Date: June 17, 2011

VRMF Level Data Results:

VRMF level From:	75.15.67.0	
VRMF Level To:	75.15.84.0	
Report for:	All DS8700	

Code Bundle Contents

This table includes code component reference information.

Bundle Level	SEA or LMC Version: Used with dscli <i>ver</i> command.	CLI Client Level	Storage Manager Code Level	STAT Tool Level
75.15.84.0	6.5.15.100	6.5.15.100	5.5.15.1110	6.5.15.100

Overview of new features and functions supported by Microcode Release:

None

This is a new microcode release only supports the DS8700.

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. Acute An irrecoverable error with potential loss of data.
- 2. Serious An irrecoverable error with potential loss of access to data.
- 3. Moderate A function not operational and/or performance might be degraded.
- 4. Service A recoverable error (no impact) and service improvements.
- 5. Improvements Improvement changes for better Usability and Serviceability.

Acute: An irrecoverable error with potential loss of data.

No call home for serviceable events identifying MAP3200

- Problem Description: There is no call home for serviceable events that MAP3200 needs to used, there is customer notification only. This event needs to call home as it indicates DDMs with media errors.
- 2. Potential Impact of Problem: Data loss

3. Frequency of Problem: Low

ID#: 253804

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

DDM intermix does not call home when no spares for drive type

- 1. **Problem Description:** DDM intermix is two DDM sizes and or drive speeds on the same DA pair. Due to microcode error if the last spare of the larger size is used no call home is generated.
- **2. Potential Impact of Problem:** No call home for no spares, DDM failure will cause read only array
- 3. Frequency of Problem: Low

ID#: 258155

Host adapter detects parity error during warmstart

- **1. Problem Description:** The entire host adapter microprocessor stack is read during warmstart. If a parity error is detected during this read a second warmstart will occur.
- 2. Potential Impact of Problem: Loss of access is possible
- 3. Frequency of Problem: Low

ID#: 248184

I/O Fabric error causes DA cache read command to hang

- **1. Problem Description:** An I/O fabric error causes a DA cache read command to hang due to an internal microcode error.
- 2. Potential Impact of Problem: Loss of access
- 3. Frequency of Problem: Low

ID#: 256941

Recursive warmstart when I/O bay is fenced

- Problem Description: When an I/O bay is fenced due to fabric fault and is also fenced during I/O fabric recovery it is possible for loss of access due to a microcode error.
- 2. Potential Impact of Problem: Loss of access
- 3. Frequency of Problem: Low

ID#: 254860

Host adapter light to the link not turned off when port is unusable

1. **Problem Description:** When an I/O fabric failure prevents communication to a host adapter from both clusters the host adapter will keep the light on the links until the adapter panic occurs 4 minutes later. The HA light will be turned off after 30 seconds when an I/O fabric error prevents communication to a host adapter.

2. Potential Impact of Problem: Loss of access (SVC hosts)

3. Frequency of Problem: Low

ID#: 251707

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

Global Copy initial copy performance is slow

- **1. Problem Description:** Global Copy initial copy performance is slow when the target mapping is not 1:1 due to a microcode error.
- 2. Potential Impact of Problem: Increased copy times
- 3. Frequency of Problem: Low

ID#: 245034

Establish PPRC Pair fails with ANTP02081

- 1. **Problem Description:** When running the Establish PPRC Pair command with message required, if the asynchronous processing completes before the command chain completes the attention interrupt is raised and there is no message placed on the attention list for the next RSSD command to read.
- 2. Potential Impact of Problem: Job failures
- 3. Frequency of Problem: Low

ID#: 255582

Service: A recoverable error, Service improvements.

ESSNI client command failures

- 1. **Problem Description:** When an ESSNI client disconnects some cleanup of HMC resources is required. If user2 logs on immediately after user1 logs off then ESSNI clients such as DSCLI will have command failures. SNMP trap off-load will not work when ESSNI is in this state.
- 2. Potential Impact of Problem: ESSNI client and SNMP trap issues
- 3. Frequency of Problem: Low

ID#: 25706

Improvements: Improvement for better usability

Security fix for Java JRMs running on the HMC

- **1. Problem Description:** https://www-304.ibm.com/support/docview.wss? mynp=OCSTXN8P&mync=E&uid=ssg1S1003877&myns=s028
- 2. Potential Impact of Problem: Security exposure
- 3. Frequency of Problem:

ID#: 258450

Trademarks

The following terms are trademarks of the International Business Machines Corporation in the United States, other countries, or both.

- > AIX
- > Enterprise Storage Server
- > ESCON
- > FICON
- > i5/OS
- > iSeries
- > IBM
- > pSeries
- > S/390
- > System Storage
- > TotalStorage
- > z/OS
- > zSeries

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at Copyright and trademark information at http://www.ibm.com/legal/us/en/copytrade.shtml. Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corporation in the United States, other countries, or both.

© Copyright IBM Corp. 2004, 2011

Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:
INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATIONS "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.