Technical Guide

ecCLOUD AuthPort Configuration

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1. Introduction

This technical guide is aimed at helping readers learn how to enable and configure settings for “AuthPort”, an add-on available on ecCLOUD. The purpose of AuthPort is to allow ecCLOUD users to manage network access and regulate network usage of their wireless clients.

With AuthPort, ***authentication, authorization, and accounting (AAA) of wireless clients*** can be performed using ecCLOUD’s built-in authentication server and account database. The “AuthPort” add-on available on ecCLOUD only supports RADIUS feature with ***username/password*** authentication. It means that "AuthPort" on ecCLOUD contains RADIUS server function. The authentication format of RADIUS supports Open, Personal and Enterprise (802.1x) (PEAP and EAP-TTLS).

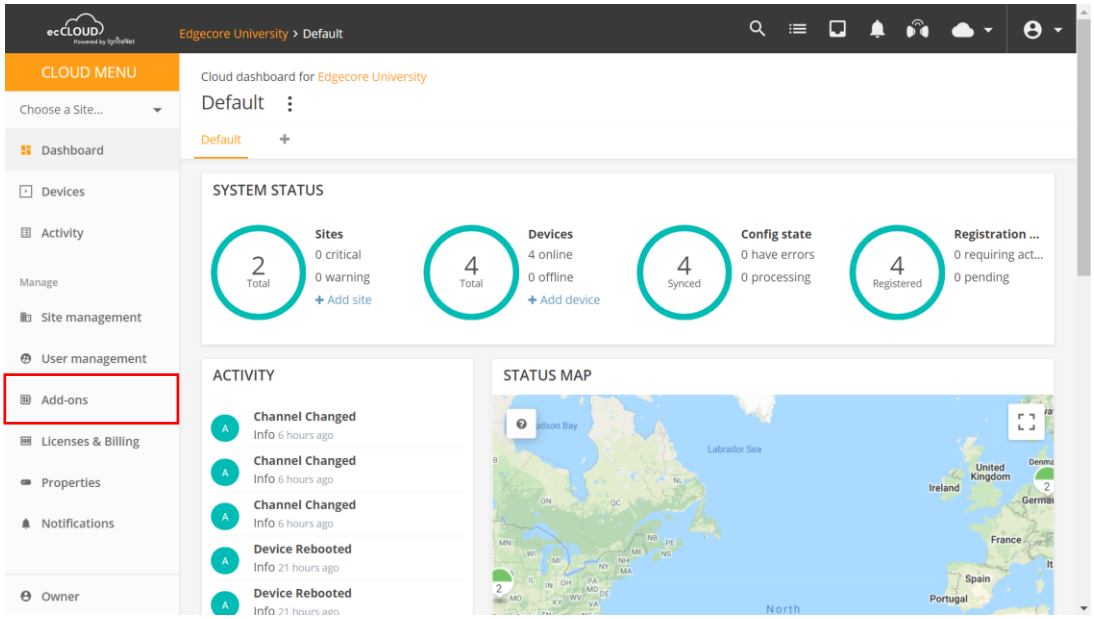
A ***captive portal editor*** is also included in AuthPort for easy captive portal customization, and multiple captive portals can be saved.After enabling AuthPort from the “Add-ons” page, it can then be enabled in configuration settings of each SSID, and the desired captive portal can be selected subsequently. Thus, wireless clients that associate to an SSID with AuthPort enabled will be presented the selected captive portal for login.

Accounts used for login via the captive portal should be pre-generated in AuthPort by ecCLOUD users, and each account is linked to a self-defined ***service plan***, which specifies constraints on network usage. Thus, service plans should be added before accounts can be created. In this way, network usage of wireless clients can be governed by the service plans associated with the accounts they log in with.

2. Enable AuthPort from Add-Ons Page

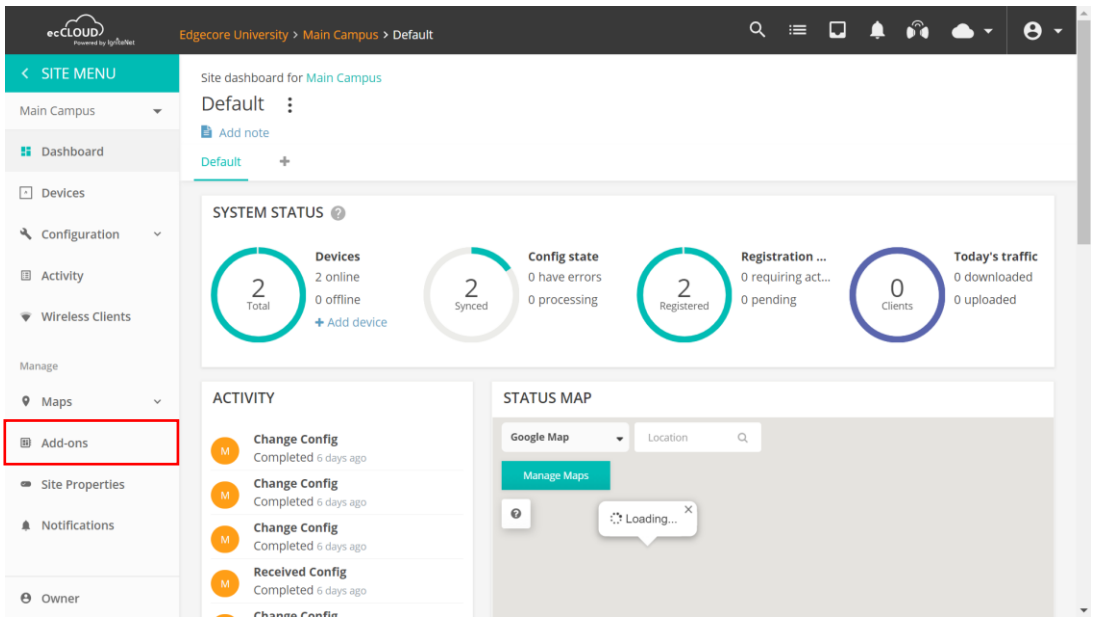
AuthPort can be enabled at the cloud level or at the site level depending on the deployment scenario. If enabled at the cloud level, AuthPort will be enabled for all the sites under this cloud at once. If you would like to enable AuthPort for only certain sites, please go to these sites and enable this add-on from the Add-ons page at the site level.

a. To enable AuthPort at the cloud level, click on "**Add-ons**" on the Cloud Menu

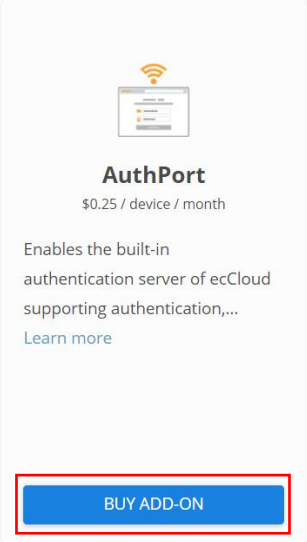


Or

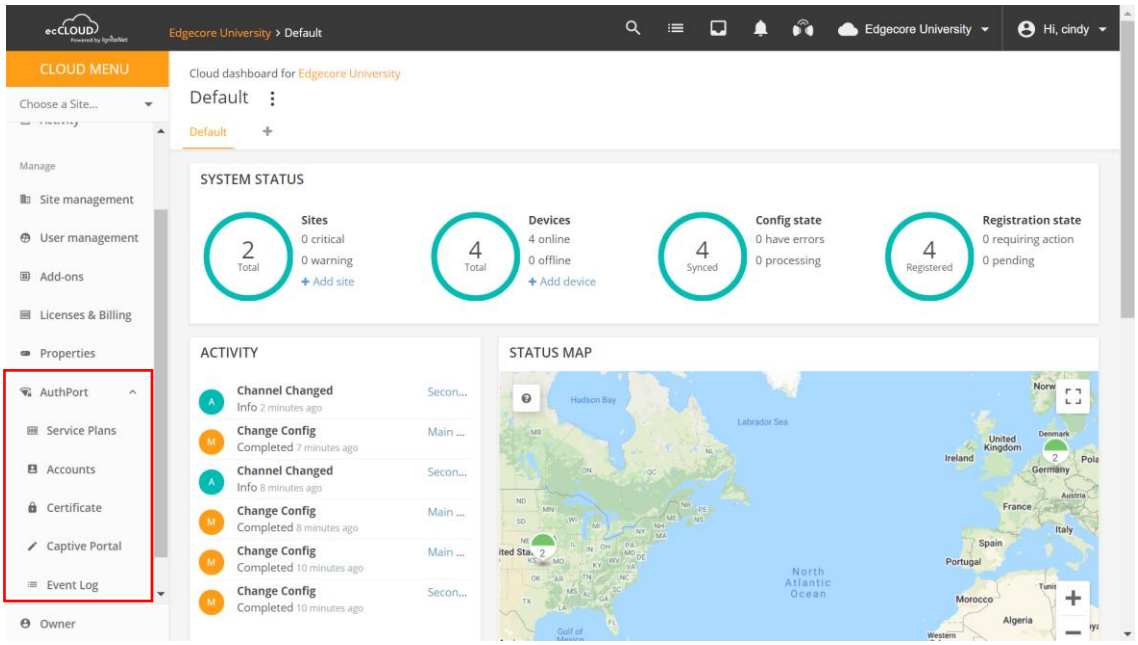
To enable AuthPort for a site, go to the site and click on **"Add-ons"** on the Site Menu



b. On the Add-ons page, find AuthPort and click on "**BUY ADD-ON**". Follow on-screen instructions to confirm purchase.



c. Once the purchase is completed, AuthPort will appear on the Cloud Menu under Manage. Clicking on AuthPort reveals a submenu.

