

Self Certification Tool

v1.2.2

Troubleshooting Guide

This guide describes the troubleshooting steps for failure conditions and provides solutions to resolve them.

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Preface

About this document

This guide provides instructions to troubleshoot and recover from failures that may occur during testing. Resolve all issues before re-running a failed test to ensure it completes successfully.

If you ignore a failed test and move on to the next one, you may trigger additional failures. To prevent this, follow the instructions in this guide or contact the support team to resolve the issue before proceeding.

Intended audience

This document is intended for system administrators, Hitachi Vantara representatives, authorized service providers, and customers who are involved in installing, configuring, and operating VSP One Software Defined Storage Block and Self Certification virtual machines. To use this document, you must have the following knowledge and experience:

- Networking
- VMware and Linux
- VSP One SDS Block
- FC and iSCSI storage protocols

Release notes

Read the release notes before installing and using this product. They may contain requirements or restrictions that are not fully described in this document or updates or corrections to this document. Release notes are available on the Hitachi Vantara documentation website:
<https://docs.hitachivantara.com>

Accessing product downloads

Product user documentation is available on: <https://docs.hitachivantara.com>. Check this site for the most current documentation, including important updates that may have been made after the release of the product.

Getting Help

[Hitachi Vantara Support Connect](https://support.hitachivantara.com/en_us/contact-us.html) is the destination for technical support of products and solutions sold by Hitachi Vantara. To contact technical support, log on to Hitachi Vantara Support Connect for contact information: https://support.hitachivantara.com/en_us/contact-us.html.

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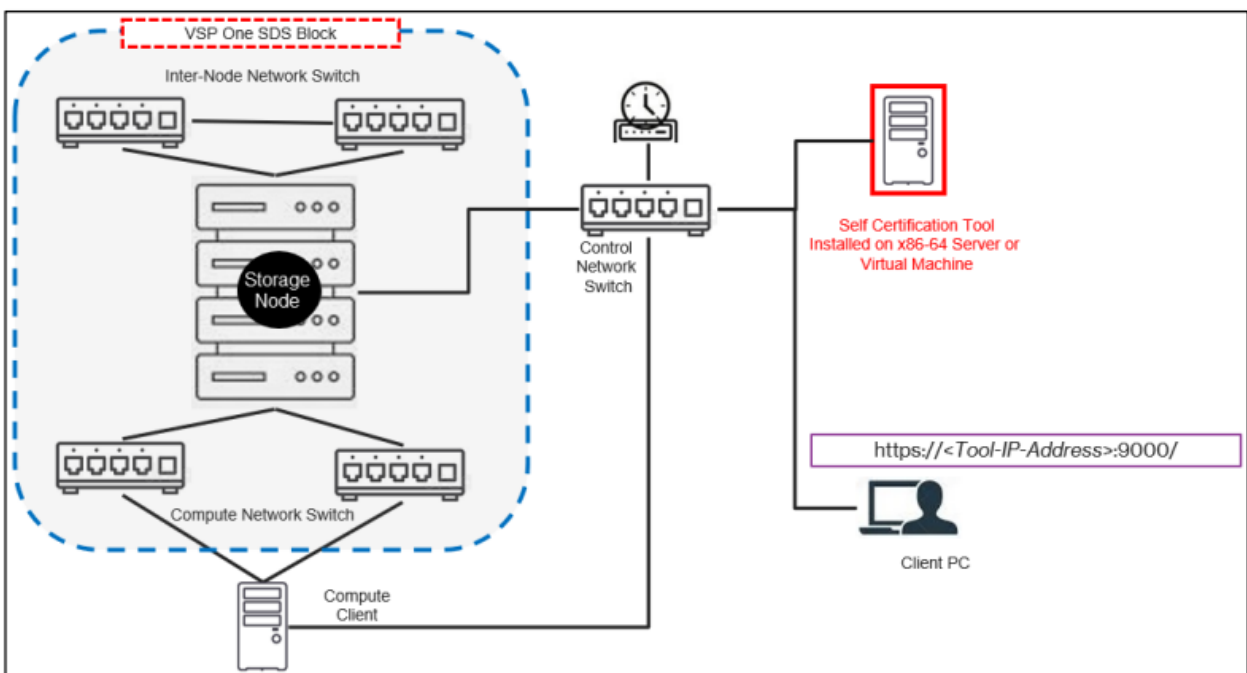
Introduction

Purpose

This guide provides error codes and solutions to help you identify and resolve test failures.

Block Diagram

The following diagram shows a multi-tier architecture independent of the underlying system, storage, and client machine.



Support Assistance

If you encounter any of the following errors, contact Hitachi Vantara support at support.hitachivantara.com for assistance.

Error Code	Error Description
SC0000IB	Undefined information. Contact support for assistance.
SC0000E	Unknown error occurred. Contact support for assistance.
SC0000W	Undefined warning. Contact support for assistance.
SC0000C	Undefined critical error. Contact support for assistance.
SC0001W	Test executed with warning. Check test log. Contact support for assistance.
SC0001E	Test execution failed. Check test log. Contact support for assistance.
SC0002E	An unexpected error occurred. Rerun the test. If the issue persists, contact support for assistance.
SC0004E	Unable to connect the system. Connection received: Timeout Error.
SC0005E	Unable to connect. Connection received: No Valid Connections Error.
SC0020E	Error occurred during volume test execution. Check test log.
SC0030E	Error occurred during user test execution. Check test log.
SC0050E	Error occurred during pool configuration execution. Check test log.
SC0060E	Error occurred during performance execution. Check test log.
SC0090E	Error occurred during test log and storage dump collection. Check test log.
SC0094E	Error occurred during execution of switch maintenance operation. Check test log.
SC0160E	Error occurred during Cluster Power Operation test execution. Check test log.
SC0161E	Error occurred during Volume Operation Stress test execution. Check test log.
SC0162E	Error occurred during Volume Operation Repeat test execution. Check test log.
SC0163E	Error occurred during Node Maintenance Without IO Test execution. Check test log.
SC0164E	Error occurred during Compute node Configuration Test execution. Check test log.

SC0165E	Error occurred during Prepare Compute client For IO Test execution. Check test log.
SC0166E	Error occurred during Compute IO Heat Run Test execution. Check test log.
SC0167E	Error occurred during IO Reset Heat Run Test execution. Check test log.
SC0168E	Error occurred during Node Maintenance With IO Test execution. Check test log.
SC0169E	Error occurred during TCP IP Packet Loss Nic Port Evaluation Test execution. Check test log.
SC0171E	Error occurred during TCP IP Packet Delay Nic Port Evaluation Test execution. Check test log.
SC0172E	Error occurred during Execute Compute Cable Error Test execution. Check test log.
SC0173E	Error occurred during Execute Internode Cable Error Test execution. Check test log.
SC0174E	Error occurred during Node Power Error Recovery Test execution. Check test log.
SC0175E	Error occurred during Inter Connect Switch Reboot Test execution. Check test log.
SC0176E	Error occurred during Compute Switch Reboot Test execution. Check test log.
SC0177E	Error occurred during Inter Connect Switch Power Error Test execution. Check test log.
SC0178E	Error occurred during Compute Switch Power Error Test execution. Check test log.
SC0179E	Error occurred during Drive Removal Error Test execution. Check test log.
SC0180E	Error occurred during Drive Insert And Pool Expansion Test execution. Check test log.
SC0248E	Unknown error occurred. Contact support for assistance.
SC0358E	Error occurred due to an unknown reason. Contact support for assistance.
SC0212E	Error occurred during a test as an unexpected event has appeared on verifying storage events. Share test log and report the issue.
SC0244E	Error occurred as Compute node delete operation failed.
SC0251E	Error occurred as Event is not found.
SC0252E	Error occurred while handling IO Run progress check in Vdbench.
SC0270E	Error occurred as Vdbench IO is not running. Contact support for more assistance.
SC0275E	Error occurred as XFS Filesystem creation failed on device/partition.

