

One Identity Safeguard for Privileged Sessions 6.2

Release Notes

September 2019

These release notes provide information about the One Identity Safeguard for Privileged Sessions 6.2 release.

About this release

One Identity Safeguard for Privileged Sessions Version 6.2 is a release with new features and resolved issues. For details, see:

- [New features](#)
- [Resolved issues](#)



NOTE:

For a full list of key features in One Identity Safeguard for Privileged Sessions, see [Administration Guide](#).

About the Safeguard product line

The One Identity Safeguard Appliance is built specifically for use only with the Safeguard privileged management software, which is pre-installed and ready for immediate use. The appliance is hardened to ensure the system is secured at the hardware, operating system and software levels. The hardened appliance approach protects the privileged management software from attacks while simplifying deployment and ongoing management -- and shortening the timeframe to value.

Safeguard privileged management software suite

Safeguard privileged management software is used to control, monitor, and govern privileged user accounts and activities to identify possible malicious activities, detect entitlement risks, and provide tamper proof evidence. The Safeguard products also aid incident investigation, forensics work, and compliance efforts.

The Safeguard products' unique strengths are:

- One-stop solution for all privileged access management needs
- Easy to deploy and integrate
- Unparalleled depth of recording
- Comprehensive risk analysis of entitlements and activities
- Thorough Governance for privileged account

The suite includes the following modules:

- **One Identity Safeguard for Privileged Passwords** automates, controls and secures the process of granting privileged credentials with role-based access management and automated workflows. Deployed on a hardened appliance, Safeguard for Privileged Passwords eliminates concerns about secured access to the solution itself, which helps to speed integration with your systems and IT strategies. Plus, its user-centered design means a small learning curve and the ability to manage passwords from anywhere and using nearly any device. The result is a solution that secures your enterprise and enables your privileged users with a new level of freedom and functionality.
- **One Identity Safeguard for Privileged Sessions** is part of One Identity's Privileged Access Management portfolio. Addressing large enterprise needs, Safeguard for Privileged Sessions is a privileged session management solution, which provides industry-leading access control, as well as session monitoring and recording to prevent privileged account misuse, facilitate compliance, and accelerate forensics investigations.

Safeguard for Privileged Sessions is a quickly deployable enterprise appliance, completely independent from clients and servers - integrating seamlessly into existing networks. It captures the activity data necessary for user profiling and enables full user session drill-down for forensics investigations.

- **One Identity Safeguard for Privileged Analytics** integrates data from Safeguard for Privileged Sessions to use as the basis of privileged user behavior analysis. Safeguard for Privileged Analytics uses machine learning algorithms to scrutinize behavioral characteristics and generates user behavior profiles for each individual privileged user. Safeguard for Privileged Analytics compares actual user activity to user profiles in real time and profiles are continually adjusted using machine learning. Safeguard for Privileged Analytics detects anomalies and ranks them based on risk so you can prioritize and take appropriate action - and ultimately prevent data breaches.

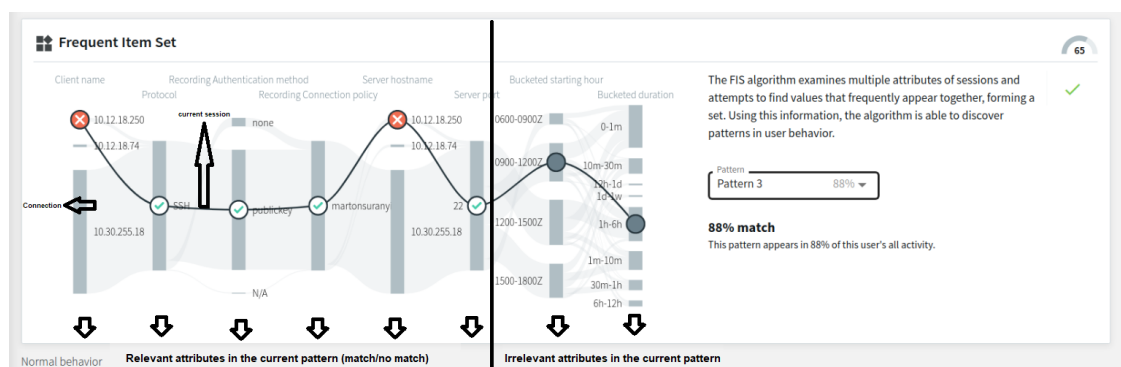
New features

New features in SPS 6.2:

