# Pulse Secure®

# Pulse Secure Virtual Traffic Manager: Release Notes

Supporting Pulse Secure Virtual Traffic Manager 19.2r2

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# Contents

# Release Notes

This chapter contains the following topics:

## Overview

Pulse Secure Virtual Traffic Manager 19.2r2 is a maintenance release of the Pulse Secure Virtual Traffic Manager product family, containing a number of performance and functionality enhancements and bug fixes. Customers are recommended to upgrade to this version to take advantage of the changes.

## Product Compatibility

You can install and use this product version on the following platforms:

### Software

- Linux x86_64: Kernel 2.6.32 - 4.15, glibc 2.12+

  For Route Health Injection: ncurses 5 (libncurses.so.5, libtinfo.so.5)

### Containers

- Docker: 1.13.0 or later recommended

### Cloud Platforms

- Amazon EC2 - as a virtual appliance or native software install

- Microsoft Azure - as a virtual appliance

- Google Compute Engine - as a virtual appliance or native software install

### Hardware Platforms

- Bare Metal Server - for information on qualified servers, see the Pulse Secure Virtual Traffic Manager Hardware Compatibility List at https://www.pulsesecure.net/techpubs

## Virtual Appliance Editions

- VMware vSphere 6.0, 6.5, 6.7

- XenServer 7.1, 8.0

- Microsoft Hyper-V Server 2016

- Microsoft Hyper-V under Windows Server 2016 and 2019

- QEMU/KVM (RHEL/CentOS 6.x, 7.x; Ubuntu 16.04, 18.04)

### Resource Requirements

Virtual appliances should be allocated a minimum of 2GB of RAM.

# Large Objects in the Webcache

A Traffic Manager running 19.2r2 will be unable to store objects greater than 2GB in the web cache, even if the web cache is enabled and all cacheability conditions are met. If you rely upon this feature, please contact Pulse Secure Technical Support through the usual support mechanism (see ).

# Fixed Issues and Other Changes

The following table lists issues that have been fixed and are resolved by upgrading to this release.

| Report Number | Description |
| --- | --- |
| **Installation and Upgrading** | |
| VTM-42672 | Fixed a bug where the configure script would still loop if --noloop was provided but clustering failed. |
| VTM-42476 | The script used to list installed Traffic Manager versions on appliances now uses the read-only option to mount, reducing the amount of time that operation takes. |
| VTM-42371 | The Traffic Manager software installer no longer depends on the presence of the libnsl.so system library so that the Traffic Manager can be installed on systems whose base package set does not include libnsl. |
| **Authentication** | |
| VTM-18659, VTM-36053, VTM-28340, VTM-23999, VTM-17657, SR23353, SR31954, SR22049 | Fixed an issue where the **System > Users > Authenticators > Edit** page wasn't formatted correctly, and looked ugly in the browser. All the page elements are now aligned within the background box. |
| **Administration Server** | |
| VTM-42284 | Fixes for CVE-2018-6913 and CVE-2018-18313 were applied to the version of Perl included in the product. |

| Report Number | Description |
|---|---|
| VTM-42403 | Fixed an issue in the Admin UI where the Status Applet would not display, nor the event log auto-update, when Internet Explorer 11 was being used to view the UI. |
| VTM-42432 | Fixed an issue where displaying the Pools summary page in the Admin UI was slow when using Service Discovery with many pools. |
| **TrafficScript** | |
| VTM-42422 | Entries in the Authenticators Catalog with ldap!ssl enabled and ldap!ssl!cert specified now include a Server Identity Check as well as verifying that the LDAP server certificate is signed by the specified certificate authority. |
| | Attempts by a TrafficScript rule to use such an authenticator via auth.query(), and that connect to a server that does not have a certificate matching its identity will fail and log a message in the event log. |
| VTM-42419 | Updated libxslt, which the Traffic Manager is linked against, to version 1.1.34, which fixes the following security vulnerabilities: CVE-2019-18197 |
| VTM-37997 | Updated libxml2, which the Traffic Manager is linked against, to version 2.9.9, which addresses CVE-2018-14404. |
| **Connection Processing** | |
| VTM-42829 | Fixed an issue where a virtual server using the DNS protocol could read from heap memory after it had been freed. |
| VTM-42444 | Fixed an issue where the traffic manager would incorrectly handle an irregular packet received by a virtual server configured to support HTTP/2, resulting in connections being dropped or denied. |
| **Webcache** | |
| VTM-41602 | Fixed an issue where the Traffic Manager's content cache would occasionally contain invalid data, resulting in responses containing incorrect content, or connections being dropped or denied. |
| **Global Load Balancing** | |
| VTM-42827 | Updated GeoIP database to 2020-02-25. |
| **vTM Self Registration** | |
| VTM-42837 | Fixed an issue where licensing settings (including Services Director self-registration settings) entered during the Initial Configuration Wizard were not saved. |

