

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

Release Date: 30 April, 2025

VRMF Level Data Results:

VRMF level From:	89.42.18.0
VRMF Level To:	89.43.3.0
Report for:	DS8900F

Code Bundle Contents

DS8900F Code Bundle Level	SEA or LMC Version:	DSCSI Client	Heat Map Transfer Utility	Storage Manager	Copy Services Manager
89.43.3.0	7.9.43.10	7.9.43.10	7.9.43.10	5.9.43.1006	6.3.10

Overview of new features and functions supported by this release on DS8900F 533x and 5341 models 993/994/996/998

At a glance:

- Code fixes

This new microcode release supports DS8900F systems only.

Select Modifications Included in this Release Note:

This is a list of some modifications contained across one or more LIC (License Internal Code) or microcode release(s). The potential impact is variable. Specific environments may aggravate or degrade the potential impact. Problem(s) fixed and reported in this release note may not be in higher levels of code bundles.

Definition of Problem Severity:

1	High Impact	- Acute: Irrecoverable error with potential loss of data. - Serious: Irrecoverable error with potential loss of access to data, or critical function.
2	Moderate	- A function not operational and/or performance might be degraded.
3	Service	- A recoverable error (no impact) and service improvements.
4	Improvements	- Improvement changes for better Usability and Serviceability.

HIPER: High Impact problem that is Pervasive: 3 or more occurrences

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

Acute: An irrecoverable error with potential loss of data.

None.

Serious: An irrecoverable error with potential loss of access to data, or critical function.

Transparent Cloud Tiering copier improvements

- 1 Problem Description:** Code enhancements to improve TCT copier performance, and reliability.
- 1 Potential Impact of Problem:** Degraded throughput, job hangs.
- 2 Environment:** All R9 using TCT
- 3 Problem Severity:** High Impact
- 4 Pervasive Problem:** No.

ID# 367069

Safeguarded Copy source volumes write inhibited

- 1 Problem Description:** When an extent pool is out of space, Safeguarded Copy is taking too long to fail the operation, and free the lock needed to allow roll-off to free up space in the pool.
- 2 Potential Impact of Problem:** Loss of access
- 3 Environment:** All R9 using Safeguarded Copy
- 4 Problem Severity:** High Impact
- 5 Pervasive Problem:** No

ID# 368070

I/O timeouts caused by missing State Change Interrupt (SCI)

- 1 Problem Description:** If the paths to a device from a specific host image are in a Mixed grouped/ungrouped state, and a SCI is first offloaded on one of the ungrouped paths, the SCI indication for the grouped paths will also be cleared.
- 2 Potential Impact of Problem:** I/O timeouts when undergoing CS state transitions, or are coming out of long busy.
- 3 Environment:** R9.4.x and z/OS workloads
- 4 Problem Severity:** High Impact
- 5 Pervasive Problem:** No

ID# 371904

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

Moderate: A system path is not operational and/or performance may be degraded.

Host Adapter MLE

- 1 Problem Description:** While processing an inbound exchange, a SAN link event may trigger a Microcode Logic Error.
 - 2 Potential Impact of Problem:** Warmstart
 - 3 Environment:** All R9
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** Yes
- ID# 356274

0x5039 MLE

- 1 Problem Description:** When quiescing a CKD volume for CS activity, code will wait for I/Os on volume 0000 to complete, regardless of which volume is being quiesced.
 - 2 Potential Impact of Problem:** Warmstart.
 - 3 Environment:** All R9 using CKD volumes.
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 366400

Transparent Cloud Tiering unresponsive after a shutdown attempt

- 1 Problem Description:** A core segmentation fault can be triggered by the TCT shutdown process if it is performed while there is I/O running.
 - 2 Potential Impact of Problem:** TCT unusable until restarted.
 - 3 Environment:** All R9 using TCT.
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 368945

IOS641I PORT STATE CHANGE messages for zHyperlinks

- 1 Problem Description:** z/OS is issuing a link reset to zHyperlinks, for timeouts that are not understood by DS8k or z development. Accordingly we are adding a long-term trace buffer, to better capture what is occurring.
 - 2 Potential Impact of Problem:** zHyperlink down for ~20 seconds
 - 3 Environment:** All R9 using zHyperlinks
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 369053

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

IEA494I PPRC PAIR DUPLEX PENDING FC messages missed by GDPS

- 1 Problem Description:** If a FlashCopy establish (or withdraw) causes a PPRC pair to go pending, present the SCI to all volumes, not just online volumes.
- 2 Potential Impact of Problem:** Failure to warn that the environment is not Hyperswap capable.
- 3 Environment:** All R9 using zHyperswap.
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 369233

