

Purpose

The purpose of this lab was in order to update the software and renew the license of the firewall. This is done to get the firewall up to date and ready to use in future labs.

Background

Updating the software of a firewall is necessary due to the fact that security threats are always evolving, and new security bugs are always being found.

We also enabled dynamic updates which are used to keep the firewall up to date automatically without any human input, keeping the firewall up to date at all times.

License syncing is required in order to connect the firewall to its valid license. Due to the fact that we factory reset the firewall, a sync is needed to use subscription services and continue getting updates for the foreseeable future.

Global Protect is needed in order to set up VPNs, something we will be doing later on in future labs using our Palo Alto 220s.

Steps



1: Under Devices > Licenses, click Retrieve license keys from license server.

Advanced Threat Prevention Date Issued June 16, 2022 Date Expires July 06, 2025 Description Advanced Threat Prevention	Advanced URL Filtering Date Issued May 02, 2022 Date Expires July 06, 2025 Description Palo Alto Networks Advanced URL License
Advanced WildFire License Date Issued September 15, 2023 Date Expires July 06, 2025 Description Access to Advanced WildFire signatures, logs, API	DNS Security Date Issued May 02, 2022 Date Expires July 06, 2025 Description Palo Alto Networks DNS Security License
GlobalProtect Gateway Date Issued May 02, 2022 Date Expires July 06, 2025 Description GlobalProtect Gateway License	GlobalProtect Portal Date Issued May 02, 2022 Date Expires Never Description GlobalProtect Portal License
PAN-DB URL Filtering Date Issued June 14, 2022 Date Expires July 06, 2025 Description Palo Alto Networks URL Filtering License Active Yes	SD WAN Date Issued May 02, 2022 Date Expires July 06, 2025 Description License to enable SD WAN feature
Standard Date Issued May 02, 2022 Date Expires July 06, 2025 Description 10 x 5 phone support; repair and replace hardware service	Threat Prevention Date Issued June 16, 2022 Date Expires July 06, 2025 Description Threat Prevention
WildFire License Date Issued May 02, 2022 Date Expires July 06, 2025 Description WildFire signature feed, integrated WildFire logs, WildFire API	License Management Retrieve license keys from license server Activate feature using authorization code Manually upload license key

Once done updating licenses, you should get new dates for your Date Expired

Applications and Threats Update Schedule ⓘ

Recurrence:

Minutes Past Hour:

Action:

☐ Disable new apps in content update

Threshold (hours):

A content update must be at least this many hours old for the action to be taken.

Allow Extra Time to Review New App-IDs

Set the amount of time the firewall waits before installing content updates that contain new App-IDs. You can use this wait period to assess and adjust your security policy based on the new App-IDs.

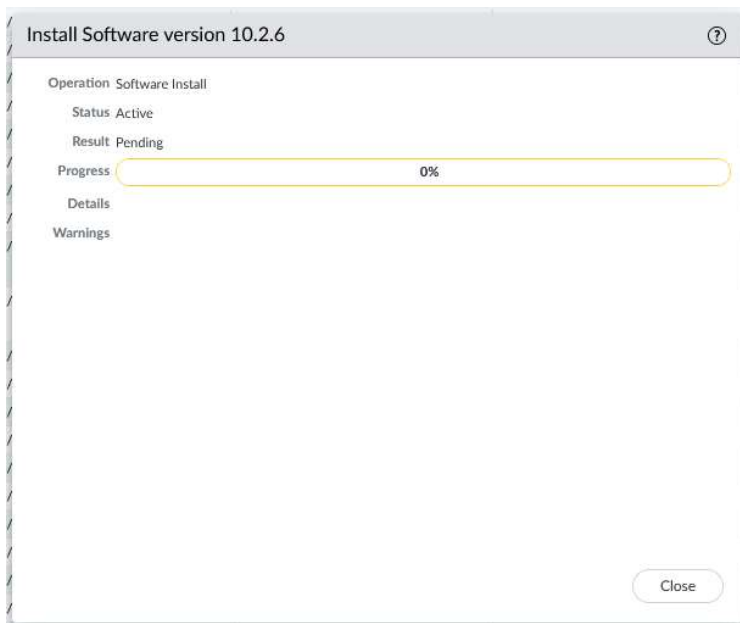
New App-ID Threshold (hours):

2: Under Devices > Dynamic Updates and update the schedule. Set the time to whatever you desire, we recommend hourly, set the action to download-and-install and click OK.

