

IBM System Storage - DS8880 Disk Storage

Microcode Bundle 88.53.5.0 Release Note Information

Release Date: June 21, 2019

VRMF Level Data Results:

VRMF level From:	88.52.23.0
VRMF Level To:	88.53.5.0
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
88.53.5.0	7.8.53.19	7.8.53.19	7.8.53.19	5.8.53.1007	6.2.4

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.

HIPER Possible data inconsistency on PPRC secondary

1. **Problem Description:** Possible data inconsistency on PPRC secondary (or GM FlashCopy target as current instance) while running FlashCopy on PPRC ESE primary (PPRC primary is also FLC target)
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID# 341639

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

HIPER Global Mirror full copy after Hyperswap

1. **Problem Description:** During Hyperswap, volumes with no I/O may not correctly reflect their current state, resulting in full volume copy instead of only the changed tracks.
2. **Potential Impact of Problem:** Unnecessary copy activity
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID# 340629

Task Control Block resource leak

1. **Problem Description:** During FlashCopy establish to ESE target, with preallocate on target, if establish is not successful, the task control block may not be freed.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID# 341218

Volume not available after Hyperswap

1. **Problem Description:** A microcode logic error may result in a volume stuck in reserved state with no owning host.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID# 341617

HIPER 'Address Specific' bit incorrectly set

1. **Problem Description:** When sending link reject for a command received on a logical path that doesn't exist, Host Adapter did not correctly set the AS (address specific) bit.
2. **Potential Impact of Problem:** loss of access, unable to resync after Hyperswap
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID# 342058

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Potential incomplete FlashCopy

- 1. Problem Description:** In zOS systems running with Extent-Space-Efficient volumes, a FlashCopy that is established while PPRC is suspended, may not copy all updated tracks when PPRC is resumed.
- 2. Potential Impact of Problem:** loss of data
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID# 342079

Repeated 0x4143 MLE

- 1. Problem Description:** Mid-chain Locate Record / Erase commands sent by System Data Mover exposed a microcode logic error.
- 2. Potential Impact of Problem:** loss of access
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID# 342604

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

I/O bay repair failed deactivation

- 1. Problem Description:** On systems with 128 host ports, Host Adapter resource managers may run out of memory
- 2. Potential Impact of Problem:** Extended I/O bay repair
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID# 339888

Rank depopulation failed

- 1. Problem Description:** Background QuickInit failed to acquire a Task Control Block
- 2. Potential Impact of Problem:** DePop failure
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** No

ID# 341636

PPRC write timeouts

- 1. Problem Description:** Systems running 88.52.21.0 or 88.52.23.0 are exposed to task timeouts and PPRC suspend when using Torn Page function in Metro Global Mirror environment.
- 2. Potential Impact of Problem:** PPRC Suspend
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID# 343216

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Service: A recoverable error, Service improvements.

SRC=BE610034 after Secure Data Overwrite

- 1. Problem Description:** After SDO completes, if HMC is rebooted, SRC is logged for unexpected reboot during SDO.
 - 2. Potential Impact of Problem:** none
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** No
- ID# 339446

UPS fenced when changing time zone

- 1. Problem Description:** Failure when setting UPS to UTC -3 time zone in DS8882F
 - 2. Potential Impact of Problem:** none
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** No
- ID# 339890

Secondary HMC update failed

- 1. Problem Description:** During LIC upgrade, secondary HMC failed to update because of a hung preload process
 - 2. Potential Impact of Problem:** LIC update failure
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** No
- ID# 341106

Collect additional code levels in heartbeat data

- 1. Problem Description:** Heartbeat collected code levels file only contains HMC and ICS related entries. Process improved to collect all currently installed levels.
 - 2. Potential Impact of Problem:** none
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** No
- ID# 341259

CMUN00014E message while configuring SKLM

- 1. Problem Description:** When using DS CLI below version 8.5, key server creation fails with a null pointer exception
 - 2. Potential Impact of Problem:** none
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** Yes
- ID# 341344

Copy Services Manager and DS CLI communication failure

- 1. Problem Description:** CSM caused an ESSNI Out-of-Memory condition
 - 2. Potential Impact of Problem:** HMC communication failure
 - 3. Problem Severity:** Service
 - 4. Pervasive Problem:** No
- ID# 341485

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Unable to repair failed DDM

- 1. Problem Description:** Replacement drive was rejected because a stale resource manager attribute was not cleared by the repair.
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 341505

Flash Drives show incorrect values in DS GUI

- 1. Problem Description:** A microcode logic error may cause drives to display an incorrect interface rate value.
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 341885

Incorrect path status reporting in HPFE Gen2

- 1. Problem Description:** High Performance Flash Enclosure Gen2 may provide stale indication of degraded path(s).
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 341951

HMC upgrade failure

- 1. Problem Description:** During HMC update/upgrade, individual package update failure may not be detected.
- 2. Potential Impact of Problem:** Unscheduled HMC reload
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 342154

Auto-Reboot HMC after MLE

- 1. Problem Description:** After a kernel microcode logic error, HMC will auto-reboot and surface SRC=BE179000
- 2. Potential Impact of Problem:** HMC unavailable
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 342160

Deleted user ID reappears after reboot

- 1. Problem Description:** When default local users like 'CE' or 'Customer' have been deleted, logic to recreate them during reboot was not suppressed.
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID# 342469

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Improvements: Improvements for better usability

Disable direct ssh login from Customer network

- 1. Problem Description:** Improve security by closing ssh port 22 for direct login. Does not affect remote support via AOS or RSC
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID# 338691

Auto-Offload LPAR crash dumps

- 1. Problem Description:** Current offload methods allow offload without impacting remote support login capability
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID# 340545

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