IBM System Storage - DS8800 Disk Storage
Microcode Bundle 86.31.184.0 Release Note Information v1

Release Date: October 30, 2015

VRMF Level Data Results:

VRMF level From:	86.31.175.0
VRMF Level To:	86.31.184.0
Report for:	All DS8800

Code Bundle Contents

This table includes code component reference information.

DS8000 Code Bundle Level	SEA or LMC Version: Used with dscli *ver* command.	CLI Client Level	Storage Manager Code Level
86.31.184.0	7.6.31.3210	7.6.31.3210	5.6.31.1338

Overview of new features and functions supported by this release on DS8800, 242x model 951

At a glance:
- Problem fixes
- Serviceability enhancements
- Improvements

This 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

Acute: An irrecoverable error with potential loss of data.

HIPER Device adapter showstop during SMRB abort

1. **Problem Description:** Media error on Smart Rebuild source disk triggered a scrub of the logical block. During the scrub, the source disk deconfigured. A microcode logic error in the subsequent recovery action caused a DA showstop.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes
ID#: 308956

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

HIPER Track Format Descriptor mismatch on PPRC secondary volume

1. **Problem Description:** A format write command encountered a TFD mismatch on the secondary volume, because out-of-sync bitmap was incorrect.
2. **Potential Impact of Problem:** PPRC suspend, can also trigger GDPS to Hyperswap.
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes
ID#: 275313

LPAR timezone incorrectly set to 'null'

1. **Problem Description:** null timezone can cause a failure in some error log analysis routines, resulting in problems going unreported.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 307696

HIPER Host adapter 0x4B0E MLE

1. **Problem Description:** zHPF workload was transferring a long chain of small records. The DS8K split the transfer into two DMAs, exposing a problem with the calculation for notAlignedBytes.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes
ID#: 308467

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

0x7475 MLE

1. **Problem Description:** When re-accessing a track after Global Copy collision, a flag had not been reset because of a microcode logic error.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes
ID#: 306421

XRC Suspended, Reason SILB cache limit
1. **Problem Description:** XRC was not being notified when a CS volume grows.
2. **Potential Impact of Problem:** XRC Suspended
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 307060

Long Flash Copy increment-last times with Preserve Mirror
1. **Problem Description:** Establish command is waiting for the change recording bitmap merge to complete. The delay is proportional to volume size.
2. **Potential Impact of Problem:** Delayed FLC establish
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 310373

Service: A recoverable error, Service improvements.

CDA suspends with SRC=BEB10020
1. **Problem Description:** During service processor firmware update, HMC logs a loss of communication with the service processor, as expected. This error should be suppressed during CDA.
2. **Potential Impact of Problem:** Extended service window
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 307871

Improve isolation for SRC=BE34029C
1. **Problem Description:** Typically this is a recoverable firmware error, but the current analysis routines call for parts replacement on the first error.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** Yes
ID#: 308354

Callhome failure
1. **Problem Description:** HMC failed to callhome because of an HTML syntax error
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 308718

0x2694 MLE during IML back
1. **Problem Description:** During IML back, with cross-cluster flash copy relations, cross-cluster query triggered a microcode logic error, and cluster failed to resume.
2. **Potential Impact of Problem:** Extended service action
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 309386

Storage enclosure firmware update suspend
1. **Problem Description:** Expected sympathetic errors were not suppressed.
2. **Potential Impact of Problem:** Extended service action
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 309842

Improvements: Improvement for better usability

Support protocol SSLv3-TLS1.2 for port 1751, not only TLSv1.2
1. **Problem Description:** Port 1751 only supports TLSv1.2, but versions of Oracle JRE below v1.7 and IBM SDK below 1.6 do not support TLSv1.2.
2. **Potential Impact of Problem:** Unable to connect to HMC
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** No
ID#: 308614

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