

One Identity Safeguard for Privileged Passwords 2.9

Release Notes

September 2019

These release notes provide information about the One Identity Safeguard for Privileged Passwords 2.9 release.

About this release

One Identity Safeguard for Privileged Passwords Version 2.9 is a minor release with new features and resolved issues. The new features include:

- Appliance diagnostics package (797266)
- SPP-SPS join enhancements (803185)
- Telnet and TN3270/TN5250 session access request support (782501)
- Two-factor authentication with FIDO2 (79072)
- Virtual appliance using Hyper-V (801564)
- VMware ESXi: Backup and restore required

For more detail, see:

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

i **NOTE:** For a full list of key features in One Identity Safeguard for Privileged Passwords, see the *One Identity Safeguard for Privileged Passwords Administration Guide*.

About the Safeguard product line

The One Identity Safeguard for Privileged Passwords Appliance is built specifically for use only with the Safeguard for Privileged Passwords 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.

A Safeguard for Privileged Passwords virtual appliance is also available.

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

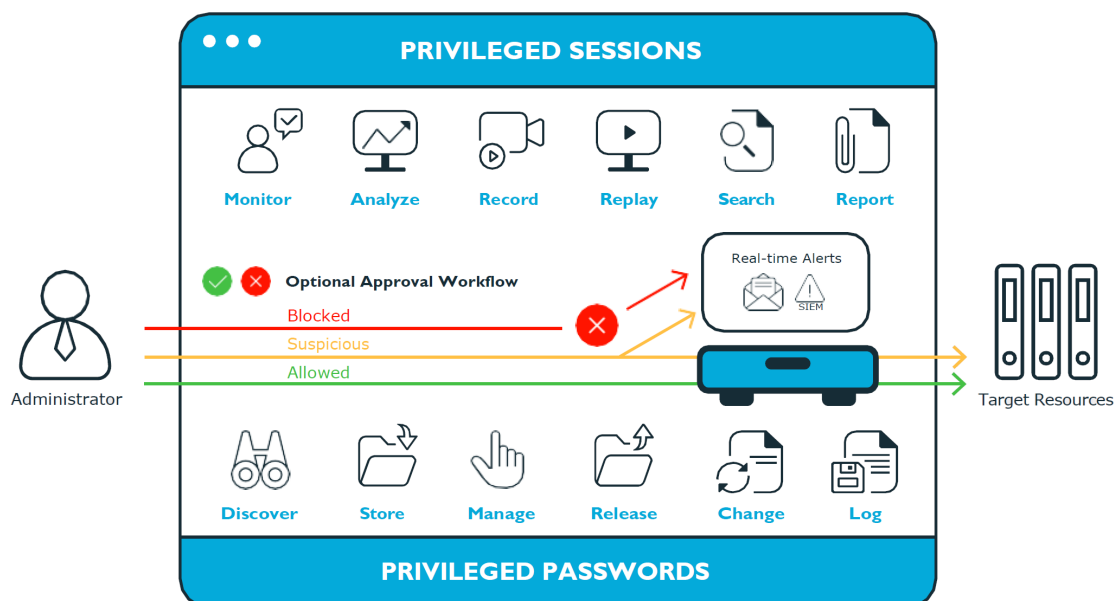
The suite includes the following modules:

- **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 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

Appliance diagnostics package (797266)

Appliance Administrators can execute a trusted, secure appliance diagnostics package to help solve issues with configuration, synchronization, and clustering as well as other other internal challenges. The appliance diagnostics package is available from the web support kiosk, not the serial kiosk. The appliance diagnostics package can be used even when the appliance is in quarantine. To protect against external threats, Safeguard rejects illegitimate appliance diagnostics packages. The manifest file in the appliance diagnostics package lists criteria which may include the minimum Safeguard version, appliance ID, and expiration timestamp UTC. New product code and database changes are not included in an appliance diagnostics package.

SPP-SPS join enhancements (803185)


Safeguard for Privileged Passwords (SPP) is enhanced to more easily use Safeguard for Privileged Sessions (SPS) for session recording and playback.

