# Pulse Secure Virtual Traffic Manager: Release Notes

Supporting Pulse Secure Virtual Traffic Manager 20.3r1


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*Pulse Secure Virtual Traffic Manager: Release Notes*

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# Release Notes

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## Overview

Pulse Secure Virtual Traffic Manager 20.3r1 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 - 5.2, 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

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## Virtual Appliance Editions

- VMware vSphere 6.5, 6.7, 7.0
- XenServer 7.1, 8.1, 8.2
- 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.

For a virtual appliance upgrade to succeed, a minimum of 2.7GB must be available on the `/logs` partition. To confirm the available free disk space, use the **System > Traffic Managers** page of the Admin UI.

# Large Objects in the Webcache

A Traffic Manager running 20.1 or later is 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, contact Pulse Secure Technical Support (see "Technical Support" on page 4).

# GeoIP Database

**VTM-43072, RFE-1472** The database used by the Traffic Manager to look up the geographic location of incoming requests based on their IP address was removed from the software installation package and appliance images in version 20.3 in order to better comply with various privacy protection laws. This database is used when performing Global Load Balancing, when displaying the Activity Map or using the geo.* TrafficScript functions.

Update packages containing the most recent version of this database can be obtained from the Pulse Secure customer portal.

**Note:** The GeoIP database already present in Traffic Manager instances that are upgraded to this version is retained, and continues to be used until an update package with a newer database is applied.

# Support for software running on RHEL/CentOS 6

**VTM-43879** Version 20.3 (including maintenance releases) is the last release to support 2.6.32-based kernels or glibc 2.12. Versions from 21.1 onwards require kernel version 3.10 or later, and glibc 2.17 or later, as described in "Product Compatibility" on page 1.

In particular, this means that it is not possible to install version 21.1 on a RHEL/CentOS 6 system or to upgrade an existing Traffic Manager instance on RHEL/CentOS 6 to version 21.1 or beyond.

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# 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 |
|---|---|
| **Fault Tolerance** | |
| VTM-44221 | Fixed an issue in persistence classes where Traffic Manager processes could be stalled, killed and restarted after persistence classes start evicting the oldest cached entry when the corresponding cache table is full. For IP persistence class, the cached entry eviction starts after **ip_cache_size** (default 32768) different client IP addresses have been cached. |

## 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 |
|---|---|
| No changes in this release. | |

# 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 Admin UI **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. |

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| Report Number | Report | Description |
|---|---|---|
| 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

20.3r1 can be installed directly using any supported installation mechanism.

Traffic Manager software installations can be upgraded directly to 20.3r1 using any supported upgrade mechanism, except those running Traffic Manager version 17.2 which must be upgraded to a non-r-release (for example 20.3) before upgrading.

Traffic Manager instances (appliance or cloud) running release 18.2 or later can be upgraded directly to 20.3r1 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

Full support for version 20.3 is available for one year from the release date of 5th February, 2021. 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.

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