Release Date: 30 May, 2024

VRMF Level Data Results:

VRMF level From:	89.40.93.0
VRMF Level To:	89.41.23.0
Report for:	DS8900F

Code Bundle Contents

DS8900F Code Bundle Level	SEA or LMC Version:	DSCLI Client		U	Copy Services Manager
89.41.23.0	7.9.41.61	7.9.41.59	77.9.41.59	5.9.41.1026	6.3.10

Overview of new features and functions supported by this release on DS8900F 533x and 5341 models 993/994/996/998

At a glance:

- Withdraw support for unauthenticated Bind in LDAP
- PPRC path compatibility for DS8A00
- Code fixes

This new microcode release supports DS8900F 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: Irrecoverable error with potential loss of data.Serious: Irrecoverable error with potential loss of access to data, or critical function.	
2	Moderate	- A function not operational and/or performance might be degraded.	
3	Service	- A recoverable error (no impact) and service improvements.	
4	Improvements	nprovements - Improvement changes for better Usability and Serviceability.	

HIPER: High Impact problem that is Pervasive: 3 or more occurrences

Acute: An irrecoverable error with potential loss of data.

HIPER Potential undetected loss of DS8000 Safeguarded Copy source volume data during an LPAR error handling event.

1 Problem Description: https://www.ibm.com/support/pages/node/7129800

2 Potential Impact of Problem: Loss of data

3 Environment: All using Safeguarded Copy4 Problem Severity: HIPER

5 Pervasive Problem: No

ID# 363337

Pinned, nonretryable data in cache

Problem Description: Two identical zHyperlink commit track operations were attempted to the same track ID.

2 Potential Impact of Problem: Loss of data

3 Environment: zHyperlink4 Problem Severity: High Impact

5 Pervasive Problem: No

ID# 364508

HIPER Potential undetected loss of DS8000 CKD Remote Pair Flashcopy Target data during an LPAR error handling event.

1 Problem Description: https://www.ibm.com/support/pages/node/7145622

2 Potential Impact of Problem: Loss of data

3 Environment: All using Remote Pair Flashcopy

4 Problem Severity: HIPER5 Pervasive Problem: No

ID# 365221

Serious: An irrecoverable error with potential loss of access to data, or critical function.

Repeated warmstarts during Safeguarded copy reservation

- 1 **Problem Description:** Safeguarded volume expansion was initiated, while creating the first backup. This exposed a timing window where data structures did not reflect the expanded capacity, causing failure to write to the Safeguarded volumes.
- 2 Potential Impact of Problem: Loss of access

3 Environment: All Safeguarded Copy

4 Problem Severity: High Impact

5 Pervasive Problem: No

HIPER ESSNI queries failing with null pointer exception

1 **Problem Description:** Applications using "ESSNIClient.jar NIVersion" to collect DS8000 LIC information may not work after boxes move to R9.4.

2 Potential Impact of Problem: Query failures

3 Environment: R9 ≥89.40.82.0
 4 Problem Severity: HIPER
 5 Pervasive Problem: Yes

ID# 366713

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

Customer Code Load failure

- 1 **Problem Description:** Incorrect permissions granted when using custom user roles in LDAP.
- 2 Potential Impact of Problem: Customer is unable to update microcode
- 3 Environment: LDAP with custom user roles
- 4 Problem Severity: Moderate
- **5 Pervasive Problem:** No

ID# 362429

DS CLI password exposed

- 1 **Problem Description:** When logging into a DS8000 using DS CLI, a specific sequence may reveal the login password.
- 2 Potential Impact of Problem: Security exposure
- 3 Environment: DS CLI on Windows
- 4 Problem Severity: Moderate
- 5 Pervasive Problem: No.

