IBM System Storage - DS8870 Disk Storage Microcode Bundle 87.51.14.0 Release Note Information v1

Release Date: August 28, 2015

VRMF Level Data Results:

VRMF level From:	87.50.5.0
VRMF Level To:	87.51.14.0
Report for:	All DS8870

Code Bundle Contents

This table includes code component reference information.

DS8870 Code Bundle Level	SEA or LMC Version:	DS CLI Client	Easy Tier Client	STAT Tool	Heat Map Transfer Utility	Storage Manager
87.51.14.0	7.7.51.48	7.7.51.48	7.7.51.48	7.7.51.48	7.7.51.48	5.7.51.1013

Overview of new features and functions supported by this release on DS8870, 242x model 961

At a glance:

• Bug fixes

This is a new microcode release only supports the DS8870.

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

<u>IBM System Storage - DS8870 Disk Storage</u> Microcode Bundle 87.51.14.0 Release Note Information v1

Acute: An irrecoverable error with potential loss of data.

Enable PCIe ECRC checking for High Performance Flash

1. **Problem Description:** End-to-end PCIe ECRC checking was disabled.

2. Potential Impact of Problem: loss of data

3. Problem Severity: High Impact

4. **Pervasive Problem:** No

ID#: 309255

Failing DDM was not rejected

1. **Problem Description:** Failed DDM is not rejected when Device Adapter is in takeover state.

2. Potential Impact of Problem: loss of data

3. Problem Severity: High Impact

4. Pervasive Problem: No

ID#: 309406

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

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 Cluster hang during failover

1. **Problem Description:** When cluster failover is preceded by quickstart, the 'surviving' cluster fails to get the statesave lock, causing it to hang in "Cluster Failover" state.

2. Potential Impact of Problem: loss of access

Problem Severity: HIPER
 Pervasive Problem: Yes
 Release Bundle: 87.31.38.0

ID#: 308404

Cache segment depletion in systems with 16GB system memory

1. **Problem Description:** Too many tracks are being kept on CPU queues, in proportion to the available cache.

2. Potential Impact of Problem: loss of access

3. **Problem Severity:** High Impact

4. Pervasive Problem: No.

ID#: 308476

FlashCopy with FRR set can encounter microcode logic error 0x7002

1. **Problem Description:** Release 7.4 introduced a change to copy services that can result in an invalid timestamp being detected. This error can cause a dual cluster reboot.

2. Potential Impact of Problem: loss of access

3. **Problem Severity:** High Impact

4. Pervasive Problem: No

ID#: 310103

IBM System Storage - DS8870 Disk Storage Microcode Bundle 87.51.14.0 Release Note Information v1

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

None

Service: A recoverable error, Service improvements.

DSGUI server fails to start

- 1. **Problem Description:** A problem with timestamp formatting causes Storage Manager to fail during startup
- 2. Potential Impact of Problem: Unable to access DSGUI
- 3. Problem Severity: Service4. Pervasive Problem: No

ID#: 308178

Improvements: Improvement for better usability

None

<u>IBM System Storage - DS8870 Disk Storage</u> Microcode Bundle 87.51.14.0 Release Note Information v1

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.

IBM System Storage - DS8870 Disk Storage Microcode Bundle 87.51.14.0 Release Note Information v1

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.