

Safeguard for Privileged Passwords 7.2

Release Notes

14 February 2023, 07:21

These release notes provide information about the Safeguard for Privileged Passwords release. For the most recent documents and product information, see [Online product documentation](#).

If you are updating a Safeguard for Privileged Passwords version prior to this release, read the release notes for the version found at: [One Identity Safeguard for Privileged Passwords Technical Documentation](#).

Release options

Safeguard for Privileged Passwords includes two release versions:

- Long Term Support (LTS) maintenance release, version 7.0.2 LTS
- Feature release, version 7.2

The versions align with Safeguard for Privileged Sessions. For more information, see [Long Term Support \(LTS\) and Feature Releases](#) on page 15.

About this release

Safeguard for Privileged Passwords Version 7.2 is a major feature release with new features, resolved issues, and known issues.

About the Safeguard product line

The Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance are 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 time frame to value.

Safeguard for Privileged Passwords virtual appliances and cloud applications are also available. 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. See [One Identity's Product Support Policies](#) for more information on environment virtualization.

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:

- **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

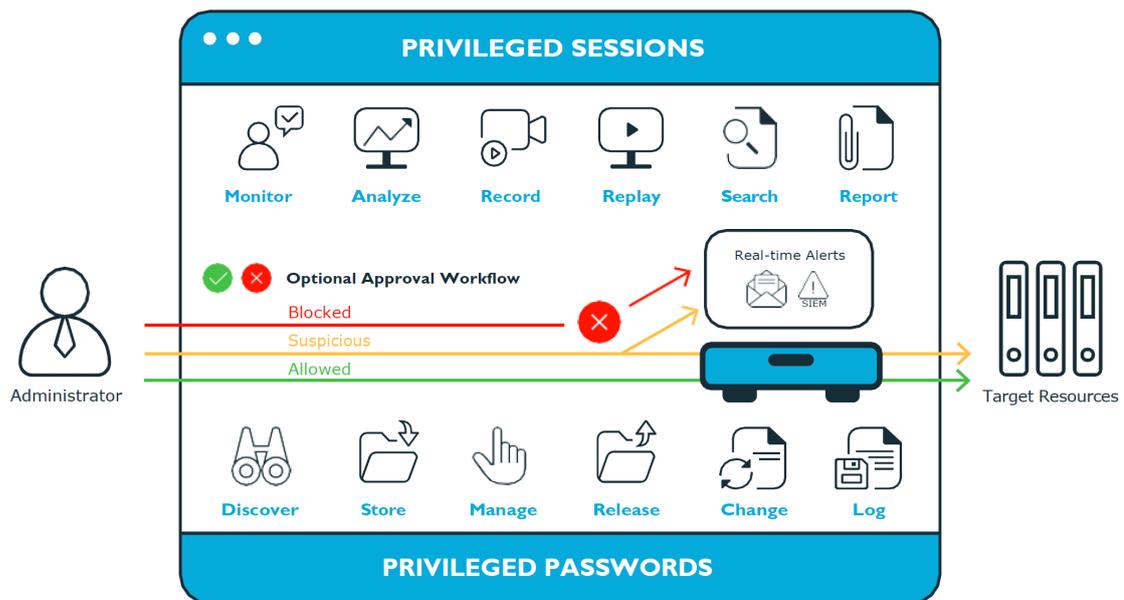
investigations.

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

NOTE: Configuration options and details related to Safeguard for Privileged Sessions will only be visible to customers that have purchased and joined the product to Safeguard for Privileged Passwords.

- **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.

Figure 1: Privileged Sessions and Privileged Passwords



New features

WinRM updates (315800)

Windows RM module in RSMS now supports missing service types in UpdateDependentSystem.

Support for using TOTP for asset accounts (315801)

Safeguard for Privileged Passwords now supports using time-based one-time passwords (TOTP) for accounts. You can set a TOTP authenticator for the accounts once they have been configured in Safeguard for Privileged Passwords.

API keys now supported for Azure AD and AWS connectors (191520)

Safeguard for Privileged Passwords now supports using API keys for accounts associated with Azure AD and AWS connectors. You can check, change, and set the API keys for the accounts once they have been configured in Safeguard for Privileged Passwords.

