



# Release Notes for *Cisco Videoscape Distribution Suite Transparent Caching Release 5.0.2 b233/b234*

---

**First Published: May 2013**

**Last Updated: July 31, 2013**

**OL-28014-05**

These release notes describe the new features and caveats of the Cisco Videoscape Distribution Suite Transparent Caching Release 5.0.2 b233/b234.



**Note**

VDS TC Release 5.0.2 b233/b234 is available as both a full installation and as an upgrade package. The file name for the *full* installation is “VDS-TC\_Installer-FI\_5.0.2\_b233\_b234-RELEASE-Cisco.iso”, and the file name for the *upgrade* package is “VDS-TC\_GA\_5.0.2b234\_Server\_Cluster.tar.gz” for a cluster installation and “VDS-TC\_GA\_5.0.2b233\_Integrated\_Appliance.tar.gz” for an integrated appliance installation.

For information on how to perform a full installation, see the “Cisco Videoscape Distribution Suite Transparent Caching Software Installation Guide” (document number OL-28015-02). For information on how to perform an upgrade, see the “Cisco Videoscape Distribution Suite Transparent Caching Software Configuration Guide” (document number OL-28016-02).

For a list of open caveats that are pertinent to this release, see the “[Caveats](#)” section.

## Contents

- [Introduction](#)
- [New Features](#)
- [Product Overview](#)
- [System Requirements](#)



---

**Americas Headquarters:**

**Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA**

- [Caveats](#)
- [Related Documentation](#)

## Introduction

The Cisco Videoscape Distribution Suite Transparent Caching (VDS TC) solution is focused on reducing costs and improving quality of user experience in delivering unmanaged Internet-based content, including Internet video, file sharing, software distribution, mobile application downloads, and web browsing. VDS TC integrates highly scalable caching software with high-performance Cisco Unified Computing System™ (UCS) servers and blades, Cisco® switches, and SAN storage. The VDS TC solution, combined with other Videoscape products like Cisco Videoscape Distribution Suite for Internet Streaming (VDS IS), provides a complete platform for optimizing managed and unmanaged content delivery.

For unmanaged content, Cisco VDS TC empowers service providers to alleviate network congestion due to Internet video and other high-bandwidth applications in their networks, while meeting subscribers' demand for the content and improved quality of experience. VDS TC is typically deployed in conjunction with a network element, such as a router, which is responsible for classification and redirection of traffic to the cache, based on Layer 4 and Layer 7 criteria.

## New Features

Release 5.0.2 of Cisco Videoscape Distribution Suite Transparent Caching (VDS TC) introduced the following new features:

- New configuration models:
  - VDS TC Integrated Appliance (VDS-TC-1S), using the Cisco UCS C240 Rack Mount Server
  - VDS TC Blade Server installations, using the Cisco UCS B200 Series Blade Servers:
    - VDS-TC-4B, redundant and non-redundant configurations
    - VDS-TC-8B, redundant and non-redundant configurations
    - VDS-TC-16B, redundant and non-redundant configurations
- Support for using the Cisco UCS C240 with DC power supply as the VDS TC management server
- Support for the Cisco Nexus 7004 Switch as the VDS TC data switch and support for the Cisco C2248TP fabric extender
- IPv6 support for the entire VDS TC solution, including subscriber facing interfaces, VDS TC data switches, and Cisco UCS servers

## Product Overview

Cisco VDS TC is multi-protocol, supporting HTTP for download, progressive download, and adaptive bit rate (ABR) streaming, as well as multiple peer-to-peer (P2P) protocols. The solution automatically adapts to content popularity once installed, and is access-network-agnostic. The system automatically adjusts to traffic mix changes during the day and week.

One of the benefits of Cisco VDS TC is that it can enable service providers to offload a significant amount of content traffic by serving the popular content from a locally cached copy, within the access network. As a result, service providers can experience a rapid return on investment (ROI) by reducing their operational network costs, and defer capital investments into their network infrastructures.

The other main benefit of Cisco VDS TC is the improvement of the quality of experience (QoE) for the subscribers of the service providers. By serving popular content from locally deployed cache, the content is better positioned to provide a better user experience than if the content were served from the original content server.

The Cisco VDS TC solution can enable service providers to:

- Lower core and edge network bandwidth
- Manage infrastructure costs for over-the-top (OTT) content in a cost-efficient manner
- Improve subscriber QoE for popular content
- Deploy OTT caching without impacting the client or origin CDN, or application behavior

## System Requirements

Cisco VDS TC is optimized for use on the Cisco Unified Computing Systems (Cisco UCS), such as the Cisco UCS C220 Rack Server or the Cisco UCS B200 Blade Server.

