



Unified Compute Platform 3.5.1

UCP Authorized Release Notes

9 December 2014

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About this document

This document contains release notes for release 3.5.1 of the **Hitachi Unified Compute Platform (UCP)**. It describes supported limits, product documentation, and known issues.

Release highlights

The following features are new to UCP 3.5.1:

- Support for UCP 4000E for VMware vSphere
- Support for UCP 4000E for Microsoft Private Cloud
- Support for Cisco 5548 Converged Networking Switch
- Replication support for VSP G1000
- Performance enhancements around Disaster Recovery

UCP document set

The following documents from UCP 3.5 Patch 2 contain information that applies to UCP 3.5.1:

- *UCP Pre-Installation Requirements and Configuration* — Contains information and procedures you need to be aware of for a successful UCP installation.
- *UCP Administration Manual* — Contains technical and usage information for UCP and UCP Director. Describes how to administer UCP Director through UCP Director Console with both VMware vCenter and Microsoft SCVMM.
- *UCP Director API Reference* — Describes how to use the UCP Director API.

- *UCP Director CLI Reference* — Describes how to use the UCP Director CLI.
- *UCP Director Third-Party Copyrights and Licences* — Contains copyright and license information for the third-party software distributed with or embedded in UCP Director.
- *UCP DOC Administration Manual* — Contains technical and usage information for Unified Compute Platform Director Operations Center (UCP DOC). Describes how to administer UCP DOC through UCP DOC Console.
- *UCP DOC API Reference* — Describes how to use the UCP DOC API.
- *UCP DOC CLI Reference* — Describes how to use the UCP DOC CLI.

The following internal documents contain information about UCP 3.5.1:

- *UCP Multi Rack Customer Engagement Forms* — Contains the information needed from the customer to successfully configure and install a multi-rack UCP configuration. This document is meant to be used as a companion to the customer document: *UCP Pre-Installation Requirements and Configuration*.
- *UCP Single Rack Customer Engagement Forms* — Contains the information needed from the customer to successfully configure and install a single-rack UCP configuration. This document is meant to be used as a companion to the customer document: *UCP Pre-Installation Requirements and Configuration*.
- *UCP Multi Rack Assembly and Configuration: Book 1 - Brocade* — Contains instructions for configuring UCP in the distribution center with Brocade Ethernet technology. It contains hardware assembly and configuration information as well.
- *UCP Multi Rack Assembly and Configuration: Book 1 - Cisco* — Contains instructions for configuring a multi-rack UCP configuration in the distribution center with Cisco Ethernet technology. It contains hardware assembly and configuration information as well.
- *UCP Single Rack Assembly and Configuration: Book 1 - Cisco* — Contains instructions for configuring a single-rack UCP configuration in the distribution center with Cisco Ethernet technology. It contains hardware assembly and configuration information as well.

- *UCP Multi Rack Assembly and Configuration: Book 2* — Contains hardware and software configuration instructions for multi-rack configuration UCP storage. The procedures in this manual may take place at the distribution center or at the customer site, depending on the storage configuration.
- *UCP Single Rack Assembly and Configuration: Book 2* — Contains hardware and software configuration instructions for single-rack configuration UCP storage. The procedures in this manual may take place at the distribution center or at the customer site, depending on the storage configuration.
- *UCP Multi Rack Customer Deployment* — Contains instructions for installing a multi-rack UCP configuration at the customer site. It includes both hardware installation and software configuration instructions.
- *UCP Single Rack Customer Deployment* — Contains instructions for installing a single-rack UCP configuration at the customer site. It includes both hardware installation and software configuration instructions.
- *UCP Multi Rack Installation and Validation* — Contains instructions for installing the base UCP software in the distribution center for a multi-rack configuration. It contains hypervisor installation, Service VM deployment, and configuration validation.
- *UCP Single Rack Installation and Validation* — Contains instructions for installing the base UCP software in the distribution center for a single-rack configuration. It contains hypervisor installation, Service VM deployment, and configuration validation.
- *UCP System Upgrade Manual* — Contains the procedures that are followed to upgrade UCP.
- *UCP Maintenance Guide* — Contains the procedures that are performed when replacing components in UCP.
- *UCP Firmware Software Matrix* — Contains the version information for all software, firmware, and drivers in the UCP system. This includes Hitachi components as well as 3rd party components.

Supported and recommended limits

UCP supports the minimum and recommended/maximum values listed in the following table. Maximum values can indicate either a technical limitation or an acceptable performance threshold.

Item	Minimum	Recommended/Maximum
Fibre Channel zones		1000 recommended
Host storage domains		512 recommended
Servers	2	Cisco Ethernet: 128 Brocade Ethernet: 64 Cisco FCOE: 16
Storage pool size	>0	HUS150: 2.8PB HUSVM: 2PB VSP: 4PB VSP G1000: 4PB
Volume size	1.9 GB	59.9 TB
Volumes		5000 recommended

Software requirements

The following software and screen settings are required to use UCP Director Console:

Software/Setting	Version/Value
Java JRE	1.7 Update 17 or greater
Screen resolution	1024x768 or higher

Included software

This section details the software that is included with UCP 3.5.1. The software listed in the *UCP Director Third-Party Copyrights and Licences* book has been omitted from the list.