Connect for Safeguard Assets service now includes 2 Mac agents (399405)

Available after Safeguard for Privileged Passwords has been joined to Starling, Connect for Safeguard Assets has added 2 Mac agents (Mac x64 and Mac arm64) to allow for disconnected assets to be discovered and managed by Safeguard for Privileged Passwords. For more information, see the *Connect for Safeguard Assets User Guide*.

Support for the Safeguard for Privileged Passwords 4000 Appliance

The Safeguard for Privileged Passwords 4000 Appliance is available with the latest security updates and trusted certificate updates/revocations. It is compatible with Safeguard for Privileged Passwords 7.0 or later.

Resolved issues

Issues addressed by this release follow.

Table 1: General resolved issues

Resolved issue	Issue ID
Improvements made to the URL link function in the password vault.	402390
Fixed task discovery on Windows 2012 R2 (and lower)	401538
AWS password checks now working as intended.	400306
The number 0 is now allowed in the Exclude these Numeric Characters	399859

Resolved issue	Issue ID
field in an Account Password Rule.	
Fixed an issue with using an @ symbol in the username of an RDP application session.	393875
Does not Equal condition in Account Rules for a Dynamic Account Group now applying properly.	393829
Improved service discovery for Windows SSH platform in a multi-forest environment.	393093
Fixed an issue where stopping the ConnectForSafeguardAssets windows service while in the process of removing an asset could cause multiple AgentIds to be generated for a single asset.	392787
Reports now accurately show the time restriction when it is only one hour.	392766
Fixed database security issue.	392749
Fixed an issue where the scheduler was still running discovery on removed or disabled assets.	389268
Documentation has been fixed to say user password rules are configurable by Appliance Administrators.	388981
Scheduled password changes no longer failing for custom platforms.	388711
Fixed a timestamp issue with quarantine bundles.	388415
Fixed an issue with using a semicolon character in a service account password for a MySQL asset.	387734
Fixed an issue causing high CPU.	387254
Password change failures on Palo Alto platform are now being detected correctly.	386369
Fixed a quarantine issue.	312916
Correctly displaying the Use Alternate Login Name field in the UI when creating access request policies.	288506
Updated third-party component libraries.	387395
Now displaying the SSH Session Port field even when None is selected as the Authentication Type .	388386
Addressed an issue causing account discovery to fail for Solaris.	316006
Fixed a quarantine issue when upgrading to 7.0.	387277
Reverted a change that hid the API keys on the Access Request Broker page to be seen by Auditors.	404697

Known issues

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

Known issue

Issues may occur when launching telnet sessions after upgrading a Safeguard for Privileged Sessions appliance. If you are experiencing issues, ensure you have downloaded and installed the latest [telnet plugin](#) before contacting support. Additional information on configuring and supporting tenet sessions is also available on the [telnet plugin site](#).

If session playback is failing for fully indexed sessions, the desktop player may need to be upgraded to 1.9.4 or greater.

SPS initiated sessions failing when using netbios name.

Workaround: Use the domain name.

System requirements and versions

Safeguard for Privileged Passwords allows you to manage access requests, approvals, and reviews for your managed accounts and systems.

- The web client consists of an end-user view and administrator view. The fully featured client exposes all of the functionality of Safeguard based on the role of the authenticated user.
- The web management console displays whenever you connect to the virtual appliance and is used for first time configuration. 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. See [One Identity's Product Support Policies](#) for more information on environment virtualization.

Ensure that your system meets the minimum hardware and software requirements for these clients.

If a Safeguard Sessions Appliance is linked to Safeguard for Privileged Passwords, session recording is handled via Safeguard for Privileged Session. The link is initiated from Safeguard for Privileged Sessions. For details about the link steps and issue resolution, see the [One Identity Safeguard for Privileged Sessions Administration Guide](#).

Bandwidth

It is recommended that connection, including overhead, is faster than 10 megabits per second inter-site bandwidth with a one-way latency of less than 500 milliseconds. If you are using traffic shaping, you must allow sufficient bandwidth and priority to port 655 UDP

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 are any further questions, please check with your Network Administration team.

