

Aerohive Networks (Extreme Networks)

U primjeru konfiguracije koriste se odvojeni management i klijentski VLAN:

- AP MGMT (VLAN 100)
- eduroam (VLAN 411)

Switchport prema AP-u konfiguriran je na sljedeći način:

- UNTAGGED za AP MGMT
- TAGGED za eduroam i AP MGMT

Adresa RADIUS poslužitelja u primjeru: 161.53.2.69

RADIUS portovi u primjeru: 1812 i 1813

Management mreža za AP u primjeru: 10.10.10.0/24

Mreža za eduroam korisnike u primjeru: 10.111.0.0/16

Obje mreže imaju izlaz prema Internetu.

Korištena oprema

Aerohive AP230 (HiveOS 10.0.10.2)

ExtremeCloud IQ (21.1.20.27)

Konfiguracija

Aerohive Networks AP-ovi su cloud managed te za konfiguraciju i upravljanje zahtijevaju povezanost sa privatnim ili javnim oblakom. Detaljan popis portova koje je potrebno propustiti između AP-a i clouda [nalazi se na stranici proizvođača](#).

CLI

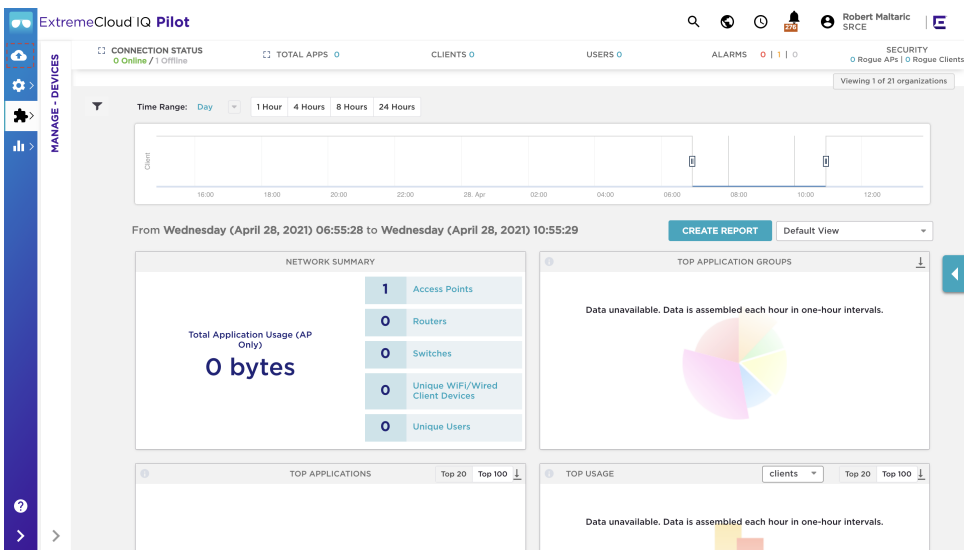
Ukoliko u management VLAN-u ne postoji DHCP, potrebno je ručno podesiti mrežne postavke AP-a

1. Konfiguracija mrežnih postavki AP-a:

```
interface mgt0 ip 10.10.10.151 255.255.255.0
ip route default gateway 10.10.10.1
```

GUI

1. Povežite se na [ExtremeCloud IQ](#) i kliknite na ikonu **ONBOARD** u gornjem lijevom kutu



- Unesite serijski broj AP-a u odgovarajuće polje te kliknite **Next** te nakon toga **Finish**

The screenshot shows the 'ADD DEVICES' screen in the ExtremeCloud IQ Pilot dashboard. The screen is divided into two main sections: 'STEP 1: ADD DEVICES' and 'DEVICES'. The 'STEP 1: ADD DEVICES' section includes a 'Device Type' dropdown (Real, Simulated) and a 'Please enter the serial numbers of your Extreme - Aerohive devices' text area. Below this is a 'Import from CSV using this format' section with a 'Choose a file or drag directly here' button and a 'Choose' button. The 'DEVICES' section shows 'No devices added', 'No location added', and 'No policy added'. A 'NEXT' button is visible at the bottom right.

