

TS7700 Release Notes - 8.53.0.63 (R5.3)

IBM System Storage TS7700

Release Notes for the TS7700 (3957 VED)

- EC: P25786 released September 15, 2022

New Function Supported:

- **Migrations Made Easy with Objects**
- **Resident Only Objects on TS7700C**
- **Increase Capacity CFC**
- **Memory Increase VED**
- **MT3948 change**
- **FC5995**
- **Rest_API (7 APIs)**

TS7700 CODE REQUIREMENTS

TS7700	8.53.0.63
DB2	v11.5.5.1 informational tokens are "DB2 v11.5.5.1", "s2103171200", "DYN2103171200AIX",and Fix Pack "1"
AIX Base Level	AIX 7.2.5.101
AIX Fix pack	7200-05-03-2148+02
P9 Server Firmware	FW950.0 (VL950_099)
TCT	Version=1.1.8-1281
Cloud Support	IBM Cloud Object Storage System (COS) appliance solution 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	H015
3592 E06 Tape Drive	D3I2_883
3592 E07 Tape Drive	D3I3_DCB
3592 E08 Tape Drive	D3I4_B12
3592 60F Tape Drive	D3I5_78D
TSSC	9.3.10
3956-CSB/CFC (2072-312 V5030E) Firmware	8.5.0.4
HDD (3956-CSB)	Seagate Evans Non-SED 7200 rpm, 3.5 inch, 10TB, SAS 12Gb/s
SSD (3956-CFC / 3956-XFC)	4Kn / FW BCL5
	Seagate Tatsu Non-SED 7200 rpm, 3.5 inch, 10TB, SAS 12Gb/s

	4Kn / FW lvl BCGd
	Seagate Mobula Non-SED 7200 rpm, 3.5 inch, 10TB, SAS 12Gb/s 4Kn / FW lvl BCHC
	Seagate EvansBP Non-SED 7200 rpm, 3.5 inch, 10TB, SAS 12Gb/s 4Kn / FW KCP5
	Samsung 1643A SSD tier1_flash, 2.5 inch, 3.84TB, SAS 12Gb/s / FW lvl MS73
RestAPI	Bundle Version 1.0.26
Atape	13.0.46.0
GPFS	GPFS Release 5.1.3.1
ITDT	9.5.2.20211117
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	VTD_EXEC_389 V1.04 (Code Signing)

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 IBM 2499-816 (SAN768B-2)	8.2.3a
Brocade 8510-4 IBM 2499-416 (SAN384B-2)	8.2.3a
Brocade 6510 IBM 2498-F48 (SAN48B-5)	8.2.3a
Brocade 7800 IBM 2498-R06 (SAN06B-R)	8.2.2b
Brocade 7840 IBM 2498-R42 (SAN42B-R)	8.2.3a
Brocade X6-8 IBM 8961-F08 (SAN512B-6)	9.0.1c
Brocade X6-4 IBM 8961-F0 (SAN256B-6)	9.0.1c
Brocade 620 IBM 8960-F64 8960-N64 SAN64B-6	9.0.1c
Brocade X7-8	9.0.1c

IBM 8961-F78 (SAN512B-7)	
Brocade X7-4 IBM 8961-F74 (SAN256B-7)	9.0.1c
Brocade G720 IBM 8960-R64/8960-P64 (SAN64B-7)	9.0.1c
Cisco MDS9250i IBM 8977-R50 (SAN50C-R)	8.5(1)
Cisco MDS9710 IBM 8978-E08 (SAN384C-6)	8.5(1)
Cisco MDS9706 IBM 8978-E04 (SAN192C-6)	8.4(2b)

PROBLEM FIXES:

Problems fixed in this level are described below. There are 559 enhancements/defects fixed in this release; 68 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

Acute: Tape Attach: Unable to recall logical volume from a secondary physical volume when the primary physical volume is damaged

Pervasive: No

Reference: 93549

Acute: Grid: Issue disabling flash copy

Pervasive: No

Reference: 91445

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: IO: Cluster went offline unexpectedly resulting in no paths to tape drives - adding first time data capture

Pervasive: No

Reference: 93365

Serious: RAS - Fence the cluster if we get a disk failure error

Pervasive: No

Reference: 93357

Serious: RAS: Tracing log exceeded size and caused system to reboot

Pervasive: No

Reference: 93127

Serious: Grid: OpenSSL thread resources not managed correctly resulting in cluster reboot

Pervasive: YES

Reference: 93119

Serious: Security: When synchronizing trust stores, remote clusters are not exporting PEM files

Pervasive: YES

Reference: 92910

Serious: Grid: Back to back write of the same volume resulted in a timing issue because the volume was still locked

Pervasive: No

Reference: 92816

Serious: Logging: Inconsistent signal handling between two threads resulted in memory corruption and an increase in memory utilization

Pervasive: No

Reference: 92231

Serious: Grid GGM: Cluster rebooted because GGM held a database lock resulting in using all system memory

Pervasive: No

Reference: 91674

Serious: Tape Attach: Add a warning about resizing a tape partition

Pervasive: No

Reference: 89239

Serious: Code Activation: Code activation failing due to Japanese character in VPD field

Pervasive: No

Reference: 93889

Serious: MI: Dual control enabled without being configured correctly

Pervasive: No

Reference: 93879

Serious: Grid: Synchronous copy can fail with SDT if certificate issues exist.

