

IBM System Storage - DS8900F Disk Storage

Microcode Bundle 89.31.26.0 Release Note Information v1.1

Release Date: August 26, 2022

VRMF Level Data Results:

VRMF level From:	89.30.68.0
VRMF Level To:	89.31.26.0
Report for:	DS8900F

Code Bundle Contents

DS8900F Code Bundle Level	SEA or LMC Version:	DSCLI Client	Heat Map Transfer Utility	Storage Manager	Copy Services Manager
89.31.26.0	7.9.31.54	7.9.31.54	7.9.31.54	5.9.31.1023	6.3.3

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

At a glance:

- Code fixes and improvements

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

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Acute: An irrecoverable error with potential loss of data.

SRC=BE33CEE1 - Bad LRC detected during daily scan

- 1 Problem Description:** Bad LRC detected on PAV alias volume caused by insufficient locking protection during a narrow window in volume creation.
 - 2 Potential Impact of Problem:** Loss of data
 - 3 Environment:** All CKD
 - 4 Problem Severity:** High Impact
 - 5 Pervasive Problem:** No
- ID# 358450

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

Dual LPAR DSI and reboot

- 1 Problem Description:** Removing volumes from a Global Mirror session, while GMIR resume was in process, exposed a microcode logic error.
 - 2 Potential Impact of Problem:** Loss of access
 - 3 Environment:** All Global Mirror on R9.3
 - 4 Problem Severity:** High Impact
 - 5 Pervasive Problem:** No
- ID# 357975

Loss of Access during code upgrade

- 1 Problem Description:** Host adapter topology changes made while CDA preload was active, were lost during code activation.
 - 2 Potential Impact of Problem:** Loss of access
 - 3 Environment:** All
 - 4 Problem Severity:** High Impact
 - 5 Pervasive Problem:** No
- ID# 357979

Dual V-RAID adapter failure

- 1 Problem Description:** A failed Flash Drive caused command timeouts on both V-RAID adapters in the pair, leading to a temporary loss of access to the array.
 - 2 Potential Impact of Problem:** Loss of access
 - 3 Environment:** All HPFE Gen2
 - 4 Problem Severity:** High Impact
 - 5 Pervasive Problem:** No
- ID# 358225

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Very long response times caused by failing Flash drive

- 1 Problem Description:** Drive sector reallocations were allowed to take an excessive amount of time before retrying or failing the drive.
- 2 Potential Impact of Problem:** Temporary loss of access
- 3 Environment:** All HPFE Gen2
- 4 Problem Severity:** High Impact
- 5 Pervasive Problem:** No

ID# 358603

XRC session forward time creep

- 1 Problem Description:** In R9 systems, timekeeping based on processor ticks causes a forward time creep, which System Data Mover and XRC software do not handle well. Systems that have extended periods with no updates on any volume in a LCU / SSID may see message ANTX5001E with No Record Found, or Invalid Track Format, and ANTX5104E RC=0901 indicating incorrect data is written to the secondary volume.
- 2 Potential Impact of Problem:** XRC failure.
- 3 Environment:** XRC on R9 systems
- 4 Problem Severity:** High Impact
- 5 Pervasive Problem:** No

ID# 358622

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

0x7001 MLE

- 1 Problem Description:** Host writes to two consecutive tracks in the same operation may encounter an overlap condition in XRC processing of the tracks.
- 2 Potential Impact of Problem:** Warmstart
- 3 Environment:** Safeguarded XRC primary
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 356451

Incorrect CS volume state shown in DS GUI

- 1 Problem Description:** When notified of Copy Services state change, GUI is incorrectly handling the values provided, and showing the wrong PPRC status.
- 2 Potential Impact of Problem:** Wrong information
- 3 Environment:** Systems running PPRC
- 4 Problem Severity:** Moderate
- 5 Pervasive Problem:** No

ID# 356680

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Incorrect DS GUI display

- 1 Problem Description:** GUI is showing incorrect information for thin-provisioned Safeguarded Copy volumes.
 - 2 Potential Impact of Problem:** Incorrect graphs
 - 3 Environment:** Systems using Safeguarded Copy
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 357411

DS CLI 'lshostconnect' shows stale data

- 1 Problem Description:** After removing zoning for a host adapter port, lshostconnect still shows the old port login information
 - 2 Potential Impact of Problem:** Wrong information
 - 3 Environment:** All
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 357800

