

IBM System Storage - DS8700 Disk Storage 1 **Microcode Bundle 76.31.143.0 Release Note Information v1**

Release Date: March 31, 2015

VRMF Level Data Results:

VRMF level From:	76.31.131.0
VRMF Level To:	76.31.143.0
Report for:	All DS8700

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
76.31.143.0	6.6.31.1460	6.6.31.1460	5.6.31.1308

Overview of new features and functions supported by this release on DS8700, 242x model 941

At a glance:

- DCR 7520 Active Port Live Reset
- SSLv3 security vulnerability, aka “Poodle” fix
- Fixes for PPRC suspends and deadlocks
- On Demand Dump when PPRC secondary goes into Simplex
- Battery end of life checking improvements
- Problem fixes
- Serviceability enhancements
- Improvements

This 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 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

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Acute: An irrecoverable error with potential loss of data.

Data check after PCIe error recovery

1. **Problem Description:** PCIe error was not properly handled, resulting in LRC errors.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 300931

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

iSeries system hang after array went read-only

1. **Problem Description:** Inquiry page C0h is not reported to iSeries hosts, preventing the host from detecting a write inhibit condition
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 298671

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

Global Mirror performance problem

1. **Problem Description:** The High Failure Rate (HFR) algorithm avoids performing I/O on PPRC links where timeouts have occurred. But the algorithm depends on I/O traffic to determine whether the path is still having problems. This change implements functionality to test the viability of PPRC links, at the host adapter port level.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 253239

Copy Services-Cache deadlock

1. **Problem Description:** Copy Services component deadlocks while waiting for access to metadata track that is in the Cache prestage task queue.
2. **Potential Impact of Problem:** I/O timeout, PPRC suspend
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes

ID#: 265169

Incorrect logical path state reporting

1. **Problem Description:** PPRC links that are in High Failure Rate (HFR) status may incorrectly transition to Failed status when coming out of HFR.
2. **Potential Impact of Problem:** loss of path
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 299525

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Cascaded PPRC suspend

1. **Problem Description:** Cascaded PPRC primary/secondary box was using the same host adapter port for both primary and secondary links, causing Task Control Block depletion
 2. **Potential Impact of Problem:** PPRC Suspend
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
- ID#: 303343

Service: A recoverable error, Service improvements.

DDM power module repair failure

1. **Problem Description:** Selecting DDM power module for repair fails, SSR had to select the whole PPS instead.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 300479

CEC down, but no callhome

1. **Problem Description:** Callhome data contained special symbols in XML text, causing the callhome process to fail. No impact, but a second CEC failure would cause loss of access.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 300934

Change warmstart notification text

1. **Problem Description:** Warmstart notification SRCs display "no service required", which may or may not be accurate.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 301987

Non-deferred DDM failure did not call home

1. **Problem Description:** After DDM sparing, failed DDM should have been called home for service.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 302829

Storage enclosure interface card replacement failure

1. **Problem Description:** FCIC repair fails during FRU level identify when enclosure serial number contains the letter 'T'
 2. **Potential Impact of Problem:** Extended repair
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
- ID#: 303200

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Improvements: Improvement for better usability

SSLv3 security vulnerablity

- 1. Problem Description:** Corrects CVE-2014-3566 "Poodle" Vulnerability, by disabling SSL v3 access.
 - 2. Potential Impact of Problem:** none
 - 3. Problem Severity:** Improvement
 - 4. Pervasive Problem:** No
- ID#: 302536

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