SC0278E	Error occurred as storage volume format operation failed.
SC0279E	Error occurred as Certification ID is not present in database.
SC0280E	Error occurred while loading switch information from config file.
SC0281E	Error occurred as TCP/IP packet loss is stopped before test duration.
SC0282E	Error occurred as TCP/IP packet delay is stopped before test duration.
SC0285E	Error occurred as Cluster Compute port type could not be determined.
SC0296E	Error occurred as test name not matched. Make sure correct test name is passed.
SC0297E	Error occurred during powering off the storage node. Check the node information provided.
SC0298E	Error occurred during powering on the storage node. Check the node information provided.
SC0299E	Error occurred as maximum timeout reached while fetching multipath JSON information.
SC0301E	Error occurred as port speed given by user did not match with the actual port speed of the switch.
SC0302E	Error occurred as port is offline.
SC0303E	Error occurred while retrieving port information.
SC0304E	Error occurred as port verification is unsuccessful for current switch.
SC0310E	Error occurred if JSON/log file is not found, make sure the file is present at respective location.
SC0311E	Error occurred while reading device timeout information.
SC0314E	Error occurred while executing command execution through SSH.
SC0316E	Error occurred while matching the VMX file with the name of the node.
SC0318E	Error occurred while registering initiator name.
SC0319E	Error occurred as number of volume discovered on Compute client did match with number of volume assigned.
SC0320E	Error occurred as port speed is not found.
SC0326E	Error occurred as IO shutdown operation in Compute client failed.
SC0327E	Error occurred while counting storage volumes. The count is less than expected.

SC0330E	Error occurred as number of volume discovered on Compute client did not match with number of volume assigned.
SC0331E	Error occurred as expected test result not observed for the test.
SC0332E	Error occurred as there is any wrong connection between volume and server. Correct volume needs to be mapped with Compute client.
SC0344E	Error occurred due to Test name mismatch.
SC0345E	Error occurred as user interaction message creation failed.
SC0354E	Error occurred if Compute ports paths have packet loss above 50 percent, Check Compute path between Compute Clients and Nodes.
SC0394E	Error occurred as storage health issue found during performance test execution, Vdbench execution terminated.
SC0395E	Error occurred as maximum iteration count reached which is defined for the function.
SC0396E	Error occurred as Node IP is inactive. Re-check the given node IP.
SC0397E	Error occurred as entered Management Controller IP is inactive. Re-check the given management controller IP.
SC0398E	Error occurred when retrieving storage cluster information.
SC0406E	Error occurred as Port connection creation failed.
SC0416E	Error occurred as bad authentication type; allowed types: ['publickey', 'keyboard-interactive']. Connection received: Bad Authentication Type.
SC0417E	Error occurred as authentication failed. Check user ID and password. Connection received: Authentication Exception.
SC0418E	Unable to read device timeout information.
SC0429E	Error occurred as unable to read and verify file /etc/multipath.conf in Compute client. Refer configuration guide or contact support for assistance.
SC0325E	Error occurred with LED indication of a drive. LED indication may not be functional.

Checklist Before Submitting a Support Request

Verify that the following steps are completed before contacting Hitachi Vantara support:

1. Check the logs to identify the cause of the test failure.
2. Log in to the storage GUI.
 - a. Verify that the SDS Block storage is up and running.
 - b. Review the event logs for any errors or incomplete events.
 - c. If any storage component status shows RED, click the component for details.
 - d. If any storage node is in a temporary or permanent blockage state, manually recover the node by following the Storage Operation Manual.
3. Log in or SSH to the compute client.
4. Verify all configurations, check compute client connections, and ping the storage IPv4 addresses.
5. Log in to the compute and internode switches and verify their connections.
6. Reboot the switches.
7. Run the following tests in order:
 - ComputeClientVerificationTest
 - ClusterPowerOperationTest
 - PrepareComputeClientForIoTest
8. Rerun the failed test:
 - a. If the test fails again, run 'ExecuteTestResultCollection' and download the zip file.
 - b. In the Self Certification GUI, click **Download Configuration Summary** to obtain the Self-Certification-Configuration-Summary.pdf.
9. Share the logs and configuration summary PDF with Hitachi Vantara support.
10. Wait for feedback from the support team.

Customer Action

If you encounter any of the following errors, perform the recommended corrective actions. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0003E	An error occurred as NTP server is unreachable. Restore NTP service and rerun the test.	<ol style="list-style-type: none"> Log in or SSH to the client machine: <ol style="list-style-type: none"> Check the NTP server reachability. Check the NTP service status: <pre>systemctl status ntp</pre> If required, restart the NTP server: <pre>systemctl restart ntp</pre> Rerun the test.
SC0006E	Connection refused by storage. Check storage ipv4 address reachability. Contact support for assistance.	<ol style="list-style-type: none"> Log in or SSH to the client machine. Ping the storage IPv4 address: <pre>ping <ipv4 address></pre> If the ping is successful, rerun the test. If the issue persists, run 'ExecuteTestResultCollection' and download the zip file. Collect the logs and share them with Hitachi Vantara support.
SC0007E	New connection error. Check storage ipv4 address reachability. Contact support for assistance.	
SC0008E	Error occurred as maximum retry connection to storage exhausted. Check storage ipv4 address reachability.	
SC0009E	Error occurred while establishing connection with the storage. Wait for some time and rerun the test. Contact support for assistance.	
SC0200E	Error occurred while communicating with storage. Check all systems are online and rerun the test.	<ol style="list-style-type: none"> Log in or SSH to the client machine. Ping the storage and switches IPv4 address:
SC0201E	Error occurred while communicating with storage. Check all systems are online and rerun the test.	

SC0202E	Error occurred while communicating with storage. Check all systems are online and rerun the test.	<p>ping <ipv4 address></p> <ol style="list-style-type: none"> If the issue persists, run 'ExecuteTestResultCollection' and download the zip file. Collect the logs and share them with Hitachi Vantara support.
SC0203E	Error occurred while communicating with storage. Check all systems are online and rerun the test.	
SC0390E	Error occurred while communicating with storage. Check storage IPv4 address.	
SC0204E	Error occurred as job submitted to storage completed and failed. Wait for few minutes and rerun the test.	<ol style="list-style-type: none"> Log in to the storage GUI. Navigate to the 'Event' tab to review the status of submitted jobs. Do not rerun any tests until the storage system shows a green status. When the system is in a healthy state, rerun the failed test.
SC0205E	Error occurred while getting Cluster Pool Information.	
SC0207E	Error occurred during volume operation in storage. Rerun the test. If issue persist, contact support for assistance.	<ol style="list-style-type: none"> Verify that no volume operations are being performed manually on the storage system through the GUI, REST API, or HSDS CLI utility. Rerun the test. If the issue persists, contact Hitachi Vantara support for assistance.
SC0208E	Error occurred as storage health is not normal. Check storage health from events. Wait for some time to get health status return to normal and rerun the test.	<p>Check the storage events.</p> <p>If any storage node is blocked, or if any compute, control, or internode port is down, wait for the storage health to automatically return to normal, or recover it manually.</p>
SC0209E	Error occurred as Self Certification server time and date is not synchronized with NTP Server. Synchronize Self Certification VM time and date with NTP Server and set time zone to UTC.	<ol style="list-style-type: none"> Specify the NTP server IP address within the <code>/etc/chrony.conf</code> file on the compute client. Restart the chronyd process:

SC0210E	Error occurred as NTP Server was not found. Provide NTP Server IP or Host Name and then rerun the test.	<pre>systemctl restart chronyd</pre> <ol style="list-style-type: none"> 3. Verify that both the NTP server and the self certification server are synchronized to the UTC time zone.
SC0211E	Error occurred on verifying Cluster events. Check storage events from GUI and if any event is running. Wait for all events to complete and rerun the test.	<ol style="list-style-type: none"> 1. Verify that no operations are running on the storage cluster through the GUI, REST API, or HSDS CLI utility. If any operation is in progress, wait for it to complete. 2. Rerun the test.
SC0214E	Error occurred as device-mapper-multipath is not configured in Compute client.	<ol style="list-style-type: none"> 1. Check whether the 'ComputeClientVerificationTest' has been run and passed. 2. If the test has failed, identify and resolve the issue, then rerun the 'ComputeClientVerificationTest'. 3. After it passes, rerun the currently failed test. 4. If the issue persists, run 'ExecuteTestResultCollection' and download the zip file. 5. Collect the logs and share them with Hitachi Vantara support.
SC0215E	Error occurred while configuring device-mapper-multipath in Compute client.	
SC0216E	Error occurred as IPv4 address and its corresponding network interface device cannot be fetched.	<p>Check whether the 'ComputeClientVerificationTest' has been run and passed.</p> <p>If the IPv4 address is incorrect, update it as follows:</p> <ol style="list-style-type: none"> 1. In the Test dashboard, select Edit hardware configuration. 2. On the Compute Client Information stepper page in the Self Certification GUI, enter the correct source IPv4 address. 3. Rerun the test.
SC0238E	Error occurred as Compute client IPv4 address does not match with user input source IPv4 address.	
SC0315E	Error occurred as IPv4 address and CIDR is incorrect.	

SC0217E	Error occurred during command execution.	<ol style="list-style-type: none"> 1. Verify whether the compute client OS is installed correctly and that it is a supported version. 2. Verify that all required packages are installed. 3. If required, install a supported OS version or add any missing packages. 4. Rerun the test.
SC0218E	Error occurred as verification of parameters in /etc/multipath.conf file failed.	
SC0247E	Error occurred as all required packages are not installed in Compute client.	
SC0219E	Error occurred as Device Mapper multipath service is inactive and test is unable to activate the service. Manually activate the service and rerun the test.	<ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Enable the multipathd.service: <code>systemctl enable multipathd.service</code> 3. Start the multipathd.service: <code>systemctl start multipathd.service</code> 4. Rerun the test.
SC0220E	Error occurred as Device mapper multipath service is disabled and test is unable to enable the service. Manually enable the service and rerun the test.	
SC0221E	Error occurred while determining volume paths from multipath daemon status.	<p>Verify the connection between the compute client and the storage system.</p> <ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Ping the storage IPv4 address: <code>ping <ipv4 address></code> 3. Verify whether the compute switch is up and connected to the compute client. 4. If the ping is successful, rerun the test.
SC0223E	Error occurred while retrieving volume and number of paths in Compute client.	
SC0224E	Error occurred while enabling a service failed.	<ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Restart the service: <code>systemctl enable <service-name></code> 3. Rerun the test.

SC0225E	Error occurred as no HBA WWN found.	<p>Verify whether the correct WWN is mentioned. If not, update the hardware information with the correct WWN and rerun the test.</p> <p>To check the WWN on the compute client:</p> <ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Navigate to the <code>/sys/class/fc_host/host(x)</code> directory. where x is the host number. 3. View the file <code>port_name</code> and note the FC WWN value. 4. Rerun the test.
SC0226E	Error occurred as Compute node is not assigned to client with source HBA WWNs or IQN name.	<p>Verify whether the correct WWN/IQN is mentioned. If not, update the hardware information with the correct WWN/IQN and rerun the test.</p> <p>To check the IQN:</p> <ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Navigate to the <code>/etc/iscsi/</code> directory. 3. Open the <code>initiatorname.iscsi</code> file and note the IQN.
SC0268E	Error occurred as no Compute node is mapped with HBA WWN/IQN.	<p>To check the WWN:</p> <ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Navigate to the <code>/sys/class/fc_host/host(x)</code> directory. where x is the host number. 3. View the file <code>port_name</code> and note the FC WWN value. 4. Rerun the test.

SC0227E	Error occurred as Compute client source IQN and Entered Source IQN did not match. Provide correct source IQN.	Verify whether the correct IQN is mentioned. If not, update the hardware information with the correct IQN and rerun the test. To check the IQN:
SC0231E	Error occurred as user input IQN does not match with source IQN.	<ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Navigate to the <code>/etc/iscsi/</code> directory. 3. Open the <code>initiatorname.iscsi</code> file and note the IQN. 4. Rerun the test.
SC0228E	Error occurred as WWN is not found in Compute client. Provide correct WWN which is mapped to Compute client.	Verify whether the correct WWN is mentioned. If not, update the hardware information with the correct WWN as follows:
SC0230E	Error occurred as required HBA WWN ports not entered in configuration.	<ol style="list-style-type: none"> 1. In the Test dashboard, select Edit hardware configuration. 2. On the Compute Client Information stepper page in the Self Certification GUI, enter the correct source IPv4 address.
SC0239E	Error occurred as valid source HBA Port WWN is not provided for Compute client configuration.	<ol style="list-style-type: none"> 3. Rerun the 'ComputeClientVerificationTest'. 4. Rerun the failed test. <p>To check the WWN:</p> <ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Navigate to the <code>/sys/class/fc_host/host(x)</code> directory. where x is the host number. 3. View the file <code>port_name</code> and note the FC WWN value. 4. Rerun the test.
SC0240E	Error occurred as Iface exists without desired mac address binding.	

SC0233E	Error occurred while creating new interface.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Delete the network interface named <code>iface</code>. The exact command may vary depending on the operating system. 3. See the OS vendor documentation for the appropriate command to remove or delete a network interface. 4. After the interface is deleted or correctly bonded, rerun the test.
SC0234E	Error occurred while updating existing interface.	
SC0235E	Error occurred during <code>iface</code> binding. Delete existing <code>iface</code> and rerun the test.	
SC0240E	Error occurred as <code>iface</code> exists without desired mac address binding.	
SC0253E	Error occurred during <code>iface</code> creation. Delete if any <code>iface</code> exists and rerun the test.	
SC0236E	Error occurred during iSCSI Target discovery and Login session operation.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Delete all files under the following folders: <code>send_targets/ nodes/</code> 3. Reboot the compute client and wait for it to come back online. 4. Rerun the test.
SC0241E	Error occurred as test cannot be executed because Compute node already exists and is mapped with Compute client.	<p>The test may have failed because it had already passed or may have been run twice.</p> <p>To rerun the test, complete the following steps:</p> <ol style="list-style-type: none"> 1. Verify whether IO is running on the compute client: <code>ps -ef grep vdbench</code> 2. Stop all IO processes: <code>for pid in \$(ps -ef grep java grep vdbench.jar awk '{print \$2}'); do kill -9 \$pid; done</code>
SC0306E	Error occurred as mount point creation failed.	
SC0312E	Error occurred while creating partition and unable to determine last sector of the device/volume.	
SC0313E	Error occurred as mount point creation is failed.	

