

IBM System Storage - DS8880 Disk Storage

88.40.x.x Release Notes Cumulative Summary v2.1

Date: March 14, 2019

VRMF Level Data Results:

VRMF level From:	88.40.62.0
VRMF Level To:	88.42.8.0
Report for:	All DS8880

Code Bundle Contents

DS8880 Code Bundle Level	SEA or LMC Version:	DSCSI Client	Heat Map Transfer Utility	Storage Manager	Copy Services Manager
88.42.8.0	7.8.42.26	7.8.42.24	7.8.42.24	5.8.42.1013	6.2.2.1
88.42.7.0	7.8.42.24	7.8.42.24	7.8.42.24	5.8.42.1011	6.2.2.1
88.41.5.0	7.8.41.14	7.8.41.14	7.8.41.14	5.8.41.1006	6.2.2.1
88.40.62.0	7.8.40.180	7.8.40.180	7.8.40.180	5.8.40.1076	6.2.2

This is a summary of the fixes in the R8.4 microcode releases.

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.

HPFE Gen2 dual adapter resets

1. **Problem Description:** Single flash drive failure led to multiple dual adapter resets
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 339272

Repeated 0x4422 MLEs

1. **Problem Description:** An unusual (but legal) sequence of Format Write/Locate Record Erase commands can trigger repeated warmstarts that may escalate to cluster failover and loss of access.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 340203

Loss of access during LPAR quiesce

1. **Problem Description:** In systems with "6 PCIe port" I/O bay hardware, if zHyperLink is not installed, a PCIe link to an internal switch may be down. During LPAR quiesce, multiple of these unused links could trigger PCIe fabric errors, that may lead to a loss of access.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 340395

HIPER Dual disk enclosure controller failure

1. **Problem Description:** A disk enclosure controller failed, and the surviving partner controller was unable to complete enclosure recovery actions.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** HIPER
4. **Pervasive Problem:** Yes
5. **Release Bundle:** 88.41.5.0

ID# 332765

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SRC=BE504940 on Flash Copy target volume

1. **Problem Description:** While performing Copy Source to Target operation, a microcode error during host bay PCIe fabric recovery, resulted in a cache medium error.
 2. **Potential Impact of Problem:** loss of data
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 333246

Registered State Change Notification with incorrect Device ID

1. **Problem Description:** During LSS creation or deletion, host adapter may send RSCN prematurely, before the Device ID has been correctly set.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335015

HIPER HPFE dual expander hang

1. **Problem Description:** During error recovery, i2c bus errors were not handled properly by VRA firmware
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** HIPER
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.41.5.0
- ID# 335285

HIPER Host Adapter 0xB40B MLE with IBM i host connections

1. **Problem Description:** A check condition while processing IBM i linked commands can trigger a Microcode Logic Error. This pattern may then repeat on multiple host adapters, leading to temporary loss of access.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** HIPER
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.41.5.0
- ID# 335351

HIPER KCQ=52400 on IBM i systems running Geographic Mirroring

1. **Problem Description:** IBM i hosts above 7.2 TR7 or 7.3 TR3 are exposed to a loss of access when processing skip read/write commands in a Geographic Mirroring environment.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** HIPER
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335899

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Repeating 0x264A MLE during failover

1. **Problem Description:** After a data loss event, a Microcode Logic Error can cause repeated warmstarts during failover.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335935

Repeated 0x7F31 MLEs

1. **Problem Description:** When creating a forward cascading FlashCopy relationship, system encountered repeated MLEs accessing some tracks in the B copy until the B -> C copy was complete
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336893

Permanent I/O errors after Hyperswap

1. **Problem Description:** z/OS Metro/Global Mirror-Incremental Resync establish commands were issued to secondary devices in a suspended Global Mirror session. The commands were allowed to process because of incorrect status in a control block.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 337250

HIPER Host Adapter LRC errors

1. **Problem Description:** Open Systems volumes having more than 15 initiators that set persistent reserve may encounter a pointer exception that results in HA LRC errors, and repeated warmstarts.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** HIPER
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.40.62.0
- ID# 333868

