TS7700 VTD_EXEC Release Notes

IBM System Storage TS7700

Release Notes for TS7700 (3948 VED / 3957 VED / 3957 VEC) VTD_EXEC

- Released 28 October 2024

PROBLEM FIXES:
Known field issues fixed in the various VTD_EXEC are described below.

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

vtd_exec release 10/28/24

vtd_exec.205 v1.09

Hydradump updates for log collection.

vtd_exec.347 v2.06

Firmware Updates and Security Enhancements for TS7700 Cache Systems, including updates for CSB and CFC (cache FW, expansion FW, drive package FW) and Upgrade Test Utility. Additional cache and disk scripts/API updates and security fixes.

vtd_exec.269 v2.09

Java updates for TS7700

vtd_exec.279 v1.19

Security improvements - https://www.ibm.com/support/pages/node/7171822

vtd_exec.405 v1.00

Security improvements - https://www.ibm.com/support/pages/node/7171828

vtd_exec.408 v1.00

Service Authorization Fixes

vtd_exec.904 v1.09

Web Code Updater for TS7700 code level R5.4

Serious: Addresses an issue where LDAP user ability to create/modify is discarded
Pervasive: No
Reference: 97205

Serious: Addresses an issue where Dual Control is incorrectly stating there are not enough checkers available
Pervasive: No
Reference: 97206

Serious: Address an issue where the MI login fails if the administrator account is not correctly set in the database

Pervasive: No
Reference: 97236

Moderate: Addresses an issue where the client can not create a Management Class or Logical Volume Search
Pervasive: Yes
Reference: 97277

vtd_exec.182 v1.38

Updates to Joins and Merges

vtd_exec.904 v1.05

R54 Web Code Updater

vtd_exec release 06/24/24

vtd_exec.182 v1.37

Updates to Joins and Merges

vtd_exec.261 v1.13

Frame replacement pre-check

vtd_exec.404 v1.00

TCT Monitor for S3 Server in R5.4PGA1

vtd_exec.406 v1.00

Disable unused code functionality for code hygiene purposes

vtd_exec.407 v1.04

Security Enhancement: Update Python to address security vulnerabilities

vtd_exec.903 v1.16

R53 Web Code Updater

vtd_exec.904 v1.04

R54 Web Code Updater

vtd_exec.402 v1.00

TS7700C S3 Server SSL Cert Verification Fix For TCT Cloud Using Proxy Server

vtd_exec.103 v2.04

This exec provides system checkout updates to enhance serviceability of the TS7700

vtd_exec.279 v1.18

Security improvements

Note: vtd_exec.279 v1.18 vs 1.17
The later version contains support for an additional code level.
There is no need to install v1.18 over v1.17 as there are no functional differences.

vtd_exec release 04/08/24

vtd_exec.269 v2.07

Java updates for TS7700

vtd_exec.279 v1.17

Security improvements – https://www.ibm.com/support/pages/node/7142104

vtd_exec.401 v1.01

Fix for the issue of cache_quotas_mgr execution failure

vtd_exec release 01/29/24

vtd_exec.269 v2.05

Security improvements – https://www.ibm.com/support/pages/node/7105342

vtd_exec release 12/11/23

vtd_exec.103 v2.02

This exec provides system checkout updates to enhance serviceability of TS7760 and TS7770

vtd_exec.399 v1.01

Service: Addresses issue where health status of TS7760 backend disk cache is not properly reported in TS7760 MI tasks
Pervasive: No
Reference: 95115

vtd_exec.901 v1.19 (R5.2 Phase 1)
vtd_exec.903 v1.10 (R5.3)

Security improvements - https://www.ibm.com/support/pages/node/7092383

Note: Contrary to prior guidance, improvements provided through vtd_exec.901 and vtd_exec.903 cannot be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) at this time. Please engage with the RCL team as required: https://tape.ibmrcl.enterpriseappointments.com/v2/

vtd_exec release 10/30/23

vtd_exec.080 v1.37

Service Tool: Backup for server/frame replacement MES

vtd_exec.279 v1.15

Security improvements: Updating code libraries to latest versions for code hygiene

vtd_exec.389 v1.07

Code signing to be able to upgrade to R5.3 or R5.4

Note: This vtd_exec must be installed on systems with lower code level prior to upgrading to R5.3 or upgrading to R5.4

vtd_exec.400 v1.00

Watchdog for FC 5278, Enable Cloud Storage Tier

vtd_exec release 10/12/23

vtd_exec.103 v1.99

This exec provides system checkout updates to enhance serviceability of TS7760 and TS7770

