

DRAFT: TS7700 Release Notes - 8.41.200.63 (R4.1 Phase 2)

IBM System Storage TS7700

Release Notes for the TS7700 (3957 VEC / VEB / V07)

- EC: M14083 released November 14, 2017

New Function Supported:

- **Compression Optimization**
- **Grid Resiliency**
- **Event Log Redesign**
- **Code Load Improvements**
- **Syslog Auditing**

TS7700 CODE REQUIREMENTS

Hydra	8.41.200.63 (EC M14083, PN 02CE202, 02CE203, 02CE204 (DVD 1, 2, & 3))
DB2	11.1.0.0 Informational tokens: "DB2 v11.1.0.0", "s1606081100", "DYN1606081100AIX", and Fix Pack "0"
AIX Base Level	7.1.4.30
AIX Fixpack	7100-04-03-1642+02
P8 Server Firmware	FW860.20
TS4500 (Anaconda) Firmware	1410-A00
TS3500 (Anaconda) Firmware	G030
3592 J1A Tape Drive	D310_C90
3592 E05 Tape Drive	D311_F1F
3592 E06 Tape Drive	D312_883
3592 E07 Tape Drive	D313_C07 (EC info pending)
3592 E08 Tape Drive	D314_815 (EC info pending)
TSSC	8.4.4 (EC M14095 PN 02CE248)
TSSC Documentation	(EC M14095 PN 02CE249)
3956-CC9/CS9/CSA Firmware	08.20.25.00
Storage Manager GUI	11.20.0G05.0018
TKLM	TKLM v2 2.0.0.2, 2.0.0.5
ISKLM	2.6.0.0
Atape	13.0.15.0
GPFS	Release 4.2.2 PTF 7 code
ITDT	9.0.1.20160222
AIX Diagnostics CD	V7.2.0.0
16Gbit Cisco Switch Firmware	BIOS level 2.1.17 Kickstart software level 6.2(9) System software level 6.2(9)
Mandatory VTD EXECs	vtd_exec.292 vtd_exec.244

Platform Requirements Matrix

Test	Software Level
zOS	V2R3
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	TS7700 levels of microcode supported
Brocade DCX IBM 2499-384 (SAN768B) Nortel 10Gb/sec MOTR card supported End of Support: 11/14/2019	7.4.1b, 7.4.1d, 7.4.2a	8.41.200.63
Brocade DCX-4S IBM 2499-192 (SAN384B) Nortel 10Gb/sec MOTR card supported End of Support: 11/14/2019	7.4.1b, 7.4.1d, 7.4.2a	8.41.200.63
Brocade 8510-8 IBM 2499-816 (SAN768B-2) Brocade 8510-4 IBM 2499-416 (SAN384B-2)	7.4.1b, 7.4.1d, 7.4.2a, 8.0.1b, 8.0.2b, 8.1.0c	8.41.200.63

Brocade 7800 IBM 2498-R06 (SAN06B-R) Brocade 6510	7.4.1b, 7.4.1d	8.41.200.63
IBM 2498-F48 8, 16 GB/sec (SAN48B-5)	7.4.1b, 7.4.1d, 7.4.2a, 8.0.1b, 8.0.2b, 8.1.0c	8.41.200.63
Brocade 7840 IBM 2498-R42 (SAN42B-R)	7.4.1b, 7.4.1d, 7.4.2a, 8.0.1b, 8.0.2b, 8.1.0c	8.41.200.63
Brocade X6-4 IBM 8961-F0 (SAN256B-6) Brocade X6-8 IBM 8961-F08 (SAN 512B-6)	8.0.1b, 8.0.2b, 8.1.0c	8.41.200.63
Cisco MDS9506 IBM 2062-D04 IBM 2054-E04	6.2.11c/6.2.11d, 6.2(11e)	8.41.200.63
Cisco MDS9509 IBM 2062-D07 IBM 2054-E07	6.2.11c/6.2.11d, 6.2(11e) 12, 24 & 48 port blades only	8.41.200.63
Cisco MDS9513 IBM 2062-E11 IBM 2054-E11	6.2.11c/6.2.11d, 6.2(11e) 12, 24 & 48 port blades only	8.41.200.63

Cisco MDS9222i	6.2.11c/6.2.11d, 6.2(11e) 12, 24 & 48 port blades only	8.41.200.63
Cisco MDS9250i	6.2.11c/6.2.11d, 6.2(11e)	8.41.200.63
Cisco MDS9710	6.2.11c/6.2.11d, 6.2(11e) 12, 24 & 48 port blades only	8.41.200.63

PROBLEM FIXES:

Problems fixed in this level are described below. There are 1230 enhancements/defects fixed in this release; 208 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 = A unrecoverable error with potential loss of data

Serious = A 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

HIPER: Operator intervention and task cleanup operations may hang and cause performance degradation and cluster reboot.