- Nakon nekoliko minuta provjerite da li je AP-povezan na [ExtremeCloud IQ](#) klikom na karticu **MANAGE > DEVICES**

The screenshot shows the 'MANAGE > DEVICES' screen in the ExtremeCloud IQ Pilot dashboard. The screen displays a table of devices with the following columns: STATUS, HOST NAME, UPTIME, MGT IP ADDRESS, CLIENTS, MAC, LOCATION, SERIAL #, MODEL, OS VERSION, UPDATED, and WIFI POWER. The table shows one device with the following details: STATUS: Online, HOST NAME: AH-2175c0, UPTIME: 0d 0h 13m, MGT IP ADDRESS: 10.10.10.151, CLIENTS: 0, MAC: 9C5D12175CC, LOCATION: Assign Loc, SERIAL #: 023, MODEL: AP230, OS VERSION: 10.0.8.0 (1), UPDATED: 2021-04-28 14:03:32, and WIFI POWER: Auto. The table is filtered by 'Enter Hostname, MAC Addr or Serial #' and shows 'Showing 1 of 1 | 0 Selected | Select: All Pages, None'. The bottom of the screen shows a pagination bar with '10 | 20 | 50 | 100' and a 'Go' button.

STATUS	HOST NAME	UPTIME	MGT IP ADDRESS	CLIENTS	MAC	LOCATION	SERIAL #	MODEL	OS VERSION	UPDATED	WIFI POWER
Online	AH-2175c0	0d 0h 13m	10.10.10.151	0	9C5D12175CC	Assign Loc	023	AP230	10.0.8.0 (1)	2021-04-28 14:03:32	Auto

- Izradite novu mrežnu politiku klikom na karticu **CONFIGURE > NETWORK POLICIES > ADD NETWORK POLICY** Označite tipove uređaja za koji kreirate policy, upišite ime te kliknite na **Save**

ExtremeCloud IQ Pilot

Network Policies > New Poli...

POLICY DETAILS WIRELESS NETWORKS DEVICE TEMPLATES ROUTER SETTINGS ADDITIONAL SETTINGS DEPLOY POLICY

New Policy

What type of policy are you creating?

☒ Wireless ☐ Switches ☐ Routing

Please name your policy

Policy Name * SRCE

Description

EXIT SAVE

5. Na kartici **WIRELESS NETWORK** odaberite **+** za dodavanje nove mreže i odaberite **All Other Networks (standard)**

ExtremeCloud IQ Pilot

Network Policies > SRCE > All SSIDs

POLICY DETAILS WIRELESS NETWORKS DEVICE TEMPLATES ROUTER SETTINGS ADDITIONAL SETTINGS DEPLOY POLICY

Wireless Networks

+ Assign SSIDs using Classification Rules

Guest Access Network

All Other Networks (standard)

No records found.

EXIT NEXT

6. Podesite postavke bežične mreže:

ExtremeCloud IQ Pilot

Network Policies > SRCE > All SSIDs > New SSID

POLICY DETAILS WIRELESS NETWORKS DEVICE TEMPLATES ROUTER SETTINGS ADDITIONAL SETTINGS DEPLOY POLICY

CONFIGURATION GUIDE

Wireless Network

Policy Name SRCE

SSID (Name) eduroam

RADIUS Server Group + Add Radius Server Group

Name (SSID) * eduroam

Broadcast Name * eduroam

Broadcast SSID Using

☒ WiFi Radio (2.4 GHz or 5 GHz)

☒ WiFi Radio (5 GHz only)

SSID Usage

SSID AUTHENTICATION MAC AUTHENTICATION

Enterprise WPA / WPA2 / WPA3

Personal WPA / WPA2 / WPA3

Private Pre-Shared Key

WEP

Open Unsecured

Key Management WPA2-802.1X

Encryption Method CCMP (AES)

Enable Captive Web Portal OFF

EXIT CANCEL SAVE

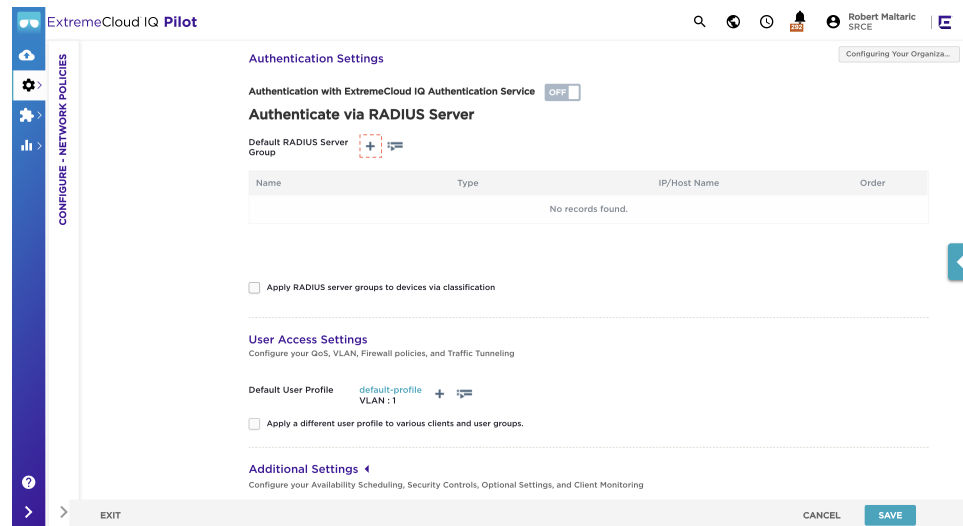
Pod **Name (SSID)** i **Broadcast Name** unesite ime bežične mreže eduroam

