Campus C-02 AGNI Lab Guide
UPSK Wireless Policy

This Lab Guide:
https://github.com/arista-rockies/Workshops/tree/main/Campus

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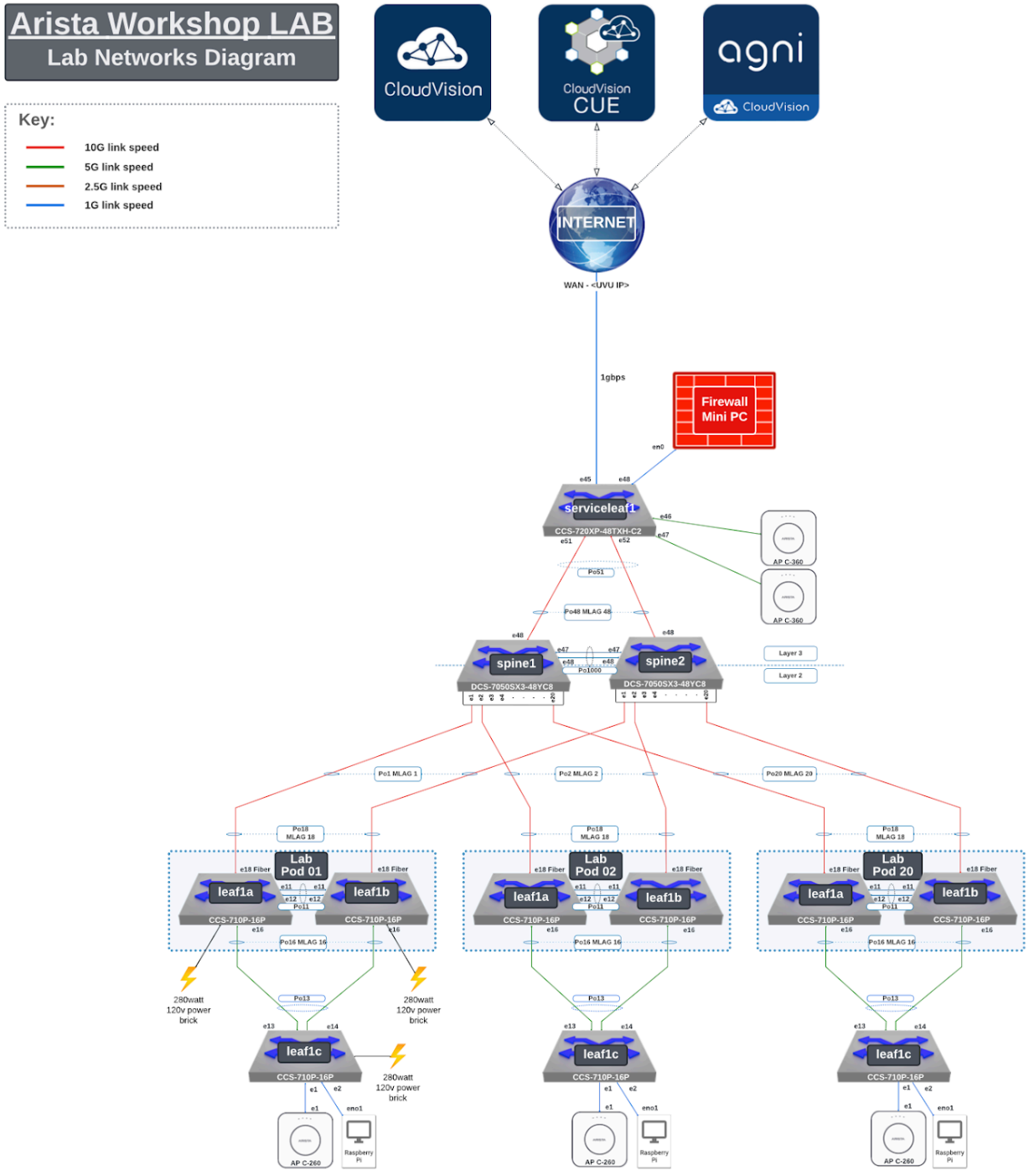
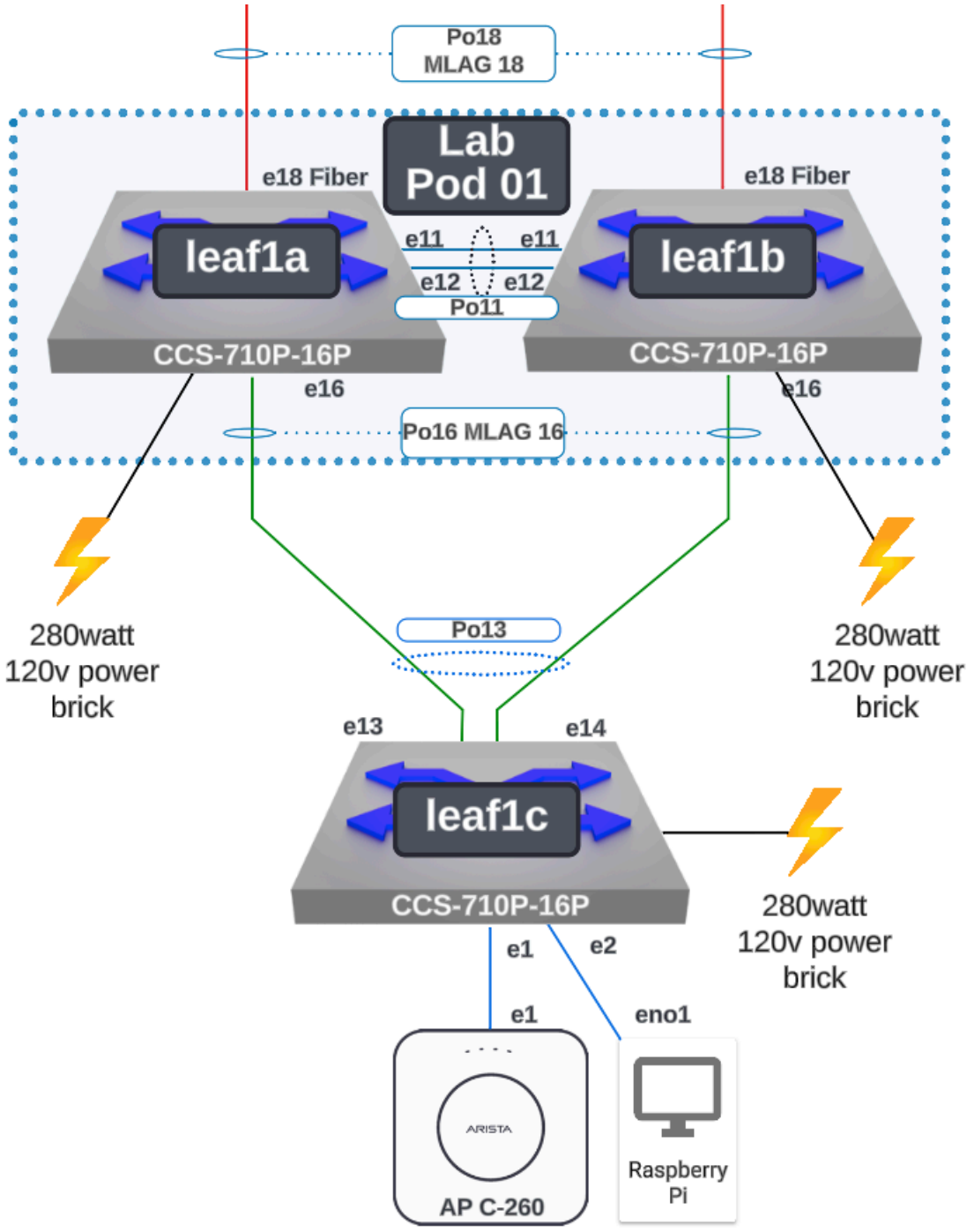
Full Lab Topology



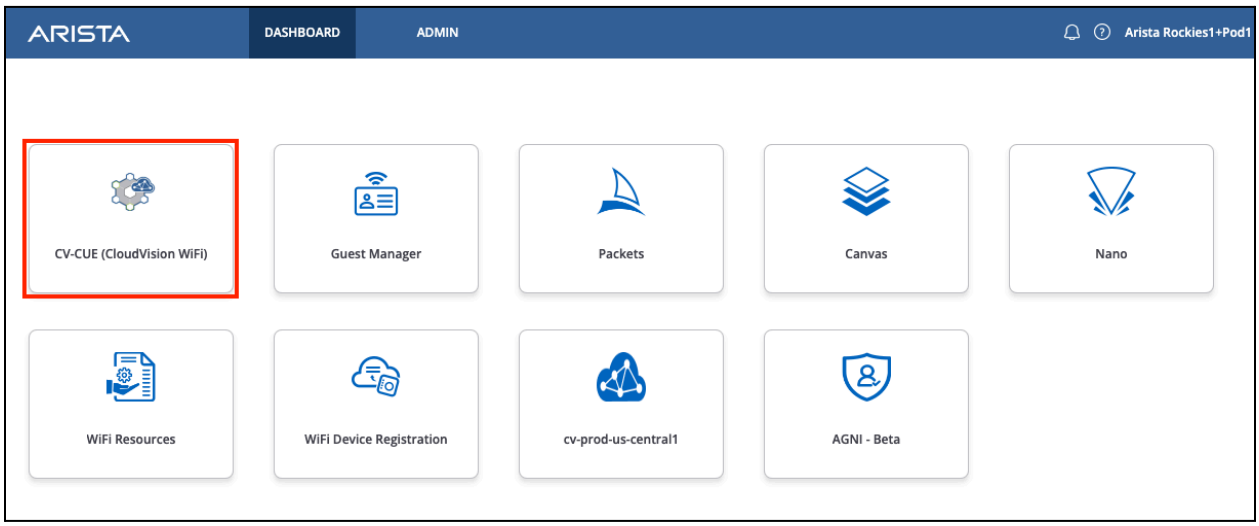
POD Topology



NAC Lab #2 - Create UPSK Wireless Policy

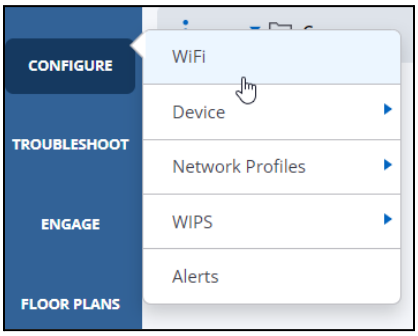
1. Create Identity UPSK SSID:

Return to the LaunchPad tab and Log into CV-CUE https://launchpad.wifi.arista.com/, or access the CV-CUE tab in your browser.