Start Pending, devices boxed during PPRC suspend

1. **Problem Description:** While attempting to recover a Global Mirror session that was in prepared/severe state, the suspend process was allowed an excessively long timeout value.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 333890

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0x2562 MLE / 0x11B6 MLE

1. **Problem Description:** Inconsistent Device Adapter task pointers resulted in multiple Microcode Logic Errors.
 2. **Potential Impact of Problem:** loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 334675

Incorrect reporting of bad data block

1. **Problem Description:** Sense data sent to IBM i host incorrectly identified the first block in the track as failed, rather than the actual failing block.
 2. **Potential Impact of Problem:** Incorrect error recovery
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 335122

0x10F7 MLE

1. **Problem Description:** Improper handling of multiple stage errors in a single adapter command caused microcode logic errors.
 2. **Potential Impact of Problem:** Repeated warmstarts, loss of access
 3. **Problem Severity:** High Impact
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 335466

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

Performance degradation when one MTMM leg is suspended

1. **Problem Description:** In Multi-Target Metro Mirror configuration, using zHyperWrite, when one of the target relationships is suspended, the MTMM primary shows some increase in disconnect times.
 2. **Potential Impact of Problem:** degraded performance
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 332739

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0xB11D MLE during Host Adapter fastload

1. **Problem Description:** PPRC link error recovery during Lights-On HA FastLoad exposed a microcode logic error in the path redrive function
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 333183

0x552C MLE

1. **Problem Description:** A timing condition was exposed when an abort request occurred at the same time as a datamover allocation request
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.42.7.0
- ID# 335151

0x7D0E MLE

1. **Problem Description:** A race condition between threads caused a process control lock to be released twice.
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.42.7.0
- ID# 336221

0x7200 MLE

1. **Problem Description:** A locking issue led to code checking a Concurrent Copy volume bitmap that no longer existed.
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 337053

HA path fail after warmstart

1. **Problem Description:** Abort during Process Logout phase left behind a stale exchange, preventing link cleanup.
 2. **Potential Impact of Problem:** loss of path
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 338688

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0x0109 MLE

1. **Problem Description:** Lock contention while processing the low-priority PPRC wait queue
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 338866

IOS071I Start Pending when establishing Metro Mirror pair(s)

1. **Problem Description:** During first pass volume copy, systems running DB2 Castout Accelerator, and zHPF write chains with multiple domains, may log:
IOS071I ... START PENDING STATUS: I/O OPERATION IS EXECUTING and
IOS071I ... START PENDING STATUS: I/O WAITING FOR EXTENT CONFLICT
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 339203

CMUN80519E when modifying an existing PPRC pair

1. **Problem Description:** When modifying an existing PPRC pair to enable Multi-Target or to start/stop Metro Global Mirror-Incremental Resync, internal logic flags are set incorrectly.
2. **Potential Impact of Problem:** Cannot establish a Multi Target pair or send a Release Space command to the secondary
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 339686

0x0B8A MLE and Host Adapter reboot

1. **Problem Description:** z System aborted during a zHPF transfer with > 55 records, triggering a Host Adapter DSI and HA reboot
2. **Potential Impact of Problem:** loss of path
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 339936

0x01B7 and 0x7D13 MLEs

1. **Problem Description:** Global Mirror subsystem query operations are taking a higher-level lock than necessary, leading to lock contention.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.42.7.0

ID# 339978

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0x05E0 MLE

1. **Problem Description:** Locking exception while a PAV alias device is trying to query whether the base device has a reserve.
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.41.5.0
- ID# 331106

FICON channel errors after swap to new CPU

1. **Problem Description:** When the original CPU was shutdown, the Host Adapter port did not clear flags that indicate features supported by the CPU, causing a mismatch when the new CPU was brought up.
 2. **Potential Impact of Problem:** Channel detected errors
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335051

