Palo Alto Global Protect VPN

Authenticating Users Using SecurAccess Server by SecurEnvoy

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Palo Alto Global Protect VPN

This document describes how to integrate Palo Alto Global Protect VPN with SecurEnvoy two-factor Authentication solution called 'SecurAccess'

A Virtual Private Network (VPN) uses a public network—such as the Internet—to enable remote users connect securely to the corporate network.

SecurAccess provides two-factor, strong authentication for remote Access solutions (such as SSH), without the complication of deploying hardware tokens or smartcards.
Two-Factor authentication is provided by the use of (your PIN and your Phone or SecurEnvoy Soft Token app to receive the one time passcode)

SecurAccess is designed as an easy to deploy and use technology. It integrates directly into any LDAP server and negates the need for additional User Security databases. SecurAccess consists of two core elements: a Radius Server and Authentication server. The Authentication server is directly integrated with LDAP in real time.

SecurEnvoy Security Server can be configured in such a way that it can use the existing LDAP password. Utilizing the LDAP password as the PIN, allows the User to enter their UserID, Domain password and One Time Passcode received upon their mobile phone. This authentication request is passed via the Radius protocol to the SecurEnvoy Radius server where it carries out a Two-Factor authentication. It provides a seamless login into the Windows Server environment by entering three pieces of information. SecurEnvoy utilizes a web GUI for configuration. All notes within this integration guide refer to this type of approach.

The equipment used for the integration process is listed below:

Palo Alto

Palo Alto Global Protect VPN - PAN-OS 5.0.6 to 7.0.0 and GlobalProtect 1.2.5.

Microsoft

Microsoft Windows Server 2012, Windows Server 2012 R2

SecurEnvoy

SecurEnvoy Server

SecurAccess software release v7.3.501

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1.0 Prerequisites

SecurEnvoy Security Server has been installed with the Radius service and has a suitable account that has read and write privileges to the Active Directory. If firewalls are between the SecurEnvoy Security server, Active Directory servers, and the ADFS server(s), additional open ports will be required.

Note

To avoid duplicating a passcode authentication the bit-length of the CSR private key SSL should be 2048.

The following table shows what token types are supported.

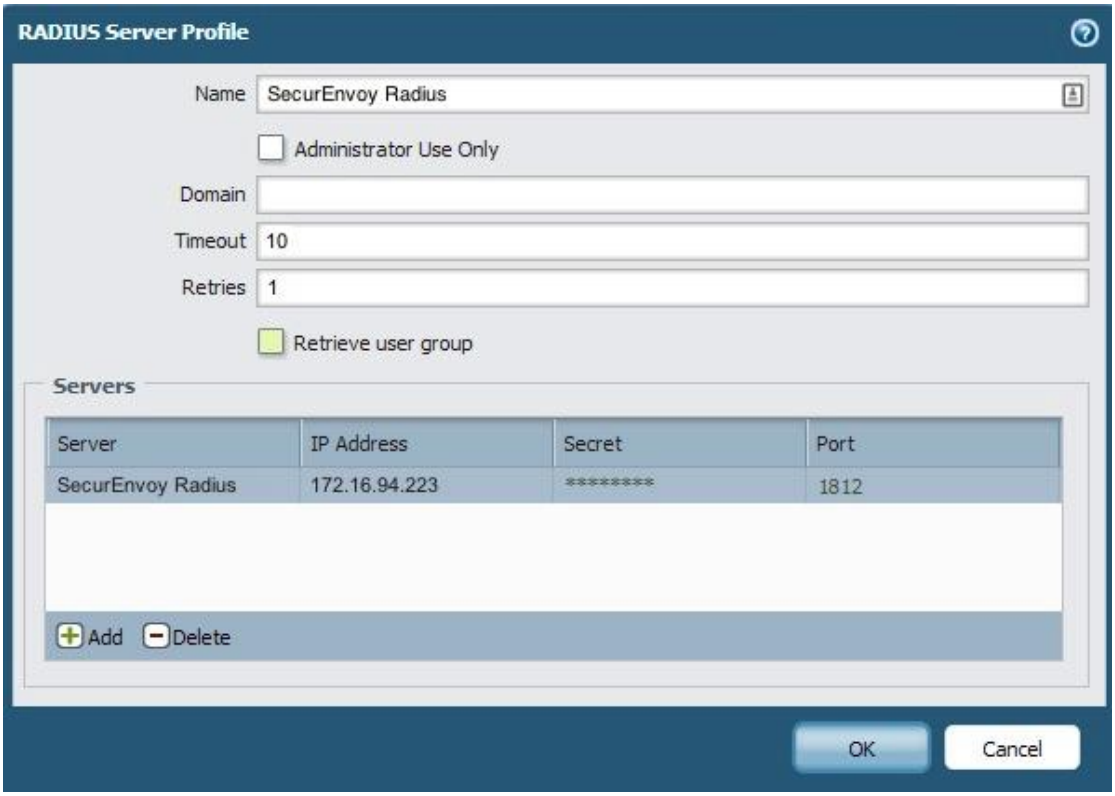
Token Types Supported	
Real Time SMS or Email	✓
Preload SMS or Email	✓
Soft Token Code	✓
Soft Token Next Code	✓
Voice Call	✓

