

IBM TotalStorage® DS8800 Disk Storage

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Microcode Bundle 86.30.51.0 v2 Release Note Information

Release Date: April 20, 2012

VRMF Level Data Results:

| | |
|------------------|------------|
| VRMF level From: | N/A |
| VRMF Level To: | 86.30.51.0 |
| Report for: | All DS8800 |

Code Bundle Contents

| DS800 Code Bundle Level | SEA or LMC Version: Used with dscli ver command. | CLI Client Level | Storage Manager Code Level |
|-------------------------|--|------------------|----------------------------|
| 86.30.51.0 | 7.6.30.160 | 7.6.30.157 | 5.6.30.1104 |

Overview of new features and functions supported by Microcode Release 86.30.51.0 for DS8800 , 242x model 951.

At a glance:

- IBM System Storage Easy Tier added support for all encrypting drive
- Thin Provisioning Enhancements for MM/GM/MGM for open systems
- 400 GB SSD drives
- 3TB 7200 rpm nearline SAS encrypting drives

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 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.

Emergency power off signal was sent to both clusters

- 1. Problem Description:** The emergency power off signal was sent to both CECs without a loss of input AC. This causes fire hose dump and power off when the system has full AC input power
- 2. Potential Impact of Problem:** loss of data
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID#: 260809

RAID 10 read error caused by DA adapter

- 1. Problem Description:** When a read causes an error staging the data to cache the DA adapter can be the cause but the DA adapter is not fenced due to a microcode logic error.
- 2. Potential Impact of Problem:** loss of data
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID#: 265786

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

Loss of access for iSeries adding 63 volumes to PPRC secondary

- 1. Problem Description:** When an iSeries host adds 63 or more volumes at one time to a PPRC secondary, all buffers can be allocated while unit format is running, PPRC primary and non-PPRC volumes are not affected.
- 2. Potential Impact of Problem:** loss of access
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID#: 267116

CCW chain with NOP and non-zero data length causes warmstart

- 1. Problem Description:** When a CCW chain has NOP data and a data length that is non-zero a microcode detected error results. If the CCW chain is received on multiple host adapters repeated warmstart will result.
- 2. Potential Impact of Problem:** warmstart, loss of access possible
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID#: 265037

Primary Power Supply service caused Fire Hose Dump

- 1. Problem Description:** When a Primary Power Supply has Fence Internal set and service is performed a Fire Hose Dump is issued due to a microcode logic error.
- 2. Potential Impact of Problem:** loss of access
- 3. Problem Severity:** High Impact
- 4. Pervasive Problem:** No

ID#: 262551

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

Global Mirror fails to start after hyperswap

- 1. Problem Description:** After a hyperswap from A to B control units and another hyperswap from B to A Global Mirror does not start until all the control units perform a warmstart.
- 2. Potential Impact of Problem:** Global Mirror will not start
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID#: 255388

HMC microcode update can fail when there is heavy TPCr workload

- 1. Problem Description:** When TPCr workload is heavy a HMC microcode update can fail in a way that requires HMC rebuild to restore operation.
- 2. Potential Impact of Problem:** No HMC access for copy services
- 3. Problem Severity:** Moderate
- 4. Pervasive Problem:** Yes

ID#: 265882

Service: A recoverable error, Service improvements.

Allow concurrent copy to a PPRC secondary with "allow writes" set

- 1. Problem Description:** In a PPRC failover the secondary has allow host writes set, but concurrent copy fails because the volume is a secondary.
- 2. Potential Impact of Problem:** Concurrent copy fails during PPRC failover
- 3. Problem Severity:** Service
- 4. Pervasive Problem:** No

ID#: 264450

Improvements: Improvement for better usability

None

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