Pervasive: YES

Ref: 82102

High Impact: Sick but not dead situation, mounts stopped after loss communications to a single cluster in the grid

Pervasive: No

Ref: 75685

High Impact: Due to hardware issues with the physical library, the library operational state change that gets surfaced to the host was left "offline" due to a race condition. This causes the TS7700 to go into a force pause condition where logical volume copies are not allowed into the cluster.

Pervasive: No

Ref: 80374

High Impact: The current physical mount recovery algorithm does not handle the case where there is a previous mount task left in the mount queue. This causes the next mount to fail with "drive in use", but the drive is actually not in used.

Pervasive: No

Ref: 81176

High Impact: The TS7700 generates a host console message with special characters such that some host applications cannot handle the special characters, leading to the host applications crashing.

Pervasive: No

Ref: 81587

High Impact: When numerous LI REQ GGM,SRCVLCHG requests are issued at a time, the LI REQ requests could be timed out and fail.

Pervasive: No

Ref: 82189

High Impact: Update the fcp adapter firmware to address an issue with cache ddm access switching from the preferred path

Pervasive: No

Ref: 82405

High Impact: During ddm reconstruction, host I/O failure due to missed reporting of unreadable sectors

Pervasive: No

Ref: 82415

High Impact: Copy Export causes reboot when more than 10 sunset media exist in Copy Export Pool because memory allocation size is not enough and it overflows at referencing Database.

Pervasive: No

Ref: 83719

High Impact: During the flash copy disable operation, a cluster in the DR family could be rebooted if the cluster is a remote TVC cluster of the production I/O.

Pervasive: No

Ref: 83749

Acute: Logical volume trailer missing resulting in failed mount.

Pervasive: No

Ref: 80271

Acute: Tape daemon error causes Ficon adapters panic and leads to a reboot.

Pervasive: No

Ref: 80972

Acute: The Java update execs do not check for available space in the filesystem and can fail if they run out of space.

Pervasive: No

Ref: 81183

Acute: When file system errors were detected the system did not call home or generate a service information message

Pervasive: No

Ref: 81210

Acute: Copy export offsite reclamation marked a secondary volume empty when the primary volume was damaged.

Pervasive: No

Ref: 81495

Acute: The vital product data server restarted due to an error and during the restart another component attempted to access the data using an invalid handle resulting in a sick but not dead situation.

Pervasive: No

Ref: 81766

Acute: Hardware error results in array going offline and cluster reboots

Pervasive: No

Ref: 81818

Acute: Unscheduled reboot or failure on an on-line cluster during a join/unjoin due to a message queue handle initialization issue

Pervasive: YES

Ref: 81840

Acute: Tape mark on a private volume is overwritten when writing from beginning of tape after a file space forward.

Pervasive: No

Ref: 82211

Acute: Disk errors encountered during a database backup were not properly reported.

Pervasive: No

Ref: 82760

Acute: Sometimes mount/demount to change pool setting in non-TVC cluster did not work if mount/demount was done twice or more.

Pervasive: No

Ref: 82982

Acute: Mirroring of system disk may fail if a reboot is issued right at the point of setting the boot sector resulting in the inability to boot the 7700

Pervasive: YES

Ref: 83031

Serious: Database health check improvements.

Pervasive: No

Ref: 73533

Serious: Grid renumber fails and the process restart did not pickup from the last checkpoint.

Pervasive: No

Ref: 78772

Serious: act_finis fails when router_config reports a network adapter configuration error.

Pervasive: No

Ref: 79001

Serious: Machine rebooted due to communications handle leak resulting in out of memory state

Pervasive: YES

Ref: 79148

Serious: fixed problem where internal virtual IP address (VIPA) not switching fast enough to working physical interface

Pervasive: YES

Ref: 79794

Serious: Updated NTPd to address potential security vulnerabilities

Pervasive: No

Ref: 80450

Serious: A cache MES will not configure the cache capacity correctly if the correct feature codes are not installed

Pervasive: No

Ref: 80796

Serious: Grid join\merge monitor process times out and reports a failure even though the process is still running.