Product	Hardware
VDS TC Cache Server	Cisco UCS B200 Blade Server or Cisco C220 Rack Mount Server with the following: <ul style="list-style-type: none"> <li>• 2 x 2.40 GHz E5-2665, 115W 8C, 20 MB Cache, DDR3 1600 MHz</li> <li>• 32 GB DDR3-1333-MHz RDIMM, PC3-10600, 2R, 1.35v</li> <li>• 2 x 300 GB 6 Gb SAS 10K RPM SFF HDD, hot plug, drive sled mounted</li> </ul>
VDS TC Cache Manager	Cisco C220 Rack Mount Server or the Cisco C240 Rack Mount Server with the following: <ul style="list-style-type: none"> <li>• 2 x 2.4 GHz E5-2609/80W 4C, 10 MB Cache, DDR3 1066 MHz</li> <li>• 16 GB DDR3-1333-MHz RDIMM/PC3-10600, 2R, 1.35v</li> <li>• 2 x 300 GB 6 Gb SAS 10K RPM SFF HDD, hot plug, drive sled mounted</li> </ul>
VDS TC SAN Storage	Dual controller, 24 x 600G SAS 10K RPM, 2.5 in. small form factor (SFF), firmware version 7.84.46

Product	Hardware
VDS TC Integrated Cache Server, Manager, and storage for a VDS-TC-1S installation	Cisco UCS C240 Rack Mount Server with the following: <ul style="list-style-type: none"> <li>• 2 x 2.40 GHz E5-2665, 115W 8C, 20 MB Cache, DDR3 1600 MHz</li> <li>• 32 GB DDR3-1333-MHz RDIMM, PC3-10600, 2R, 1.35v</li> <li>• 2 x 300 GB 6 Gb SAS 10K RPM SFF HDD, hot plug, drive sled mounted</li> <li>• 12 x 1T B 6 Gb SATA 7.2K RPM SFF HDD, hot plug, drive sled mounted</li> </ul>
VDS TC Analytics Server	Cisco UCS C240 Rack Mount Server with the following: <ul style="list-style-type: none"> <li>• 2 x 2.40 GHz E5-2665, 115W 8C, 20 MB Cache, DDR3 1600 MHz</li> <li>• 48 GB DDR3-1333-MHz RDIMM, PC3-10600, 2R, 1.35v</li> <li>• 2 x 300 GB 6 Gb SAS 10K RPM SFF HDD, hot plug, drive sled mounted</li> <li>• 10 or 22 x 900 GB 6 Gb SAS 10K RPM SFF HDD, hot plug, drive sled mounted</li> </ul>

## Caveats

### Open Caveats in Cisco Videoscape Distribution Suite Transparent Caching Release 5.0.2 b233/b234

- **CSCud85704**
  - **Symptom:** The previous license data remains in the existing CLI login session after an upgrade or a new license has been applied.
  - **Workaround:** To see the content of the latest license, log off of the CLI and log in again. This will sync the license content with the one seen in the UI. When applying a new license, the license is applied as shown in the UI. The CLI shows the old license information until you log off and log back in again, but the system *does* use the new license.
- **CSCug09063**
  - **Symptom:** For a VDS TC 1S system, when you execute the **oper service stop** command, it can take up to 20 seconds to stop the caching service. If you execute the **show status** command immediately after entering the **oper service stop** command, you may see a status of “enable started”, even though the stopping process has already been initiated.
  - **Workaround:** Continue to enter the **show status** command until you see a status of “oper service stop”. It may take up to 20 seconds to see this status depending on how busy the VDS TC 1S system is.
- **CSCug27744**

- **Symptom:** When you enter the command `./cmdbutils -s` from the `/opt/pang/bin` folder, the following two lines of erroneous messages are returned at the beginning of the output. However, the correct output appears below these lines.

```
sh: -c: line 0: unexpected EOF while looking for matching `''
sh: -c: line 41: syntax error: unexpected end of file
```

- **Workaround:** Ignore the two lines of erroneous messages that appear at the beginning of the output.

- **CSCug46383**

- **Symptom:** When you choose **Policies and Config > License Manager > Generate License Request** from Cisco VDS TC Manager, not all of the system ids are included in the license request that is generated.
- **Workaround:** This problem occurs because not all cache engines are online when the license request is generated. Please ensure that all cache engines are online by issuing the **show status** command from the VDS TC CLI. To start a cache engine that is not online, from the VDS TC CLI Enable mode, enter the command **oper server x start** command, where *x* is the number of the cache engine that you want to start.

- **CSCug32380**

- **Symptom:** Occasionally, incorrect messages are logged into `/opt/pang/cdrs` while unplugging and plugging back in the Ethernet1 and Ethernet2 cables of a cache engine.

