

Hitachi Infrastructure Director v1.0.0 Release Notes

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About this document

This document, RN-94HID002-00, June 2015, provides late-breaking information about Hitachi Infrastructure Director. It may also include 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 possible solutions.

Intended audience

This document is intended for customers and Hitachi Data Systems partners who license and use Hitachi Infrastructure Director.

Getting help

The Hitachi Data Systems Support Center 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

These release notes cover Infrastructure Director v1.0.0.

Features

Some of the key Infrastructure Director capabilities include:

- Simplified user experience for managing infrastructure resources. Provides visual aids to easily view and interpret key management information, such as used and available capacity, and guide features to help quickly determine appropriate next steps for a given management task.
- Recommended system configurations to speed initial storage system setup and accelerate new infrastructure resource deployments.
- Integrated configuration workflows with Hitachi recommended practices to streamline storage provisioning and data protection tasks.
- Common, centralized management for the midrange Hitachi Virtual Storage Platform family.
- REST-based API to provide full management programmability and control in addition to unified file-based management support.
- Enablement of automated SAN zoning during volume attach and detach. Optional auto-zoning eliminates the need for repetitive zoning tasks to be performed on the switch.

System requirements

Verify that the Infrastructure Director storage system meets or exceeds the minimum requirements to take advantage of all the features of Infrastructure Director.

Server	Problem
Hypervisor operating system	VMware® ESXi 5.0
Available disk space	40 GB
Memory	12 GB RAM
CPU	4 vCPUs
A client computer that can run a supported browser	At least one of the following: <ul style="list-style-type: none"> • Internet Explorer v10 or later • Firefox v31.3.0 ESR, v34.0.5 or later • Chrome v38.0.2125.122 or later

Verify that Infrastructure Director ports do not overlap with those used by other programs on the storage system.

Service	Port number
CCI	31001
HTTP	80
HTTPS	443
Reserved	1099, 8843, 8080, 8082, 8083, 8084, 8085, 8090, 8888, 51099, 51100
SNMP	161, 162

Supported storage systems

Hitachi Infrastructure Director supports the midrange storage systems of the Virtual Storage Platform family.

Initial startup and initial setup of any supported storage system must be completed by a Hitachi Data Systems representative or an authorized service provider.

Hitachi Infrastructure Director supports the following storage systems:

- Hitachi Virtual Storage Platform G200
- Hitachi Virtual Storage Platform G400
- Hitachi Virtual Storage Platform G600

Supported file server

Hitachi Infrastructure Director requires minimum file server firmware and system management unit software versions.

Hitachi Infrastructure Director supports the following file server configuration:

Hitachi NAS Platform (HNAS) firmware: 11.2.3319.14

System management unit (SMU) software: 11.2.3319.02

Supported fabric switch models

Infrastructure Director supports a variety of Brocade® fabric switches.

Model	Fiber OS version	Type
300	7.0	71
	7.1	
	7.2	
5300	7.0	64
	7.1	
	7.2	
6505	7.0	118
	7.1	
	7.2	
6510	7.0	109
	7.1	
	7.2	
6520	7.0	133
	7.1	
	7.2	
7800	7.0	83
	7.1	
	7.2	
DCX 8510-4	7.0	121
	7.1	
	7.2	

Supported servers

Hitachi Infrastructure Director can be used to provision storage to many servers running any one of the following operating systems:

- VMware®
- Windows®
- HP-UX™
- Sun Solaris
- NetBSD®
- TRU64 UNIX®
- Novell NetWare®
- IBM® AIX®
- Linux®
- IRIX®

Known issues

The following table lists known issues in the current release of Infrastructure Director. The issues are listed in order by defect ID.

Defect ID	Problem	Workaround/Comments
359, 1840	<ul style="list-style-type: none"> • When adding or updating a fabric switch, if cinder is not able to reach the SSH of the switch, the Infrastructure Director interface may become unresponsive. • If any of the switches that have been added to inventory are inaccessible, the Attach workflow may fail with the error code: "CinderConnecti onControlFailure ErrorMessage". 	<ul style="list-style-type: none"> • Remove the inaccessible switch from inventory and run the command again or bring the inaccessible switch back into a functioning state. • Wait for some time and retry when the switch becomes reachable.
617, 946, 2077	<p>HDT pool creation may rarely encounter an error and fail with the message: "Updating automatic tier management on HDT pool failed."</p> <p>When HDT pool creation fails it is possible that the pool was actually created but Infrastructure Director failed to set up tiering on the pool. In this case the pool may not show in the Infrastructure Director pool list for about 30 minutes.</p>	<p>Wait for 30 minutes and review the pool list. When the pool displays, either delete the pool and retry the HDT pool creation or go to Hitachi Device Manager - Storage Navigator and set up tiering on the pool.</p>