0x13DA MLE

1. **Problem Description:** Two Dynamic Extent Relocation requests are migrating the same extent
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335529

Easy Tier stats collection stalled

1. **Problem Description:** After a warmstart, Easy Tier may fail to allocate stat buffers for new volumes
 2. **Potential Impact of Problem:** degraded performance
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335547

0x7410 MLE

1. **Problem Description:** When establishing a Metro-Global-Mirror session, if A->B is established before B->C, I/O will be flowing to B during the B->C establish, exposing a microcode logic error.
 2. **Potential Impact of Problem:** Warmstart
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.41.5.0
- ID# 336397

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High PPRC response times

1. **Problem Description:** Lock contention on PPRC secondary during write complete processing
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 336501

HMC Java OutOfMemory condition

1. **Problem Description:** Missing statement.close() caused a java.lang.OutOfMemoryError condition
2. **Potential Impact of Problem:** HMC communication failures
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 336651

PPRC Track Format Descriptor mismatch

1. **Problem Description:** Task was aborted on primary, but completed normally on secondary
2. **Potential Impact of Problem:** PPRC Suspend
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 336838

0x0109 MLE with IBM i hosts

1. **Problem Description:** Error during cache access while processing a Skip Read/Write command
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 337751

Space Release issues during PPRC failover/failback

1. **Problem Description:** Improper tracking of space release may cause increased data transfer once pair is resumed.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 337891

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0x7ECB MLE

1. **Problem Description:** During a Flash Copy withdraw and split operation, a duplicate Flash Copy relation was registered.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0
ID# 331890

XRC suspend with msg ANTX8117I

1. **Problem Description:** Ref: APAR OA54082 - XRC suspend caused by an error in consistency time handling, when a datamover is idle.
2. **Potential Impact of Problem:** XRC suspend
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0
ID# 332112

0x0109 MLE running DELPAIR when single cluster

1. **Problem Description:** A locking exception can occur when primary is running single cluster, and there are no paths to the secondary.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0
ID# 332574

0x625 MLE

1. **Problem Description:** When modifying a volume group, a Task Control Block type change was processed twice.
2. **Potential Impact of Problem:** Warmstart
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** Yes
5. **Release Bundle:** 88.40.62.0
ID# 333704

Global Copy caused performance impact

1. **Problem Description:** Global Copy workload may affect Metro Mirror performance when bandwidth is constrained between primary and secondary systems.
2. **Potential Impact of Problem:** degraded performance
3. **Problem Severity:** Moderate
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0
ID# 334084

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Excessive re-copying of data with suspended PPRC pair

1. **Problem Description:** In a Multi-Target PPRC environment, when one of the pairs is suspended, tracking of Out-Of-Sync tracks may incorrectly cause unnecessary re-copying of data when the pair is resumed.
 2. **Potential Impact of Problem:** Delayed PPRC resync
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 334763

SRC=BE172000 LPAR crash dump

1. **Problem Description:** A read thread was waiting on a lock being freed by a write thread, but was unable to access the CPU because of a microcode logic error. This caused LPAR failover and reboot.
 2. **Potential Impact of Problem:** degraded performance
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 335067

Higher response times after CDA to 88.24.6.0 or later

1. **Problem Description:** Excessive cache is being allocated to sequential workloads causing increased cache demote of random tracks.
 2. **Potential Impact of Problem:** degraded performance
 3. **Problem Severity:** Moderate
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.40.62.0
- ID# 335470

Service: A recoverable error, Service improvements.

