IBM System Storage - DS8870 Disk Storage
Microcode Bundle 87.41.17.0 Release Note Information v1.1

Release Date: April 16, 2015

VRMF Level Data Results:

VRMF level From:	87.41.9.0
VRMF Level To:	87.41.17.0
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
87.41.17.0	7.7.41.50	7.7.41.50	7.7.41.50	7.7.41.50	7.7.41.50	5.7.41.1015

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

At a glance:

• Supports increased number of TPC-R connections
• Bug fixes

This 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

Acute: An irrecoverable error with potential loss of data.

0x7178 MLE, SEFLC target volume in failed state
1. **Problem Description:** Track-Space-Efficient secondary volumes in failed state because of a microcode logic error
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 303700

VRAID adapter parity error detection
1. **Problem Description:** Parity errors in metadata or unused areas of flash arrays are not properly processed by VRAID adapters, and will not open a serviceable event. This problem can lead to loss of access, and/or loss of data.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 305245

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

Loss of access during CDA when repository size > 50TiB
1. **Problem Description:** Insufficient metadata table space for repositories > 50TiB, but this limit was not enforced.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 295123

Repeated 0xE716 MLE after failover
1. **Problem Description:** NVS data for the failed CEC was being processed, which should have been cleared.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 301554

Direct-attach FICON Link will not initialize
1. **Problem Description:** Direct-connect FICON paths may fail to login to the DS8870, because of invalid Source_ID / Destination_ID. The exposure exists on mixed FICON/FC-SCSI DS8870s, where host ports have been configured using the new r7.4 GUI.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 305206

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

Cache Metadata Track function hang
1. **Problem Description:** The CMT function, which is used by CS to clear certain Copy Services metadata information, hangs in r7.4 code.
2. **Potential Impact of Problem:** Unable to perform function
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 302608

Reduced sequential performance after update to r7.4
1. **Problem Description:** Optimizations made in r7.4 to support 1M IOPS produced some unwanted side-effects.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 304102

Service: A recoverable error, Service improvements.

Storage enclosure interface card replacement failure
1. **Problem Description:** FCIC repair fails during FRU level identify when enclosure serial number contains the letter 'T'
2. **Potential Impact of Problem:** Extended repair
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 303200

Increase maximum number of TPC-R server connections allowed
1. **Problem Description:** Environments with multiple TPC-R servers may exceed the maximum client logins to the DS8K. This change increases the default maximum client logins from 10 to 64.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 303459

Improvements: Improvement for better usability

SSLv3 security vulnerabliity
1. **Problem Description:** Corrects CVE-2014-3566 "Poodle" Vulnerability, by disabling SSL v3 access.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** No
ID#: 302533

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