Appliance Administrators can identify the SPP SPS join connections by:

- **Host Name**
- **Network Address** (identified by the IP address of the session connection)
- Other nodes in the SPS cluster
- Other nodes that belong to each SPS cluster that has been joined to SPP

Navigate to **Administrative Tools | Settings | Cluster | Session Appliances** for details.

Appliance Administrators can also identify managed networks by the host name and IP address of the cluster master. Navigate to **Administrative Tools | Settings | Cluster | Managed Networks** and view **Sessions Managed By**.

Policy Administrators can identify the host name and IP address of the SPS cluster master from which policies originate. A  **Warning** icon displays if a policy is not functional. Navigate to **Administrative Tools | Entitlements | Access Request Policies | Session Settings** tab and view the **SPS Connection Policy**.

Users and administrators receive timely notification if an access request will not result in a launchable session request. The notifications identify details such as:

- User are informed if SPP could not contact SPS and are given the option to try again so the request can be redirected to another managed host in the SPS cluster.
- Policy Administrators can identify the SPS connection policies by the host name and IP address of the SPS cluster master from which the policies originate.
- User are informed if the SPS configuration is locked and are given the option to try again later. This condition is typically because the SPS administrator is making configuration changes to the SPS appliance at the same time that a new access request is being created or a session is being launched.

Telnet and TN3270/TN5250 session access request support (782501)

Safeguard for Privileged Passwords (SPP) supports session access requests with mainframes using software terminal emulation including telnet and TN3270/TN5250 over telnet. Safeguard for Privileged Sessions (SPS) version 6.1 or higher is used for session recording.

Actions

- Security officers can record activities of administrators who maintain critical systems running on IBM iSeries and mainframe computers.
- Asset Administrators can:
 - Customize the TN3270/TN5250 login screen field detection to work for the Safeguard custom login setup.
 - Mark an asset as supporting telnet sessions and specify if the asset is available.
- Policy Administrators can create an entitlement with an access policy that includes session access using telnet and TN3270/TN5250 sessions over telnet.
- Requesters' log in experience follows the regular client telnet or TN3270/TN5250 interface even when the session is being recorded. Sessions are not launched from Safeguard for Privileged Passwords and all required log in information is available through Safeguard for Privileged Passwords.

High level steps

- ❗ **IMPORTANT:** Engagement with [One Identity Professional Services](#) is required for assistance with configurations and installation including available plug-ins, policy creation, pattern files, shortcuts, and best practices.

In Safeguard for Privileged Sessions (SPS), the following steps are required. For operation details, see the *One Identity Safeguard for Privileged Sessions Administration Guide* at this link: [One Identity Safeguard for Privileged Sessions Administration Guide](#).

- Until supplied by SPS, import the plug-in to supply authentication and authorization (AA) information to authenticate with and pull the credentials from SPP.
- Create and assign **Pattern Sets** which use pattern files specific to the log in experience for each system connection, which vary from mainframe to mainframe.
- Specify each **Authentication Policy**.
- Configure each **Connection Policy**. Multiple connection policies are typically required because of the uniqueness of each system and pattern file.
- Perform related activities based on your installation.

In Safeguard for Privileged Sessions (SPS):

- The Asset Administrator adds the mainframe asset including the **Telnet Session Port** that is identified on the **Administrative Tools | Asset | Management** tab.
- The Policy Administrator sets the **Access Type (Telnet)** on the **Administrative Tools | Entitlements | Access Request Policies** tab.
- When configuration is complete, the requester proceeds to use the terminal service application in use. The requester will copy the required information based on the telnet or TN3270/TN5250 over telnet connection requirements.

For more information, see the *Safeguard for Privileged Passwords Administration Guide*, How do I set up telnet and TN3270/TN5250 session access requests.

Additional log in step and two-factor authentication with FIDO2 (79072)

- IMPORTANT:** All users will experience an additional step to log in to Safeguard for Privileged Passwords. After clicking **Connect**, the user sees a message like: You'll now be redirected to your web browser to complete the login process. You can select: Don't show this message again. Then, click **OK**. The browser window can be closed. On the user login screen, the user entered the **User Name** and **Password** as usual.

