify Entire or Full sector based on the target disk file system type and disk type.

Usage precautions

No.	Target File System	Specify Entire(#1)	Specify Full sector(#2)
1	FAT16	(#3)	-
2	FAT32	(#3)	-
3	NTFS	(#3)	-
4	ReFS	Yes	Yes
5	ext2	-	-
6	ext3	-	-
7	ext4	Yes	Yes
8	Linux-swap	-	-
9	LVM1	Yes	Yes
10	LVM2	Yes	Yes
11	ReiserFS	Yes	Yes
12	JFS	Yes	Yes
13	XFS	Yes	Yes
14	Maintenance partition	-	-
15	other	Yes	Yes

(#1) For snapshot, Entire must be specified regardless of this list.

For a dynamic disk and GPT disk environments, Entire must be specified regardless of this list.

(#2) For SuSE Linux or Solaris environment, Full sector must be specified regardless of this list.

(#3) Basic disk on Windows Server 2008 R2 or Windows Server 2012 is not supported for partitions.
Entire must be specified for this environment.

- Image Path for System-level Backup or Snapshot

The System-level Backup and Snapshot image paths support only single-byte characters.

- If the target host of a System-level Backup/Snapshot task is unmanaged or removed from the list of licensed resources, the task is able to run. However, the image generated by the task cannot be used in a System-level Restore/Deployment task.

Deployment Templates

- Host Name setting

The Deployment Template host name setting supports only single-byte characters.

- Network settings

Set one or more static IP address that can communicate with HCSM in Specify Network Parameters. When the IP address is not specified, the Deploy Master

Image task fails. In addition, ensure that you set an IP address that is different from the IP address assigned in DHCP.

- Language in Create Deployment Template for Windows

While creating Deployment Templates for Windows Server 2008 or later versions, specify the same value as the operating system language for the Master Image that you plan to use for the Deploy Master Image task. When an incorrect language is specified, the IP address and Administrator password settings fail, and the Deploy Master Image task may fail.

Master Image Deployment

- SSH port number

While performing disk duplication for a Linux server, set the SSH port number of the management target server as 22. If the port number is anything other than 22, the Deploy Master Image task fails.

- Windows account name

When running the Windows snapshot task, change the account name (Administrator or other) back to the default built-in account name, activate the account, and then run the Snapshot task. If the snapshot is run when the account name is different than the default or while the account is disabled, the Deploy Master Image task fails.

- Supported language for the Deploy Master Image task

The Deploy Master Image task for Windows Server 2003 supports English only. When the Deploy Master Image task is run for an operating system other than English, the Deploy Master Image task may fail.

- Notes on Deployment Manager settings

When configuring Deployment Manager settings, ensure that you set the Maximum Simultaneous Connection value by measuring the performance monitor parameter while running a backup task.

No.	Group	Counter	Recommended Value
1	PhysicalDisk	Current Disk Queue Length	[Maximum] (Number of disks for which physical disk is configured+2) x Number of CPU threads or less

Installation and removal of Deployment Manager

- Notes on upgrading from v4.1-00 to v7.4.1-01 or later

If you created Deployment Templates using v4.1-00 and then you upgrade to 7.4.1-01, you must reset the Deploy Template settings and the language settings

before running the Deploy Master Image task. When the language is not set, the IP address and Administrator password settings fail, and Deploy Master Image task may fail.

- Removing Deployment Manager

Do not remove Microsoft SQL Server before you remove Deployment Manager. Removal of SQL Server before Deployment Manager may cause a reinstallation to fail. If you plan to reinstall the database, ensure that the following folders do not exist. If the folders exist, delete them before reinstalling the database.

[Target folder]

In Microsoft SQL Server 2012:

C:\Program Files\Microsoft SQL Server\MSSQL11.DPMDBI

If the following files exist in the target folder used by Deployment Manager, delete the files and the target folder:

- \MSSQL\Data\DPM_DATA.MDF
- \MSSQL\Data\DPM_LOG.LDF

Deployment Manager disk number limitation

When you specify a disk number for a Deployment Manager task, the number must be less than or equal to the number described in the following table.

No.	Type of disk	Upper limit of disk number
1	IDE	4
2	SCSI, FC	16(#1)(#2)
3	RAID	16(#3)

(#1) This number is the upper limit of total number of SCSI and FC disks.

(#2) When you configure multi-path FC, a detected and an actual number might differ.

(#3) This number is the upper limit of logical disks on a controller.

Limitation on the number of partitions on a licensed resource

When either of the following limitations is exceeded, a Deployment Manager task fails.

- A dynamic disk has more than 1000 partitions.
- A basic disk has more than the following number of partitions.

When you configure a disk using an extended partition, the limitation on logical drives on the disk are 3 units fewer than listed in the following table.

No.	Type of disk	Upper limit of partitions on a disk
1	IDE	15
2	SCSI, FC	14
3	RAID	14

About the disk capacity

From HCSM 7.6.1 onward, the value for [Capacity] of a disk that is displayed in each dialog box of the deployment function has changed.

- Versions prior to 7.6.1: The sum of the recognized sizes of partitions
- Versions 7.6.1 and later: The recognized size of the disk

Example:

If a 20-GB disk has 10 GB for Partition 1 and 5 GB for Partition 2, the disk size is displayed as follows depending on the version:

- Versions prior to 7.6.1: 15 GB
- Versions 7.6.1 and later: 20 GB

This information changes if the disk configuration check is executed in v7.6.1 or a later version. Only the display is changed. The operation is not affected.

