Establishing two-factor authentication with Juniper SSL VPN and HOTPin authentication server from Celestix Networks

Contact Information

www.celestix.com info@celestix.com

Celestix Networks USA	3125 Skyway Court, Fremont, California, 94539, USA	+1 510 668 0700
Celestix Networks EMEA	30 Queens Road, Reading, RG1 4AU, United Kingdom	+44 (0)118 959 6198
Celestix Networks APAC	1 Changi North Street 1, #02-02, Singapore 498789	+65 6781 0700

Integration completed by

Kimberley Wong Kwan Lun klun@celestix.com

This document outlines the steps required to integrate the Juniper SA700 SSL VPN Appliance with Celestix HOTPin two-factor authentication. The following steps are detailed within this guide:

- Adding users
- Enabling user self provisioning
- Configuring RADIUS integration in Juniper
- Adding Juniper as a RADIUS client in Celestix HOTPin
- Testing the login process

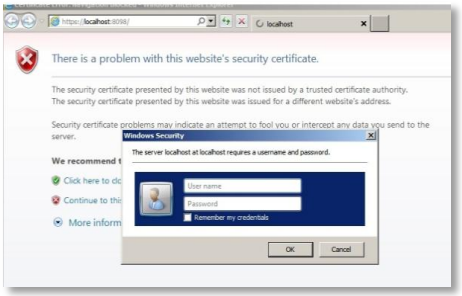
Steps to Configure Standalone Celestix HOTPin v3.5

Prerequisites

This document assumes you have followed the steps in the HOTPin Quick Start Guide, and either installed HOTPin Server v3.5, or configured your HSA Appliance ready for use. If you haven't already done so, please refer to the Quick Start Guide to complete this before proceeding.
The Quick Start Guide can be found here: http://www.celestix.com/hotpin-tl.html

Step 1: Launch HOTPin Administration

Launch the HOTPin Management GUI using the shortcut icon on the desktop. This will load the default web browser. HOTPin ships with a default certificate to provide HTTPS security. The browser will display a certificate security warning, this is normal, choose **"Continue to this website."**



Microsoft Windows User Access Control will prompt for a username and password. Enter the administrator credentials.

NOTE - depending on the web browser and the default settings, the message might be slightly different.

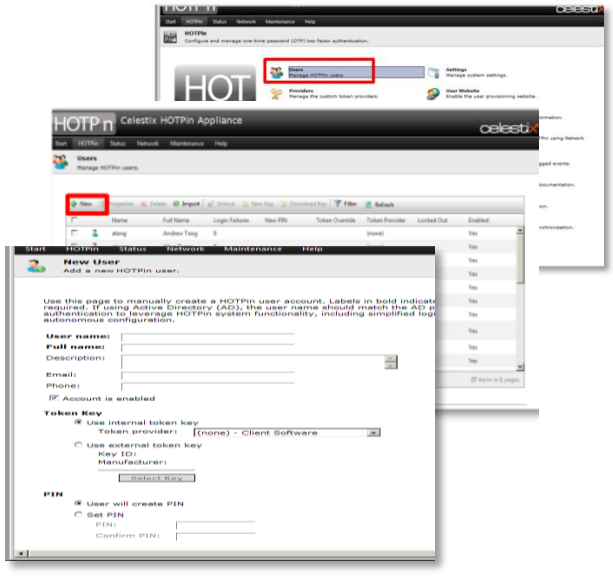
Step 2: Adding users

To add users go to **HOTPin > Users**.

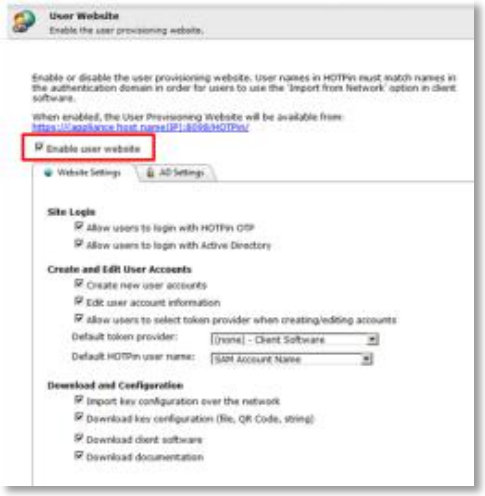
Click on **'New.'** Complete the user settings for an end user.

Token Key: (none) – Client Software (default)
PIN: User will create PIN

For production and full installation we recommend you make use of the Active Directory import feature within HOTPin, and then enable Active Directory Synchronization. This can be achieved easily and simply through the main Management GUI.



