

One Identity Safeguard for Privileged Sessions 5.11

Release Notes

April 2019

These release notes provide information about the One Identity Safeguard for Privileged Sessions 5 F11 release.

About this release

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.

The privileged management software provided with One Identity Safeguard consists of 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.

For details on this release, see [New features](#).



NOTE:

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

New features

Screen content search improvements

- You can now combine content search queries arbitrarily with other search queries. As a result, flow view and quick statistics charts on the Search interface can handle content searches.
- Reporting subchapters can include reports about specific content search queries (Reporting > Search subchapters).
- Screen content search is now available in search clusters.
- Screen content hits are no longer limited to 3000 per query.

Security settings of TLS sessions

You can now uniformly set the TLS security settings of HTTP, RDP, Telnet, and VNC connections, including the permitted ciphers and TLS versions on the **<Protocol> Control > Settings** pages.

To ensure the security of your sessions, SSL encryption is not supported anymore, only TLS 1.0 and later.

REST API

- Backup and archive policies can now be configured using the REST API.
- Health status information about the Central Management node and the cluster nodes is now available at the `/api/cluster/status` endpoint of the node.

Other changes

- You can now export the search results into a comma-separated values file from the **Search > Search** page.
- Backup policies can be configured to run more than once a day.
- The Central Management node now displays health status information about the cluster nodes.
- When using X.509 certificates to authenticate on the SPS web interface, SPS can now extract the name of the user from the UserPrincipalName field of the certificate. For details, see "[Authenticating users with X.509 certificates](#)" in the [Administration Guide](#).

New documents

- The documentation of the Safeguard for Privileged Sessions Plugin Software Development Kit (Plugin SDK) is now publicly available at <https://oneidentity.github.io/safeguard-sessions-plugin-sdk/>. The Plugin SDK provides base classes and services to enable rapid development of Python 3 plugins for the Safeguard for Privileged Sessions (SPS) product. SPS plugins released in the future will use this SDK.

Deprecated features

The following is a list of features that are no longer supported starting with SPS 5.11.

- Support for the Lieberman ERPM credential store has been deprecated, this feature will be removed from the upcoming SPS 6 LTS release. One Identity recommends to use Safeguard for Privileged Passwords instead. For details, [contact our Sales Team](#).

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 1: 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
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

The SPS T-10 appliance 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.

Resolved issues

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

Table 2: General resolved issues in release 5.11.0

Resolved Issue	Issue ID
Search for audit trails that are not indexed is not working In some cases if the connection database is big, searching for audit trails that are not indexed on the Search > Search (classic) page did not work properly. (Selecting the 'Not indexed' option in the "Channel's Indexing Status" column resulted in a search query that was never completed.) This has been corrected.	PAM-9000
Clicking dates on the Search > Search page does not work Clicking dates on the Search > Search page did not correctly work in some cases. This has been corrected.	PAM-8860
The events page of a session does not time out When opening events page of a session (Search > Search > details > events), the web session did not properly time out if the user was inactive. This has been corrected.	PAM-8835

Resolved Issue	Issue ID
<p>Users with limited search privileges get permission error on the Search page</p> <p>In some cases, if the SPS administrator deleted the built-in usergroups that had the Search All privilege, and no other remaining group had this privilege, then certain users received permission errors on the Search page. This has been corrected.</p>	PAM-8810
<p>Permission errors on the Search page</p> <p>After upgrading to SPS 5.10.0, permission errors were displayed for the admin user on the Search page. This has been corrected.</p>	PAM-8796
<p>Incorrect hostname in syslog messages when using the SIEM forwarder</p> <p>When using the Universal SIEM Forwarder, the HOSTNAME field of the messages contained scb1 or scb2 instead of the actual hostname of the appliance. This has been corrected.</p>	PAM-8675
<p>Gateway authentication fails when gateway username is not set</p> <p>Previous versions of SPS attempted gateway authentication even when no gateway user was specified and there was no Usermapping policy configured, the default gateway user was the remote username. After upgrading to 5.10.0a, the gateway authentication was not performed at all. This has been corrected.</p>	PAM-8630
<p>Special characters are handled incorrectly when changing password from the console menu</p> <p>Special characters such as '&' and ' ' in the password were incorrectly handled when the root password was changed from the console menu. In that case the password changing was incomplete and the user could not log in with the new password. This has been corrected.</p>	PAM-8618
<p>MFA plugin does not return gateway user when derived from remote username</p> <p>When there is no gateway authentication, the remote username is used to look up the MFA identity. However, the plugin did not set this identity as the gateway user, causing Channel policies to fail. This has been corrected.</p>	PAM-8601
<p>The "A system service failed" (xcbInitSystemUnitFailed) alert is skipped</p> <p>Due to internal message filtering error the xcbInitSystemUnitFailed alert was skipped. The message filter has been fixed and the alert is sent from now again.</p>	PAM-8588
<p>PermissionQuery filtering fails when there are HTTP connection policies in the configuration</p> <p>PermissionQuery filtering has failed with Non-JSON response error when there were HTTP connection policies in the configuration. This has been corrected.</p>	PAM-8551
<p>Alerting in screen content can cause error in paa-pipeline process</p> <p>When using alerting in screen content, storing the alert in the database failed if</p>	PAM-8549

