

# IBM System Storage - DS8700 Disk Storage 1 **Microcode Bundle 76.31.190.0 Release Note Information v1**

**Release Date:** July 21, 2017

## **VRMF Level Data Results:**

<b>VRMF level From:</b>	<b>76.31.177.0</b>
<b>VRMF Level To:</b>	<b>76.31.190.0</b>
<b>Report for:</b>	<b>All DS8700</b>

## **Code Bundle Contents**

This table includes code component reference information.

<b>DS8000 Code Bundle Level</b>	<b>SEA or LMC Version: Used with dscli ver command.</b>	<b>CLI Client Level</b>	<b>Storage Manager Code Level</b>
<b>76.31.190.0</b>	<b>6.6.31.2090</b>	<b>7.8.23.87</b>	<b>5.6.31.1408</b>

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

### **At a glance:**

- Unified DSCLI version
- Remote Support Console option
- 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.**

When running Global Mirror on DS8000, if the host requests an update to a track that is in transit via the background copy process, the data for that track may be sent incorrectly to the secondary

1. **Problem Description:** <http://www.ibm.com/support/docview.wss?uid=ssg1S1010217>
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes

ID#: 326551

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

### Call Home on first instance of a Host Adapter MLE

1. **Problem Description:** Original design of DS8K was not to call home for HA Microcode Logic Errors until the third occurrence. These are normally recoverable by warmstart, but in some cases, temporary loss of access can occur.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No

ID#: 310655

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

### DDM media errors caused performance impact

1. **Problem Description:** Fix lowers correctable media error thresholds
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 321413

### 0x7D10 MLE

1. **Problem Description:** Microcode Logic Error caused by a race condition between checkpoint process and volume create
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 321631

### Performance degraded on workloads dependent on hw reserves

1. **Problem Description:** Hardware device reserve processing may delay allowing a disconnected device to reconnect
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No

ID#: 324961

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## **Long I/O and transaction purge during XRC Resync**

- 1. Problem Description:** Merge of XRC metadata N and N-1 bitmaps can cause performance impact with large volumes
  - 2. Potential Impact of Problem:** degraded performance
  - 3. Problem Severity:** Moderate
  - 4. Pervasive Problem:** No
- ID#: 326652

## **Service: A recoverable error, Service improvements.**

### **Incomplete lost frame analysis**

- 1. Problem Description:** Fibre Channel Lost Data Frame counters also include counts for Lost Non-Data Frames. Also there is no summary for lost non-data frame counts
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 298786

### **DSCLI will not install in Windows 10 environment**

- 1. Problem Description:** DSCLI installer using an older version of InstallAnywhere that is not compatible with Windows 10
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 314695

### **Secure Data Overwrite false pre-check failure**

- 1. Problem Description:** Drives were in a good state for SDO, but failed pre-check because a service state flag was not reset.
  - 2. Potential Impact of Problem:** Extended SDO duration
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 322705

### **Change Assist OnSite Access Control List group**

- 1. Problem Description:** Change to allow only the single AOS ACL group IBM/BLUE/GTS/EMEA/STORAGE/DS8000 for EMEA systems.
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 324050

### **DDM Serviceable Event lists wrong DDM serial number**

- 1. Problem Description:** When multiple DDMs are rejected from an array, the DDM serial number in the FRU callout may be incorrect
  - 2. Potential Impact of Problem:** none
  - 3. Problem Severity:** Service
  - 4. Pervasive Problem:** No
- ID#: 324181

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## **Security scan flags SLPd service active**

1. **Problem Description:** Service Location Protocol service was left active when CIM Agent was not running
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 324342

## **HMC WUI broken NLS support**

1. **Problem Description:** HMC WUI shows garbage characters in IE11 if set for Japanese language.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 324566

## **Multiple drives rejected in an enclosure during power cycle**

1. **Problem Description:** Drive notification of power off was incorrectly treated as an error.
  2. **Potential Impact of Problem:** Extended service action
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 325229

## **No serviceable event for HMC ethernet adapter failure**

1. **Problem Description:** Add detection code for adapter interface errors, and generate callhome
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 325469

## **Callhome fails via modem**

1. **Problem Description:** After update to R6.3 SP15, call home via modem doesn't generate a PMH
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 325953

## **Hung Device Adapter health check process**

1. **Problem Description:** DA health check process was hung, which then prevented subsequent health checks to run.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 326097

## **Repaired HPFE SES error reported again after CDA**

1. **Problem Description:** LPAR SES log directories were not sync'd to the new CDA preload image.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 326441

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## **Restore ICSs and CS Pokes after LPAR hard drive rebuild**

1. **Problem Description:** Add necessary directories to HDR backup restore list.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Service
  4. **Pervasive Problem:** No
- ID#: 326561

## **Improvements: Improvement for better usability**

### **Update AOS to latest 4.0.1**

1. **Problem Description:** Assist OnSite maintenance release
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Improvement
  4. **Pervasive Problem:** No
- ID#: 320543

### **Change notification time for HMC network surveillance errors**

1. **Problem Description:** Enables function in WUI to change the current 8 hour notification time to a shorter value
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Improvement
  4. **Pervasive Problem:** No
- ID#: 326007

### **Remote Support Console**

1. **Problem Description:** Add support for RSC method for remote access.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Improvement
  4. **Pervasive Problem:** No
- ID#: 325539

### **RSC auto-reconnect after HMC reboot**

1. **Problem Description:** After rebooting HMC, Remote Support Console will auto-reconnect to an existing session.
  2. **Potential Impact of Problem:** none
  3. **Problem Severity:** Improvement
  4. **Pervasive Problem:** No
- ID#: 325601

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