

# Safeguard for Privileged Sessions On Demand Hosted

## Release Notes

**20 April 2022, 07:37**

These release notes provide information about the Safeguard for Privileged Sessions On Demand 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 6.13.1 is a release with new features and resolved issues.

For the list of issues addressed in release 6.13.1, see [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 One Identity Safeguard for Privileged Sessions (SPS) version 6.13.1:

- For encrypted audit trails, you no longer need to upload the PEM-encoded X.509 certificate in addition to the private keys. Now only the RSA private key is needed. Navigate to **Basic Settings > Local Services > Indexer service**.
- From SPS version 6.13.1, Internet Explorer 11 (IE11) is not supported anymore. SPS version 6.12.0 and previous versions continue to support IE11.
- If you have joined an SPP to SPS, you can share specific SPS functions with SPP. Currently, SPS supports sharing RDP and SSH connection policies with SPP. To use the **Share connection policy with SPP** option under **Functions shared with SPP**, navigate to:
  - **RDP Control > Connections**
  - **SSH Control > Connections**
- SPS supports enhanced networking capabilities through the Elastic Network Adapter (ENA) on AWS.

### Changes and improvements in SPS REST API Reference Guide version 6.13.1

- The `session-events` and `indexer-events` parameters were added to *Monitor appliance health status*. These two parameters represent the fullness of the processing pipeline in SPS. If the pipeline is almost full, it may affect SPS cluster updates.
- The `/ldaptest` endpoint was added to test LDAP server connection. With this endpoint, you can test whether your LDAP server configuration was successful, and the connection between the LDAP server and SPS can be established. See *Testing LDAP server connections*.
- The `/hosts-by-name` endpoint was added to aid in SPS configuration by resolving the hostname of a computer or server to a list of related IP addresses that can be used in configuration. See *Resolving hostnames to IP addresses*.
- SPS supports on-box generated private keys that can be used for the following purposes:
  - for the web server, timestamping authority or CA
  - SMTP client authentication

- Syslog client authentication
- LDAP client authentication
- Changes in authentication and user database settings from SPS 6.12 and onwards:
  - `/api/configuration/aaa/settings` in *User management and access control > Authentication and user database settings* has been renamed to *Login settings*, and you can configure the following three security enhancing measures with it:
    - Protecting against brute-force attacks
    - Authentication banner
    - Web interface authentication
  - To create a user database locally on SPS and configure authentication with passwords, X.509 certificates, or against a RADIUS servers, see *Configuring SPS login methods*.
  - To connect to a LDAP server to authenticate users, see *Configuring LDAP servers*.

## Deprecated features

### Apache Lucene database

Starting from SPS 7.0 LTS, One Identity plans to modify the search for screen content in session data to use the Elasticsearch database only. The current Apache Lucene database support will be phased out, but the query language will remain Lucene-like.

After the switch to the Elasticsearch database, you will be able to access content stored in an Apache Lucene database only if you regenerate the content with the reindex tool.

### Splunk forwarder

The Splunk forwarder is deprecated as of SPS 6.7 and is now removed. One Identity recommends using the universal SIEM forwarder instead.

### Web interface

The `/api/configuration/management/webinterface` endpoint is deprecated as of SPS 6.13 and is now removed. One Identity recommends using the `webinterface_timeout` parameter of the `/api/configuration/aaa/settings` endpoint instead.

## Resolved issues

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

**Table 1: General resolved issues in release 6.13.1**

<b>Resolved Issue</b>	<b>Issue ID</b>
<p>Audit trail writer error can cause all connections to terminate.</p> <p>When auditing was enabled for a connection, but an error occurred during audit trail writing, incorrect error handling could cause all connections of the same protocol to terminate. In this case, the error message "Failed to write record with audit trail writer service;" was written to the system log.</p> <p>The error handling has been fixed: the audit failure now only causes the affected connection to terminate, as intended.</p>	PAM-16192
<p>Health status information is not up to date on the API.</p> <p>After upgrading to SPS 6.13.0, the <code>{/api/health-status}</code> information was never updated. This has been fixed.</p>	PAM-16197

The following is a list of issues addressed in release 6.13.0.

