

Hitachi Unified Storage Series Firmware 0982/D Release Notes

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About This Document

This document provides late-breaking information about the Hitachi Unified Storage Series firmware version 0982/D. It includes information that was not available at the time the technical documentation for this product was published, as well as a list of known problems and solutions.

Intended Audience

This document is intended for customers and Hitachi Data Systems authorized service partners who license and use the Hitachi Unified Storage Series.

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Hitachi Data Systems Support Connect is the destination for technical support of products and solutions sold by Hitachi Data Systems. To contact technical support, log on to Hitachi Data Systems Support Connect for contact information:

https://support.hds.com/en_us/contact-us.html.

About This Release

These release notes cover the Hitachi Unified Storage 100 Series firmware version 0982/D.

How to obtain a copy

This firmware can be downloaded or ordered from The Download Center (TDC) in the Technical Information Service Center (TISC).

New Features and Important Enhancements

New Features

- None

Important Enhancements

- Improved response delay for host I/O when frequent media-related errors occur while restoring a drive

When restoring a drive during a correction copy, dynamic sparing, or copy back operation, sequential media-related errors that occur on a drive being restored could cause a processing failure. Such repeated errors could delay responses to the host I/O that is handling the logical block addressing (LBA) that is different from the media-related error.

To account for this scenario, the firmware has been improved to prioritize host I/O processing and prevent response delays when a media-related error occurs sequentially on the drive being restored.

New System and Hardware Requirements

- None

Fixed Problems

No	Items	Contents
1	Title	A controller block or system-down condition no longer occurs during HTTPS access to a LAN port.
	Category	LAN
	Phenomena	Previously, if a security-check tool or security scan and virus scan accessed a storage system LAN port via HTTPS (SSL), the HTTP status code "404: (File Not Found)" was not output to the browser and the controller containing the accessed LAN port was blocked, disabling the controller's host access and web connection. If the same problem occurred on both controllers, both controllers became blocked and the storage system went down, disabling host access and web connections for the entire storage system.
	Conditions of Occurrence	If a controller met all the following conditions, the controller was blocked. If both controllers met all the following conditions, both controllers were blocked and the storage system went down. (1) A security-check tool or security scan and virus scan accessed the storage system's management and maintenance LAN ports using a secure HTTPS (SSL) connection. (2) During HTTPS access of (1), the specified URL does not exist, and the character length of the URL is between 1,023 and 2,048 bytes long.
	Affected Products and Version	Hitachi Unified Storage 110, Hitachi Unified Storage 130, and Hitachi Unified Storage 150: 0915/B and later

2	Title	Incomplete ShadowImage (SI)/TrueCopy (TC) copy.
	Category	Replication
	Phenomena	Condition 1: Differential-data copy of an SI restore operation (*1) might not complete normally. Condition 2: Differential-data copy of a TC SWAP resync operation (*1) might not complete normally. Condition 3: Differential-data copy of a TC resync operation (*2) might not complete normally. *1: Differential-data copy from a secondary volume (S-VOL) to primary volume (P-VOL) works. *2: Differential-data copy from a P-VOL to S-VOL works.
	Conditions of Occurrence	The condition might occur when the following conditions were met conditions for occurrence 1, 2 or 3. [Conditions of occurrence 1] 1-(1) SI and HDP were used. 1-(2) LUs constituting the SI P-VOL/S-VOL were DP virtual LUs that were set as virtual area (*3). 1-(3) Configuration where SI pair was 1:N setting (one P-VOL was paired with multiple S-VOLs). 1-(4) A restore operation was performed from the SI S-VOL to the SI P-VOL. 1-(5) A restore operation was performed from SI S-VOL that is different than the SI pair of 1-(4) to SI P-VOL. [Conditions of occurrence 2] 2-(1) SI, TC, and DP were used. 2-(2) LUs constituting the SI P-VOL/S-VOL were DP virtual LUs that were set as virtual area (*3). 2-(3) Configuration where the SI P-VOL was used as a TC pair volume. 2-(4) A restore operation was performed for a SI pair. 2-(5) A SWAP resync operation was performed from the TC S-VOL to the TC P-VOL.

Fixed Problems

		[Conditions of occurrence 3] 3-(1) SI, TC, and DP were used. 3-(2) LUs constituting the SI P-VOL/S-VOL were DP virtual LUs that were set as virtual area (*3). 3-(3) Cascade configuration where SI S-VOL was combined with TC P-VOL. 3-(4) A resync operation was performed from the SI P-VOL to the S-VOL. 3-(5) A resync operation was performed from the TC P-VOL to the TC S-VOL. *3: In one of the following cases, the condition did not occur because there was no virtual area: (a) Virtual LUs of pair volumes (P-VOL and S-VOL) were in Full Allocation mode. (b) Virtual capacity was equal to the actual capacity.
	Affected Products and Version	Hitachi Unified Storage 110, Hitachi Unified Storage 130, and Hitachi Unified Storage 150: 0915/B and later

3	Title	TC status no longer changes to PSUE in a Copy-on-Write SnapShot (SS)-TrueCopy (TC) configuration.
	Category	Replication
	Phenomena	Previously, in an SS (V-VOL)-TC (P-VOL) cascade configuration, a write I/O issued to the SS P-VOL during a TC pair resync operation could cause the TC pair to change its status to PSUE.
	Conditions of Occurrence	The problem occurred when all the following conditions were met. (1) Both SS and TC were enabled. (2) Cascade configuration combined SS V-VOL with TC P-VOL. (3) A write I/O was issued to the P-VOL of SS pair in PSUS status. (4) A resync operation was performed for the TC pair, hierarchical memory control worked in the internal processing, and an error occurred that allowed drive retry.
	Affected Products and Version	Hitachi Unified Storage 110, Hitachi Unified Storage 130, and Hitachi Unified Storage 150: 0915/B and later

Known Problems

- None

Notes on Installation

- None

Documentation

Related Documents

None

Documentation Update

Hitachi Unified Storage Hardware Installation and Configuration Guide (MK-91DF8273-27)

Hitachi Unified Storage Hardware Service Guide (MK-91DF8302-16)

Documentation Errata

None