

One Identity Safeguard for Privileged Sessions 6.10.0

Release Notes

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These release notes provide information about the One Identity Safeguard for Privileged Sessions release. For the most recent documents and product information, see [One Identity Safeguard for Privileged Sessions - Technical Documentation](#).

About this release

One Identity Safeguard for Privileged Sessions Version 6.10.0 is a release with new features and resolved issues. For details, see:

- [New features](#)
- [Resolved issues](#)
- [Known 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 Safeguard for Privileged Sessions (SPS) version 6.10.0:

The replaying audit trails in your browser option has been enhanced

The replaying audit trails in your browser option has been enhanced with the following:

- The video file generation is executed as a background operation and there is no trace of it on the UI. You can play the video file of an audit trail already while the generation is ongoing in the background.
- You can follow active sessions in the browser.
- In cluster mode, you can play the video files of audit trails not only from the Search Master node, but from the Search Minion nodes as well.
- You can store the private keys necessary to decrypt encrypted audit trails and screenshots in your audit keystore. The audit keystore is protected by a master password that you define. The audit keystore is not used to store the certificates that correspond to the private keys added to your keystore. You must add the necessary certificates to the indexer service.
- While watching a video file of an audit trail or following an active session, you can copy the content of text-based protocols to the clipboard.
- The **Automatic refresh** option of the details view of the **Search** interface is now available under **User menu > Preferences**.

Using Sudo with SPS

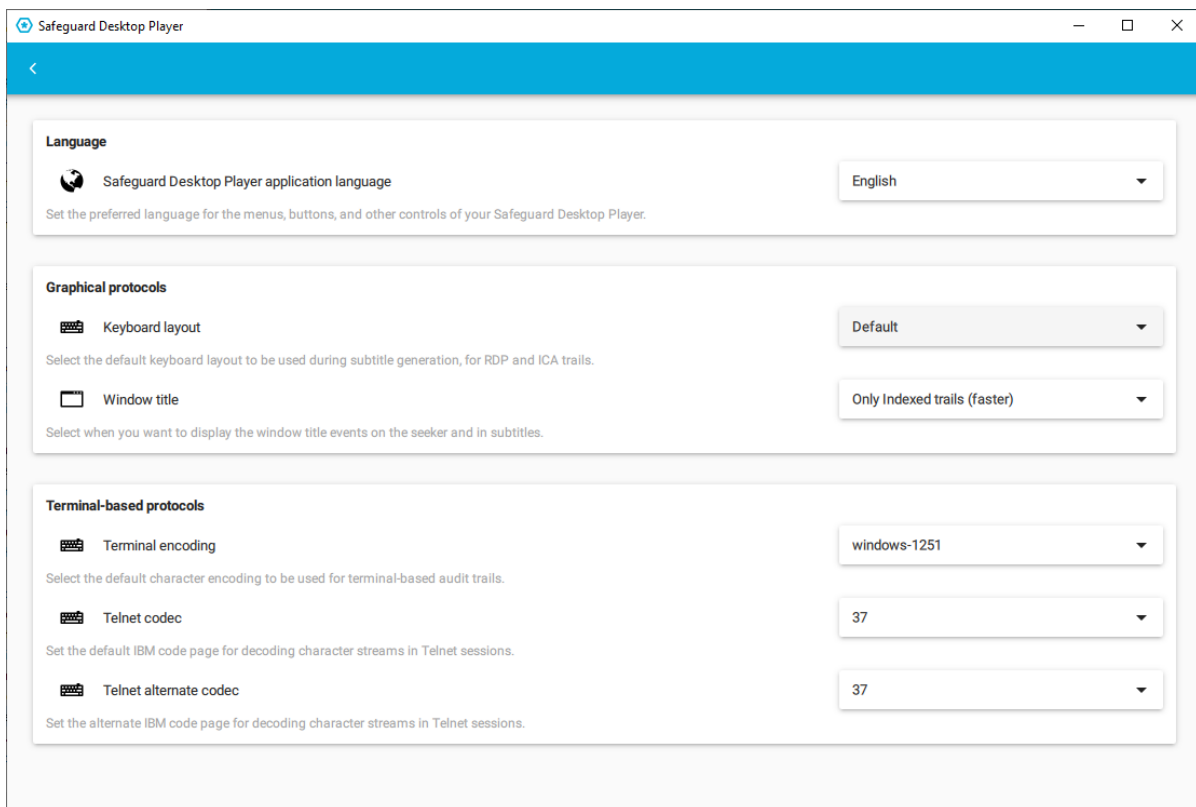
With the SPS and Sudo integration, you can collect and analyze Sudo session recordings, called iologs in Sudo terminology, in SPS.