Defect ID	Problem	Workaround/Comments
706	Pools created using the basic method may not have the size that was indicated when the pool was created. This occurs if the pool volumes created on the parity group do not consume the entire parity group capacity.	Access the pool details and look at the parity groups used to create the pool. One or more parity groups has less percentage used than the others. Delete the pool and initialize this parity group. The percentage used will increase. Retry pool creation.
713	The disk capacity in Hitachi Device Manager - Storage Navigator and Hitachi Infrastructure Director might differ because Hitachi Device Manager - Storage Navigator shows model-specific capacity while Hitachi Infrastructure Director shows actual usable capacity.	There is no workaround. This is only a difference in reporting. The actual disk capacity available and used by Hitachi Device Manager - Storage Navigator or Hitachi Infrastructure Director is the same.
736, 1766, 1877	Volume deletion fails.	Check the volume details. If the volume is protected, unprotect it. Check the server details. If the volume is attached, manually detach it. Once the volume is unprotected and unattached, delete it.
737, 1985	In the Parity Group inventory page, the disk status information is missing.	Disk status is not available in Infrastructure Director. Log in to Hitachi Device Manager - Storage Navigator to access this information. If the "Create parity group" or "Delete parity group" request fails with a 3305-208016 error, either log in to the Management Utility and ensure that no drive is in a blocked state or contact the HDS Support Center.
877	Infrastructure Director user interface may display only a spinning icon if a call fails with an Internal Server Error (500).	Service is down, resulting in the alert indicating an internal server error. Contact the HDS Support Center.
941, 1970, 1973	Creation of a resource with a space in its name fails.	Remove any spaces and retry.
976, 1047	Concurrent tasks to create, update, or delete parity groups fail intermittently.	Make sure each parity group task has completed before starting another.

Defect ID	Problem	Workaround/Comments
979	Onboarding a storage system takes a while to complete.	When onboarding a storage system for the first time, the system might take a while to show all the resource information and the capacity summary. Wait for some time for the complete information to appear on the GUI.
1012, 1051	The parity group batch creation fails when any individual parity group creation task in the batch fails. One of the following may intermittently display: <ul style="list-style-type: none"> Command I/O error. Workaround: Retry the parity group batch creation. Network error 4011. Workaround: Retry the parity group batch creation. "The parity group {parityGroupId} was not found" error message. 	In this case, the parity group is created. Wait for the parity group to appear in the inventory. It will have the status "UNINITIALIZED". Delete the parity group and recreate it.
1218	When adding or updating a fabric switch, the IP address for the Standby CP of the Core Switch is used. This results in a null pointer exception (500 Internal Server Error).	Use the Active CP IP address.
1349	Hardware alerts on the Monitoring tab are not updated unless the user navigates to another tab and back to the Monitoring tab.	Click another tab and then click the Monitoring tab to display updated alerts.
1417	Both FMD and SSD disks display as SSD.	No workaround.
1623	While updating Initial Setup Wizard settings, an invalid mail server is successfully added.	Delete the invalid mailserver details and add valid mailserver details.

Defect ID	Problem	Workaround/Comments
1737	An existing volume with UVM Host Mode cannot be attached to a server: An error is returned that the LUN path cannot be set.	No workaround. UVM Host Mode is not supported.
1738	A fabric switch has been added but does not display on the Fabric Switches page.	The job to create the fabric switch has not completed. Wait until the job is completed to view the switch.
1767	An account domain is updated but does not display.	Wait a brief period for the domain to be contacted.
1803	After multiple fields in the Initial Startup Wizard are updated, one or more jobs fail. The error message indicates that the request to acquire lock for maintenance utility failed.	Resubmit the updates.
1813	The attach volume API does not provide a setting for empty Host Mode Option.	The Host Mode Option setting cannot be changed in Infrastructure Director. Access Hitachi Device Manager – Storage Navigator to change the setting.
1849	A data protection job fails with a message that the resource group name is too long.	Use a name with fewer than 28 characters. Use the Comments field for any detailed information.
1857	Spaces are stripped from the beginning and end of fields when entering SNMP configuration information.	No workaround.
1889	The Initial Startup Wizard page for common settings and license are not populated with the current values from the storage system.	Close the Initial Startup Wizard and reopen it.
1922	Cannot create pool on parity group with RAID 5 (8D+1P) layout even though the parity group status is Available.	Do not use 8D+1 PG for pool creation.
1972	In the Infrastructure Director GUI and API, the date and time shows GMT no matter what time zone is picked.	Manually set the system time (without NTP server) using current time in Universal Coordinated Time (UTC) / Greenwich Mean Time (GMT), and get date-time system time API response is always in UTC/GMT.

