IBM System Storage - DS8880 Disk Storage
Microcode Bundle 88.23.18.0 Release Note Information v1.1

Release Date: June 9, 2017

VRMF Level Data Results:

VRMF level From:	**88.22.34.0**
VRMF Level To:	**88.23.18.0**
Report for:	**All DS8880**

Code Bundle Contents

DS8880 Code Bundle Level	SEA or LMC Version:	DSCLI Client	STAT Tool	Heat Map Transfer Utility	Storage Manager	Copy Services Manager
88.23.18.0	7.8.23.87	7.8.23.87	7.8.23.87	7.8.23.87	5.8.23.1030	6.1.5

Overview of new features and functions supported by this release

At a glance:

- VMWare VAAI Unmap command support
- MCStore Serverless Offload to Cloud Storage
- MCStore Object Offload to TS7700
- Unified DSCLI versions
- Bug 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

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Acute: An irrecoverable error with potential loss of data.

None.

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

I/O bay failure during code update
1. **Problem Description:** Pre-verify did not flag PCIe bus soft errors, which subsequently caused failures during cluster IML.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 319023

HIPER PPRC paths failed to resume
1. **Problem Description:** PPRC path management failure may lead to loss of access or PPRC suspend.
2. **Potential Impact of Problem:** Loss of Access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes
ID#: 319201

IBM i LUN discovery problem
1. **Problem Description:** IBM i serial number prefix is captured incorrectly if it has a leading zero
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 324682

/var filesystem full
1. **Problem Description:** Temporary log jar files are accumulating. Can occur on HMCs or LPARs.
2. **Potential Impact of Problem:** Potential loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 324988

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

RPO increase after code load
1. **Problem Description:** Copy Services metadata pre-stage function was not pre-staging enough metadata tracks
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 317758

Add persist files for destage TCB pokes
1. **Problem Description:** Number of destage TCB setting can be poked but is not persistent.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 326613

Slow data migration to secondary system
1. **Problem Description:** Easy Tier heat map transfer to secondary failed to properly set the measurement count attribute.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
ID#: 326736

Service: A recoverable error, Service improvements.

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

Storage Enclosure install failure
1. **Problem Description:** Storage enclosure install in Rack 3 failed because of errors in a plugOrder file
2. **Potential Impact of Problem:** Extended service action
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 321251

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Easy Tier missing statistics
1. **Problem Description:** Easy Tier Application volume statistics do not show workload details
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 323642

Cannot launch MRPD panel
1. **Problem Description:** The MRPD configuration panel could not be launched from the HMC internal WUI browser.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 323712

Easy Tier Stat Tool browser shows an incorrect picture
1. **Problem Description:** Stat Tool browser page shows a picture of an older DS8000 model
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 323912

Incorrect Key Manager path status with single HMC
1. **Problem Description:** Path status was being incorrectly reported as degraded on HMC2, when there was no HMC2
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 323996

Add GUI tip for embedded DSCLI scripts
1. **Problem Description:** Embedded DSCLI GUI function supports running DSCLI scripts, but the icon may not be obvious.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 324330

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

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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

RSC terminated with broken pipe
1. **Problem Description:** Remote Support Console missed connected message because it was mixed with other unexpected data
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 324800

Improve missing drive isolation
1. **Problem Description:** When healthcheck finds multiple "not installed" drives in an enclosure, problem isolation may not call the correct FRU replacement order.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 324996

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

HMC WUI shows incorrect battery end-of-life value
1. **Problem Description:** HMC WUI is referencing a deprecated field in the Resource Manager object
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 325689

HMC not responding if one network interface is down
1. **Problem Description:** DSCLI and CSM commands are not processed on the remaining internal network path.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 325728

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HMC callhome failure
1. **Problem Description:** HMC1 connection to IBM was down, and was not able to call home via HMC2, which did have a good connection.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 325932

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

Software PID filesets missing
1. **Problem Description:** When filesets are missing on one LPAR, query is unable to tell which LPAR
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 326146

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

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

SSL callhome test fails through authenticated proxy
1. **Problem Description:** In systems running R8.2 SP2 SSL callhome test is failing to authenticate through the proxy
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 326837

ICS reinstall failed after LPAR hard drive rebuild
1. **Problem Description:** After LPAR hard drive rebuild, ICS reinstall list included ICS fixes that were no longer required.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 327747

Improvements: Improvements for better usability

VMWare Unmap command support
1. **Problem Description:** Enable support for VMWare VAAI Unmap command
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Improvement
4. **Pervasive Problem:** No
ID#: 325585

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

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

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