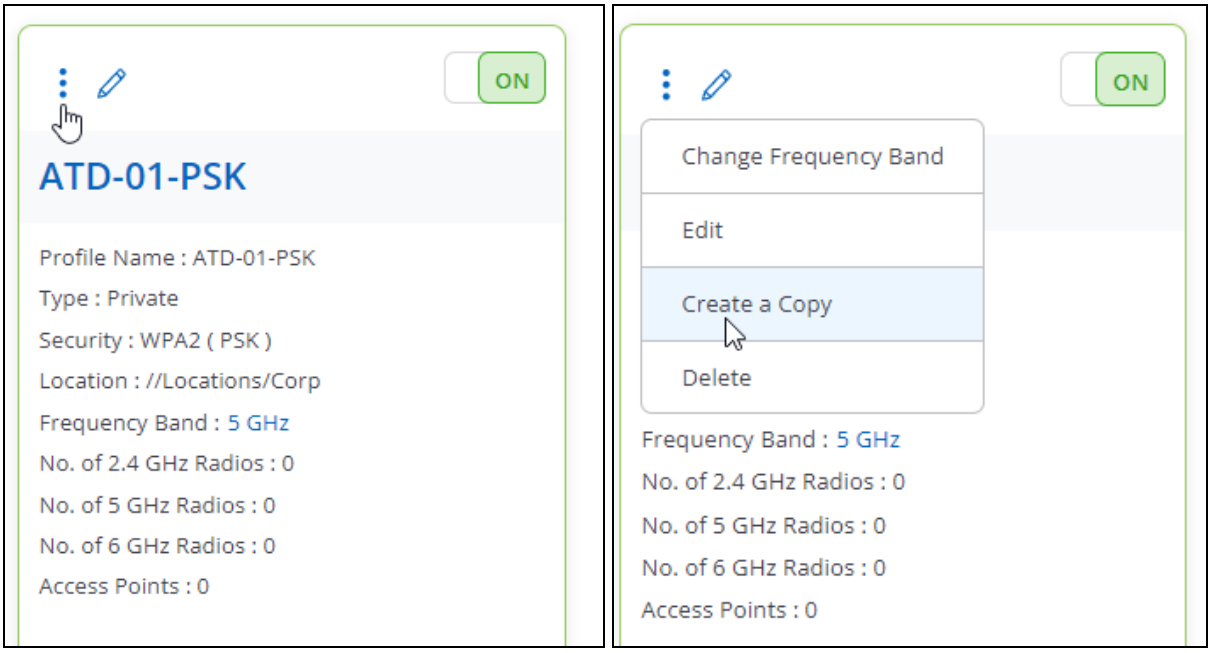


Next, we will modify the PSK SSID we created in the CV-CUE lab.

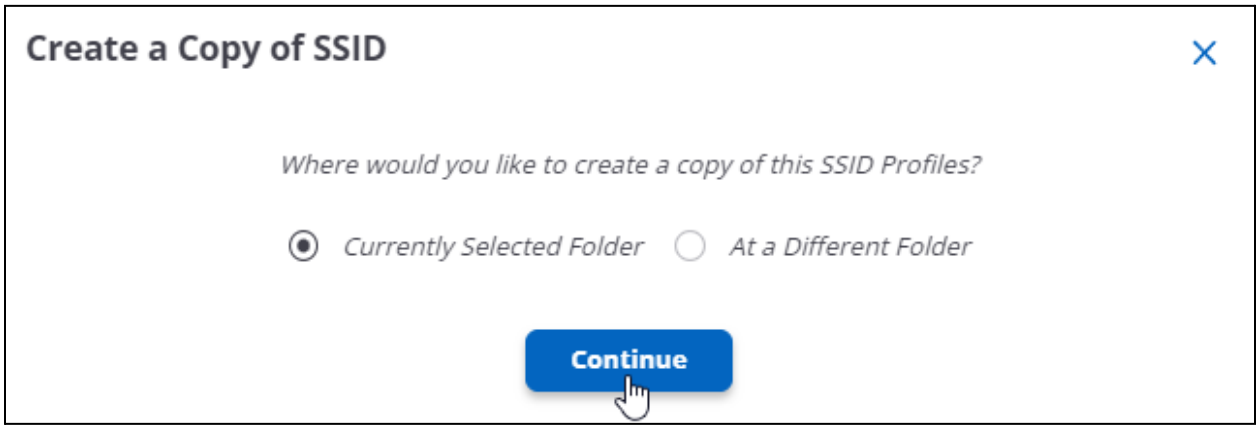
While on the **Corp** folder, Click on **Configure** and then **WiFi**



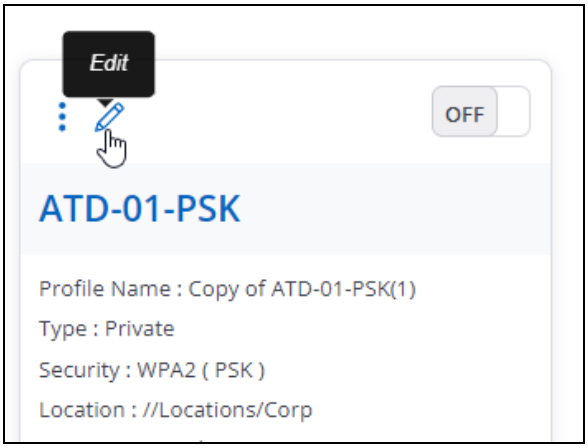
Next, click on the 3 Dots and select **Create a Copy** on the SSID **ATD-##-PSK** where **##** is a 2 digit character between 01-20 that was assigned to your lab/Pod



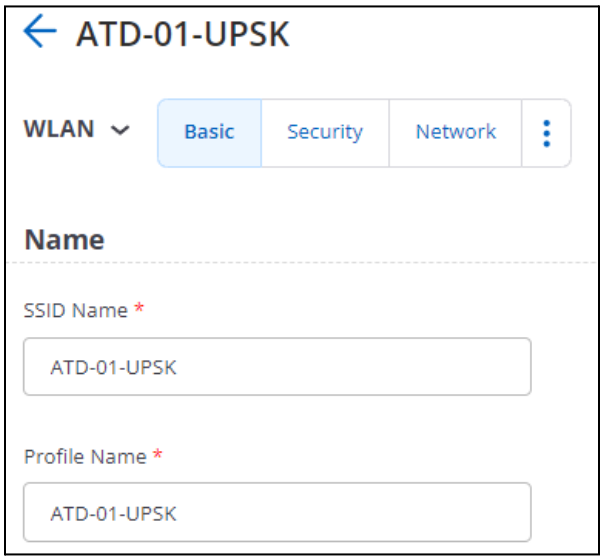
Select - Currently Selected Folders and then **Continue.**



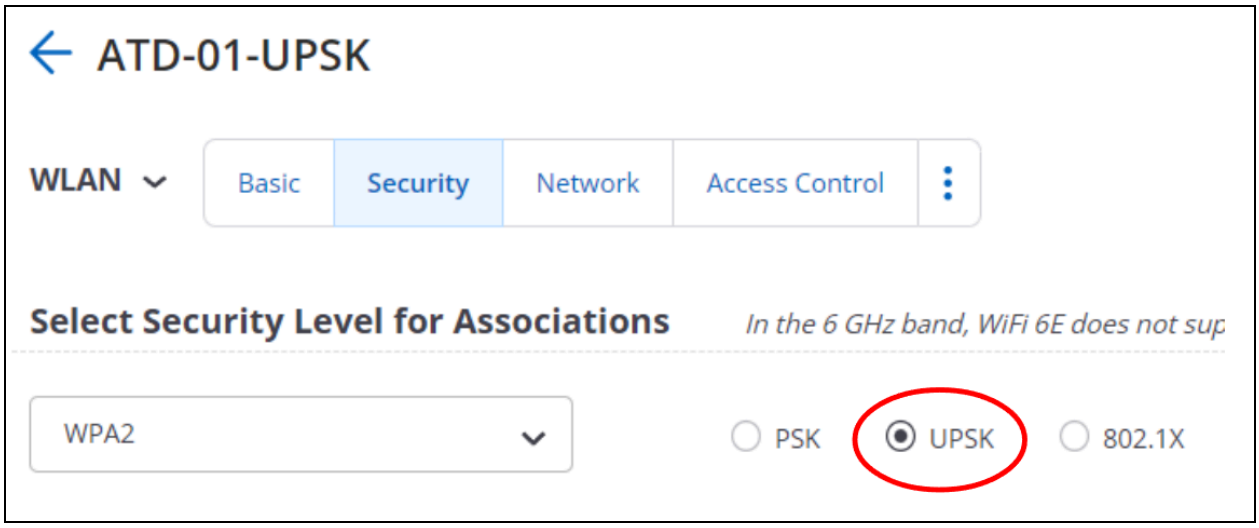
Click on the new SSID and select **Edit**.



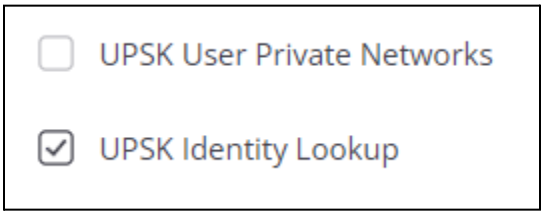
On the Basic Tab rename the SSID to **ATD-##-UPSK,** and copy the SSID Name and paste it in the Profile Name field.