Search improvements

- Analytics information can now be displayed also on the Search Master node of an SPS cluster.
- Frequent Item Set (FIS) analysis is available on the Search interface. The FIS flow view is similar to the flow view analytics overview, except that the FIS flow view only displays data narrowed down to a single user's previous sessions in the analysis period. For details, see ["Visualizing Frequent Item Sets on the FIS flow view" in the Administration Guide](#).

Figure 1: Search – The FIS flow view (close-up)



Using SPS with SPP

To further improve the cooperation of SPS and SPP, using the two deployments in a Sessions-initiated workflow has been greatly improved. For details, see ["Configuring the Sessions-initiated workflow" in the Administration Guide](#).

SSH improvements

- If you do not specify the username or the address in nontransparent SSH and Telnet connections, One Identity Safeguard for Privileged Sessions (SPS) displays an interactive prompt where you can enter the username and the server address.
- Kerberos-based authentication in SSH sessions has been improved. For details, see ["Kerberos authentication settings" in the Administration Guide](#).
- Resolving hostnames in Channel Policies can now use a custom Domain Name server. For details, see ["Creating and editing channel policies" in the Administration Guide](#).

RDP improvements

- Transferring files between the target server and the client host using the Clipboard can now be audited. The transferred files can be extracted from the audit trail using a command-line tool. For details, see ["Export files from an audit trail after RDP file transfer via clipboard" in the Safeguard Desktop Player User Guide](#).

Join SPS to SPP improvements

Joining your One Identity Safeguard for Privileged Sessions (SPS) deployment to your One Identity Safeguard for Privileged Passwords (SPP) deployment now supports the Sessions-initiated (SPS-initiated) workflow as well. For details, see ["Joining SPS to SPP" in the Administration Guide](#).

Changes in the external indexer

i NOTE:

Due to legal reasons, installation packages of the external indexer application will be available only from the SPS web interface. After SPS versions 6.3 and 6.0.2 are released, the installation packages will be removed from our website.

REST API improvements

You can now configure Telnet Connection Policies from the `/api/coniguration/telnet` endpoint of the API.

Enhancements

The following is a list of enhancements implemented in SPS 6.2.

Table 1: General enhancements

Enhancement	Issue ID
When storing hostnames and fully-qualified domain names in Channel policies, you can now configure SPS to use a custom domain name server to resolve the hostnames. For details, see "Creating and editing channel policies" in the Administration Guide .	
You can verify the integrity of the plugins uploaded to SPS from the web interface.	
Enabling debug logging now does not automatically increase the verbosity level of the logs related to the audited network traffic. For details, see "Collecting logs and system information for error reporting" in the Administration Guide .	

Resolved issues

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

Table 2: General resolved issues in release 6.2

Resolved Issue	Issue ID
Security package updates	PAM-10817
bind9: <ul style="list-style-type: none">• CVE-2019-6471	
bzip2: <ul style="list-style-type: none">• CVE-2019-12900	
expat: <ul style="list-style-type: none">• CVE-2018-20843	
glib2.0: <ul style="list-style-type: none">• CVE-2019-13012	
libmspack: <ul style="list-style-type: none">• CVE-2019-1010305	
linux: <ul style="list-style-type: none">• CVE-2018-12126• CVE-2018-12127• CVE-2018-12130• CVE-2019-11085• CVE-2019-11091• CVE-2019-11478• CVE-2019-11479• CVE-2019-11815• CVE-2019-11833• CVE-2019-11884	
mysql-5.7: <ul style="list-style-type: none">• CVE-2019-2737• CVE-2019-2738• CVE-2019-2739	

Resolved Issue

Issue ID

- CVE-2019-2740
- CVE-2019-2741
- CVE-2019-2757
- CVE-2019-2758
- CVE-2019-2774
- CVE-2019-2778
- CVE-2019-2791
- CVE-2019-2797
- CVE-2019-2805
- CVE-2019-2819

nss:

- CVE-2019-11719
- CVE-2019-11729

openjdk-8:

- CVE-2019-2745
- CVE-2019-2762
- CVE-2019-2766
- CVE-2019-2769
- CVE-2019-2786
- CVE-2019-2816
- CVE-2019-2842
- CVE-2019-7317

openldap:

- CVE-2019-13057
- CVE-2019-13565

openssl:

- CVE-2018-0732
- CVE-2018-0735
- CVE-2018-0737
- CVE-2019-1543

patch:

Resolved Issue	Issue ID
<ul style="list-style-type: none"> • CVE-2019-13636 • CVE-2019-13638 	
postgresql-10:	
<ul style="list-style-type: none"> • CVE-2019-10164 • CVE-2019-10208 	
python2.7:	
<ul style="list-style-type: none"> • CVE-2018-1000802 • CVE-2018-14647 	
redis:	
<ul style="list-style-type: none"> • CVE-2019-10192 	
sqlite3:	
<ul style="list-style-type: none"> • CVE-2018-20346 • CVE-2018-20505 • CVE-2018-20506 • CVE-2019-8457 • CVE-2019-9936 • CVE-2019-9937 	
vim:	
<ul style="list-style-type: none"> • CVE-2019-12735 	
walinuxagent:	
<ul style="list-style-type: none"> • CVE-2019-0804 	
Ignore the actual result of the whoami request when checking the availability of an LDAP server	PAM-10729
To check the availability of an LDAP server, SPS performs a "who am I" query against that server. If that query was disabled on the server, SPS treated the response as a sign of the server being down, even if it was handling other requests properly. This behavior has been changed and SPS now only checks if the server responds at all.	
Low idle timeouts on LDAP servers not handled correctly	PAM-10674
SPS did not correctly handle if an LDAP server closed idle sessions after less than 600 seconds. After this fix, idle timeout settings above 120s work correctly.	
Connection data backup not available in the console menu	PAM-

Resolved Issue	Issue ID
<p>It is possible to manually initiate a backup process from the menu accessible via SSH or the appliance console. Due to a bug, only the system backup option was available there and the option to backup data associated with connection policies (such as audit trails) was not. This is now fixed and all backup options are available again.</p>	10576
<p>Login page can redirect to arbitrary external sites</p> <p>To streamline the login process, SPS was able to redirect the user to the site they originally wanted to access after a successful login. However, this feature also redirected the user to any URL if the login page was accessed through a properly crafted link. This made phishing attacks against the administrators of SPS easier, so the login page now only redirects to URLs on SPS itself.</p>	PAM-10560
<p>On an extremely overloaded machine, the OCR scanning (indexing) process could crash</p> <p>When the machine was so overloaded that the connection between the process that controls the OCR scanning and indexing operation (indexerworker) and the process doing the computation (indexerservice) was lost, the worker process tried to abort the processing but crashed. The index job might be finished successfully later. The problem was fixed and the worker process now handles this outage correctly.</p>	PAM-10547
<p>Disk fill-up prevention should always deny incoming connections when limit is reached</p> <p>Disk fill-up prevention has not denied incoming connections in the following case: IP forwarding was enabled for the NIC where the connection was coming from and a connection policy was configured to 'Use original target address of the client'. This issue has been fixed. All connections are now denied when disk fill-up limit is reached. Forwarded connections that do not match a connection policy, and therefore are not audited still pass through the appliance even if disk fill-up limit is reached.</p>	PAM-10510
<p>Session verdict is 'auth-fail' after a failed gateway authentication attempt even if it succeeds after a retry</p> <p>If the user enters a wrong password or the gateway authentication attempt failed for another reason, the "verdict" for that session on the search interface remained "auth-failed", even if a second attempt was offered for the user and that succeeded. This logic is now fixed and the final authentication decision is used to decide the verdict of the session.</p>	PAM-10509
<p>Console menu does not timeout</p> <p>As a side-effect of an unrelated change, the console menu did not log off idle users after a timeout. This is now fixed and idle sessions are properly terminated.</p>	PAM-10441