Pervasive: No

Ref: 80822

Serious: Service prep is stuck because tokens marked hot against nonexistent cluster are never reconciled.

Pervasive: No

Ref: 80994

Serious: Database deadlock leads to machine slow down and cluster reboot.

Pervasive: YES

Ref: 80969

Serious: Improved log collection in internal database snapshots to improve first time data capture (FTDC).

Pervasive: No

Ref: 81047

Serious: Slow initialization can occur on a cluster that has migrated from R3.2 or below due to improper timestamp population of database records.

Pervasive: YES

Ref: 81103

Serious: System hung up when putting the cluster in service because AIX was not responding to a terminate request.

Pervasive: YES

Ref: 81134

Serious: Cache hardware issue created performance and channel errors during I/O resulting in job abend. Ficon adapter firmware goes panic after read CCW being cancelled.

Pervasive: No

Ref: 81141

Serious: NTPv4 requires a different method to instruct it not to jump the clock around when making time adjustments. We never switched to the new method when we upgraded from NTPv3 to NTPv4.

Pervasive: YES

Ref: 81142

Serious: The tape drive firmware sometimes marks a tape cartridge with ENXIO (reached logical end of medium) too early so the full capacity of the tape is not used. A tape drive dump will be taken at unload time when this condition is detected.

Pervasive: No

Ref: 81147

Serious: Fixed problem where events may never clear when system tries to close an event before it was successfully opened

Pervasive: No

Ref: 81154

Serious: Improve tool to detect (scan) unreadable sectors

Pervasive: No

Ref: 81230

Serious: The database was mistakenly dropped when performing a server replacement.

Pervasive: No

Ref: 81253

Serious: A grid merge operation will fail if there is insufficient space in the filesystem.

Pervasive: No

Ref: 81266

Serious: Due to a library, drive, or fibre channel switch issue, the TS7700 can get stuck waiting for the physical mount or demount to get completed. When the error condition clears, the current error recovery does not automatically recover all the tape drives.

Pervasive: YES

Ref: 81461

Serious: The ethernet driver detects a transmit failure (GOENT_TX_ERR err label) and attempts to recover. This recovery may cause a hang of the box.

Pervasive: No

Ref: 81471

Serious: Fixed problem where MES frame replacement failed due to corrupted vpd.xml file.

Pervasive: No

Ref: 81523

Serious: When there is a cluster with degraded library state such as Out Of Scratch etc. in the Grid, the mount and Device Allocation Assistance request could hang and the job could fail.

Pervasive: No

Ref: 81528

Serious: False out-of-cache alert may be raised on TS7720 or TS7760.

Pervasive: YES

Ref: 81704

Serious: External key manager proxy check incorrectly logs a failure if the machine has more than one cache string

Pervasive: No

Ref: 81749

Serious: Cluster became isolated from the grid during Grid IP testing

Pervasive: No

Ref: 81754

Serious: D SMS,LIB(ALL),DETAIL shows the incorrect model "V06" instead of "VEC" when the target composite library includes TS7700 model VEC cluster and peer cluster with R3.3 or below code.

Pervasive: YES

Ref: 81946

Serious: System may hung when restarting a component due to an incorrect call to an AIX API.

Pervasive: No

Ref: 82021

Serious: Filesystem full warnings needed

Pervasive: No

Ref: 82097

Serious: Offsite Reclaim can get stuck. The cause of this issue is that Offsite Reclaim waits for completion of non-existing Recall process. The reason why Offsite Reclaim waits for non-existing Recall is that it was invoked by Offsite Reclaim before the time of last offline/online of the cluster. The cluster records process IDs of Recall processes which Offsite Reclaim should wait for. The recorded process IDs list should be cleaned up when the cluster is made offline/online but there is a case it can remain. When such case occurs, this issue occurs.

Pervasive: No

Ref: 82098

Serious: During DR Unjoin process, volume takeover lock which are owned by removed cluster are not moved to a remaining cluster. As a result, after the unjoin no one can takeover those volumes.

Pervasive: No

Ref: 82168

Serious: Timing window when a copy job deletion and update occur at the same time may result in a deadlock and cluster reboot.