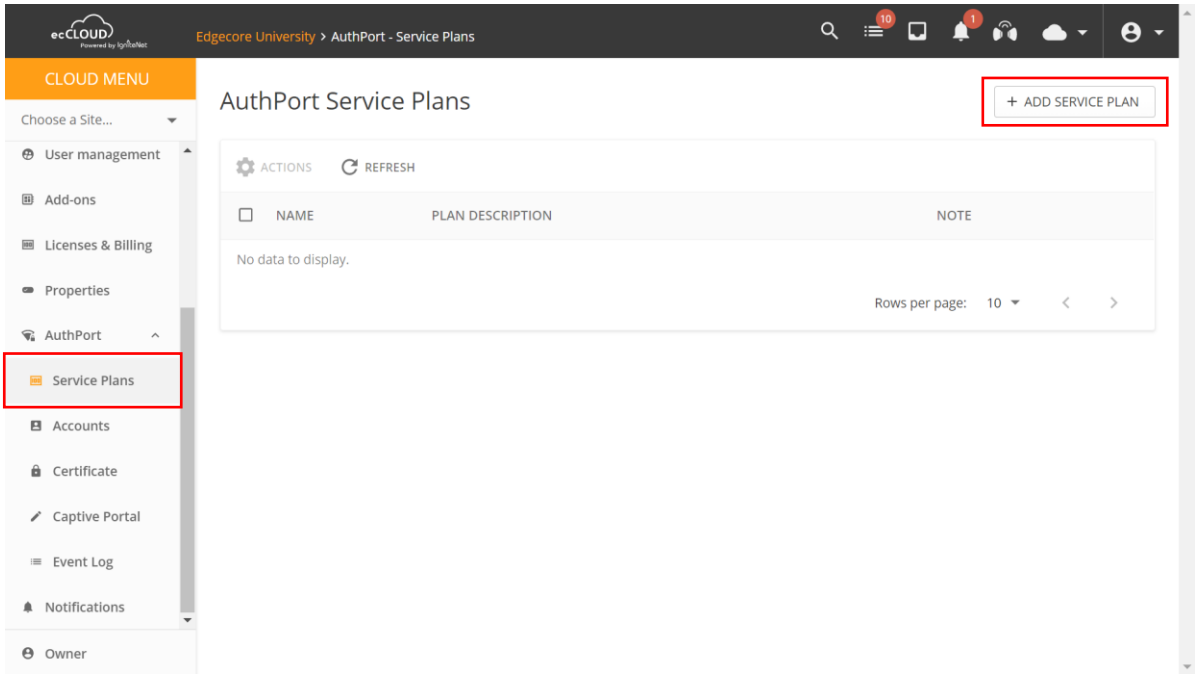


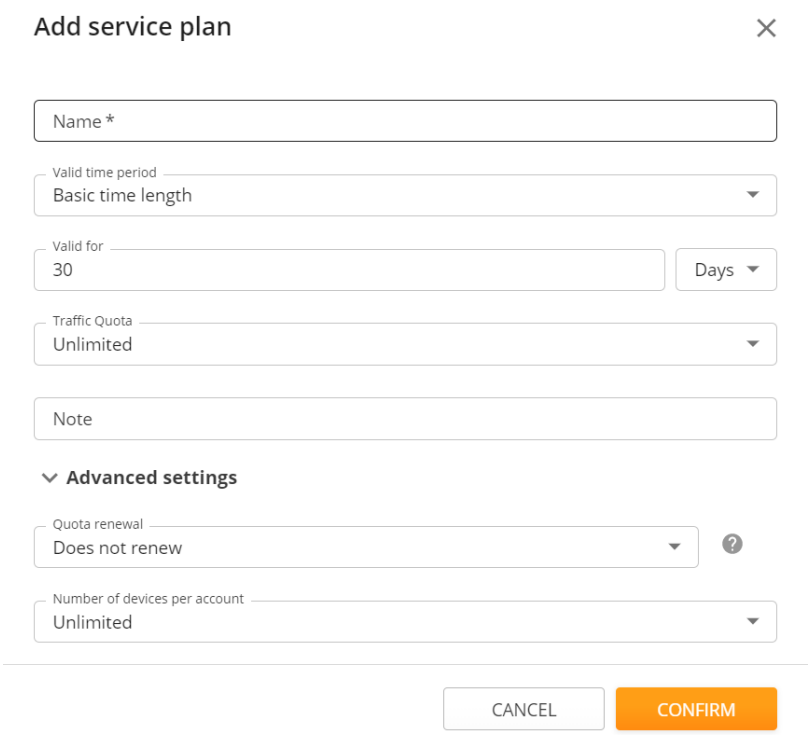
3. Configure AuthPort Settings: Add Service Plans and Generate Accounts

On the AuthPort submenu, first add at least one service plan. In a service plan, time, data and/or device number constraints can be specified as desired. Once one or more service plans have been added, accounts can then be generated where each account links to a specific service plan.

3.1 Add Service Plans

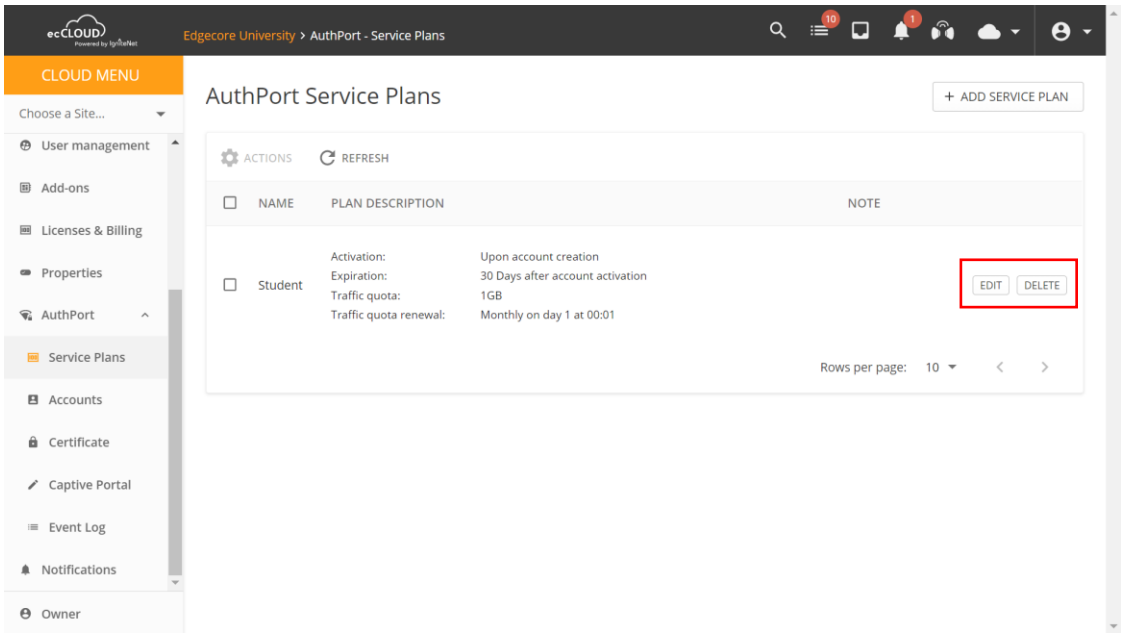
a. Go to "**Cloud Menu > AuthPort > Service Plan**" and click on "**ADD SERVICE PLAN**"