Token Types Not Supported	
OneSwipe QRCode	X

1.1 Configure Palo Alto GlobalProtect Gateway

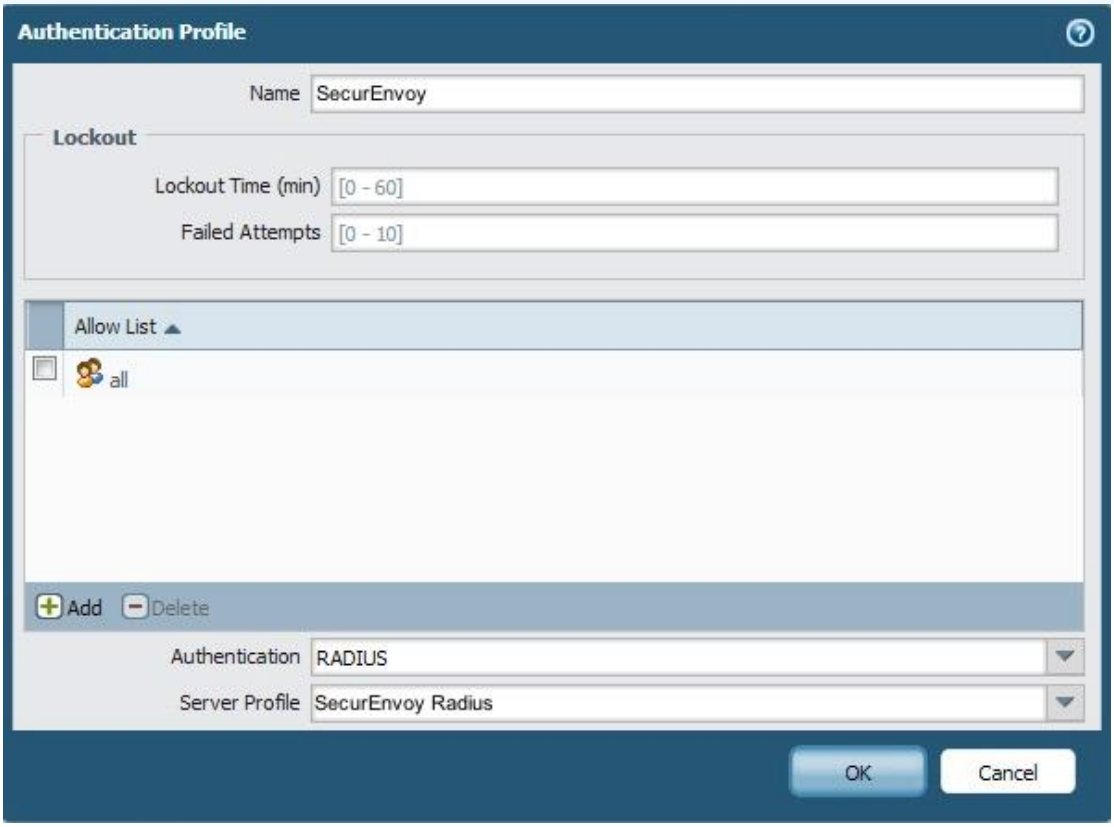
1) Log onto the Palo Alto Admin interface
2) Create a Radius Server Profile by navigating to **Server Profile > Radius > click Add**.
3) In the **Name** field, enter SecurEnvoy RADIUS, and in the **Timeout** field enter 10.
4) Add Server to the profile by clicking Add on the bottom of the profile.