About the attribute values of the partition information

From HCSM v7.6.1 onward, the value for [Attribute] that is displayed in each window of the deployment function has changed. The table below shows a list of the changes.

The information changes if the disk configuration check task runs in v7.6.1 or a later version. The operations is not affected; only the display changes.

Versions prior to 7.6.1	Versions 7.6.1 to 7.6.x	Versions 8.0.0 and later
Unknown EFI Linux RAID	Unknown	Unknown
hidden partition	hidden partition	hidden partition
NTFS(#)	NTFS Unknown(#)	NTFS Unknown(#)

FAT12 FAT12/16	FAT12	FAT12
FAT32	FAT32	FAT32
Linux Unknown	Linux	Linux Native Linux ext2/3/4 Linux ext4
Linux-swap	Linux-swap	Linux-swap
Linux LVM LVM	Linux LVM	Linux LVM
EFI system	EFI system	EFI system
Microsoft reserved	Microsoft reserved	Microsoft reserved
Unknown	Dynamic Volume	Dynamic Volume
Maintenance partition	Maintenance partition	Maintenance partition

#: If using v7.6.1 or earlier, ReFS is displayed as NTFS. If using v7.6.1 or later, ReFS is displayed as Unknown.

Notes on setting a Windows Server 2012 R2 Hyper-V virtual machine as a management target

Specify Generation 1 as the Generation of the virtual machine when you create it.

Notes on master image deployment in v7.6.1 and later

Master image deployment will fail if you use a master image acquired from a version prior to 7.6.1 and all the following conditions are met:

- (1) The HSCM and DHCP servers coexist.
- (2) For the master image acquired from a version prior to 7.6.1, one of the following conditions is satisfied:
 - (a) When Sysprep is executed, the IP address of the management server is not entered.
 - (b) When Sysprep is executed, the IP address of the management server is entered, but it is different from the IP address of the management server in which HCSM 7.6.1 or a later version of HCSM is running.

Note on errors during Disk Configuration Check

There is a possibility that the managed resource is stopped during the processing when errors occur in Disk Configuration Check. Power off the managed resources before using them. (SD CR#: 14925)

Notes on an error occurring for a task to change deployment settings

If a task to change deployment settings terminates due to a KASV31422-E error, run the task again. (SD CR#: 15748)

Notes on UEFI boot order setting for Deployment Manager targets

Do not add an UEFI-based computer which has a boot order setting bound with a hardware ID (such as MAC address) as a licensed resource of Deployment Manager. This setting may prevent system-level restore tasks, master image deployment tasks, or restarting the target after finishing Deployment Manager tasks.

Notes on elapsed time of PXE boot for Deployment Manager targets

If a Deployment Manager licensed resource takes more than 10 minutes to complete a PXE boot after the resource turns on, the deployment task fails.

In this case, adjust the [Maximum allotted time for Servers, LPARs or VMs to power on successfully] setting to a higher number to allow for completing the PXE boot.

Notes on Red Hat Enterprise Linux 7 as a Deployment Manager target in UEFI boot environments

When registering a Red Hat Enterprise Linux 7 system as a Deployment Manager target in UEFI boot environments, after installing Red Hat Enterprise Linux 7, change the boot file setting from shim.efi to grubx64.efi.

Notes on the Local Security Policy

After installing Deployment Manager, do not remove the following account information from the "Log on as a Service" list in the Local Security Policy.

- In Windows Server 2008 R2 (IIS7.5)
 - NT SERVICE\ALL SERVICES
 - Classic .NET AppPool
 - NETWORK SERVICE
 - NT SERVICE\MSSQL\$DPMDBI
 - NT SERVICE\SQLAgent\$DPMDBI

- SQLServer2005SQLBrowserUser\$*computer-name*
- ASP.NET v4.0 DeploymentManagerPool

- In Windows Server 2012 (IIS 8.0)
 - NT SERVICE\ALL SERVICES
 - IIS APPPOOL\.NET v4.5
 - IIS APPPOOL\.NET v4.5 Classic
 - NETWORK SERVICE
 - NT SERVICE\MSSQL\$DPMDBI
 - NT SERVICE\SQLAgent\$DPMDBI
 - SQLServer2005SQLBrowserUser\$*computer-name*
 - IIS APPPOOL\DeploymentManagerPool

- In Windows Server 2012 R2 (IIS 8.5)
 - NT SERVICE\ALL SERVICES
 - IIS APPPOOL\.NET v4.5
 - IIS APPPOOL\.NET v4.5 Classic
 - NETWORK SERVICE
 - NT SERVICE\MSSQL\$DPMDBI
 - NT SERVICE\SQLAgent\$DPMDBI
 - SQLServer2005SQLBrowserUser\$*computer-name*
 - IIS APPPOOL\DefaultAppPool
 - IIS APPPOOL\DeploymentManagerPool

If System-level Restore or Master Image Deployment wizard displays multiple images of the same backup image or snapshot image

If you change the Logical Partitioning (enable or disable LPAR Manager) without deleting the information of hosts managed by HCSM, the backup images or snapshot images of the hosts might be shown redundantly. (SD CR#: 18212)

In this case, cancel the wizard, and then remove the hosts existed before changing the Logical Partitioning from the HCSM management targets.