Next, click on the Security Tab and change the WPA2 Security from PSK to **UPSK**

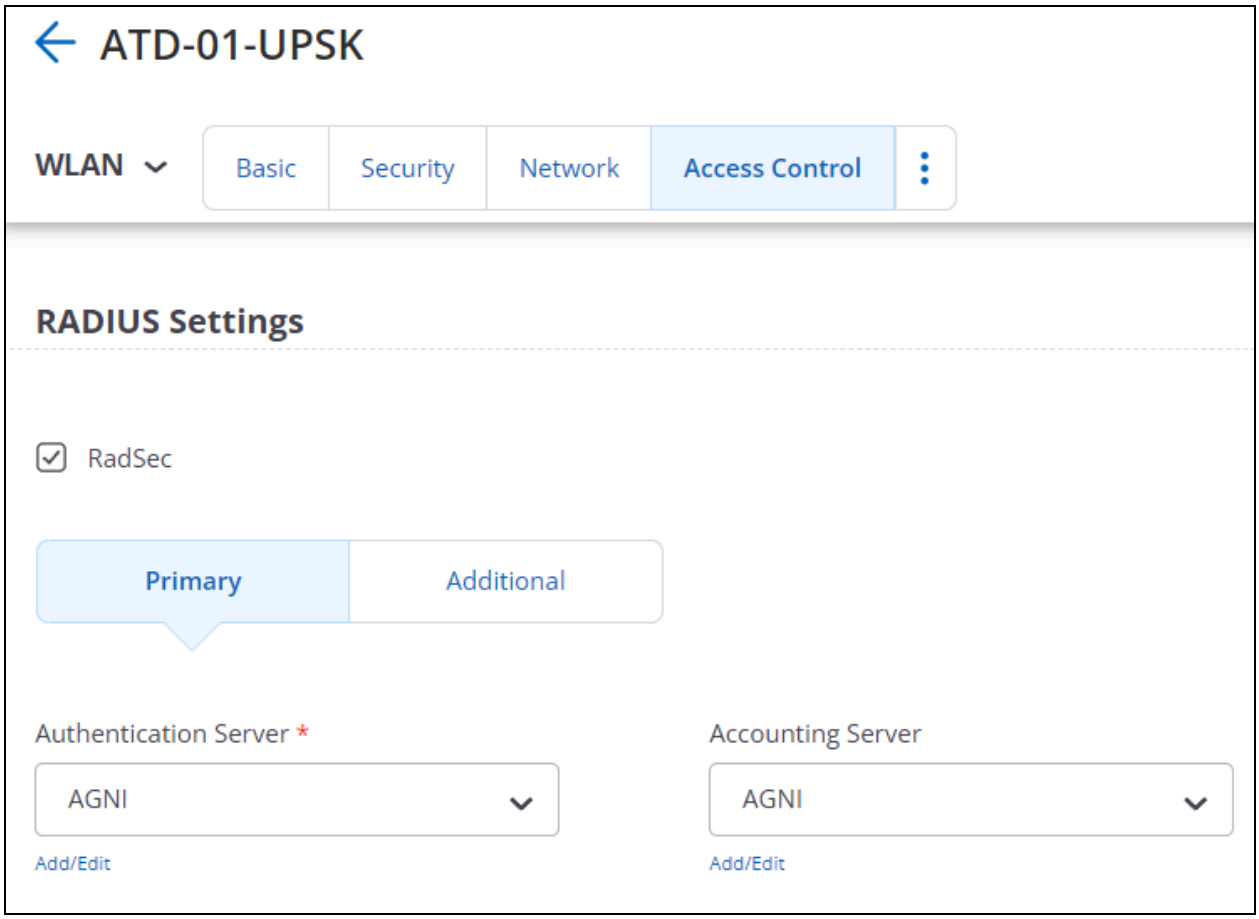


Next, select **UPSK Identity Lookup**

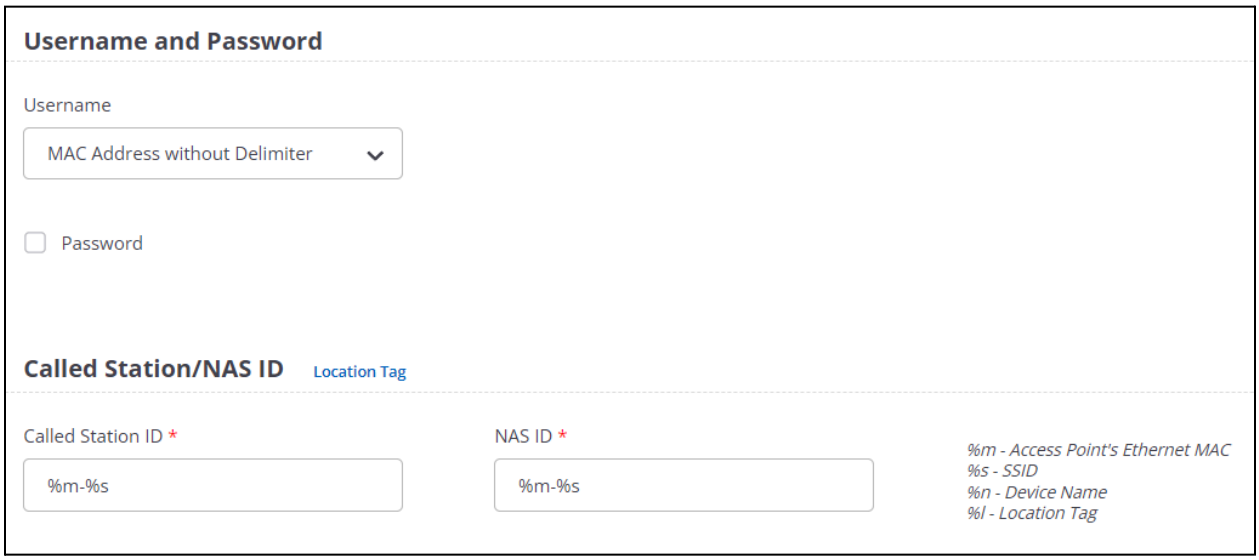


For more information on UPSK click here:
https://arista.my.site.com/AristaCommunity/s/article/Unique-PSKs

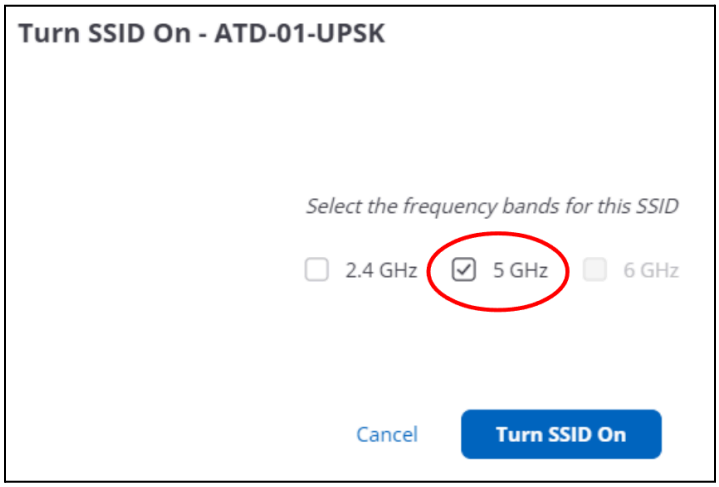
Next, Click on the **Access Control** tab. Under **RADIUS Settings**, select **RadSec** and then **AGNI** for the Authentication and Accounting Servers.



Confirm the Username and Password, Called Station, COA information.

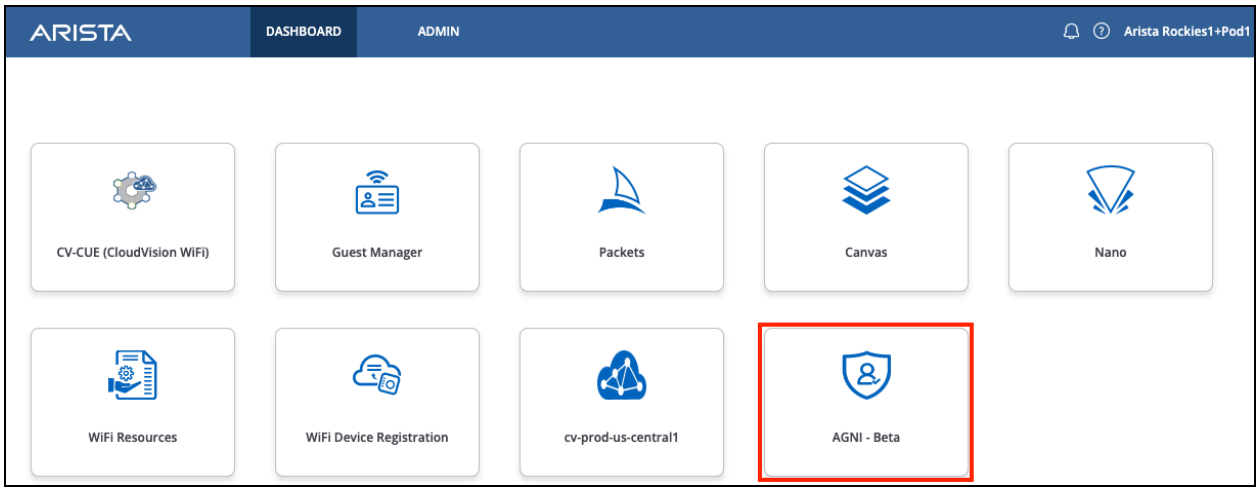


Finally, **Save** and turn on the SSID.

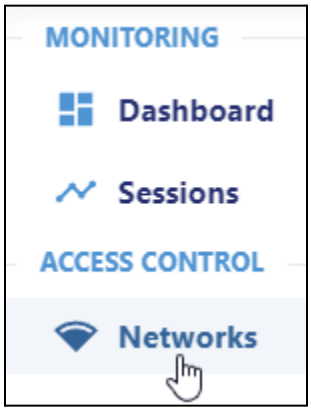


2. Create UPSK Network and Segment:

Return to the LaunchPad tab, and select the AGNI tile, or go to your AGNI tab in your browser.



Click on **Networks** and then **+ Add Network**.



Add the following:

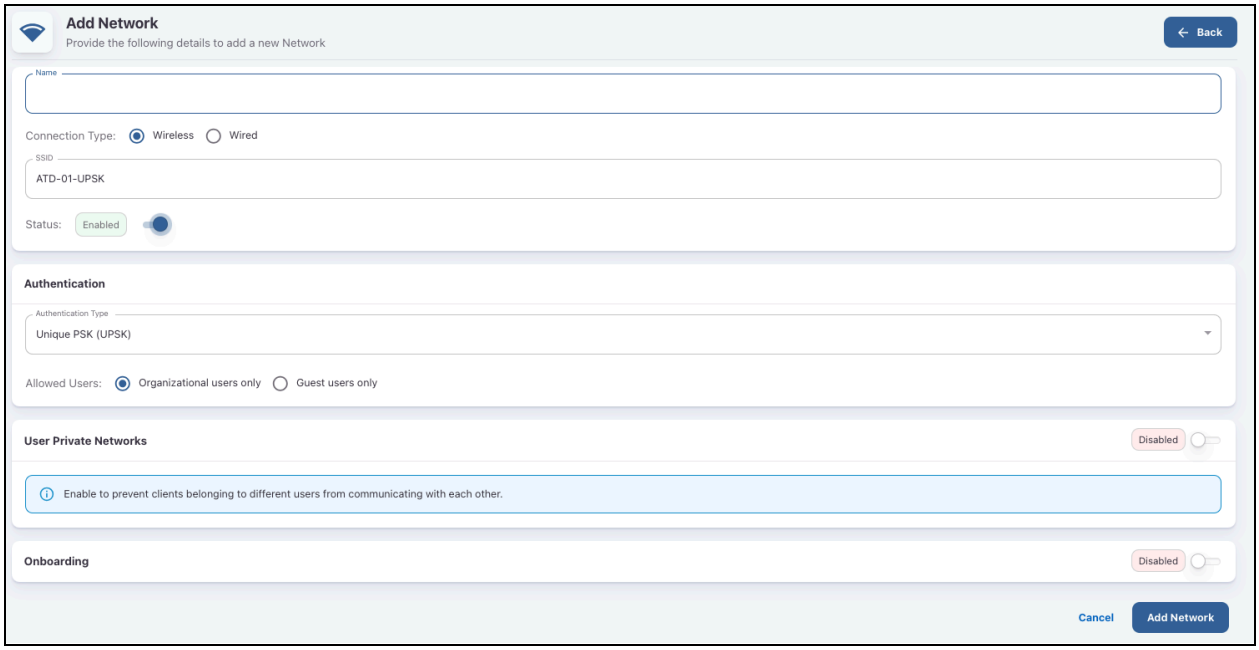
Name: **Wireless-UPSK**

Connection Type: **Wireless**

SSID: **ATD-##-UPSK**

Authentication Type: **Unique PSK (UPSK)**

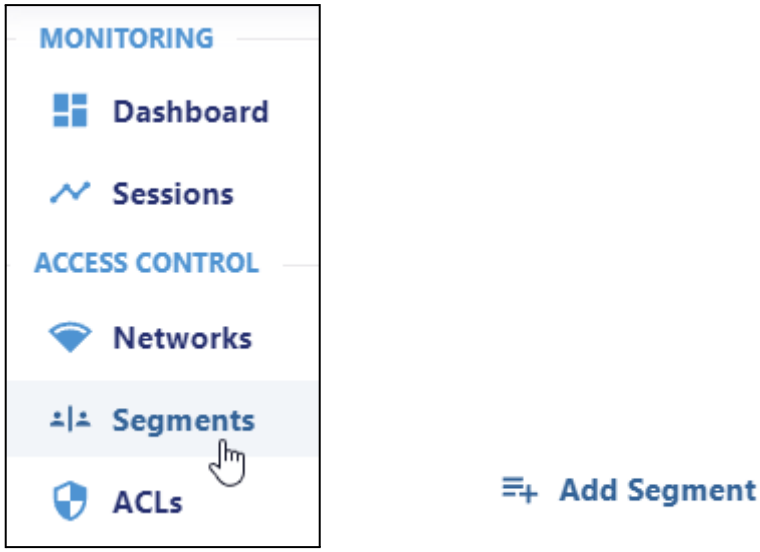
Add Network



You should now see this listed in your networks.

Next, we will add the Segment.

Under Access Control, click on **Segments** and then **+ Add Segment**

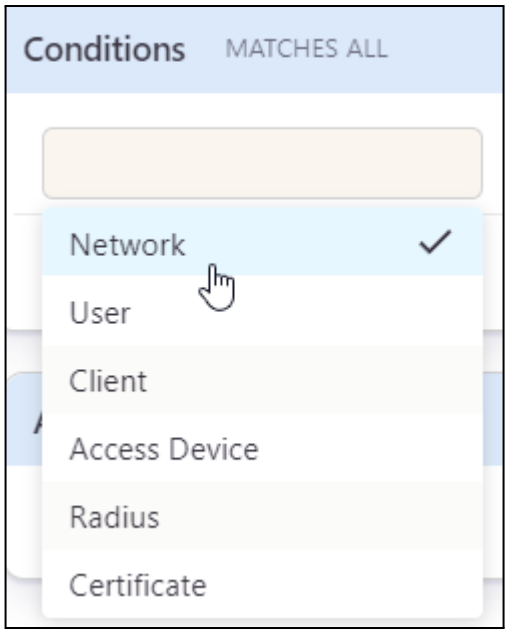


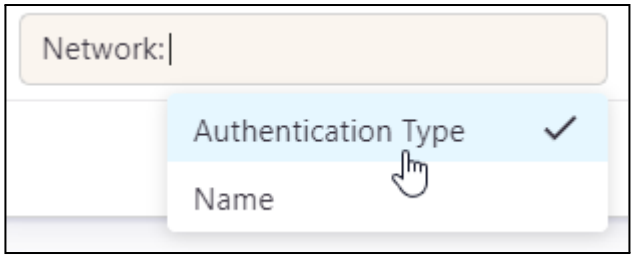
Name: **Wireless-UPSK**

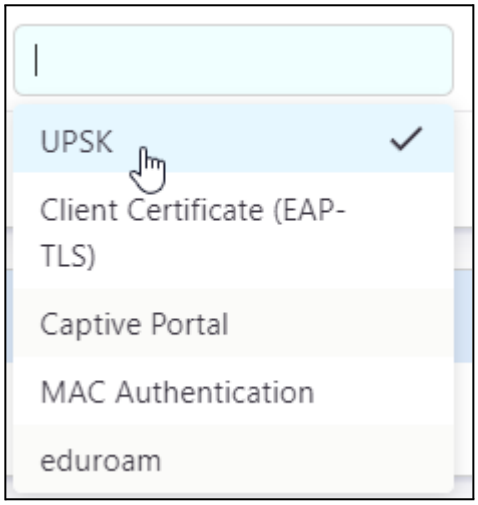
Description: **Wireless-UPSK**

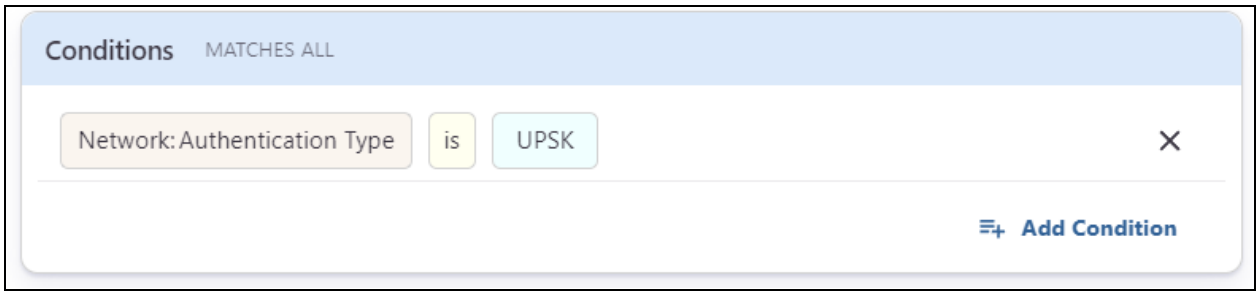
Click on **+ Add Condition**

Conditions: **Network:Authentication Type is UPSK**
***Note:** Conditions are always Matches ALL.



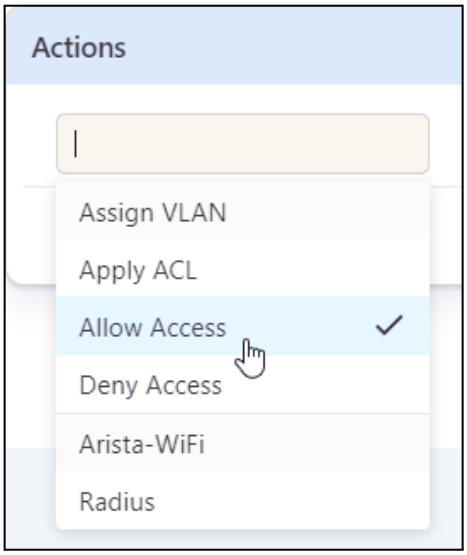


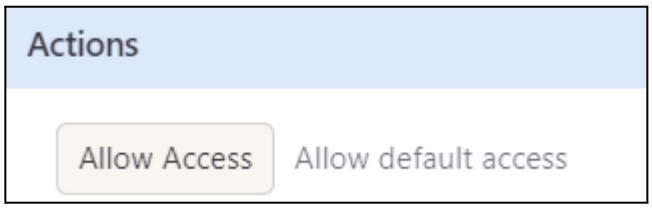


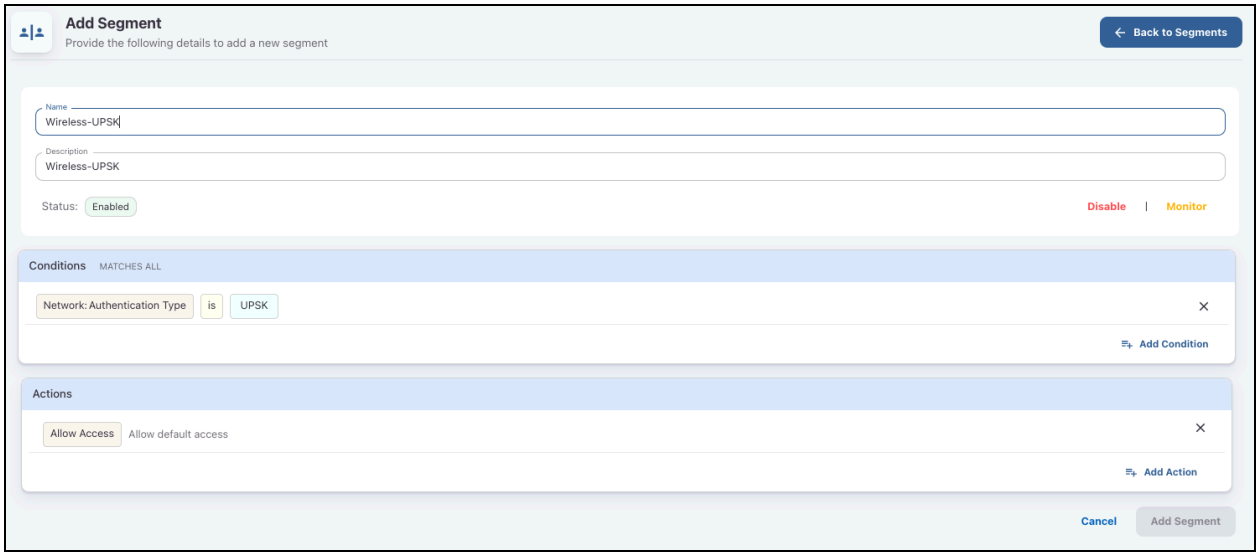


Click on **+ Add Action**

Actions: **Allow Access**

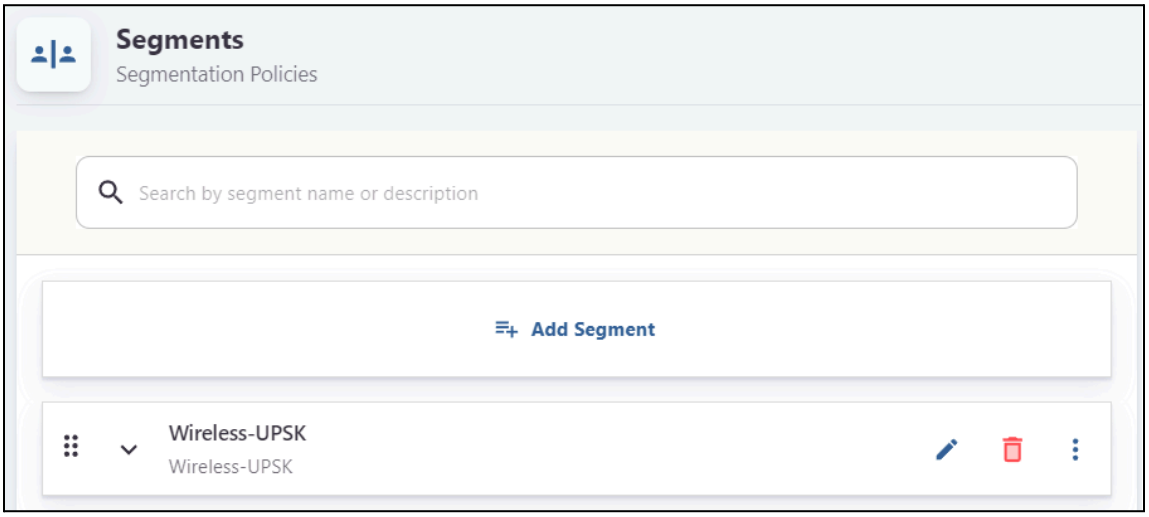






Finally, click on **Add Segment**.