A new secondary authentication type, FIDO2, is now supported and can be assigned to any Safeguard for Privileged Passwords user, providing they have at least one compatible FIDO2 authenticator security key. After being configured by a User Administrator, a Safeguard for Privileged Passwords user will be prompted to register their FIDO2 authenticator security key at next login. For more information, see the *One Identity Safeguard for Privileged Passwords Administration Guide*, "Requiring user to log in using secondary authentication" section.

Users are then responsible for managing their own FIDO2 authenticator keys, including registering additional keys for backup purposes, viewing, renaming, or deleting unused keys. For more information, see the *One Identity Safeguard for Privileged Passwords Administration Guide*, "User information and log out" section.

Authenticator support

Any FIDO/FIDO2 authenticator that supports the WebAuthn standard can be used for two-factor authentication, this includes some older U2F authenticator security keys. Safeguard for Privileged Passwords does not use or require any authenticator attestation data. User verification, such as PIN or biometric is also not used.

Virtual appliance using Hyper-V (801564)

The Appliance Administrator can use Hyper-V as the virtual target environment deployed by importing the Safeguard for Privileged Passwords Hyper-V zip file with the virtual machine settings.

VMware ESXi: Backup and restore required

vSphere Hypervisor (ESXi) is enhanced in Safeguard for Privileged Passwords (SPP) 2.9. For SPP 2.9 only, you are required to take a backup of your 2.8.x system and restore it on your SPP 2.9 system. Future versions will not require this action.

- CAUTION:** Failure to backup of your 2.8.x system and restore it on your SPP 2.9 system will result in loss of configuration and functionality.


See also:

- [Resolved issues](#) on page 7

Resolved issues

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

Table 1: General resolved issues

Resolved Issue	Issue ID
An administrator with appropriate permissions can delete events and logs.	762585
MySQL password change is successful on MySQL version 5.6.44.	802519
RDP enabled accounts handled as expected on Request work flow.	802537
Performing a network asset discovery applies the Allow Session Requests property to discovered assets.	802560
Event email renders unicode characters.	802597
The archiving process completes and closes instances appropriately.	802721
Supported MySQL accounts can have the format <username> or <username>@<range of IP addresses>. The permitted range of IP addresses must include the IP address of the Safeguard appliance. The % character can be used as a wildcard. Examples: John : Permit John to log in from any host (default) John@%: Permit John to log in from any host John@10.1.%: Permit John to log in from any IP address in 10.1.xx	802743
The Activity Center  (green dot) indicates that a live session is taking place. A Security Policy Administrator can click this button to launch the Desktop Player to follow what is happening in the current session.	802782
When searching for an access policy, a backslash can be in the filter name equals to entry.	802833
Directory groups require the forest root domain to be visible and available for identity and authentication.	802838
Authentication to Okta Radius performs correctly when the password length is greater than 16 characters.	802941
Filtering by tags performs efficiently.	803042

Resolved Issue	Issue ID
Uploading an .xml file succeeds in creating an External Federation identity and authentication provider.	803187
An asset with an underscore in the name can be edited once imported by a Directory discovery job.	803444 and 803566
A Directory discovery job detects the Windows 2019 operating system correctly.	803445
The asset .csv import wizard imports csv records successfully imports assets and accounts.	803685
Event email notification has comment.	804088

Known issues

The following is a list of issues known to exist at the time of release.

Table 2: Known issues

Known Issue	Issue ID
If you are using the Safeguard virtual appliance, we highly recommend you configure a backup archive server. If that is not feasible, decrease the maximum number of retained backups to two from five. Since VMs are shipped with 60GB disk space, taking the recommended backup steps will ensure the ability to log in and that speed is not compromised.	803833
If you are using the embedded sessions module and have never joined Safeguard for Privileged Passwords (SPP) with an external Safeguard for Privileged Sessions (SPS) appliance, after upgrading to SPP 2.9, check the network settings for the X1 interface. Manually restore the settings, if needed.	803945

System requirements

One Identity Safeguard for Privileged Passwords has two graphical user interfaces that allow you to manage access requests, approvals and reviews for your managed accounts and systems. Ensure that your system meets the following minimum hardware and software requirements for these clients.

