

# **IBM System Storage - DS8870 Disk Storage**

## **Microcode Bundle 87.52.44.0 Release Note Information**

**Release Date: June 1, 2020**

### **VRMF Level Data Results:**

<b>VRMF level From:</b>	<b>87.52.35.0</b>
<b>VRMF Level To:</b>	<b>87.52.44.0</b>
<b>Report for:</b>	<b>All DS8870</b>

### **Code Bundle Contents**

<b>DS8000 Code Bundle</b>	<b>SEA or LMC</b>	<b>DSCLI Client</b>	<b>STAT Tool</b>	<b>Easy Tier Client</b>	<b>Heat Map Transfer Utility</b>	<b>Storage Manager Code Level</b>
<b>87.52.44.0</b>	<b>7.7.52.1350</b>	<b>7.7.52.1350</b>	<b>7.7.52.1350</b>	<b>7.7.52.1350</b>	<b>7.7.52.1350</b>	<b>5.7.52.1057</b>

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

### **At a glance:**

- Code fixes
- **Note:** Upgrades to 87.52.44.0 from levels below 87.5x.x.x will require two-step HMC transformation

<b>This new microcode release supports DS8870 systems only.</b>
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### **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:**

<b>1</b>	<b>High Impact</b>	- Acute: An irrecoverable error with potential loss of data. - Serious: An irrecoverable error with potential loss of access to data.
<b>2</b>	<b>Moderate</b>	- A function not operational and/or performance might be degraded.
<b>3</b>	<b>Service</b>	- A recoverable error (no impact) and service improvements.
<b>4</b>	<b>Improvements</b>	- 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.**

#### **Inconsistent data on secondary after error recovery**

1. **Problem Description:** Error recovery while forming FlashCopy Consistency Groups, across multiple LSSs, may result in one or more LSSs coming out of freeze earlier than the others.  
**Note:** Complete fix will require Co-Req APARs OA59936 (SDM) and PH26701 (GDPS)
2. **Potential Impact of Problem:** Data inconsistency
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 347624

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

#### **Production impact during incremental Flash Copy**

1. **Problem Description:** When managed out-of-band by CSM, the primary volume was being quiesced during PPRC fallback.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 331945

#### **HIPER SRC=BE352662 Host Adapter zHPF Global CRC error**

1. **Problem Description:** An unusual zHPF chain led to CRC errors, and fencing of multiple Host Adapters.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID#: 345019

#### **VRAID adapter left in service mode**

1. **Problem Description:** After a pseudo-repair of a VRAID adapter, the adapter was left in service mode. Subsequent repair of the partner adapter was allowed to proceed, causing loss of access.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 346737

#### **Repeated 0x0109 MLEs running Concurrent Copy**

1. **Problem Description:** 0x7D0E ODD Dump failed to clear a lock, leading to multiple 0x0109 MLEs and repeated warmstarts.
2. **Potential Impact of Problem:** Repeated warmstarts, single cluster reboot
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 347490

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

### **Resource Manager failure**

1. **Problem Description:** Resource Manager runs out of Adapter Platform Object Model file descriptors.
  2. **Potential Impact of Problem:** Copy Service Manager/CS Toolkit communication failure
  3. **Problem Severity:** Moderate
  4. **Pervasive Problem:** Yes
- ID#: 320360

### **0x05E0 MLE**

1. **Problem Description:** A task freed it's lock before it was completely done processing.
  2. **Potential Impact of Problem:** Warmstart
  3. **Problem Severity:** Moderate
  4. **Pervasive Problem:** No
- ID#: 347497

**Service: A recoverable error, Service improvements.**

### **AOS connection failure**

1. **Problem Description:** Assist OnSite connection via proxy fails, and AOS must be restarted.
  2. **Potential Impact of Problem:** Remote support access failure
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 327293

### **Rank creation fails with SRC=BE51627A**

1. **Problem Description:** Initial rank creation failed because a flash drive failed format. After drive replacement, stale format progress status remained in the VRAID adapter, causing subsequent rank creation attempts to fail.
  2. **Potential Impact of Problem:** Unable to create a rank
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 330929

### **ODD dump format failure**

1. **Problem Description:** During ODD dump formatting, stale data in the dump caused a failure to format post-statesave data, used in copy services analysis.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 334613

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### **HPFE Gen2 firmware fails to update during MES**

1. **Problem Description:** During install of new HPFE Gen2 enclosures or drive sets, the firmware update may begin before format is finished.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 336177

### **Test Callhome utility failure**

1. **Problem Description:** When running Test Callhome utility, two synchronous processes conflict, causing process hang and eventual test failure.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 346851

### **CMUN80000E login failure after Customer network IP change**

1. **Problem Description:** If the first configured remote authentication URL is unreachable, HMC does not retry over the second configured URL.
  2. **Potential Impact of Problem:** Unable to authenticate via LDAP
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 346946

### **AOS config panel display incorrect**

1. **Problem Description:** AssistOnSite config panel displays incorrectly when authenticated proxy is configured with a password containing "@".
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 348208

### **mkarray failed with CMUN02013E**

1. **Problem Description:** In device adapter pairs with an intermix of drive capacities and speeds, an array site may become intermixed because of prior failures and subsequent repair actions. If an intermixed array is removed, the intermix condition may prevent reconfiguring the array.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 348279

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### **HMC heartbeat callhome triggers SNMP alert**

- 1. Problem Description:** If SNMP is configured for Trap 3 notifications, after the next HMC reboot, SNMP will begin also reporting Trap 13 events.
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 348520

### **HMC WUI fails CE and Customer login**

- 1. Problem Description:** CE or Customer login returned "Invalid user name or password specified" because of a Pluggable Authentication Module (PAM) failure.
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 348649

### **NTP server config missing after HMC update**

- 1. Problem Description:** Function to remove default public NTP servers can also remove Customer-configured public NTP servers.
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 348834

## **Improvements: Improvements for better usability**

None.

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