Pervasive: No

Ref: 82170

Serious: Unnecessary logging messages are filling the cache logs and limiting the amount of logging that can be collected

Pervasive: No

Ref: 82198

Serious: Interventions for old cache errors that have been resolved are resurfacing

Pervasive: No

Ref: 82238

Serious: Event 687: "An unknown cache problem was encountered..." was triggered while Storage Subsystem health status = fixing and all DDMs had optimal status

Pervasive: No

Ref: 82292

Serious: Storage frame MES may fail if an empty expansion frame is being installed

Pervasive: No

Ref: 82324

Serious: Provide the new token handshake data into LI REQ, DIAGDATA output.

Pervasive: No

Ref: 82359

Serious: Need to add first time data capture to track a memory leak that can result in a system hang or reboot

Pervasive: No

Ref: 82497

Serious: Activation will fail if another external process is trying to query a cache that is password protected

Pervasive: No

Ref: 82562

Serious: All category mounts in the range 0x8000 - 0xFFFF fail even though they're defined in the write-protect excluded categories when Write Protect Mode is enabled (problem introduced in R3.3 PGA2)

Pervasive: No

Ref: 82576

Serious: Enable rlogin before upgrade cache fw

Pervasive: No

Ref: 82620

Serious: Using a deprecated DB2 call results in a memory leak.

Pervasive: No

Ref: 82633

Serious: Unexpected reboot during a db2 backup, db2 archive log file was missing.

Pervasive: No

Ref: 82708

Serious: Mount Pending occurs when a response to a BVIR request is too large to fit into a volume.

Pervasive: No

Ref: 82714

Serious: There was a point of a previous activate that failed, leaving a status file in the referenced directory.

There was no log file, which was used as the previous tell to see if the status file existed, so in this case when the activate wanted to read from the status file, it found two and failed.

Pervasive: No

Ref: 82865

Serious: Callhome does not contain Ficon adapter error log data if it is not yet initialized

Pervasive: YES

Ref: 82963

Serious: Unexpected reboot due to communication handle corruption

Pervasive: YES

Ref: 83168

Serious: First time code activate fails indicating an activation is in progress when the previous activation had completed successfully.

Pervasive: No

Ref: 83207

Serious: Auto-removal for lvol which were configured as time-delayed copy to other clusters was not processed when there was many time-delayed copy lvol.

Pervasive: No

Ref: 83245

Serious: Periodically, the TS7700 would send an alert to the host indicating a problem with the tape drives when there is no issue.

Pervasive: No

Ref: 83652

Serious: Microcode did not support library logical name longer than 16 available from TS4500.

If the attached library had such long name, TS7700 would reboot.

Pervasive: No

Ref: 83659

Serious: When both sync and immediate deferred states are cleared by completing the required copies at the same time, the cluster could be rebooted.

Pervasive: No

Ref: 83669

Serious: Grid Copy can stick after non-TVC cluster could not process previous demount for the lvol correctly because the cluster was in service or grid link disconnection or something.

Pervasive: No

Ref: 83725

Serious: In certain extreme condition, a copy job may be abended.

Pervasive: YES

Ref: 83873

Serious: When one copy of a volume which has Synchronous Copy Mode with Deferred On Write Failure option is failed to open for write while the volume is being copied to a third cluster, the failed copy is not marked as inconsistent correctly. Because of the incorrect consistency, the volume may go to damaged category.

Pervasive: YES

Ref: 83958

Moderate: Collect network status logs with a system dump

Pervasive: No

Ref: 71070

Moderate: Service cancel failed if only 2 out of 4 Gridlinks works

Pervasive: No

Ref: 71744

Moderate: Empty pvols not returned to scratch due to an error opening a file.

Pervasive: No

Ref: 76918

Moderate: An old database migrated up to a newer level may fill up the database filesystem due to older migration method

Pervasive: YES

Ref: 77067

Moderate: The default limit of 13 GB per bulk request for Bulk Recall is small when 25 GB volumes are used.

Pervasive: No

Ref: 77380

Moderate: BVIR CACHE CONTENT request may not return any results when many volumes exists because of a fixed timeout value.

Pervasive: No

Ref: 77468

Moderate: When the operator using the TS7700 MI initiates a task that times out, the task does not close out the TS7700 MI Task Webpage. The task is left open, preventing the next operation from being accepted.