Web client system requirements

Table 2: Web requirements

Component	Requirements
Web browsers	Desktop browsers: <ul style="list-style-type: none">• Apple Safari 16.0 for desktop (or later)• Google Chrome 108 (or later)• Microsoft Edge 108 (or later)• Mozilla Firefox 108 (or later) Mobile device browsers: <ul style="list-style-type: none">• Apple Safari Mobile 14.7 (or later)• Google Chrome on Android 108 (or later)

Web management console system requirements

Table 3: Web kiosk requirements

Component	Requirements
Web management console	Desktop browsers: <ul style="list-style-type: none">• Apple Safari 16.0 for desktop (or later)• Google Chrome 108 (or later)• Microsoft Edge 108 (or later)• Mozilla Firefox 108 (or later)

Platforms and versions follow.

- You must license the VM with a Microsoft Windows license. We recommend using either the MAK or KMS method. Specific questions about licensing should be directed to your Sales Representative.

- Supported hypervisors:
 - Microsoft Hyper-V (VHDX) version 8 or higher
 - VMware vSphere with vSphere Hypervisor (ESXi) versions 6.5 or higher
 - VMware Workstation version 13 or higher
- Minimum resources: 4 CPUs, 10GB RAM, and a 500GB disk. The virtual appliances default deploy does not provide adequate resources. Ensure these minimum resources are met.

Supported platforms

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**, **Other Managed**, **Other Directory**, or **Linux** selection on the **Management** tab of the **Asset** dialog.

SPP linked to SPS: Sessions platforms

CAUTION: When linking your One Identity Safeguard for Privileged Sessions (SPS) deployment to your One Identity Safeguard for Privileged Passwords (SPP) deployment, ensure that the SPS and SPP versions match exactly, and keep the versions synchronized during an upgrade. For example, you can only link SPS version 6.6 to SPP version 6.6, and if you upgrade SPS to version 6.7, you must also upgrade SPP to 6.7.

Make sure that you do not mix Long Term Supported (LTS) and feature releases. For example, do not link an SPS version 6.0.1 to an SPP version 6.1.

When Safeguard for Privileged Passwords (SPP) is linked 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.

Table 4: Supported platforms: Assets that can be managed

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
ACF2 - Mainframe	ACF2 - Mainframe LDAP r14 zSeries ACF2 - Mainframe LDAP r15 zSeries	True	True
ACF2 - Mainframe LDAP	ACF2 - Mainframe LDAP r14 zSeries ACF2 - Mainframe LDAP r15 zSeries	True	False
Active Directory	Active Directory	True	False
AIX	AIX 7.1 AIX 7.2 AIX 7.3	True	True
Amazon Linux	Amazon Linux 2 Amazon Linux 2022 Amazon Linux Other	True	True
Amazon Web Services	Amazon Web Services 1	True	False
CentOS Linux	CentOS Linux 7 CentOS Linux 8	True	True
Check Point GAiA (SSH)	Check Point GAiA (SSH) R76 Check Point GAiA (SSH) R77 Check Point GAiA (SSH) R80.30	True	True
Cisco ASA	Cisco ASA 7.X Cisco ASA 8.X Cisco ASA 9.X	True	True
Cisco IOS (510)	Cisco IOS 12.X Cisco IOS 15.X Cisco IOS 16.X	True	True
Cisco ISE	Cisco ISE 2.7 Cisco ISE 3	True	False
Cisco ISE CLI	Cisco ISE CLI 2.7 Cisco ISE CLI 3	True	True
Cisco NX-OS	Cisco NX-OS 9.3(7) Cisco NX-OS 9.3(7a)	True	True