Notes for modifying a Host IP address

When you modify a Host IP address after deleting the host information (containing the original IP address) from HCSM, specify the modified IP address and then run Discovery.

Notes on the Hitachi Compute Rack maintenance mode

When in maintenance mode, Hitachi Compute Rack-mounted systems cannot be managed in HCSM. (SD CR#: 10963)

Notes on performance monitoring

CPU usage

When monitoring the performance of a host that is running the following software, there is a possibility that the CPU usage may not be acquired correctly:

- Operating system is Windows Server 2008.
- Hyper-V is installed.

Therefore, if you have managed hosts in your environment that meet this criteria, disable the acquisition of CPU usage performance data in the performance monitoring settings.

Physical disk read/write

When displaying ESX performance data, instance names that are displayed in the read/write of a physical disk differ from that of the object names displayed on a vSphere Client. (SD CR#: 11631)

Notes on the management server hostname

The management server hostname must adhere to the following rules:

- Maximum length: 128 bytes
- Valid characters: A-Z a-z 0-9 - .
- A dash (-) cannot be used at the beginning and at the end of the host name.

Notes on the properties files during an overwrite/upgrade installation

When running an overwrite/upgrade installation, the HCSM properties file is replaced with a new property file. However, the existing settings of the properties files are carried forward to the new file. If, however, you modified or added parameters other than the standard setting values, those changes are not inherited from the original file and must be made again.

Notes for management targets logged in as general user in Linux

When the following conditions are met, the Timeout error (KASV10029-E, KASV30036-E) may occur:

- Connect to a Linux host.
- For credentials, specify General user set to use the sudo command.
- The sudoers setting required to use the sudo command are not set.

Refer to the Hitachi Compute Systems Manager Installation and Configuration Guide for information on how to add or correct the sudoers settings.

Notes about the information for volumes mounted on a network drive

In the following situations, the same network drive information is displayed for the file system in the host information more than once. (SD CR#: 13396)

- For Windows Server 2003 or for Windows Server 2008 with UAC disabled:
If there are sessions connected to the management target, the number of login sessions is displayed regardless of the account.
- For Windows Server 2008 with UAC enabled:
The number of volumes mounted by the Administrator account is displayed according to the number of login sessions of the Administrator.

Notes on time synchronization

If the following time-adjustment programs are run, the operating system time might be changed to a past date, which may cause HCS to run improperly:

- Time synchronization using NTP (Network Time Protocol)
- Time synchronization function of a guest OS in Hyper-V

In such cases, refer to the Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide and adjust the time of the management server.

Notes on server blade firmware updates

If the firmware of server blade is updated when the server blade power is OFF, the process to reflect the updated firmware in the server blade is run. During that time, the server blade power control is restricted by the management module. You must monitor this process closely so that there is no overlap between the firmware update process when registering the task that manages the power control of the server blade.

The reflection time to the firmware server blade is approximately 20 minutes.

Notes on exporting CSV

BOM (Byte Order Mark)

CSV export data is output in UTF-8 code and BOM (Byte Order Mark) is added to the beginning of the file.

Corruption of UTF-8 text

Because exported CSV data is output in UTF-8 format, output text may be corrupted by software that is not compatible with UTF-8.

Notes when modifying MAC address on management target OS

If a MAC address is modified on the operating system typically according to network driver settings, hosts cannot be correctly managed using associated VM or LPAR information.

To change the MAC address, change the VM or LPAR settings instead of OS or network driver settings.

If you modified the MAC address using the operating system or network driver settings, change the operating system or network driver settings again to use the same MAC address used in the VM or LPAR setting.

Notes on EFI settings and enabling/disabling LPAR Manager

When LPAR Manager on Hitachi Compute Blade 2000 is enabled or disabled, the EFI settings for the applicable blade are overwritten with initial values for each LPAR Manager status.

Notes on LPAR Management

Solaris Support

LPARs for Solaris cannot be created using HCSM. However, you can manage LPARs for Solaris that already exist.

Supported LPAR NICs

HCSM Server does not support LPARs with only dedicated NICs. Ensure LPARs are assigned shared NICs so that the HCSM Server can manage the LPARs.

LPAR migration error

HCSM Logical Partitioning Manager differs with HVM Navigator in how LPAR migration status information is displayed. HCSM LPAR Manager requires

approximately 10 minutes before notifying a user that an LPAR migration task failed, whereas HVM Navigator notifies a user immediately.

The delay is caused by the way HCSM Logical Partitioning Manager manages maintenance information, and occurs regardless of whether the LPAR migration tasks succeed. Although there is a delay in displaying the information, the expected time for HCSM to collect maintenance information included in an LPAR migration task is equivalent to HVM Navigator.

LPAR Manager operation

Do not operate an LPAR Manager simultaneously by using HCSM and another logical partitioning manager software such as HVM screen or Element Manager.

Supported LPAR Manager

HCSM Server only supports LPAR Managers in "Expansion" mode. Do not change the mode to "Standard".

Notes on encrypted communication

If HCSM is configured to verify a certificate for communications between HCSM and a TLS supported LPAR Manager, the HCSM server must import the certificate of the certificate authority or intermediate certificate authority that is the issuer of the LPAR Manager certificate. If the valid certificate is not imported, managing the LPAR Manager fails due to communication errors.

