

Hitachi Storage Plug-in for VMware vCenter v04.11.0 Release Notes

About this document

This document (RN-92ADPTR048-34, Jun. 2024) provides late-breaking information about Hitachi Storage Plug-in for VMware vCenter 04.11.0. 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 Vantara partners who license and use Hitachi Storage Plug-in for VMware vCenter.

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About this release

This is a major release that adds new features and resolves known problem.

- Support of VSP One B24, B26 and B28
- Support of VSP One SDS Block 01.13.00.xx, 01.14.00.xx
- Support of compression function and NVMe over TCP of VSP One SDS Block
- Dropping support of HNAS 4000 Series
- Dropping support of NAS module of VSP N400, N600, N800.
- The issue of non-displaying information on the Volume Summary screen in "VSP One SDS Block" has been fixed.

Software and Hardware Support

The software and hardware listed below is supported by this release. Hardware and/or software not listed in the table(s) below is not supported by this release.

Software

The Hitachi Storage Plug-in for VMware vCenter supports the following software:

Software	Remarks
<p>One of the following software is required See Note 1</p> <p>VMware vCenter Server Appliance 7.0 VMware vCenter Server Appliance 7.0 (Update 1) VMware vCenter Server Appliance 7.0 (Update 2) VMware vCenter Server Appliance 7.0 (Update 3) VMware vCenter Server Appliance 8.0 VMware vCenter Server Appliance 8.0 (Update 1) VMware vCenter Server Appliance 8.0 (Update 2)</p>	<p>Required for vSphere Client</p>
<p>One of the following software is required</p> <p>VMware ESXi 7.0 VMware ESXi 7.0 (Update 1) VMware ESXi 7.0 (Update 2) VMware ESXi 7.0 (Update 3) VMware ESXi 8.0 VMware ESXi 8.0 (Update 1) VMware ESXi 8.0 (Update 2)</p>	<p>Required for ESXi</p>
<p>Hitachi Ops Center API Configuration Manager (Hitachi Ops Center Component) See Note 2</p>	<p>Storage systems and compatible versions:</p> <p>VSP E590, E790: 10.5.1 or later VSP E590H, E790H: 10.7.0 or later VSP E990: 10.1.0 or later VSP E1090, E1090H: 10.8.0 or later VSP F350, F370, F700, F900: 8.6.0 or later VSP G350, G370, G700, G900: 8.6.0 or later VSP F400, F600, F800: 8.6.2 or later VSP G200, G400, G600, G800: 8.6.2 or later VSP N400, N600, N800: 8.6.4 or later VSP 5100, 5500, 5100H, 5500H: 10.0.0 or later VSP 5200, 5600, 5200H, 5600H: 10.8.0 or later VSP F1500: 8.6.2 or later VSP G1500: 8.6.2 or later VSP G1000: 8.6.2 or later</p>
<p>Microsoft Windows:</p> <p>Microsoft Edge See Note 3 Mozilla Firefox Google Chrome</p> <p>Mac OS:</p>	<p>Installed in VMware Management client. We recommend using the latest version.</p>

Mozilla Firefox Google Chrome	
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Note 1: The vSphere Client is included in VMware vCenter Server.

Note 2: Refer to related documents for the requirements of Hitachi Ops Center API Configuration Manager. To register a storage system to Hitachi Ops Center API Configuration Manager, refer [Setting up the Prerequisite Software](#) too.

Note 3: Microsoft Edge is supported under VMware vCenter Server Appliance 7.0 or later environment only.

Storage Systems

The Hitachi Storage Plug-in for VMware vCenter supports the following storage systems:

Storage Model	Firmware Version	Interface/Host Port
VSP E590, E790	93-03-21 or later	Fibre Channel, iSCSI
VSP E590H, E790H	93-05-02 or later	Fibre Channel, iSCSI
VSP E990	93-02-01 or later	Fibre Channel, iSCSI
VSP E1090, E1090H	93-06-01 or later	Fibre Channel, iSCSI
VSP F350, F370, F700, F900 VSP G350, G370, G700, G900	When Hitachi Configuration Manager 8.6.0 or 8.6.1 is used: 88-01 or later When Hitachi Configuration Manager 8.6.2 or later is used: 88-03-01 or later	Fibre Channel, iSCSI
VSP F400, F600, F800 VSP G200, G400, G600, G800	83-05-25 or later	Fibre Channel, iSCSI
VSP N400, N600, N800	83-06-01 or later	Fibre Channel, iSCSI
VSP 5100, 5500, 5100H, 5500H	90-01-42 or later	Fibre Channel, iSCSI
VSP 5200, 5600, 5200H, 5600H	90-08-01 or later	Fibre Channel, iSCSI

VSP F1500 VSP G1000 VSP G1500	80-06-61 or later	Fibre Channel, iSCSI
VSP One B24, B26, B28	A3-02-21 or later	Fibre Channel, iSCSI
VSP One SDS Block	01.12.00.xx 01.13.00.xx 01.14.00.xx	Fibre Channel, iSCSI, NVMe over TCP

Restrictions and Considerations

Restrictions

This version runs on only VMware vSphere Client (HTML5).