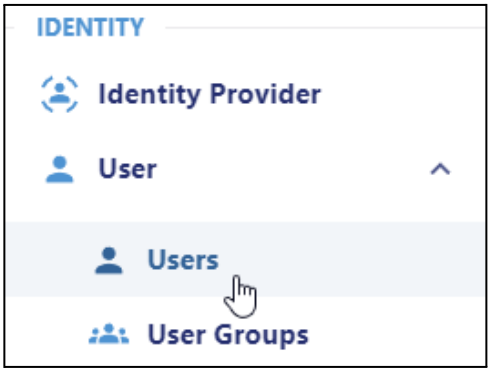
You should now see **Wireless-UPSK** in the list of segments.



3. Create an AGNI Local User and Enroll Personal Device

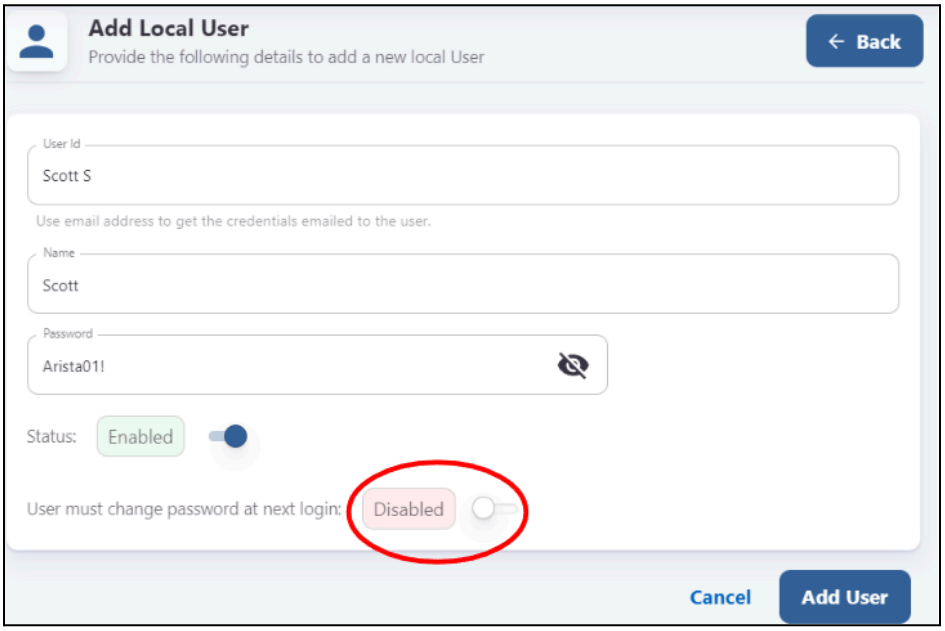
In this section you will create a local user and enroll the MAC of your device.

In AGNI, under Identity, click on **User** and then **+ Add User**.



Fill out the sections. Use **Arista01!** for the password.

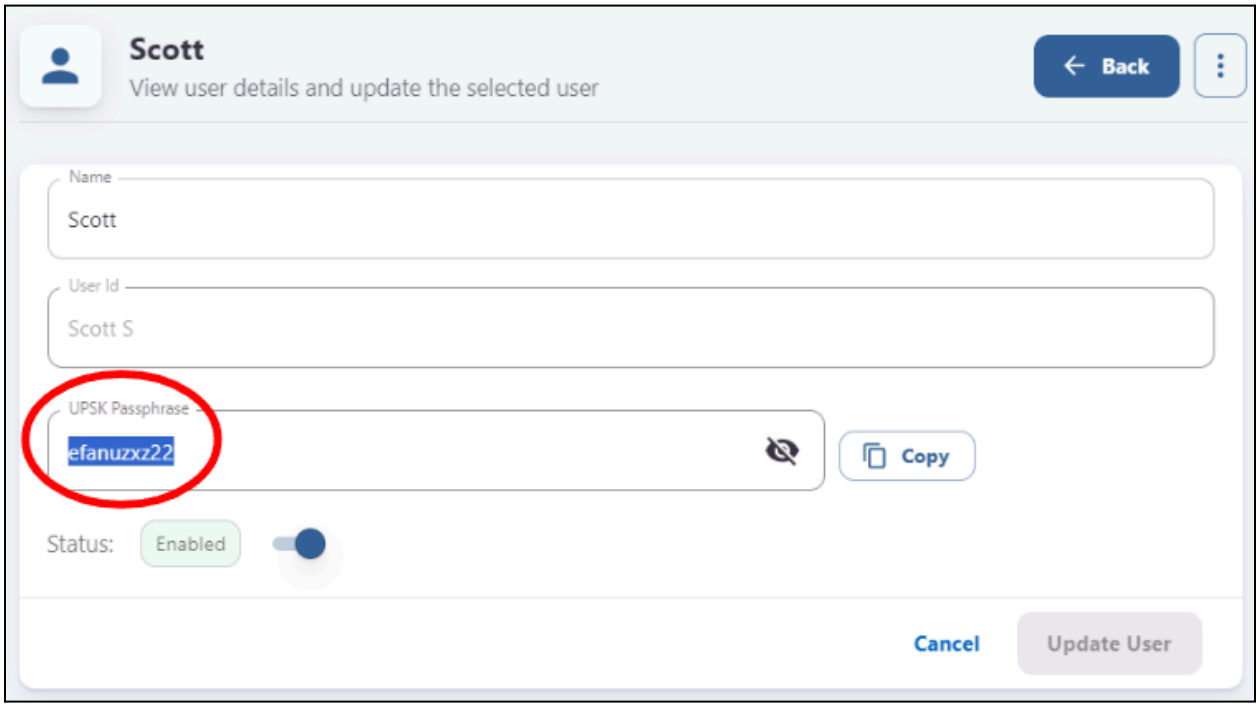
Disable - User must change password at next login:



Click **Add User**

You will notice that Password has now changed to UPSK Passphrase

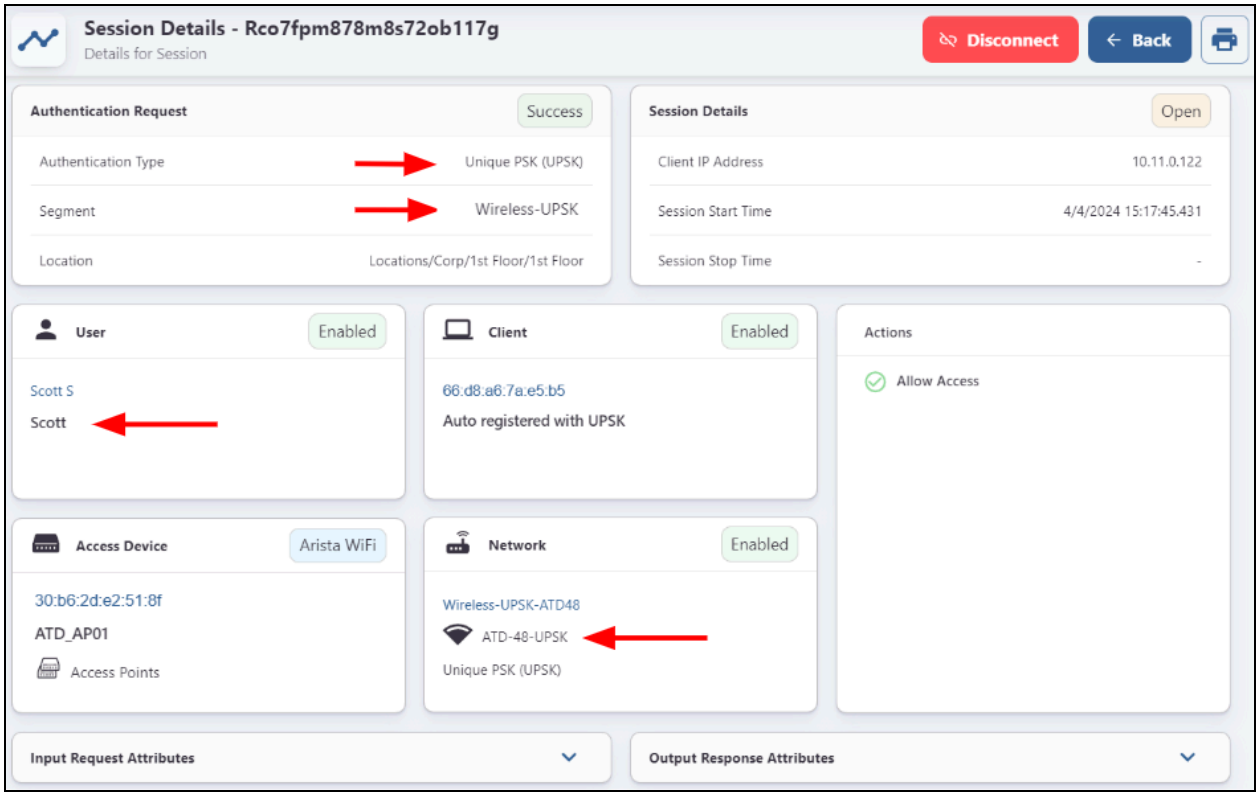
Copy and write down or save to text file the new UPSK Passphrase.