Notes on changing the Logical Partitioning of a server blade

To enable or disable the Logical Partitioning of a blade server, remove hosts that are operating on the target server blade and the Logical Partitioning from HCSM management targets, and then change the Logical Partitioning.

Notes on FC boot settings

If you use a non-Hitachi FC board, the Boot Availability of private and shared FCs cannot be changed by using the LPAR create/edit function.

Notes on user account

Do not use a user account with a user ID containing one or more single quotation marks.

Notes on memory usage of browser

If a browser connecting to the HCSM server slows down or displays incorrectly, the memory usage of the browser might be extremely high. To recover from the symptom, close the browser window, and then log in to the HCSM Server again.

Notes on the status of the managed resources

When a managed resource is not able to respond to HCSM while the managed resource is starting or shutting down, HCSM displays the status of the managed resource as "Unknown" or "Unconnect".

Notes on blade power operation

To reduce the duration of a power control operation for a blade that runs LPAR Manager, the following operations are effective.

- Disable "Verify LPAR Manager startup" setting, and then execute power on or reboot for LPAR Manager.
- Power OFF LPARs that runs on a target LPAR Manager, and then execute power off or reboot for LPAR Manager.

Notes on using LPAR Migration and N+M Cold Standby

If LPAR Migration and N+M Cold Standby are used in a system, an LPAR Migration task might fail with a WWN conflict error with ID KASV00566-E. This symptom might occur when all of the following conditions are met:

- (1) An LPAR Migration was run using HVM Navigator or HCSM Server, and the associated blades are managed by the HCSM Server.
- (2) The blades were added to an N+M Cold Standby group.
- (3) An LPAR Migration task was run for one or more managed blades in the system.

To resolve the problem that occurred in (3), complete the following procedures to correct the conflict:

- (i) On each blade with a conflict, access the HVM menu screen and run "Save Configuration" or press the F9 key.
- (ii) Turn on or restart the LPAR Manager.

If the problem persists, collect the relevant maintenance information by referring to the Hitachi *Compute Systems Manager Installation and Configuration Guide* or

the *Hitachi Compute Systems Manager Users Guide* and then contact the Customer Support.

Notes on using HVM Navigator

When managing LPARs in HCSM, do not install HVM Navigator on the same computer on which the HCSM Server is installed.

Notes on managed resources in a multiboot environment

If the managed resources are in a multiboot environment, the resources cannot be managed by HCSM.

Notes on memory usage if using ZFS with Solaris

If ZFS is used with Solaris, when the ZFS cache is allocated, the value displayed in HCSM performance information that shows memory usage will decrease. If the cache is UFS, the value that shows memory usage does not decrease. Memory allocated as a cache is automatically released by the operating system when there is a memory shortage.

Note on performance data collection for VMware ESX/ESXi

Although this version fixes an issue that caused the sent and received packets of performance data of VMware ESX/ESXi to swap display values, incorrectly stored data is not corrected and is displayed incorrectly. Therefore the affected sent and received packets values must be swapped when they are read.

Notes on the variables specified in the argument of Scripted Command

The value of the following variables might include a meta character (such as a space, &, ` , <, >, |, ^, \, ;, \$, or ") :

%M: The name of the resource on which the alert was issued.

%S: The alert content.

%P: The failure location for the alert.

%H: The ID of the LPAR Manager which the alert was issued.

%V: The name of the LPAR on which the alert was issued.

Enclose the argument in double quotation marks (") in the command path setting of the script command. (For example: D:\tools\ShutdownOS.bat %D %T "%M" %L %I "%S")

Even if the argument is enclosed in double quotation marks ("), the scripted command does not operate properly when the variable includes ", \, or \$.

Do not use ", \, or \$ in the values for the following settings:

- Host Name
- Chassis Name
- Server Name
- LPAR Manager ID
- LPAR Name
- "Failure Location" and "Alert Content" of the SNMP settings

Notes on the registration of repetitive tasks

If the KASV10066-E error occurs when registering a repetitive task, there might be a mistake in the schedule settings. Confirm that there are no mistakes in the cycle, start time, and end time. (SD CR#: 14751)

Notes on using SSL communication or changing the port number for Hitachi Command Suite Common Component

If HCSM is installed in an environment in which SSL communication is enabled or the port number for Hitachi Command Suite Common Component has been changed, the GUI might not start, even if the " Start Hitachi Command Suite GUI" check box is selected in the Install Complete window.

If this problem occurs, check the changed management server information, and then enter the URL for Compute Systems Manager in the web browser's address bar to start the GUI.

Notes on using Internet Explorer 11.0

When you click a button or anchor on the screen to open a new tab or new window, an extra blank window or transitional window might be displayed at the same time. In such a case, please close the unnecessary window.

If such problems occur repeatedly, create a new Windows user account, and then use the new user account to operate the browser.

Notes on specifying user-defined asset tags for servers

You can specify a user-defined asset tag for server managed resources using Element Manager. After you define the asset tag, you can view it along with the other server information in the server list.

(1) On the Resources tab, select Chassis & Servers.