Resolved Issue	Issue ID
<p>the screen content to be stored exceeded 32kb. Such cases resulted in error messages like this:</p> <pre>paa-pipeline[27907]: ERROR c.b.pam.pipeline.PipelineSupervisor PipelineSupervisor received a critical error, actor system is terminated, reason={\"type\": \"illegal_argument_exception\", \"reason\": \"Document contains at least one immense term in field=\\\"alert.matched_content.raw\\\"</pre> <p>This has been corrected, now large screen content is processed properly.</p>	
<p>Setting syslog and SIEM forwarding to the same IP:port pair causes errors</p> <p>Setting syslog forwarding (Basic Settings > Management > Syslog) and SIEM forwarding to the same <ip>:<port> pair caused an error in forwarding the messages. This has been corrected.</p>	PAM-8540
<p>Creating a support bundle sometimes fails</p> <p>In some cases, creating a support bundle failed with the following error message:</p> <pre>sudo: no tty present and no askpass program specified</pre> <p>This has been corrected.</p>	PAM-8467
<p>LDAP connections leak the file descriptors in some cases</p> <p>In certain cases, LDAP connections could leak the related file descriptor, consuming the file descriptors if this error occurred a lot. This has been corrected.</p>	PAM-8441
<p>Only the first start time of each Archive/Cleanup policy takes effect</p> <p>Archive/Cleanup policies can have multiple start time entries. This means that archiving can be started multiple times a day. Each time the data older than the retention time is archived. This feature was broken as only the first start time entry took effect, meaning that archiving would run once a day. This has been corrected, the policies are now executed properly.</p>	PAM-8409
<p>Cleanup is not working when an audit trail file is missing</p> <p>When an audit file was missing, the cleanup process terminated instead of continuing the cleanup. This is fixed now, missing audit files are ignored.</p>	PAM-8378
<p>Events are duplicated when using a Content Policy</p> <p>When you have configured a Content Policy with commands, the indexer processes the sessions real-time, and adds the detected commands to the database. After the session ends, the indexer processes it and adds the command events to the database, resulting in duplicate entries. This has been corrected, and duplicate entries are now avoided.</p>	PAM-8368
<p>Individual algorithm scores does not appear on the UI</p>	PAM-

Resolved Issue	Issue ID
<p>The scores of the algorithms were missing from the "analytics result" column of the Search > Search page. This has been fixed and now the scores appear properly.</p>	8351
<p>Cannot login to SPS web interface with RSASSA-PSS signed client certificate</p> <p>When X.509 authentication was enabled for the SPS web interface, users could not login with a RSASSA-PSS signed client certificate (Signature Algorithm: rsassaPss when viewing the certificate with OpenSSL) and received an "SSL Certificate Error" in their browser. Also, the following error message appeared in the system logs of SPS:</p> <p>"client SSL certificate verify error: (68:CA signature digest algorithm too weak) while reading client request headers,"</p> <p>Note that Firefox has multiple bugs for RSASSA-PSS client certificates, which can be another reason that this feature doesn't work with these kind of certificates:</p> <p>https://bugzilla.mozilla.org/show_bug.cgi?id=1088140</p> <p>https://bugzilla.mozilla.org/show_bug.cgi?id=158750</p> <p>Now users who got a "SSL Certificate Error" with X.509 client authentication on earlier versions will be able to log in with RSASSA-PSS signed client certificates.</p>	PAM-8327
<p>Small fields on the Basic Settings > Starling Join page</p> <p>The Product TIMS and Credential String fields were very small on the Basic Settings > Starling Join page. This has been corrected.</p>	PAM-8325
<p>None</p> <p>Username handling in the RSA plugin was case sensitive, causing some problems when interacting with other components. Now the RSA plugin automatically forces usernames to be lowercase.</p>	PAM-8312
<p>Error message is hardly readable when testing of uploaded firmware fails</p> <p>When the test failed for the new firmware, it contained irrelevant debugging information for the user and the message formatting was hardly readable. Now the debug information is not appearing in the message and it is well formatted both on the web UI and on the console menu too.</p>	PAM-8311
<p>The Start Generation button appears for active sessions</p> <p>On the Search > Search page, the Start Generation button appeared briefly for active sessions. This has been corrected, the button appears only for completed sessions.</p>	PAM-8305
<p>'open() "/opt/scb/html/css/frame.css" failed' error message in the logs</p> <p>The /var/log/nginx/error.log file contained lots of error messages about failing to open a css file:</p>	PAM-8284