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
Debian GNU/Linux	Debian GNU/Linux 9 Debian GNU/Linux 10 Debian GNU/Linux 11	True	True
Dell iDRAC	Dell iDRAC 7 Dell iDRAC 8 Dell iDRAC 9	True	True
eDirectory LDAP	eDirectory LDAP 9.0	True	False
ESXi	ESXi 7.0 ESXi 8.0	True	False
F5 Big-IP	F5 Big-IP 12.1.2 F5 Big-IP 13.0 F5 Big-IP 14.0 F5 Big-IP 15.0	True	True
Fedora	Fedora 36 Fedora 37	True	True
Fortinet FortiOS	Fortinet FortiOS 5.2 Fortinet FortiOS 5.6 Fortinet FortiOS 6.0 Fortinet FortiOS 6.2 Fortinet FortiOS 7.0	True	True
FreeBSD	FreeBSD 12 FreeBSD 13	True	True
HP iLO	HP iLO 2 HP iLO 3 HP iLO 4 HP iLO 5	True	True
HP iLO MP	HP iLO MP 2 HP iLO MP 3	True	True
HP-UX	HP-UX 11iv3 (B.11.31)	True	True
IBM i	IBM i 7.3	True	True

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
	IBM i 7.4		
Junos - Juniper Networks	Junos - Juniper Networks 19 Junos - Juniper Networks 20 Junos - Juniper Networks 21 Junos - Juniper Networks 22	True	True
LDAP	OpenLDAP 2.4	True	False
Linux		True	True
macOS	macOS 11 macOS 12 macOS 13	True	True
MongoDB	MongoDB 4.2 MongoDB 4.4 MongoDB 5.0 MongoDB 6.0	True	False
MySQL	MySQL 5.7 MySQL 8.0	True	False
Oracle	Oracle 19c Oracle 21c	True	False
Oracle Linux (OL)	Oracle Linux (OL) 7 Oracle Linux (OL) 8 Oracle Linux (OL) 9	True	True
Other		False	False
Other Directory		True	False
Other Managed		True	False
PAN-OS	PAN-OS 9.1 PAN-OS 10.1 PAN-OS 10.2	True	True
PostgreSQL	PostgreSQL 11 PostgreSQL 12 PostgreSQL 13	True	False

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
	PostgreSQL 14 PostgreSQL 15		
RACF - Mainframe	RACF - Mainframe z/OS V2.1 Security Server zSeries RACF - Mainframe z/OS V2.2 Security Server zSeries RACF - Mainframe z/OS V2.3 Security Server zSeries	True	True
RACF - RACF - Mainframe LDAP	RACF - Mainframe LDAP z/OS V2.1 Security Server zSeries RACF - RACF - Mainframe LDAP z/OS V2.2 Security Server zSeries RACF - RACF - Mainframe LDAP z/OS V2.3 Security Server zSeries	True	False
Red Hat Enterprise Linux (RHEL)	Red Hat Enterprise Linux (RHEL) 7 Red Hat Enterprise Linux (RHEL) 8 Red Hat Enterprise Linux (RHEL) 9	True	True
Red Hat Directory Server	Red Hat Directory Server 11	True	False
SAP HANA	SAP HANA SAP HANA 2	True	False
SAP Netweaver Application Server	SAP Netweaver Application Server 7.3 SAP Netweaver Application Server 7.4 SAP Netweaver Application Server 7.5	True	False
Safeguard for Privileged Sessions	Safeguard for Privileged Sessions 7.0	True	True
Solaris	Solaris 10 Solaris 11.3 Solaris 11.4	True	True
SonicOS	SonicOS 6.5 SonicOS 7 SonicOSX 7	True	False
SonicWALL SMA or	SonicWALL SMA or CMS 11.3.0	True	False

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
CMS			
SQL Server	SQL Server 2012 SQL Server 2014 SQL Server 2016 SQL Server 2017 SQL Server 2019 SQL Server 2022	True	False
SUSE Linux Enterprise Server (SLES)	SUSE Linux Enterprise Server (SLES) 12 SUSE Linux Enterprise Server (SLES) 15	True	True
Sybase (Adaptive Server Enterprise)	Sybase (Adaptive Server Enterprise) 15.7 Sybase (Adaptive Server Enterprise) 16 Sybase (Adaptive Server Enterprise) 17	True	False
Top Secret - Mainframe	Top Secret - Mainframe r14 zSeries Top Secret - Mainframe r15 zSeries Top Secret - Mainframe r16 zSeries	True	False
Top Secret - Mainframe LDAP	Top Secret - Mainframe LDAP r14 Top Secret - Mainframe LDAP r15 Top Secret - Mainframe LDAP r16	True	True
Ubuntu	Ubuntu 18.04 LTS Ubuntu 22.04 LTS Ubuntu 22.10	True	True
Windows Desktop Windows Desktop (SSH) Windows Desktop (WinRM) Windows Server Windows Server	Windows (SSH) 10 Windows (SSH) 11 Windows (SSH) Server 2012 Windows (SSH) Server 2012 R2 Windows (SSH) Server 2016 Windows (SSH) Server 2019	True	True