Pervasive: No

Reference: 93738

Serious: Security: New CA Iwikis certificates did not copy properly

Pervasive: No

Reference: 93647

Serious: Code Activation: Timing issue with firmware upgrade running in background and the configuration process failed to set performance parameters

Pervasive: No

Reference: 93605

Serious: Tools: Fast migrate to tape tool help panel requires updating

Pervasive: No

Reference: 93473

Serious: Code Activation: Code activation is failing to discover the disks in the server due to a timing issue

Pervasive: YES

Reference: 93459

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: Security: Error exporting certificates

Pervasive: No

Reference: 93347

Serious: Online: Timing issue in mutex locking tied to code compilation

Pervasive: No

Reference: 93224

Serious: RAS: Add a new system check to monitor the named process if a DNS is configured

Pervasive: No

Reference: 92843

Serious: RAS: System dump file going to the wrong directory resulting in a full filesystem

Pervasive: No

Reference: 92718

Serious: Tape Attach: The code is incorrectly flagging logical end of media on JD cartridges resulting in underutilized tapes

Pervasive: No

Reference: 92410

Serious: Grid Cluster Renumber: Hot tokens were not cleaned up properly before trying to renumber a grid

Pervasive: No

Reference: 91785

Serious: RAS: Collect fresh log data when calling home with a cache issue

Pervasive: YES

Reference: 90772

Serious: Tools: Need to provide the SSR with the ability to run the inconsistency check

Pervasive: No

Reference: 84309

Moderate: Grid: Outbound copy rate imbalanced between clusters in the grid

Pervasive: No

Reference: 93029

Moderate: RAS: Call home is paging space increases > 10%

Pervasive: No

Reference: 92175

Moderate: Cloud Attach: Configuring a system for cloud attach can fail and leave the system partially configured

Pervasive: No

Reference: 91701

Moderate: MI: Customer unable to download csv report

Pervasive: No

Reference: 93809

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: DS8K Offload: Change fileset names to lowercase to accomodate a DS8K change

Pervasive: No

Reference: 93489

Moderate: Tape Attach: Need to provide a message when a physical tape approaches end of life

Pervasive: No

Reference: 93483

Moderate: Tape Attach: Configuration change required for flagging low on scratch media with new 1160 media

Pervasive: No

Reference: 93355

Moderate: Tape Attach: 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: Security: Remove all SHA1 choices from sshd configurations

Pervasive: No

Reference: 93212

Moderate: MI: Dual control approving and rejecting LDAP policies not working

Pervasive: No

Reference: 93181

Moderate: Cache MES: Correct a connection issue when performing a CSB cache MES

Pervasive: No

Reference: 93108

Moderate: RAS: Do not display an error if no vtd execs are installed on a cluster

Pervasive: No

Reference: 93077

Moderate: Security: LDAP certificate retrieval failure

Pervasive: No

Reference: 92704

Moderate: Code Activation: Firewall rules not defined correctly when GGM is configured

Pervasive: No

Reference: 92683

Moderate: Tape Attach: Physical tape ejected when it reached end of life and customer was not notified

Pervasive: No

Reference: 92544

Moderate: MI: Cleanup reason codes for some MI events

Pervasive: No

Reference: 92234

Moderate: MI: Provide dual control when adding scratch categories

Pervasive: No

Reference: 91279

Moderate: Frame Swap: Error configuring LDAP after a frame swap

Pervasive: No

Reference: 90922

Moderate: RAS: Cleanup reporting for cache single disk failure verses two disk failure

Pervasive: No

Reference: 90417

Moderate: Join/Merge: Join fails when the vital product data contains German characters

Pervasive: No

Reference: 90402

Moderate: Join/Merge: Enable MI user access to the new cluster(s) joining the grid

Pervasive: No

Reference: 86396

Service: Unjoin: Fix a timing issue with removing the unjoined cluster from the list of active clusters in the vital product data

Pervasive: No

Reference: 91719

Improvement: Unjoin: Cleanup management class settings for the cluster that was unjoined

Pervasive: No

Reference: 90665

Improvement: RAS: Collect additional logs when the system hits an abort

Pervasive: No

Reference: 93284

Improvement: RAS: Increase CSB cache logging

Pervasive: YES

Reference: 93105

Improvement: Code Activation: Fix error in logging when increasing logging size

Pervasive: No

Reference: 93292

Improvement: RAS: Increase logging sizes

Pervasive: No

Reference: 91461

Improvement: Grid: Copy failure not reported correctly if SDT enabled and the certificate has expired

Pervasive: No

Reference: 90142

Improvement: Security: Improve CRC checking as volumes are copied, migrated and recalled

Pervasive: YES

Reference: 87800