Hitachi

The following Hitachi software is included with UCP:

Software	Version
Command Control Interface (CCI)	01-31-03/07
Hitachi Compute Systems Manager (HCSM)	8.1.0
Hitachi Device Manager (HDvM)	8.1.0
Hitachi Storage Navigator Modular 2 (HSNM2)	27.73
Hitachi Tuning Manager (HTnM)	8.1.0
HTnM Agent for RAID	8.1.0
Hitachi vSphere APIs for Storage Awareness (VASA)	2.3.0
Site Recovery Adapter (SRA)	2.01.04
UCP Director	3.5.1.4849
UCP Director Operations Center	3.5.1.4849

VMware

The following VMware software is included with UCP:

vSphere 5.1

Software	Version
Enterprise Plus	5.1 U2
ESXi	5.1 U2
Site Recovery Manager (SRM)	5.1.2



Note: UCP does not support using vSphere 5.5 ESXi images with vSphere 5.1.

vSphere 5.5

Software	Version
Enterprise Plus	5.5 U2
ESXi	5.5 U2
SRM	5.8

Microsoft

The following Microsoft software is included with UCP:

Software	Version
AppFabric for Windows Server	1.1
ASP.NET MVC	3.0
Internet Information Services (IIS)	8
Internet Explorer (IE)	11
Microsoft SQL	2012 Standard SP1 + Hotfix KB2793634
.NET	4.5
System Center Virtual Machine Manager (VMM)	2012 R2 + Update Rollups 3 & 4
Windows Deployment Services (WDS)	6.2
Windows Server	2012 R2 SP1
Windows Web Deploy	3.0

Linux

The following Linux software is included with UCP:

Software	Version
CentOS for blade verification	6.2
CentOS for CR210s	6.2
CentOS for UCPUtility VM	6.3
CentOS shipped with WDS	6.4

Image support

UCP supports images using the following OS versions:

Supported element	Version
CentOS	6.4
ESXi	5.1 U1 (build 1065491+) 5.5 U2
Red Hat Enterprise Linux	6.4

Supported element	Version
Windows Server	2008 R2 SP1, 2012 and 2012 R2 SP1

SNMP support

UCP supports SNMP monitoring of the hardware. With Ethernet and Fibre Channel switches, UCP Director receives traps from the switches directly. When working with servers or storage, UCP Director receives traps from the corresponding element manager, HCSM and HDvM respectively. UCP uses the following SNMP versions:

Supported element	Version
Ethernet switches	3
Fibre Channel switches	3
HCSM	2c
Storage system	1

Issues with workarounds

Release issues

The table below lists new issues that are relevant to the 3.5.1 release for which workarounds exist. The issues are listed in order by reference number.

Ref. number	Description
16665	<p><i>VMware's online repository cannot be configured as an image repository for UCP</i></p> <p>UCP has issues accessing VMware's online repository. As a result, scheduled image update management cannot automatically download image updates from the online repository for use by ESXi hosts.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1.) Download ESXi image updates manually from VMware's repository (https://hostupdate.VMware.com/software/VUM/PRODUCTION/main/vmwdepot-index.xml) and put them in a network share location 2.) In UCP Directory, configure that network share as a repository that UCP has access to 3.) Once configured, UCP will pick up these updates from the network share repository and apply them to active images
19483	<p><i>UCP cannot perform some storage operations on volumes that have vsantraces enabled</i></p> <p>For vSphere 5.5 ESXi hosts, there is a new service, called vsantraces which causes at least one of the volumes attached to a host to get locked. When a volume (or datastore) is locked, UCP cannot remove a volume. Furthermore, If the locked volume has a coredump file or vsan trace logs, it will not unmount and UCP cannot detach the volume from the hosts. Coredump files are created on some of the datastores when an ESXi cluster has High Availability (HA) enabled.</p> <p>Workaround: For all hosts that need to detach a volume:</p> <ol style="list-style-type: none"> 1.) Enable SSH on the host, and then start a PuTTY session to the host 2.) Log in as root 3.) Type <code>~ # /etc/init.d/vsantraced</code> and hit Enter to stop the vsantraced service 4.) Type <code>~ # esxcli system coredump file list</code> and hit Enter to stop the host from using the coredump file. There may be a list of coredump files. The one listed as 'true' under the Active and Configured columns is owned by this host and can be removed 5.) Type <code>~ # esxcli system coredump file remove -f=/FILE NAME --force</code> and hit Enter to mark the dumpfile as true for this host 6.) Log into the other hosts with PuTTY and repeat the steps above until there are no longer any hosts using coredump files for this datastore 7.) Unmount the datastore through vCenter 8.) Detach the datastores from hosts using UCP

(Continued)