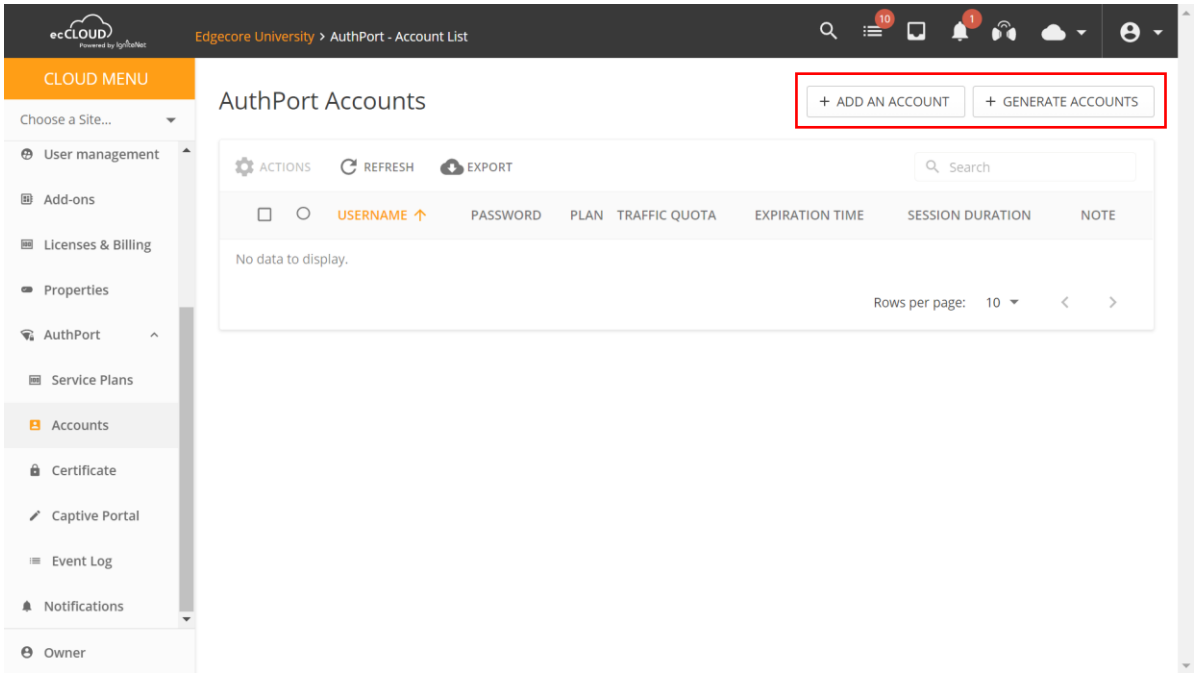
- **Name**: Name of the service plan.
- **Valid time period**: The time period during which the account is valid.
    - Select "**Basic time length**" if you want the account to be valid for a certain time duration, and you can define the time duration in seconds, minutes, hours or days in the field "Valid for" below.
    - Select "**Custom**" if you want to the account to be activated at a specific time, and the account can also expire at certain time or after a time duration. For account activation, select "Activate upon account creation" for the account to be activated at the same time it's created; select "Activate before" for the account to be activated before a specific date and time as defined in the next field. For account expiration, select "Does not expire" for the account to remain valid unless it has reached the defined traffic quota (see below for description of traffic quota), if any; select "Expires in" for the account to expire after a certain time period as defined in the next field; or select "Expires on" for the account to expire on a specific date and at a specific time.
- **Traffic quota**:
    - Select "**Custom**" to define a data cap for the account to become invalid once the cap is reached.
    - Select "**Unlimited**" to allow the account to enjoy unlimited data usage.
- **Quota renewal**: If configured, the defined traffic quota can be renewed daily, weekly or monthly for the account within the time frame set.
- **Number of devices per account**: Select "Custom" for the account to be shared by only a limited number of devices as defined in the next field; select "Unlimited" for the account to be shared by

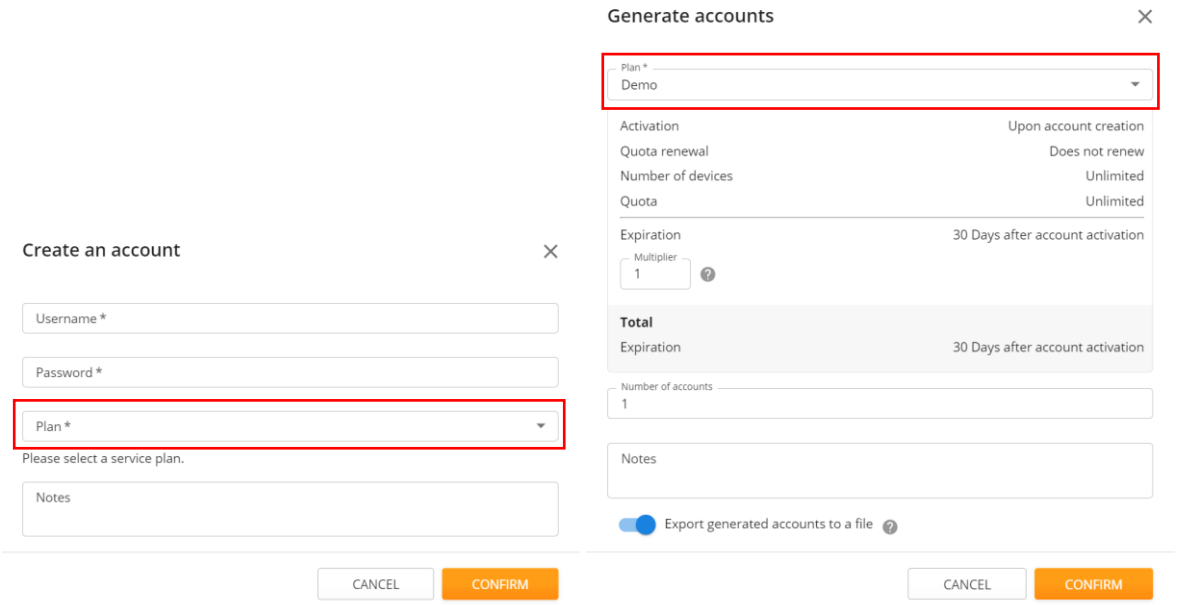
Once a service plan has been added, it can be edited or deleted from this page.



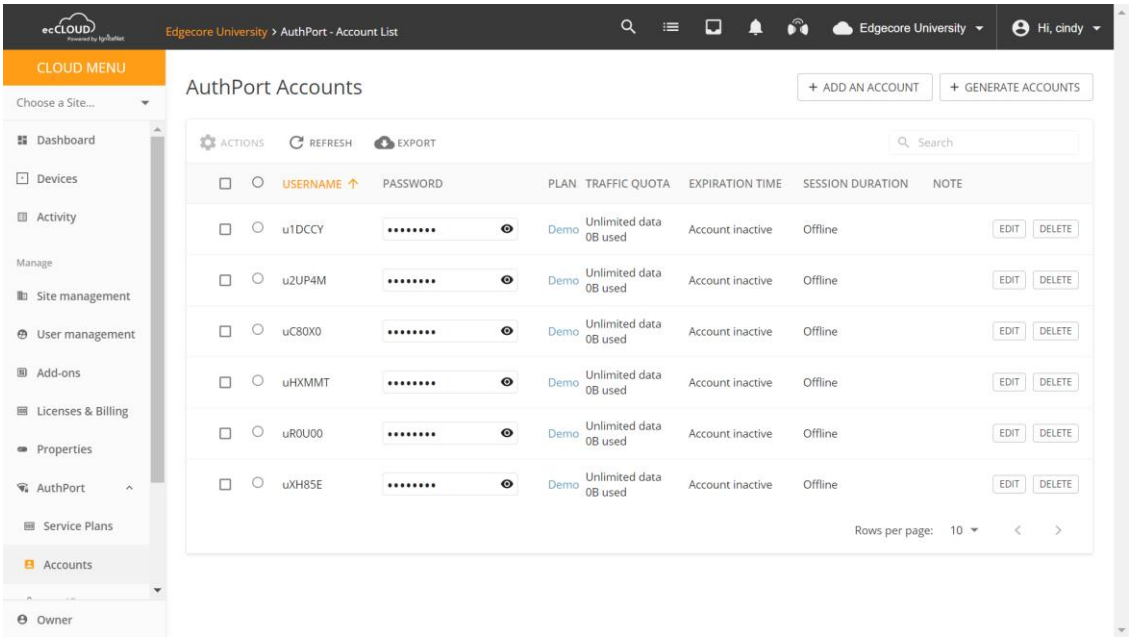
3.2 Generate Accounts

a. Go to "**Cloud Menu > AuthPort > Accounts**", and click on "**ADD AN ACCOUNT**" to add one account or "**GENERATE ACCOUNTS**" to add multiple accounts. Note that a service plan has to be selected when generating accounts.