- (2) Select All Servers.
- (3) Expand the tree and select the type of server for which you want to view information.
- (4) From the list of servers, locate the server for which you want to specify an asset tag and click the associated Chassis Name link. The chassis summary screen opens.
- (5) From the More Actions menu, select Launch Element Manager. The Element Manager application opens.
- (6) Log in to Element Manager. The Element Manager interface opens.
- (7) On the Element Manager Resources tab, select Server Blades and then expand the tree and select the Server blade for which you want to specify an asset tag.
- (8) Select the BMC tab.
- (9) On the BMC tab, select Edit --> Asset information.
- (10) In the Asset information window, enter a unique asset tag for this server and click Confirm. You can enter a maximum of 63 alphanumeric characters and symbols. The new asset tag appears in the Asset tag field on the BMC tab.
- (11) When you finish adding asset tags, you can close Element Manager. When you return to the HCSM screen, the new asset tag now appears as the server name in the Server list.

Notes on creating LPAR

When you upgrade HCSM from v7.6.1-00 or an earlier version to this version, refresh server information for the target blade before creating or editing LPARs. The error message with Message-ID: KASV50005-E might occur, if the server information is not refreshed. (SD CR#: 15039)

Notes on the decimal point in the CLI output

If a decimal point is included in the CLI output when the version of HCSM which CLI has connected to is later than v7.6.1-01, the decimal point is always displayed as "." regardless of the OS language settings.

Notes on HCS installation failure due to a Common Component error

If the following message is recorded in the Common Component installation log file, the installation file is scheduled for update during the next startup. Restart the management server, and then start the installer again.

Log file location: Root directory of the <system-drive>

File name: hcmdsist.log

[hh:mm:ss] Installation result:

[hh:mm:ss] 02

Notes for if the management target is a SUSE Linux Enterprise Server

The maximum length of the network interface name (eth0 and so on) is 9 characters. If the name exceeds 9 characters, the network information cannot be acquired correctly. (SD CR#: 7093)

Notes on the column display and the filter settings of HCSM GUI after an upgrade

When you upgrade HCSM, the order of columns, show or hide settings, sort settings, and filtering conditions that were set for each window in the previous version are reset. (SD CR#: 17618, 18026, 18473)

Notes on file transfers when upgrading

If upgrading from v8.0 or earlier, the installation directory used in v7.x is deleted. If there are any necessary files other than the data that is transferred in the upgrade, back them up before the upgrade.

Notes on the Deployment Manager port number when upgrading

If upgrading from v8 or earlier, the port number used in the Deployment Manager is overwritten with the default value or the value used in v7.x. Check the settings after the upgrade.

Notes on user scripts when upgrading

The command name to collect management server maintenance information was changed from hcmdsgetlogs for v7.x to hcmds64getlogs for v8.0.0 and later. If the hcmdsgetlogs command is used in any user scripts, you must update the scripts to use the new command name.

Notes on the uninstallation order of HCS products

To uninstall HCS products (including HCSM), uninstall the following products first:

- Hitachi Storage Navigator Modular 2
- Hitachi File Services Manager

Notes on migrating from the Windows version of HCSM to the Linux version

Take note of the following if the database in the Windows version of HCSM is exported and imported to the Linux version of HCSM.

Deployment Manager Settings

The Deployment Manager settings that are set in the Windows version of HCSM are deleted.

If the managed Host is Windows

Import the database to the Linux version of HCSM and then use the GUI to specify the port number for the Credentials of the Windows managed host. The communication method used for the Windows managed host is changed from DCOM to WinRM. See the Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide when configuring the settings.

Notes on the power consumption of power monitoring

If the times of the management server and the power monitoring target server do not match, a hyphen (-) might be displayed in the total power consumption and average power consumption. (SD CR#: 15609)

Notes on Red Hat Enterprise Linux 6.5 prerequisite libraries

The following optional package is required for Red Hat Enterprise Linux 6.5 to run HCSM server. Apply this package if you use Red Hat Enterprise Linux 6.5.

upstart-0.6.5-13.el6_5.3.x86_64 or later

Notes on using power capping for Compute Rack

Power capping setting for Compute Rack does not reject an invalid threshold value which is less than the acceptable range, and power capping function is not turned on. Instead of an error in power capping setting, you receive a 0xFF10 alert generated by the Compute Rack.

In this case, correct the threshold value.(SD CR#: 10666)

Notes on displaying a MAC address of a Compute Rack

HCSM does not show a MAC address of a NIC in a PCI slot of a Compute Rack.

Discover the OS on the Compute Rack, and access the IP Network tab to check the MAC address.(SD CR#: 11023)

Notes on users, user groups, and resource groups

Take care to design the system in such a way that the following limits on users, user groups, and resource groups are not exceeded:

(1) Limits that apply to Hitachi Command Suite

- (a) Number of users: 30
- (b) Number of user groups: 30
- (c) Number of resource groups: 400

(2) Limits that apply to a single user group

- (a) Number of users: 30
- (b) Number of resource groups: 20

(3) Limits that apply to a single user

- (a) Number of user groups: 3

Notes on the group definition of N+M Cold Standby Groups

If either of the following conditions is met, the controller number of an I/O card will appear blank in the group definition of an N+M Cold Standby Group: (SD CR#:17794)

(1) The N+M Cold Standby Group was created in a version of HCSM earlier than 8.1.0

(2) The chassis type of the N+M Cold Standby Group is Compute Blade CB500 and the firmware version is earlier than A0230.