0x21E1 MLE

- 1 Problem Description:** Two Safeguarded Copy tasks "collided" while deallocating cache segments on the same cache track.
- 2 Potential Impact of Problem:** Warmstart.
- 3 Environment:** All R9 using Safeguarded Copy recovery point on an active backup.
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 369645

0x4143 MLE, End of Chain Task Timeout

- 1 Problem Description:** A deadlock can occur, if a FlashCopy establish is issued to a target volume, that is also a PPRC primary, and suspend command is issued to this volume.
- 2 Potential Impact of Problem:** Warmstart.
- 3 Environment:** All R9 using FlashCopy onto PPRC
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 370151

0x062E MLE

- 1 Problem Description:** zHyperlink write task was interrupted by a subsequent zHyperlink write task.
- 2 Potential Impact of Problem:** Warmstart.
- 3 Environment:** All R9 using zHyperlink.
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 370313

DS CLI password still exposed

- 1 Problem Description:** When logging into a DS8000 using DS CLI, a specific sequence may reveal the login password. Prior fix does not always work.
- 2 Potential Impact of Problem:** Security Exposure.
- 3 Environment:** All R9 using DS CLI on Windows.
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 371442

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

Enclosure Services Manager (ESM) fenced after Storage Enclosure midplane replaced

- 1 Problem Description:** Midplane repair does not reset state of ESMs immediately after it has passed verification.
- 2 Potential Impact of Problem:** Extended service action.
- 3 Environment:** All R9
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 371656

mkcloudserver fails with SSL handshake invalid certificate path exception

- 1 Problem Description:** Code logic sometimes selects the wrong certificates when creating the cloud
- 2 Potential Impact of Problem:** Warmstart.
- 3 Environment:** All R9 using multiple certificate pairs for TCT.
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 372274

Service: A recoverable error, Service improvements

GUI dashboard showing different used vs provisioned total capacity

- 1 Problem Description:** GUI is receiving CKD volume information in number of cylinders, but lacks the code to process the conversion.
- 2 Potential Impact of Problem:** Warmstart.
- 3 Environment:** All R9 using CKD volumes.
- 4 Problem Severity:** Service
- 5 Pervasive Problem:** No

ID# 370318

After CDA, collectedCodeLevels file contains incorrect code version

- 1 Problem Description:** Ensure process to collect local HMC levels, will also run for peer HMC.
- 2 Potential Impact of Problem:** Incorrect reporting.
- 3 Environment:** All R9
- 4 Problem Severity:** Service
- 5 Pervasive Problem:** No

ID# 371385

Cleanup AOS Entries in /etc/hosts on HMCs

- 1 Problem Description:** Entries provided to ensure Assist On-Site (AOS) availability are no longer needed, and are potentially counterproductive.
- 2 Potential Impact of Problem:** Loss of remote support capability using AOS.
- 3 Environment:** All R9
- 4 Problem Severity:** Service
- 5 Pervasive Problem:** No

ID# 371439

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

Improvements: Improvements for better usability

Slow Transparent Cloud Tiering migration to Cloud

- 1 Problem Description:** Create additional logging for First-Time Data Capture.
- 2 Potential Impact of Problem:** Degraded Performance
- 3 Environment:** All R9 using TCT
- 4 Problem Severity:** Improvement
- 5 Pervasive Problem:** No

ID# 364420

Certificate Signing Request abbreviates the STate attribute

- 1 Problem Description:** In CSR, ST=Arizona becomes ST=AZ, for example.
- 2 Potential Impact of Problem:** Noncompliant CSR.
- 3 Environment:** All R9, creating CSR using DS GUI. WUI is unaffected.
- 4 Problem Severity:** Improvement.
- 5 Pervasive Problem:** No.

ID# 365499

Resiliency improvement for SRC BE82CD7x

- 1 Problem Description:** 1 of 2 midplane VPD modules could not be read.
- 2 Potential Impact of Problem:** Single point of repair
- 3 Environment:** All R9
- 4 Problem Severity:** Improvement
- 5 Pervasive Problem:** Yes

ID# 371036

Pick up new HMC base

- 1 Problem Description:** Pick up new HMC base for security improvements.
- 2 Potential Impact of Problem:** N/A
- 3 Environment:** All R9
- 4 Problem Severity:** Improvement.
- 5 Pervasive Problem:** No.

ID# 371766

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

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IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.43.3.0 Release Note Information v1.1

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