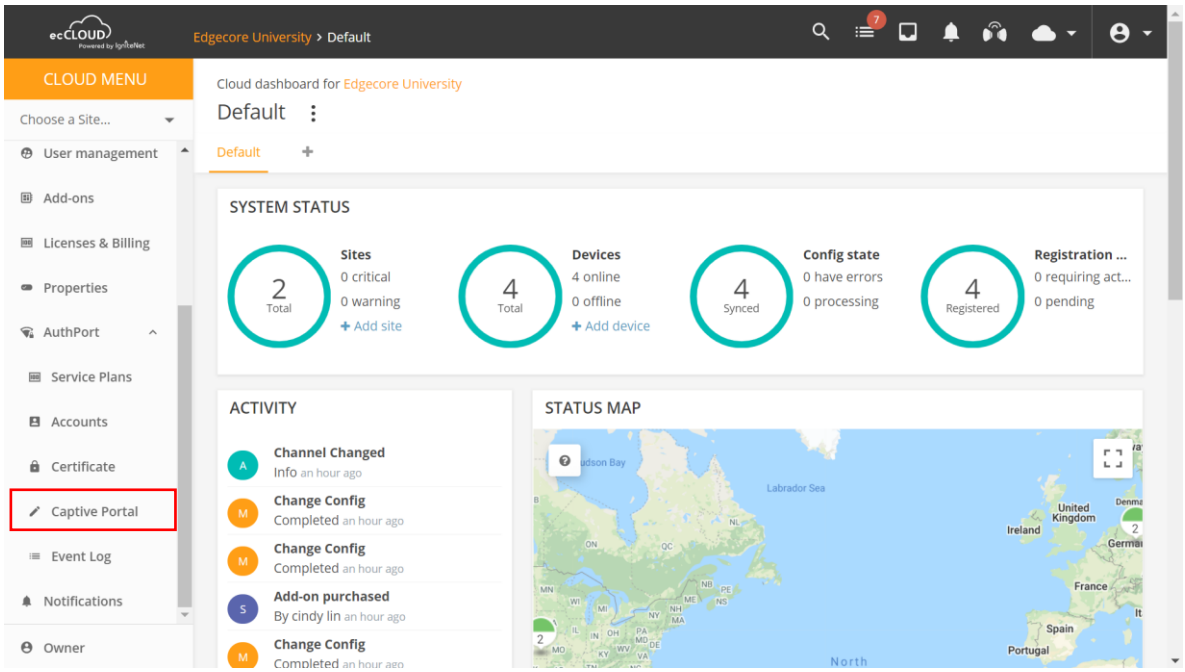


b. Once accounts have been generated, they will appear on the same page.

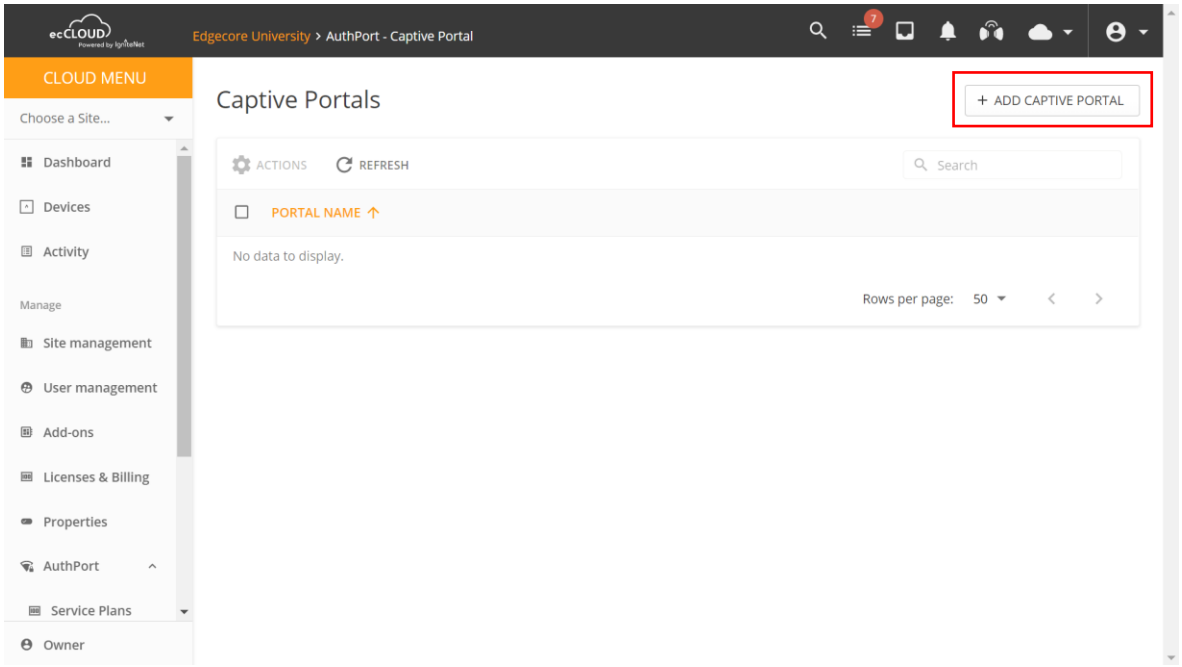


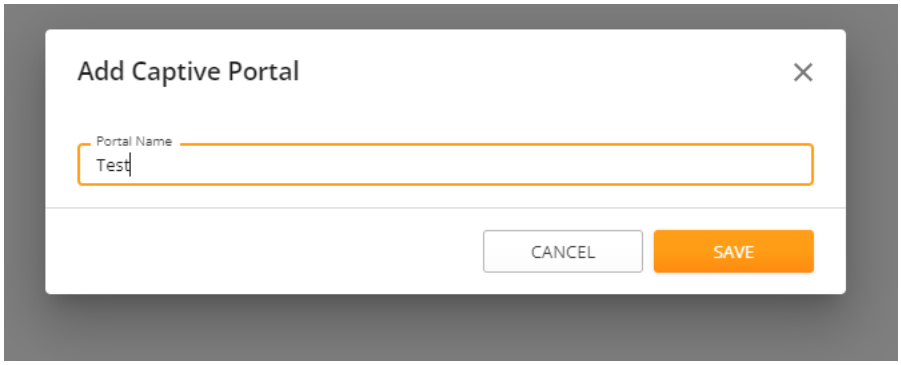
4. Configure AuthPort Settings: Add Customized Captive Portals

a. On the "**AuthPort**" submenu, click on "**Captive Portal**".

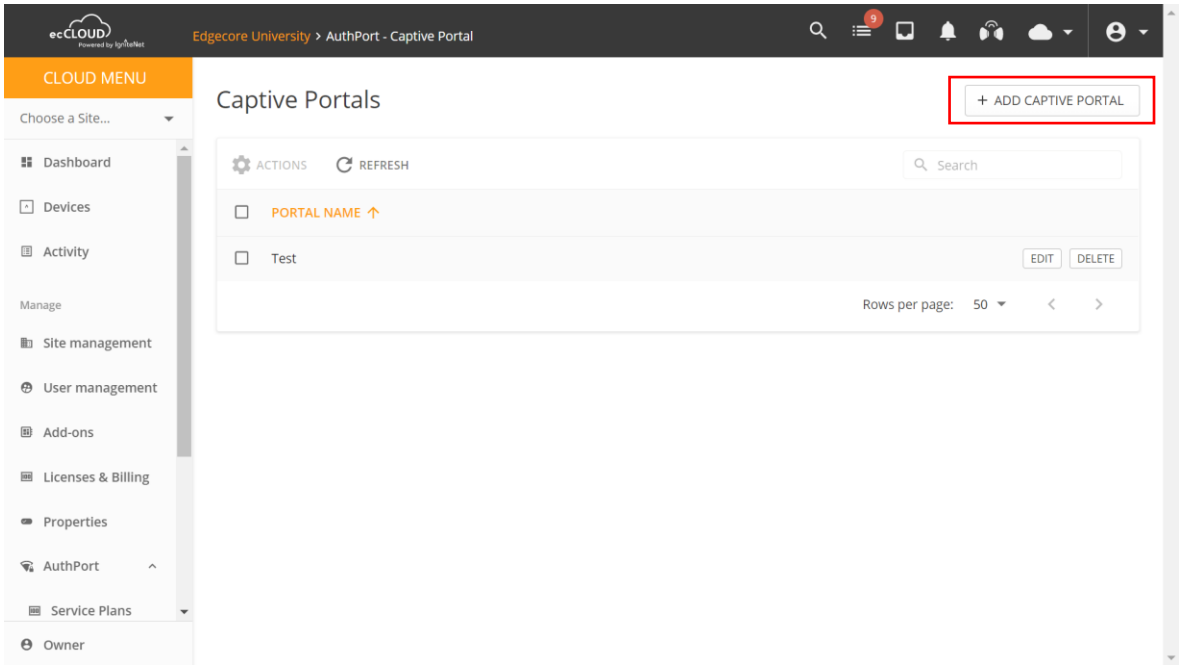


b. Once on the Captive Portal page, click on "**ADD CAPTIVE PORTAL**" to add a new captive portal to begin customizing it.