Pervasive: No

Ref: 78373

Moderate: The output from system check for data of disk was hard to read

Pervasive: No

Ref: 78377

Moderate: System check calls hanging

Pervasive: No

Ref: 78406

Moderate: Collect physical drive dumps with dump data

Pervasive: No

Ref: 79067

Moderate: Timing issue after a join with alerting that NTP server is not available

Pervasive: No

Ref: 80342

Moderate: For a heterogeneous tape drive setup, statistical information will be missing for the drive types prior to TS1150.

Pervasive: No

Ref: 80732

Moderate: Memory leak in connection handle recovery can result in an unscheduled reboot

Pervasive: No

Ref: 80784

Moderate: Copy export resets a read only physical volume access incorrectly resulting in offsite reclamation issues.

Pervasive: No

Ref: 80973

Moderate: Host is not informed of operator intervention being cleared.

Pervasive: No

Ref: 81139

Moderate: When a selective reset is required during the volume mount process, the mount could be hung and the job could fail then the used logical drive needs to be reset by IBM service personnel.

Pervasive: YES

Ref: 81148

Moderate: Problem downloading cvs file in Cluster/Grid Summary

Pervasive: No

Ref: 81323

Moderate: System hangs when the number of communication connections is exceeded. Need to monitor and flag the issue.

Pervasive: YES

Ref: 81477

Moderate: Tape attached clusters joining/merging to another cluster/grid will inherit pinned storage classes from the existing cluster.

Pervasive: No

Ref: 81483

Moderate: VPD logs will be wrapped quick so we will miss the critical data for RCA.

Pervasive: No

Ref: 81494

Moderate: The category 0xFFFF can't be set and used as a target category of LI REQ OTCNTL,CONFIG,CAT and the ownership of the volume in 0xFFFF can't be transferred specifically.

Pervasive: No

Ref: 81535

Moderate: The storage constructs do not automatically get created in the Library Universal Mount by the TS7700 if it is not already defined by the operator using the TS7700 MI. The expected behavior is that the TS7700 should automatically create the new constructs using the default actions from the default storage constructs.

Pervasive: No

Ref: 81549

Moderate: When multiple requests to disable flash copies are issued before the previous request completes, the logical volume tokens were incorrectly deleted.

Pervasive: No

Ref: 81556

Moderate: Downloading copy queue information from the MI may hang if the copy queue is large.

Pervasive: No

Ref: 81573

Moderate: DCT is applied incorrectly in non-TVC cluster.

Pervasive: No

Ref: 81703

Moderate: "Maximum Virtual Devices Mounted" value in BVIR output becomes 0 after the cluster went offline.

Pervasive: No

Ref: 81750

Moderate: If a private mount to a volume to which no data is written yet is issued, it always fails when any cluster is unavailable in the Grid or all clusters in the Grid are already replaced from the original Grid by unjoin/join MES.

Pervasive: No

Ref: 81785

Moderate: Installing VTD_EXEC.182 may deadlock other clusters in the grid and potentially initiate a reboot.

Pervasive: No

Ref: 81792

Moderate: Could not update the live cluster masks due to an error during reading the vital product data.

Pervasive: No

Ref: 81875

Moderate: During excessive VPD query, an error in loading VPD does not return back to caller so the default/wrong data returned caller.

Pervasive: YES

Ref: 81999

Moderate: Update Houston adapter firmware to address an issue with configuring flow control on a 10GB ethernet switch

Pervasive: No

Ref: 82000

Moderate: Remove and replace of a 10GB ethernet card did not configure the new card correctly resulting in performance issues.

Pervasive: No

Ref: 82038

Moderate: Grid to grid merge creates a huge number of tasks and when trying to load the tasks page the MI server ran out of memory

Pervasive: No

Ref: 82045

Moderate: System checkout does not handle '.' or '-' in LDAP server name

Pervasive: No

Ref: 82075

Moderate: Alert needed when filesystems are getting full

Pervasive: No

Ref: 82082

Moderate: Offsite Reclaim treats its target lvols as PG0 and makes them migrated state after secondary copies are recreated even though they are configured to PG1 and are premigrated state before starting Offsite Reclaim.

Pervasive: YES

Ref: 82085

Moderate: If online is issued while a previous offline still pending, online process may hang.

Pervasive: No

Ref: 82108

Moderate: MI dumps fill up a file system.