Bandwidth

We recommend that connection, including overhead, is faster than 10 megabits per second inter-site bandwidth with a one-way latency of less than 500ms. If you are using traffic shaping, you must allow sufficient bandwidth and priority to port 655 UDP/TCP in the shaping profile. These numbers are offered as a guideline only in that other factors could require additional network tuning. These factors include but are not limited to: jitter, packet loss, response time, usage, and network saturation. If there is any questions please contact One Identity Technical Support.

Windows desktop client requirements

The desktop client is a native Windows application suitable for use on end-user machines. The desktop client consists of an end-user view and an administrator view. The administrative functionality is dynamically enabled based on the user's permissions.

Table 3: Desktop client requirements

Component	Requirements
Technology	Microsoft .NET Framework 4.6 (or later)
Windows platforms	64-bit editions of: <ul style="list-style-type: none">• Windows 7• Windows 8.1• Windows 10• Windows Server 2008 R2• Windows Server 2012• Windows Server 2012 R2• Windows Server 2016

If the appliance setting, **TLS 1.2 Only** is enabled, (**Administrative Tools | Settings | Appliance | Appliance Information**), ensure the desktop client also has TLS 1.2 enabled. If the client has an earlier version of TLS enabled, you will be locked out of the client and will not be able to connect to Safeguard for Privileged Passwords.

- NOTE:** Internet Explorer security must be set to use TLS 1.0 or higher. Ensure the proper "Use TLS" setting is enabled on the Advanced tab of the **Internet Options** dialog (In Internet Explorer, go to **Tools | Internet Options | Advanced** tab).
- NOTE:** To use FIDO2 two-factor authentication, you will need a web browser that supports the WebAuthn standard.

Component	Requirements
Desktop Player	See <i>One Identity Safeguard for Privileged Sessions [version] Safeguard Desktop Player User Guide</i> available at: One Identity Safeguard for Privileged Sessions - Technical Documentation, User Guide .

Web client requirements

The web client is functionally similar to the desktop client end-user view. It exposes the access request workflow functionality and is meant primarily for the non-Administrative user.

Table 4: Web client requirements

Component	Requirements
Web browsers	<p>Desktop browsers:</p> <ul style="list-style-type: none"> • Google Chrome 66 (or later) • Microsoft Internet Explorer 11 and Edge • Mozilla Firefox 52 (or later) <p>i NOTE: To use FIDO2 two-factor authentication, you will need a web browser that supports the WebAuthn standard.</p> <p>Mobile device browsers:</p> <ul style="list-style-type: none"> • Apple Safari iOS 10 (or later) • Google Chrome on Android <p>The web client is implemented for modern web browser technology, using:</p> <ul style="list-style-type: none"> • HTML5 • CSS • JavaScript <p>i NOTE: If your browser lacks these required technologies, then use the desktop client.</p>

Web kiosk requirements

The web kiosk is functionally similar to the desktop client end-user view. The web kiosk consists of an end-user view and an administrator view. The administrative functionality is dynamically enabled based on the user's permissions.

Table 5: Web kiosk requirements

Component	Requirements
Web management console	<p>Desktop browsers:</p> <ul style="list-style-type: none">• Google Chrome 66 (or later)• Microsoft Internet Explorer 11 and Edge• Mozilla Firefox 52 (or later) <p>i NOTE: To use FIDO2 two-factor authentication, you will need a web browser that supports the WebAuthn standard.</p> <p>The web management console is implemented for modern web browser technology, using:</p> <ul style="list-style-type: none">• HTML5• CSS• JavaScript

Supported platforms

One Identity Safeguard for Privileged Passwords supports a variety of platforms, including custom platforms.

Safeguard for Privileged Passwords tested platforms

The following table lists the platforms and versions that have been tested for Safeguard for Privileged Passwords (SPP). Additional assets may be added to Safeguard for Privileged Passwords. If you do not see a particular platform listed when adding an asset, use the "Other" or "Other Linux" option on the **Management** tab of the **Asset** dialog.

SPP joined to SPS: Sessions platforms

When Safeguard for Privileged Passwords (SPP) is joined with a Safeguard for Privileged Sessions (SPS) appliance, platforms are supported that use one of these protocols:

- SPP 2.8 or lower: RDP, SSH
- SPP 2.9 or higher: RDP, SSH, or Telnet.