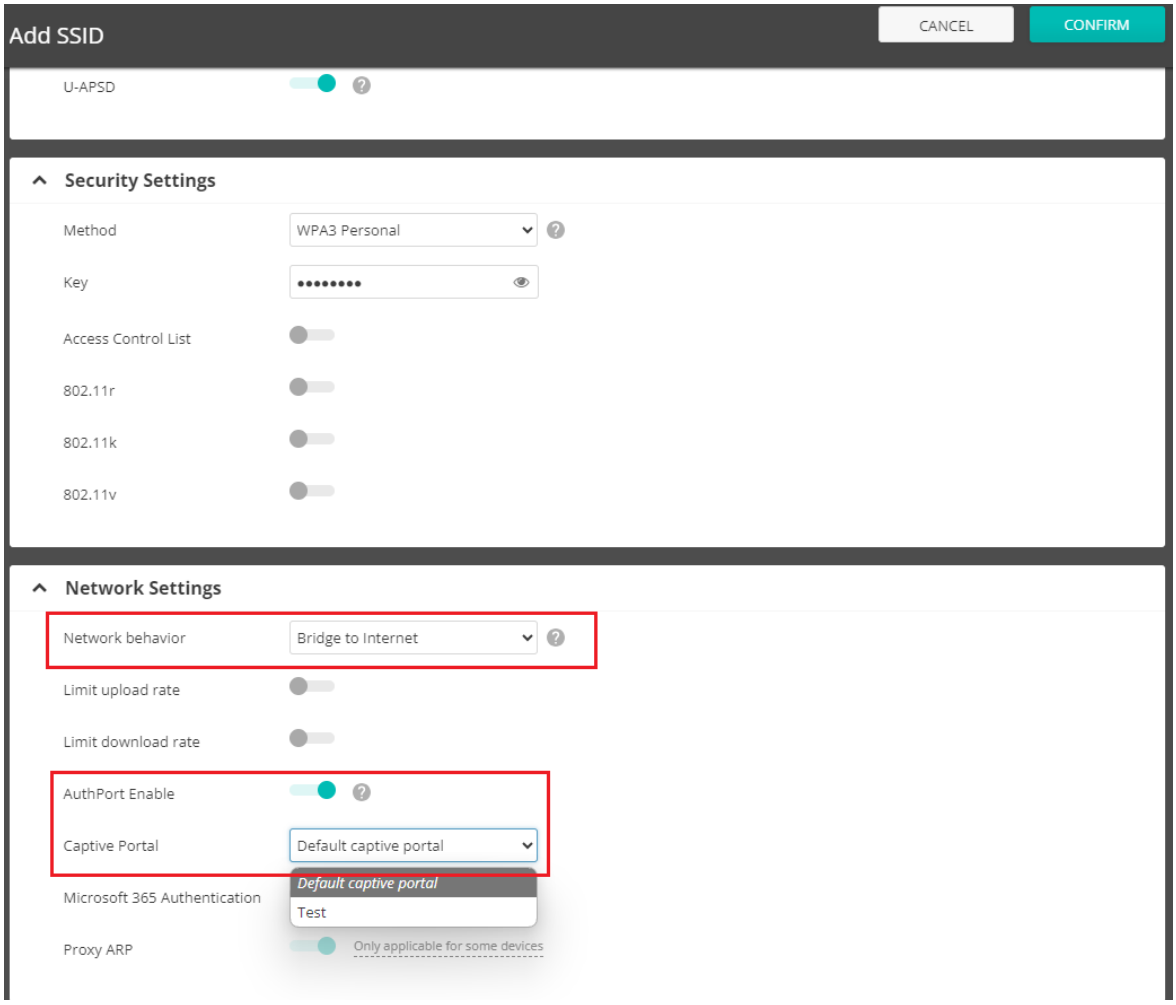




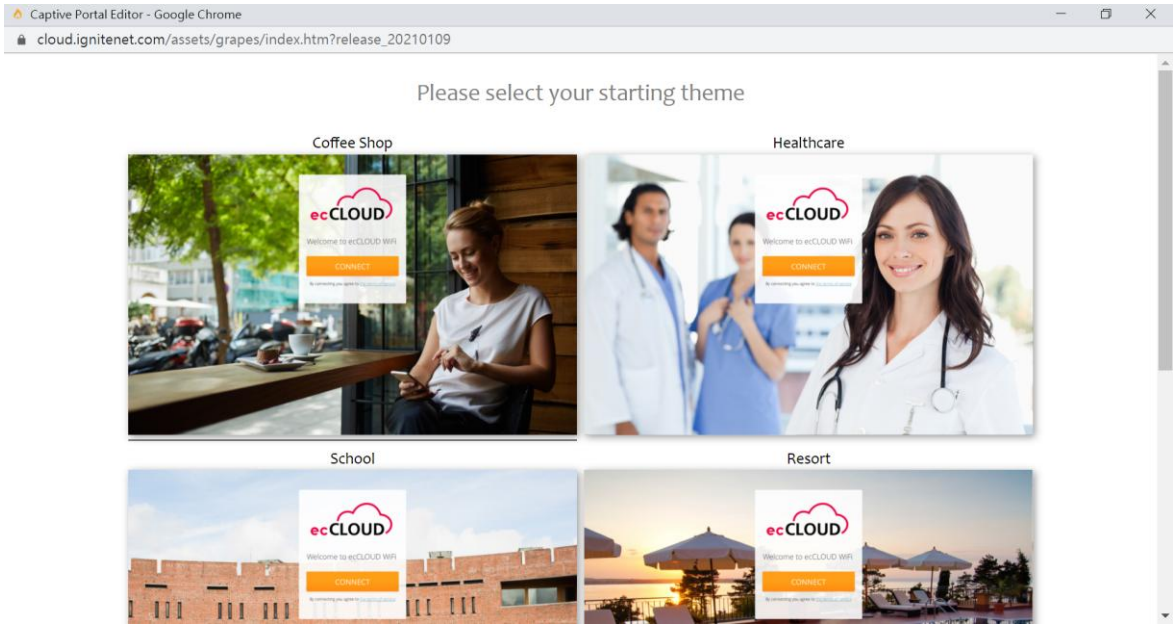
If there are existing captive portals, they can also be edited or deleted from this page.



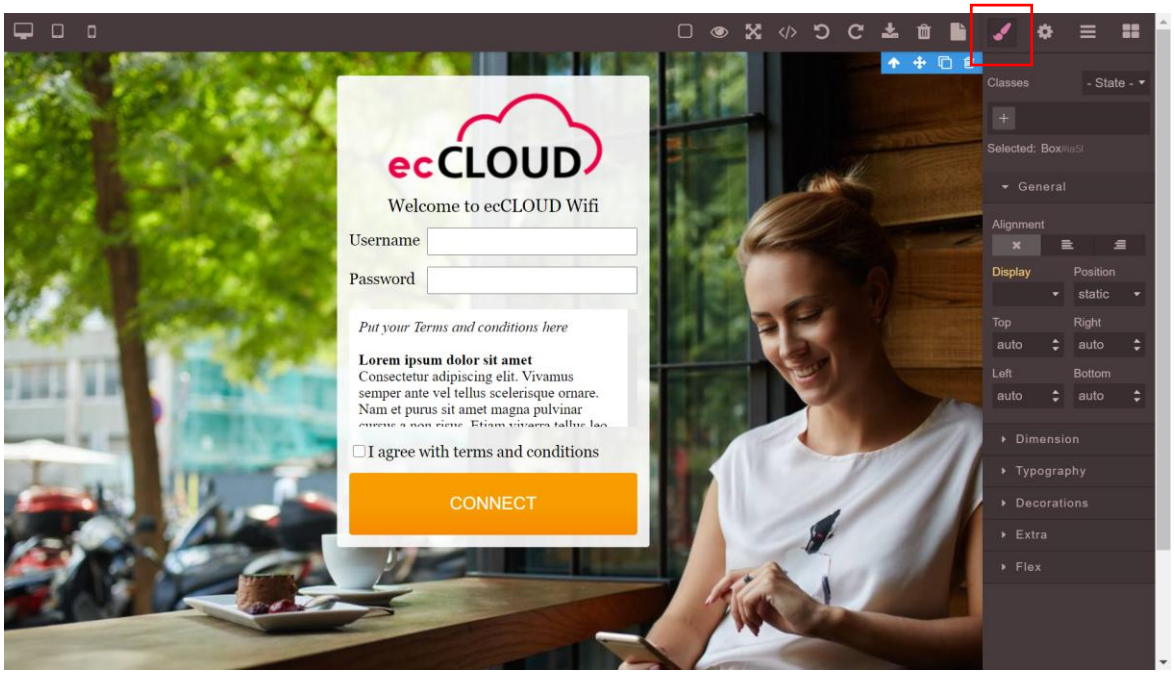
Captive portals can also be added from any SSID configuration page. Once AuthPort is enabled, the Captive Portal option will be revealed, and new captive portals can be added by clicking on "**ADD NEW PORTAL**".