Platform Name	Tested Versions	Supports SPP	Supports SPS Access
(SSH)	Windows (SSH) Server 2022		
Windows Server (WinRM)	Windows 10		
	Windows 11		
	Windows Server 2012		
	Windows Server 2012 R2		
	Windows Server 2016		
	Windows Server 2019		
	Windows Server 2022		

Table 5: Supported platforms: Directories that can be searched

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

For all supported platforms, it is assumed that you are applying the latest updates. For unpatched versions of supported platforms, Support will investigate and assist on a case-by-case basis but it may be necessary for you to upgrade the platform or use SPP's custom platform feature.

IMPORTANT: For the current list of platforms supported by Connect for Safeguard Assets, see the *Connect for Safeguard Assets User Guide*.

Custom platforms

The following example platform scripts are available:

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

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

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 that 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.

Long Term Support (LTS) and Feature Releases

Releases use the following version designations:

- Long Term Support (LTS) Releases: The first digit identifies the release and the second is a zero (for example, 6.0 LTS).
- Maintenance LTS Releases: A third digit is added followed by LTS (for example, 6.0.6 LTS).
- Feature Releases: The Feature Releases version numbers are two digits (for example, 6.6).

Customers choose between two paths for receiving releases: Long Term Support (LTS) Release or Feature Release. See the following table for details.

Table 6: Comparison of Long Term Support (LTS) Release and Feature Release

	Long Term Support (LTS) Release	Feature Release
General Release	Scope: Includes new features, resolved issues and security updates Versioning: The first digit identifies the LTS and the second digit is a 0 (for example, 6.0 LTS, 7.0 LTS, and so on).	Scope: Includes the latest features, resolved issues, and other updates, such as security patches for the OS Versioning: The first digit identifies the LTS and the second digit is a number identifying the Feature Release (for example, 6.6, 6.7, and so on).
Maintenance Release	Scope: Includes critical resolved issues	Scope: Includes highly critical resolved issues

Versioning: A third digit designates the maintenance LTS Release (for example, 6.0.6 LTS).

Versioning: A third digit designates the maintenance Feature Release (for example, 6.6.1).

Release and support details can be found at [Product Life Cycle](#).

⚠ CAUTION: Downgrading from the latest Feature Release, even to an LTS release, voids support for SPP.

One Identity strongly recommends always installing the latest revision of the release path you use (Long Term Support path or Feature Release path).

Moving between LTS and Feature Release versions

You can move from an LTS version (for example, 6.0.7 LTS) to the same feature version (6.7) and then patch to a later feature version. After that, you can patch from the minimum version for the patch, typically N-3. If you move from an LTS version to a feature version, you will receive a warning like the following which informs you that you will only be able to apply a Feature Release until the next LTS Release:

Warning: You are patching to a Feature Release from an LTS Release. If you apply this update, you will not be able to upgrade to a non-Feature Release until the next LTS major release version is available. See the Administration Guide for details.

You cannot move from a Feature Release to LTS Release. For example, you cannot move from 6.7 to 6.0.7 LTS. You have to keep upgrading with each new Feature Release until the next LTS Release version is published. For this example, you would wait until 7.0 LTS is available.

Patching

You can only patch from a major version. For example, if you have version 6.6 and want to patch to 7.7, you must patch to 7.0 LTS and then apply 7.7.

An LTS major version of Safeguard for Privileged Passwords (SPP) will only work with the same LTS major version of Safeguard for Privileged Sessions (SPS). For the best experience, it is recommended you use the latest supported version.