Pervasive: No

Ref: 82140

Moderate: MI blocking demount of a virtual tape drive because status is not idle

Pervasive: No

Ref: 82176

Moderate: Change password form will display the password in plain text if password is entered incorrectly

Pervasive: No

Ref: 82218

Moderate: There is a logging file that keeps a history of the tape drive and physical library errors that is used for viewing by the technical support staff. This file grows slowly, but it needs to be pruned periodically.

Pervasive: No

Ref: 82224

Moderate: While the customer changed DCTAVRTD, it did not work correctly from the perspective of the customer. It was because hidden DCTCURTD stayed default value.

Pervasive: No

Ref: 82264

Moderate: Trying to see the details of a damaged volume shows a big error on the Virtual Volume Details page without explanation

Pervasive: No

Ref: 82271

Moderate: Failed to switch over to secondary key server when unable to access the primary key server

Pervasive: No

Ref: 82300

Moderate: customer has problems using LDAP policies to login MI due permissions limitations on the LDAP server, there are search restrictions that doesn't allow the authentication

Pervasive: No

Ref: 82349

Moderate: After unjoin, system max logical volume setting may change so need check and update.

Pervasive: No

Ref: 82369

Moderate: The performance of auto-removal is slow when many small scratch volumes exist.

Pervasive: YES

Ref: 82385

Moderate: A database deadlock may prevent disabling DR flash copy.

Pervasive: No

Ref: 82398

Moderate: When pre-migrated volumes get recovered from a physical volume by Read Only Recovery, they will not be pre-migrated immediately up to 4 hours.

Pervasive: No

Ref: 82401

Moderate: The key server information unexpectedly disappears from the TS7700's configuration, causing tape drive encryption to not function

Pervasive: No

Ref: 82466

Moderate: "SETTING,RECLAIM,RCLMSMAX" Library Request command does not fail when it is executed on homogeneous drive environment.

Pervasive: No

Ref: 82539

Moderate: Grid Copy got stuck so logical volume handled by it was kept to be locked on Grid Copy target cluster. As a result, other operations which want to use the locked logical volume could not work on the Grid Copy target cluster. The way to recover from this state is to making offline/online the Grid Copy source cluster.

Pervasive: No

Ref: 82679

Moderate: Mark a volume as "Removed" when the volume with "Exist" copy mode is deleted by the setting of LI REQ, EXISTDEL function to clearly state no consistent volume exists on the cluster.

Pervasive: No

Ref: 82691

Moderate: Do not allow a cluster join or grid merge to start if a grid/cluster renumber failed to complete.

Pervasive: No

Ref: 82736

Moderate: The physical tape drive status is seen on the TS7700 Management Interface as offline when it was actually online and being used

Pervasive: No

Ref: 82812

Moderate: Volume demount from the Management Interface is incorrectly denied

Pervasive: No

Ref: 82923

Moderate: Check for undefined host ports

Pervasive: No

Ref: 82958

Moderate: Manufacturing cleanup failed and the checkpoint restart failed because the cache passwords had been deleted

Pervasive: No

Ref: 83014

Moderate: Error reported when cache firmware was upgraded even though the upgrade was successful

Pervasive: No

Ref: 83138

Moderate: MI server process not starting up with correct ownership resulting in errors with process connections

Pervasive: No

Ref: 83177

Moderate: If logical volume auto-removal is enabled and the cache still gets full, no call home is initiated.

Pervasive: No

Ref: 83277

Moderate: New function to change limited cache threshold by LI REQ.

Pervasive: No

Ref: 83278

Moderate: When a user wants to mount a volume, the response takes a long time to respond, it is taking almost 30 seconds.

Pervasive: No

Ref: 83292

Moderate: A process could not report correct information to log when it received a signal from AIX due to logic error. This fix is for a first time data capture

Pervasive: No

Ref: 83419

Moderate: Network issues may cause a large amount of unnecessary hot token merges and result in consuming an excessive amount of memory that will lead to rebooting the cluster

Pervasive: No

Ref: 83522

Moderate: Mount performance issue due to the Management Interface trying to retrieve tape device information incorrectly.

