

# Safeguard for Sudo 7.2.1

## Release Notes

**07 March 2022, 17:27**

These release notes provide information about the One Identity Safeguard for Sudo release.

### About this release

Safeguard for Sudo helps Unix/Linux organizations take privileged account management through Sudo to the next level: with a central policy server, centralized management of Sudo and sudoers, centralized reporting on sudoers and elevated rights activities, and event and keystone logging of activities performed through Sudo. With Safeguard for Sudo, One Identity provides a plug-in to Sudo 1.8.1 (and later) to make administering Sudo across a few, dozens, hundreds, or thousands of Unix/Linux servers easy, intuitive, and consistent. It eliminates the box-to-box management of Sudo that is the source of so much inefficiency and inconsistency. In addition, the centralized approach delivers the ability to report on the change history of the sudoers policy file.

Safeguard for Sudo 7.2.1 is a patch release that includes [Resolved issues](#).

**NOTE:** Beginning with version 7.0, Safeguard for Sudo supports only Linux-based systems for Safeguard policy servers.

### End of support notice

After careful consideration, One Identity has decided to cease the development of the Management Console for Unix (MCU). Therefore, the MCU will enter limited support for all versions on April 1, 2021. Support for all versions will reach end of life on Nov 1, 2021.

As One Identity retires the MCU, we are building its feature set into modern platforms starting with Software Distribution and Profiling. Customers that use the MCU to deploy Authentication Services and Safeguard for Sudo can now use our Ansible collections for those products, which can be found at [Ansible Galaxy](#).

## New features

New features in Safeguard for Sudo 7.2.1:

- Safeguard for Sudo is shipped with OpenSSL shared objects since version 7.0. Due to recent high severity fixes in the OpenSSL library, the shipped shared objects have been upgraded to version 1.1.1m, which include the corresponding fixes.
- The text of the End-user license agreement (EULA) has been updated. Users must accept the updated EULA upon installing this product.

See also:

- [Resolved issues](#)

## Resolved issues

The following is a list of issues addressed in this release.

**Table 1: Resolved issues**

Resolved Issue	Issue ID
Fixed updating the <code>/etc/services</code> file during policy server configuration. In some cases, after unconfiguring the policy server, the policy server could leave entries belonging to Privilege Manager daemons in <code>/etc/services</code> file and the policy server configuration could result in having multiple entries.	287684
Fixed issue when orphaned <code>pmmasterd</code> processes hang indefinitely due to network disconnect. If the policy server disconnects from the network while there is an open sudo session on a client, there is a chance that the <code>pmmasterd</code> process handling that client connection never terminates. This issue has been fixed by enabling <code>SO_KEEPALIVE</code> socket option on the socket by default. It can be disabled by setting the 'masterkeepalive' configuration option to 'NO' in the <code>pm.settings</code> product configuration file.	288722

Resolved Issue	Issue ID
<p>For sudo clients, license validity could be reported wrongly for short time periods.</p> <p>Some tools like "pmlugininfo -v" could report having no license for the product for short periods of time, even if a valid license has previously been installed for the policy server. These wrong messages only affected sudo clients joined to the policy server and not the policy server itself.</p>	295769
<p>On the relatively new Fedora 35, pmlogsearch failed to return search results. pmlogsearch did not previously support "protected regular" security hardening option (which is enabled by default on the Fedora 35 server). This resulted the tool to run on error and search results to become empty.</p>	296543
<p>Fixed issue when audit trail files stored on the policy server could not be transmitted to an SPS logserver.</p> <p>When the connection between the Safeguard for Sudo policy server and an SPS logserver is interrupted, IO logs are cached on the policy server if the policy server is not in 'enforced' mode. Later on, when the connection is restored, the cached trails can be sent to the SPS logserver by running the pmauditsrv send command. This caused critical error on SPS side, the received trails became corrupt, and data loss could happen.</p>	296550
<p>Linux packages now ship with native service files for systemd.</p> <p>To work on older systems as well, our packages provide sysv init scripts for service maintenance.</p> <p>Newer linux distributions however may not provide compatibility with these by default: some additional packages need to be installed for that (for example systemd-sysvinit / initscripts). Now these additional packages are not needed any more. Note that sysv init scripts are still provided, and distributions without systemd remains supported (like RHEL 6).</p>	298900
<p>Improved git-svn handling.</p> <p>Prior to git-svn 1.8 it is not possible to query the version number without a working repository. In order to make the user interface more convenient, we postponed the version check until it is necessary. Because of this it is less likely to get warnings about missing or incompatible programs, however with this change the dependency is less obvious.</p>	300197
<p>Fixed a race condition between pmmasterd and pmlogsrvd.</p> <p>There is a rare race condition between pmlogsrvd and pmmasterd when they both access the same event in the database. From now on pmlogsrvd detects such a situation and solves the problem by restarting the affected database operation.</p>	300333

# Supported platforms

The following table provides a list of supported platforms for Safeguard for Sudo clients.