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 following tables list the Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance specifications and power requirements.

Table 7: 4000 Appliance: Feature specifications

4000 Appliance	Feature / Specification
Processor	Intel Xeon 4310T 2.3 GHz
# of Processors	1
# of Cores per Processor	10 cores (20 threads)
L2/L3 Cache	15 MB Cache
Chipset	Intel C621A Chipset
DIMMs	ECC DDR4-2667
RAM	64 GB
Internal HD Controller	Supermicro AOC-S3908L-H8iR-16DD
Disk Hard Drive	4 x Seagate Exos 7E10 2TB SAS 512e
Availability	TPM 2.0, EEC Memory, Redundant PSU
I/O Slots	2x PCIe 4.0 x16 FHHL 1x PCIe 4.0 x16 HHL
RAID	RAID10
NIC/LOM	Broadcom P210TP - 2 x 10G BASE-T Broadcom P210P - 2 x 10G SFP+
Power Supplies	Redundant, 500W/600W, Auto Ranging (100v~240V), RoHS and REACH compliant
Fans	6 Supermicro FAN-0141L
Chassis	1U Rack
Dimensions (HxWxD)	43 x 437.0 x 650.0 (mm) 1.7 x 17.2 x 25.6 (in)
Weight	Max: 37 lbs (16.78 Kg)

Table 8: 3000 Appliance: Feature specifications

3000 Appliance	Feature / Specification
Processor	Intel Xeon E3-1275v6 3.8 GHz
# of Processors	1
# of Cores per Processor	4 cores (8 threads)
L2/L3 Cache	8MB L3 Cache
Chipset	Intel C236 Chipset

3000 Appliance	Feature / Specification
DIMMs	Unbuffered ECC UDIMM DDR4 2400MHz
RAM	32 GB
Internal HD Controller	LSI MegaRAID SAS 9361-4i Single
Disk Hard Drive	4 x Seagate 7E2000 2TB 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	4 port - dual GbE LAN with Intel i210-AT
Power Supplies	Redundant, 700W, Auto Ranging (100v~240V), ACPI compatible
Fans	1 Supermicro SNK-P0046P and 2 Micron 16GB 2666MHz 2R ECC Unb Z01B Dual Label
Chassis	1U Rack
Dimensions (HxWxD)	43 x 437.0 x 597.0 (mm) 1.7 x 17.2 x 23.5 (in)
Weight	Max: 37 lbs (16.78 Kg)

Table 9: 2000 Appliance: Feature specifications

2000 Appliance	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

2000 Appliance	Feature / Specification
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 10: Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance: Power requirements

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

Safeguard for Privileged Passwords is also available as a virtual appliance and from the cloud.

Appliance LCD and controls

The front panel of the Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance contain 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>
 - MGMT: <management IP address>
 - MGMT MAC: <media access control address>
 - IPMI: <IP address for IPMI>

Table 11: Appliance LCD and controls

Control	Description
Green check mark button	<p>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.</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> • MGMT: <management IP address> • MGMT MAC: <media access control address> • IPMI: <IP address for IPMI>

Product licensing

CAUTION: All customers upgrading to Safeguard for Privileged Passwords 7.0 require a new license. For more information, contact Support.

Hardware appliance

The Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance ship with the Privileged Passwords module which requires a valid license to enable functionality.

You must install a valid license. Once the module is installed, Safeguard for Privileged Passwords shows a license state of **Licensed** and is operational. If the module license is not installed, you have limited functionality. That is, even though you will be able to configure access requests, if a Privileged Passwords module license is not installed, you will not be able to request a password release.

Virtual appliance Microsoft Windows licensing

You must license the virtual appliance with a Microsoft Windows license. We recommend using either the MAK or KMS method. Specific questions about licensing should be directed to your Sales Representative. The virtual appliance will not function unless the operating system is properly licensed.

Licensing setup and update

To enter licensing information when you first log in

The first time you log in as the Appliance Administrator, you are prompted to add a license. The **Success** dialog displays when the license is added.

On the virtual appliance, the license is added as part of Initial Setup.

