# TS7700 Release Notes - 8.52.102.13 (R5.2 Phase 1 PGA2)

IBM System Storage TS7700

Release Notes for the TS7700 (3957 VED / VEC)

- EC: P25763 released September 9, 2022

New Function Supported:
- **None**

## TS7700 CODE REQUIREMENTS

| | |
|---|---|
| TS7700 | 8.52.102.13 (EC P25763, PN 02XY421, PN 02XY422, PN 02XY423, PN 02XY424 (DVD 1, 2, 3 & 4)) |
| DB2 | DB2 v11.5.4.0<br>Informational tokens are "DB2 v11.5.4.0", "s2006161200", "DYN2006161200AIX",and Fix Pack "0" |
| AIX Base Level | AIX 7.2.5.0 |
| AIX Fixpack | 7200-05-01-2038 |
| P9 Server Firmware | FW950.00 (VL950_045) |
| P8 Server Firmware | FW860.90 (SV860_226) |
| TCT | Version= 1.1.8-1281 |
| Cloud Support | IBM Cloud Object Storage System (COS) appliance solution<br>Version 3.15.7.43 April Maintenance Release (Storage_COSS_3.15.7.43) / S3 Protocol |
| | AWS, S3 Protocol |
| TS4500 (Anaconda) Firmware | 1800-C00 |
| TS3500 (Anaconda) Firmware | H0150 |
| 3592 E07 Tape Drive<br>3592 E08 Tape Drive | D3I3_DCB<br>D3I4_B12 |
| TSSC | 9.2.14 |
| 3956-CSB (2072-312 V5030E)<br>3956-CFC (2072-3N4 V5035E)<br>Firmware | 8.4.0.5 |

| | |
|---|---|
| HDD (3956-CSB / 3956-XSB) | Seagate ST10000NM002G Evans Non-SED   7200 rpm, 3.5 inch, 10TB,  SAS 12Gb/s 4Kn / FW BCL4 |
| | Seagate ST10000NM0206 Tatsu Non-SED   7200 rpm, 3.5 inch, 10TB,  SAS 12Gb/s 4Kn / FW lvl BCGA\D |
| | Seagate ST10000NM0528 Mobula Non-SED   7200 rpm, 3.5 inch,  10TB,  SAS 12Gb/s 4Kn / FW lvl BCHC |
| | Seagate ST10000NM015G EvansBP Non-SED (Nearline), 7200 RPM, 3.5 inch, 10TB, SAS 12Gb/s 4Kn / FW lvl KCP3 |
| SSD (3956-CFC / 3956-XFC) | Samsung 1643A SSD tier1_flash, 2.5 inch, 3.84TB, SAS 12Gb/s / FW lvl MS73 |
| 3956-CSA Firmware Storage Manager GUI | 08.40.60.01 11.30.0A05.0037 Storage Manager GUI level |
| GKLM | 4.1.0.1 |
| Atape | 13.0.46.0 |
| GPFS | GPFS Release 5.1.0.3 |
| ITDT | 9.0.1.20160222 |
| AIX Diagnostics CD | Version 7.2 |
| 16Gbit Cisco Switch Firmware | BIOS level 2.1.17 Kickstart software level 6.2(9) System software level 6.2(9) |
| VTD EXECs | |

## Platform Requirements Matrix

| Test | Software Level |
|------|----------------|
| zOS | V2R4 |
| zTPF | 1.1 |
| zVM | 6.3, 6,4 |
| zVSE | 5.2, 6.1, 6.2 |

## Switch and Channel Extender Support Matrix

| Product Vendor and Model | Product Levels of Microcode Supported |
|--------------------------|----------------------------------------|
| Brocade 8510-8<br>IBM 2499-816<br>(SAN768B-2) | 8.2.3b |
| Brocade 8510-4<br>IBM 2499-416<br>(SAN384B-2) | 8.2.3b |
| Brocade 6510<br>IBM 2498-F48<br>8, 16 GB/sec<br>(SAN48B-5) | 8.2.3b |
| Brocade 7800<br>IBM 2498-R06<br>(SAN06B-R) | 8.2.2b |
| Brocade 7840<br>IBM 2498-R42<br>(SAN42B-R) | 8.2.3b |
| Brocade X6-8 | 9.0.1c.8.2.3b |