By using SPS to collect and analyze Sudo session recordings, your Sudo recordings are stored and indexed by SPS, and you can use the Search interface, for example, to view the recordings, list commands executed during a Sudo session, and so on.

Enhancements for the Safeguard Desktop Player

The Safeguard Desktop Player has been enhanced with the **Preferences** menu, which you can use to set the application language, select a keyboard layout, select how you want to display the window title events on the seeker and in subtitles, and so on.

Figure 1: Settings > Preferences



Other changes and improvements

- To avoid errors, SPS now prevents you to unjoin SPS from One Identity Starling if Remote Access is enabled. You can only unjoin SPS from One Identity Starling if you first disable Remote Access.

Changes and improvements in Safeguard for Privileged Sessions REST API Reference Guide version 6.10.0

- **Web gateway authentication:** You can use the `/web_gateway_authentication` endpoint to configure the banner on the login screen before web gateway authentication. For more information, see One Identity Safeguard for Privileged Sessions 6.10 REST API > **Basic settings > Logs, monitoring and alerts > Management options > Web gateway authentication.**
- **Upload Telnet pattern sets via REST API:** You can now upload Telnet pattern sets via REST API. For more information, see One Identity Safeguard for Privileged Sessions 6.10 REST API > **Telnet connections > Telnet pattern sets.**
- The error details field has been updated in REST API error messages.
- The Password parameters table has been updated in One Identity Safeguard for

Resolved issues

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

Table 1: General resolved issues in release 6.10.0

Resolved Issue	Issue ID
<p>Downloading a certificate or key in DER format could provide an unparseable file for some certificates and keys</p> <p>When a certificate or key was downloaded from the Web interface in DER format and the resulting binary blob ended with bytes that could be interpreted as ASCII whitespace or NULL (0x00, 0x09, 0x0a, 0x0b, 0x0d, 0x20), then those bytes were truncated, resulting in an invalid file. This has been fixed.</p>	PAM-14227
<p>If there was a proxy misfunction, the sessions were left open until the next reboot</p> <p>There was an issue that caused that if a proxy component crashed, some sessions got stuck in active state on the auditor portal and did not close until SPS was restarted. This issue has been fixed.</p>	PAM-14178
<p>LDAP-based authentication did not work after an LDAP server issue</p> <p>If an LDAP server that we had been trying to authenticate with returned some errors, the LDAP client in SPS got stuck in an error state, where it was impossible to do any LDAP operations. As a workaround, the ldapservice.service unit was restarted.</p> <p>This issue has been fixed.</p>	PAM-14160
<p>The hardware usage charts did not display any information</p> <p>With this fix, the hardware charts display the corresponding data, which is updated periodically.</p>	PAM-14104
<p>The timeline and sankey chart did not show any data</p> <p>With this fix, the data is displayed correctly and updated on every search.</p>	PAM-14093
<p>The user was unable to create a new content-based subchapter from the Reporting page</p> <p>The user now is able to create a new subchapter. This issue was caused by an open issue from Microsoft & IE11. The user now is able to edit or create a new content-based subchapter.</p>	PAM-14069
<p>The copyright date was 2020</p>	PAM-

Resolved Issue	Issue ID
The copyright date has been updated to 2021.	14066
In Basic Settings > Trust Stores, the CA certificates with EC keys / ECDSA signing algorithm was not supported The Key Upload component previously did not support the ECC signing algorithm certificates. This has been fixed.	PAM-14003
There was a rare scenario, where notification and Python threads could cause a deadlock There was a rare scenario where a deadlock could happen, involving the notification thread and Python's global interpreter lock (GIL). The issue has been fixed by only holding the GIL for the minimum required duration during a critical part and the dependency causing the potential deadlock was broken.	PAM-13544
SWAP monitoring could send false alarms through email and/or SNMP for appliances where no SWAP was configured for the appliance, mostly effecting virtual machine-based SPS appliances Due to an upstream bug, it happened rarely that the SNMP monitoring sent out false alarms each time the appliance was restarted or the monitoring-related configuration was changed. This only happened when the SWAP available on the system was 0 bytes (SWAP was disabled) and where that value was compared to the available amount. The upstream issue related to the comparison of these values and that caused the alert to be sent out also if these values were equal, and not only when the available SWAP was below the configured threshold.	PAM-13156
When creating a new subchapter from the Reporting page, pressing ESC closed all the side-sheets Now this is handled in the correct way, all side-sheets are not closed, only the top-most one.	PAM-13069
The RDP security protocol and encryption method negotiation is not logged When an RDP connection succeeded, or failed due to security protocol or encryption method negotiation failure, it was hard to determine what protocol was selected or tried, and what caused the negotiation failure. This has been fixed. Now, every RDP connection emits a log line containing information about the security protocols, and, if the legacy standard RDP security is used, a log line is emitted also about the encryption methods.	PAM-12535
The link at the end of the search walkthrough pointed to a non-existing URL Now the link is fixed, so it points to the correct URL.	PAM-12534
The Report subchapter could not be saved The report creation has a different UI now for creating subchapters and the subchapter can be saved.	PAM-12420