Some platforms may support more than one protocol. For example, a Linux (or Linux variation) platform supports both SSH and Telnet protocols.

For the embedded sessions module, platforms that support RDP and SSH protocols are generally supported.

Table 6: Supported platforms: Assets that can be managed

Platform	Version	Architecture (all versions unless noted)	SPP	SPS
ACF2 - Mainframe	r14, r15	zSeries	True	True
ACF2 - Mainframe LDAP	r14, r15	zSeries	True	False
Active Directory			True	False
AIX	6.1, 7.1, 7.2	PPC	True	True
Amazon Linux	2	x86_64	True	True
Amazon Web Services (AWS)	1		True	False
CentOS Linux	6 7	(ver 6) x86, x86_64 (ver 7) x86_64	True	True
Cisco ASA	7.x, 8.x		True	True
Cisco IOS	12.X, 15.X		True	True
Debian GNU/Linux	6, 7, 8, 9	x86, x86_64, MIPS, PPC, zSeries	True	True
Dell iDRAC	7, 8		True	True
ESXi (VSphere)	5.5, 6.0, 6.5, 6.7		True	False
F5 Big-IP	12.1.2, 13.0, 14.0		True	True
Facebook (deprecated)			True	False
Fedora	21, 22, 23, 24, 25, 26, 27, 28, 29, 30	x86, x86_64	True	True
Fortinet FortiOS	5.2, 5.6		True	True
FreeBSD	10.4, 11.1, 11.2	x86, x86_64	True	True
HP iLO	2, 3, 4	x86	True	True
HP iLO MP	2, 3	IA-64	True	True
HP-UX	11iv2 (B.11.23), 11iv3 (B.11.31)	PA-RISC, IA-64	True	True

Platform	Version	Architecture (all versions unless noted)	SPP	SPS
IBM i	7.1, 7.2, 7.3	PPC	True	True
Junos - Juniper Networks	12, 13, 14, 15		True	True
macOS	10.9, 10.10, 10.11, 10.12, 10.13	x86_64	True	True
MongoDB	3.4, 3.6, 4.0		True	False
MySQL	5.6, 5.7		True	False
OpenLDAP	2.4		True	False
Oracle	11g Release 2, 12c Release 1		True	False
Oracle Linux (OEL)	6 7	(ver 6) x86, x86_64 (ver 7) x86_64	True	True
Other			False	False
Other Linux			True	True
PAN-OS	6.0, 7.0, 8.0, 8.1		True	True
PostgreSQL	9.6, 10.2, 10.3, 10.4, 10.5		True	False
RACF - Mainframe	z/OS V2.1 Security Server, z/OS V2.2 Security Server	zSeries	True	True
RACF - Mainframe LDAP	z/OS V2.1 Security Server, z/OS V2.2 Security Server	zSeries	True	False
Red Hat Enterprise Linux (RHEL)	6, 7, 8	(ver 6) x86, x86_64, PPC, zSeries (ver 7 and 8) x86, x86_64, PPC, zSeries	True	True
SAP HANA	2.0	Other	True	False
SAP Netweaver Application Server	7.3, 7.4, 7.5		True	False
Solaris	10, 11	(ver 10) SPARC, x86, x86_64 (ver 11) SPARC,	True	True

Platform	Version	Architecture (all versions unless noted)	SPP	SPS
		x86_64		
SonicOS	5.9, 6.2		True	False
SonicWALL SMA or CMS	11.3.0		True	False
SQL Server	2012, 2014, 2016		True	False
SUSE Linux Enterprise Server (SLES)	11 12	(ver 11) x86, x86_64, PPC, zSeries, IA-64 (ver 12) x86_64, PPC, zSeries	True	True
Sybase (Adaptive Server Enterprise)	15.7, 16		True	False
Top Secret - Mainframe	r14, r15	zSeries	True	True
Top Secret - Mainframe LDAP	r14, r15	zSeries	True	False
Twitter (deprecated)			True	False
Ubuntu	14.04 LTS, 15.04, 15.10, 16.04 LTS, 16.10, 17.04, 17.10, 18.04 LTS, 18.10, 19.04	x86, x86_64	True	True
Windows	Vista, 7, 8, 8.1, 10 Enterprise (including LTSC and IoT).		True	True
Windows Server	2008, 2008 R2, 2012, 2012 R2, 2016, 2019		True	True

Table 7: Supported platforms: Directories that can be searched

Platform	Version
Microsoft Active Directory	Windows 2008+ DFL/FFL
OpenLDAP	2.4

Custom platforms

The following example platform scripts are available:

- Custom HTTP
- Linux SSH
- Telnet
- TN3270 transports are available

For more information, see *Safeguard for Privileged Passwords Administration Guide*, Custom Platforms and Creating a custom platform script.