The screenshot shows the Palo Alto Networks PA-220 web interface. The 'Device' tab is selected, and the 'Software' section is expanded. A 'Download Software' dialog box is open, showing a progress bar for the download of the latest OS version (10.2.5). The background table lists various software components and their versions.

VERSION	SIZE	RELEASE DATE	AVAILABLE	CURRENTLY INSTALLED	ACTION
10.2.5	382 MB	2023/09/27 12:55:25			Download
10.2.5	393 MB	2023/08/17 12:40:32			Download
10.2.4-42	368 MB	2023/05/16 12:29:47			Download
10.2.4	368 MB	2023/03/30 09:25:40			Download
10.2.4-44	392 MB	2023/			Download
10.2.4-43	392 MB	2023/			Download
10.2.3	353 MB	2022/			Download
10.2.3-44	354 MB	2023/			Download
10.2.3-42	354 MB	2022/			Download
10.2.2-42	328 MB	2022/			Download
10.2.2	339 MB	2022/			Download
10.2.1	334 MB	2022/			Download
10.2.0	556 MB	2022/			Download
10.2.0-41	556 MB	2022/			Download
10.1.11	381 MB	2021/			Download
10.1.10-42	368 MB	2021/			Download
10.1.10	367 MB	2021/			Download
10.1.10-41	368 MB	2021/			Download
10.1.9	367 MB	2021/			Download
10.1.9-43	367 MB	2021/			Download
10.1.9-41	367 MB	2021/			Download
10.1.8-42	365 MB	2022/			Download
10.1.8	359 MB	2022/			Download
10.1.7	359 MB	2022/			Download
10.1.6-46	357 MB	2022/08/09 15:46:40			Download
10.1.6	357 MB	2022/05/24 12:44:17			Download
10.1.6-42	357 MB	2022/04/21 08:11:05			Download
10.1.5	355 MB	2022/03/24 17:15:41	Downloaded		Validate
10.1.5-42	355 MB	2022/04/25 10:19:32	Downloaded		Validate
10.1.5-41	355 MB	2022/04/09 22:37:08	Downloaded		Validate

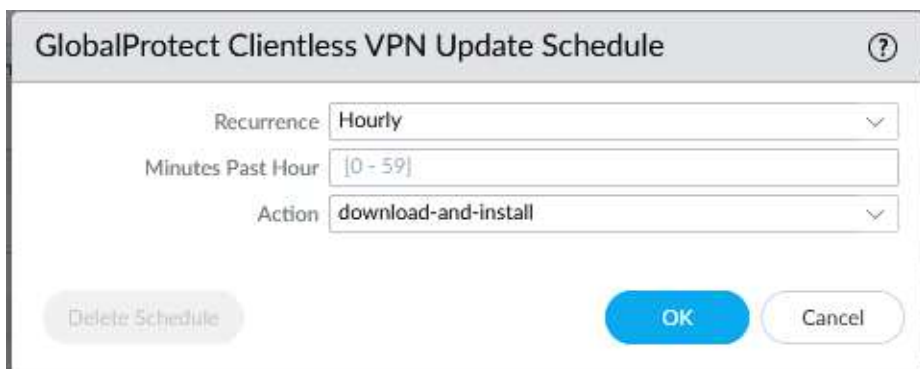
3: Under Device > Software, download the latest OS version. Once it's downloaded update to the latest version.



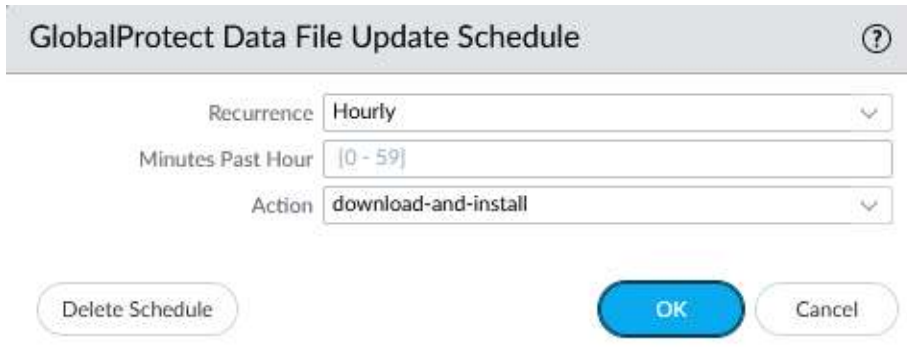
VERSION	SIZE	RELEASE DATE	AVAILABLE	CURRENTLY INSTALLED	ACTION
10.2.6	382 MB	2023/09/27 12:55:25	Downloaded	✓	Validate Export Reinstall

Current version installed.