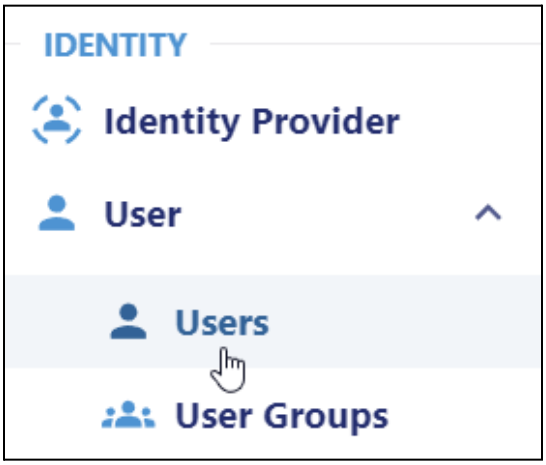
Next, connect your client to **ATD-##-UPSK** using your UPSK Passphrase.

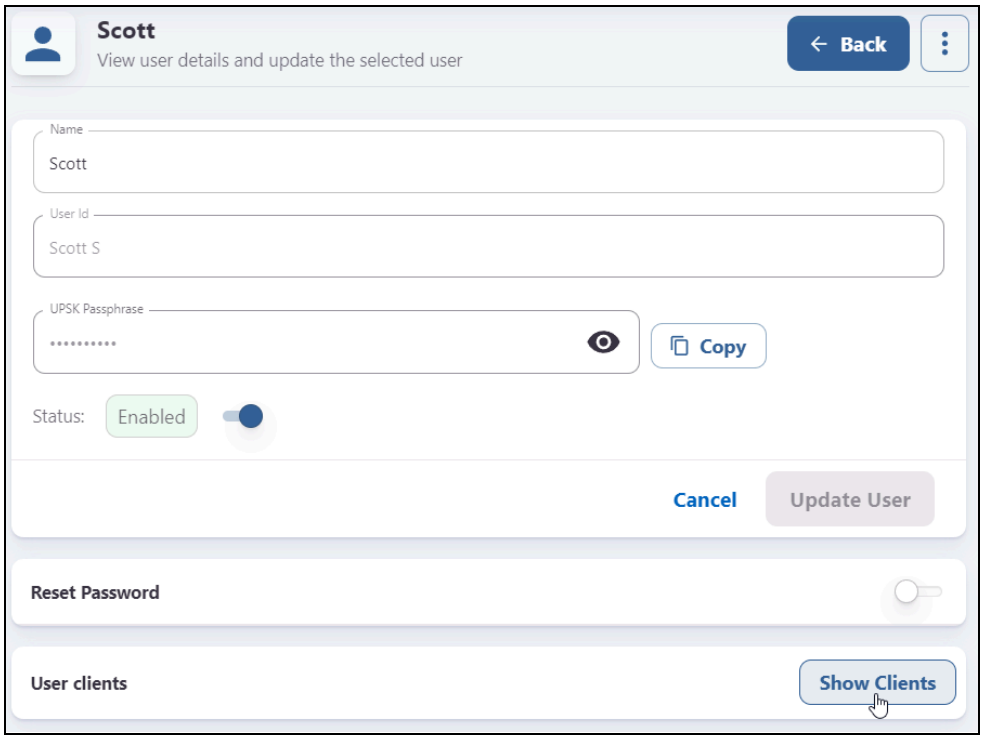
Click on Sessions and validate your device connection.

#	IDENTITY	TYPE	MAC ADDRESS	IP ADDRESS	STATUS	TIMESTAMP
1	**Scott S**	Unique PSK (UPSK)	66:d8:a6:7a:e5:b5	10.11.0.122	Success	4/4/2024 15:17:45.431

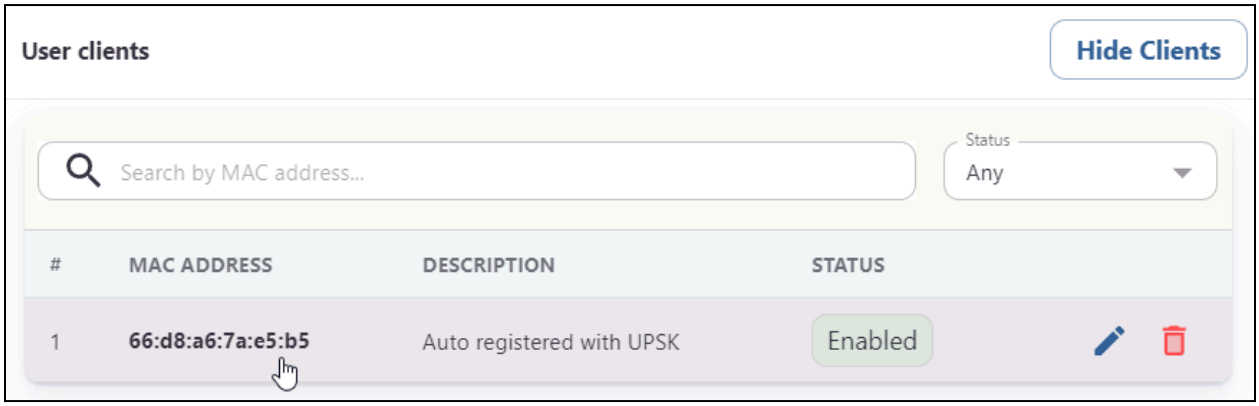


Next, validate your device by clicking on **User** and then **Users.** Select your user.





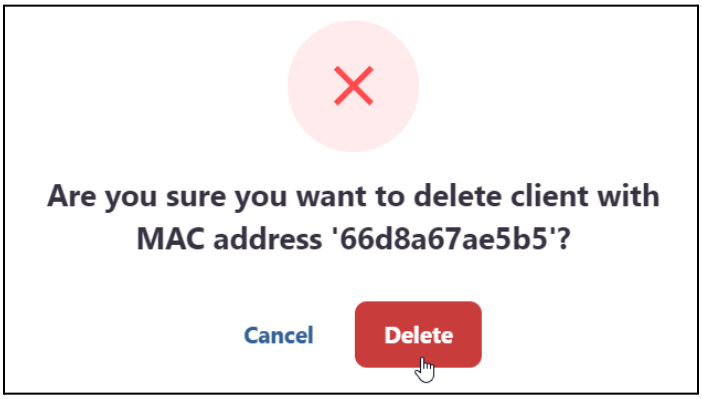
Click on **Show Clients**

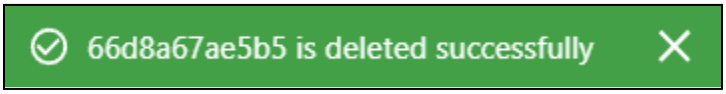


4. Create an AGNI Client Group

In this section, you will simulate your device as an IoT device.

Disable and forget previously saved lab networks so your wireless connection on your test device does not auto connect. Under your user client list, delete your device.

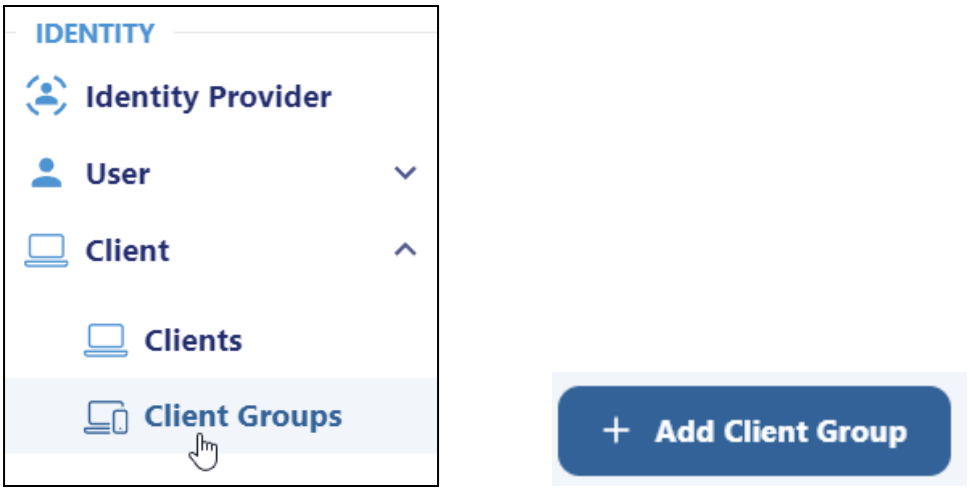




Next, you will add your client device as an IoT device in a Client Group.

First, we will need to create the Client Group.

In AGNI, under Identity, click on **Client Groups** and then **+ Add Client Group.**