Ref. number	Description
21302	<p><i>No poolID value is displayed for HTI volumes immediately after creating a replication group job</i></p> <p>The poolID for Hitachi Thin Imaging (HTI) test volumes will not display a value immediately after successfully creating a replication group job because it can take some time to generate.</p> <p>Workaround: Wait 30 minutes for the poolID to be generated. You can also go to the UCP Storage System page and click on the Refresh Storage Inventory tab to generate one sooner.</p>
21685	<p><i>Opening the blade console with the UCP Plug-in for SCVMM requires a refresh</i></p> <p>When you open a console window for a server using the UCP Plug-in for SCVMM, the resulting web page shows that the page is unreachable.</p> <p>Workaround: Refresh the browser window.</p>
21756	<p><i>Multiple DNS records for a Hyper-V host may get mapped to the same IP</i></p> <p>If Hyper-V templates are redeployed to the same host, multiple DNS records may get mapped to the same IP. This can happen when Active Directory (AD) or DNS zones have not been properly cleaned up.</p> <p>Workaround: Clean up a Hyper-V host, including AD and DNS records by following the steps below:</p> <ol style="list-style-type: none"> 1.) Log onto the Hyper-V host and unformat all data volumes 2.) Using UCP Director, detach all data volumes that are attached to the server 3.) In SCVMM, remove the host from SCVMM inventory 4.) Login to the Hyper-V host as a domain admin and unjoin the computer from the domain 5.) Power off the server 6.) Detach and delete the boot volume 7.) Remove the server profile 8.) Check DNS and AD to ensure that all records for that object have been removed

(Continued)

Ref. number	Description
22063	<p><i>VMQ is disabled during deployment of Hyper-V templates</i></p> <p>The Emulex driver version (10.0.835.0) included with UCP has issues that cause network related actions, including UI and PowerShell to hang. In order to prevent any further issues, VMQ is automatically disabled during the deployment of all Hyper-V templates.</p> <p>Workaround: Upgrade the Emulex driver to a newer version, and then enable VMQ on each host.</p>
22079	<p><i>Cannot change SNMP settings to "NoAuth" in the vSphere Client</i></p> <p>The vSphere Client (thick client) will not allow you to change the SNMP authentication protocol value to 'NoAuth' on the Fibre Channel and Ethernet Switch UI pages.</p> <p>Workaround: Use the vSphere Web Client UI/API/ CLI to change this authentication setting.</p> <p>For example, using the CLI command, you could type Set-UCPSnmpSetting - ResourceType FibreChannel -SnpVersion V3 -AuthenticationProtocol NoAuth -PrivacyProtocol NoPriv -UserName ucpsnmpuser</p>
22140	<p><i>Adjust power management settings for the host profile before deploying a cluster containing B1 and B2 blades from a UCP service template</i></p> <p>When planning to deploy a cluster with a UCP cluster service template and the target blades are a mix of B1 and B2, you will need to change the CPU policy setting to "High Performance" on the associated host profile. This will make sure the power management setting is compatible across both blade models.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1.) In vCenter, make a copy of the basic host profile 2.) Edit the profile copy, and then go to the Advanced Configuration Settings 3.) Under Power System Configuration, click on Power System 4.) In CPU Policy, select High Performance 5.) Click Finish to save the profile 6.) Create or edit an existing UCP cluster service template and ensure that it is associated with the modified host profile

Prior issues

The table below lists existing issues that were known prior to the 3.5.1 release for which workarounds exist. The issues are listed in order by reference number.

Ref. number	Description
11949	<p><i>Expanding the datastore operation through UCP fails intermittently</i></p> <p>When expanding a datastore the underlying volume gets expanded but the datastore expansion fails sometimes. This is a known bug with the VMware API.</p> <p>Workaround: Login into the host using the vSphere client and follow VMware documentation on how to expand storage. For more information see this link:</p> <p>http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1017662</p>
12329	<p><i>When an ESXi image is added to a UCP image repository, it cannot have the same name as an existing ESXi image in UCP inventory.</i></p> <p>Displaying two images with the same name is not supported as this is a limitation in vCenter autodeploy rules.</p> <p>Workaround: If the image you plan to add has the same name as an existing image, rename it using the vSphere PowerShell CLI. The image cannot simply be renamed in Windows since vSphere will not recognize the image afterwards.</p>
12330	<p><i>User can still make REST calls when permissions have been revoked</i></p> <p>If UCP related permissions for example - network administrator privileges are revoked from a user, the user will still be able to make network related calls till about 30 minutes from the time the privileges were removed. This issue happens because UCP cache refresh is scheduled at a 30 minute interval.</p> <p>Workaround: Wait for 30 minutes and try again.</p>
12870	<p><i>Granting UCP permissions in vCenter</i></p> <p>Granting UCP permissions to a user/group in vCenter does not work if the node the permissions are granted in are anything other than the vCenter root.</p> <p>Workaround: Grant the permissions in the vCenter root.</p>
12982	<p><i>Refresh Image inventory might fail if you have same image (different casing) in multiple repositories</i></p> <p>If refresh image inventory failed because of an unexpected error, please verify that the same image (zip file) is not present in multiple repositories (same file name different case).</p> <p>Workaround: Please remove one of the duplicate images from one of the repositories or rename the image profile and run Refresh Image Inventory again.</p>