⚠ CAUTION: Facebook and Twitter functionality has been deprecated. Refer to the custom platform open source script provided on GitHub. Facebook and Twitter platforms will be removed in a future release.

Sample custom platform scripts and command details are available at the following links available from the [Safeguard Custom Platform Home](#) wiki on GitHub:

- Command-Reference:
<https://github.com/OneIdentity/SafeguardCustomPlatform/wiki/Command-Reference>
- Writing a custom platform script:
<https://github.com/OneIdentity/SafeguardCustomPlatform/wiki/WritingACustomPlatformScript>
- Example platform scripts are available at this location:
<https://github.com/OneIdentity/SafeguardCustomPlatform/tree/master/SampleScripts>

⚠ CAUTION: Example scripts are provided for information only. Updates, error checking, and testing are required before using them in production. Safeguard for Privileged Passwords checks to ensure the values match the type of the property which include: a string, boolean, integer, or password (which is called secret in the API scripts). Safeguard for Privileged Passwords cannot check the validity or system impact of values entered for custom platforms.

Appliance specifications

The Safeguard for Privileged Passwords Appliance is built specifically for use only with the Safeguard for Privileged Passwords privileged management 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.

The One Identity Safeguard for Privileged Passwords 2000 Appliance specifications and power requirements are as follows.

Table 8: Safeguard 2000 Appliance: Feature specifications

Safeguard for Privileged Passwords 2000	Feature / Specification
Processor	Intel Xeon E3-1275v5 3.60 GHz
# of Processors	1
# of Cores per Processor	4
L2/L3 Cache	4 x 256KB L2, 8MB L3 SmartCache
Chipset	Intel C236 Chipset
DIMMs	DDR4-2400 ECC Unbuffered DIMMs
RAM	32GB
Internal HD Controller	LSI MegaRAID SAS 9391-4i 12Gbps SAS3
Disk	4 x Seagate EC2.5 1TB SAS 512e
Availability	TPM 2.0, EEC Memory, Redundant PSU
I/O Slots	x16 PCIe 3.0, x8 PCIe 3.0
RAID	RAID10
NIC/LOM	3 x Intel i210-AT GbE
Power Supplies	Redundant, 700W, Auto Ranging (100v~240V), ACPI compatible
Fans	4 x 40mm Counter-rotating, Non-hot-swappable
Chassis	1U Rack
Dimensions (HxWxD)	43 x 437.0 x 597.0 (mm) 1.7 x 17.2 x 23.5 (in)
Weight	Max: 46 lbs (20.9 Kg)
Miscellaneous	FIPS Compliant Chassis

Table 9: Safeguard 2000 Appliance: Power requirements

Input Voltage	100-240 Vac
Frequency	50-60Hz
Power Consumption (Watts)	170.9
BTU	583

Appliance LCD and controls

The front panel of the One Identity Safeguard for Privileged Passwords 2000 Appliance contains the following controls for powering on, powering off, and scrolling through the LCD display.

- ✓ Green check mark button: Use the **Green check mark** button to start the appliance. Press the **Green check mark** button for NO more than one second to power on the appliance.
 - ▲ **CAUTION:** Once the Safeguard for Privileged Passwords Appliance is booted, DO NOT press and hold the Green check mark button. Holding this button for four or more seconds will cold reset the power of the appliance and may result in damage.
- Red X button: Use the **Red X** button to shut down the appliance. Press and hold the **Red X** button for four seconds until the LCD displays POWER OFF.
 - ▲ **CAUTION:** Once the Safeguard for Privileged Passwords Appliance is booted, DO NOT press and hold the Red X button for more than 13 seconds. This will hard power off the appliance and may result in damage.
- Down, up, left and right arrow buttons: When the appliance is running, the LCD home screen displays: Safeguard for Privileged Passwords <version number>. Use the arrow buttons to scroll through the following details:
 - Serial: <appliance serial number>
 - X0: <appliance IP address>
 - X1: <IP address of the sessions module interface>
If one or more Safeguard Sessions Appliances are joined to Safeguard for Privileged Passwords, X1 is not available in Safeguard for Privileged Passwords.
 - MGMT: <management IP address>
 - MGMT MAC: <media access control address>
 - IPMI: <IP address for IPMI>