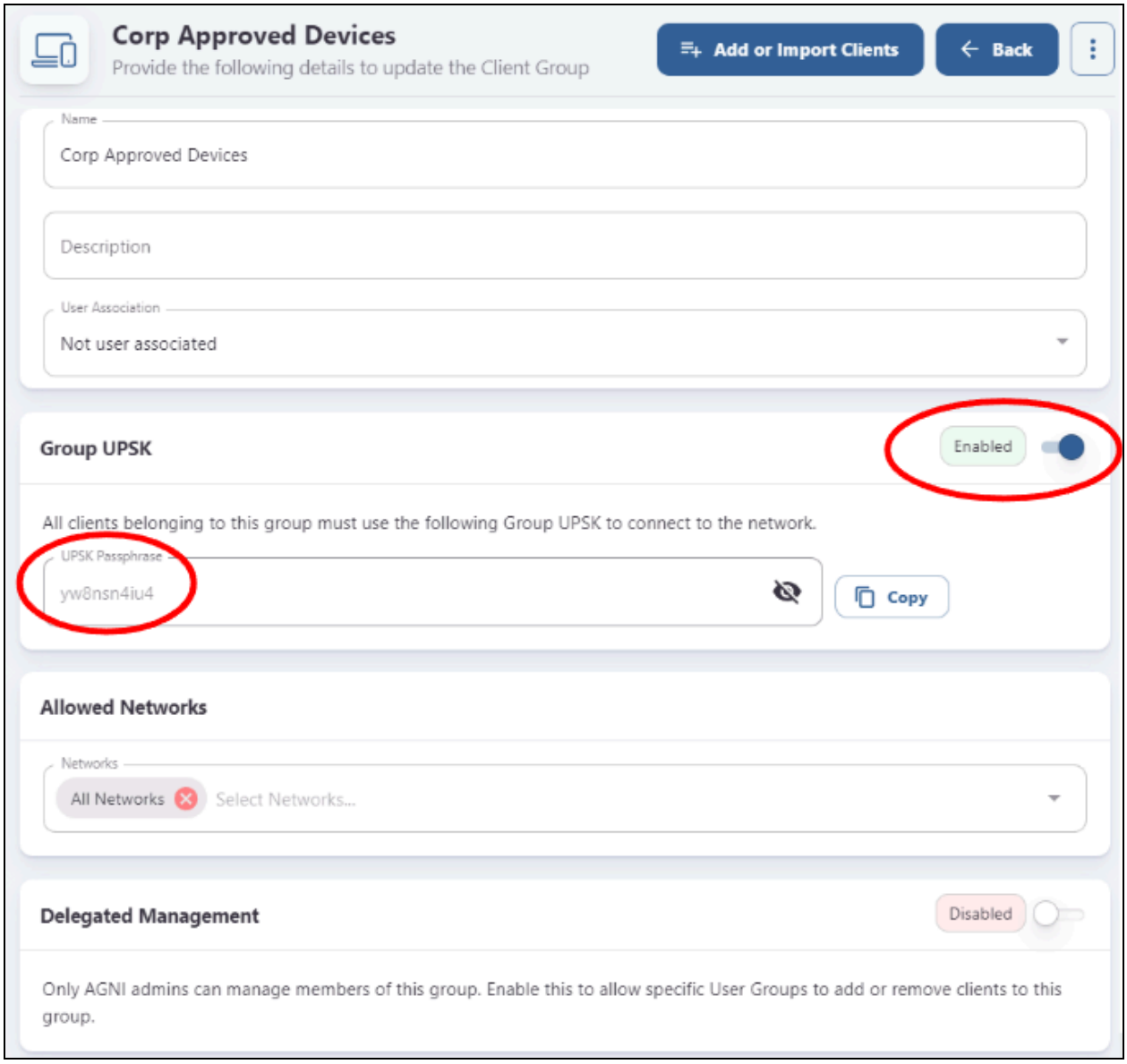
Name: **Corp Approved Devices**

Description: **Corp Approved Devices**

User Association: **Not user associated**

Enable the Group UPSK. Copy the UPSK Passphrase

Then click on **Add Group**

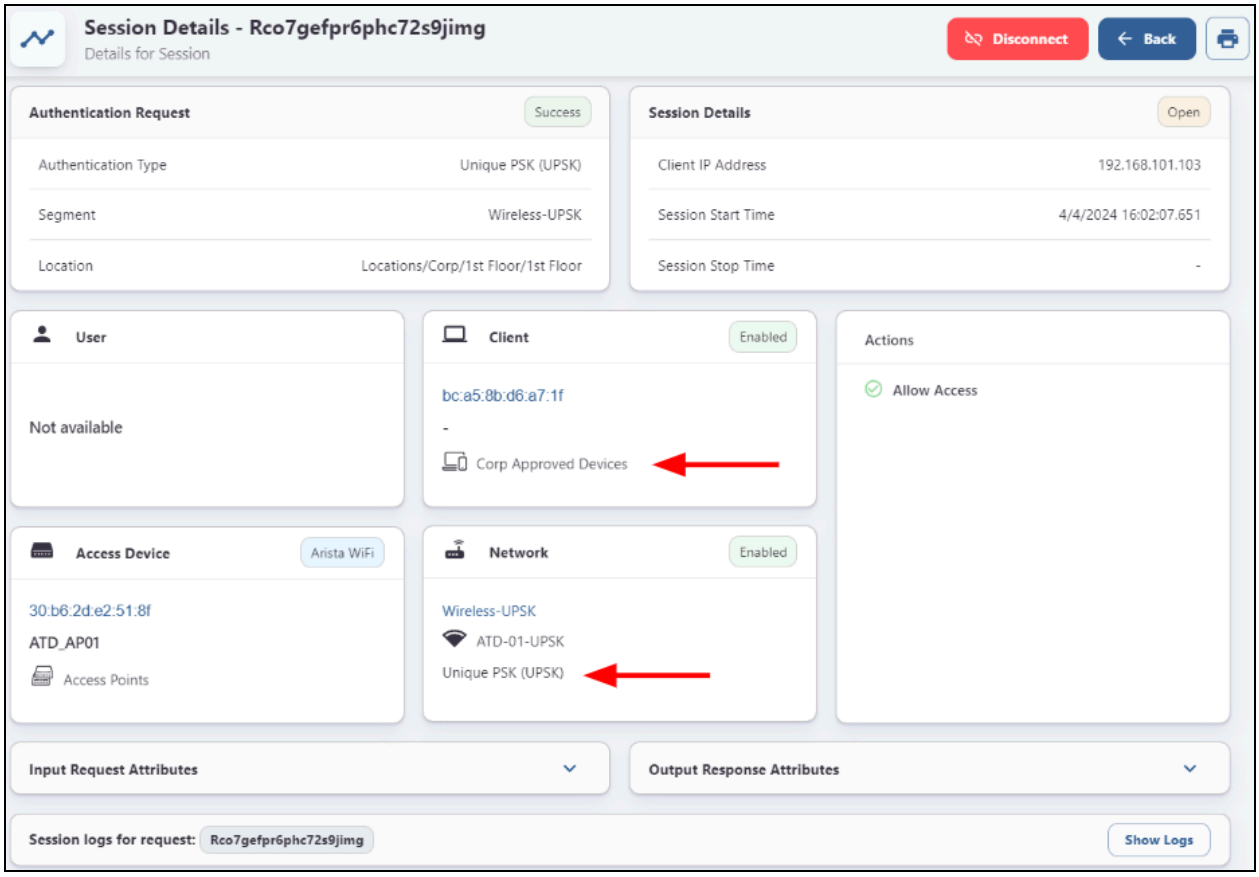


Add Group

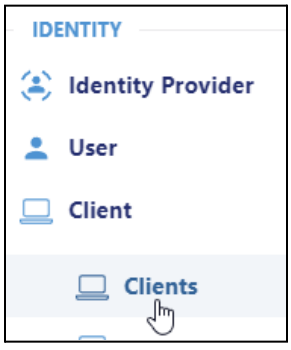
Next, connect your client to **ATD-##-UPSK** using the Client Group UPSK Passphrase.

Click on Sessions and validate your device connection.

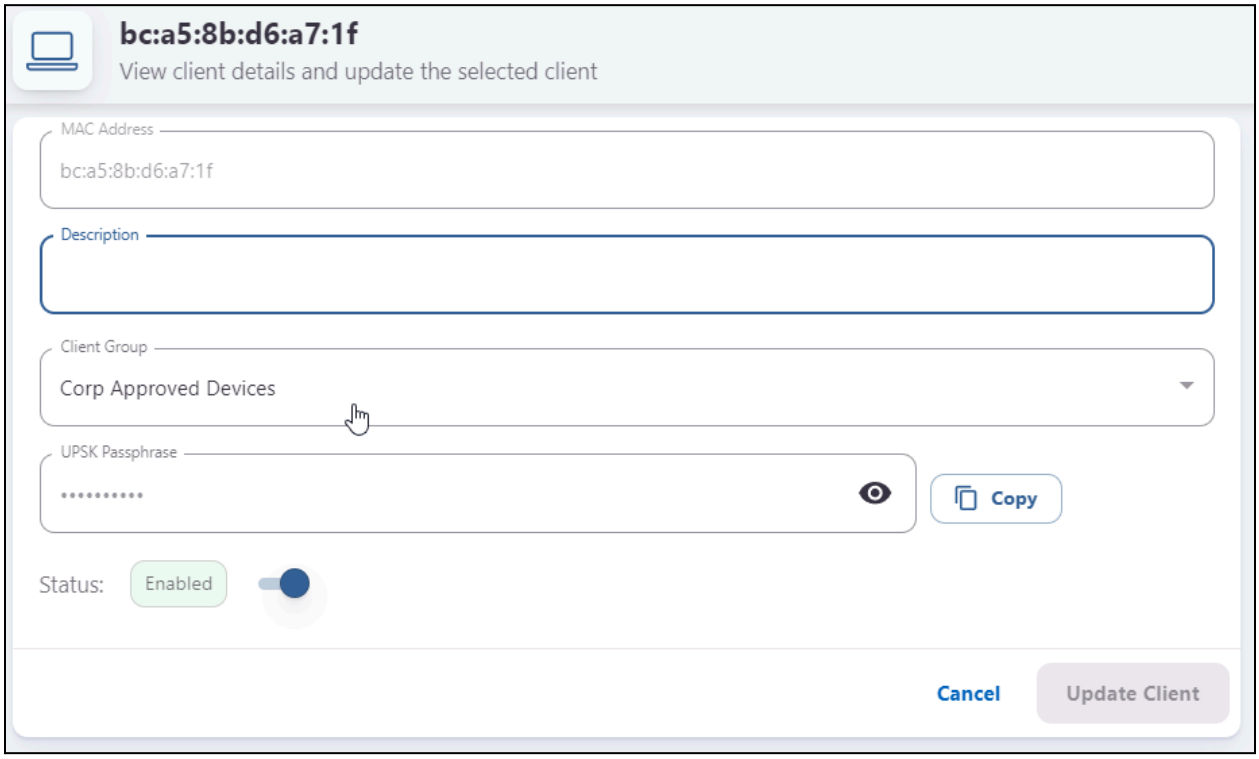
IDENTITY	TYPE	MAC ADDRESS	IP ADDRESS	STATUS
Corp Approved Devices	Unique PSK (UPSK)	bc:a5:8b:d6:a7:1f	192.168.101.103	Success



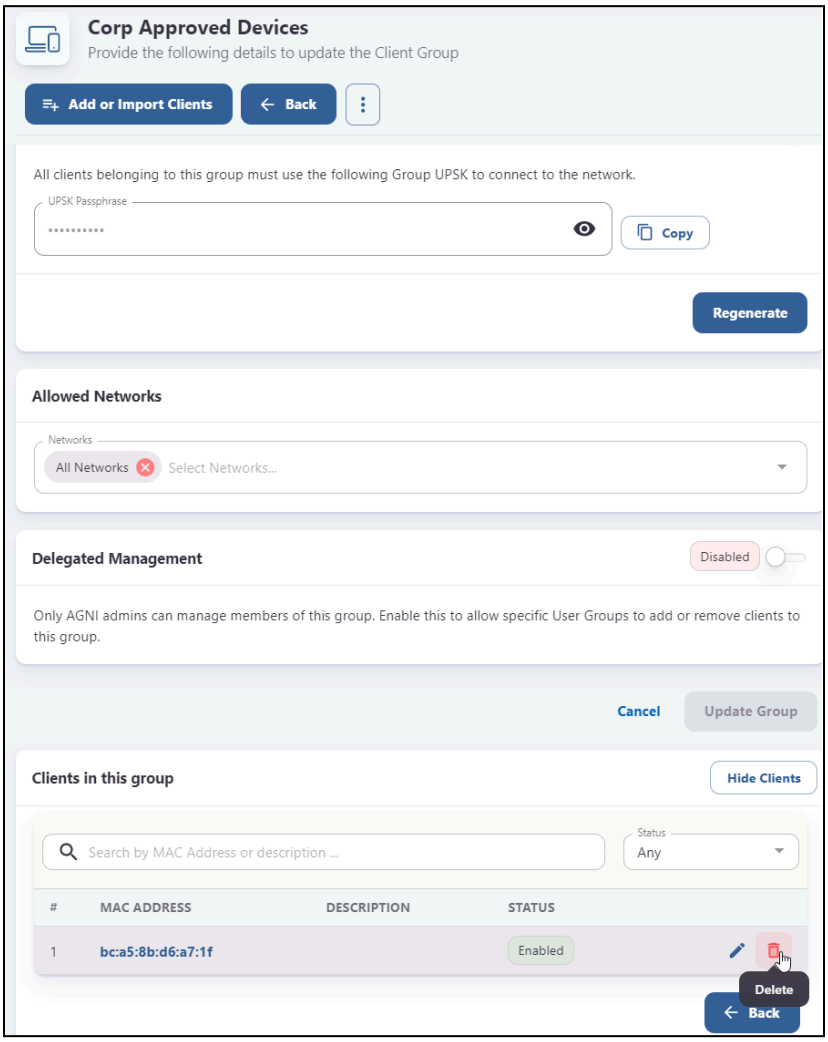
Next Click on your Client.