This version does not support upgrade from v03.x.x.

The information of capacity saving is not displayed when you use VSP G200, G400, G600, G800, G1000, G1500, VSP F400, F600, F800, F1500, VSP N400, N600 or N800.

When the message of retry appears during Provision Datastore, there is a case in which LDEVs that is not used by the Datastore are created. Then verify their LDEV IDs written in StoragePlugin.log, tell the LDEV IDs and LDEV labels (the same as Datastore name) to your storage administrator and ask him to delete them.

The model name of the storage system selected in the Physical Storage Discovery and the model name of the virtual storage machine displayed in the Virtual Storage Discovery which has the same serial number could be different. If you want to register the storage system selected in the Physical Storage Discovery in the Add Storage wizard, select the virtual storage machine with the same serial number in the Virtual Storage Discovery.

If the session of vSphere Client is terminated while the plug-in processing the task, the task fails and retry/rollback become to be unavailable. For the details, refer to [VMware vSphere Client Session termination](#) in this document.

On condition that the Hitachi Storage Plug-in fails to get a session information between the vSphere Client and a web browser, the Hitachi Storage Plug-in forcibly shows the Storage System screen. If you are using Mozilla Firefox, the Hitachi Storage Plug-in might repeat showing the Storage System screen due to continuous failure of getting

session information. If you face that case, try refresh the browser. If it does not work, clear caches of browser, or use other browser than Mozilla Firefox.

Before operating Provision Datastore with enabling Capacity Saving (deduplication function) on a Virtual Storage Machine(VSM), assign 48 or above LDEV IDs to the VSM's resource group. It is because 48 deduplication system data volumes (fingerprint and datastore) are automatically created into the pool which related to the VSM's resource group by the Storage System.

The plug-in does not support the operating during controller model upgrade where the Storage System is upgraded from VSP 5100, 5500, 5100H and 5500H to VSP 5200, 5600, 5200H and 5600H.

The descriptions in "Setting up SSL certificates" in Hitachi Storage Plug-in for VMware vCenter User's Guide are the procedures in the case of not including the Intermediate Certificates. To import the certificate chains including the Intermediate Certificates, please refer to the related general documentation.

If a datastore is provisioned with using Provision Datastore where the name of the datastore contains a plus (+) character, the plus (+) character is replaced with a space () in the name of the datastore provisioned.

On a condition that a VPS is registered to a plug-in with using a VPS administrator's credential, Provision Datastore on the VPS fails when a Storage Adapter selected in Provision Datastore has been already registered in a Hitachi Virtual Storage Software Block cluster where the VPS exists. In this case, manually delete a compute node created by plug-in according to the procedure below.

[Step 1] From "Task Console" in vSphere Client, confirm a error messages in a failed task of Provision Datastore. Strings following "URI = [HTTPS://172.16.60.200:443/ConfigurationManager/simple/v1/objects/servers/](https://172.16.60.200:443/ConfigurationManager/simple/v1/objects/servers/)" is a compute node ID. For example, db4ac4d6-0161-4e33-a574-cccaef90a35 in the case below.

2023/07/26 10:53:09 [EB006006] An error occurred while executing REST API. URI =
HTTPS://172.16.60.200:443/ConfigurationManager/simple/v1/objects/servers/db4ac4d6-0161-4e33-a574-cccaeaf90a35/hbas, operation = POST,
statusCode = - (Job Failure), errorSource =
/ConfigurationManager/simple/v1/objects/servers/db4ac4d6-0161-4e33-a574-cccaeaf90a35/hbas, messageID = KARS03004-E, message = The initiator name cannot be registered., cause = The specified initiator name is already registered., solution = Specify another initiator name., errorCode = None. Perform the following: (1) Check the cause and the solution mentioned above, carry out the solution if needed, and then try again. (2) Communication problems may have occurred with the storage system. Check the storage system environment.

[Step2] In a VPS's summary screen on the plug-in (The VPS is where you tried Provision Datastore on), check a VPS ID. You can confirm the VPS ID in [VPS name]_[VPS's IP address]_(ID: [VPS ID])

[Step3] Ask VPS administrator or system administrator of Hitachi Virtual Storage Software Block to delete the compute node using compute node ID and VPS ID.

When you try to do Provision Datastore to create many datastores at once and it will take 30 minutes or more, change a setting of session timeout of vCenter Server according to the procedure below.

[Step1] Log in to the vCenter Server with SSH.