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Ref. number	Description
13192	<p><i>UCP does not immediately report the correct total and used capacity for a volume</i></p> <p>If a volume is expanded multiple times UCP might not report the volume capacity correctly as HDvM does not read the correct capacity from the array.</p> <p>Workaround: Use HDVM UI to resync with the array. It should be noted that forcing HDVM to resync with the array will degrade performance of the array for several minutes up to more than an hour.</p>
13571	<p><i>UCP Director is not able to get array reservation for a long time</i></p> <p>If the SVP on the VSP is put in a modify mode by a customer service engineer and the mode is not released, UCP Director will be stuck in a endless loop trying to get the reservation from the array.</p> <p>Workaround: Customer engineer should NEVER put SVP in modify mode when storage operations are running on UCP. UCP will only be able to perform storage operation when the SVP is in the view mode.</p>
14678	<p><i>Changing the boot type of a server may succeed immediately after the Blade is powered ON</i></p> <p>If the boot type for a server is changed too soon after the Blade is powered on, HCSM and UCP Director may be out of sync on the power status of the blade and UCP Director may allow changing boot type between custom boot and ESXi stateless.</p> <p>Workaround: Wait for the blade to be powered ON completely and ensure that UCP shows the correct power status before attempting to change the boot type for the server.</p>
14697	<p><i>After recovery from unexpected network outage, the power status of some blades may be 'unknown'</i></p> <p>When UCP regains connectivity to HCSM, it may not pick up the correct power states of some blades. Even after a server inventory refresh, the blades' power states may still be reported as 'unknown.' An additional side affect is that most of the Hitachi server actions through the web client will not be available.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1.) Open a web browser to HCSM and log in as ucpadmin 2.) Go to the Resources tab 3.) Under "General Tasks," click Refresh\Refresh All Chassis and Servers 4.) When the task completes, return to UCP Director Console and click Refresh Server Inventory in the UCP Server Inventory table 5.) The UCP display of current power states for all blades should be corrected

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Ref. number	Description
15051	<p><i>Restoring the configuration on a Brocade switch can cause the switch to not send any traps</i></p> <p>If users try to take a backup of the switch and restore back the configuration on the Brocade switch, the SNMP agent on the switch will get removed.</p> <p>Workaround: The next topology scan will fix the issue. It will detect that there is no SNMP agent on switch and create the SNMP agent.</p>
15242	<p><i>If VPC Domain can disable on one of the Cisco 5K switches, it will cause both switches to become the Cisco switches to get disconnected from external network</i></p> <p>If VPC domain gets disabled on one of UCP's Cisco switches due to some out of band activity, the other switch will remain connected to the network outside of the appliance till the next topology scan. However, on UCP's next topology scan, UCP will recreate the VPC peer link between UCP's two Cisco switches. This will cause the VPCs to become inconsistent between UCP's Cisco switches, and all uplinks to the outside network will be disabled.</p> <p>Workaround: Manually recreate VPCs to the outside network via a SSH client.</p>
15305	<p><i>If Fibre Channel switch refresh happens during the same time as a server reboot then the FC switch cache might get invalidated for that server</i></p> <p>During server reboot, if a FC switch refresh happens concurrently then the FC switch cache might remove zones for that particular server from the cache. This might lead to storage attach operation failing immediately after the host comes back up.</p> <p>Workaround: Refresh FC switch inventory after the server reboot, this will update the cache with the zone information for the server.</p>
15232	<p><i>Running Ethernet switch inventory refresh enables CDP feature on Ethernet switches even though the feature is disabled on switches</i></p> <p>The UCP orchestrator service settings are stored in its web.config on UCPManagementVM. One of settings in this file is 'enableCDPonVirtualSwitch'. This has default value of 'true' and Ethernet switch inventory refresh operation enables CDP setting on switches based on 'enableCDPonVirtualSwitch' setting.</p> <p>Workaround: Confirm the user installation does not require enabling CDP on the Ethernet switches. Change the 'enableCDPonVirtualSwitch' setting to 'false' in UCP orchestratorservice's web.config. Rerun Ethernet switch inventory refresh.</p>
15948	<p><i>vSphere web client runs older version of UCP after re-install</i></p> <p>Intermittently after an uninstall and reinstall of UCP web client might still run the older version of UCP.</p> <p>Workaround: Delete "com.hds.ucpdirector.service" and "com.hds.ucpdirector.ui" from folder "C:\Program Files\VMware\Infrastructure\vSphereWebClient\server\work\org.eclipse.virgo.kernel.deployer_3.0.3.RELEASE\staging\global\bundle" and re-register UCP. The new version of UCP web client will get picked up.</p>