		<ol style="list-style-type: none"> 3. Delete all volumes attached to the compute node. 4. Delete the compute node. 5. Rerun the test. 6. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0243E	Error occurred as multipath.conf file does not exist.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Install the device-mapper-multipath package. 3. Rerun the 'ComputeClientVerificationTest' test confirm that it passes. 4. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0245E	Error occurred as Compute client Operating System version is not under supported List. Refer Compute client configuration document for list of supported Operating systems.	<ol style="list-style-type: none"> 1. Verify whether the compute client OS is installed correctly and that it is a supported version. 2. Verify that all required packages are installed. 3. If required, install a supported OS version or add any missing packages. 4. Rerun the test. 5. If the issue persists, collect the failed test logs from the GUI, submit them to the Hitachi Vantara support team for further analysis, and wait for the resolution.
SC0246E	Error occurred while executing OS verification commands. Refer Compute client Configuration for list of supported Operating System.	
SC0260E	Error occurred as FC HBA port command execution has failed.	
SC0261E	Error occurred while executing Re-scan SCSI Bus Command.	
SC0258E	Error occurred while executing Issue Lip command.	

SC0328E	Error occurred as IO start operation in Compute client failed.	<p>If the Self Certification tool is hosted on a VM, log in to the ESXi host and complete the following steps:</p> <ol style="list-style-type: none"> 1. Verify that both the ESXi host server and the virtual machine are powered on and running. 2. Confirm that the SDS Block storage is up and running. 3. Rerun the test. 4. If the test continues to fail, contact Hitachi Vantara support for further assistance.
SC0250E	Error occurred as Protection Domain rebuild status is not STOPPED.	Run the 'ExecuteTestResultCollection' test and download the logs. Share the log with the Hitachi Vantara support team for analysis and wait for the resolution.
SC0254E	Error occurred as iSCSI Session has issue. Execute iSCSI all session logout and rerun the test.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Run the iSCSI session logout command. The exact command may vary depending on the operating system. See the OS vendor documentation for the correct command for logging out. 3. Rerun the test.
SC0255E	Error occurred as few storage volumes found unmounted. Run PrepareComputeClientForIoTest to remount the storage volumes in Compute client.	<ol style="list-style-type: none"> 1. Rerun the 'PrepareComputeClientForIoTest'. 2. If the issue persists, collect the failed test logs from the GUI and contact Hitachi Vantara support for assistance.
SC0256E	Error occurred as no storage volumes found mounted. Run PrepareComputeClientForIoTest to remount the storage volumes in Compute client.	<ol style="list-style-type: none"> 3. Additionally, run the 'ExecuteResultCollection' test and download it. 4. Wait for the resolution from the support team.
SC0262E	Error occurred as Compute client user does not have root permission.	Verify whether the 'ComputeClientVerificationTest' has been run and passed.

SC0264E	Error occurred as the test is unable to set a Udev rule. Check the Compute client user permission to be as 'root' and rerun the test.	<p>If the IPv4 address is incorrect, update it as follows:</p> <ol style="list-style-type: none"> 1. In the Test dashboard, select Edit hardware configuration. 2. On the Compute Client Information page in the Self Certification GUI, enter the same credentials and provide the correct IPv4 address. 3. Rerun the 'ComputeClientVerificationTest'. 4. Rerun the failed test.
SC0267E	Error occurred as test is unable to reset Device Mapper multipaths in Compute client. Check Compute client status and user permission and rerun the test.	
SC0263E	Error occurred during Udev rule verification. Few storage volumes paths are not set to required timeout. Reboot Compute client and rerun the test.	<ol style="list-style-type: none"> 1. Log in to the compute client using the root user and password, then reboot the system. 2. Wait for the compute client to come back online, and rerun the test.
SC0266E	Error occurred while rebooting Compute client. Reboot it manually.	
SC0272E	Error occurred as login failed while CHAP enabled. Disable CHAP in Compute target ports and retry.	<ol style="list-style-type: none"> 1. Log in to the storage GUI. 2. Disable CHAP authentication in the storage cluster. See the SDS Block documentation for detailed steps on disabling CHAP. 3. Rerun the test.
SC0276E	Error occurred as Self Certification Tool is only compatible on Linux platform.	<ol style="list-style-type: none"> 1. Verify whether the compute client OS is installed correctly and that it is a supported version. 2. Verify that all required packages are installed. 3. If required, install a supported OS version or add any missing packages. 4. Rerun the test.
SC0277E	Error occurred as Compute client time and date is not synchronized with NTP Server.	<ol style="list-style-type: none"> 1. Log in to the compute client and synchronize time with the NTP server.

		<ol style="list-style-type: none"> Set the time zone to UTC. Rerun the test.
SC0283E	Error occurred as few packet loss is observed. Packet loss unset command failed.	<ol style="list-style-type: none"> Verify that the compute connection path parameters such as speed, MTU settings, and VLANs are correctly set according to the recommended settings specified in the Self Certification documentation. Rerun the test. If the issue persists, collect the failed test logs from the Self Certification GUI and submit them to the Hitachi Vantara support team for analysis. Wait for feedback from the support team.
SC0284E	Error occurred as few packet delay is observed. Packet delay unset command failed.	<ol style="list-style-type: none"> Rerun the test. If the issue persists, collect the failed test logs from the Self Certification GUI and submit them to the Hitachi Vantara support team for analysis. Wait for feedback from the support team.
SC0289E	Error occurred as operation timed out. Test stopped. Check relevant hardware status and rerun the test.	<ol style="list-style-type: none"> Collect the failed test logs from the Self Certification GUI and submit them to the Hitachi Vantara support team for analysis. Wait for feedback from the support team.
SC0291E	Error occurred while fetching MAC address.	<ol style="list-style-type: none"> In the Test dashboard, select Edit hardware configuration. On the Compute Client Information stepper page in the Self Certification GUI, enter the correct source IPv4 address/HBA WWNs. Rerun the test.

SC0292E	Error occurred as test is searching for lface but did not find any lface. Make sure Compute client user permission is 'root' user and rerun the test.	<ol style="list-style-type: none"> 1. In the Self Certification GUI, select Edit hardware configuration. 2. On the Compute Client Information page, enter the correct source IPv4 address. 3. Rerun the test.
SC0293E	Error occurred while verifying hardware status. Compute client or storage health check failed.	<ol style="list-style-type: none"> 1. Collect the failed test logs from the Self Certification GUI and submit them to the Hitachi Vantara support team for analysis. 2. Wait for feedback from the support team.
SC0295E	Test failed as user chose to cancel the operation.	The user canceled the test operation; no further action is required.
SC0305E	Error occurred during Vdbench installation, make sure the Vdbench package is placed on the client and correct location is provided.	<ol style="list-style-type: none"> 1. Copy the vdbench zip file to the '/root/' folder on the compute client. 2. In the Self Certification GUI, go to the Test Dashboard and select Edit Hardware Configuration. 3. On the Compute Client Hardware Information page, specify the absolute file path to the vdbench zip file. 4. Rerun the test.
SC0308E	Error occurred during installation of Vdbench.	<p>Log in to the compute client and verify the following:</p> <ul style="list-style-type: none"> • The vdbench zip file is located in the /root/ folder. • The vdbench zip file is not corrupted and can be successfully extracted. • At least 100Mib disk space is available at the vdbench folder path specified in the GUI.
SC0309E	Error occurred while opening JSON/log files, make sure file is in correct read/write format.	