Resolved Issue	Issue ID
<p>Transferring files over 4GB not possible over RDP disk redirection</p> <p>Files over 4GB transfers via RDP disk redirection over SPS got corrupted. This is now fixed and both download and upload of larger files is possible.</p>	PAM-10418
<p>indexer-service cannot be reloaded multiple times within a short time</p> <p>Reloading indexer-service occasionally returned with a false error message, even though it was actually reloaded. However, if you attempted to reload it again within a short time (within in ~3 seconds), the reload failed.</p>	PAM-10355
<p>Core files are generated for ICA sessions</p> <p>In certain situations after the client has closed an ICA session, SPS generated a core file. This has been corrected.</p>	PAM-10316
<p>Search interface easier to use on smaller displays</p> <p>Some of the controls on the search interface were difficult to use on displays with less than 1480 horizontal pixels. The design was made more responsive to accomodate for smaller displays, too.</p>	PAM-10285
<p>RDP connection problems with a load balancer between SPS and the target server</p> <p>Due to a problem around how SPS handled some packets in the RDP protocol, connections could be broken if there was a load balancer between SPS and the target server. The error "ERRINFO_CB_CONNECTION_ERROR_INVALID_SETTINGS" was visible in the logs when this happened. These packets are now handled properly.</p>	PAM-10284
<p>The /api/active-sessions endpoint responds with Internal Server Error (500)</p> <p>The /api/active-sessions endpoint could respond only with Internal Server Error (500) in case of an error during DELETE. From now on the /api/active-sessions endpoint can respond with Not Found Error (404) if the given session id is not found in the list of active sessions.</p>	PAM-10281
<p>Removed deprecated and duplicate fields from the search interface</p> <p>Many no longer used or duplicate fields were offered in the selectors on the search interface which made them difficult to use. That list was reviewed and now only relevant fields are available to be selected.</p>	PAM-10175
<p>Disk fill-up prevention should always deny incoming connections when limit is reached</p> <p>Disk fill-up prevention has not denied incoming connections in the following case: IP forwarding was enabled for the NIC where the connection was coming from and a connection policy was configured to 'Use original target address of the client'. This issue has been fixed. All connections are now denied when disk fill-up limit is reached. Forwarded connections that do not match a connection policy, and therefore are not audited still pass trough the appliance even if disk fill-up</p>	PAM-10039

Resolved Issue	Issue ID
limit is reached.	
Prevent joining SPS nodes running different firmware versions to a cluster Configuration (and cluster state) synchronization may not work if the Central Management and other cluster nodes are running different versions of SPS. In order to avoid possible misconfiguration, product version compatibility will now be validated during joining nodes to an SPS cluster.	PAM-10020
Improved error detection of Elasticsearch database for audit information If the Elasticsearch instance that acts as a backend for the audit database failed to start for some reason, it kept retrying (and failing) and never notified the user about the problem. The problem has been fixed and such problems are properly escalated.	PAM-10018
Indexing status does not change on UI after successfully reindexing a failed session If indexing of an audit trail failed for some reason and reindexing was triggered manually, the status of indexing was never updated on the UI even if reindexing was successful. This has been fixed and the latest and correct indexing status is shown in the interface at all times.	PAM-9753
Stopping more data-producing processes when disk fillup prevention is triggered The disk fillup prevention feature in SPS proactively stops traffic passing through if this usage reaches a predefined threshold to avoid more severe errors caused by the disk being filled up completely. Besides ongoing traffic there are several services that also produce data, which are now also stopped, providing further protection.	PAM-8012
The default number of indexer workers was 16 on a newly installed SPS. The default number of indexer workers was 16 on a newly installed SPS. This has been modified, and now the number of CPU cores of the machine is taken into account when deciding the default number of indexer workers.	PAM-3739

System requirements

Before installing SPS 6.2, ensure that your system meets the following minimum hardware and software requirements.

The One Identity Safeguard for Privileged Sessions Appliance is built specifically for use only with the One Identity Safeguard for Privileged Sessions software that is already installed and ready for immediate use. It comes hardened to ensure the system is secure at the hardware, operating system, and software levels.