   Name = SecurEnvoy RADIUS
   IP address = IP address of the SecurEnvoy Server
   Secret = Secret shared between Palo Alto and SecurEnvoy Radius
   Port = 1812 (UDP)



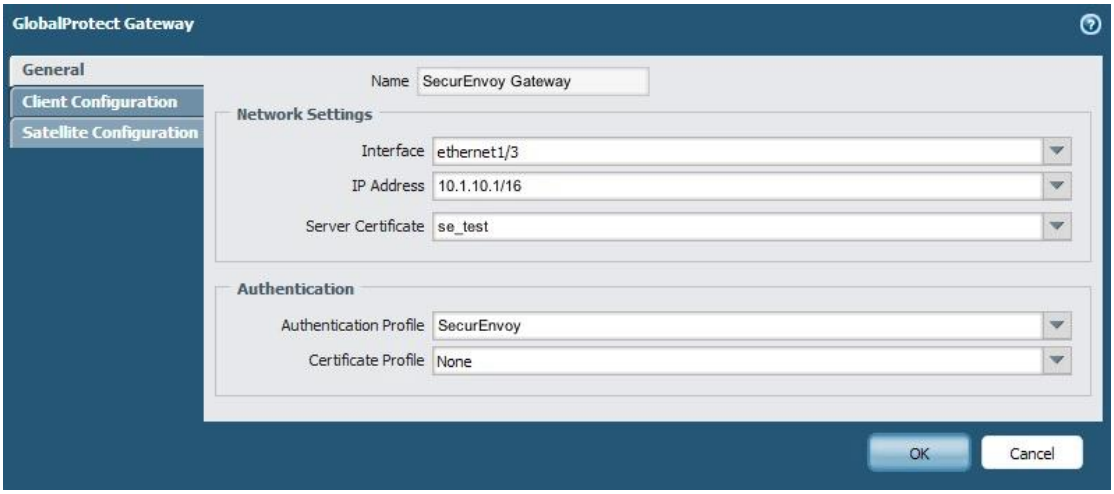
Click **OK** to save the RADIUS server profile.

5) On the **Device** tab, navigate to **Authentication Profile**.
6) Click **Add** to add a new profile.
7) Enter a name for the new Authentication Profile and configure the settings.
8) For **Name**, enter: SecurEnvoy
9) For **Authentication**, select **Radius** as the authentication method.
10) Under **Server Profile**, select SecurEnvoy Radius, and



Click **OK** to save.

