Release Date: March 30, 2012

VRMF Level Data Results:

VRMF level From:	86.20.111.0
VRMF Level To:	86.20.114.0
Report for:	All DS8800

Code Bundle Contents

Level	SEA or LMC Version: Used with dscli <i>ver</i> command.	CLI Client Level	Storage Manager Code Level
86.20.114.0	7.6.20.510	7.6.20.510	5.6.20.1127

Overview of new features and functions supported by Microcode Release 86.20.101.0 for DS8800, 242x model 951.

At a glance:

none

This is a new microcode release only supports the DS8800.

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 HIPER - 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.

Pervasive: Problems with 3 or more occurrences

Acute: An irrecoverable error with potential loss of data.

RAID10 array member with a mis-compare error is read for recovery

1. **Problem Description**: A RAID10 array member has a mis-compare error and during recovery the same DDM is read instead of the mirrored partner drive. This result in data loss for the affected tracks.

2. Potential Impact of Problem: loss of data

3. Problem Severity: HIPER 4. Pervasive Problem: Yes

ID#: 261209

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

Device Adapter port is disabled due to a microcode logic error

- 1. Problem Description: Port on a DA is disabled after a recovered error on FC-AL loop fails to clear the interrupt due to a microcode logic error.
- 2. Potential Impact of Problem: Unnecessary DA replacement, loss of access possible
- 3. Problem Severity: High Impact

4. Pervasive Problem: No.

ID#: 263428

Primary Power Supply in an internal fence state not being cleared

- 1. **Problem Description:** When a Primary Power Supply is set to internal fence pending state this state is not cleared due to a microcode logic error. If the partner Primary Power Supply has a failure while internal fence pending state is set the machine go through emergency shutdown.
- 2. Potential Impact of Problem: loss of access
- 3. Problem Severity: HIPER 4. Pervasive Problem: Yes

ID#: 265581

Alias volumes are inaccessible after host adapter error recovery

- 1. Problem Description: If we receive a SPID DISBAND command when all of the volumes in the LSS are not in a good state then a microcode logic error could cause alias volumes to become inaccessible. If host software error recovery only retries access to alias volumes then a permanent I/O error will result.
- 2. Potential Impact of Problem: loss of access, unplanned hyperswap
- 3. Problem Severity: High Impact
- 4. Pervasive Problem: No

ID#: 265713

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

Slow FlashCopy performance with background copy

1. Problem Description: When the configuration which use extent pool striping has all low numbered ranks on one DA Pair and all high numbered ranks on another DA Pair there can be slow performance for FlashCopy back ground copy.

2. Potential Impact of Problem: Degraded FlashCopy performance

3. Problem Severity: Moderate 4. Pervasive Problem: Yes

ID#: 238791

Service: A recoverable error, Service improvements.

Smart rebuild failure when source drive can not be read

- 1. Problem Description: If the source drive can not be read during smart rebuild the source drive is not rejected, causing smart rebuild to abort.
- 2. Potential Impact of Problem: extended maintenance
- 3. Problem Severity: Service 4. Pervasive Problem: No

ID#: 267042

FICON commands with chained data can cause IFCC

- 1. Problem Description: If commands with chained data are received it is possible a microcode error will cause the command to cause an interface control check.
- 2. Potential Impact of Problem: IFCC
- 3. Problem Severity: Service 4. Pervasive Problem: No

ID#: 265644

Improved fault isolation for SRC BE304442 FC-AL loop error

- 1. Problem Description: A single DDM can cause BE304442 multiple DDMs single port active error to be logged. If a single DDM is identified as single port active that DDM will be identified as the failing part.
- 2. Potential Impact of Problem: extended or repeat service
- 3. Problem Severity: Service 4. Pervasive Problem: Yes

ID#: 255215

Repeated recovered faults on internal I/O fabric does not call home

- 1. Problem Description: Repeated unisolated fabric faults on an I/O bay are recovered by warmstart but no serviceable event is opened. This change will call home if previous fabric faults have occurred on the same I/O bay.
- 2. Potential Impact of Problem: additional recovered fabric faults
- 3. Problem Severity: Service 4. Pervasive Problem: No

ID#: 259669

MIH errors during FlashCopy withdraw on extended address volumes

1. Problem Description: FlashCopy withdraw can take longer than 30 sec. for extended address volumes because of the time required for meta data update.

2. Potential Impact of Problem: MIH errors during FlashCopy withdraw

Problem Severity: Service
 Pervasive Problem: No

ID#: 263377

DSCLI Isavailpprcpath command returns CMUC00234I error

 Problem Description: Command reject prevents all valid PPRC paths from being displayed by the Isavailpprcpath command. This problem is due to a microcode error.

2. Potential Impact of Problem: Invalid PPRC path information

Problem Severity: Service
 Pervasive Problem: No

ID#: 265457

DSGUI menus not accessible with Mozilla Firefox® 3.5

1. Problem Description: DSGUI main page will load but when a menu is selected it will not complete loading.

2. Potential Impact of Problem: No DSGUI access from browser

Problem Severity: Service
 Pervasive Problem: No

ID#: 264541

Improvements: Improvement for better usability None

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