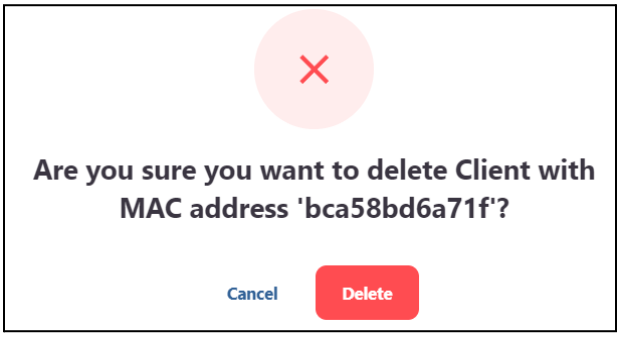


Notice your Client Group. Here you have the option to change the Client Group your device belongs to.



Next, delete your device from the **Client Group** - **Corp Approved Devices.**



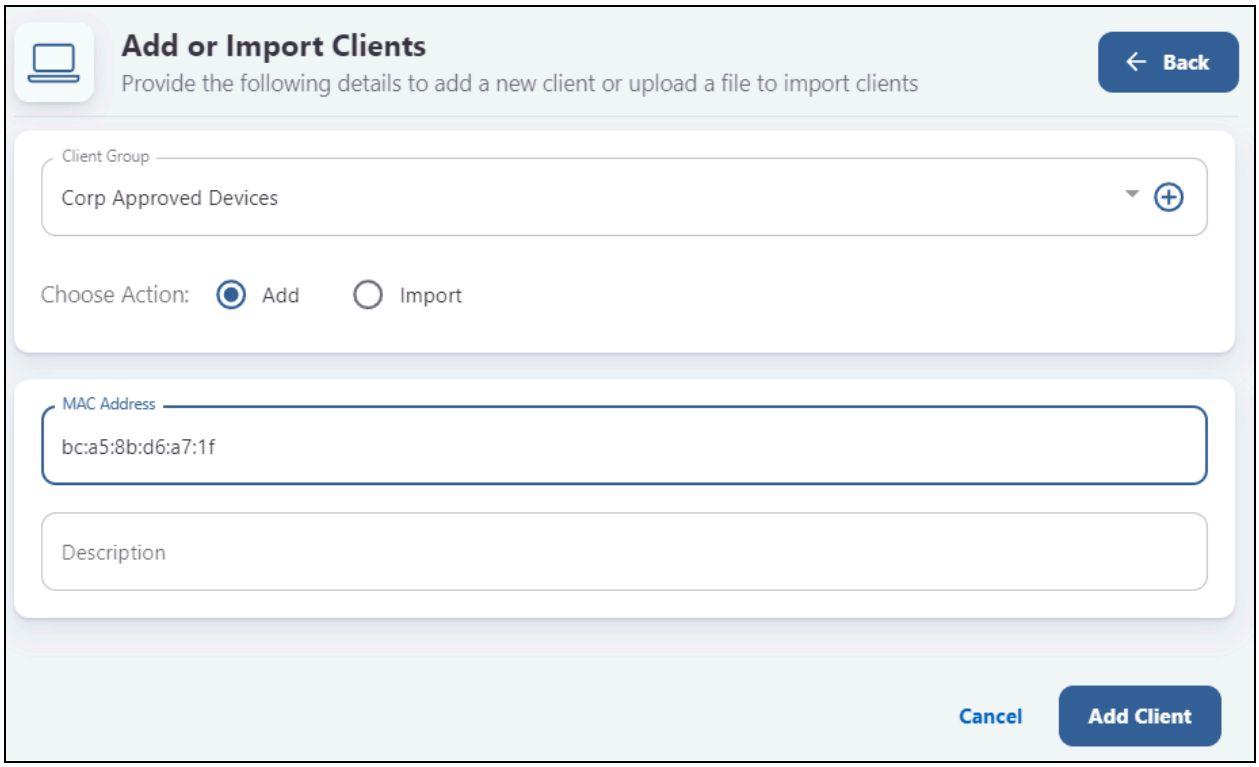


Next, under Identity, click on **Clients** and then **+ Add Client**.

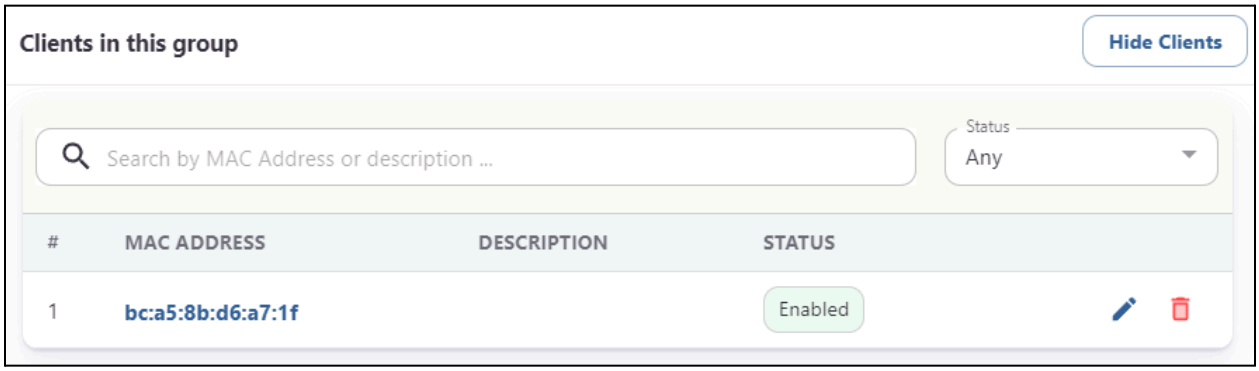
Select the Client Group: **Corp Approved Devices**

Add in the MAC Address of your test device like your phone that is not randomized.

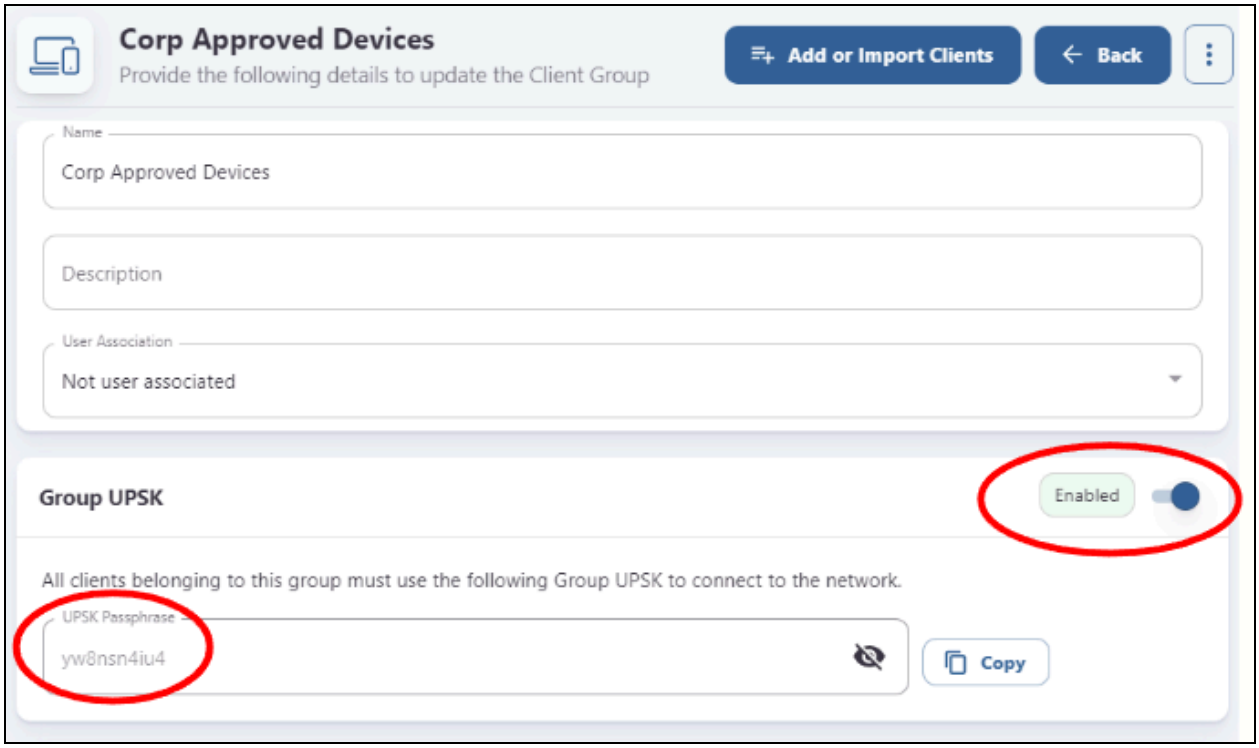
Then select **Add Client**



You will then see the Client added to the Group.



Validate and Verify your connection using the Client Group UPSK Passphrase.



IDENTITY	TYPE	MAC ADDRESS	IP ADDRESS	STATUS
Corp Approved Devices	Unique PSK (UPSK)	bc:a5:8b:d6:a7:1f	192.168.101.103	Success

NAC LAB #2 COMPLETE