Addresses TS7700 (3957-VED, 3948-VED) with code level

vtd_exec release 09/14/23

vtd_exec.182 v1.36

Service improvements to support TS7700 cluster join/merge operation.

vtd_exec.398 v1.00

Improvements to rsyslog

vtd_exec.901 v1.14 (R5.2 Phase 1)
vtd_exec.903 v1.07 (R5.3)

Security improvements - https://www.ibm.com/support/pages/node/7031979

Note: Contrary to prior guidance, improvements provided through vtd_exec.901 and vtd_exec.903 cannot be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) at this time. Please engage with the RCL team as required: https://tape.ibmrcl.enterpriseappointments.com/v2/

vtd_exec release 07/31/23

vtd_exec.188 v1.55

Improvements to Call Home functionality

vtd_exec.269 v2.04

Security improvements – https://www.ibm.com/support/pages/node/7015879

vtd_exec release 07/05/23

vtd_exec.103 v1.95

This exec provides system checkout updates to enhance serviceability of TS7760 and TS7770

vtd_exec.347 v2.04

Firmware Updates for backend disk cache and drives.

vtd_exec release 05/30/23

vtd_exec.269 v2.03

Security improvements – https://www.ibm.com/support/pages/node/6985503

vtd_exec.279 v1.13

Security improvements - https://www.ibm.com/support/pages/node/6984425

vtd_exec release 05/02/23

vtd_exec.182 v1.27

Service improvements to support TS7700 cluster join/merge operation.

vtd_exec.900 v1.14 (R5.1)
vtd_exec.901 v1.11 (R5.2 Phase 1)
vtd_exec.903 v1.04 (R5.3)

Security improvements - https://www.ibm.com/support/pages/node/6980845

Note: Contrary to prior guidance, improvements provided through vtd_exec.900, vtd_exec.901 and vtd_exec.903 cannot be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) at this time. Please engage with the RCL team as required: https://tape.ibmrcl.enterpriseappointments.com/v2/

vtd_exec.103 v1.93

This exec provides system checkout updates to enhance serviceability of the TS7700

vtd_exec.347 v2.00

TS7770 backend disk cache HDD/SSD firmware update for CSB/XSB
Added support for additional CSC/XSC SSD FRU

vtd_exec release 01/30/23

vtd_exec.269 v2.02

Security improvements – https://www.ibm.com/support/pages/node/6858055

vtd_exec.389 v1.06

Code signing to be able to upgrade to R5.3

Note: this exec must be installed on system with R5.1 or R5.2 before upgrading to 5.3 GA or above

vtd_exec release 01/10/23

vtd_exec.396 v1.00

Moderate: Fix for improper date stamp in backend disk cache battery VPD of TS7770 with 3956-CSB
       Note: This may result in the TS7770 backend disk cache reporting a premature battery end of life warning.
        This applies to a small subset of batteries manufactured in 2020.
Pervasive: No
Reference: 94216

vtd_exec release 12/07/22

vtd_exec.269 v2.01

Security improvements – https://www.ibm.com/support/pages/node/6844439

vtd_exec.279 v1.12

Security improvements - https://www.ibm.com/support/pages/node/6844445

vtd_exec.900 v1.10 (R5.1)
vtd_exec.901 v1.08 (R5.2 Phase 1)
vtd_exec.902 v1.03 (R5.2 Phase 2)
vtd_exec.903 v1.02 (R5.3)

Security improvements - https://www.ibm.com/support/pages/node/6844441

Note: Improvements provided through vtd_exec.900, vtd_exec.901, vtd_exec.902 and vtd_exec.903 can be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) once the necessary updates were acquired through call home functionality:
https://www.ibm.com/docs/en/ts7700-virtual-tape/5.3?topic=service-update-system

vtd_exec release 10/31/22

vtd_exec.103 v1.92

This exec provides system checkout updates to enhance serviceability of the TS7700

vtd_exec.331 v1.06

Various fixes related to hardware MES and Remove/Replace procedures

vtd_exec release 10/19/22

vtd_exec.391 v1.00

Improved hardware location reporting of server internal DDM/SSD

vtd_exec.395 v1.00

Fixed issue where TS1160 tape drive encryption using JE and JM media type was not working properly

vtd_exec release 09/30/22

vtd_exec.394 v1.00

Mandatory exec to for CSB/CFC STRING MES CSB/CFC with code 5.3 and external encryption enable

vtd_exec.103 v1.91

This exec provides system checkout updates to enhance serviceability of the TS7700.

