TS7700 VTD_EXEC Release Notes

IBM System Storage TS7700

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

• Released 30 January 2023

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 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_exec103 v1.92

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

vtd_exec331 v1.06

Various fixes related to hardware MES and Remove/Replace procedures

vtd_exec release 10/19/22

vtd_exec391 v1.00

Improved hardware location reporting of server internal DDM/SSD

vtd_exec395 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 – <u>https://www.ibm.com/support/pages/node/6824193</u>

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 <u>https://www.ibm.com/support/pages/node/6597671</u>

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 – <u>https://www.ibm.com/support/pages/node/6591077</u>

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 - <u>https://www.ibm.com/support/pages/node/6524972</u>

vtd_exec release 02/28/2022

vtd_exec.269 v1.21

Security improvements - <u>https://www.ibm.com/support/pages/node/6552866</u>

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 - <u>https://www.ibm.com/support/pages/node/6524972</u>

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 <u>https://www.ibm.com/support/pages/node/6524972</u>
- 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 - <u>https://www.ibm.com/support/pages/node/6495469</u>

vtd_exec.901 v1.02

Web Code Updater for TS7700 code level R5.2

• Security improvements - <u>https://www.ibm.com/support/pages/node/6495469</u>

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

vtd_exec release 07/26/2021

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