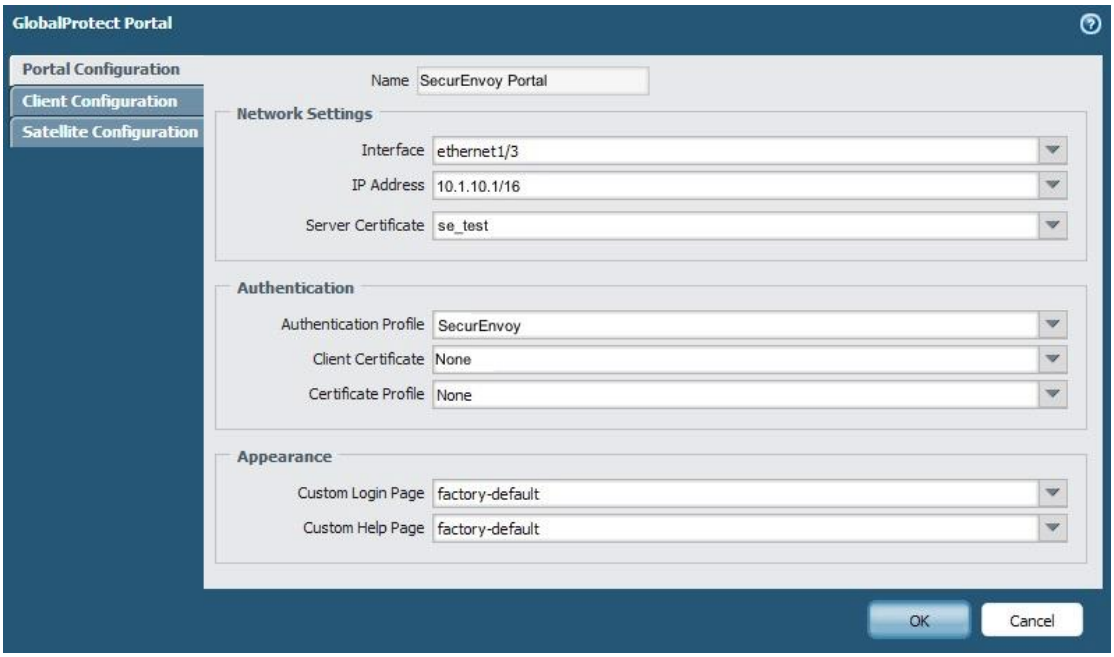
11) On the **Network** tab, navigate to **GlobalProtect** then **Gateways**.
12) Click on your configured **GlobalProtect Gateway** and see the properties window.
13) In the GlobalProtect Gateway **General** properties tab, under the **Authentication** section, select the **SecurEnvoy** authentication profile created earlier from the drop-down list.



Click **OK** to save.

14) On the **Network** tab, navigate to **GlobalProtect** then **Portal**.

15) Click on your configured **GlobalProtect Portal** to see the properties window.
16) In the **Authentication** section of the GlobalProtect **Portal Configuration** properties tab, select the **SecurEnvoy** Authentication Profile from the drop-down list.



Click **OK** to save.