| | |
|---|---|
| IBM 8961-F08<br>(SAN512B-6) | |
| Brocade X6-4<br>IBM 8961-F0<br>(SAN256B-6) | 9.0.1c |
| Brocade 620<br>IBM 8960-F64<br>8960-N64<br>SAN64B-6 | 9.0.1c,8.2.3b |
| Brocade X7-8<br>IBM 8961-F78<br>(SAN512B-7) | 9.0.1c |
| Brocade X7-4<br>IBM 8961-F74<br>(SAN256B-7) | 9.0.1c |
| Brocade G720<br>IBM 8960-R64/8960-P64<br>(SAN64B-7) | 9.0.1c |
| | |
| Cisco MDS9250i<br>IBM 8977-R50<br>(SAN50C-R) | 9.2(1),8.5(1) |
| Cisco MDS9710<br>IBM 8978-E08<br>(SAN384C-6) | 9.2(1),8.5(1) |
| Cisco MDS9706<br>IBM 8978-E04<br>(SAN192C-6) | 9.2(1),8.5(1) |

**PROBLEM FIXES**:

Problems fixed in this level are described below. There are 68 enhancements/defects fixed in this release; 25 defects occurred or were related to problems in client installations. They are described below with the following designations:

**HIPER** = High Impact & Pervasive

**High Impact** = Loss of access or loss of data

**Acute** = An unrecoverable error with potential loss of data

Serious = An unrecoverable error with potential loss of access to data

Moderate = A system path is not operational and performance might be degraded

Service = A recoverable error, Service Improvements

Improvement = Improvement for better usability

Pervasive: problems with 3 or more occurrences

**High Impact:**  IO: Periodic cache check incorrectly deleted a newly written volume
Pervasive: No
Reference: 93543

**Acute**: Unjoin: Removing a cluster that was cloud attached resulted in unnecessary recalls
Pervasive: No
Reference: 93581


**Acute**: Tape Attach: Unable to mount physical volumes for recalls
Pervasive: No
Reference: 93579

Serious: BVIR: BVIR commands fail due to a file handle leak
Pervasive: No
Reference: 93885

Serious: Grid Cloud Attach: Provide the capability to recall a volume from the cloud on a cluster that is marked inconsistent
Pervasive: No
Reference: 93619

Serious: Grid - OpenSSL thread resources not managed correctly resulting in cluster reboot
Pervasive: YES
Reference: 93119

Serious: Grid: Synchronous copy can fail with SDT if certificate issues exist.
Pervasive: No
Reference: 93738

Serious: Tape Attach: Mix of Jag6 and Jag 4 drives not using Jag6 drives with empty JC/JK cartridges
Pervasive: No
Reference: 93409

Serious: Tape Attach: Physical volumes not marked full after drive conversion to Jag4 and Jag6 mix
Pervasive: No
Reference: 93408

Serious: MI: Dual control adding a new checker not working
Pervasive: YES
Reference: 93407

Serious: RAS: Collect fresh log data when calling home with a cache issue
Pervasive: YES
Reference: 90772

Moderate: Grid: Outbound copy rate imbalanced between clusters in the grid
Pervasive: No
Reference: 93029

Moderate: Copy Export: Offsite Reclaims Will Not Run with JAG6 heterogeneous setup
Pervasive: No
Reference: 93608

Moderate: RAS: System check is incorrectly reporting an error when an adapter is not installed
Pervasive: No
Reference: 93585

Moderate: Config:  Host throughput not getting configured correctly
Pervasive: No
Reference: 93548

Moderate: MI: Installed vtd execs are not displayed correctly
Pervasive: No
Reference: 93379

Moderate: Tape Attach: Configuration change required for flagging low on scratch media with new 1160 media
Pervasive: No
Reference: 93355

Moderate: Tape Attached: Incorrectly alerting out of scratch physical media after introducing Jag 6 drives
Pervasive: No
Reference: 93327

Moderate: RAS: Incorrectly reporting physical tape drive error when a drive is busy
Pervasive: YES
Reference: 93281

Moderate: LWORM: Retention time is calculated incorrectly resulting in volumes being retained twice as long as requested
Pervasive: No
Reference: 93262

Moderate: Cache MES: Correct a connection issue when performing a CSB cache MES
Pervasive: No
Reference: 93108

Moderate: MI: Provide dual control when adding scratch categories
Pervasive: No
Reference: 91279

Improvement: Unjoin: Cleanup management class settings for the cluster that was unjoined
Pervasive: No
Reference: 90665

Improvement: RAS: Increase CSB cache logging
Pervasive: YES
Reference: 93105

Improvement: Tools: Qradar only reports logins and not logouts from the TS7700
Pervasive: No
Reference: 91502