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# Monitoring Palo Alto

Beta Version

Palo Alto PowerPack version 100

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# Chapter

# 1

## Introduction

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### Overview

This manual describes how to monitor Palo Alto firewalls in SL1 using the *Palo Alto PowerPack*.

The following sections provide an overview of Palo Alto firewalls and the *Palo Alto PowerPack*:

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### What is Palo Alto?

Palo Alto Networks is a provider of enterprise network security solutions. Their products include physical and virtual firewalls, the WildFire cloud-based service, and the Panorama network security management platform.

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## What Does the Palo Alto PowerPack Monitor?

The *Palo Alto* PowerPack includes the following features:

- Dynamic Applications to collect configuration and performance data about Palo Alto firewalls
- Device Classes for each of the Palo Alto devices monitored
- Event Policies and corresponding alerts that are triggered when Palo Alto devices meet certain status criteria

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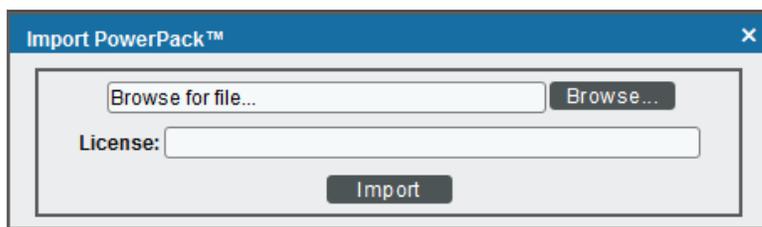
## Installing the Palo Alto PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Palo Alto* PowerPack.

**TIP:** By default, installing a new version of a PowerPack overwrites all content from a previous version of that PowerPack that has already been installed on the target system. You can use the **Enable Selective PowerPack Field Protection** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields. (For more information, see the **System Administration** manual.)

To download and install a PowerPack:

1. Download the PowerPack from the [ScienceLogic Customer Portal](#).
2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
3. In the **PowerPack Manager** page, click the **[Actions]** button, then select *Import PowerPack*.
4. The **Import PowerPack** dialog box appears:



5. Click the **[Browse]** button and navigate to the PowerPack file.
6. When the **PowerPack Installer** modal page appears, click the **[Install]** button to install the PowerPack.

**NOTE:** If you exit the **PowerPack Installer** modal page without installing the imported PowerPack, the imported PowerPack will not appear in the **PowerPack Manager** page. However, the imported PowerPack will appear in the **Imported PowerPacks** modal page. This page appears when you click the **[Actions]** menu and select *Install PowerPack*.

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# Chapter

# 2

## Configuration and Discovery

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### Overview Configuration and Discovery

The following sections describe how to configure and discover Palo Alto firewalls for monitoring by SL1 using the *Palo Alto PowerPack*:

<i>Prerequisites for Monitoring Palo Alto Firewalls</i> .....	6
<i>Creating Credentials for Palo Alto</i> .....	7
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### Prerequisites for Monitoring Palo Alto Firewalls

Before you can monitor Palo Alto firewalls in SL1 using the *Palo Alto PowerPack*, you must have the following information:

- SNMP community strings for the devices you want to monitor
- IP addresses for each device you want to monitor
- Username and password for a user with access to the devices you want to monitor

**NOTE:** The monitored firewalls must be running PAN-OS version 8.0 or later to ensure the proper collection of tunnel performance data.

# Creating Credentials for Palo Alto

To configure SL1 to monitor Palo Alto firewalls, you must create the SNMP and Basic/Snippet credentials that enable SL1 to connect with those firewalls.

**NOTE:** The *Palo Alto* PowerPack currently supports only basic authentication for discovery; it does not support the use of an API key.

## Creating an SNMP Credential

Some of the Dynamic Applications in the *Palo Alto* PowerPack use SNMP to collect information about Palo Alto firewalls. To use these Dynamic Applications, you must first define an SNMP credential that enables SL1 to communicate with the firewalls.

To configure an SNMP credential:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Click the **[Actions]** button and then select *Create SNMP Credential*. The **Credential Editor** page appears.
3. Complete the following fields:

The screenshot shows the 'Credential Editor [22]' window. It has a title bar with 'Edit SNMP Credential #22', 'New', and 'Reset' buttons. The form is divided into three sections: 'Basic Settings', 'SNMP V1/V2 Settings', and 'SNMP V3 Settings'. In 'Basic Settings', 'Profile Name' is 'SNMP Public V2', 'SNMP Version' is '[ SNMP V2 ]', 'Port' is '161', 'Timeout(ms)' is '1500', and 'Retries' is '1'. In 'SNMP V1/V2 Settings', 'SNMP Community (Read-Only)' is 'public' and 'SNMP Community (Read/Write)' is empty. In 'SNMP V3 Settings', 'Security Name' and 'Security Passphrase' are empty, 'Authentication Protocol' is 'MD5', 'Security Level' is 'No Authentication / No Encryption', 'SNMP v3 Engine ID' is empty, 'Context Name' is empty, 'Privacy Protocol' is 'DES', and 'Privacy Protocol Pass Phrase' is empty. At the bottom are 'Save' and 'Save As' buttons.

- **Profile Name.** Type a name for the credential.
- **SNMP Version.** Select *SNMP V2*.
- **SNMP Community (Read Only).** Type the community string for the Palo Alto firewalls you want to monitor.