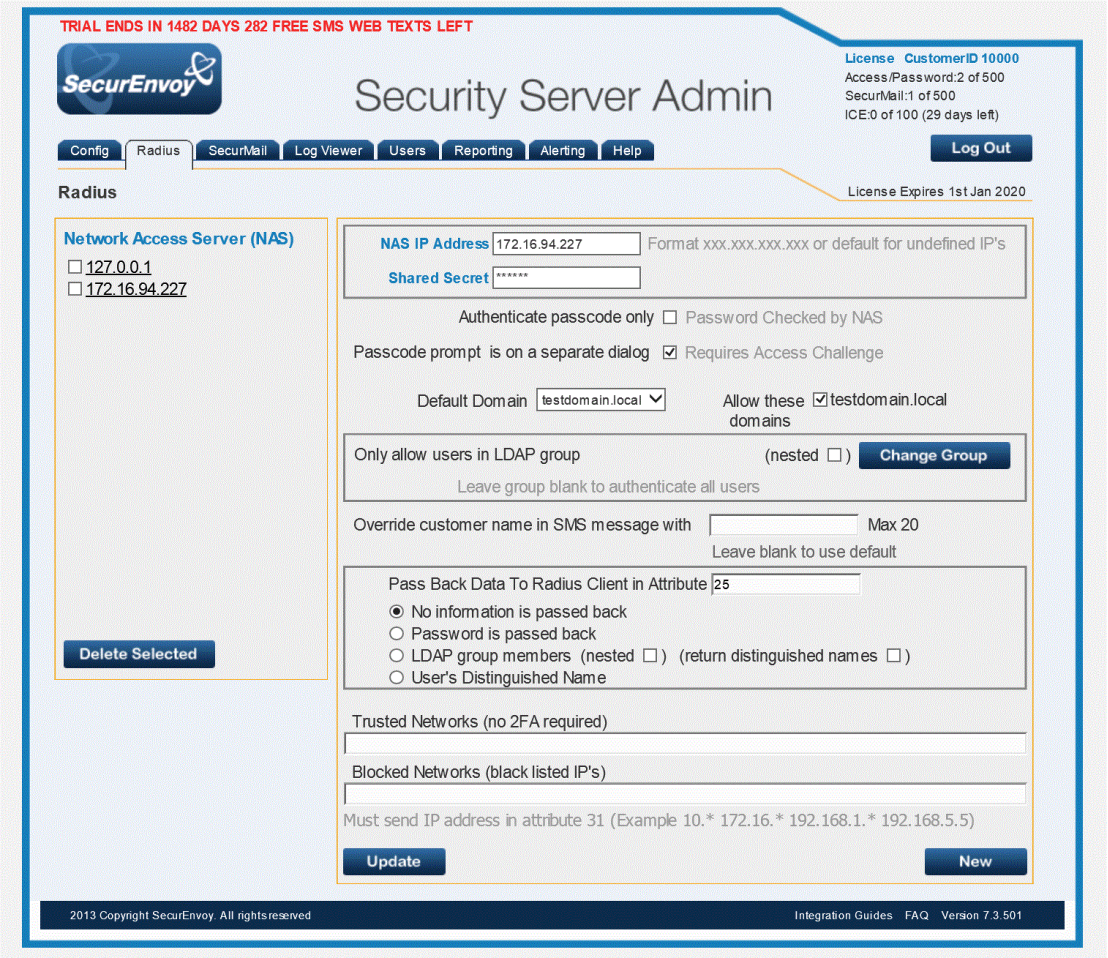
17) Save the **GlobalProtect** configuration. Click **Commit** in the upper-right corner of the Palo Alto administrative interface.

2.0 Configuration of SecurEnvoy

To help facilitate an easy to use environment, SecurEnvoy can be set up to use the existing Windows password as the PIN component. SecurEnvoy supplies the second factor of authentication, which is the dynamic one time passcode (OTP), which is sent to the user's SecurEnvoy mobile soft token application

Launch the SecurEnvoy admin interface, by executing the Local Security Server Administration link on the SecurEnvoy Security Server.

Click the **"Radius"** tab



Enter IP address and Shared secret for the Palo Alto device that wish to use SecurEnvoy Two-Factor authentication.

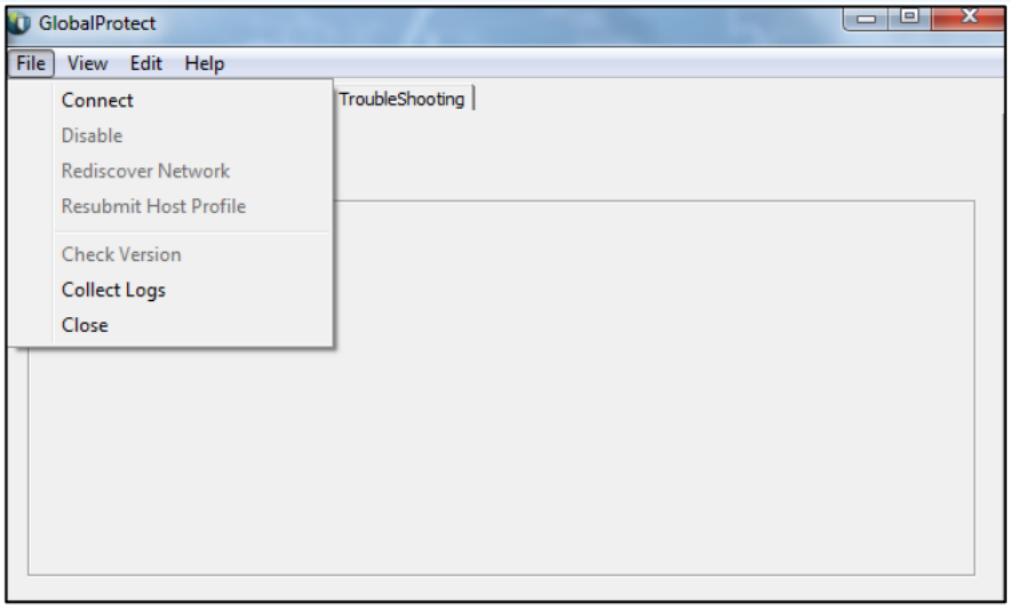
Click to **Check** the box "Passcode prompt is on a separate dialog".