vtd_exec.269 v2.00

Security improvements – https://www.ibm.com/support/pages/node/6824193

vtd_exec release 09/15/22

vtd_exec.389 v1.04

Code signing to be able to upgrade to 5.3

Note: this exec must be installed on system with R5.1 or R.52 before upgrading to 5.3 GA

vtd_exec release 08/29/22

vtd_exec.205 v1.07

Hydradumps updates
Reference: 91698, 90506, 92316, 92864

vtd_exec.279 v1.11

Security improvements - https://www.ibm.com/support/pages/node/6616067

vtd_exec.387 v1.00

Fileset Case Fix
Reference: 93545

Note: This exec is a tool that can be used as needed. It addresses the known dependency where DS8k cloud names
https://www.ibm.com/support/pages/node/6597671

vtd_exec.900 v1.08

Web Code Updater for TS7700 code level R5.1
- Provides additional security improvements.

Reference: 91402, 93407

vtd_exec release 07/28/22

vtd_exec.372 v1.04

Install improvements only, same functionality as v1.01 (VEC) and v1.02 (VED) and v1.03 (both)

Note: Install of v1.04 over v1.01 or v1.02 or v1.03 is unnecessary as the provided functionality is identical.

Note: With TS7770 (3957-VED) this vtd_exec will be installed prior to a TS7770 code update to detect the potential issue and apply the required correction if needed, typically 2-3 days ahead of time.

vtd_exec release 07/11/22

vtd_exec.384 v1.02

Various improvements TS7700 MI (management interface) and underlying web server

vtd_exec.900 v1.07

Web Code Updater for TS7700 code level R5.1

- Various improvements TS7700 MI (management interface) and underlying web server

vtd_exec.901 v1.05

Web Code Updater for TS7700 code level R5.2 Phase 1

- Various improvements TS7700 MI (management interface) and underlying web server

vtd_exec.902 v1.01

Web Code Updater for TS7700 code level R5.2 Phase 2

- Various improvements TS7700 MI (management interface) and underlying web server

Note: Improvements provided through vtd_exec.900, vtd_exec.901 and vtd_exec.902 can be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) once the necessary updates were acquired through call home functionality:
https://www.ibm.com/docs/en/ts7700-virtual-tape/5.2.2?topic=service-update-system

vtd_exec release 06/27/2022

vtd_exec.269 v1.22

- Security improvements – https://www.ibm.com/support/pages/node/6591077

vtd_exec release 04/25/2022

vtd_exec.365 v1.05

- Improves remove/replacement procedure for server internal disk
- Updated Firmware for server internal SSD

vtd_exec.372 v1.03

- Install improvements only, same functionality as v1.01 (VEC) and v1.02 (VED)
  Note: Install of v1.03 over v1.01 or v1.02 is unnecessary as the provided functionality is identical
  Note: With TS7770 (3957-VED) this vtd_exec will be installed prior to a TS7770 code update to detect
     the potential issue and apply the required correction if needed, typically 2-3 days ahead of time.

vtd_exec release 03/07/2022

vtd_exec.384 v1.01

Security improvements - https://www.ibm.com/support/pages/node/6524972

vtd_exec release 02/28/2022

vtd_exec.269 v1.21

Security improvements – https://www.ibm.com/support/pages/node/6552866

vtd_exec.372 v1.02

Serious: Addresses rare issue when extending a filesystem logical volume within a TS7770 Volume Group
Note: This vtd_exec will be installed prior to a TS7770 code update to detect the potential issue
and apply the required correction if needed, typically 2-3 days ahead of time.
Pervasive: No
Reference: 92836

vtd_exec release 01/31/2022

vtd_exec.347 v1.06

TS7770 backend disk cache and HDD/SSD firmware update for CSB/XSB and CFC/XFC

- Added support for additional CSB/XSB HDD FRU

vtd_exec.900 v1.06

Web Code Updater for TS7700 code level R5.1

- Install improvements only, same functionality as v1.05

Note: Improvements provided through vtd_exec.900 can be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) once the necessary updates were acquired through call home functionality: https://www.ibm.com/docs/en/ts7700-virtual-tape/5.2.2?topic=service-update-system

vtd_exec.901 v1.04

Web Code Updater for TS7700 code level R5.2

- Install improvements only, same functionality as v1.03

Note: Improvements provided through vtd_exec.901 can be installed by a client operator through the TS7700 Web User Interface (Management Interface, MI) once the necessary updates were acquired through call home functionality: https://www.ibm.com/docs/en/ts7700-virtual-tape/5.2.2?topic=service-update-system

