Release Date: May 22, 2018

VRMF Level Data Results:

VRMF level From:	88.33.34.0
VRMF Level To:	88.33.41.0
Report for:	All DS8880

Code Bundle Contents

	SEA or LMC Version:		1		Copy Services Manager
88.33.41.0	7.8.33.131	7.8.33.131	7.8.33.131	5.8.33.1053	6.2.2

Overview of new features and functions supported by this release

At a glance:

Code fixes

This new microcode release supports DS8880 systems only.

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.

None.

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

HIPER Host Adapter LRC errors

- 1. **Problem Description:** Open Systems volumes having more than 15 initiators that set persistent reserve may encounter a pointer exception that results in HA LRC errors, and repeated warmstarts
- 2. Potential Impact of Problem: loss of access
- Problem Severity: HIPER
 Pervasive Problem: Yes

ID#: 333868

Incorrect reporting of bad data block

- 1. **Problem Description:** Sense data sent to IBM i host incorrectly identified the first block in the track as failed, rather than the actual failing block.
- 2. Potential Impact of Problem: Incorrect error recovery
- 3. Problem Severity: High Impact
- 4. Pervasive Problem: No

ID#: 335122

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

XRC suspend with msg ANTX8117I

- **1. Problem Description:** Ref: APAR OA54082 XRC suspend caused by an error in consistency time handling, when a datamover is idle.
- 2. Potential Impact of Problem: XRC suspend
- 3. Problem Severity: Moderate
- 4. Pervasive Problem: No

ID#: 332112

0x0109 MLE running DELPAIR when single cluster

- 1. **Problem Description:** A locking exception can occur when primary is running single cluster, and there are no paths to the secondary.
- 2. Potential Impact of Problem: Warmstart
- 3. Problem Severity: Moderate
- 4. Pervasive Problem: No

ID#: 332574

Global Copy caused performance impact

1. Problem Description: Global Copy workload may affect Metro Mirror performance when bandwidth is constrained between primary and secondary systems.

2. Potential Impact of Problem: degraded performance

3. Problem Severity: Moderate4. Pervasive Problem: No

ID#: 334084

0x2562 MLE / 0x11B6 MLE

1. Problem Description: Inconsistent Device Adapter task pointers resulted in multiple Microcode Logic Errors.

2. Potential Impact of Problem: Warmstarts

3. Problem Severity: Moderate4. Pervasive Problem: No

ID#: 334675

Excessive re-copying of data with suspended PPRC pair

1. Problem Description: In a Multi-Target PPRC environment, when one of the pairs is suspended, tracking of Out-Of-Sync tracks may incorrectly cause unnecessary re-copying of data when the pair is resumed.

2. Potential Impact of Problem: Delayed PPRC resync

3. Problem Severity: Moderate

4. Pervasive Problem: No

ID#: 334763

SRC=BE172000 LPAR crash dump

- 1. Problem Description: A read thread was waiting on a lock being freed by a write thread, but was unable to access the CPU because of a microcode logic error. This caused LPAR failover and reboot.
- 2. Potential Impact of Problem: degraded performance

3. Problem Severity: Moderate

4. Pervasive Problem: No

ID#: 335067

Service: A recoverable error, Service improvements.

SRC=BE3A290D during IPL

1. Problem Description: During z System IPL, DS8880 with zHyperLinks creates unnecessary serviceable events.

2. Potential Impact of Problem: none

Problem Severity: Service
 Pervasive Problem: No

ID#: 334322

Incorrect status displayed after MT-PPRC failback

1. **Problem Description:** After successful PPRC failback in a Multi-Target environment, query of PPRC status continues to show 'Pri-Sus'

2. Potential Impact of Problem: none

3. Problem Severity: Service4. Pervasive Problem: No

ID#: 334362

Improvements: Improvements for better usability

None.

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