Click **"Update"** to confirm settings.

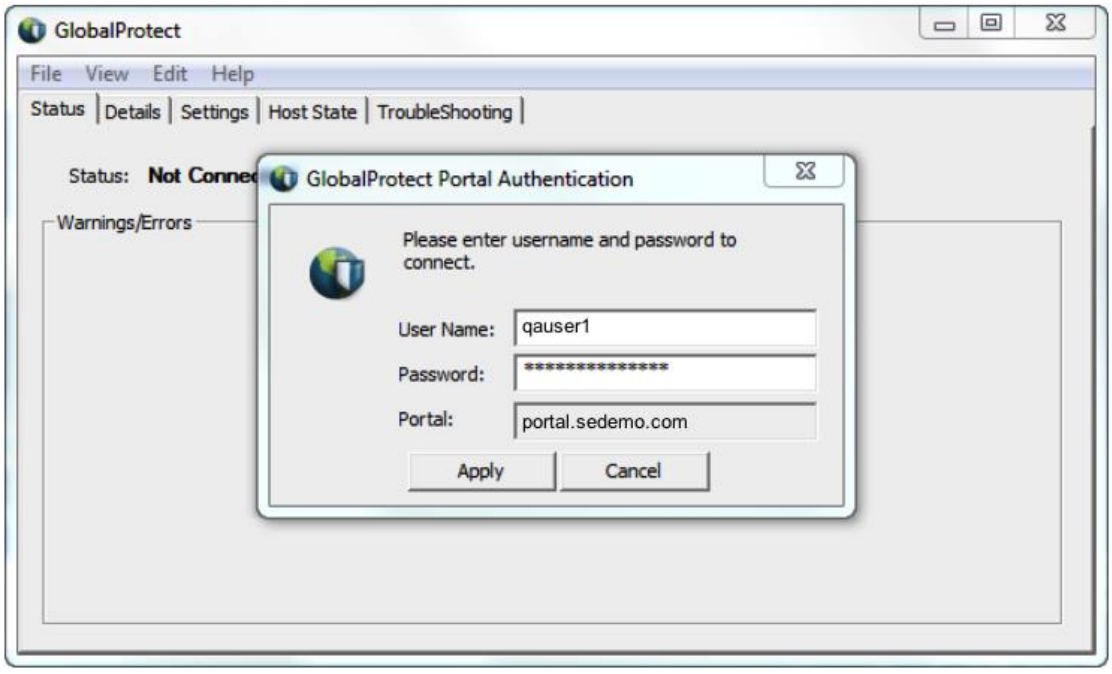
Click **"Logout"** when finished. This will log out of the Administrative session.

3.0 Test Two-Factor Authentication

1) A user opens the GlobalProtect client, and then clicks **File**, then **Connect**.



2) The user enters their **LDAP Username / Password** for the GlobalProtect **Portal** Authentication



3) The user is then prompted to enter their Passcode (OTP) from their SecurEnvoy soft token.

(Passcode delivered via Soft Token in this example)

4) Finally, the user is successfully connected.

4.0 Notes