Short performance impact while taking a hot spare drive

- 1 Problem Description:** When taking a hot spare, a format process is taking the adapter out of performance mode.
 - 2 Potential Impact of Problem:** Degraded performance
 - 3 Environment:** All HPFE Gen2
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 358259

HMC timezone reverted to UTC during CDA

- 1 Problem Description:** During a CDA upgrade (Transformation) the HMC timezone was not restored.
 - 2 Potential Impact of Problem:** Extended service action
 - 3 Environment:** R9.2 transformation from 9.0 or 9.1
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 358398

Single LPAR DSI/reboot

- 1 Problem Description:** Recovery code attempted to reset a Device Adapter that was not installed.
 - 2 Potential Impact of Problem:** Degraded performance
 - 3 Environment:** Two occurrences since R7.2 GA
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 358424

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HMC /extra filesystem full

- 1 Problem Description:** ESSNI uses /extra to store CS events when memory queue is full, but does not pull the events back from /extra when the events are processed.
 - 2 Potential Impact of Problem:** HMC filesystem full
 - 3 Environment:**
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** No
- ID# 358541

During CDA upgrade, HMC not available after reboot

- 1 Problem Description:** During HMC upgrade (Transformation), HMC WUI is unavailable for an extended time after reboot. First-Time Data Capture fix.
 - 2 Potential Impact of Problem:** Extended service action
 - 3 Environment:** R9.2 transformation from 9.0 or 9.1
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** Yes
- ID# 358656

Reclassify Host Adapter SerDes error

- 1 Problem Description:** Modify Host Adapter SerDes timeout error from 'Class A' to 'Class B', and trigger ODD Dump instead of warmstart.
 - 2 Potential Impact of Problem:** Warmstart
 - 3 Environment:** Systems with 16Gb or 32Gb Host Adapters
 - 4 Problem Severity:** Moderate
 - 5 Pervasive Problem:** Yes
- ID# 359049

Service: A recoverable error, Service improvements

Cluster PCIe repair failure

- 1 Problem Description:** Cluster PCIe card replacement failed to complete; required development support because P1 planar was not included in the FRU list.
 - 2 Potential Impact of Problem:** Extended service action
 - 3 Environment:** All R9 systems
 - 4 Problem Severity:** Service
 - 5 Pervasive Problem:** No
- ID# 358494

GUI reports "unknown" state on processor nodes

- 1 Problem Description:** After code update and HMC reboot, DS GUI reports "unknown" for processor nodes and/or other entities in the rack view. First-Time Data Capture fix.
 - 2 Potential Impact of Problem:** Wrong GUI status
 - 3 Environment:** All R8.5 and R9.x
 - 4 Problem Severity:** Service
 - 5 Pervasive Problem:** Yes
- ID# 358497

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AOS remote access failing on R9.3 systems

- 1 Problem Description:** Assist OnSite remote access via Windows is failing on R9.3 systems because of unexpected packets being sent during login.
- 2 Potential Impact of Problem:** Extended service action
- 3 Environment:** R9.3 and Windows AOS clients and/or “jump” servers.
- 4 Problem Severity:** Service
- 5 Pervasive Problem:** No

ID# 359001

Improvements: Improvements for better usability

Improve logging for HMC login failures

- 1 Problem Description:** After bundle updates, HMC login may require an additional HMC reboot.
- 2 Potential Impact of Problem:** HMC login fails
- 3 Environment:** R9.3
- 4 Problem Severity:** Improvement
- 5 Pervasive Problem:** No

ID# 358527

DS CLI 'fshowlinkcounts' improvement

- 1 Problem Description:** Update 'fshowlinkcounts' to:
 - add a '-c' option to request output in Comma Separated Value format
 - add a '-f filename' option to allow the user to specify an input file
- 2 Potential Impact of Problem:** None
- 3 Environment:** All R9.3
- 4 Problem Severity:** Improvement
- 5 Pervasive Problem:** No

ID# 358555

Provide an additional AOS broker

- 1 Problem Description:** Provide additional Assist OnSite broker 'aosback.us.ihost.com' for remote support access.
- 2 Potential Impact of Problem:** None
- 3 Environment:** All R8 and R9
- 4 Problem Severity:** Improvement
- 5 Pervasive Problem:** No

ID# 358759

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