Resolved Issue	Issue ID
<p>open() "/opt/scb/html/css/frame.css" failed This has been corrected.</p>	
<p>Backup using CIFS fails if there are failed reports on SPS Failed reports contained the colon (:) character in their filename, which is not supported by CIFS, causing the backup to fail if there were failed reports on SPS. Since failed reports are used only for debugging, from now on they are excluded from the backup. Failed reports are available under the /opt/scb/var/failedreports directory, and are referenced in support bundles.</p>	PAM-8254
<p>Generated files (for example, core files) cannot be deleted It was not possible to delete files generated by certain SPS components. For example</p> <ul style="list-style-type: none"> - core files - temporary configuration directory - kerberos keytab file - configuration bundle temporary directory. <p>This has been corrected, and the features which generated these files are working correctly.</p>	PAM-8247
<p>'Indexing of job failed' errors on the search nodes under high load In some cases, when using a cluster with multiple search nodes under high load, warnings about failed indexing jobs have appeared in the logs. This has been corrected.</p>	PAM-8191
<p>Clicking Cancel when importing a configuration results in an error message Clicking Cancel when importing a configuration resulted in the following error message: "Error removing temporary config directory Error: sudo: no tty present[00]" This has been corrected, now the button simply closes the window.</p>	PAM-8080
<p>Inconsistent data for sessions that contain more than 5000 channels If a session contained more than 5000 channels, then the records of the channels became inconsistent. This has been corrected.</p>	PAM-7802
<p>Clicking the Generate video button has no visible effect Under certain circumstances, it was possible to click the Generate video button on the web interface without a visible result. Neither the progress bar nor the</p>	PAM-7582

Resolved Issue	Issue ID
Play Video / Delete button appeared. This has been corrected.	
Fuzzy search queries do not work properly Using the fuzzy search (keyword~) did not properly work in some cases, and did not return the search results it should have. This has been corrected, now the fuzzy search works as expected.	PAM-6897
Version information in the syslog-ng.conf file is incorrect The version information in the syslog-ng.conf file was incorrect and did not match the version of the installed binary (3.16). This has been corrected.	PAM-5438
None Exporting search results to CSV could consume the resources of the appliance if the connection database was large, the search had lots of hits, and the time range of the search was large. From now on, the Search > Search interface and the REST API can export the search results to CSV, without using excessive resource. Note that on the new Search page, only the first 10.000 result will be exported to CSV.	PAM-3705
Intermittent failures in ICA traffic In certain rare cases the Citrix ICA proxy of the appliance could crash which resulted in the termination of all ICA sessions. The problem has been identified and fixed.	PAM-3150

System requirements

Before installing SPS 5.11, ensure that your system meets the following minimum hardware and software requirements.

Supported web browsers and operating systems

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.



CAUTION:

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

CAUTION:

Even though the 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 Search \(classic\)](#) 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 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 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.

Supported virtual environments for evaluating One Identity Safeguard for Privileged Sessions

To evaluate One Identity Safeguard for Privileged Sessions as a virtual appliance, you can download and install the latest SPS ISO file into a virtual machine. The following virtual environments are supported for evaluation:

- Kernel-based Virtual Machine (KVM)
- Microsoft Hyper-V
- VMware
- vSphere (VMware ESX)

SPS may work in other virtual environments like VirtualBox as well, although these are officially not supported. You can obtain an evaluation license and the ISO file using your [support portal](#) account.

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 5 F11

CAUTION:

Due to a change in the underlying database, the upgrade process removes all risk scores generated earlier by One Identity Safeguard for Privileged Analytics. Sessions initiated after the upgrade will be scored again.

For step-by-step instructions on upgrading to SPS 5 F11, 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 5 F1 or 5 F2), you have 2 months to upgrade to version 5 F11 if you want to keep running on a supported release.

For a full description of stable 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 5 F11, 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 5 F11 if you are running SPS on Pyramid hardware:

⚠ CAUTION:

Physical SPS appliances based on Pyramid hardware are not supported in 5 F1 and later feature releases. Do not upgrade to 5 F1 or later on a Pyramid-based hardware. The last supported release for this hardware is 5 LTS, which is a long-term supported release.

If you have purchased SPS before August, 2014 and have not received a replacement hardware since then, you have Pyramid hardware, so do not upgrade to SPS 5 F1 or later. If you have purchased SPS after August 2014, you can upgrade to 5 F1.

If you do not know the type of your hardware or when it was purchased, complete the following steps:

1. Login to SPS.
2. Navigate to **Basic Settings > Troubleshooting > Create support bundle**, click **Create support bundle**, and save the file.
3. Open a ticket at <https://support.oneidentity.com/create-service-request/>.
4. Upload the file you downloaded from SPS in Step 1.
5. We will check the type of your hardware and notify you.

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 5 F11 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 or other inquiries, visit <https://www.oneidentity.com/company/contact-us.aspx> or call +1-800-306-9329.

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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