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Ref. number	Description
16139	<p><i>Trusted domain users cannot be restricted to vCenter resources at any level lower than the root.</i></p> <p>When a trust relationship is established between an existing domain and UCP, users from the existing domain can be added to administrative OU groups within the UCP domain. However, their privileges to vCenter objects cannot be restricted to any datacenter, folder, or cluster.</p> <p>Workaround: Users from trusted domains must always be granted access at the root level of vCenter. Individual privileges can be restricted, but this will apply from the root-level on down the inventory tree.</p>
16197	<p><i>Configure host network when switches are in initializing state, fails but job event does not clearly specify why</i></p> <p>Configure network on server host requires the Ethernet switch inventory in UCP need to have complete information about host to Ethernet switch connectivity.</p> <p>Workaround: Refresh Ethernet switch inventory, wait for 30 seconds and then rerun 'configure host network'</p>
16319	<p><i>Setting weak SNMP passwords for Cisco Ethernet switches succeeds task, but fails to configure SNMP settings on the switch</i></p> <p>On a UCP instance, a user can input a weak authentication/privacy password for Cisco Ethernet switches. The task will report as success, but the switch will not be configured with the supplied password. This will cause all SNMP collection tasks to fail (SNMP traps, performance, health) for the Ethernet switch.</p> <p>Workaround: Use an Authentication/Privacy Password that meets the following criteria:</p> <ol style="list-style-type: none"> 1.) It cannot be based on a dictionary word - example: "Password1" 2.) It MUST include multiple characters of at least three of the following classes: lower case letters, upper case letters, digits and special characters 3.) It cannot have repeated characters of three or more times consecutively

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Ref. number	Description
16498	<p><i>Warning when importing UCP cmdlets into powershell</i></p> <p>When trying to import UCP cmdlets into powershell, users will get the following warning for some cmdlets that do not have powershell approved verbs.</p> <p>Important: Some imported command names include unapproved verbs which might make them less discoverable. Use the Verbose parameter for more detail or type Get-Verb to see the list of approved verbs."</p> <p>This message is only a warning. The complete module is still imported, including the non-conforming commands.</p> <p>Workaround: To suppress the warning message, use the DisableNameChecking parameter of the Import-Module cmdlet.</p>
16661	<p><i>Detach/Delete volume fails after tearing down replication group.</i></p> <p>When a replication group is deleted or a replicated volume is removed from a replication group, users may not be able to detach and/or delete the underlying volumes as the volumes still believe that they are being replicated.</p> <p>Workaround: Wait up to 24 hours for for HDvM to resync with the storage array or use HDVM UI to resync with the array. It should be noted that forcing HDVM to resync with the array will degrade performance of the array for several minutes up to more than an hour.</p>
17037	<p><i>REST call to clusters/{clusterId}/networks incorrectly reports resource not found when network cache is not ready</i></p> <p>API call to get cluster networks using REST call to clusters/{clusterId}/networks incorrectly reports resource not found when network cache is not ready.</p> <p>Workaround: Run Ethernet switch inventory refresh and wait 5 minutes</p>

(Continued)

Ref. number	Description
17490	<p><i>Removing HUR replication group sometimes fails to remove journal</i></p> <p>Removing replication group or replicated volume pair on HUR sometimes fails with error that "Cannot delete journal {journalId} since the journal is being used for replication".</p> <p>Workaround: Follow these steps to manually remove the journal volumes:</p> <ol style="list-style-type: none"> 1.) Log into HDvM and manually refresh the Storage system. Wait for the task to complete 2.) In HDvM, obtain the serial number of the storage system 3.) Open a PowerShell session using an account with UCP Admin role or vCenter Administrator role 4.) Load the Hitachi.UCP.CLI 5.) Obtain the UCP instance with Get-UCPDirector CLI cmdlet 6.) Remove the Journal volume with the Remove-UCPJournal cmdlet, using the storage system id obtained earlier, and the Journal ID as shown in the previous failure event
18125	<p><i>Setting DPM (Distributed Power Management) to Automatic can cause the hosts to stay in Suspended state</i></p> <p>Configuring an HA/DRS cluster with DPM (Distributed Power Management) set to Automatic can cause the hosts to go in a bad state. DPM causes unutilized hosts to go into "Suspended" mode. However, because UCP uses ESXi stateless, there is no disk to resume from and hosts cannot come out of Suspended state.</p> <p>Workaround: Do not use the 'Automatic' setting when configuring Distributed Power Management for a cluster of stateless ESXi hosts.</p>

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Ref. number	Description
18390	<p><i>After power loss to both management servers, the VMware VirtualCenter Server service will not start</i></p> <p>Symptom will exhibit as an inability to log into vCenter with either the web client or the thick client. The vCenter management VM is up and running, but the vCenter server service is not running. Production workloads on the compute blades will continue running in this state, but if any ESXi blade is restarted, it will not receive an image deployment from Auto Deploy. The blade will remain in a perpetual reboot cycle until vCenter service is restored.</p> <p>In most power failures where vCenter service will not resume, we've found the root cause to be a known vCenter database issue which is easily repaired as follows. First, however, verify that this is truly the problem.</p> <p>To verify the issue:: Log into the vCenter VM with domain administrator or svc_vcncr privileges. From Server Manager, Tools, launch Services. Look at VMware VirtualCenter Server service. If it is in Starting state, proceed with next steps.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. First, verify that the Application Pools on the UCPManagement VM are all "Started" 2. To do so, log into the UCPManagement VM, open the Internet Information Services Manager and verify that all Application Pools are Started. Start any that are off. 3. Next, repair the vCenter DB. Log into the SQL VM and open the SQL Server Management Studio 4. Log into SQL with sa privilege 5. Expand Databases, VMware_vCenter_DB, Tables 6. Find the table called dbo.VPX_DVS, right click it, and choose Edit Top 200 rows 7. Scroll to the right and find these three columns: POLICY_AUTO_PREINSTALL, POLICY_AUTO_UPGRADE, and POLICY_PARTIAL_UPGRADE. 8. If any of the VDS rows contain NULL in those columns, change NULL to 1. If NULL does not appear in those columns, then this is not the root cause of the issue. 9. Close SQL Management Studio and log off the SQL VM. 10. Restart the VMware VirtualCenter Server service if it doesn't automatically change to Started state.