		<ul style="list-style-type: none"> The specified vdbench folder path has the necessary permissions to allow file and folder creation. <ol style="list-style-type: none"> Rerun the test. If the issue persists, collect the failed test logs by running 'ExecuteTestResultCollection' and download the zip file. Share the logs with Hitachi Vantara support. Wait for feedback from the support team.
SC0317E	Error occurred as user has given same input for both HBA WWN. User needs to provide different HBA WWN.	<p>Verify whether distinct and correct WWNs is mentioned. If not, update the hardware information with the correct WWN as follows, and rerun the test.</p> <p>To check the WWNs:</p> <ol style="list-style-type: none"> Log in or SSH to the compute client machine. Navigate to the <code>/sys/class/fc_host/host(x)</code> directory. where x is the host number. View the file <code>port_name</code> and note the FC WWN values.
SC0338E	Error occurred during data rebuild. Login to storage GUI and check the storage node status.	<ol style="list-style-type: none"> Log in to the storage GUI and check the status of the node. If the storage node is in a temporary or permanent blockage state, manually recover it by following the Storage Operation Manual. Wait for the storage to return to a normal state.
SC0339E	Error occurred as Storage node is in Persistent Blockage, Login to storage GUI and manually recover the node following directions from Storage Operation manual document.	
SC0249E	Error occurred as node is not in normal state. Check the SDS block storage nodes.	
SC0340E	Error occurred as storage node is under Temporary Blockage.	

SC0341E	Error occurred as storage node is under Maintenance Blockage.	4. Rerun the test. 5. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0392E	Error occurred as Storage Node Status is not Normal / Ready.	
SC0342E	Error occurred as storage node rebuild operation reached maximum timeout.	
SC0343E	Error occurred as storage node rebuild start operation reached maximum timeout.	
SC0352E	Error occurred while retrieving Compute Port Information.	1. Check the compute path connection between the compute client and the storage compute ports. 2. From the compute client, verify connectivity by pinging each storage compute port IPv4 address to confirm they are reachable. 3. Rerun the test.
SC0353E	Error occurred while retrieving Internode Port Information.	
SC0354E	Error occurred if Compute ports paths have packet loss above 50 percent, Check Compute path between Compute Clients and Nodes.	
SC0359E	Error occurred as IPv4 address is unreachable.	
SC0360E	Error occurred as user password is expired. Change password.	Reset the admin user password manually using the appropriate CLI command, or contact Hitachi Vantara support for further assistance.
SC0361E	Error occurred as user account is locked. Change password to unlock account.	
SC0362E	Error occurred as User creation is failed.	1. Log in to the SDS GUI using the admin user credentials to verify the password is correct. 2. If the login is successful, re-enter the same credentials in the Self Certification tool. 3. Rerun the test.

		4. If the issue persists, collect the test logs and contact Hitachi Vantara support for further assistance.
SC0363E	Error occurred as an unable to collect installed package information from yum. Fix yum and rerun the test.	<ol style="list-style-type: none"> 1. Log in to the compute client. 2. Fix the repository configuration and reconfigure yum. See the OS vendor documentation for the appropriate steps. 3. Rerun the test.
SC0365E	Error occurred while creating storage dump files.	<ol style="list-style-type: none"> 1. Log in to the storage GUI and check the storage status. 2. If any node is in a temporary or permanent blockage state, attempt to recover the node manually. 3. Verify the compute and internode cable connections. 4. Rerun the test. 5. If the issue persists, collect the failed test logs from the Self Certification GUI and submit them to the Hitachi Vantara support team for analysis. 6. Wait for feedback from the support team.
SC0366E	Error occurred while collecting test results and corresponding input parameters.	
SC0367E	Error occurred while creating tar file from storage dump and test results.	
SC0368E	Error occurred while verifying output file path for test result collection.	
SC0369E	Error occurred while transferring test result collection.	
SC0370E	Error occurred while preparing downloadable test result collection tar file.	
SC0372E	Error occurred due to iSCSI session reset operation error.	<ol style="list-style-type: none"> 1. Log in to the compute client and reboot the system. 2. Wait for the compute client to come back online. 3. Rerun the 'PrepareComputeClientForIOtest' and wait for it to pass. 4. Rerun the failed test.
SC0379E	Error occurred as password reset of Storage admin user failed.	If you reset the admin user password manually outside the tool, enter the updated password in the Hardware Information section of the Self Certification tool, and re-run the test.

		If the issue persists, contact Hitachi Vantara Support.
SC0380E	Error occurred as updating Storage timeout parameters failed.	<ol style="list-style-type: none"> 1. Log in to the SDS GUI using the admin user credentials to verify the password is correct. 2. If the login is successful, re-enter the same credentials in the Self Certification tool. 3. Rerun the test. 4. If the issue persists, collect and share the logs with Hitachi Vantara support for further assistance. 5. Wait for feedback from the support team.
SC0381E	Error occurred while connecting to storage. Failed to support storage.	
SC0382E	Error occurred when power OFF the server through iLO.	<ol style="list-style-type: none"> 1. Verify that the correct iLO details are provided. 2. Log in to the storage GUI and check the status of the node. There may be an issue during a power cycle operation of the storage node from iLO. 3. Wait for the storage to return to a normal state and then rerun the test. 4. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0383E	Error occurred while checking the iLO IP status. Check the server management controller details options and IP.	
SC0384E	Error occurred when power ON the server through iLO.	
SC0385E	Error occurred while creating vdbench parameter files for performance test.	<p>Log in or SSH to the compute client and verify the following:</p> <ul style="list-style-type: none"> • At least 100Mib disk space is available at the vdbench folder path specified in the GUI. • The specified vdbench folder path has the necessary permissions to allow file and folder creation. <ol style="list-style-type: none"> 1. Rerun the test. 2. If the issue persists, collect the failed test logs by running
SC0386E	Error occurred while preparing compute client for vdbench execution.	
SC0387E	Error occurred while executing vdbench for performance test run.	
SC0388E	Error occurred while collecting storage performance data.	

SC0389E	Error occurred while creating downloadable storage performance measurement data.	<p>'ExecuteTestResultCollection' and download the zip file.</p> <ol style="list-style-type: none"> 3. Share the logs with Hitachi Vantara support. 4. Wait for feedback from the support team.
SC0391E	Error occurred as storage license has expired. Extend the license and rerun the test. Contact support for assistance.	<ol style="list-style-type: none"> 1. Obtain the license from the support team. 2. Check the storage software documentation for more details.
SC0409E	Error occurred as Storage license has expired. Contact support for assistance.	
SC0393E	Error occurred while checking the volume path count, vdbench execution terminated.	<ol style="list-style-type: none"> 1. Check the compute path connection between the compute client and the storage compute ports. 2. For Ethernet-based storage clusters, from the compute client, run a ping command to each storage compute port IPv4 address to verify network connectivity. 3. For FC storage cluster, verify that switch configuration and zoning are complete. Confirm that all switch ports are online. 4. Rerun the test.
SC0405E	Error occurred as volumes has mount issue. Execute command 'umount -a' followed by 'mount -a' and re-execute this test.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Run the following commands to unmount and remount all file systems: <pre>umount -a mount -a</pre> 3. Rerun the 'PrepareComputeClientForIoTest' test. 4. If the issue persists, collect the failed test logs from the Self Certification