Add SSID
CANCEL
CONFIRM
U-APSD
Security Settings
Method
WPA3 Personal
Key
Access Control List
802.11r
802.11k
802.11v
Network Settings
Network behavior
Bridge to Internet
Limit upload rate
Limit download rate
AuthPort Enable
Captive Portal
Default captive portal
Default captive portal
Test
Microsoft 365 Authentication
Proxy ARP
Only applicable for some devices

c. Captive Portal Editor will appear as a pop-up window. Choose one of the starting themes to begin customizing the new captive portal.



d. Use Style Manager to modify the attributes of the selected HTML object.



See Table 1 below for descriptions of each attribute category.

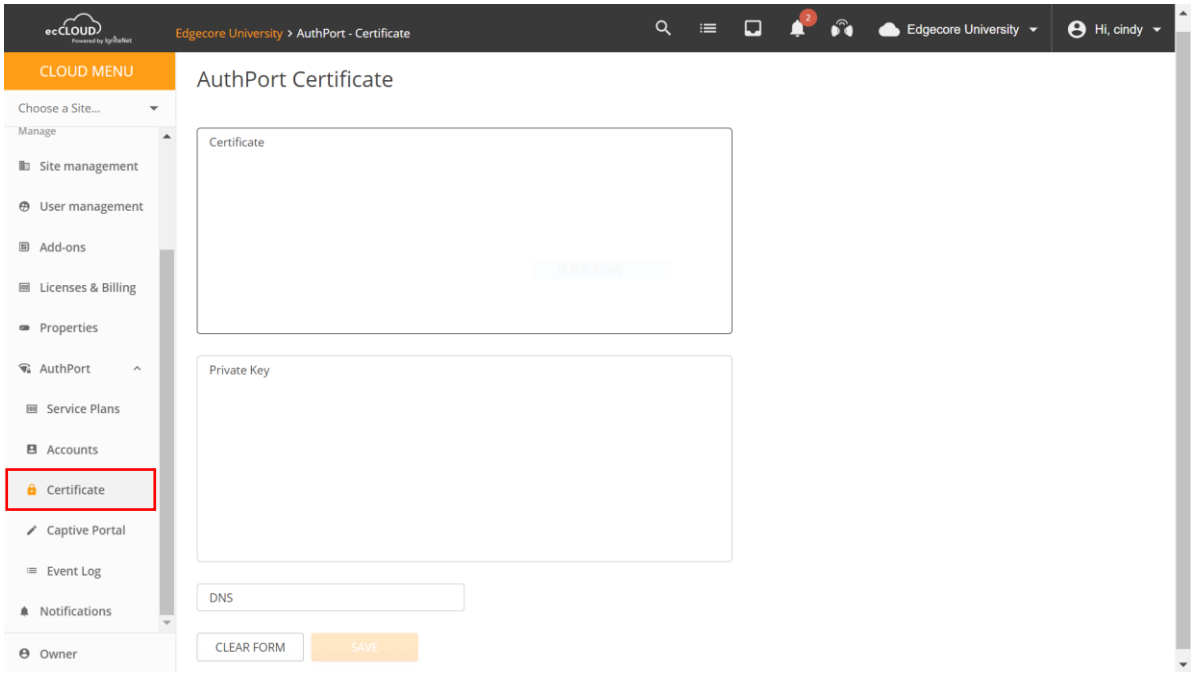
Table 1

Attribute Category	**Description**
Class	This tells you what kind of component it is
General	configure alignment and display position
Dimension	Modify component dimension
Typography	Edit font, size, text align, text decoration
Decorations	Select background color, border width/styler/color
Extra	Add transition, edit perspective, transform (rotate, scale)
Flex	Edit flex effect

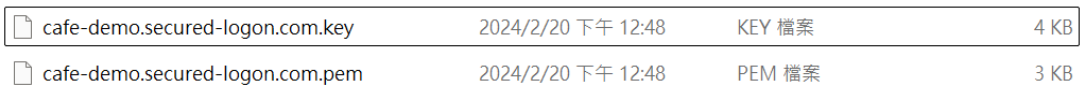
5. Configure AuthPort Settings: Upload an SSL Certificate

When AuthPort is enabled, we recommend submitting a valid SSL certificate to help make the captive portal redirection experience smooth for your wireless clients. If no SSL certificate is uploaded or if a suspicious SSL certificate is uploaded, they may see a security warning upon captive portal detection.

a. Click on "**Certificate**" on the "**AuthPort**" submenu



b. Open your Private key and SSL certificate file in Notepad.



SSL Certificate:

```
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```

Private key:

```
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```
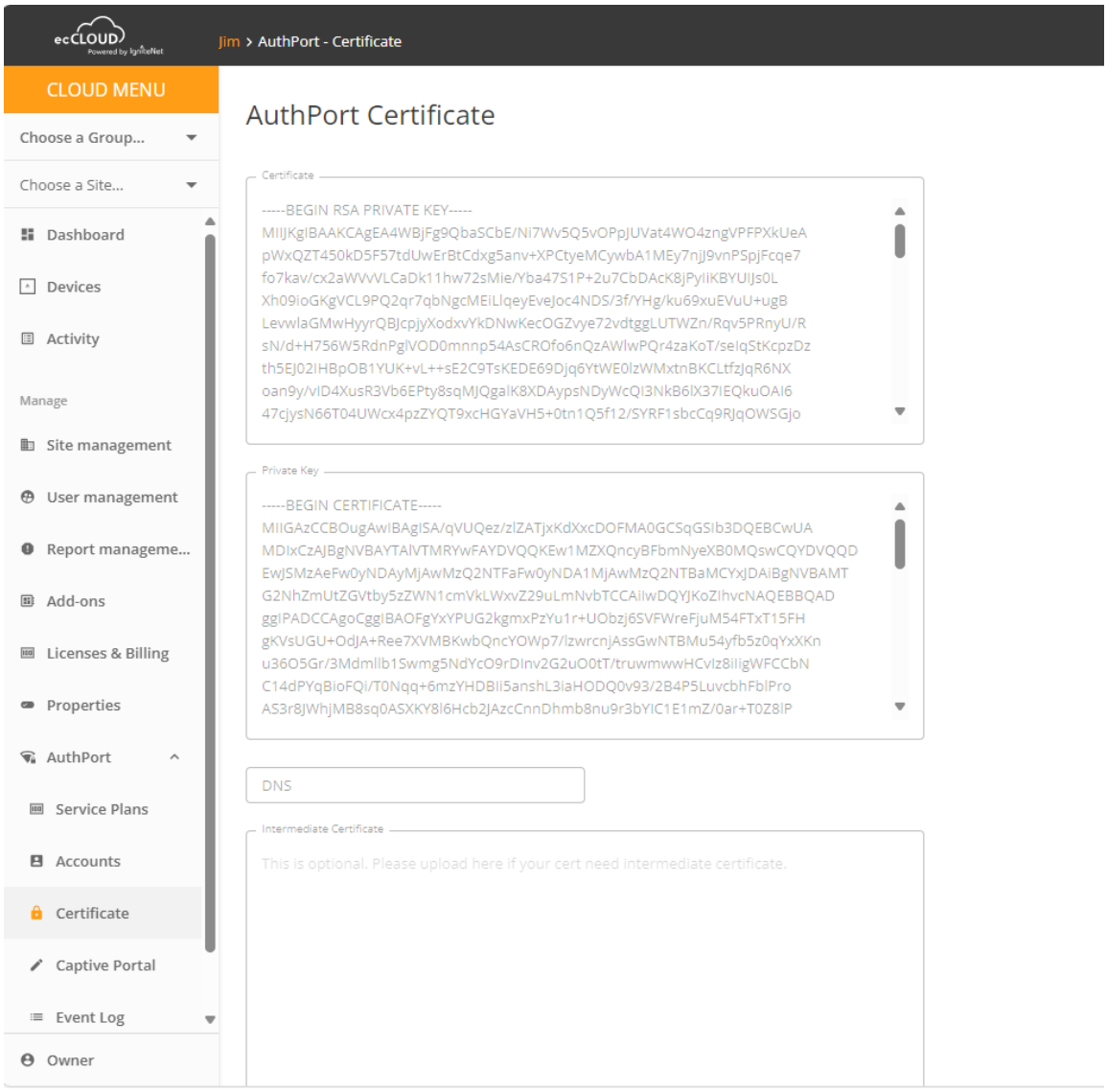

c. Copy your Private key and SSL certificate file content to “Certificate” and “Private key” field.