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Ref. number	Description
18405	<p><i>Removing replication for a volume that is added to SRM protection group may fail after removing the associated test volume pairs</i></p> <p>An attempt to remove replication for a volume that is added to SRM protection group may fail after removing the test volume pair but before removing the replicated volume pair. This leaves the volume pair in erroneous state.</p> <p>Workaround: Delete the SRM protection group or remove the volume from SRM protection group and retry removing volume replication.</p>
18410	<p><i>PowerShell Session fail because session object reference is NULL</i></p> <p>On a UCP instance, various jobs will start to fail including monitoring, disaster recovery and attempts to gather information from VMware. These failures will all contains unexpected errors and refer to an error number. In the Orchestration log files, messages surrounding the unexpected error number will refer to a NULL session value.</p> <p>Workaround: Wait for existing jobs to complete. Connect to the UCPManangement VM. From the command line run the iisreset command.</p>

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Ref. number	Description
18467	<p><i>Unable to determine Write Transfer Rate for replicated volumes</i></p> <p>Datacenter Director is unable to determine the write transfer rate of the volumes to replicate. As a result, journals are created to support maximum write transfer rates</p> <p>Workaround: Use the API or CLI to gather the last 4 weeks of write transfer rate and identify the greatest MAX value.</p> <ul style="list-style-type: none"> • For the CLI, initiate a CLI session to the protected UCP instance • Run the command (replacing the ResourceId with the target volume Resource ID) Get-UCPPerformanceData -ResourceType StorageVolume -ResourceId inst.blue-pdf-4070.stor.1.ss.53106.vol.14871 -PerformanceCounterName WriteXferRate -AggregationFrequency Weekly • Connect to the Datacenter director VM • Edit the web.config file located at "C:\Program Files\UCPDatacenterDirector\DRService" • Replace the default value for DefaultJournalThroughputInMegabytesPerSecond (250.0) with the Max value identified from the API/CLI • Make sure no jobs are active in the datacenter director system • From the command line run iisreset for the new value to take affect • Create the replication group • It is recommended to reset the DefaultJournalThroughputInMegabytesPerSecond back to its default values once the replication group job is completed
18517	<p><i>New UCP privileges are not added to custom roles in vCenter after an upgrade</i></p> <p>UCP v3.0.1 has added new privileges to vCenter - UCP Network Console privilege and UCP Reset Global VLAN privilege, UCP Storage Console privilege and UCP Server Console privilege. These privileges were included in the following privileges for UCP v2.2. UCP Network Administrator privilege, UCP Storage Administrator privilege and UCP Server Administrator privilege respectively. If users had created a custom role that uses any of the UCP v2.2 privileges they will not get the new UCP v3.0.1 privileges added by default.</p> <p>Workaround: Users can go into the edit role option in vCenter and add the new privileges.</p>

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Ref. number	Description
18553	<p><i>The Hitachi UCP Director Servers page may display an HCSM connectivity error while there is an ongoing server firmware update procedure.</i></p> <p>When using the vSphere thick client, the Hitachi UCP Director Servers page may display an HCSM connectivity error while there is an ongoing server firmware update procedure. This error message says "Sorry, an error occurred while processing your request. The server inventory cannot be displayed due to a loss of connectivity with HSCM. Inventory details will be refreshed when HCSM connectivity is restored". This is a temporary state that will be corrected once the server firmware update procedure is complete.</p> <p>Workaround: Use the vSphere Web Client to access the Hitachi UCP Director server inventory while there is an ongoing server firmware update procedure.</p>
18569	<p><i>Setting FC Privacy protocol to AES 128 not supported for 5460</i></p> <p>When setting the Privacy Protocol of FC switches to AES128, the task succeeds without errors, and the 6510 SNMP configuration is properly set, but the 5460 SNMP configuration is set to Privacy Protocol 3DES. This causes all refresh health and refresh FC Performance tasks to fail.</p> <p>Workaround: Use UCP Director to change the Fibre Channel privacy protocol to "NoPriv" or "DES"</p>
18672	<p><i>In case of link failure, UCP Topology</i></p> <p>When topology paths go down for storage or network, the corresponding storage or network UI view may fail to show some of the previously connected devices.</p> <p>Workaround: Review all physical and logical topologies for the affected sections, and try to view topology again</p>
18721	<p><i>Setting FC Privacy protocol to AES 128 not supported for 5460</i></p> <p>When setting the Priv Protocol of FC switches to AES128, the task succeeds without errors, and the 6510 SNMP configuration is properly set, but the 5460 SNMP configuration is set to Priv Protocol 3DES. This causes all refresh health and refresh FC Performance tasks to fail.</p> <p>Workaround: Use UCP Director to change the Fibre Channel privacy protocol to "NoPriv" or "DES"</p>
18976	<p><i>PathSelectionPolicy and SATP configuration gets set on ESXi server host after creating ESXi cluster using service template</i></p> <p>ESXiCluster service template requires server base host profile. When base host profile has both 'PSP' and 'PSP, SATP' configurations not selected, the created ESXi cluster enabled these two settings.</p> <p>Workaround: Manually disable these two configuration settings from the cluster host profile after cluster creation is complete. Then re-apply the host profile to hosts in the cluster.</p>