		<p>GUI and contact Hitachi Vantara support for assistance.</p> <ol style="list-style-type: none"> 5. Additionally, run the 'ExecuteResultCollection' test and download it. 6. Wait for the resolution from the support team.
SC0407E	Error occurred as Storage volumes is already mapped in Compute client.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Verify whether IO is running on the compute client: <code>ps -ef grep vdbench</code> 3. Stop all IO processes: <code>for pid in \$(ps -ef grep java grep vdbench.jar awk '{print \$2}'); do kill -9 \$pid; done</code> 4. To rerun the test or map the volumes to the SDS Block again, unmount the volumes: <code>umount -a</code> 5. Delete all volumes using the storage GUI. 6. Rerun the test.
SC0408E	Error occurred as port status is not Normal. Verify the issue in storage event logs. Check compute/internode/control port connections.	<ol style="list-style-type: none"> 1. Verify whether any port is disabled from the storage system. 2. Reconnect any disabled ports. 3. Wait for the storage to return to a normal state. 4. Rerun the test. 5. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0419E	Error occurred as internode port/ports are down. Check internode switches.	
SC0415E	Error occurred as File is not present at given location.	<ol style="list-style-type: none"> 1. Log in to the compute client.

		<ol style="list-style-type: none"> 2. Upload or place the 'vdbench' zip package in the /root/ folder on the compute client. 3. In the Self Certification GUI, navigate to the Hardware Information page and enter the exact path to the vdbench zip file. 4. Rerun the test.
SC0271E	Error occurred because stopping of Vdbench IO failed.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Verify whether IO is running on the compute client: <code>ps -ef grep vdbench</code> 3. Stop all IO processes manually: <code>for pid in \$(ps -ef grep java grep vdbench.jar awk '{print \$2}'); do kill -9 \$pid; done</code> 4. Rerun the test.
SC0307E	Error occurred as IO is running in Compute client and reboot operation cannot be performed.	
SC0427E	Error occurred as IO is running in Compute client and test cannot proceed.	
SC0428E	Error occurred as current iteration is completed but contains an error.	<p>The test failed due to unexpected events that may have occurred on the storage system. Some verification steps for the current iteration were not completed.</p> <ol style="list-style-type: none"> 1. Log in to the storage GUI. 2. Open the Event tab to check the status of the submitted job. 3. Do not rerun any tests until the storage status returns to green. 4. Rerun the failed test.

Errors Requiring Tool Reinstallation

If you encounter any of the following errors, reinstall the Self Certification tool. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0213E	Error occurred as storage protocol is not Ethernet. Contact support for assistance.	<ol style="list-style-type: none"> 1. Verify that the correct platform (Hypervisor or Bare Metal) and storage type (iSCSI, FC, or NVMe) are selected when filling out the hardware information in the Self Certification GUI. 2. If a mismatch is found, reinstall the Self Certification tool and reconfigure it using the correct protocol for the storage compute ports. 3. Rerun the test after reconfiguration.
SC0229E	Error occurred as Cluster Compute port Type and Compute client Type did not match.	<ol style="list-style-type: none"> 1. Verify the storage compute protocol type. 2. Reinstall the Self Certification tool. 3. Provide the correct storage compute port protocol in the hardware information form in the Self Certification GUI. 4. Rerun the test.
SC0257E	Error occurred as user has given some other protocol than iSCSI.	
SC0348E	Error occurred as user input storage protocol is not present in the approved list.	
SC0349E	Error occurred as storage protocol input by user does not match with storage protocol retrieved from storage.	
SC0410E	Error occurred due to incorrect combination of Compute port protocol or storage platform.	
SC0259E	Error occurred as no required FC HBA list is found or is empty.	<ol style="list-style-type: none"> 1. Determine the correct HBA adapter name and model. 2. Reinstall the Self Certification tool. 3. Provide the storage protocol on the certification page. 4. Rerun the test.

SC0346E	Error occurred as number of nodes input by user does not matches with total count of nodes retrieved from storage.	1. Check the number of nodes in the storage GUI.
SC0411E	Error occurred due to incorrect storage platform.	2. Reinstall the Self Certification tool. 3. Provide the correct number of nodes in the certification page. 4. Rerun the test.
SC0350E	Error occurred as user input storage policy is not present in the approved list.	1. Check the policy of the storage system.
SC0351E	Error occurred as storage policy input by user did not match with storage policy retrieved from storage.	2. Reinstall the Self Certification tool. 3. Provide the correct storage policy on the certification page. 4. Rerun the test.
SC0357E	Error occurred as the operation performed by the user is not supported by FC protocol.	1. Check the protocol of the storage system. 2. Reinstall the Self Certification tool. 3. Provide the correct storage protocol on the certification page. 4. Rerun the test.
SC0371E	Error occurred while verifying storage platform. Contact support for assistance.	1. Check the platform of the storage system. 2. Reinstall the Self Certification tool. 3. Provide the correct storage platform on the certification page. 4. Rerun the test.

Compute and Internode Cable Connection Errors

Compute and internode cable connection errors indicate physical or port link up and down issues, such as faulty cables, loose connections, or port failures that can disrupt communication between the compute client, nodes, and the storage system, leading to test failures. If you encounter any of the following errors, perform the recommended corrective actions. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0232E	Error occurred as target Compute port IPv4 address is unreachable.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Verify whether the compute client network ports can successfully ping the storage compute port IPv4 address. 3. Rectify any cable faults between the compute client network and the storage compute ports network through the compute switch. 4. Rerun the test.
SC0269E	Error occurred as storage volume count or paths count is less than expected.	
SC0237E	Error occurred during iSCSI Target discovery and Login session operation as not all controller target IPv4 addresses are reachable.	<ol style="list-style-type: none"> 1. Verify whether the compute client network ports can successfully ping the storage compute port IPv4 address. 2. Rectify any cable faults between the compute client network and the storage compute ports network through the compute switch. 3. Delete all files in the following folders: <ul style="list-style-type: none"> • send_targets/ • nodes/ 4. Reboot the compute client and wait for it to come back online. 5. Rerun the test.
SC0274E	Error occurred as source IPv4 addresses are unable to ping Compute target iSCSI controller IPv4 address.	

SC0265E	Error occurred while verifying Compute client. Check cable connections. If issue persists contact support for assistance.	<ol style="list-style-type: none"> 1. Log in to the storage GUI and verify whether any port, or the correct port, is disabled by checking the storage events. 2. On the compute client machine, verify all compute and internode switch-port connections. 3. In the Self Certification GUI, open the Edit Configuration page and verify that the correct IPv4 address, port numbers, and switch login details are entered. 4. Rerun the test. 5. If the issue persists, contact Hitachi Vantara support for assistance.
SC0300E	Error occurred as port number given by user did not match with the actual port number of the switch which is used for connections.	
SC0334E	Error occurred as Compute Cable Pull Error test failed.	
SC0333E	Error occurred as user has pulled the wrong cable, or it is not connected back properly. Check user has pulled the correct cable.	
SC0335E	Error occurred as Internode Cable Pull Error test failed.	<ol style="list-style-type: none"> 1. For a Bare Metal cluster, verify whether the correct port is disabled from the storage events. 2. In the Self Certification GUI, navigate to the Edit Configuration page and verify all internode switch-port connections. 3. Verify that the correct IPv4 address, port numbers, and switch login details are entered. 4. Rerun the test.
SC0420E	Error occurred as maybe appropriate internode cable has not been pulled. Make sure the inter-node switch port connections are entered correctly.	
SC0430E	Error occurred as maybe appropriate internode cable has not been pulled. Make sure the inter-node switch port connections are entered correctly and rerun the test.	
SC0321E	Error occurred as wrong cable is pulled. Connect back the cable and rerun the test.	<ol style="list-style-type: none"> 1. For a Bare Metal cluster, verify whether any port or the correct port is disabled from the storage events. 2. In the Self Certification GUI, navigate to the Edit Configuration page and verify all compute switch-port connections. 3. Verify that the correct IPv4 address, port numbers, and switch login details are entered. 4. Rerun the test.
SC0426E	Error occurred as user has not pulled any Compute cable. Rerun the test.	
SC0431E	Error occurred as maybe appropriate Compute cable between switch and storage has not been pulled. Make sure the Compute switch port connections are entered correctly and rerun the test.	

