IBM System Storage - DS8870 Disk Storage Microcode Bundle 87.21.16.4 Release Note Information v1

Release Date: October 7, 2014

VRMF Level Data Results:

VRMF level From:	87.21.16.0
VRMF Level To:	87.21.16.4
Report for:	All DS8870

Code Bundle Contents

This table includes code component reference information.

DS8870 Code Bundle Level	SEA or LMC Version:	DS CLI Client	Easy Tier Client		Heat Map Transfer Utility	Storage Manager
87.21.16.4	7.7.21.42	7.7.21.38	7.7.21.38	7.7.21.38	7.7.21.38	5.7.21.1012

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

At a glance:

- 'VVL' Brocade Switch Reboot fix
- Global Copy Collision enhancement fixes

This 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.

Fabric login to a Brocade switch with VVL bit set causes reboot

- 1. **Problem Description:** If the Vendor Version Level (VVL) field has non-zero values then the Brocade switch will reboot. These bits will be set to all zeros when the DS8000 initiates fabric login to the switch.
- 2. Potential Impact of Problem: loss of access
- 3. Problem Severity: High Impact
- 4. Pervasive Problem: No

ID#: 294098

Host I/O time-outs when PPRC bit maps are merged

- **1. Problem Description:** When consistency groups fail to form the internal data structure is locked while bit maps are merged. Host I/O will be held off during the merge, due to the lock. This problem is exposed with large volume sizes.
- 2. Potential Impact of Problem: degraded performance, high RPO, loss of access possible
- 3. Problem Severity: HIPER
- 4. Pervasive Problem: Yes

ID#: 296179

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

Global Mirror drain failure recovery

- 1. **Problem Description:** When the Global Copy Collision code is enabled, if a Global Mirror collision occurs together with a Global Copy collision, the Global Mirror collision may be queued behind the Global Copy transfer.
- 2. Potential Impact of Problem: Elongated consistency group times
- 3. Problem Severity: Moderate
- 4. Pervasive Problem: No

ID#: 296338

Service: A recoverable error, Service improvements.

PPRC path failure causes 0x7473 MLE

- **1. Problem Description:** A permanent PPRC path failure during data transfer can cause a Microcode Logic Error
- 2. Potential Impact of Problem: Warmstart
- Problem Severity: Service
 Pervasive Problem: Yes

ID#: 297669

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Improvements: Improvement for better usability

None.

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