## Pulse Secure Virtual Traffic Manager Appliance

The following table lists issues that have been fixed and are resolved by upgrading to this release.

| Report Number | Description |
|---|---|
| **Appliance OS** | |
| VTM-42461 | Fixed an issue where sometimes a systemd-timesyncd process would be running instead of the correctly configured ntpd. |

| Report Number | Description |
|---|---|
| **Cloud Platforms** | |
| VTM-39229 | Fixed an issue where NTP would not be correctly configured on appliances running in Azure. |

## Known Issues

The following table lists the Known issues in the current release.

| Report Number | Report | Description |
|---|---|---|
| VTM-41385 | Software in Ubuntu 16.04 on GCE | A Traffic Manager software install on a GCE instance running Ubuntu 16.04 can report a serious error "sysconfig_error GCE IP routes error: Didn't find nic label for <MAC address>". This does not occur for Ubuntu 18.04. |
| VTM-34654 | KVM Network Interface Card renaming | In rare circumstances a KVM host may change the PCI addresses of a virtual appliance's network cards after a reboot, resulting in the network interface labels changing. This can be fixed by removing the configuration from the non-existent card on the Traffic Manager **System > Networking** page and re-adding it to the correct card. |
| VTM-38881 | Obsolete counters are missing from old REST API versions | Obsolete counters removed from version 6.0 of the status API are missing in versions 5.X, despite the schemata published with the product claiming they are still present. |
| VTM-38948 | The format of encrypted bootloader passwords has changed in version 18.2 | The format of encrypted bootloader passwords changed in version 18.2. When upgrading from a version earlier than 18.2 with a bootloader password set, the bootloader will be unprotected, and a configuration error will be reported until the password is re-entered. It can be set on the **System > Global Settings** page of the Admin UI. |
| VTM-38962 | Pre-18.2 Admin UI rollback tools will not offer roll-forward to 18.2 or later | After rolling back from 19.2 to a vTM version earlier than 18.2 the rollback version selector on the **System > Traffic Managers** page of the Admin UI will not offer versions after 18.2 as an option. Use '$ZEUSHOME/zxtm/bin/rollback' from the command line to switch back instead. |

## Upgrade Instructions

19.2r2 can be installed directly using any supported installation mechanism. Traffic Manager software installations can be upgraded directly to 19.2r2 using any supported upgrade mechanism, except those running Traffic Manager version 17.2 which must be upgraded to some other version (for example 17.2r3 or 19.2) before upgrading.

Traffic manager instances (appliance or cloud) running release 18.2 or later can be upgraded directly to 19.2r2 using any supported upgrade mechanism.

Traffic manager instances (appliance or cloud) running versions prior to 18.2 must first be upgraded to a non-r-release, such as 18.2 or 19.2.

To learn more about upgrading your Traffic Manager, see the *Pulse Secure Virtual Traffic Manager: Installation and Getting Started Guide* applicable to your product variant.

## Documentation

Pulse Secure documentation is available at https://www.pulsesecure.net/techpubs.

For policy reasons, security issues are not normally mentioned in release notes. To find more information about our security advisories, see the security advisory page on the Pulse Secure website.

## Technical Support

Pulse Secure Virtual Traffic Manager 19.2 is designated a Long Term Support (LTS) release.

Full support for version 19.2 will be available for three years from the release date of July 15, 2019. For more information, see the End of Support and End of Engineering Schedule notices at the following location: https://support.pulsesecure.net/product-service-policies/eol/software/vadc-virtual-traffic-manager/

For additional information or assistance, contact Pulse Secure Global Support Center (PSGSC):

- https://support.pulsesecure.net
- support@pulsesecure.net
- Call 1-844-751-7629 (toll-free USA)

For technical support resources, browse the Pulse Secure Technical Support website https://support.pulsesecure.net.