

## New as of 2021-01-25:

This matrix provides an overview of available VTD\_EXEC that may be applied to supported systems with supported code level.

While all VTD\_EXEC are typically recommended, not all VTD\_EXEC are necessarily applicable.

Examples:

- Some VTD\_EXECs only apply to systems in a GRID configuration.
- Some VTD\_EXECs only apply when upgrading code or making a configuration change.
- Some VTD\_EXECs only apply when a specific 3956 disk cache or a specific hardware feature is present.

2020-10-01: Initial version covering TS7700 R4.1 Phase 2, R4.2, R5.0 and R5.1

2020-10-26: Added vtd\_exe.205 v1.06, vtd\_exec.279 v1.10 and vtd\_exec.355 v1.03

2020-12-01: Added vtd\_exe.103 v1.88, vtd\_exec.256 v1.03, vtd\_exec.269 v1.17 and vtd\_exec.343 v1.06

Moved R4.1 references to history as R4.2 PGA2 is minimum code

Moved vtd\_exec references applicable to R4.1 and older R5.0 to history

2020-12-23: Added vtd\_exe.347 v1.01 and vtd\_exec.355 v1.06

2021-01-25: Added vtd\_exe.347 v1.02 and vtd\_exec.900 v1.02

Moved R5.0 GA, PGA0 and PGA1 references to history as R5.0 PGA2 is recommended code

TS7700 Release Version Code Version VTD\_EXECs

TS7700 R5.1	8.51.0.63	103_v1.88(VED) 182_v1.27(join/merge/ClusterRenumber) 279_v1.10(security) 347_v1.02(VED) 355_v1.06(all) 900_v1.02(all)
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TS7700 R5.0 PGA2	8.50.2.6	103_v1.88(VED) 182_v1.27(join/merge/ClusterRenumber) 205_v1.06(all) 256_v1.03(all) 269_v1.17(security) 279_v1.10(security) 343_v1.06(all) 346_v1.02(VEC) 347_v1.02(VED) 355_v1.06(all) 357_v1.01(VEC/actFinis)
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Note: vtd\_exec references for R5.0 GA, R5.0 PGA0 and R5.0 PGA1 are no longer updated.  
It is recommended to upgrade to R5.0 PGA2 for latest fixes first.

TS7700 Code Update Recommendation:

<https://www.ibm.com/support/pages/node/6334607>

TS7700 R4.2 PGA2	8.42.2.12	103_v1.86(all) 182_v1.27(join/merge/ClusterRenumber) 205_v1.06(all) 220_v1.06(copy export/recovery) 256_v1.03(all) 269_v1.17(security/VEC) 279_v1.10(security) 314_v1.04(16GbFICON) 331_v1.03(all) 338_v1.01(all) 344_v1.01(all) 346_v1.02(VEC) 352_v1.01(VEC)
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Note: Older 8.4x.x.x versions are below the recommended level and must be updated to recommended code first.

## Keys

all	This vtd_exec must be installed on all machines
see-details	This vtd_exec applies to specific scenarios. Read the detailed description of this vtd_exec to determine if it applies to your machine.
actFinis	This vtd_exec must be applied during a code update between act_go and act_finis. Do not install it on clusters that have already been successfully updated.
cacheMES	This vtd_exec must be installed prior to starting a cache MES(adding drawers/strings/frames).
frameMES	This vtd_exec must be installed prior to starting a frame replacement MES
tapeAttMES	This vtd_exec must be installed prior to starting a Tape Attach MES
tapeAtt	This vtd_exec must be installed on all clusters attached to a TS3500 or TS4500 tape library (V07, VEB-T, VEC-T)
copy export/recovery	This vtd_exec must be installed prior to starting copy export recovery or copy export merge
standalone	This vtd_exec must be installed on all standalone clusters - it does not apply to machine in a grid.
grid	This vtd_exec must be installed on all machines if they are in a grid - it does not apply to standalone clusters.
VEC join/merge	This vtd_exec must be installed prior to starting a grid join or merge with a VEC.
join/merge	This vtd_exec must be installed prior to starting a grid join or merge.
ClusterRenumbr	This vtd_exec must be installed prior to starting a cluster renumber.
LDAP	This vtd_exec resolves an issue that only effects machines configured for LDAP authentication.
security	This vtd_exec resolves a security vulnerability.
TPF	This vtd_exec applies to machines in TPF software environment
VEC	This vtd_exec must be installed on all model VEC clusters.
VED	This vtd_exec must be installed on all model VED clusters.
CSA	This vtd_exec must be installed on all TS7700 clusters with CSA cache.
CSB	This vtd_exec must be installed on all TS7700 clusters with CSB cache.
8GbFICON	This vtd_exec must be installed on all TS7700 clusters with 8 Gb FICON adapters (FC 3438 or 3439)
16GbFICON	This vtd_exec must be installed on all TS7700 clusters with 16 Gb FICON adapters (FC 3402 or 3403)