ID# 363107

Transparent Cloud Tiering repeated task failures

- 1 **Problem Description:** TCT is not closing and releasing all its resources when jobs fail.
- 2 Potential Impact of Problem: TCT out of memory
- **3** Environment: TCT, over congested networks.
- 4 Problem Severity: Moderate
- **5 Pervasive Problem:** No

ID# 363370

Unexpected full copy during a site swap

- 1 Problem Description: MTIR pair creation was unable to reuse a duplicate reserved relation.
- 2 Potential Impact of Problem: Full copy during site swap
- 3 Environment: Multi-Target Incremental Resync
- 4 Problem Severity: Moderate
- 5 Pervasive Problem: No

Web UI (WUI) user login failure

1 Problem Description: Unable to login to WUI after microcode update to R9.4

2 Potential Impact of Problem: Login failure

3 Environment:

4 Problem Severity: Moderate5 Pervasive Problem: Yes

ID# 364346

Host Adapter resource manager failure

1 Problem Description: Single port wrap test was attempted on a fenced Host Adapter port.

2 Potential Impact of Problem: Warmstart

3 Environment: All R9 \geq 89.1.23.0

4 Problem Severity: Moderate

5 Pervasive Problem: No

ID# 364528

Web UI (WUI) login failures after HMC code update

1 **Problem Description:** Certificate issues are preventing the Challenge-Response servlet from executing.

2 Potential Impact of Problem: Extended service action

3 Environment: All coming from R9.4 GA - 89.40.82.0

4 Problem Severity: Moderate5 Pervasive Problem: Yes

ID# 364548

DS GUI login failure after upgrade to 89.40.83.0 or 89.40.89.0

1 Problem Description: Security changes may cause false authentication failures.

2 Potential Impact of Problem: Unable to login to HMCs.

3 Environment: Update from R9.4 GA or GA2

4 Problem Severity: Moderate5 Pervasive Problem: Yes

ID# 364707

Lock spin MLE

Problem Description: Two or more CPUs attempt to access the same data structure lock. In certain conditions, one thread can incorrectly release the lock, causing a warmstart

2 Potential Impact of Problem: Warmstart

3 Environment: R9.4 ≥89.40.82.04 Problem Severity: Moderate

5 Pervasive Problem: No

mkcloudserver fails with CMUN80993E

1 **Problem Description:** Transparent Cloud Tiering is not validating if "/var/adm/mcstore/" folder exists

2 Potential Impact of Problem: TCT fails to start

3 Environment: TCT on R9 \geq 89.33.42.0

4 Problem Severity: Moderate5 Pervasive Problem: No

ID# 364921

0x014E MLE during LPAR code activation

1 **Problem Description:** Miscompare in zHyperlink data structures after updating the first LPAR.

2 Potential Impact of Problem: Unable to resume LPAR back to dual-cluster mode.

3 Environment: All using zHyperlink in R/W mode

4 Problem Severity: Moderate5 Pervasive Problem: No

ID# 365019

zHyperlink read response time spikes

1 **Problem Description:** Changes made to enhance performance may not be appropriate for all workloads.

2 Potential Impact of Problem: Degraded performance

3 Environment: zHyperlink on R9.4 GA or GA2

4 Problem Severity: Moderate

5 Pervasive Problem: No

ID# 365231

DS CLI getVersion is failing for older machines

1 **Problem Description:** R9.4 DS CLI version is not compatible with older boxes when attempting to collect DS8K LIC version using "ver -l"

2 Potential Impact of Problem: Query failures

3 Environment: R9 ≥89.40.82.0
 4 Problem Severity: Moderate
 5 Pervasive Problem: No

ID# 366902

Service: A recoverable error, Service improvements

Withdraw support for unauthenticated Bind in LDAP

1 **Problem Description:** Unauthenticated Bind poses a security risk.

Potential Impact of Problem: Security exposure
 Environment: Remote authentication (e.g. LDAP)

4 Problem Severity: Service5 Pervasive Problem: No

SNMP trap configuration missing after HMC rebuild

1 Problem Description: HMC backup didn't include SNMP trap config for base feature

2 Potential Impact of Problem: SNMP failure

3 Environment: All R8 and R9
4 Problem Severity: Service
5 Pervasive Problem: No

ID# 365210

Improvements: Improvements for better usability

Mapping for PPRC connections to DS8A00 Host Adapters

1 **Problem Description:** Provide capability to create PPRC paths to DS8A00 Host Adapters in physical slots 3 and 6

2 Potential Impact of Problem: PPRC path compatibility

3 Environment: DS8880 and DS8900F connecting to DS8A00

4 **Problem Severity:** Improvement

5 Pervasive Problem: No

ID# 363545

New IBMAPKI Certificate

1 Problem Description: Add new IBMAPKI certificate for Assist OnSite (AOS)

2 Potential Impact of Problem: None

3 Environment: All

4 Problem Severity: Improvement

5 Pervasive Problem: No

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