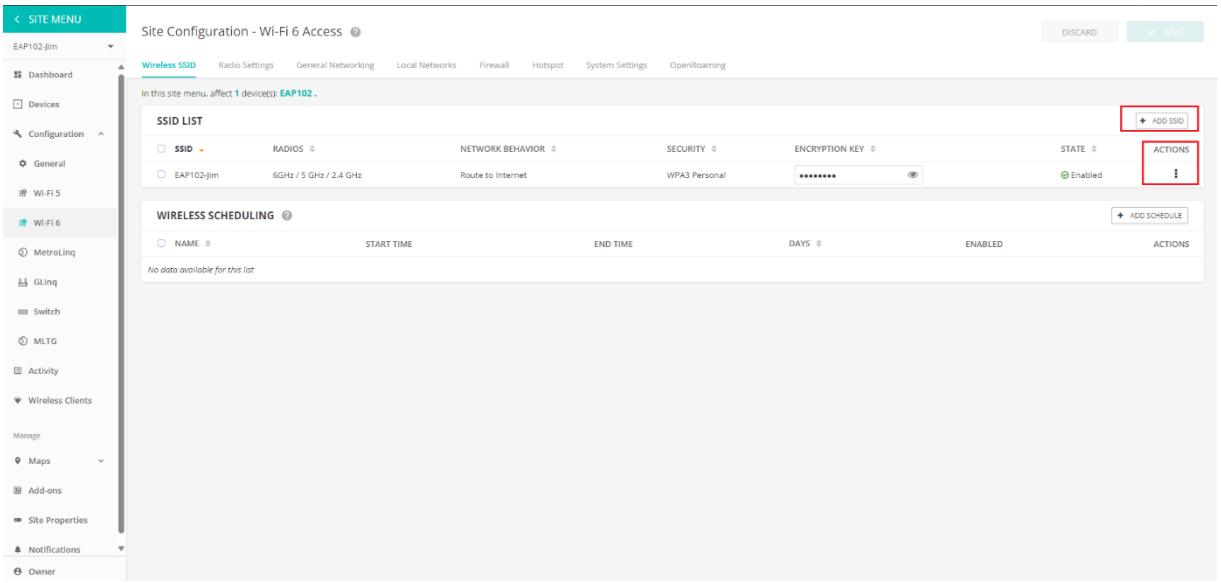


d. The “**DNS**” field does not need to be filled and will be automatically filled by the system with the certificate’s common name once the “**Certificate**” field has been filled.

6. Enable AuthPort in SSID Configuration Settings

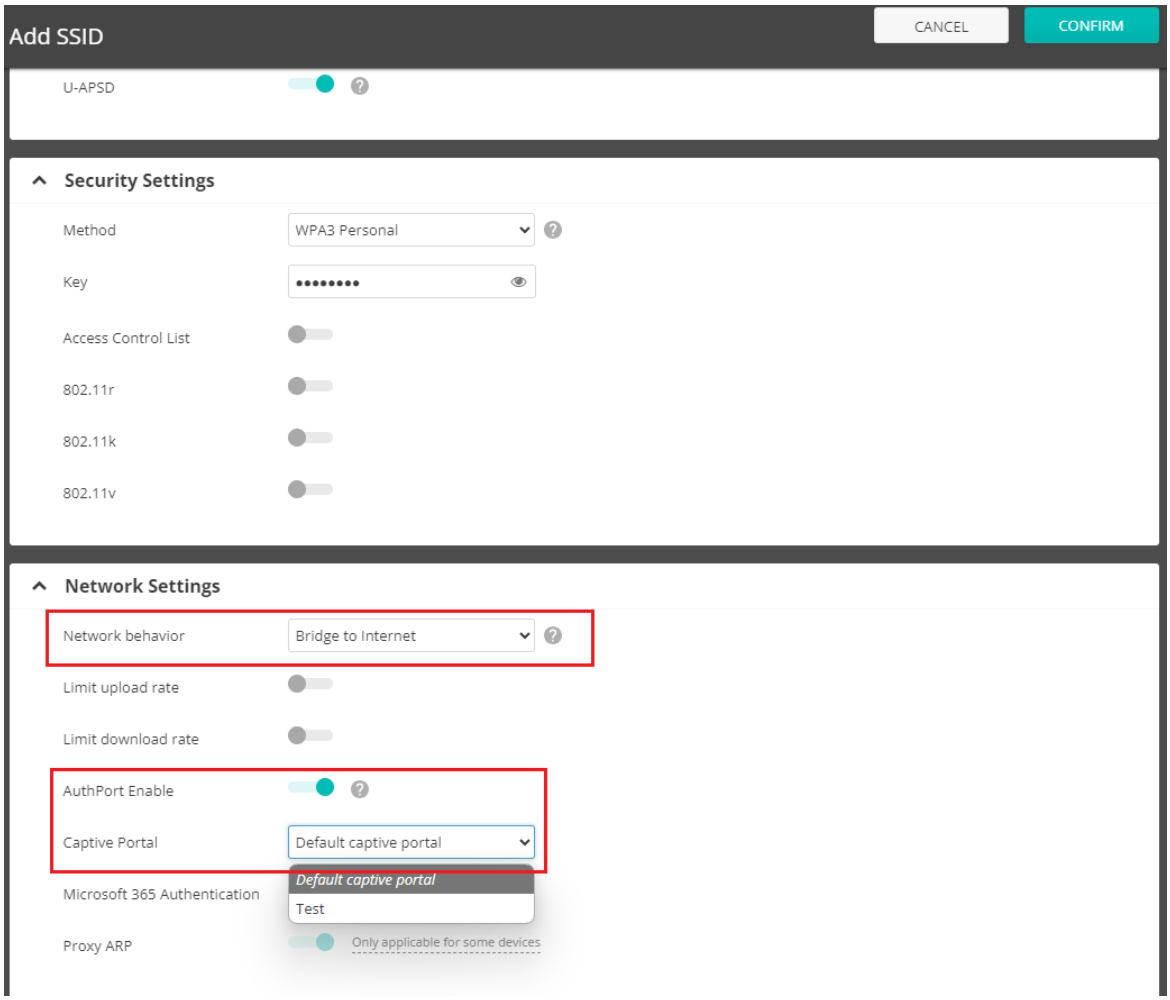
In configuration settings of each SSID, AuthPort can be enabled under "**Network Settings**". Once enabled, the "**Captive Portal**" option will appear for the desired captive portal to be selected. Thus, each SSID can have its independent AuthPort setting and captive portal.

a. On the Site Menu, go to "**Configuration > WiFi 5/ WiFi 6 > Wireless SSID**" and click on "**Add SSID**" to create a new SSID. To modify an existing SSID, click on "**Edit**" under Actions.

