IBM System Storage - DS8880 Disk Storage
Microcode Bundle 88.25.8.0 Release Note Information v1

Release Date: February 14, 2018

VRMF Level Data Results:

<table>
<thead>
<tr>
<th>VRMF level From:</th>
<th>88.24.6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRMF Level To:</td>
<td>88.25.8.0</td>
</tr>
<tr>
<td>Report for:</td>
<td>All DS8880</td>
</tr>
</tbody>
</table>

Code Bundle Contents

<table>
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<tr>
<th>DS8880 Code Bundle Level</th>
<th>SEA or LMC Version:</th>
<th>DSCLI Client</th>
<th>STAT Tool</th>
<th>Heat Map Transfer Utility</th>
<th>Storage Manager</th>
<th>Copy Services Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>88.25.8.0</td>
<td>7.8.25.17</td>
<td>7.8.25.15</td>
<td>7.8.25.15</td>
<td>7.8.25.15</td>
<td>5.8.25.1008</td>
<td>6.1.5</td>
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Overview of new features and functions supported by this release

At a glance:
- ESE / STD volume intermix on DS8870 PPRC secondary
- Code 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.**

**Potential data loss in systems running zHPF and APAR OA52080**
1. **Problem Description:** A microcode logic error may result in data loss in systems running zHPF, with Format Write chains that have multi-track embedded Locate Record entries, such as those created for Torn Page Protection.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
   ID#: 331965

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

**Temporary loss of access during DA error recovery**
1. **Problem Description:** A Device Adapter was reset while the partner adapter was also being reset.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
   ID#: 326608

**Repeated 0x7003 MLE**
1. **Problem Description:** During CS metadata track recovery, an unexpected reason code triggered a microcode logic error.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
   ID#: 330348

**Production impact during incremental Flash Copy**
1. **Problem Description:** When managed out-of-band by CSM, the primary volume was being quiesced during PPRC failback.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
   ID#: 331945

**V-RAID adapter timeouts during array rebuild**
1. **Problem Description:** SAS T10 errors on rebuild target drive caused repeated resets of both V-RAID adapters.
2. **Potential Impact of Problem:** loss of access
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
   ID#: 332374
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HPFE Gen2 enclosure powered off
1. Problem Description: False thermal sensor indications caused enclosure to power off.
2. Potential Impact of Problem: loss of access
3. Problem Severity: High Impact
4. Pervasive Problem: No
ID#: 332414

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

None.

Service: A recoverable error, Service improvements.

I/O bay fenced with no serviceable event
1. Problem Description: Rack power control card registers were not correctly set for the I/O bays
2. Potential Impact of Problem: Undetected I/O bay power/cooling errors
3. Problem Severity: Service
4. Pervasive Problem: Yes
ID#: 330717

REST API authentication failure
1. Problem Description: HMCs using remote authentication (LDAP) are not properly handling authentication requests for RESTful API service
2. Potential Impact of Problem: none
3. Problem Severity: Service
4. Pervasive Problem: No
ID#: 331802

Improvements: Improvements for better usability

Allow ESE/STD PPRC volume intermix for DS8870 secondary systems
1. Problem Description: Support PPRC volume intermix when secondary system is DS8870, to facilitate migration and testing scenarios.
2. Potential Impact of Problem: none
3. Problem Severity: Improvement
4. Pervasive Problem: No
ID#: 331712
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