SC0329E	<p>Error occurred as node is in persistent blockage or user has pulled the wrong cable, or it is not connected back properly. Check user has pulled the correct cable.</p>	<ol style="list-style-type: none"> 1. Log in to the storage GUI and check the status of the node. 2. If the storage node is in a temporary or permanent blockage state, manually recover it by following the Storage Operation Manual. 3. Wait for the storage to return to a normal state. 4. Rerun the test. 5. Log in to the compute client machine and verify all compute and internode switch-port connections. 6. In the Self Certification GUI, navigate to the Edit Configuration page and verify that the correct IPv4 address, port numbers, and switch login details are entered. 7. Rerun the test. 8. If the issue persists, contact Hitachi Vantara support for assistance.
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NIC Interface Errors

NIC interface errors indicate network-level issues, such as packet loss, MTU mismatch, or link instability that can disrupt communication between compute clients and storage nodes, leading to test failures. If you encounter any of the following errors, perform the recommended corrective actions. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0222E	Unable to determine multipath device information from Compute client. Compute client may not be ready and may require to run ComputeClientVerificationTest.	<ol style="list-style-type: none"> 1. Rerun the 'ComputeClientVerificationTest' and confirm that it passes. 2. If required, run the 'ComputeNodeConfigurationTest' and confirm that it passes. 3. Rerun the failed test.
SC0347E	Error occurred as no node is connected to storage.	
SC0364E	Error occurred as NIC Interface MAC Addresses are not present in Compute Client.	
SC0412E	Error occurred as iSCSI session login all encountered an issue. iSCSI session cleanup complete in Compute client. Re-execute the test.	
SC0294E	Error occurred as operation unable to collect Source NIC information from Compute client. Edit configuration, verify and submit correct Source NIC IPv4 addresses and rerun the test.	<p>If the source NIC IPv4 addresses are incorrect, change them as follows:</p> <ol style="list-style-type: none"> 1. In the Test dashboard, select Edit hardware configuration. 2. On the Compute Client Information stepper page in the Self Certification GUI, provide the correct IPv4 address. 3. Rerun the 'ComputeClientVerificationTest'. 4. Rerun the failed test.
SC0355E	Error occurred as User chosen HBA or NIC Model does not match with FC card installed in Compute Client. Edit Hardware information and re execute the test.	<p>Verify whether the correct WWN is mentioned. If not, update the hardware information with the correct WWN and rerun the test.</p> <p>To check the WWN:</p>

SC0356E	Error occurred as User chosen HBA or NIC does not match with FC card installed in Compute Client. Edit Hardware information and re execute the test.	<ol style="list-style-type: none"> 1. Log in or SSH to the compute client machine. 2. Navigate to the <code>/sys/class/fc_host/host(x)</code> directory. where x is the host number. 3. View the file <code>port_name</code> and note the FC WWN value.
SC0421E	Error occurred as Internode port NIC teaming policy found is different than expected policy.	<ol style="list-style-type: none"> 1. Set the internode NIC policy as follows: <ul style="list-style-type: none"> • Load_balance: explicit • Failback value: False • Standby Adapter: 1 • Active Adapter: 1 2. Rerun the following tests in order: <ul style="list-style-type: none"> • ComputeClientVerificationTest • PrepareComputeClientForIoTest 3. Rerun the currently failed test. 4. If the issue persists, contact Hitachi Vantara support for assistance.
SC0422E	Error occurred as Compute port NIC teaming policy found is different than expected policy.	<ol style="list-style-type: none"> 1. Set the compute NIC policy as follows: <ul style="list-style-type: none"> • Load_balance: srcport • Failback value: true • Active Adapter: 1 2. Rerun the following tests in order: <ul style="list-style-type: none"> • ComputeClientVerificationTest • PrepareComputeClientForIoTest 3. Rerun the currently failed test. 4. If the issue persists, contact Hitachi Vantara support for assistance.

Drive Errors

Drive errors can occur during drive removal, insertion, or pool expansion operations and are typically caused by hardware mismatch or failure to detect the drive, potentially impacting storage availability or test progress. If you encounter any of the following errors, perform the recommended corrective actions. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0019E	Error occurred as the system Drive is not selected as RAID1	This failure is expected and may not affect the overall certification process. You can proceed with the next test. If you are unsure about the cause or impact of the failure, collect the logs and contact Hitachi Vantara support for further assistance.
SC0206E	Error occurred during storage Pool size verification. Add more disk to meet minimum 2TiB Pool size.	Add disk drives to the storage nodes to increase the combined raw capacity to at least 2TiB.
SC0242E	Error occurred as Storage cluster Pool Capacity/Size is less than 1024 GiB.	Add disk drives to the storage nodes to increase the combined raw capacity to at least 1024 GiB.
SC0322E	Error occurred while user was prompted to insert the disk drive and confirm the same after insertion in the pop-up message.	<ol style="list-style-type: none"> 1. Reinsert the disk that was previously removed. 2. Wait for the storage status to turn green. 3. Run the DriveRemovalFailureTest before running the DriveInsertAndPoolExpansionTest. 4. Run the MultipleDriveRemovalFailureTest before running the MultipleDriveInsertAndPoolExpansionTest.
SC0323E	Error occurred while user was prompted to remove the disk drive and confirm the same after removal in the pop-up message.	<ol style="list-style-type: none"> 1. Reinsert the disk that was previously removed. 2. Wait for the storage status to turn green. 3. Rerun the currently failed test to initiate disk removal from the storage system.
SC0324E	Error occurred as drive information are incorrect.	
SC0373E	Error occurred as drive count found is zero.	