Step 3: Configure the user provisioning website



From the main Management GUI, go to **User Website** and tick the **Enable user website** box.

This will allow your users to provision a variety of tokens by accessing a user provisioning portal, but it is important to configure this in advance of giving access.

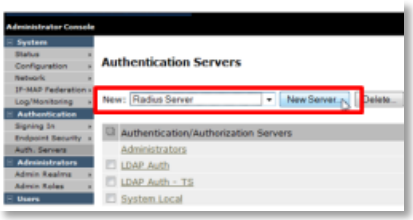
Once enabled, default access to the site is:
https://(appliancehostname|IP):8098/hotpin/

This site is not enabled by default; it must be turned on by Administrators.

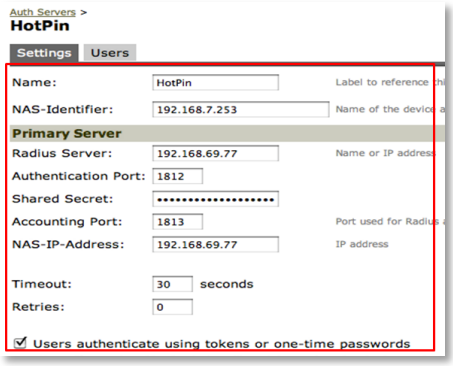
At this point, the basic configuration for Celestix HOTPin is complete, and we'll return to the User Provisioning Website later.

Configure RADIUS integration in Juniper

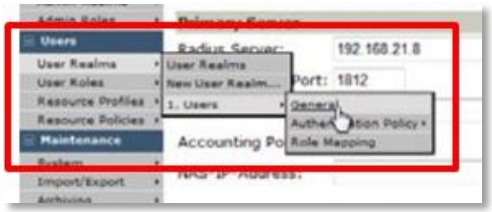
Step 4: Add Authentication Server

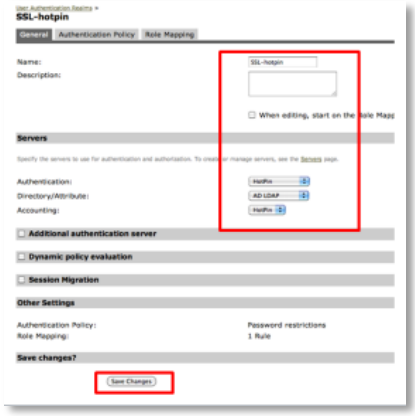


- Log into the Juniper SSL VPN web portal.
- Select **Auth Servers** in the **Authentication** menu of the **Administrator Console**.
- From the dropdown box select **Radius Server** then click on **New Server.**
- Under **Auth. Servers > Settings,** complete the fields:
  - **Name:** Enter a name for the HOTPin server.
  - **NAS-Identifier:** Name of the device as known to Radius server.
  - **Radius Server:** The IP address of the HOTPin server.
  - **Authentication Port:** Set to 1812.
  - **Shared Secret:** Enter the shared secret of the HOTPin server.
  - **Accounting Port:** Set to 1813.
  - **NAS-IP-Address:** Enter the IP address of the HOTPin server.
  - Tick the box **Users authenticate using tokens or one-time passwords.**



Step 5: Configure User Authentication Realms

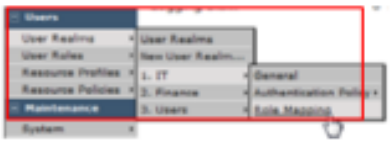


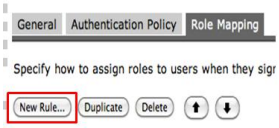


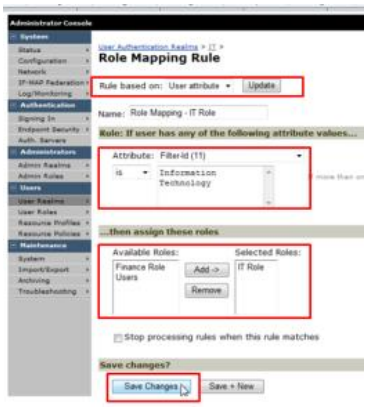
Under **Users** go to **User Realms > Users > General.**

- Complete the fields:
    - **Name:** Choose a name of the Authentication Realm.
    - **Under Servers > Authentication >** Choose the radius server created in step 4.
    - **Directory/Attribute:** Choose you're Active Directory server.
    - **Accounting Port:** Choose the radius server you created in step 4.
    - Click **Save Changes.**