IMPORTANT: After successfully adding a license, the Software Transaction Agreement will be displayed and must be read and accepted in order to use Safeguard for Privileged Passwords.

To configure reminders for license expiration

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.

Users are instructed to contact their Appliance Administrator if they get an "appliance is unlicensed" notification.

As an Appliance Administrator, if you receive a "license expiring" notification, apply a new license.

To update the licensing file

Licensing update is only available using a virtual machine, not via the hardware.

To perform licensing activities

Go to the licensing page:

1. Navigate to **Appliance Management > Appliance > Licensing**.
 - To upload a new license file, click **+Upload new license file** and browse to select the current license file. The Software Transaction Agreement will also be displayed during this process and must be read and accepted in order to complete the licensing process.
 - To remove the license file, select the license and click  **Remove selected license**.

Update and installation instructions

⚠ CAUTION: For customers upgrading to 7.0 from a previous Safeguard for Privileged Passwords release, be aware the following changes are required prior to upgrading:

- **New license (<https://support.oneidentity.com/contact-us/licensing>).** Once the new license is installed, Appliance Administrators will need to read and accept the Software Transaction Agreement before Safeguard for Privileged Passwords will be fully functional.
- **Must apply the OS patch release prior to upgrading to 7.0.** For more information, see [One Identity Safeguard for Privileged Passwords required Operating System Patch Pre-requisite for SPP 7.0 LTS \(338064\)](#).
- **Approval Anywhere has been deprecated.** Any Safeguard for Privileged Passwords customers also currently using Starling Two-Factor Authentication as their authentication provider should wait to upgrade until they have removed all Starling Two-Factor Authentication related user information.

The Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance are built specifically for use only with the Safeguard for Privileged Passwords privileged management software, which is pre-installed and ready for immediate use on the hardened appliances.

Safeguard for Privileged Passwords virtual appliances and cloud applications are also available.

To set up a new deployment: Safeguard for Privileged Passwords 4000 Appliance, 3000 Appliance and 2000 Appliance Virtual Machine, or Cloud

If this is a new physical appliance, virtual machine, or cloud deployment, see the *Safeguard for Privileged Passwords Appliance Setup Guide*. The guide is also included in the package with a physical appliance.

To update an existing physical appliance or virtual appliance with this patch

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

- **Minimum patch version:** 7.0.0.18401. If you are running an earlier version of the Safeguard for Privileged Passwords Appliance, you must upgrade to this version before applying the 7.2 patch.
- **Clustered environment:** See the Patching cluster members section in the *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.

Prepare to install a patch

1. Backup your appliance before you install a patch. Once you install a patch, you cannot uninstall it. See the *Safeguard for Privileged Passwords Administration Guide*, Backup and restore topic.
2. Download the latest physical appliance patch or virtual appliance patch from the One Identity Support Portal:
<https://support.oneidentity.com/one-identity-safeguard-for-privileged-passwords/download-new-releases>

To install the hardware patch

1. As an Appliance Administrator, log in to the Safeguard for Privileged Passwords client.
2. Select **Appliance Management > Appliance > Patch Updates**.
The current appliance and client versions are displayed.
3. 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.
4. Once the file has successfully uploaded, click **Install Now**.

To install the virtual machine patch

1. Make adequate resources available. The virtual appliances default deploy does not provide adequate resources. The minimum resources required are: 4 CPUs, 10GB RAM, and a 500GB disk. Without adequate disk space, the patch will fail and you will need to expand disk space then re-upload the patch.
2. Go to the web management console and click  **Setup** and follow the wizard.

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 Appliance.

To verify the uploaded patch was installed

1. Log in to the Safeguard for Privileged Passwords client as an Operations Administrator or an Appliance Administrator.
2. Select **Appliance Management > Appliance > Appliance Information**.
3. 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-for-privileged-passwords/technical-documents>
- One Identity Communities: <https://www.quest.com/community/one-identity/>
- Knowledge Base: <https://support.oneidentity.com/one-identity-safeguard-for-privileged-passwords/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.

About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit <https://www.oneidentity.com/company/contact-us.aspx>.

Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

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

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

Third-party 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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