Pervasive: No

Ref: 83528

Moderate: Call home was not initiated when TS7720 cache went to 100% full

Pervasive: No

Ref: 83530

Moderate: Some information about pool property in VEHSTATS report is missing when a cluster is upgraded from R3.2 to R3.3 or later

Pervasive: YES

Ref: 83611

Moderate: Remove the threshold for monitor database connections

Pervasive: No

Ref: 83736

Moderate: The encryption key server information kept in the TS7700's vital product data gets removed unexpectedly.

Pervasive: No

Ref: 83947

Moderate: Incorrect reporting of unreadable sectors in the cache

Pervasive: No

Ref: 84024

Moderate: DES and 3DES algorithms are considered insecure, so we need to remove them as an option in the SSL cipher suites

Pervasive: No

Ref: 84043

Service: Service cancel fails in case creating a task tracking record fails

Pervasive: No

Ref: 75546

Service: vtd network check reports issues with LDAP server, but customer has round robin settings and not all of his ip addresses have issues

Pervasive: No

Ref: 79135

Service: Grid network check alerted grid link issues against cluster into service state.

Pervasive: No

Ref: 81061

Service: A Replacement DDM was taken as bad during a drawer mes

Pervasive: No

Ref: 81310

Service: verify_card_slots (Card Positions checkpoint into vtd hardware check) shows wrong fcs adapters count when there're adapters into defined state (R/R cleaning procedure fix into 81425 defect)

Pervasive: YES

Ref: 81368

Service: The db2 reduce command is not recognized by older levels of db2 during a server/frame replacement.

Pervasive: No

Ref: 81376

Service: Currently, there are two TS7700 Management Interface Events that contain the "% " [percent space] string that causes the host message to be constructed incorrectly. As a result, the message sent to the host contains a huge number in place of the % sign.

Pervasive: No

Ref: 81912

Service: System may report a false device drive to cause confusion

Pervasive: No

Ref: 82240

Service: Tool to display the cache partition sizes is displaying a negative value

Pervasive: No

Ref: 82270

Service: LI REQ SETTING,ALERT,PCPYCRIT/PCPYLOW couldn't work properly and a false alert may be surfaced or the expected alert may not be surfaced.

Pervasive: No

Ref: 82320

Service: MI shows Released Code Level of accessing cluster wrong.

Pervasive: No

Ref: 82469

Service: According to defect the icon "Virtual volume not in cache" is being displayed when it should not. By example it shouldn't been displayed if the virtual volume has been created because it isn't in the primary cache and has not been migrated.

Pervasive: No

Ref: 82694

Service: Updated system firmware to the latest golden level

Pervasive: No

Ref: 82755

Service: DDM replacement status is hung

Pervasive: No

Ref: 82784

Service: Added new mfg released HW in system supported FRU table

Pervasive: No

Ref: 82951

Service: Ficon adapter error occurs when trying to offline a cluster multiple times and can lead to a reboot

Pervasive: No

Ref: 83444

Service: Security scanners complaining about missing 3 HTTP headers that provide more protection against direct attacks.

Pervasive: No

Ref: 83561

Improvement: NF Rebuild task in MI

Pervasive: No

Ref: 72839

Improvement: Core files are missing in dump collection

Pervasive: No

Ref: 74134

Improvement: The new copy types (copy refresh and family deferred) are not displayed in incoming copy queue spreadsheet

Pervasive: No

Ref: 75307

Improvement: There is no host notification when a cluster fails and goes offline

Pervasive: No

Ref: 75699

Improvement: Support a new LI REQ, DRSETUP,LIVEACC to allow the live copy volume access through the devices attached to the DR family cluster.

Pervasive: No

Ref: 75882

Improvement: Customer is not able to set the ownership takeover through LI REQ.

Pervasive: No

Ref: 76845

Improvement: The problem is related to how zVSE cannot alter its private category during a DR test. zVSE is unique in how it uses categories. It can use unique scratch categories for new allocations, but its private category is fixed to 0xFFFF. A volume created by a DR LPAR after the time zero, the access of it is denied because it didn't exist prior to time zero. Thus, anything the DR host creates DURING the DR test, it can't access later. In R3.3, the following library request was added to allow read only access to those kind of volumes.

LI REQ, <distributed library>,

DRSETUP, <DR family>, SELFLIVE, [ENABLE | DISABLE]

However, since write access to those volumes are not allowed, it prevents some DR test cases.