**Table 2: General resolved issues in release 6.13.0**

<b>Resolved Issue</b>	<b>Issue ID</b>
<p>Encrypted sudo-iolog sessions can be replayed without decryption keys.</p> <p>Though users had no decryption keys for encrypted sudo-iolog sessions, screenshots and videos were available for inspection. This issue has been fixed. Encrypted sudo-iolog sessions now cannot be replayed without decryption keys.</p>	PAM-15862
<p>Despite there is no video to play, the 'Play video from this event' button does not disappear.</p> <p>If there is no video, the 'Play video from this event' button is not displayed.</p>	PAM-15657
<p>Unable to configure some Trust Stores for AD/LDAP</p> <p>It was not possible to configure Trust Stores with "leaf" or "full" certificate revocation checking for Active Directory or LDAP by using the web user interface, although it was possible over the REST API. This was fixed.</p>	PAM-15645
<p>The verbosity level of the traffic at the HTTP, ICA, MSSQL, RDP, SSH, TELNET and VNC Control &gt; Global Options page could not be changed on a search-master SPS cluster node.</p> <p>The search-master SPS cluster node does not handle proxy traffic, therefore the change of the global verbosity level failed because of the unavailable proxy service. With this fix SPS does not trigger log level change for the proxy service on a search-master SPS cluster node, so the configuration change can be applied.</p>	PAM-15585
<p>UI cannot handle identical names for trust stores.</p>	PAM-15372

**Resolved Issue****Issue ID**

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This issue has been fixed. When the user enters a name for the trust store which is not unique, the "Name must be unique" error message is shown next to the name field on the side sheet, and the Save button is disabled.

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Improperly formatted X.509 certificates.

PAM-14005

When SPS displayed a certificate on the REST API or in an error message, it used a custom formatting for the subject or issuer. This could include unnecessary fields with "None" values and some fields could be missing, which could make the task of identifying the certificate cumbersome.

SPS now uses a more standard formatting when displaying certificate subjects or issuers.

**Table 3: Resolved Common Vulnerabilities and Exposures (CVE) in release 6.13.0**

<b>Resolved Issue</b>	<b>Issue ID</b>
mysql-8.0:	CVE-2022-21245
	CVE-2022-21249
	CVE-2022-21253
	CVE-2022-21254
	CVE-2022-21256
	CVE-2022-21264
	CVE-2022-21265
	CVE-2022-21270
	CVE-2022-21301
	CVE-2022-21302
	CVE-2022-21303
	CVE-2022-21304
	CVE-2022-21339
	CVE-2022-21342
	CVE-2022-21344
	CVE-2022-21348
	CVE-2022-21351
	CVE-2022-21358
	CVE-2022-21362
	CVE-2022-21367
	CVE-2022-21368
	CVE-2022-21370
	CVE-2022-21372
	CVE-2022-21374
	CVE-2022-21378
CVE-2022-21379	

Resolved Issue	Issue ID
linux:	CVE-2020-26541
	CVE-2021-4002
	CVE-2022-0185
lxml:	CVE-2021-43818
pillow:	CVE-2021-23437
	CVE-2021-34552
	CVE-2022-22815
	CVE-2022-22816
	CVE-2022-22817
qtbasesource-opensource-src:	CVE-2021-38593
samba:	CVE-2021-43566
	CVE-2021-44142
	CVE-2022-0336
strongswan:	CVE-2021-45079
systemd:	CVE-2021-3997
vim:	CVE-2021-3974
	CVE-2021-3984
	CVE-2021-4019
	CVE-2021-4069

## 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 4: General known issues**

### Known Issue

TLS version 1.3 is not supported when using the inWebo, Okta or One Identity Starling 2FA plugins. To ensure that TLS 1.2 is used by SPS during negotiation, specify the minimum and maximum TLS version as follows:

- For the minimum TLS version, select TLS version 1.2.