[Step2] Open /etc/vmware-vpx/vpxd.cfg with text editor and add <soap> element between <vmacore> and </vmacore> and set "120" of sessionTimeout as the example below.

```
<vmacore>
....
<soap>
  <sessionTimeout>120</sessionTimeout>
</soap>
....
</vmacore>
```

[Step3] Reboot the vCenter Server using below command.
service-control --restart vsphere-ui

When performing various operations with a plugin, there may be cases where the intended messages that should be displayed in the plugin's GUI do not appear, and instead, a different message is displayed. This is the issue of output of messages and does not affect the functionality or operations themselves. If necessary, you can repeat

the steps provided in the resolution method below several times to display the correct message.

Plug-in's GUI	Incorrectly displayed message.	Intended message.	Recovery
Plug-in's wizard	addstoragewizard.info.title	REST API Server Information	Press the X button to close the wizard and then perform the same operation again.
	addstoragewizard.info.description	Enter the REST API Server Information.	
	addstoragewizard.info.Cmtitle	Configuration Manager REST API Server Information	
	addstoragewizard.info.Cmdescription	Enter the Configuration Manager REST API Server Information.	
	msg.0021	Provision Datastore failed. Do you want to retry this operation? To retry, click Yes.	
	msg.0024	Delete Datastore failed. Do you want to retry this operation? To proceed, click Yes.	
	msg.005E	Unable to get session information. Perform the following: (1) Refresh the browser. (2) Navigate to any other view first and then, return the Hitachi Storage Plug-in. If the problem is still not resolved, please clear cookies and site data.	
Plug-in's dialog box	msg.0020	Remove the selected storage system(s)?	Press the X button to close the dialog box and then perform the same operation again.
	msg.0038	Refresh the selected storage system(s)?	
	msg.0023	Are you sure you want to remove the selected item(s)? To proceed, click Yes.	

Plug-in's screen	msg.0021	Provision Datastore failed. Do you want to retry this operation? To retry, click Yes.	Please perform the browser's refresh operation or press the "NO" button to close the dialog box and then display any screen of the plug-in again.
	msg.0024	Delete Datastore failed. Do you want to retry this operation? To proceed, click Yes.	
	msg.003A	Refresh information from the storage system(s)? This may take some time.	
	msg.0063	Connection to the Backend Server failed. Please log in to the vSphere Client again. If the above does not resolve the issue, perform the following: (1) Verify that the connected vCenter Server is registered. (2) Verify that the configuration file (vcenterList.json) is corrupt or does not exist. The configuration file (vcenterList.json) is located in the Backend Server folder: /usr/local/hitachi-storage-plugin/jetty/webapps/conf (3) Verify if the SSL Thumbprint or GUID of the connected vCenter Server has changed.	Please perform the browser's refresh operation or display any screen of the plug-in again.
msg.0064	You have no privileges to view this object or it does not exist.		

Refer to "Restrictions and considerations" of the Hitachi Storage Plug-in for VMware vCenter User's Guide (MK-92ADPTR047-29).

Setting up the Prerequisite Software

Registering a storage system is required when using Hitachi Configuration Manager.

A command example for Hitachi Configuration Manager v8.6 is shown below. Please set the parameters to suitable value for your environment. For detailed information, please see the Hitachi Command Suite Configuration Manager REST API Reference Guide.

You can register a storage array with this command:

```
curl -v -H "Accept:application/json" -H "Content-Type:application/json" -u user:password  
-X POST --data-binary @./InputParameters.json  
https://192.0.10.30:23451/ConfigurationManager/v1/objects/storages
```

Where InputParameters.json is:

```
{  
  "ctl1Ip" : "192.0.10.10",  
  "ctl2Ip" : "192.0.10.11",  
  "targetCtl" : "CTL1",  
  "model" : "VSP G900",  
  "serialNumber" : "123456",  
  "changeNotificationSetting" : {  
    "isNotifiable" : true  
  }  
}
```

Note: Please set the parameter "isNotifiable" to true. If "isNotifiable" is not set to true, Hitachi Storage Plug-in may not get the latest information or the operations may be failed.

VMware vSphere Client Session termination

If the session of vSphere Client is terminated while the plug-in is processing the task, the task will fail and retry/rollback will become unavailable. If session termination occurs, follow steps 1 and 2.

[Step 1. How to check whether the task fails]

If the message like below is recorded in StoragePlugin.log at /var/log/hitachi-storage-plugin of Backend Server, session termination had occurred.

```
[167] [09/18/19-07:15:25.756] ERROR [-----]
{HiLogger::outputStackTraceLog}: An unexpected error has
occurred.Exception:ServerSOAPFaultException ErrorMessage:Client
received SOAP Fault from server: The session is not authenticated. Please
see the server log to find more detail regarding exact cause of the failure.
```

[Step 2. How to rollback the datastore]

If the message in step 1 is recorded, there is a case in which LDEVs that are not used by the Datastore are created. Verify their LDEV IDs written in StoragePlugin.log, tell the LDEV IDs and LDEV labels (the same as Datastore name) to your storage administrator and ask him to delete them.

Operating Suggestions

When installing the vCenter Server Appliance version of Hitachi Storage Plug-in for VMware vCenter is failed, run the installer with root user credentials.

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