

IBM System Storage - DS8870 Disk Storage

Microcode Bundle 87.52.19.0 Release Note Information v1

Release Date: November 2, 2018

VRMF Level Data Results:

VRMF level From:	87.51.121.0
VRMF Level To:	87.52.19.0
Report for:	All DS8870

Code Bundle Contents

DS8000 Code Bundle	SEA or LMC	DSCLI Client	STAT Tool	Easy Tier Client	Heat Map Transfer Utility	Storage Manager Code Level
87.52.19.0	7.7.52.620	7.7.52.620	7.7.52.620	7.7.52.620	7.7.52.620	5.7.52.1025

Overview of new features and functions supported by this release on DS8870 242x model 961

At a glance:

- Code fixes
- Note: Upgrades to 87.52.19.0 from levels below 87.5x.x.x will require two-step HMC transformation

This new microcode release supports DS8870 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: An irrecoverable error with potential loss of data. - Serious: An irrecoverable error with potential loss of access to data.
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=BE504940 on Flash Copy target volume

1. **Problem Description:** While performing Copy Source to Target operation, a microcode error during host bay PCIe fabric recovery, resulted in a cache medium error.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 333246

System with multiple failed DDMs did not call home

1. **Problem Description:** Callhome did not occur because a prior repair action was not completed.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 333464

Serious: An irrecoverable error with potential loss of access to data.

Callhome if bypass power is set

1. **Problem Description:** If the bypass power flag is set for > 1 month, create a serviceable event.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 331306

HIPER Dual disk enclosure controller failure

1. **Problem Description:** A disk enclosure controller failed, and the surviving partner controller was unable to complete enclosure recovery actions.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID#: 332765

Start Pending, devices boxed during PPRC suspend

1. **Problem Description:** While attempting to recover a Global Mirror session that was in prepared/severe state, the suspend process was allowed an excessively long timeout value.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 333890

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PPRC devices boxed

1. **Problem Description:** After terminating a PPRC session through CSM, the 31 volumes in that session became boxed in z/OS
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
- ID#: 334957

Incorrect reporting of bad data block

1. **Problem Description:** Sense data sent to IBM i host incorrectly identified the first block in the track as failed, rather than the actual failing block.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
- ID#: 335122

HIPER High Performance Flash Enclosure dual expander hang

1. **Problem Description:** During error recovery, i2c bus errors were not handled properly by V-RAID adapter firmware
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** HIPER
 4. **Pervasive Problem:** Yes
- ID#: 335285

0x10F7 MLE

1. **Problem Description:** Improper handling of multiple stage errors in a single adapter command caused microcode logic errors.
 2. **Potential Impact of Problem:** Repeated warmstarts, loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
- ID#: 335466

Permanent I/O errors after Hyperswap

1. **Problem Description:** z/OS Metro/Global Mirror-Incremental Resync establish commands were issued to secondary devices in a suspended Global Mirror session. The commands were allowed to process because of incorrect status in a control block.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
- ID#: 337250

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

0x05E0 MLE

1. **Problem Description:** Locking exception while a PAV alias device is trying to query whether the base device has a reserve.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 331106

0x0109 MLE running DELPAIR when single cluster

1. **Problem Description:** A locking exception can occur when primary is running single cluster, and there are no paths to the secondary.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 332574

Performance issues with low-volume PPRC workloads

1. **Problem Description:** Add persistent pokeable csmgrSyncLowTierOnePart = 1 and make this the default setting.
2. **Potential Impact of Problem:** Performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 337459

Service: A recoverable error, Service improvements.

DS GUI displays wrong LIC bundle level

1. **Problem Description:** DS GUI incorrectly parsed the CDA history
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 327155

Incorrect LPAR date/time

1. **Problem Description:** During LPAR boot, clock sync to HMC was not successful.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 328549

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Unable to change array scrub rate

1. **Problem Description:** Change to array scrub rate was rejected because another resource value was incorrectly initialized.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 331744

DS GUI did not display VOLSER of a CKD volume

1. **Problem Description:** When a new volume was created, DS GUI did not refresh the VOLSER, because there was no old VOLSER to update.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 331799

CMUN80973E when enabling encryption

1. **Problem Description:** Error in configuring HMC as KMIP proxy
 2. **Potential Impact of Problem:** loss of data, loss of access, loss of path, degraded performance, none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 332881

CMUN00018E error accessing DS GUI or DSCLI

1. **Problem Description:** ESSNI process fails to start because of an endless loop while processing user id / password pairs
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 333019

Update callhome Certificate Authority (CA) trust store

1. **Problem Description:** Update CA certificates for URSF and ECC callhome connections.
 2. **Potential Impact of Problem:** Unable to call home
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 333280

False SRC=BE33CE9C logged during warmstart

1. **Problem Description:** During warmstart, Device Adapter reset code incorrectly flags a temporary loss of access.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 333586

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Heartbeat callhome failed

1. **Problem Description:** Memory leak in resource action used by ESSNI
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** Yes

ID#: 334120

Remote login authentication fails intermittently

1. **Problem Description:** High volume of authentications, or DSCLI 'testauthpol' commands, can lead to a Java out-of-bounds condition.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 334449

HMC backups could fill up /var filesystem in LPARs

1. **Problem Description:** Function to prune old backup files fails to remove the files.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 336080

CDA suspended because of open problem

1. **Problem Description:** SRC=BE14EAF1 is logged for TKLM/SKLM communication error. This should not impact Code Load, and can be ignored.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 336646

Java.lang.OutOfMemoryError on LPARs

1. **Problem Description:** Copy Services Commands contained too many repetitive strings
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 337260

Improvements: Improvements for better usability

Customer notification of failed callhome

1. **Problem Description:** Add serviceable event number, SRC, and problem text to Customer notification when callhome is not successful.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** No

ID#: 333375

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Suppress server version information in DS GUI error message

- 1. Problem Description:** Exposing server version information could lead to an exploit of HMC code
- 2. Potential Impact of Problem:** none
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID#: 336304

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