Terminal Server (TS) Agent Release Notes
Release 9.0
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Terminal Server (TS) Agent 9.0 Release Information

Revision Date: March 5, 2020

Review important information about Palo Alto Networks Terminal Server (TS) agent software, including new features introduced, workarounds for open issues, and issues that are addressed in TS agent 9.0 releases.

To ensure you have the most current version of this document, please refer to the online version on the TechDocs portal.

- Features Introduced in TS Agent 9.0
- Changes to Default Behavior
- System Requirements
- Operating System (OS) Compatibility
- Known Issues in TS Agent 9.0
- Terminal Server (TS) Agent 9.0 Addressed Issues
- Getting Help
Features Introduced in TS Agent 9.0

The Terminal Server (TS) agent 9.0 releases have no new features. The TS agent (and User-ID agent) 9.0 releases were created to keep release numbering in sync with the PAN-OS 9.0 feature releases.
# Changes to Default Behavior

The Terminal Server (TS) Agent 9.0.1 release has the following change to default behavior.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strict use of TLS 1.2</td>
<td>Beginning with release 9.0.1, Terminal Server and User-ID agents use only TLS 1.2 to negotiate authenticated and encrypted connections with Palo Alto Networks next-generation firewalls; support for legacy versions of TLS (1.0 and 1.1) are removed.</td>
</tr>
</tbody>
</table>
System Requirements

The system where you install Terminal Server (TS) agent 9.0 has the following minimum requirements:

- **CPU**—4 cores
- **Hard disk space**—10MB
- **Memory**—4GB RAM
Operating System (OS) Compatibility

The Terminal Server (TS) agent is compatible with PAN-OS® 9.0 and earlier PAN-OS releases that Palo Alto Networks still supports. To see where you can install TS agents, refer to the Terminal Server (TS) agent compatibility information in the Palo Alto Networks Compatibility_Matrix.
Known Issues in TS Agent 9.0

The following known issue applies to all Terminal Server (TS) agent 9.0 releases.

For recent updates to known issues for a given PAN-OS release, refer to live.paloaltonetworks.com/t5/Articles/Critical-Issues-Addressed-in-PAN-OS-Releases/ta-p/52882.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WINAGENT-430</td>
<td>(Citrix PVS only) There is an issue when running a TS agent 9.0 release on Windows Server where the server stops responding when you attempt to shut it down.</td>
</tr>
<tr>
<td>WINAGENT-319</td>
<td>When you install the TS agent on a Windows Server 2008/R2 server, the TS agent displays a driver failure error (Service is stopped. Check log file for detailed reason) and firewalls can’t connect to the agent.</td>
</tr>
</tbody>
</table>
Terminal Server (TS) Agent 9.0 Addressed Issues

The TS agent 9.0 releases do not introduce any newly addressed issues. These releases were provided to maintain parity with User-ID™ agent 9.0 releases. For new features, associated software versions, known issues, or changes in default behavior, see Terminal Server (TS) Agent 9.0 Release Information.

- TS Agent 9.0.5 Addressed Issues
- TS Agent 9.0.4 Addressed Issues
- TS Agent 9.0.3 Addressed Issues
- TS Agent 9.0.2 Addressed Issues
- TS Agent 9.0.1 Addressed Issues
- TS Agent 9.0.0 Addressed Issues

For recent updates to addressed issues for a given PAN-OS release, refer to live.paloaltonetworks.com/t5/Articles/Critical-Issues-Addressed-in-PAN-OS-Releases/ta-p/52882.

TS Agent 9.0.5 Addressed Issues

This TS agent 9.0 release has no updates or addressed issues. The TS agent 9.0.5 release was provided to maintain parity with User-ID™ agent 9.0 releases.

TS Agent 9.0.4 Addressed Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WINAGENT-430</td>
<td>(Citrix PVS only) Fixed an issue where running a TS agent 8.1 release on Windows Server caused the server to stop responding when you attempted to shut the server down. To leverage this fix, enable Detach agent driver at shutdown (Terminal Server Agent &gt; Configure).</td>
</tr>
</tbody>
</table>

TS Agent 9.0.3 Addressed Issues

This TS agent 9.0 release has no updates or addressed issues. The TS agent 9.0.3 release was provided to maintain parity with User-ID 9.0 releases.

TS Agent 9.0.2 Addressed Issues

This TS agent 9.0 release has no updates or addressed issues. The TS agent 9.0.2 release was provided to maintain parity with User-ID 9.0 releases.
TS Agent 9.0.1 Addressed Issues

This TS agent 9.0 release has no updates or addressed issues. The TS agent 9.0.1 release was provided to maintain parity with User-ID 9.0 releases.

TS Agent 9.0.0 Addressed Issues

This TS agent 9.0 release has no updates or addressed issues. The TS agent 9.0.0 release was provided to maintain parity with PAN-OS and User-ID 9.0 releases.
Getting Help

The following topics provide information on where to find more about our products and how to request support:

> Related Documentation
> Requesting Support
Related Documentation

Refer to the following PAN-OS® 9.0 documentation on the Technical Documentation portal at docs.paloaltonetworks.com for more information about the Palo Alto Networks next-generation firewalls:

- **PAN-OS 9.0 Administrator's Guide**—Provides the concepts and solutions to get the most out of your Palo Alto Networks next-generation firewalls. This includes taking you through the initial configuration and basic set up on your Palo Alto Networks firewalls.
- **PAN-OS 9.0 Web Interface Reference Guide**—Describes how to administer the Palo Alto Networks firewall using the web interface. The guide is intended for system administrators responsible for deploying, operating, and maintaining the firewall.
- **Palo Alto Networks Compatibility Matrix**—Provides operating system and other compatibility information for Palo Alto Networks next-generation firewalls, appliances, and agents, including on which operating systems you can install the TS agent.
Requesting Support

For contacting support, for information on support programs, to manage your account or appliances, or to open a support case, refer to https://www.paloaltonetworks.com/support/tabs/overview.html.

For the most current PAN-OS® and Panorama™ 9.0 release notes, go to https://docs.paloaltonetworks.com/pan-os/9-0/pan-os-release-notes.html.

To provide feedback on the documentation, please write to us at: documentation@paloaltonetworks.com.