0x1C14 MLE

1. **Problem Description:** Internal NTP adjustment of LPAR time may cause Device Adapter utilities to report a negative runtime duration
 2. **Potential Impact of Problem:** ODD dump
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.42.7.0
- ID# 333857

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Auto-Offload PE package incomplete

1. **Problem Description:** Auto-offload process sent the PE package before all compress operations were completed.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 336710

SRC=BE3825A8 FRU list incomplete

1. **Problem Description:** PCIe link failure SRC=BE3825A8 included the PCIe adapters in the CEC and I/O bay, but did not include the PCIe cable that connects between them
 2. **Potential Impact of Problem:** Extended service actions
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 336848

Serious alert, but no callhome

1. **Problem Description:** Callhome of the event was left disabled by a prior failed repair attempt that was aborted by HMC reboot.
 2. **Potential Impact of Problem:** Callhome failure
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 337554

Expand FRU list for SRC=BE316003

1. **Problem Description:** Improve FRU call for transient LRC errors on Device Adapter loops
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 337555

zHyperLink transceiver wrap error

1. **Problem Description:** Wrap test continually failed because cumulative wrap test link error counters were not being cleared.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 338830

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Remote syslog message flood

1. **Problem Description:** Incorrect HMC rsyslog rule order
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 339450

0x01B7 MLE

1. **Problem Description:** In systems with "6 PCIe port" I/O bay hardware, if zHyperLink is not installed, a variable does not get initialized. This condition may cause bay heartbeat to time out on a locking exception.
 2. **Potential Impact of Problem:** ODD Dump
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 339729

ODD Data Collection Timeout

1. **Problem Description:** Changes made to support zHyperLink data collection may cause the data collection to exceed the timeout value.
 2. **Potential Impact of Problem:** ODD data collection failure
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 339887

Incorrect Copy Services User access controls

1. **Problem Description:** Users with "Copy Services User" role are able to view and export log data that they should not be able to access.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 340362

0x01B7 MLE

1. **Problem Description:** Lock contention caused by many query functions taking a lock they do not need to take;
 2. **Potential Impact of Problem:** ODD dump
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 340430

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0x01B7 MLE

1. **Problem Description:** Lock contention during Copy Services write intercept to set/reset track Out of Sync bit
2. **Potential Impact of Problem:** On Demand Data (ODD) dump
3. **Problem Severity:** Service
4. **Pervasive Problem:** Yes
5. **Release Bundle:** 88.41.5.0
ID# 330095

Unable to change array scrub rate

1. **Problem Description:** Change to array scrub rate was rejected because another resource value was incorrectly initialized.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0
ID# 331744

Space Release failed on PPRC secondary

1. **Problem Description:** During PPRC establish, code failed to determine that the secondary system was configured with space-efficient volumes.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0
ID# 331774

False SRC=BE33CE9C logged during warmstart

1. **Problem Description:** During warmstart, Device Adapter reset code incorrectly flags a temporary loss of access.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0
ID# 333586

Remote login authentication fails intermittently

1. **Problem Description:** High volume of authentications, or DSCLI 'testauthpol' commands, can lead to a Java out-of-bounds condition.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0
ID# 334449

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IEA3071 on PPRC secondary devices during IPL

1. **Problem Description:** Sense Subsystem Status (SNSS) data did not accurately reflect that the PPRC secondary DS8K was in a cascading relationship.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 334798

DSCLI lsextpool command returns '-' value

1. **Problem Description:** Calculation of allocated extents exceeded the 32-bit maximum integer value, causing an arithmetic error
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335058

SRC=BE340113 Health Check failed

1. **Problem Description:** Health check failed because a file used to track health check failures was empty
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 335309

CSM configuration data missing after HMC update or reload

1. **Problem Description:** If embedded Copy Services Manager has been updated using DSCLI 'installsoftware' method, and later the HMC is reloaded, or upgraded to a level that involves reload, the CSM configuration can be lost.
 2. **Potential Impact of Problem:** CSM not operational
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** Yes
 5. **Release Bundle:** 88.41.5.0
- ID# 335729

DS GUI removes spaces in Customer configuration fields

1. **Problem Description:** When editing callhome or administrator information fields, spaces are removed.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336436

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SRCs BE9B0001 and BE9B0002 do not show the image filenames

1. **Problem Description:** During Remote Code Load, SRCs BE9B0001 and BE9B0002 are used to indicate when file downloads are complete. But they do not show details of which files were downloaded.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336614