vtd_exec release 12/10/2021

vtd_exec.901 v1.03

Web Code Updater for TS7700 code level R5.2

- Security improvements - https://www.ibm.com/support/pages/node/6524972

vtd_exec release 11/29/2021

vtd_exec.188 v1.54

Improvements to Call Home functionality

vtd_exec.334 v1.03

Memory usage monitor

vtd_exec.346 v1.04

Improve reporting of FIPS status for 3956-CSA

vtd_exec.348 v1.00

Improvements to Grid unjoin

vtd_exec.378 v1.00

Add support for additional FCP adapter FRU

vtd_exec.900 v1.05

Web Code Updater for TS7700 code level R5.1

- Security improvements - https://www.ibm.com/support/pages/node/6524972
- Security improvements - Removed SHA1 cipher
- Added support for reporting tape partition type
- Fixed issue where local login may fail due to prior LDAP dependency
- Improved message details for various operator messages for DS8000 Object Store
- Improved vtd_exec.900 Fix Acquisition

vtd_exec release 10/27/2021

vtd_exec.256 v1.04

Usability improvements for SSR service interface

vtd_exec.269 v1.19

Security improvements – https://www.ibm.com/support/pages/node/6507117

vtd_exec.347 v1.05

TS7770 backend disk cache and HDD/SSD firmware update for CSB/XSB and CFC/XFC

- Updated cache controller firmware for all TS7700 with microcode level R5.2 Phase 2 (8.52.100.32)
- Updated HDD and SSD firmware
- Improved reporting of vtd_exec install status
- Improved backend disk cache health checking, currently reporting "Array response too high"

vtd_exec.365 v1.04

Updated Firmware for server internal HDD and SSD

vtd_exec release 10/05/2021

vtd_exec.900 v1.03

Web Code Updater for TS7700 code level R5.1

- Security improvements - https://www.ibm.com/support/pages/node/6495469

vtd_exec.901 v1.02

Web Code Updater for TS7700 code level R5.2

- Security improvements - https://www.ibm.com/support/pages/node/6495469

vtd_exec release 09/27/2021

vtd_exec.188 v1.53

Improvements to Call Home functionality

vtd_exec.376 v1.00

Service: Fixed issue resulting in SSL certificate validation failure when using client CA certificate
Pervasive: No
Reference: 91930

vtd_exec release 09/03/2021

vtd_exec.901 v1.01

Web Code Updater for TS7700 code level R5.2

- Fixed display issue where FC ports were reported as copper
- Fixed issue preventing remote authentication policies from being modified
- Updated embedded client documentation

vtd_exec.377 v1.00

Increases number of objects that can be stored in TS7700 through DS8000 Object Store

vtd_exec.331 v1.05

Fix for FC 8083 MES when installing 3.84TB SSDs in TS7770 (3957-VED) server

<div align="center">**vtd_exec release 07/26/2021**</div>

vtd_exec.372 v1.01

Re-release of fix provided with vtd_exec.372 v1.00 with installation improvement to not trigger false call home
Note: Install of v1.01 over v1.00 is unnecessary as the provided functionality is identical

vtd_exec.364 v1.02

Re-release of fix provided with vtd_exec.364 v1.00 with installation improvement and supporting older R5.0 code level
Note: Install of v1.02 over v1.00 is unnecessary as the provided functionality is identical

vtd_exec.331 v1.04

Serious: Improvements for Grid Ethernet MES from 1Gb/s to 10Gb/s, and adapter remove/replace
Pervasive: No
Reference: 91405 91263

vtd_exec release 06/28/2021

vtd_exec.374 v1.04

Re-release of fix provided with vtd_exec.374 v1.03 with installation improvement during RCL
Note: Install of v1.04 over v1.03 is unnecessary as the provided functionality is identical

vtd_exec.365 v1.03

Re-release of fix provided with vtd_exec.365 v1.01/v1.02 with installation improvement during RCL
Note: Install of v1.03 over v1.01/v1.02 is unnecessary as the provided functionality is identical

vtd_exec.368 v1.00

Serious: Fixed potential problem that can result in issues with volume ownership/damaged volume/hot token
Pervasive: No
Reference: 91354

vtd_exec.370 v1.00

Serious: Improvements to handling of backend disk cache
Pervasive: No
Reference: 91464

vtd_exec.372 v1.00

Serious: Improvement to repair process for TS7760 internal HDD
Pervasive: No
Reference: 91670

vtd_exec release 05/24/2021

vtd_exec.364 v1.00

Moderate: Fixes for Cloud Storage Tier improving cloud recall/cloud premig handling
Pervasive: No
Reference: 90793