Notes for Linux management targets

HCSM only supports network interface names in the formats listed in the table below. HCSM will not display network interfaces with names that do not meet these conditions. (SD CR#: 17774)

No.	Conditions	Examples
1	Contains <code>eth</code>	<code>eth0</code> , <code>seth0</code> , <code>veth0</code>
2	Contains <code>bond</code>	<code>bond0</code>
3	Contains <code>:</code>	<code>eth0:1</code>
4	Starts with <code>ibft</code>	<code>ibft0</code>
5	Starts with <code>en</code>	<code>eno1</code> , <code>ens33</code> , <code>enp1s0f1</code> , <code>enx78e7d1ea46da</code>

6	Matches the following regular expression: . <code>.*</code>	bond1.100
7	Matches the following regular expression: vlan\code{1,4}. <code>.*</code>	vlan100
8	Matches the following regular expression: br\code{d+}. <code>.*</code>	br0
9	Matches the following regular expression: virbr\code{d+}. <code>.*</code>	virbr0, virbr0-nic
10	Matches the following regular expression: p\code{[0-9a-fA-F]+d+}. <code>.*</code>	p1p1
11	Matches the following regular expression: em\code{d+}. <code>.*</code>	em1

Notes on Product values in host information

When you upgrade HCSM from a version earlier than 8.1.0, a space is sometimes added to the end of the Product value in the host information, preventing filters from working correctly. In this case, update the host information manually. (SD CR#: 17810)

Notes when blades in a logical partition are removed from the chassis

When a blade that was added as a target blade of a logical partition is removed from the chassis, an incorrect number of target blades is shown in the summary area. Specifically, the number of blades shown in the summary area displayed by clicking **Local Partitioning** and then **Licensed Blades** in the **Administration** tab is the actual number of blades minus the number that were removed. You can view the correct number of target blades in the Compute Systems Manager License Information dialog box, displayed by clicking **Help, About**, and then **About**. (SD CR#: 17835)

Notes when the image file path of a system backup or snapshot image contains a semicolon (;)

From HCSM 8.1.1, semicolons (;) can no longer be used in the path to an image file used by Deployment Manager. If an image file is stored in a path that contains a semicolon (;) in a version earlier than HCSM 8.1.1, or if a deployment functionality task to which a path that contains a semicolon is specified exists, follow the procedure below to change the path to the image files.

- (1) Write down the information of a task whose path to an image file to be acquired or used contains a semicolon (;).
- (2) Move or copy a system backup image or snapshot image whose path contains a semicolon (;) to a path that does not contain a semicolon.

(3) In the **Administration** tab, go to **Deployment** and **Image File Management**, and then import the information of the file moved or copied in (2).

(4) Re-register the task in (1). For a System-level Restore or Master Image Deployment task, specify the file imported in (3) as the image file to be used. For a system backup or snapshot task, specify a path that does not use a semicolon (;) as the image storage destination.

(5) Delete the task in (1).

(6) In the **Administration** tab, go to **Deployment** and then **Image File Management**, and then delete the information of the original file moved or copied in (2).

(7) In the **Administration** tab, select **Deployment** and then **Settings**. If a path that contains a semicolon (;) is specified for **Default Path**, change the path to a path that does not contain a semicolon.

Note on Filtering

The filtering may not work correctly when a criteria including a comma(,) is specified for the following items. (SD CR#: 18239)

- Credentials
- Server Slot Numbers

To filter correctly, specify the target string separately without using a comma(,).

Notes on security for communications with management targets

HCSM v8.1.1 or later versions do not use SSLv3 in communications with managed Hitachi servers by default because of security vulnerabilities in the SSLv3 protocol. As a result, if communication with a management target by using SSLv3 is used in a version of HCSM earlier than v8.1.1, the communication will fail.

The following management targets are able to communicate by using SSLv3:

(1) Hitachi Compute Blade CB500, CB2000, and CB2500

The new firmware supports TLS communication. In *Hardware Requirements in Management target requirements*, check the firmware versions supported by HCSM. If you are using a firmware version that is not supported, update the firmware to a supported version. After updating the firmware, see the manual for the server and specify the settings for TLS communication.

Note that if the firmware does not support TLS, HCSM cannot receive alerts from servers.

(2) Hitachi Compute Rack

The new firmware supports TLS communication. In *Hardware Requirements in Management target requirements*, check the firmware versions supported by HCSM. If you are using a firmware version that is not supported, update the

firmware to a supported version. After updating the firmware, see the manual for the server and specify the settings for TLS communication.

If you cannot take action on the management target side, you can enable SSLv3 communication by completing the following procedure. However, as mentioned above, we do not recommend enabling SSLv3 because security vulnerabilities have been discovered for SSLv3.

- (1) Stop the HCSM server.
- (2) Edit the property in the following file.

File:

In Windows:

```
<HCS-Common-Component-installation-folder>\  
conf\user.conf
```

In Linux:

```
<HCS-Common-Component-installation-directory>/  
conf/user.conf
```

Property:

```
ssl.protocol=TLSv1,TLSv1.1,TLSv1.2,SSLv3
```

Note: Hitachi Command Suite Common Component is installed in the following directory by default.

In Windows:

```
<HCSM-installation-folder>\Base64
```

In Linux:

```
<HCSM-installation-directory>/Base64
```

If you install Compute Systems Manager on a server on which other Hitachi Command Suite products are already running, Compute Systems Manager is installed in the same location as Hitachi Command Suite Common Component.

Note: If the file user.conf does not exist, create the file.