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Ref. number	Description
19210	<p><i>Apply service template fails when Ethernet feature is disabled</i></p> <p>Applying service template with Ethernet-Feature disabled is NOT supported. UCP has setting to turn OFF configuring any settings on Ethernet switches in inventory. This is available in Ethernet-Switch inventory page as 'EthernetFeature' button. Service template feature is required to configure Ethernet switch port/s connected to host. Turning OFF or disabling 'EthernetFeature' will make service template feature not function correctly.</p> <p>Workaround: Do not disable 'EthernetFeature' if using service templates</p>
19213	<p><i>Cannot update site pair inventory</i></p> <p>UCP Datacenter Director site pair inventory cache cannot be updated if any UCP site in site pair is down.</p> <p>Workaround: Ensure UCP Director is up and running at both sites.</p>
19252	<p><i>Test volume not created in a SRM Reprotect operation</i></p> <p>When a Reprotect operation is performed in SRM on a Recovery Plan, a Test volume is not created on the Recovery site. This prevents a Test operation to be run, however it does not affect the successful outcome of a Disaster Recovery or Planned Migration in SRM.</p> <p>Workaround: If a Test operation must be supported, create a new Replication Group in UCP Datacenter Director, and in SRM create a new Recovery Plan to hold this Replication Group.</p>
20505	<p><i>vSphere web access error message when not using signed certificate</i></p> <p>When using the vCenter web client to access UCP from a client workstation that does not already have a signed certificate installed, the operation will fail with the following error: "Content was blocked because it was not signed by a valid security certificate. For more information, see "About Certificate Errors" in Internet Explorer help."</p> <p>Workaround: On the client workstation, install a signed certificate. Either obtain a digital certificate from your trusted third party certificate authority (CA), or export a self signed certificate from UCPManagement and import it onto the client workstation.</p>
20721	<p><i>Servers may loose I/O access to storage during firmware upgrade</i></p> <p>ESXi hosts or bare metal servers may loose I/O access to storage for 14 seconds while updating firmware on an Access Fibre Channel switch.</p> <p>Workaround: For every host that accesses the target Fibre Channel switch, disable the two HBA paths that access that switch. Then update the firmware on the switch. Then re-enable the paths on the hosts. Repeat these steps for the other switch.</p>

Issues with no workarounds

The table below lists existing issues that are relevant to this release for which no workarounds exist. The issues are listed in order by reference number.

Ref. number	Description
12442	<p><i>UCP Monitoring service ignore SNMP traps that have the "inform" mode set to true</i></p> <p>UCP Monitoring service only handles the SNMP traps which has the "trap" mode set to true.</p>
12895	<p><i>UCP Server Inventory does not display all details for blades in Hardware Maintenance Mode</i></p> <p>While servicing blades, a technician will place blades into a hardware-based maintenance mode. (This is different from vCenter's Maintenance Mode). While in hardware maintenance mode, UCP will be unable to display certain details about the blade. After leaving maintenance mode, all hardware details about the blade will again be displayed by UCP. You will not be able to perform any server actions against a blade which is in Hardware Maintenance Mode. Example: power operations or LID on\off. You may be able to attempt these actions, but the job will fail.</p>
13886	<p><i>The locale of the vCenter client used to access UCP Director should be the same as the locale of the OS running on the UCP Management VM</i></p> <p>UCP Director can only be accessed in the language of the OS that is running on the UCP Management VM. Currently UCP Director supports Japanese and English languages. If a vCenter client tries to access UCP in a language that is different than the language of the UCP VM the format of events, alarms and tasks will not be accurate.</p>
15095	<p><i>Volume detaches from a cluster can intermittently lead to false failure messages</i></p> <p>If a user tries to detach multiple volumes that share the same storage path concurrently or immediately one after the other, the detach succeeds but it can intermittently throw a false failure message.</p>
15162	<p><i>Same server ID with different host names causes InvalidOperationException</i></p> <p>Each server host in UCP server inventory is identified with server ID. If admin changes server ID directly on the host after it boots into ESXi it's possible to assign server ID. Doing this will create conflict in vCenter server host inventory which in turn result in server host being not correctly available to UCP. Each server host should have unique server ID.</p>