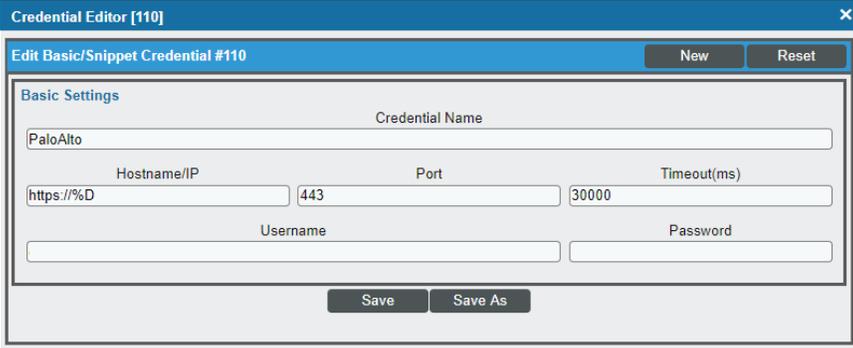
4. Supply values in the other fields on this page as needed. In most cases, you can accept the default values for the other fields.
5. Click the **[Save]** button.

## Creating a Basic/Snippet Credential

To configure SL 1 to monitor Palo Alto devices, you must also create a Basic/Snippet credential. This credential enables some of the Dynamic Applications in the *Palo Alto PowerPack* to connect with those devices.

To create a Basic/Snippet credential for Palo Alto devices:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Click the **[Actions]** button and then select *Create Basic/Snippet Credential*. The **Credential Editor** page appears.
3. Complete the following fields:



The screenshot shows a window titled "Credential Editor [110]". Inside, there's a sub-header "Edit Basic/Snippet Credential #110" with "New" and "Reset" buttons. Below is a "Basic Settings" section with a "Credential Name" field containing "PaloAlto". There are three rows of fields: "Hostname/IP" with "https://%D", "Port" with "443", and "Timeout(ms)" with "30000". Below these are "Username" and "Password" fields, both empty. At the bottom are "Save" and "Save As" buttons.

- **Credential Name.** Type a name for the credential.
  - **Hostname/IP.** Type "https://%D".
  - **Port.** Type "443".
  - **Timeout.** Type "30000".
  - **Username.** Type the username for a user account with access to the Palo Alto firewalls.
  - **Password.** Type the password for the Palo Alto user account.
4. Click the **[Save As]** button.
  5. When the confirmation message appears, click **[OK]**.

# Discovering Palo Alto Devices

After you have created the necessary credentials, you can discover the Palo Alto devices that you want to monitor. Several minutes after the discovery session has completed, the Dynamic Applications in the Palo Alto PowerPack will automatically align to the devices, enabling you to view configuration and performance data about the devices.

To discover the Palo Alto devices that you want to monitor:

1. Go to the **Discovery Control Panel** page (System > Manage > Discovery).
2. In the **Discovery Control Panel**, click the **[Create]** button.
3. The **Discovery Session Editor** page appears. In the **Discovery Session Editor** page, complete the following fields:

The screenshot shows the 'Discovery Session Editor' interface for editing session [16]. The interface is divided into several sections:

- Identification Information:** Name 'PaloAlto', Description field.
- IP and Credentials:** IP Address/Hostname Discovery List with '10.64.162.28' and an 'Upload File' button. Below it are 'SNMP Credentials' and 'Other Credentials' dropdown menus.
- Detection and Scanning:** Initial Scan Level, Scan Throttle, Port Scan All IPs, and Port Scan Timeout, all set to '[ System Default (recommended) ]'. A 'Detection Method & Port' list includes options like 'UDP: 161 SNMP', 'TCP: 1 - tcpmux', etc. 'Interface Inventory Timeout (ms)' is set to '600000' and 'Maximum Allowed Interfaces' is '10000'. There is a 'Bypass Interface Inventory' checkbox.
- Basic Settings:** 'Discover Non-SNMP' is unchecked, 'Model Devices' is checked, and 'DHCP' is unchecked. 'Device Model Cache TTL (h)' is '2'. 'Collection Server PID' is '[em7ao]'. 'Organization' is '[ System ]'. 'Add Devices to Device Group(s)' is empty. 'Apply Device Template' is '[ Choose a Template ]'. 'Log All' is unchecked.

Buttons for 'Save', 'Save As', 'New', and 'Reset' are visible at the top and bottom of the interface.

- **IP Address/Hostname Discovery List.** Type the IP address or addresses for the Palo Alto devices that you want to discover.
  - **SNMP Credentials.** Select the SNMP credential you created for the Palo Alto devices.
  - **Other Credentials.** Select the Basic/Snippet credentials you created for the Palo Alto devices.
  - **Model Devices.** Select this checkbox.
4. Optionally, you can enter values in the other fields on this page. For more information about the other fields on this page, see the **Discovery & Credentials** manual.

5. Click the **[Save]** button to save the discovery session, and then close the **Discovery Session Editor** window.
6. The discovery session you created appears at the top of the **Discovery Control Panel** page. Click its lightning-bolt icon (  ) to run the discovery session.
7. The **Discovery Session** window appears. When the device(s) are discovered, click the device icon (  ) to view the **Device Properties** page for each device.

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