

IBM System Storage - DS8870 Disk Storage

Microcode Bundle 87.21.39.0 Release Note Information v1

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Release Date: October 2, 2014

VRMF Level Data Results:

VRMF level From:	87.21.30.0
VRMF Level To:	87.21.39.0
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	STAT Tool	Heat Map Transfer Utility	Storage Manager
87.21.39.0	7.7.21.78	7.7.21.78	7.7.21.78	7.7.21.78	7.7.21.78	5.7.21.1042

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

At a glance:

- Bash 'ShellShock' vulnerability fix
- Apache Tomcat chunk denial of service vulnerability fix

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.

HIPER - Slow DDM rejected by one DA is not rejected by partner DA

1. **Problem Description:** When a DDM is rejected by DAHP for being slow the partner adapter may not reject the drive the DDM does not respond to commands. The microcode logic should reject the DDM on both adapters without waiting for the DDM to respond.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID#: 294172

DA Takeover failure during cluster failure causes loss of access

1. **Problem Description:** When a cluster and DA adapter fail the operational cluster can takeover a DA adapter owned by the failing cluster. A microcode logic error can prevent the DA Takeover when an unexpected adapter state is detected.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 294527

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

PPRC state change unit attentions may be incorrectly reported to AIX and iSeries hosts

1. **Problem Description:** In some configurations, the rate of unit attentions generated can be high enough to cause performance problems
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 296526

Preserve Mirror PPRC suspends

1. **Problem Description:** While Performing flashcopy to primary volume of a Metro Mirror pair, an erase command while the volume is still duplex pending can cause Track Format Descriptor (TFD) mismatch.
2. **Potential Impact of Problem:** PPRC suspends
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 296584

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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:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** Yes

ID#: 297669

Heartbeat call home with wrong level information

1. **Problem Description:** Improper merge of CDA history records from dual HMCs.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 298561

Repair action fails if HMC and SF are at different code levels

1. **Problem Description:** Unable to perform service actions after HMC has been updated, but before SFI code has been updated.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No

ID#: 298881

Improvements: Improvement for better usability

Apache Tomcat chunk denial of service vulnerability

1. **Problem Description:** CVE-2014-0075, CVE-2014-0095, CVE-2014-0096, CVE-2014-0099, CVE-2014-0119
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** No

ID#: 298087

Fix bash shellshock security exposure

1. **Problem Description:** The bash (shell shock) security exposure has been fixed on the HMC with this change. This addresses exposures detailed security bulletins CVE-2014-6271, CVE-2014-7169, CVE-2014-7186, CVE-2014-7187, CVE-2014-6277, CVE-2014-6278.
2. **Potential Impact of Problem:** security exposure
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** N/A

ID#: 301426

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