Table 10: Appliance LCD and controls

Control	Description
Green check mark button	Use the Green check mark button to start the appliance. Press the Green check mark button for NO more than one second to power on

Control	Description
	<p>the appliance.</p> <p>⚠ CAUTION: Once the Safeguard for Privileged Passwords Appliance is booted, DO NOT press and hold the Green check mark button. Holding this button for four or more seconds will cold reset the power of the appliance and may result in damage.</p>
Red X button	<p>Use the Red X button to shut down the appliance. Press and hold the Red X button for four seconds until the LCD displays POWER OFF.</p> <p>⚠ CAUTION: Once the Safeguard for Privileged Passwords Appliance is booted, DO NOT press and hold the Red X button for more than 13 seconds. This will hard power off the appliance and may result in damage.</p>
Down, up, left and right arrow buttons	<p>When the appliance is running, the LCD home screen displays:</p> <ul style="list-style-type: none"> • Safeguard for Privileged Passwords <version number> <p>Use the arrow buttons to scroll through the following details:</p> <ul style="list-style-type: none"> • Serial: <appliance serial number> • X0: <appliance IP address> • X1: <IP address of the sessions module interface> <p>If one or more Safeguard Sessions Appliances are joined to Safeguard for Privileged Passwords, X1 is not available in Safeguard for Privileged Passwords.</p> <ul style="list-style-type: none"> • MGMT: <management IP address> • MGMT MAC: <media access control address> • IPMI: <IP address for IPMI>

Product licensing

The One Identity Safeguard for Privileged Passwords 2000 Appliance ships with the following modules, each requiring a valid license to enable functionality:

- One Identity Safeguard for Privileged Passwords
- One Identity Safeguard for Privileged Sessions

To add a Safeguard for Privileged Passwords module license

The first time you log into the Safeguard for Privileged Passwords desktop client as the Appliance Administrator, it prompts you to add a license. In addition, you can add additional Safeguard for Privileged Passwords module licenses.

1. Navigate to **Administrative Tools | Settings | Appliance | Licensing** in the desktop client.
2. Click **+**.
3. **Browse** to select the license file.
Once you add a license, Safeguard for Privileged Passwords displays the current license information and additional links that allow you to update the license.
4. To add another module license, click **Add Another License** from the **Success** dialog.

i **NOTE:** To avoid disruptions in the use of Safeguard for Privileged Passwords, the Appliance Administrator must configure the SMTP server, and define email templates for the *License Expired* and the *License Expiring Soon* event types. This ensures you will be notified of an approaching expiration date.

Update and installation instructions

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

To setup a new One Identity Safeguard for Privileged Passwords 2000 Appliance

If this is a new One Identity Safeguard for Privileged Passwords 2000 Appliance, see the *One Identity Safeguard for Privileged Passwords Appliance Setup Guide* that was included in the package with your appliance. You can also find this guide on the One Identity Support Portal: <https://support.oneidentity.com/one-identity-safeguard/2.1/technical-documents>.

To update an existing Safeguard for Privileged Passwords 2000 Appliance with this patch

It is the responsibility of the Appliance Administrator to upgrade One Identity Safeguard for Privileged Passwords by installing an update file (patch). Consider the following:

- **Minimum patch version:** 2.0.1.5037. If you are running an earlier version of the Safeguard for Privileged Passwords Appliance, you must upgrade to this version before applying the 2.9 patch.
- **Clustered environment:** Please see the *Patching cluster members* section in the *One Identity Safeguard for Privileged Passwords Administration Guide* for instructions on how to deploy a patch so all appliances in the cluster are on the same version.

i **IMPORTANT:** Always back up your appliance before you install an update file. Once you install an update file, you cannot uninstall it. For more information, see the *One Identity Safeguard for Privileged Passwords Administration Guide*.