vtd_exec release 04/30/2021

vtd_exec.103 v1.89

Serious: Call Home code is calling out a DDM that had just been replaced
Pervasive: No
Reference: 91262

vtd_exec.347 v1.03

Serious: Fixed issue resulting in increased 10TB DDM fallout
Pervasive: No
Reference: 91222

vtd_exec.358 v1.02

Re-release of fix provided with vtd_exec.358 v1.01 for various code level now for R5.1 GA (8.51.0.63)

vtd_exec.365 v1.01

Updated Firmware for server internal HDD and SSD

vtd_exec.366 v1.02

Re-release of fix provided with vtd_exec.366 v1.01 for various code level now for R5.1 GA (8.51.0.63)

vtd_exec.367 v1.00

Moderate: Fixed issue where disk cache capacity is improperly reported after installing R5.1
Pervasive: No
Reference: 91267

vtd_exec release 03/29/2021

vtd_exec.269 v1.18

Security improvements - https://www.ibm.com/support/pages/node/6420469

vtd_exec.358 v1.01

Moderate: Volumes not migrated out of cache when cloud attached - cache shows over-committed on partition 1
Pervasive: No
Reference: 90637

vtd_exec.366 v1.01

Serious: Database re-org fails to run due to missing hourly database statistics
Pervasive: No
Reference: 89977

Serious: Adding reorg fix from vtd_exec.366 v1.01 missing binaries for 8.51.0.63
Pervasive: No
Reference: 91349

Service: Fixed issue where online reorg may skip index reorg
Pervasive: No
Reference: 91106

vtd_exec release 02/19/2021

vtd_exec.343 v1.07

Moderate: Management interface does not report licensed feature codes when vtd_exec.343 v1.06 is installed
Pervasive: No
Reference: 90844

vtd_exec.363 v1.00

Fixed problem to address potential memory leak when using SDT and grid copy issue

vtd_exec release 01/25/2021

vtd_exec.347 v1.02

Moderate: Cache firmware update for CSB and XSB cache types with mixed DDMs
Pervasive: No
Reference: 90848

vtd_exec.900 v1.02

TS7700 Management Interface performance improvements, plus fixes from vtd_exec.900 v1.00

vtd_exec release 12/23/2020

vtd_exec.355 v1.06

Serious: Potential external key manager access issue after code update
Pervasive: No
Reference: 90578

Serious: Fixed issue where DDM firmware update could run for long time
Pervasive: No
Reference: 90711

Serious: Regeneration of keys for CSB cache type for External and Local encryption types is only happening for String0 (base cache)
Pervasive: No
Reference: 90725

vtd_exec release 12/18/2020

vtd_exec.347 v1.01

Serious: Cache firmware update for CSB and XSB cache types
Pervasive: YES
Reference: 89787

vtd_exec release 12/01/2020

vtd_exec.103 v1.88

Serious: Detect low TX power on Bluefish FCP adapter, report error and generate a call home
Pervasive: No
Reference: 90516

vtd_exec.256 v1.03

Usability improvements for SSR service interface

vtd_exec.269 v1.17

Security improvements - https://www.ibm.com/support/pages/node/6374032

vtd_exec.343 v1.06

TS7700 Management Interface performance improvements

vtd_exec release 10/26/2020

vtd_exec.205 v1.06

Serious: Filesystem filled during log collection
Pervasive: No
Reference: 90023

Improvement: Log collection may not gather all required logs
Pervasive: No
Reference: 90025

vtd_exec.279 v1.10

Security improvements - https://www.ibm.com/support/pages/node/6353443

vtd_exec.355 v1.03

Serious: Potential performance issue after backend disk cache MES
Pervasive: No
Reference: 90494

vtd_exec release 09/30/2020

vtd_exec.182 v1.27

Serious: During join/merge operation an existing I/O running cluster may fail to mount a new vol
Pervasive: No
Reference: 90352

vtd_exec.343 v1.04

Serious: Management interface performance enhancements
Pervasive: No
Reference: 90056

vtd_exec.355 v1.02

Service: Improve encryption return codes for proper system health status
Pervasive: No

Reference: 90241

vtd_exec release 09/28/2020

vtd_exec.900 v1.00

Improved handling for Dual Control

vtd_exec release 08/31/2020

vtd_exec.269 v1.16

Security improvements - https://www.ibm.com/support/pages/node/6260995

vtd_exec.346 v1.02

Add support for additional 8TB DDM FRU for 3956-CSA

vtd_exec.357 v1.01

Serious: Reduce online time for TS7760 when updating microcode from 8.4x to 8.5x level
Pervasive: No
Reference: 90184