IBM System Storage - DS8880 Disk Storage
Microcode Bundle 88.23.27.0 Release Note Information v1

Release Date: August 25, 2017

VRMF Level Data Results:

<table>
<thead>
<tr>
<th>VRMF level From:</th>
<th>88.23.20.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRMF Level To:</td>
<td>88.23.27.0</td>
</tr>
<tr>
<td>Report for:</td>
<td>All DS8880</td>
</tr>
</tbody>
</table>

Code Bundle Contents

<table>
<thead>
<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>88.23.27.0</td>
<td>7.8.23.114</td>
<td>7.8.23.91</td>
<td>7.8.23.114</td>
<td>7.8.23.114</td>
<td>5.8.23.1039</td>
<td>6.1.5</td>
</tr>
</tbody>
</table>

Overview of new features and functions supported by this release

At a glance:

- 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:

<table>
<thead>
<tr>
<th></th>
<th>High Impact</th>
<th>Moderate</th>
<th>Service</th>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acute: An irrecoverable error with potential loss of data.</td>
<td>A function not operational and/or performance might be degraded.</td>
<td>A recoverable error (no impact) and service improvements.</td>
<td>Improvement changes for better Usability and Serviceability.</td>
</tr>
<tr>
<td>2</td>
<td>Serious: An irrecoverable error with potential loss of access to data.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HIPER: High Impact problem that is Pervasive: 3 or more occurrences
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Acute: An irrecoverable error with potential loss of data.

0x7DEA MLE running MT-PPRC with preserve mirror
1. **Problem Description:** Clients running Multi-Target PPRC with preserve mirror are exposed to a microcode logic error caused by an incorrect Out-of-Sync bitmap.
2. **Potential Impact of Problem:** loss of data on target volume
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 328458

0x7235 MLE during ESE space release
1. **Problem Description:** During withdraw of a dataset from a full volume ESE Flash Copy, space release attempted to release extents that were still doing I/O.
2. **Potential Impact of Problem:** loss of data
3. **Problem Severity:** High Impact
4. **Pervasive Problem:** No
ID#: 329996

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

None.

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

None.

Service: A recoverable error, Service improvements.

Unable to access DS GUI
1. **Problem Description:** DS GUI access may return 404 error because of an incorrect XML change in R8.2 SP3
2. **Potential Impact of Problem:** none
3. **Problem Severity:** Service
4. **Pervasive Problem:** No
ID#: 329595

Improvements: Improvements for better usability

None.
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