Step 6: Configure Role Mapping

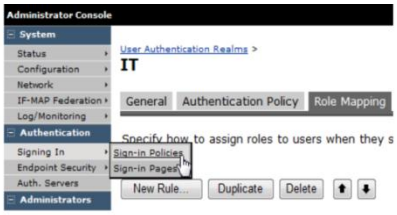






- Under **Users** section **> User Realms >** Highlight the User Realm where the Filter-ID attribute will be added > Click on **Roll Mapping.**
- Under the **Role Mapping tab**, select on the **New Rule** button.
- Complete the following fields on the Role Mapping Rule webpage:
    - **Rules based on:** User attribute. Click **Update.**
    - Under the **Attribute** section, select **Filter-ID (11)** from the dropdown box.
    - In the textbox below, choose a name for the Filter-Id (e.g. Information Technology).
    - Under the **…then assign these roles** choose the role to assign the user to.
    - Click **Save changes.**

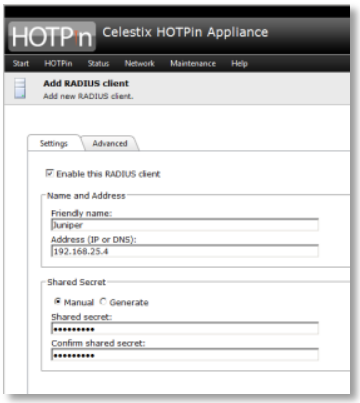
Step 6: Configure Role Mapping cont.



Under **Authentication > Signing In > Sign-In Policies,** ensure that the default User URL is set to use the User Realm that has the Filter-Id added as a Role Mapping.

Check that the Authentication Realm section has the correct User Realm displayed. This means that the User Realms created within the Juniper SSL VPN can authenticate to this User URL.

Step 7: Enabling RADIUS client on Celestix HOTPin



Go to **HOTPin > NPS Radius > RADIUS clients > New.**
Tick **Enable this RADIUS client.**
Enter name and IP address of the Juniper box.
Apply shared secret.

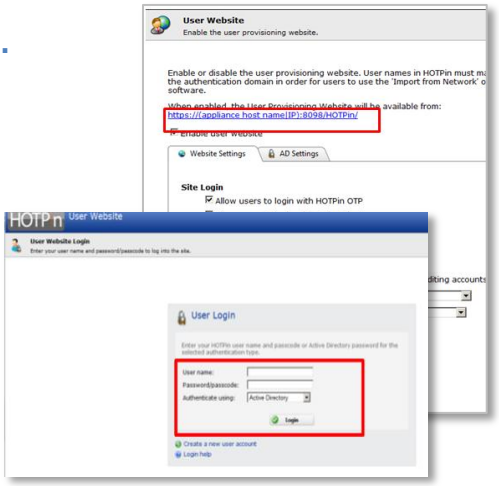
This completes the integration process.
Next we'll test the login process.

Testing the login process

Celestix HOTPin supports the following platforms for generating a one-time password. Generate a one-time password using any of the client software below.

- Microsoft Windows
- MacOS
- iOS devices (iPhones and iPads)
- Android devices
- Windows phone devices
- Blackberry devices.

Step 8: Log on to end user provisioning website.

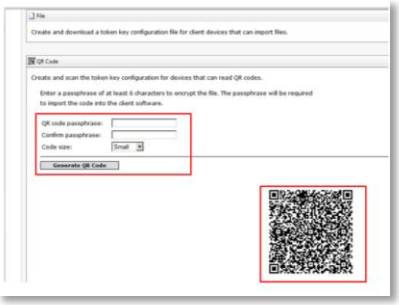


Go to User Website and click on the link for example this URL https://(appliancehostname|IP):8098/hotpin/

After you have downloaded the HOTPin app to your Smart Device, log on to the end user provisioning site with your Active Directory credentials.

Step 9: Create Token Key

Go to **Token Key > QR Code.**
Enter QR code passphrase:
Create a passphrase of at least 6 characters.
Confirm passphrase.
Code size: Select the image size.
Generate QR Code: Click to create the image.



Open the HOTPin app on your smart device.
Choose **Import from QR Code.**
Scan the QR Code.
Enter the **passphrase.**
Click on **Import** (IPhone) or **OK** with Android).

You are now able to generate a one time password and this completes the one time device provisioning process.
Log on back to the user provisioning website and choose HOTPin to authenticate.

Further Help

For further help, go to http://www.celestix.com