Pervasive: No

Ref: 78350

Improvement: The new copy types (copy refresh and family deferred) are not displayed in incoming copy queue spreadsheet

Pervasive: No

Ref: 78527

Improvement: Collect additional CMQ data during dump collection

Pervasive: No

Ref: 79159

Improvement: Correct V06 feature codes in the Customer InfoCenter.

Pervasive: No

Ref: 79250

Improvement: Messages in Physical and Virtual Mounts pages are not clear. Some of our clients think that these pages are showing the statistics for the Physical and Virtual Mounts for 15 minutes after mounting volumes. These statistics are taken from the MOST RECENT 15-MINUTE SNAPSHOT, and this snapshots are calculated each quarter of an hour in the system. I.E if a user mounts a virtual volume at 10:20am, then the statistics generated from this procedure are going to be displayed in the snapshot from 10:15am to 10:30am.

Pervasive: No

Ref: 79728

Improvement: Support a new LI REQ, DIAGDATA to provide Grid-Grid handshake statistics.

Pervasive: No

Ref: 80430

Improvement: Grid to Grid migration flooded the operating system's error log causing other errors to not be logged.

Pervasive: No

Ref: 80536

Improvement: Add logging parameters to help debug database deadlocks. The grid code spawned additional threads, in an attempt to complete its work, and eventually ran out of memory causing a core. This resulted in a reboot. From the logs provided we are not able to identify the root cause of this problem.

Pervasive: No

Ref: 80703

Improvement: The host notification messages sent to the host were using message identifiers (IDs) already used by other messages.

Pervasive: No

Ref: 81201

Improvement: Support a RPQ request to use a standalone cluster as CSG in the GGM setup.

Pervasive: No

Ref: 81247

Improvement: Some firewalls will trigger a warning to the customer due to ID = 0.

Pervasive: No

Ref: 81325

Improvement: Some customers are running LDAP on a very restrained environment and a regular LDAP search method does not work there, so LDAP is unusable in these scenarios.

Pervasive: No

Ref: 81326

Improvement: Display installed vtd_execs on internal development tools

Pervasive: No

Ref: 81339

Improvement: Collect a GPFS snap after a check1

Pervasive: No

Ref: 81538

Improvement: First time data capture for RCA on a reboot

Pervasive: No

Ref: 81541

Improvement: Keep history of events for 180 days and provide interface for customer to download the file

Pervasive: No

Ref: 81983

Improvement: Damaged volumes are not getting logged when they are found

Pervasive: No

Ref: 82074

Improvement: Cleanup performance summary files that are older than 30 days to avoid filling a file system.

Pervasive: No

Ref: 82116

Improvement: List of allowed customer IPs need to be updated

Pervasive: No

Ref: 82378

Improvement: Add the ability to respawn the process that moves data from cache to tape.

Pervasive: No

Ref: 82524

Improvement: Copy stuck resulting in inability to access the logical volume.

Pervasive: No

Ref: 82525

Improvement: Incorrect calculations of sizes reported on the web MI.

Pervasive: No

Ref: 82549

Improvement: Changed a Hydra application timing so system can report error condition fast

Pervasive: No

Ref: 82596

Improvement: ISKLM for zOS information should not be in the 7700 service Knowledge Center

Pervasive: No

Ref: 82614

Improvement: Increase the WORM expire hold max limit from 3 years to 10 years

Pervasive: No

Ref: 82622

Improvement: The customer needs an extension of the time that is allowed for categories expiration.

Pervasive: No

Ref: 82670

Improvement: Worm expire hold protection has been extended to 10 years update documentation

Pervasive: No

Ref: 82671

Improvement: Ficon adapter does not become online depending on adapter configuration ordering

Pervasive: No

Ref: 82676

Improvement: Need to be able to search by compression method on Virtual Volume Search page

Pervasive: No

Ref: 82867

Improvement: New Fence mechanism requires a new option via AOTM

Pervasive: No

Ref: 83155

Improvement: Copy stuck need to restart the remote copy server.

Pervasive: No

Ref: 83275

Improvement: AL5012 host message states "disk-only cluster" even on TS7700T.

Pervasive: No

Ref: 83307

Improvement: SMIT needs to have a new option to display Notification settings

Pervasive: No

Ref: 83427

Improvement: MDE descriptions needs to be up to date to be displayed in the web interface

Pervasive: No

Ref: 83999

Improvement: Knowledge center interventions are downlevel

Pervasive: No

Ref: 84057