## VTD\_EXEC Reference List:

<b>vtd_exec</b>	<b>version</b>	<b>released</b>	<b>comment</b>	<b>description</b>
vtd_exec.103	v1.88	12/1/2020	regularly updated as required	Updates to system health check
vtd_exec.182	v1.27	9/30/2020	regularly updated as required	Improvements to Grid join/merge
vtd_exec.205	v1.06	10/26/2020	regularly updated as required	Updates to system log collection tools
vtd_exec.220	v1.06	4/24/2020	regularly updated as required	Improvements to Copy Export Recovery and Copy Export Merge
vtd_exec.256	v1.03	12/1/2020	regularly updated as required	Updates to system service menu
vtd_exec.269	v1.17	12/1/2020	regularly updated as required	Security Enhancement: Update internal Java components
vtd_exec.279	v1.10	10/26/2020		Security Enhancement: Update NTP
vtd_exec.314	v1.04	2/14/2020	obsolete with R5.x	Fixed issue for 16Gb/s FICON adapter for R4.2
vtd_exec.331	v1.03	1/29/2020	obsolete with R5.x	Improvements for Grid Ethernet MES from 1Gb/s to 10Gb/s adapter
vtd_exec.338	v1.01	2/14/2020	obsolete with R5.x	Fixed issue that could result in false error indicating invalid compression type
vtd_exec.343	v1.06	12/1/2020		Fixed issue that could result in Web UI to become unresponsive
vtd_exec.344	v1.01	5/29/2020	obsolete with R5.0 PGA2	Fixed issue where network penetration scan tools could overwhelm TS7700 MI resources
vtd_exec.346	v1.02	8/31/2020	obsolete with R5.0 PGA2	Various fixes for 3956-CSA backend disk cache
<a href="#">vtd_exec.347</a>	<a href="#">v1.02</a>	<a href="#">1/25/2021</a>		Updated Firmware for 10TB disk drives
vtd_exec.352	v1.01	6/30/2020		Fixed issue that could result in cancelled host jobs
vtd_exec.355	v1.06	12/23/2020		Improvements to handling of backend disk cache
vtd_exec.357	v1.01	8/31/2020		Fixed problem that could result in performance degradation after going online
<a href="#">vtd_exec.900</a>	<a href="#">v1.02</a>	<a href="#">1/25/2021</a>	regularly updated as required	Web Code Updater - MI performance improvements

**TS7700 Release Version Code Version VTD\_EXECs**

Note: vtd\_exec history for code level no longer maintained in the vtd\_exec matrix page 2

TS7700 R5.0 PGA1	8.50.1.25	103_v1.86(all) 182_v1.27(join/merge/ClusterRenumber) 205_v1.06(all) 269_v1.16(security) 279_v1.10(security) 343_v1.04(all) 344_v1.01(all) 346_v1.02(VEC) 350_v1.00(all) 352_v1.01(all) 354_v1.01(all) 355_v1.03(all) 357_v1.01(VEC/actFinis)
TS7700 R5.0 PGA0	8.50.0.140	103_v1.86(all) 220_v1.06(copy export/recovery) 269_v1.16(security) 344_v1.01(all) 346_v1.02(VEC) 347_v1.00(VED) 352_v1.01(all)
TS7700 R5.0	8.50.0.134	103_v1.86(all) 220_v1.06(copy export/recovery) 269_v1.15(security) 332_v1.00(tapeAtt) 334_v1.01(all) 335_v1.00(VED) 337_v1.00(all) 339_v1.01(tapeAtt) 340_v1.00(16GbFICON) 342_v1.02(VED) 344_v1.01(all) 346_v1.02(VEC) 347_v1.00(VED) 352_v1.01(all)

<b>TS7700 R4.1 Phase 2 PGA1</b>	<b>8.41.201.4</b>	<b>103_v1.86(all) 182_v1.25(join/merge/ClusterRenumber) 202_v2.11(security) 241_v1.43(all) 244_v1.05(see-details) 256_v1.02(all) 264_v1.08(LDAP) 269_v1.16(security/VEC) 279_v1.10(security) 298_v1.03(all) 299_v1.07(16GbFICON) 304_v1.05(8GbFICON/16GbFICON) 316_v1.10(all) 317_v1.40(actFinis) 321_v1.0(all) 326_v1.03(all) 331_v1.03(all) 344_v1.01(all)</b>
TS7700 R4.1 Phase2	8.41.200.113	103_v1.86(all) 182_v1.25(join/merge/ClusterRenumber) 188_v1.52(all) 202_v2.11(security) 220_v1.05(copy export/recovery) 241_v1.43(all) 244_v1.05(see-details) 269_v1.09(security) 279_v1.10(security) 297_v1.01(all) 298_v1.03(all) 299_v1.07(16GbFICON) 300_v1.01(actFinis) 301_v1.00(ClusterRenumber) 302_v1.00(tapeAtt) 304_v1.05(8GbFICON/16GbFICON) 307_v1.00(grid) 308_v1.01(grid) 309_v1.00(LDAP) 312_v1.00(all) 316_v1.10(all) 317_v1.40(actFinis)