Resolved Issue	Issue ID
With a locked private keystore, the 'Start rendering' button was not displayed. After the browser/onbox enhancement, it is not necessary to render videos.	PAM-11023
Fixing the channel selector before playing the video file. With the new online/browser player, the channel selector has been fixed.	PAM-9849
Previously, sometimes the Play/Pause functionality got into an endless loop in the Onbox/Browser player and could not play the video file. The play and pause functionality of the Browser/Onbox player has been fixed.	PAM-8062

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Table 2: General known issues

Known Issue
<p>⚠ CAUTION: If you are using SHA1 (Secure Hash Algorithm 1) signed certificates, SPS does not allow Remote Desktop Protocol (RDP) connections to Windows Servers.</p> <p>Use the Microsoft Management Console (MMC) to verify your certificate:</p> <ul style="list-style-type: none"> • If Remote Desktop Services (RDS) uses a self-signed certificate, make sure that you update your system to the latest patch level, then delete the certificate and restart the Remote Desktop Configuration service in order to re-generate the self-signed certificate. • If RDS is using a certificate imported from a Public Key Infrastructure (PKI), contact your PKI admin for a new SHA256 certificate.

System requirements

Before installing SPS 6.10.0, 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:

NOTE: When setting up a virtual environment, carefully consider the configuration aspects such as CPU, memory availability, I/O subsystem, and network infrastructure to ensure the virtual layer has the necessary resources available. Please consult [One Identity's Product Support Policies](#) for more information on environment virtualization.

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

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:

From SPS version 6.10, you do not need to install the [Google WebM Video for Microsoft Internet Explorer plugin](#) to replay audit trails in your browser. The supported browsers are Google Chrome, Firefox, Safari, and IE11.

For SPS version 6.9 and earlier versions, 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 Safeguard Desktop Player application. For details, see ["Replaying audit trails in your browser" in the Administration Guide](#) and [Safeguard Desktop Player User Guide](#).

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

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, Google Chrome, Microsoft Edge (Microsoft Edge Legacy is not supported), 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 7, CentOS 7, or newer. The Safeguard Desktop Player application will probably run on other distributions as well that have at least libc6 version 2.17 installed.

Depending on the distribution, you will need the following packages installed:

- On Debian-based GNU/Linux:
 - libxcb-render-util0
 - libxcb-keysyms1
 - libxcb-image0
 - libxcb-randr0
 - libxcb-xkb1
 - libxcb-xinerama0
 - libxcb-icccm4
- On CentOS/Red Hat:
 - xcb-util-renderutil

- xcb-util-keysyms
- xcb-util-image

- **Mac:**

macOS High Sierra 10.13, or newer.

Installing the Safeguard Desktop Player application requires about 200MB 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	1x Intel Xeon X3430 2.40GHz	2 x 4 GB	2 x 1 TB	Software RAID	Yes
SPS T-4	Yes	1x Intel Xeon E3-1275 v2 3.50GHz	2 x 4 GB	4 x 2 TB	LSI MegaRAID SAS 9271-4i SGL	Yes
SPS T-10	Yes	2 x Intel Xeon E5-2630 v2 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 v6 3.80GHz	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	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 6.10.0

For step-by-step instructions on upgrading to SPS 6.10.0, see [Upgrade Guide](#).

NOTE: Due to legal reasons, installation packages of the external indexer application will be available only from the SPS web interface. After SPS versions 6.4 and 6.0.3 are released, the installation packages will be removed from our website.

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 6.10.0 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 **Self Service Tools > Product Support > 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 SPS6.10.0, 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 SPS6.10.0 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 6.10.0 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.**