- (3) Start the HCSM server.

Precautions about the Snapshot function (for creating images for Master Image Deployment)

If a target OS is SUSE Linux Enterprise Server, and there are more than 10 network devices (eth0, eth1, ...), a snapshot image cannot be taken correctly. Although the Snapshot task ends without an error, a Master Image Deployment task using the image fails. (SD CR#: 18627)

Precautions about the deployment template for Linux

In the deployment template for Linux targets, associations of MAC addresses and devices (eth0, eth1, ..., eth6) are ignored. For this reason, select "Auto Detect" for MAC addresses. (SD CR#: 18628)

Documentation

Available documents

Manual Name	Manual No.	Issue Date
Hitachi Command Suite Compute Systems Manager User Guide	MK-91HC194-11	February 2015
Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide	MK-91HC195-13	February 2015
Hitachi Command Suite Compute Systems Manager CLI Reference Guide	MK-91HC196-02	April 2014
Hitachi Command Suite Compute Systems Manager Messages	MK-91HC197-12	February 2015
Hitachi Command Suite Messages	MK-90HC178-18	February 2015

Documentation errata

Content corrections for the Hitachi Command Suite Compute Systems Manager User Guide:

No.	Correction Location	Corrections	
1	Configuring or changing email notification settings	Before	Before Hitachi Compute Systems Manager can send email notifications about Compute Systems Manager system operations, such as task status and alerts, you must set up a system account email address.
		After	Before Hitachi Compute Systems Manager can send email notifications about Compute Systems Manager system operations, such as task status and alerts, you must set up email notification settings.

Content corrections for the Hitachi Command Suite Compute Systems Manager CLI Reference Guide:

Documentation

No.	Correction Location	Corrections																					
1	User permissions for running commands	Before	<p>User permissions for running commands</p> <p>An HCSM user can be assigned the following permissions:</p> <ul style="list-style-type: none"> Admin: A user with Admin permission can register resources to be managed, change settings, manage resources, and view information. Modify: A user with Modify permission can manage resources and view information about managed resources. View: A user with View permission can view information about managed resources. User Management: A permission common to all Hitachi Command Suite (HCS) products. This permission enables the management of HCS users. <p>Note: The User Management permission can be assigned with all other permissions.</p> <p>The HCSM CLI commands have the following permissions.</p> <table border="1" data-bbox="805 831 1432 1104"> <thead> <tr> <th data-bbox="805 831 967 968">Command (Short Form)</th> <th colspan="4" data-bbox="967 831 1432 873">Permission</th> </tr> <tr> <th data-bbox="805 873 967 968"></th> <th data-bbox="967 873 1057 968">Admin</th> <th data-bbox="1057 873 1179 968">Modify</th> <th data-bbox="1179 873 1308 968">View</th> <th data-bbox="1308 873 1432 968">User Management</th> </tr> </thead> <tbody> <tr> <td data-bbox="805 968 967 1037">configure on page 21</td> <td data-bbox="967 968 1057 1037">Yes</td> <td data-bbox="1057 968 1179 1037">Yes</td> <td data-bbox="1179 968 1308 1037">Yes</td> <td data-bbox="1308 968 1432 1037">Yes</td> </tr> <tr> <td data-bbox="805 1037 967 1104">login on page 22</td> <td data-bbox="967 1037 1057 1104">Yes</td> <td data-bbox="1057 1037 1179 1104">Yes</td> <td data-bbox="1179 1037 1308 1104">Yes</td> <td data-bbox="1308 1037 1432 1104">Yes</td> </tr> </tbody> </table>	Command (Short Form)	Permission					Admin	Modify	View	User Management	configure on page 21	Yes	Yes	Yes	Yes	login on page 22	Yes	Yes	Yes	Yes
Command (Short Form)	Permission																						
	Admin	Modify	View	User Management																			
configure on page 21	Yes	Yes	Yes	Yes																			
login on page 22	Yes	Yes	Yes	Yes																			

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		Before (continued)	logout on page 23	Yes	Yes	Yes	Yes
			ping on page 23	Yes	Yes	Yes	Yes
			help on page 24	Yes	Yes	Yes	Yes
			GetAlerts (getalerts) on page 25	Yes	Yes	Yes	No
			GetHost (gethost) on page 28	Yes	Yes	Yes	No
			GetHostAlert (gethostalert) on page 30	Yes	Yes	Yes	No
			GetHostCPU (getcpu) on page 31	Yes	Yes	Yes	No
			GetHostFCNetwork (getfc) on page 33	Yes	Yes	Yes	No
			GetHostFile System (getfilesystem) on page 35	Yes	Yes	Yes	No
			GetHostIPNetwork (getip) on page 36	Yes	Yes	Yes	No
			GetHostMemory (getmemory) on page 38	Yes	Yes	Yes	No
			GetHostOs (getos) on page 40	Yes	Yes	Yes	No