For the requirements about installing One Identity Safeguard for Privileged Sessions as a virtual appliance, see one of the following documents:

- [Installation Guide](#)
- [Deployment from Azure Marketplace](#)
- [Deployment on Amazon Web Services](#)

Supported web browsers and operating systems

⚠ CAUTION:

Since the official [support of Internet Explorer 9 and 10 ended](#) in January, 2016, they are not supported in One Identity Safeguard for Privileged Sessions (SPS) version 4 F3 and later.

⚠ CAUTION:

Even though the One Identity Safeguard for Privileged Sessions (SPS) web interface supports Internet Explorer and Microsoft Edge in general, to replay audit trails you need to use Internet Explorer 11, and install the [Google WebM Video for Microsoft Internet Explorer plugin](#). If you cannot install Internet Explorer 11 or another supported browser on your computer, use the the Safeguard Desktop Player application. For details, see "[Replaying audit trails in your browser](#)" in the [Administration Guide](#) and [Safeguard Desktop Player User Guide](#).

ℹ NOTE:

SPS displays a warning message if your browser is not supported or JavaScript is disabled.

ℹ NOTE:

The minimum recommended screen resolution for viewing One Identity Safeguard for Privileged Sessions's (SPS's) web interface is 1366 x 768 pixels on a 14-inch widescreen (standard 16:9 ratio) laptop screen. Screen sizes and screen resolutions that are equal to or are above these values will guarantee an optimal display of the web interface.

Supported browsers

The current version of Mozilla Firefox and Google Chrome, Microsoft Edge, and Microsoft Internet Explorer 11 or newer. The browser must support TLS-encrypted HTTPS connections, JavaScript, and cookies. Make sure that both JavaScript and cookies are enabled.

Supported operating systems

Windows 2008 Server, Windows 7, Windows 2012 Server, Windows 2012 R2 Server, Windows 8, Windows 8.1, Windows 10, Windows 2016, and Linux.

The SPS web interface can be accessed only using TLS-encryption and strong cipher algorithms.

Opening the web interface in multiple browser windows or tabs is not supported.

Safeguard Desktop Player system requirements

The Safeguard Desktop Player application supports the following platforms:

- **Microsoft Windows:**

64-bit version of Windows 7 or newer. Install the appropriate driver for your graphic card.

- **Linux:**

RHEL 6, CentOS 6, or newer. The Safeguard Desktop Player application will probably run on other distributions as well that have at least libc6 version 2.12 installed.

- **Mac:**

macOS High Sierra 10.13, or newer.

Installing the Safeguard Desktop Player application requires about 120MB disk space, and a temporarily used disk space to store the audit trails that are replayed. The size of the temporary files depends on the size of the replayed audit trails.

You can install the Safeguard Desktop Player application with user privileges.

Hardware specifications

One Identity Safeguard for Privileged Sessions appliances are built on high performance, energy efficient, and reliable hardware that are easily mounted into standard rack mounts.

Table 3: Hardware specifications

Product	Redundant PSU	Processor	Memory	Capacity	RAID	IPMI
SPS T-1	No	Intel(R) Xeon(R) X3430 @ 2.40GHz	2 x 4 GB	2 x 1 TB	Software RAID	Yes

Product	Redundant PSU	Processor	Memory	Capacity	RAID	IPMI
SPS T-4	Yes	Intel(R) Xeon(R) E3-1275V2 @ 3.50GHz	2 x 4 GB	4 x 2 TB	LSI MegaRAID SAS 9271-4i SGL	Yes
SPS T-10	Yes	2 x Intel(R) Xeon(R) E5-2630V2 @ 2.6GHz	8 x 4 GB	13 x 1 TB	LSI 2208 (1GB cache)	Yes
Safeguard Sessions Appliance 3000	Yes	1x Intel Xeon E3-1275 3.60GHz 8Core	2 x 16 GB	4x2 TB NLSAS	LSI MegaRAID SAS 9361-4i Single	Yes
Safeguard Sessions Appliance 3500	Yes	2x Intel Xeon Silver 4110 2.1Ghz 8Core (=16Core)	8 x 8 GB	9x2 TB NLSAS	1 x Broadcom MegaRAID SAS 9361-16i + LSI Avago CacheVault Power Module 02 (CVPM02) Kit	Yes

The Safeguard Sessions Appliance 3500 is equipped with a dual-port 10Gbit interface. This interface has SFP+ connectors (not RJ-45) labeled A and B, and can be found right of the Label 1 and 2 Ethernet interfaces. If you want faster communication, for example, in case of high data load, you can connect up to two 10Gbit network cards. These cards are not shipped with the original package and have to be purchased separately.