**NOTE:** Beginning with version 7.2.1, Safeguard for Sudo supports only Linux-based systems for Safeguard policy servers.

**Table 2: Linux supported platforms — server and plugin**

Platform	Version	Architecture
Amazon Linux	AMI, 2	x86_64
CentOS Linux	6, 7, 8	Current Linux architectures: s390x, PPC64, PPC64le, x86, x86_64, AARCH64
Debian	Current supported releases	x86_64, x86, AARCH64
Fedora Linux	Current supported releases	x86_64, x86, AARCH64
OpenSUSE	Current supported releases	x86_64, x86, AARCH64
Oracle Enterprise Linux (OEL)	6, 7, 8	Current Linux architectures: s390x, PPC64, PPC64le, x86, x86_64, AARCH64
Red Hat Enterprise Linux (RHEL)	6, 7, 8	Current Linux architectures: s390x, PPC64, PPC64le, x86, x86_64, AARCH64
SuSE Linux Enterprise Server (SLES)/Workstation	11 SP4, 12, 15	Current Linux architectures: s390x, PPC64, PPC64le, x86, x86_64, AARCH64
Ubuntu	Current supported releases	x86_64, x86, AARCH64

**Table 3: Unix and Mac supported platforms — plugin**

Platform	Version	Architecture
Apple MacOS	10.15 or later	x86_64, ARM64
FreeBSD	12.x, 13.x	x32, x64
HP-UX	11.31	PA, IA-64
IBM AIX	6.1 TL9, 7.1 TL3, 7.2	Power 4+
Oracle Solaris	10 8/11 (Update 10), 11.x	SPARC, x64

# System requirements

Before installing Safeguard 7.2.1, ensure that your system meets the following minimum hardware and software requirements.

**NOTE:** Beginning with version 7.2.1, Safeguard for Sudo supports only Linux-based systems for Safeguard policy servers.

**Table 4: Hardware and software requirements**

Component	Requirements
Operating systems	See <a href="#">Supported platforms</a> to review a list of platforms that support Safeguard clients.
Disk space	<p>80 MB of disk space for program binaries and manuals for each architecture.</p> <p>Considerations:</p> <ul style="list-style-type: none"><li>• At a minimum, you must have 80 MB of free disk space. The directories in which the binaries are installed must have sufficient disk space available on a local disk drive rather than a network drive. Before you install Safeguard, ensure that the partitions that will contain /opt/quest have sufficient space available.</li><li>• Sufficient space for the keystroke logs, application logs, and event logs. The size of this space depends on the number of servers, the number of commands, and the number of policies configured.</li><li>• The space can be on a network disk drive rather than a local drive.</li><li>• The server hosting Safeguard must be a separate machine dedicated to running the pmmasterd daemon.</li></ul>
SSH software	<p>You must install and configure SSH client and server software on all policy server hosts.</p> <p>You must also install SSH client software on all hosts that will use the Sudo Plugin.</p> <p>You must enable access to SSH as the root user on the policy server hosts during configuration of the policy servers. Both OpenSSH 4.3 (and later) and Tectia SSH 6.4 (and later) are supported.</p>
Processor	Policy Servers: 4 cores
RAM	Policy Servers: 8GB

**Table 5: Primary policy server and host system installation requirements**

<b>Systems Required</b>	<b>Minimum Requirements</b>
Primary Policy Server	<ul style="list-style-type: none"><li>• Supported Unix or Linux operating system</li><li>• SSH (ssh-keyscan binary)</li></ul>
Host System	<ul style="list-style-type: none"><li>• Supported Unix, Linux, or macOS platform</li><li>• SSH (ssh-keyscan binary)</li><li>• Sudo 1.8.1 (or later)</li></ul>

## Upgrade and compatibility

Safeguard for Sudo supports a direct upgrade installation from versions 2.0 and higher. The Safeguard software in this release is provided using platform-specific installation packages. For more information on upgrading, see the *One Identity Safeguard for Sudo Administration Guide*.

One Identity recommends that:

- You upgrade your policy server (Master) systems before Sudo plugins, and that a policy server is run at the same or higher level than Sudo plugins.
- All policy server systems and Sudo plugins are upgraded to the latest version to take advantage of all new features.

The upgrade process will create symbolic links to ensure that your existing paths function correctly.