Defect ID	Problem	Workaround/Comments
2069	Infrastructure Director allows pool creation when the pool volumes on the parity groups are in quick formatting state. If you use a newly created parity group for pool creation and use the pool, you may notice some performance impact.	No workaround. The performance impact will automatically be reverted once the pool volumes are out of formatting state.
2094	Hardware monitoring alerts display even though alerts for some components of a given type (for example, fans, pools, batteries) have cleared.	Alerts are only cleared when all components of a given type with errors in the storage system return to normal state. The exception is disks, each of which can have alerts cleared, even if other disks remain in error. Alerts for ports and processors are cleared together, so alerts are cleared only when all ports and all processors are normal.
2109	If one volume is attached to multiple servers, Data Protection Alerts does not launch the server inventory page to display all servers that are affected.	No workaround. Infrastructure Director displays only one server detail page.
2134	<p>Creating a pool from template fails, generating the message: "CAUSE: Resource group of specified ldev is different from the resource group of the other ldevs which belong to specified pool."</p> <p>If LDEV IDs are from different resource group from that of the parity group, pool creation fails with the foregoing error.</p>	Access Hitachi Device Manager - Storage Navigator, make sure the LDEVs and parity group belong to the same resource group.

Defect ID	Problem	Workaround/Comments
2143, 2149	<ul style="list-style-type: none"> No error is reported when the Change IP Address Utility is executed with a default gateway that is outside the subnet of the VM. Onboarding an HNAS cluster with incorrect IP causes 504 gateway timeout 	<ul style="list-style-type: none"> When running the utility, make sure that the specified default gateway is in the same subnet as the desired VM IP. Configuring an invalid gateway will result in your VM being inaccessible from another subnet. Onboard HNAS with the correct IP address.
2157	An unexpected time lag is noticed in Infrastructure Director while loading resources.	<p>There is a lag when resources are created outside of Infrastructure Director.</p> <p>Wait a while for Infrastructure Director to process the resources.</p>
2160	A user who has been assigned the StorageAdministrator role cannot update pools.	Perform the task with the role SystemAdministrator.
2161	Password has been removed from response for the GET fabric switch request. The Hitachi Infrastructure Director RESTful API Reference Guide does not reflect this change.	No workaround.
2163	Clone now replication intermittently fails and displays the message "An unexpected error occurred."	Retry the replication task.
2166	During ovf deployment in a static environment using the command line, the deployment confirmation displays transposed IP addresses for Netmask and Gateway.	No impact. The addresses set during deployment are retained and are only transposed in the confirmation menu.
2175	Updated time zone information is not available on VAM user interface. The correct time zone is saved in the system.	No workaround.

Defect ID	Problem	Workaround/Comments
2177	Refcode mapping to SNMP trap description is not available.	Refcode mapping file is available in the ISO image.
2182	The create-attach-protect workflow does not update copy groups based on the number of clones. If the user specifies the number of copies while adding a volume to an existing Copy Group, the number of copies specified is ignored and copies are generated based on the number specified in the existing Copy Group.	No workaround.
2239	If Fabric Name is not set on the Principal Switch, an error occurs.	Set the Fabric Name on the Principal Switch and retry the operation.
2240	After running the IP-change script, the appliance retains its previous IP address, as well as the newly set IP address.	Remove the previous address by running IP-change script twice using the new IP address to retain the correct IP address.
2251	If a fabric is not onboarded and zones are not pre-created, Infrastructure Director will not be able to auto-select ports for provisioning storage. In such a case, "attach" volume operation will fail indicating that no ports and WWNs could be selected	Make sure that the fabric is onboarded and accessible with port security enabled on storage and fabric ports. If you do not want to onboard a fabric and use auto zoning, make sure that zones are pre-created between the servers and storage system. If neither of the above conditions can be satisfied, please manually select ports and WWNs in the "attach" operation.
2256	If Infrastructure Director Help is minimized, entering a term in the Search field does not maximize Help.	Maximize Help and then enter a term in the Search field.
2263	Unprotecting a volume removes the replication pair but does not remove the HSD created for the secondary volume. As a result, deleting the volume is not possible through Infrastructure Director.	Access Hitachi Device Manager - Storage Navigator and remove the HSD (with no valid WWNs). Once the volume is removed from all HSDs, delete the volume.

Defect ID	Problem	Workaround/Comments
2275	Infrastructure Director interface displays a blank screen with an error regarding LDEV 0 not found when accessing volumes.	This issue automatically clears up and HID shows volume list successfully after some time. No workaround.

Documentation

This section lists the Infrastructure Director user documentation.

Related documents

- Hitachi Infrastructure Director Getting Started Guide (MK-94HID001)
- Hitachi Infrastructure Director Release Notes (RN-94HID002) (this document)
- Hitachi Infrastructure Director RESTful API Reference Guide (MK-94HID003)
- Hitachi Infrastructure Director User Guide (MK-94HID004)

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