4: Under Device > Global Protect Client, click Check Now. Update to the latest VPN.

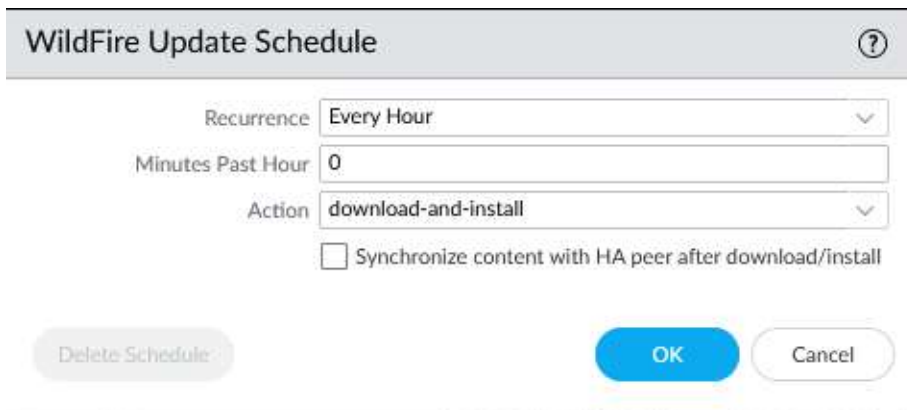


5: Set a VPN update schedule, we recommend hourly. Select the download-and-install option



The dialog box is titled "GlobalProtect Data File Update Schedule" with a help icon. It contains three dropdown menus: "Recurrence" set to "Hourly", "Minutes Past Hour" set to "[0 - 59]", and "Action" set to "download-and-install". At the bottom, there are three buttons: "Delete Schedule", "OK", and "Cancel".

6: Do the same for VPN Data File update schedule

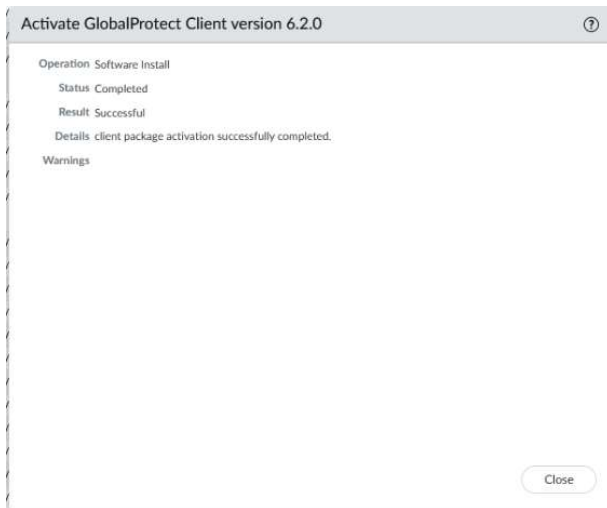


The dialog box is titled "WildFire Update Schedule" with a help icon. It contains three dropdown menus: "Recurrence" set to "Every Hour", "Minutes Past Hour" set to "0", and "Action" set to "download-and-install". Below the "Action" dropdown is a checkbox labeled "Synchronize content with HA peer after download/install" which is currently unchecked. At the bottom, there are three buttons: "Delete Schedule", "OK", and "Cancel".

7: And with WildFire schedule.

VERSION	SIZE	RELEASE DATE	AVAILABLE	CURRENTLY INSTALLED	ACTION
6.2.0	257 MB	2023/05/22 07:45:59			Download

8: install Global Protect



Problems:

The biggest problem we ran into when doing this lab was mistakenly doing the to-do list out of order. You **MUST** set up dynamic updates before you update the software of a PA-220. Once this mistake was realized it was a fairly easy fix, just set up dynamic update before installing the OS.



Conclusion:

These steps must be done in order or troubles will occur. Updating the license goes first, followed by setting up dynamic updates. Update the OS and set up global protect after that, and you'll be set. Make sure you familiarize to the GUI as this is what we will be using for the foreseeable future.