

IBM System Storage - DS8880 Disk Storage

Microcode Bundle 88.59.42.0 Release Note Information v1.2

Release Date: November 1, 2022

VRMF Level Data Results:

| | |
|------------------|------------|
| VRMF level From: | 88.59.36.0 |
| VRMF Level To: | 88.59.42.0 |
| Report for: | All DS8880 |

Code Bundle Contents

| DS8880 Code Bundle Level | SEA or LMC Version: | DSCLI Client | Heat Map Transfer Utility | Storage Manager | Copy Services Manager |
|--------------------------|---------------------|--------------|---------------------------|-----------------|-----------------------|
| 88.59.42.0 | 7.8.59.158 | 7.8.59.158 | 7.8.59.158 | 5.8.59.1066 | 6.3.2 |

Overview of new features and functions supported by this release

At a glance:

- Code fixes

This new microcode release supports DS8880 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. Problem Severity:** High Impact
 - 4. Pervasive Problem:** No
- ID# 358450

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

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. Problem Severity:** High Impact
 - 4. Pervasive Problem:** No
- ID# 357979

HIPER Temporary loss of access with an unusual workload pattern.

- 1. Problem Description:** Workloads with a small number of tracks in NVS, but very high update write activity to those same tracks, may lead to a destage stall condition, in systems running R8.5 SP11 – 88.59.36.0. <https://www.ibm.com/support/pages/node/6857815>
 - 2. Potential Impact of Problem:** Loss of access
 - 3. Problem Severity:** HIPER
 - 4. Pervasive Problem:** Yes
- ID# 358142

Failure to establish additional PPRC relationships

- 1. Problem Description:** MultiTarget Incremental Resync relationships could not be created because there were no free primary relationship entries. Original Relation IDs still existed in the control structures, but were not reused. <https://www.ibm.com/support/pages/node/6857809>
 - 2. Potential Impact of Problem:**
 - Unexpected full copy.
 - Loss of Copy Services function.
 - 3. Problem Severity:** High Impact
 - 4. Pervasive Problem:** No
- ID# 358170

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

Unable to restart failed CPC Processor and Memory upgrade

- 1. Problem Description:** If one CPC was upgraded, and the second fails, it cannot be recovered to dual cluster without support assistance.
- 2. Potential Impact of Problem:** Extended service action
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 347993

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. Problem Severity:** Moderate
- 4. 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. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 356680

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. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 357800

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. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 358424

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During CDA upgrade, HMC not available after reboot

- 1. Problem Description:** During HMC upgrade (Transformation), HMC is unavailable for an extended time after reboot.
- 2. Potential Impact of Problem:** Extended service action
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID# 358656

0x4143 MLE - End of Chain task timeout

- 1. Problem Description:** Deadlock occurred on a read operation to a metadata track that was locked by another component.
- 2. Potential Impact of Problem:** Warmstart
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 358787

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. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID# 359049

Service: A recoverable error, Service improvements.

None.

Improvements: Improvements for better usability

Support new error code sense for failbackpprc

- 1. Problem Description:** Create and return new 0x7415 code when receiving sense data 0F74-15 from microcode.
- 2. Potential Impact of Problem:** None
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID# 357731

Data capture enhancement for 0x7F05 MLE

- 1. Problem Description:** Improve data capture for a rare microcode logic error that can trigger a warmstart.
- 2. Potential Impact of Problem:** None
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID# 358054

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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. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID# 358759

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