

IBM System Storage - DS8870 Disk Storage

Microcode Bundle 87.10.102.0 Release Note Information v3

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Release Date: September 30 , 2013

VRMF Level Data Results:

VRMF level From:	87.10.91.0
VRMF Level To:	87.10.102.0
Report for:	All DS8870

Code Bundle Contents

This table includes code component reference information.

DS8870 Code Bundle Level	SEA or LMC Version: <i>dscli ver</i>	DS CLI Client	Easy Tier Client	STAT Tool	Storage Manager
87.10.102.0	7.7.10.317	7.7.10.317	7.7.10.317	7.7.10.317	5.7.10.1182

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

At a glance:

- Support for https connection to DSGUI
- DSGUI support for managing ESE volumes with IO Priority Manager

General:

- PPRC fixes to address suspends, CG formation and path failures
- Several FlashCopy fixes to address performance issues

This is a new microcode release only supports the DS8870.

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.

None

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

None

Moderate: A system path is not operational and performance might be degraded.

PPRC suspend due to track format mismatch being falsely detected

1. **Problem Description:** Track format checking can detect a false mismatch when R0 is uninitialized on a PPRC secondary volume
2. **Potential Impact of Problem:** PPRC suspend, GDPS freeze
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 286844

Global Mirror stuck in first pass due to a microcode logic error

1. **Problem Description:** Global Copy pairs are stuck in first pass and do not form consistency groups.
2. **Potential Impact of Problem:** Global Mirror not forming consistency groups
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 283328

PPRC link errors cause host adapter to be fenced

1. **Problem Description:** Host adapter recovery can fence a host adapter that experiences CRC errors on a port used as a PPRC path.
2. **Potential Impact of Problem:** loss of path
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 286001

NVS saturation with large sequential bursts of PPRC data to secondary

1. **Problem Description:** NVS utilization for large ranks can result in PPRC and host I/O to wait for NVS space, causing degraded performance.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 284307

Read I/O on FlashCopy source volumes not being counted by Easy Tier

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1. **Problem Description:** On Flashcopy CST operation, Easy Tier records the read I/O statistics on FlashCopy source volume against the target volume.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 286540

IOS071I Start Pending with zHPF active

1. **Problem Description:** Microcode logic error if very high channel utilization causes I/O operation to hang, invoking MIH.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 284393

Change in how cache handles LRU demotes

1. **Problem Description:** Large sequential workloads can utilize excessive cache resources, impacting performance of random workloads.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 285125

Service: A recoverable error, Service improvements.

AOS Access Control list is missing the group for Scandinavia

1. **Problem Description:** AOS ACLs are missing the group preventing remote support from accessing the HMC via the imbedded AOS gateway.
2. **Potential Impact of Problem:** No remote access with AOS
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 288539

DSCLI microcode logic error when querying SCSI reserve

1. **Problem Description:** The "showfbvol -reserve" can result in a microcode logic error that causes warmstart for error recovery. If the command is issued enough times the warmstart recoveries can result in cluster failover.
2. **Potential Impact of Problem:** Cluster failover
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 285875

Improvements: Improvement for better usability

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Add support for I/O Priority Manager to manage ESE volumes

- 1. Problem Description:** I/O Priority Manager can manage performance groups
Extent Space Efficient volumes with the DSGUI menus.
- 2. Potential Impact of Problem:** N/A
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** No

ID#: 285451

Support for secure connections via https to the DSGUI

- 1. Problem Description:** The HMC GUI can be accessed via http which is not encrypted. This change will support https connections to the DSGUI
- 2. Potential Impact of Problem:** security exposure
- 3. Problem Severity:** Improvement
- 4. Pervasive Problem:** Yes

ID#: 282605

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