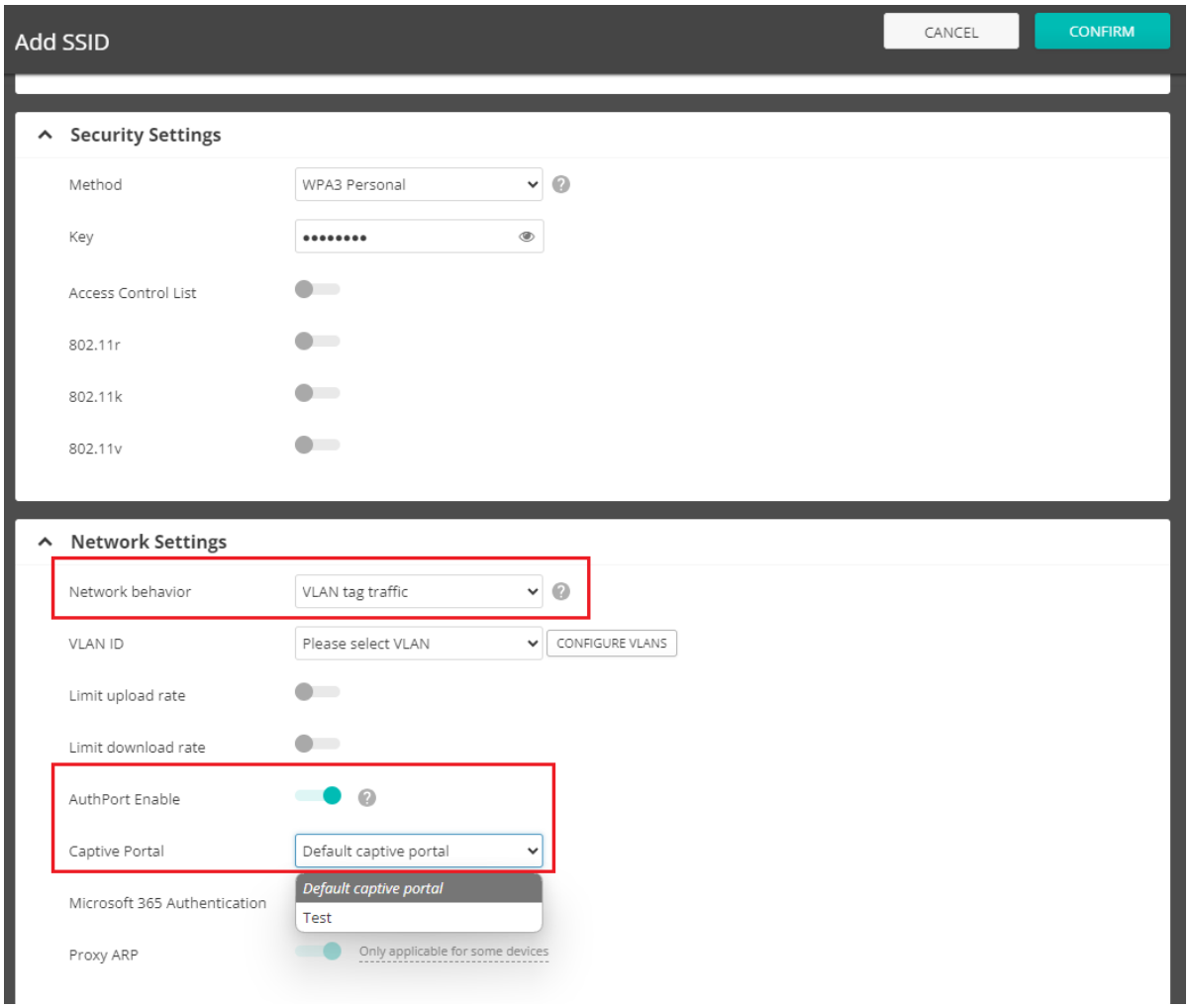


b. Scroll down to “**Network Settings**”, Select Network behaviour: “**Bridge to Internet**” or “**VLAN tag traffic**” and enable “**AuthPort**”. Once enabled, the "**Captive Portal**” setting will be displayed below. If no captive portals have been added previously in “**AuthPort > Captive Portal**” at the cloud level, only the default captive portal will be available. However, you can also add captive portals from this page by clicking on “**ADD NEW PORTAL**”. Captive portals added from this page will appear under “**AuthPort > Captive Portal**” at the cloud level.

- Network behaviour: “**Bridge to Internet**”



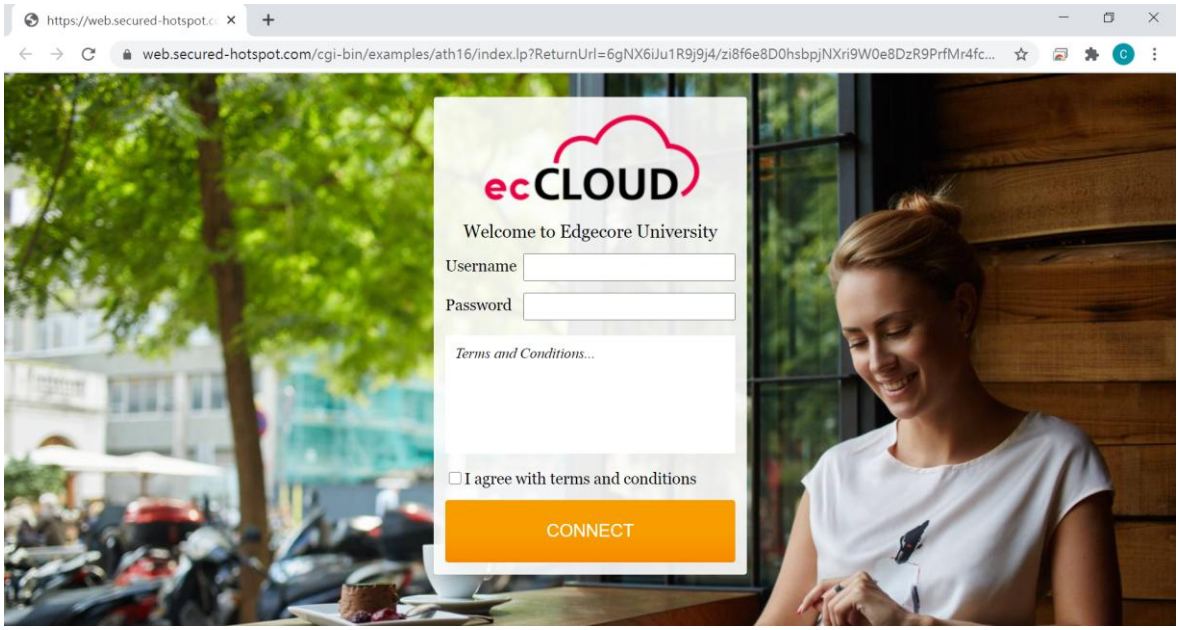
- Network behaviour: “**VLAN tag traffic**”



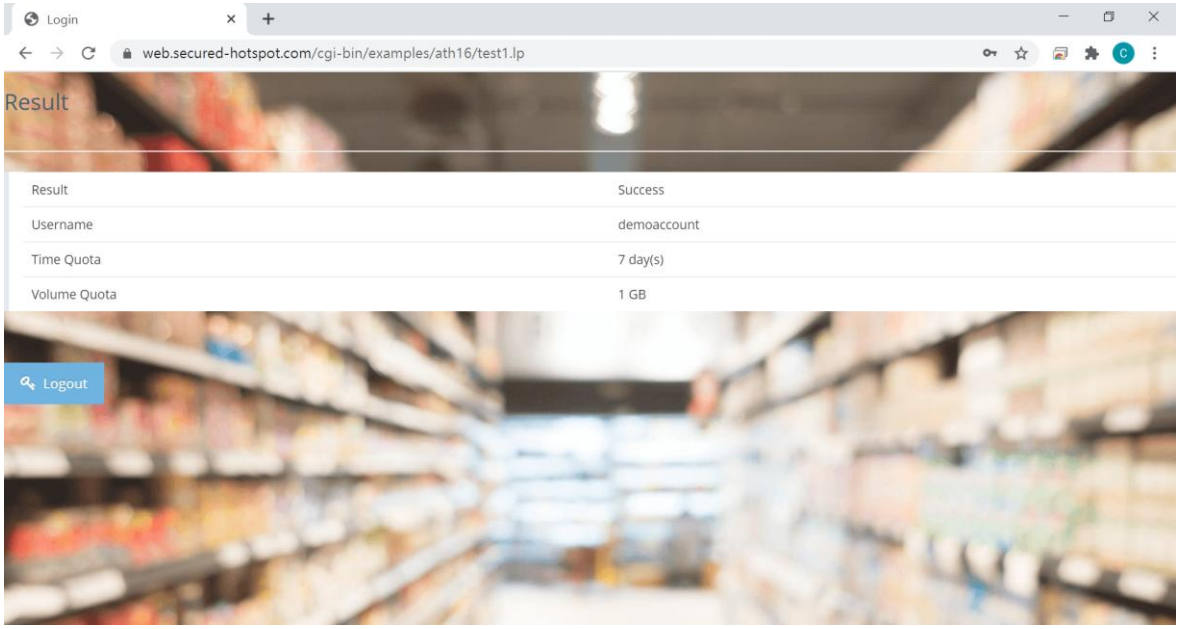
7. Wireless Client Login Test & Account Monitoring

7.1 Wireless Client Login Test

a. On your Wi-Fi device, connect to an SSID that has AuthPort enabled.
b. On the login screen, enter a set of pre-generated username and password (and tick the box for “I agree with terms and conditions” if necessary) to login.



c. The following screen will be shown upon successful login.



7.2 Account Monitoring

a. Go to “**Accounts**” from the “**AuthPort**” submenu. Here you will be able to monitor account status in real-time.