(Continued)

Ref. number	Description
15540	<p><i>Manual editing of HORCM files used for replication may cause replication to break and be reported successful</i></p> <p>UCP Disaster Recovery owns the HORCM file configurations used to setup replication. If the HORCM files are edited manually, UCP does not have the knowledge of known states and may result in unpredictable behavior, such as breaking replication and causing it to be reported as successful. Please do not modify the HORCM files used for replication.</p>
16013	<p><i>Current image reads: "Updated" HitachiESXi image" if the image is cloned</i></p> <p>Current image might have the following text prepended "(Updated)" once the image has been cloned. This is an intermittent issue at VMware's end.</p>
16130	<p><i>Ignore system partition failure errors when deploying windows using UCP service template</i></p> <p>During windows installation a warning message might popup on the console stating - "Setup was unable to create a new system partition or locate an existing system partition. See the Setup log files for more information." or</p> <p>The user should ignore these messages. UCP handles this error by rebooting the blade, loading the appropriate HBA driver, and dealing with MPIO issues and disk initialization. The user should not interfere by attempting other troubleshooting steps.</p>
17433	<p><i>Uninstalling UCP Disaster Recovery from UCP Director only results in UCP Datacenter Director failure</i></p> <p>UCP Disaster Recovery will not work in UCP Datacenter Director if UCP Disaster Recovery is not also installed in UCP Director. Uninstalling UCP Disaster Recovery from UCP Director at a site that has been added to UCP Datacenter Director, without fully uninstalling it from UCP Datacenter Director will result in an error when using the disaster recovery feature of UCP Datacenter Director. Uninstalling UCP Disaster Recovery from UCP Datacenter Director will disable disaster recovery functionality in UCP Datacenter Director.</p>
18035	<p><i>Password for SCP server cannot contain the "@" character</i></p> <p>Firmware update and switch configuration restore operations will not work on the Brocade switches if SCP password has an "@" character in it. Please use other characters when setting a new password.</p>
18331	<p><i>Replication will fail if the volume size is 1.2 GB</i></p> <p>If user tries to replicate a volume that is 1.2 GB in size replication will fail as UCP does not detect the volume capacity accurately.</p>

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Ref. number	Description
18612	<p><i>The Hitachi UCP Director Status Monitor page occasionally displays an AMQP communication error message</i></p> <p>The Hitachi UCP Director Status Monitor page may occasionally display an AMQP communication error message in the All Events table. This error event says "Failed to communicate with the AMQP service at IP Address: 127.0.0.1". If the UCP System is registered into a UCP Datacenter Director service, there is a small chance that the Datacenter Director service will not receive a monitor state message from the UCP system. This will be corrected during the next regularly scheduled UCP monitor state refresh task.</p>
18648	<p><i>Attaching storage volume between different OS version succeeds</i></p> <p>For example, applying volume created earlier (not currently used by any Linux host) for Linux OS can be attached to non-Linux hosts. This is because UCP Pro restricts only the currently in use storage volumes to be not shared across different OSs.</p>
18848	<p><i>Cannot view Performance Graphs on Mac</i></p> <p>Opening up the performance graphs on a Mac results in an error popup, and the graphs do not properly display.</p>
19175	<p><i>Get-Image CLI returns serverCount as '-1' when no applicable server exist</i></p> <p>UCP 3.0.2 ships with two default ESXi images one each for host blade type HBA1, HBA2. If the user's installation has only one type of these host blade type, the 'AssociatedServersCopunt' for non-existing blade type will be returned as '-1'</p>
19486	<p><i>No monitoring support for depletion thresholds in HUS storage array family</i></p> <p>When depletion thresholds are exceeded on a HUS storage array, monitoring status shows "Normal" state. This is expected behavior since HDvM does not support monitoring for depletion thresholds.</p>
20519	<p><i>Identity conflict after removing server profile from server</i></p> <p>Remove Server Profile removes the virtual identity from the server leaving the server only with physical identity. The physical identity of the server could have been virtualized to another server causing a an identity conflict.</p>
20991	<p><i>Topology UI has been deprecated in 3.5 release</i></p> <p>Going forward from 3.5 we will be using vC OPs for topology information and not the topology maps that show up in the vSphere web client UI. The UI options will be removed in the 3.5.1 release.</p>
22412	<p><i>Re-applying server profile fails when changing slots for blades currently existing in UCP server inventory</i></p> <p>When a blade that currently exists in UCP server inventory is moved to a different slot, re-applying the server profile that is already associated to that slot fails. This is due to duplicate MAC addresses in the database.</p>

Getting help

If you need to call the Hitachi Data Systems® support center, please have your site ID and provide as much information about the problem as possible, including:

- The circumstances surrounding the error or failure
- The exact content of any returned messages

The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, please call:

- United States: (800) 446-0744
- Outside the United States: (858) 547-4526

Getting help

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RNI-92UCP015-08