IBM TotalStorage® DS8800 Disk Storage
Microcode Bundle 86.20.132.0 v1 Release Note Information

Release Date: December 14, 2012

VRMF Level Data Results:

VRMF level From:	86.20.130.0
VRMF Level To:	86.20.132.0
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
86.20.132.0	7.6.20.850	7.6.20.850	5.6.20.1161

Overview of new features and functions supported by Microcode Release 86.20.132.0 for DS8800 , 242x model 951.

At a glance:
none

General:
Metro/Global mirror link error handling improvements

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

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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.
None

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

Global mirror fatal error is possible with FlashCopy revertible pairs
1. **Problem Description:** When there are network issues and FlashCopy was established revertible option then Global Mirror can experience a fatal error due to a microcode error
2. **Potential Impact of Problem:** Global Mirror suspend
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 274483

PPRC suspend caused when microcode logic error detects no buffers
1. **Problem Description:** A microcode logic error incorrectly indicates zero buffers are available on the host adapter. This can occur on direct attached PPRC paths.
2. **Potential Impact of Problem:** PPRC suspend, PPRC path failures
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes
ID#: 273044

Service: A recoverable error, Service improvements.
PPRC command reject can result in a warmstart
1. **Problem Description:** On a highly utilized PPRC link a command reject result in a warmstart due to a microcode logic error
2. **Potential Impact of Problem:** warmstart
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 275799

Destage of cache data can encounter a microcode logic error
1. **Problem Description:** Due to a microcode logic error a warmstart can occur during cache destage. This error will result in a warmstart
2. **Potential Impact of Problem:** warmstart
3. **Problem Severity:** Service
4. **Pervasive Problem:** Yes
ID#: 273131

Improvements: Improvement for better usability
None

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