For example:

```
stats: iff_4 (eth9) to classifier 0
```

```
10-04-13 13:32:09.080, 7189[common:Statistics]void statistics_c::dump_packets_queues()
### Classifier Interface queues stats: iff_5 (eth10) to classifier 0
```

```
10-04-13 13:32:09.080, 7189[common:Statistics]void statistics_c::dump_packets_queues()
### Classifier Interface queues stats: iff_6 (eth11) to classifier 0
```

```
10-04-13 13:32:09.080, 7189[common:Statistics]void statistics_c::dump_packets_queues()
### Classifier Interface queues stats: iff_7 (eth12) to classifier 0
```

- **Workaround:** The messages should be ignored, they do not belong in `/opt/pang/cdrs`.

- **CSCug77748**

- **Symptom:** If all of the connections between the cache engines and the entire storage array are lost, all traffic is forwarded directly to the Internet (bypassed by the system). Once connection between the cache engines and the storage array is restored, it may take up to one hour before user requests will be handled by the cache engine.
- **Workaround:** There is no work around. It will take one hour before the cluster returns to normal.

- **CSCuh89643**

- **Symptom:** The `VDS-TC-MIB.txt` file does not load on the HP NNMi. This error occurs when loading the `VDS-TC-MIB.txt` on the HP NNMi.
- **Workaround:** Contact your Cisco representative to obtain a compliant file.

## Resolved Caveats

This section contains the resolved caveats in Cisco VDS TC Release 5.0.2 b233/b234. Not all resolved issues are mentioned here. The following list highlights resolved caveats associated with customer deployment scenarios:

- **CSCud43741:** Incorrect reporting of some HTTP traffic as P2P traffic.
- **CSCud65345:** Cluster is degraded for 15 minutes after disconnecting storage controller 1.
- **CSCud86102:** Management server does not re-establish spread connection if it gets disconnected.
- **CSCug22967:** After entering a management IPv6 address on the VDS TC management server using either the GA\_installer.sh script or the CLI commands, **network ip6** and **network default6\_gw**, the IPv6 address information does not appear in the configuration of the VDS TC management server.
- **CSCud47393:** VDS TC Manager shows an inactive volume on the cluster. However, when checking the volumes from the IBM storage manager, no bad sectors or errors can be found. This can occur if the volume had a corrupted file system when the VDS TC disk format script was executed. The disk format script will skip the re-format on that volume and leave it in an inactivate state.

## Related Documentation

### Software Documents

Refer to the following documents for additional information about VDS TC 5.0.2.

Document	URL
<i>Cisco Videoscape Distribution Suite Transparent Caching Software Installation Guide</i>	<a href="http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28015-02_VDS-TC_5.0.2_sw_install_guide.pdf">http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28015-02_VDS-TC_5.0.2_sw_install_guide.pdf</a>
<i>Cisco Videoscape Distribution Suite Transparent Caching Software Configuration Guide</i>	<a href="http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28016-02_VDS-TC_5.0.2_sw_config_guide.pdf">http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28016-02_VDS-TC_5.0.2_sw_config_guide.pdf</a>
<i>Cisco Videoscape Distribution Suite Transparent Caching Manager User Guide</i>	<a href="http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28017-02_VDS-TC_5.0.2_manager_user_guide.pdf">http://www.cisco.com/en/US/docs/video/videoscape/distribution_suite/vds/v5_0_2/OL-28017-02_VDS-TC_5.0.2_manager_user_guide.pdf</a>
<i>Cisco UCS C-Series Rack Servers Install and Upgrade Guides</i> web page	<a href="http://www.cisco.com/en/US/products/ps10493/products_installation_and_configuration_guides_list.html">http://www.cisco.com/en/US/products/ps10493/products_installation_and_configuration_guides_list.html</a>
<i>Cisco UCS B200 Blade Server Installation and Service Note</i>	<a href="http://www.cisco.com/en/US/docs/unified_computing/ucs/hw/chassis/install/blade.html">http://www.cisco.com/en/US/docs/unified_computing/ucs/hw/chassis/install/blade.html</a>
<i>Cisco UCS B-Series Blade Servers Configuration Guides</i> web page	<a href="http://www.cisco.com/en/US/products/ps10280/products_installation_and_configuration_guides_list.html">http://www.cisco.com/en/US/products/ps10280/products_installation_and_configuration_guides_list.html</a>
<i>Cisco UCS 5108 Server Chassis Installation Guide</i>	<a href="http://www.cisco.com/en/US/docs/unified_computing/ucs/hw/chassis/install/ucs5108_install.html">http://www.cisco.com/en/US/docs/unified_computing/ucs/hw/chassis/install/ucs5108_install.html</a>

The entire VDS TC software documentation suite is available on Cisco.com at:  
[http://www.cisco.com/en/US/products/ps12654/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps12654/tsd_products_support_series_home.html)

# Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.

---

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2013 Cisco Systems, Inc. All rights reserved.