SC0374E	Error occurred while expanding storage pool.	<ol style="list-style-type: none"> 1. Log in to the storage GUI. 2. Verify if the storage pool is displayed on the dashboard. <ul style="list-style-type: none"> • If the storage pool is not displayed, reinstall the SDS Block software. • If the issue persists, contact Hitachi Vantara support. 3. Navigate to the Drive tab and verify that the drives are listed. If no drives are listed, collect the drive model details and contact Hitachi Vantara support
SC0375E	Error occurred as Storage Pool List cannot be retrieved.	
SC0376E	Error occurred as storage Pool status cannot be determined.	
SC0377E	Error occurred as Storage Pool size cannot be retrieved.	
SC0378E	Error occurred as storage pool rebuild rate settings update failed.	
SC0432E	Error occurred as rebuild capacity status is not Sufficient.	<p>The test failed because the rebuild capacity information is insufficient for the 'DriveRemovalFailureTest'.</p> <p>To resolve this:</p> <ol style="list-style-type: none"> 1. Set the rebuild capacity parameters as follows: <ul style="list-style-type: none"> • Rebuild capacity status: Sufficient • Rebuild policy plan: Fixed • Rebuildable drive count: greater than or equal to 1 2. Rerun the test.
SC0433E	Error occurred as rebuild policy plan is not Fixed.	
SC0434E	Error occurred as Rebuildable drive count must be greater than or equal to 1.	
SC0435E	Error occurred as pulled Drive details could not be found. Run DriveRemovalFailureTest.	<p>The storage system did not detect the removed disk. Reinsert the disk into the same slot from which it was removed.</p> <p>After reinserting the disk, follow the appropriate procedure based on the test:</p> <ol style="list-style-type: none"> 1. Run the DriveRemovalFailureTest before running the DriveInsertAndPoolExpansionTest. 2. Run the MultipleDriveRemovalFailureTest before running the MultipleDriveInsertAndPoolExpansionTest.
SC0438E	Error occurred as either drive has not been pulled correctly or there is some error in detecting blockade drive.	
SC0436E	Error occurred as unable to set Tolerable Drive Failures, due to limited user drives count per node.	<ol style="list-style-type: none"> 1. Add identical disk drives to the storage nodes to ensure the total number of drives exceeds two. 2. Rerun the test.

		<ol style="list-style-type: none"> 3. If the issue persists, contact Hitachi Vantara support for assistance.
SC0437E	Error occurred as failed to expand storage pool. All storage nodes do not have equal number of user disks	<ol style="list-style-type: none"> 1. Maintain the same number of identical disk drives on each storage node. 2. Rerun the test. 3. If the issue persists, contact Hitachi Vantara support for assistance.
SC0439E	Error occurred as Rebuildable drive count must be greater than or equal to 2.	<ol style="list-style-type: none"> 1. Verify that each storage node has more than two disk drives, each meeting the minimum allowable capacity. 2. Rerun the test. 3. If the issue persists, contact Hitachi Vantara support for further assistance.
SC0440E	Error occurred as SSD Model or capacity of inserted drive is not matched with pulled drive.	<ol style="list-style-type: none"> 1. Insert the same or identical drives that were removed during the MultipleDriveRemovalFailureTest into the same slots. 2. Verify that the disk model and disk capacity of the inserted drives match those of the pulled drives. 3. After reinserting the disk, follow the appropriate procedure based on the test: <ul style="list-style-type: none"> • Run the DriveRemovalFailureTest before running the DriveInsertAndPoolExpansionTest. • Run the MultipleDriveRemovalFailureTest before running the MultipleDriveInsertAndPoolExpansionTest.
SC0441E	Error occurred as no offline drive is found in storage.	<p>The inserted disk is not detected by the storage system.</p> <ol style="list-style-type: none"> 1. Remove the inserted disk. 2. Follow the appropriate procedure based on the test: <ul style="list-style-type: none"> • Run the DriveRemovalFailureTest before running the DriveInsertAndPoolExpansionTest.

		<ul style="list-style-type: none"> Run the MultipleDriveRemovalFailureTest before running the MultipleDriveInsertAndPoolExpansionTest.
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Switch Errors

Switch errors typically stem from misconfigurations, port failures, or link instability, which can interrupt data flow between third-party hardware and storage system, resulting in test disruptions or failures. If you encounter any of the following errors, perform the recommended corrective actions. If the issue persists, contact Hitachi Vantara support for assistance.

Error Code	Error Description	Action
SC0273E	Error occurred due to Telnet connection timeout. Check the switch IP and credentials.	<ol style="list-style-type: none"> 1. Verify that Telnet support is enabled on the compute and internode switches. 2. Ensure the Telnet service is running. 3. Rerun the test.
SC0286E	Error occurred as there are no redundant switches present.	<ol style="list-style-type: none"> 1. Provide redundant switch-port connections. 2. Use unique ports for each connection in the case of a single internode switch. 3. Use unique ports for each connection in the case of a single compute switch. 4. Rerun the test.
SC0287E	Error occurred as there are no redundant internode switches present.	
SC0288E	Error occurred as there are no redundant Compute switches present.	
SC0336E	Error occurred as no redundant connections exists in between storage nodes and Compute switches.	
SC0337E	Error occurred as no redundant connections exists in between storage nodes and internode switches.	
SC0290E	Unable to establish connection with the switch. Check switch status and rerun the test.	<ol style="list-style-type: none"> 1. Log in or SSH to the client machine. 2. Ping the storage, compute, and internode IPv4 addresses: <pre>ping <ipv4 address></pre>

		<ol style="list-style-type: none"> 3. If required, reboot the switches. 4. Rerun the test. 5. If the issue persists, run 'ExecuteTestResultCollection' and download the zip file. 6. Collect the logs and share them with Hitachi Vantara support.
SC0423E	Error occurred as unable to detect Internode switch.	<ol style="list-style-type: none"> 1. Review the VSP One SDS Block documentation for the correct ESXi configuration details. 2. Verify whether all ESXi settings align with the recommended configuration. 3. Contact support for further assistance if issues persist.
SC0424E	Error occurred as unable to detect Compute switch.	
SC0425E	Error occurred as unable to detect vSwitch.	

Troubleshooting Test Errors

UserOperationConfigurationTest

Message:

[ERROR] User list response [401] and test failed:

Solution:

1. Check whether the SDS Block storage is correctly installed.
2. After a successful installation, do not reset the password for the 'admin' user.

Message:

[ERROR] Checking Storage Health Status HTTP ERROR: 401 in logfile.

Solution:

1. Confirm that you log in to the SDS Block storage using the new test username and new test password in the Storage Nodes Information section.
2. Verify the storage license validity and address any warning messages that appear.

DriveRemovalFailureTest

Message:

Test failed because of repeated execution of DriveRemovalFailure Test:

Solution:

1. Check the storage event logs, verify the events, and wait for the storage disk data rebuild to complete. If the same disk is removed repeatedly, the rebuild operation may not occur as there is no rebuildable data present.
2. Run the DriveInsertAndPoolExpansionTest to roll back and insert the drive.

Message:

Test failed because of event ID : KARS06588-I, KARS06589-I takes more than 15 minutes to complete:

Solution:

1. Check the storage event logs and verify the events.
2. Wait for the following events to complete and confirm that the rebuild has finished if running:

2. KARS06588-I: Metadata capacity shrinkage start
3. KARS06589-I: Metadata capacity shrinkage complete
4. Run the DriveInsertAndPoolExpansionTest to roll back and insert the drive.

DriveInsertAndPoolExpansionTest

Message:

Test failed because of event ID : KARS06588-I, KARS06589-I event is in running state:

Solution:

1. Check the storage event logs and verify the events.
2. Wait for the following events to complete and confirm that the rebuild has finished if running:
 - KARS06588-I: Metadata capacity shrinkage start
 - KARS06589-I: Metadata capacity shrinkage complete
3. Rerun the DriveInsertAndPoolExpansionTest and insert the drive.

Hitachi Vantara

Corporate Headquarters 2535 Augustine Drive

Santa Clara, CA 95054 USA www.HitachiVantara.com community.HitachiVantara.com

Regional Contact Information

Americas: +1 866 374 5822 or info@hitachivantara.com

Europe, Middle East and Africa: +44 (0) 1753 618000 or info.emea@hitachivantara.com

Asia Pacific: +852 3189 7900 or info.marketing.apac@hitachivantara.com