**Note: Older 8.41.x.x versions are below the minimum level and must be updated to minimum/recommended code first. Any systems running 8.41.x.x versions are advised to update to recommended code first.**

## VTD\_EXEC History List:

Note: list of old vtd\_exec no longer maintained in the vtd\_exec reference page 4

<b>vtd_exec</b>	<b>version</b>	<b>released</b>	<b>comment</b>	<b>description</b>
vtd_exec.188	v1.52	5/15/2018	obsolete with R4.2 and R5.x	Improvements to call home logic
vtd_exec.202	v2.11	8/19/2019	obsolete with R4.2 and R5.x	Security Enhancement: PSIRT Advisories
vtd_exec.241	v1.43	2/21/2019	obsolete with R4.2 and R5.x	Memory Usage Monitor
vtd_exec.244	v1.05	11/26/2019	regularly updated as required	Support for old DB versions for Join/Merge/Copy Export
vtd_exec.264	v1.08	10/3/2019	obsolete with R4.2 and R5.x	Improvements to LDAP support to allow wildcard lookup
vtd_exec.297	v1.01	6/13/2018	obsolete with R4.2 and R5.x	Disable sick-but-not-dead detection during dB reorg to prevent false positives
vtd_exec.298	v1.03	11/13/2018	obsolete with R4.2 and R5.x	Disable Surface EOT feature
vtd_exec.299	v1.07	5/17/2019	obsolete with R4.2 and R5.x	Fixed issue for 16Gb/s FICON adapter
vtd_exec.300	v1.01	6/29/2018	obsolete with R4.2 and R5.x	Improvements for code installation/activation process
vtd_exec.301	v1.00	6/25/2018	obsolete with R4.2 and R5.x	Improvements for cluster renumbering process
vtd_exec.302	v1.00	7/9/2018	obsolete with R4.2 and R5.x	Fixed issue that could result in unexpected cluster reboot
vtd_exec.304	v1.05	5/17/2019	obsolete with R4.2 and R5.x	Fixed issue in device driver for 8Gb/s and 16Gb/s FICON adapter
vtd_exec.307	v1.00	9/10/2018	obsolete with R4.2 and R5.x	Improvements to allow proper handling of new functions in mixed R4.2 and R4.1 Phase 2 Grid
vtd_exec.308	v1.01	10/18/2018	obsolete with R4.2 and R5.x	Fixed issue that could result in potential Service Prep hang
vtd_exec.309	v1.00	9/21/2018	obsolete with R4.2 and R5.x	Fixed issue that prevents IBM service user login when running R4.1 Phase 2 and LDAP enabled
vtd_exec.312	v1.00	10/18/2018	obsolete with R4.2 and R5.x	Fixed issue that could cause DB operations to fail
vtd_exec.316	v1.10	9/26/2019	obsolete with R4.2 and R5.x	Fixed issue when canceling a Temporary Removal Threshold via TS7700 MI
vtd_exec.317	v1.40	5/9/2019	obsolete with R4.2 and R5.x	Fixed issue to improve First Time Install
vtd_exec.321	v1.0	4/2/2019	obsolete with R4.2 and R5.x	Fixed issue that could result in unexpected cluster reboot
vtd_exec.326	v1.03	11/7/2019	obsolete with R4.2 and R5.x	Fixed issue that could cause DB lockup and subsequent cluster hang
vtd_exec.332	v1.00	11/26/2019	obsolete with R5.0 PGA2	Fixed issue where active primary partitions was not always created for Tape Attach
vtd_exec.334	v1.01	11/26/2019	obsolete with R5.0 PGA2	Memory Usage Monitor
vtd_exec.335	v1.00	11/26/2019	obsolete with R5.0 PGA2	Fixed issue that could result in performance degradation
vtd_exec.337	v1.00	11/26/2019	obsolete with R5.0 PGA2	Fixed issue that could result in host job abends
vtd_exec.339	v1.01	2/27/2020	obsolete with R5.0 PGA2	Fixed issue that could result in backend tape drives to go offline
vtd_exec.340	v1.00	3/5/2020	obsolete with R5.0 PGA2	Fixed issue for 16Gb/s FICON adapter for R5.0
vtd_exec.342	v1.02	2/27/2020	obsolete with R5.0 PGA2	Fixed issue resulting in duplicate WWNN/WWPN
vtd_exec.350	v1.00	6/12/2020	obsolete with R5.0 PGA2	Fixed issue that could result in performance degradation with large block sizes
vtd_exec.354	v1.01	6/30/2020	obsolete with R5.0 PGA2	Improvements to LWORM overwrite recovery