## Product licensing

Although licenses are allocated on a per-agent basis, you install licenses on Safeguard policy servers.

No special commands are required to register or license the clients with policy servers. Hosts using the Safeguard agents are automatically granted a license once a request is received on the Safeguard policy server by means of the sudo client program.

### **To install a license file**

1. Copy the .dlv license file to the policy server.
2. To install the license, run:

```
# /opt/quest/sbin/pmlicense -l <license_file>
```

This command displays your currently installed license and the details of the new license to be installed.

3. When it asks, "Would you like to install the new license (Y/N) [Y]?", press **Enter**, or type: **Y**
4. If there are other policy servers configured in your policy server group, it forwards the license configuration to the other servers.

See the *One Identity Safeguard for Sudo Administration Guide* for more information about the syntax and usage of the `pmlicense` command.

## Upgrade and installation instructions

**NOTE:** Due to a change in the communication protocol, using 7.1 or later clients and servers with 7.0 clients and servers is not supported. One Identity recommends you upgrade all of your 7.0 installations to 7.1 or later versions. Installations of release 6.x are not affected and can still be used with 7.1.

## Upgrade instructions

For information on upgrading Safeguard for Sudo, see *Upgrade Safeguard for Sudo* in *Safeguard for Sudo Administration Guide*.

### Upgrading your license

Depending on whether you are upgrading Safeguard for Sudo from a version earlier than 7.0 or from version 7.x, handling your license is different.

- **Upgrading from a version 7.x:** If you have purchased Safeguard for Sudo version 7.x without owning an earlier version, you will receive a new license. In this case, you do not have to perform any extra steps and can proceed with the upgrade process.
- **Upgrading from a version earlier than 7.0:** The product licensing changed with Safeguard for Sudo version 7.0. If you are upgrading Safeguard for Sudo from a version earlier than 7.0 to version 7.x, you must upgrade your license first.

In this case, make sure that you have received your upgraded license before starting the upgrade process.

When client machines attempt to join to the policy server using the `pmjoin` or `pmjoin_plugin` command, if you do not have the proper license, the following error message is displayed:

```
*** Checking connection to policy server host <policy-server> [FAIL]
- ERROR: policy server <policy-server> has no valid license (for QPM4U)
- ERROR: Unable to connect to any policy servers
```

To display a summary of the combined licenses configured on this host, enter the following command without any options

```
pmlicense
```

To install a license, enter the following command. For more information on license installation, see *Installing licenses in Safeguard for Sudo Administration Guide*.

```
pmlicense -l <path-to-dlv-file>
```

- If the license file is valid, the installer displays the following:

```
The selected license file (<path-to-dlv-file>) contains a valid license
```

- If the license file is not valid, the installer displays the following error:

```
Error: This license file is not valid. Please contact Quest Licensing for a new license file.
```

You will receive the following message after the license is installed, depending the success of the installation:

- If the license is successfully installed:

```
** Successfully installed new license
```

- If the license install is failed:

```
** Error: Cannot configure new license from file <path-to-dlv-file>
```

## More resources

Additional information is available from the following:

- Online product documentation: <https://support.oneidentity.com/safeguard-for-sudo/technical-documents>
- One Identity Privileged Account Management forum: <https://www.quest.com/community/one-identity/unix-access-management/>

## Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.



This release supports any single-byte character set. Double-byte or multi-byte character sets are not supported. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America.

## About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

## Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit <https://www.oneidentity.com/company/contact-us.aspx>.

## Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

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- Sign up for product notifications
- Download software and technical documentation
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- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

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### Legend

-  **WARNING:** A WARNING icon highlights a potential risk of bodily injury or property damage, for which industry-standard safety precautions are advised. This icon is often associated with electrical hazards related to hardware.
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

# Third-party contributions

This product contains some third-party components (listed below). Copies of their licenses may be found at referencing <https://www.oneidentity.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (\*) is available at <http://opensource.quest.com>.

**Table 6: List of Third-Party Contributions**

Component	License or Acknowledgement
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APR Utilities 2.0	This product includes software developed by the Apache Software Foundation ( <a href="http://www.apache.org">http://www.apache.org</a> ) Version 2.0, January 2004 This component is governed by the <a href="#">Apache License</a>
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Subversion 1.6.15	<p>This product includes software developed by the Apache Software Foundation (<a href="http://www.apache.org">http://www.apache.org</a>) Version 2.0, January 2004</p> <p>This component is governed by the <a href="#">Apache License</a></p>
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Component	License or Acknowledgement
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Zlib 1.2.5	Copyright (c) 1995-2010 Jean-loup Gailly and Mark Adler This component is governed by Zlib 1.2.5

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Version 2.0, January 2004

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