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		<p>Before (continued)</p>	<table border="1"> <tr> <td data-bbox="803 296 966 401">GetHostPCI (getpci) on page 42</td> <td data-bbox="966 296 1052 401">Yes</td> <td data-bbox="1052 296 1177 401">Yes</td> <td data-bbox="1177 296 1304 401">Yes</td> <td data-bbox="1304 296 1430 401">No</td> </tr> <tr> <td data-bbox="803 401 966 621">GetHostRemoteManagement (getrmtmgmt) on page 43</td> <td data-bbox="966 401 1052 621">Yes</td> <td data-bbox="1052 401 1177 621">Yes</td> <td data-bbox="1177 401 1304 621">Yes</td> <td data-bbox="1304 401 1430 621">No</td> </tr> <tr> <td data-bbox="803 621 966 747">GetTaskInfo (gettaskinfo) on page 45</td> <td data-bbox="966 621 1052 747">Yes</td> <td data-bbox="1052 621 1177 747">Yes</td> <td data-bbox="1177 621 1304 747">Yes</td> <td data-bbox="1304 621 1430 747">No</td> </tr> <tr> <td data-bbox="803 747 966 873">PowerOFF (poweroff) on page 47</td> <td data-bbox="966 747 1052 873">Yes</td> <td data-bbox="1052 747 1177 873">Yes</td> <td data-bbox="1177 747 1304 873">No</td> <td data-bbox="1304 747 1430 873">No</td> </tr> <tr> <td data-bbox="803 873 966 999">PowerON (poweron) on page 48</td> <td data-bbox="966 873 1052 999">Yes</td> <td data-bbox="1052 873 1177 999">Yes</td> <td data-bbox="1177 873 1304 999">No</td> <td data-bbox="1304 873 1430 999">No</td> </tr> <tr> <td data-bbox="803 999 966 1125">RebootOS (rebootos) on page 49</td> <td data-bbox="966 999 1052 1125">Yes</td> <td data-bbox="1052 999 1177 1125">Yes</td> <td data-bbox="1177 999 1304 1125">No</td> <td data-bbox="1304 999 1430 1125">No</td> </tr> <tr> <td data-bbox="803 1125 966 1297">ShutdownOS (shutdownos) on page 50</td> <td data-bbox="966 1125 1052 1297">Yes</td> <td data-bbox="1052 1125 1177 1297">Yes</td> <td data-bbox="1177 1125 1304 1297">No</td> <td data-bbox="1304 1125 1430 1297">No</td> </tr> </table>	GetHostPCI (getpci) on page 42	Yes	Yes	Yes	No	GetHostRemoteManagement (getrmtmgmt) on page 43	Yes	Yes	Yes	No	GetTaskInfo (gettaskinfo) on page 45	Yes	Yes	Yes	No	PowerOFF (poweroff) on page 47	Yes	Yes	No	No	PowerON (poweron) on page 48	Yes	Yes	No	No	RebootOS (rebootos) on page 49	Yes	Yes	No	No	ShutdownOS (shutdownos) on page 50	Yes	Yes	No	No
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ShutdownOS (shutdownos) on page 50	Yes	Yes	No	No																																		
		<p>After</p>	<p>User roles for running commands</p> <p>The following roles can be assigned to a user group to which the user belongs:</p> <ul style="list-style-type: none"> ● Admin: Users with this role can complete tasks such as use resources, view resource information, and view system settings. Also, if All Resources is assigned, the user can register the resources to manage and change the system settings. ● Modify: Users with this role can complete tasks such as use resources and view resource information. ● View: User with this role can view resource information. 																																			

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		<p>After (continued)</p>	<p>Users who execute CLI commands need roles for the target resources.</p> <p>Assign a resource group to which the command execution target resources belong, and a required role to the user group to which the user belongs.</p> <p>The following table shows the roles required for each CLI command:</p> <table border="1" data-bbox="803 506 1404 1776"> <thead> <tr> <th rowspan="2">Command (Short Form)</th> <th colspan="3">Role</th> </tr> <tr> <th>Admin</th> <th>Modify</th> <th>View</th> </tr> </thead> <tbody> <tr> <td>configure on page 21</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>login on page 22</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>logout on page 23</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>ping on page 23</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>help on page 24</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetAlerts (getalerts) on page 25</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetHost (gethost) on page 28</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetHostAlert (gethostalert) on page 30</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetHostCPU (getcpu) on page 31</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetHostFCNetwork (getfc) on page 33</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>GetHostFile System (getfilesystem) on page 35</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> </tbody> </table>	Command (Short Form)	Role			Admin	Modify	View	configure on page 21	Yes	Yes	Yes	login on page 22	Yes	Yes	Yes	logout on page 23	Yes	Yes	Yes	ping on page 23	Yes	Yes	Yes	help on page 24	Yes	Yes	Yes	GetAlerts (getalerts) on page 25	Yes	Yes	Yes	GetHost (gethost) on page 28	Yes	Yes	Yes	GetHostAlert (gethostalert) on page 30	Yes	Yes	Yes	GetHostCPU (getcpu) on page 31	Yes	Yes	Yes	GetHostFCNetwork (getfc) on page 33	Yes	Yes	Yes	GetHostFile System (getfilesystem) on page 35	Yes	Yes	Yes
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Documentation

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2	GetHost (gethost)	Before	Displays the host operation status.																																								
		After	Displays the host operation status. [Running, Stopped, Unknown]																																								
3	GetHostOs	Before	Displays whether SMT can be used.																																								

	(getos)	After	Displays whether SMT can be used. If the information cannot be acquired, the value is left blank.
4	PowerOFF (poweroff)	Before	Use the PowerOFF command to power down a specific host or group of hosts.
		After	Use the PowerOFF command to power down a specific host or group of hosts without shutting down the operating system.

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