Download the latest update from the One Identity Support Portal:

<https://support.oneidentity.com/one-identity-safeguard/>

To install the software patch

1. As an Appliance Administrator, log into the Safeguard for Privileged Passwords desktop client.
2. From the **Home** page, select **Administrative Tools**.
3. Select **Settings | Appliance | Updates**.
The current appliance and client versions are displayed.
4. Click **Upload a File** and browse to select the update file you downloaded from the One Identity support web site.

NOTE: When you select a file, Safeguard for Privileged Passwords uploads it to the server, but does not install it.

5. Once the file has successfully uploaded, click **Install Now**.

To install the Safeguard for Privileged Passwords desktop client

To define and enforce security policy for your enterprise, install the Windows desktop client application which gives you access to the Administrative Tools. You install the Windows desktop client by means of an MSI package which can be downloaded from the appliance web client portal. You do not need administrator privileges to install the One Identity Safeguard for Privileged Passwords desktop client.

NOTE: The install also includes: Safeguard for Privileged Passwords PuTTY which is used to launch the SSH client for SSH session requests.

Installing the Safeguard for Privileged Passwords desktop client application

1. To download the Safeguard for Privileged Passwords desktop client Windows installer .msi file, open a browser and navigate to:
<https://<Appliance IP>/Safeguard.msi>
Save the **Safeguard.msi** file in a location of your choice.
2. Run the MSI package.
3. Select **Next** in the **Welcome** dialog.
4. Accept the **End-User License Agreement** and select **Next**.
5. Select **Install** to begin the installation.
6. Select **Finish** to exit the desktop client setup wizard.

Installing the Desktop Player

CAUTION: If the Desktop Player is not installed and a user tries to play back a session from the Activity Center, a message like the following will display: No Desktop Player. The Safeguard Desktop Player is not installed. Would you like to install it now? The user will need to click **Yes** to go to the download page to install the player following step 2 below.

1. Once the Safeguard for Privileged Passwords installation is complete, go to the Windows **Start** menu, **Safeguard** folder and click **Download Safeguard Player** to be taken to the [One Identity Safeguard for Privileged Sessions - Download Software](#) web page.
2. Follow the *Install Safeguard Desktop Player* section of the player user guide found here:
 - a. Click this link: [One Identity Safeguard for Privileged Sessions - Technical Documentation](#).
 - b. Scroll to **User Guide** and click *One Identity Safeguard for Privileged Sessions [version] Safeguard Desktop Player User Guide*.

New Desktop Player versions

When you have installed a version of the Safeguard Desktop Player application, you will need to uninstall the previous version to upgrade to a newer player version.

Verify successful installation

You can verify that the correct version has been successfully installed from the Safeguard for Privileged Passwords desktop client or the LCD on the Safeguard for Privileged Passwords 2000 Appliance.

To verify the uploaded patch was installed

1. Log into the Safeguard for Privileged Passwords desktop client as an Operations Administrator or an Appliance Administrator.
2. Select **✕ Administrative Tools**.
3. Select **Settings | Appliance | Appliance Information**.
4. Verify the correct appliance version is displayed in the appliance properties pane.

In addition, when the appliance is running, the LCD home screen on the front panel of the appliance displays **Safeguard for Privileged Passwords** <version number>. Therefore, you can verify the correct appliance version is running from there as well.

More resources

Additional information is available from the following:

- Online product documentation: <https://support.oneidentity.com/one-identity-safeguard/technical-documents>
- One Identity Communities: <https://www.quest.com/community/one-identity/>
- Knowledge Base: <https://support.oneidentity.com/one-identity-safeguard/kb>

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. It supports simultaneous operation with multilingual data. 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).

The release is localized to the following languages: Arabic (Saudi Arabia), Chinese (Traditional), Dutch, French, German, Italian, Japanese, Korean, Russian, Spanish.

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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:

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- View Knowledge Base articles
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- Download software and technical documentation
- View how-to videos at: www.YouTube.com/OneIdentity
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- View services to assist you with your product

Third-party components

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

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