Product licensing

To enable a trial license

1. Visit the [Download Trials page](#), and navigate to **One Identity Safeguard for Privileged Sessions > Download Free trial**.
2. Complete the registration form, and click **Download Trial**.
3. You will receive the details on how to access your license key and the download the ISO files in email.

To enable a purchased commercial license

1. Navigate to **My Account > My License Assets** on the support portal.
2. To access your license key, click **Retrieve Key** next to your product.

3. Once you have the license keys, navigate to **My Account > My Products** and click **Download** next to your product. The **Download Software** page is displayed.
4. Download the ISO image (install cdrom) of your product.

If you need help with accessing your license, navigate to the [Licensing Assistance](#) page, and follow the instructions on screen.

Upgrade and installation instructions

The One Identity Safeguard for Privileged Sessions appliance is built specifically for use only with the One Identity Safeguard for Privileged Sessions software that is already installed and ready for immediate use.

To upgrade to One Identity Safeguard for Privileged Sessions 6.2

For step-by-step instructions on upgrading to SPS 6.2, see [Upgrade Guide](#).

About feature releases

This is a feature release, which means that it will be supported for 6 months after the release date or 2 months after the release of a succeeding feature release (whichever date is later). It also means that if you are running a previous feature release (such as versions 6.1), you have 2 months to upgrade to version 6.2 if you want to keep running on a supported release.

For a full description of long-term-supported and feature releases, open the [SPS product page on the Support Portal](#) and navigate to **Product Life Cycle & Policies > Product Support Policies > Software Product Support Lifecycle Policy**.

If you have a physical appliance based on MBX hardware

One Identity recommends you to upgrade to SPS 6.2, if you are not running SPS on Pyramid hardware and any of the following is true:

NOTE:

If you do not know the type of your hardware, see [If you have a physical appliance based on Pyramid hardware](#).

- You wish to take advantage of any of the new features.
- You are running a previous feature release.
- You are OK with having to continuously upgrade to the latest feature release to remain supported.

We are releasing new feature releases approximately once every 2 months.

If you have a physical appliance based on Pyramid hardware

Do NOT upgrade to SPS 6.2 if you are running SPS on Pyramid hardware:

Downgrading from a feature release

Do NOT downgrade from a feature release.

⚠ CAUTION:

Downgrading from a feature release is not supported. If you upgrade from an LTS release (for example, 4.0) to a feature release (4.1), you have to keep upgrading with each new feature release until the next LTS version (in this case, 5.0) is published.

Verify successful installation

Navigate to **Basic Settings > System > Version details** and verify that SPS is running version 6.2 of the firmware. If not, it means that the upgrade process did not complete properly and SPS performed a rollback to revert to the earlier firmware version. In this case, complete the following steps:

1. Navigate to **Basic Settings > Troubleshooting > Create support bundle** and click **Create support bundle**.
2. Save the resulting ZIP file.
3. contact our Support Team and send them the file. They will analyze its contents to determine why the upgrade was not completed and assist you in solving the problem.

More resources

To obtain more information, read the technical documentation or consult the community:

- [One Identity Safeguard for Privileged Sessions - Technical Documentation](#)
- [One Identity Community](#)

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 is Unicode-enabled and supports any character set. 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, Central and Eastern Europe, Far-East Asia, Japan. It supports bidirectional writing (Arabic and Hebrew). The release supports Complex Script (Central Asia – India, Thailand).

This release has the following known capabilities or limitations: OCR is limited to Nuance supported languages. No support for RTL languages.

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/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to videos at www.YouTube.com/OneIdentity
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

Third-party contributions

This appendix includes the open source licenses and attributions applicable to One Identity Safeguard for Privileged Sessions.

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Version 2, June 1991

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Version 2, June 1991

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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.**