## Known Issue

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- For the maximum TLS version, select TLS version 1.3.

For more information, see ["Verifying certificates with Certificate Authorities using trust stores" in the Administration Guide](#).

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The accuracy of replaying audit trails in Asian languages (Traditional Chinese, Korean) has been enhanced. Due to this change, when upgrading SPS to version 6.11.0, all your sessions will be reindexed, and while reindexing is in progress, your sessions on the Search interface are incomplete. For this reason, plan your upgrade to SPS 6.11.0 accordingly.

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Report generation may fail if a report subchapter references a connection policy that has been deleted previously.

SPS can create reports giving detailed information about connections of every connection policy. For this, the user can add connection subchapters in the **Report Configuration Wizard**, under **Reporting > Create & Manage Reports**.

For a successful report generation, the referenced connection policy must exist on the appliance. However, when deleting a connection policy that is referenced as a connection subchapter, the user is not warned that the report subchapter must be removed, otherwise the subsequent report generation will fail.

This affects scheduled report generation as well.

## System requirements

Before installing SPSOD Hosted, 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.

# Supported web browsers and operating systems

## ⚠ CAUTION:

From version 6.13.0, SPS does not support Internet Explorer 11 (IE11) anymore. SPS version 6.12.0 and previous versions continue to support IE11.

From SPS version 6.10, the Google WebM Video for Microsoft Internet Explorer plugin is not required for replaying audit trails in your browser. The supported browsers are:

- Google Chrome
- Firefox
- Safari
- Internet Explorer 11 (IE11) - supported until SPS version 6.12.0

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

## ⚠ CAUTION:

SPS version 4 F3 and later versions do not support Internet Explorer 9 (IE9) and Internet Explorer 10 (IE10), as the official support of IE9 and IE10 ended in January, 2016.

**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 following browsers are supported:

- Mozilla Firefox (the latest version)
- Google Chrome
- Microsoft Edge (Microsoft Edge Legacy is not supported)

The browser must support TLS-encrypted HTTPS connections, JavaScript, and cookies. Make sure that both JavaScript and cookies are enabled.

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.

## Supported operating systems

The following operating systems are supported:

- Windows 2008 Server
- Windows 2012 Server
- Windows 2012 R2 Server
- Windows 2016
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- Linux

# 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 5: 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	Yes	2x Intel Xeon Silver	8 x 8 GB	9x2 TB NLSAS	1 x Broadcom	Yes

Product	Redundant PSU	Processor	Memory	Capacity	RAID	IPMI
Appliance 3500		4110 2.1GHz			MegaRAID SAS 9361-16i + LSI Avago CacheVault Power Module 02 (CVPM02) Kit	

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 6.13.1

For step-by-step instructions on upgrading to SPS 6.13.1, 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.

### **CAUTION:**

**Starting from 6.10.0, SPS (SPS) has changed to hardened SSL settings. As a result, during TLS session establishment, the following items are not considered secure:**

- **Private keys and X.509 certificates having RSA or DSA keys shorter than 2048 bits, or ECC keys shorter than 224 bits.**
- **Certificates (other than Root CA certificates) with signatures that use the SHA-1 or the MD5 hashing algorithm.**

**With the hardened SSL settings, SPS will not connect to remote systems that are protected with weak certificates.**

**You cannot upgrade SPS if your configuration contains insecure certificates, keys or certificate chains in any of the following sections:**

- **SPS web interface**
- **internal CA certificate**
- **connection policy TLS settings**
- **client X.509 credentials for external LDAP, SMTP or Syslog connections**
- **server X.509 certificates for external SMTP or Splunk servers**
- **external indexer credentials (only writable over the REST API)**
- **CA certificates in Trusted CA Lists and Trust Stores**

**Note that the certificates and keys that are used for signing, timestamping, encryption or decryption are not affected by this change.**

## 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 6.13.1 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 SPS6.13.1, 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 SPS6.13.1 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 6.13.1 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](http://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.

# GNU General Public License

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.