CDA suspended because of open problem

1. **Problem Description:** SRC=BE14EAF1 is logged for TKLM/SKLM communication error. This should not impact Code Load, and can be ignored.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336646

CMUN80293E creating IPSEC connection

1. **Problem Description:** Code could not determine that IPSEC service was running because an OS change renamed the .pid file
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336684

0x723E MLE

1. **Problem Description:** When deleting a Fixed Block volume, not all metadata for the volume was deleted.
 2. **Potential Impact of Problem:** On Demand Data (ODD) dump
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 337002

java/lang/OutOfMemoryError on LPARs

1. **Problem Description:** Copy Services Commands contain too many repetitive strings
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 337260

IBM System Storage - DS8880 Disk Storage

88.40.x.x Release Notes Cumulative Summary v2.1

Unable to access DS GUI after installing Customer-supplied certificate

1. **Problem Description:** Installation process did not restart the web server
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 337849

DS GUI reports false Global Mirror session messages

1. **Problem Description:** DS GUI repeatedly displays false "GM session copy state changed to running" messages.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.41.5.0

ID# 338372

DS GUI displays wrong LIC bundle level

1. **Problem Description:** DS GUI incorrectly parsed the CDA history.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0

ID# 327155

Committed Bundle VRMF not updated after CDA

1. **Problem Description:** Ne
2. eded logs were pruned. This defect addresses First-Time Data Capture improvement.
3. **Potential Impact of Problem:** none
4. **Problem Severity:** Service
5. **Pervasive Problem:** No
6. **Release Bundle:** 88.40.62.0

ID# 327902

DS GUI did not display VOLSER of a CKD volume

1. **Problem Description:** When a new volume was created, DS GUI did not refresh the VOLSER, because there was no old VOLSER to update.
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
5. **Release Bundle:** 88.40.62.0

ID# 331799

IBM System Storage - DS8880 Disk Storage

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HTTPS certificate chain broken after CDA

1. **Problem Description:** Customer-provided certificate chain was missing the root Certificate Authority after code bundle update
 2. **Potential Impact of Problem:** Unable to access DS GUI
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 331866

DSCLI 'lssestg' and 'showestg' incorrect output

1. **Problem Description:** With DSCLI bundle from R8.1 or higher, and a target system on R8.0 or lower, DSCLI shows wrong percentage values.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 333772

SRC=BE3A290D during IPL

1. **Problem Description:** During z System IPL, DS8880 with zHyperLinks creates unnecessary serviceable events.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 334322

Incorrect status displayed after MT-PPRC failback

1. **Problem Description:** After successful PPRC failback in a Multi-Target environment, query of PPRC status continues to show 'Pri-Sus'
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 334362

Host bay firmware update failed

1. **Problem Description:** If the initial firmware query fails, the retry path does not correctly handle some host bay location codes.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 334889

IBM System Storage - DS8880 Disk Storage

88.40.x.x Release Notes Cumulative Summary v2.1

HMC backups could fill up /var filesystem in LPARs

1. **Problem Description:** Function to prune old backup files fails to remove the files.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Service
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.40.62.0
- ID# 336080

Improvements: Improvements for better usability

Improve DA LRC checking

1. **Problem Description:** Change CKD LRC strategy from per-track to per-record.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Improvement
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 338865

Remove HMC warning popup

1. **Problem Description:** Remove unnecessary warning message that displays when performing a repair action using an HMC that is not acting as Problem Analysis primary.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Improvement
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.42.7.0
- ID# 339498

CSM backup restore enhancements

1. **Problem Description:** During HMC reload, prevent CSM from performing a backup if it has not yet been restored. Also, if a newer CSM package exists on the LPARs, install the package, and then restore the backup.
 2. **Potential Impact of Problem:** none
 3. **Problem Severity:** Improvement
 4. **Pervasive Problem:** No
 5. **Release Bundle:** 88.41.5.0
- ID# 336382

IBM System Storage - DS8880 Disk Storage

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