U sekciji **SSID Usage > SSID AUTHENTICATION** odaberite **Enterprise** kao način autentikacije

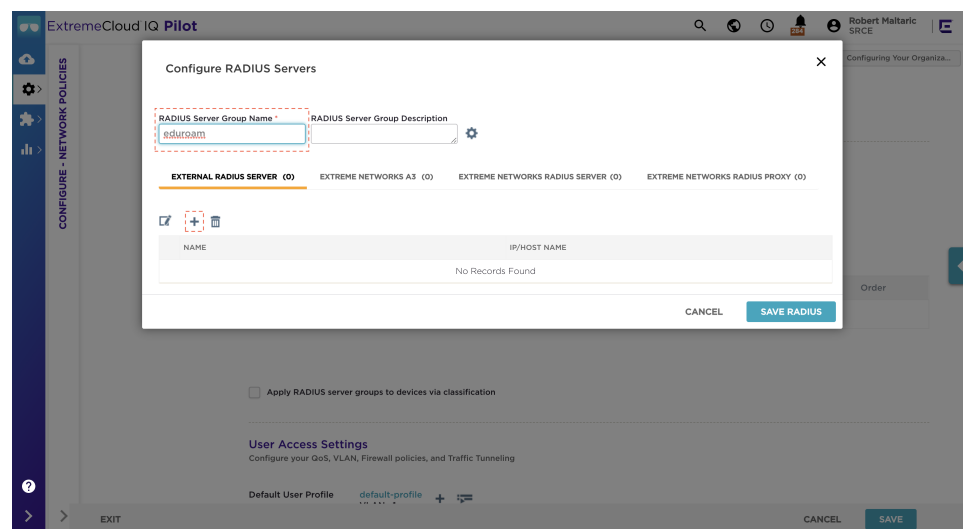
Key Management postavite na **WPA2-802.1X**

Kao **Encryption Method** odaberite **CCMP (AES)**

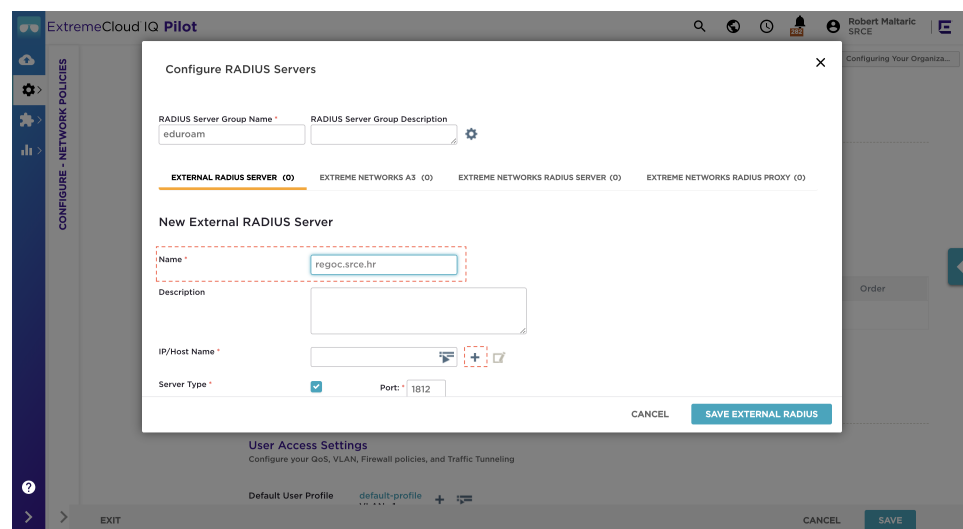
U sekciji **Authentication Settings** kliknite na **+** za dodavanje novog RADIUS poslužitelja



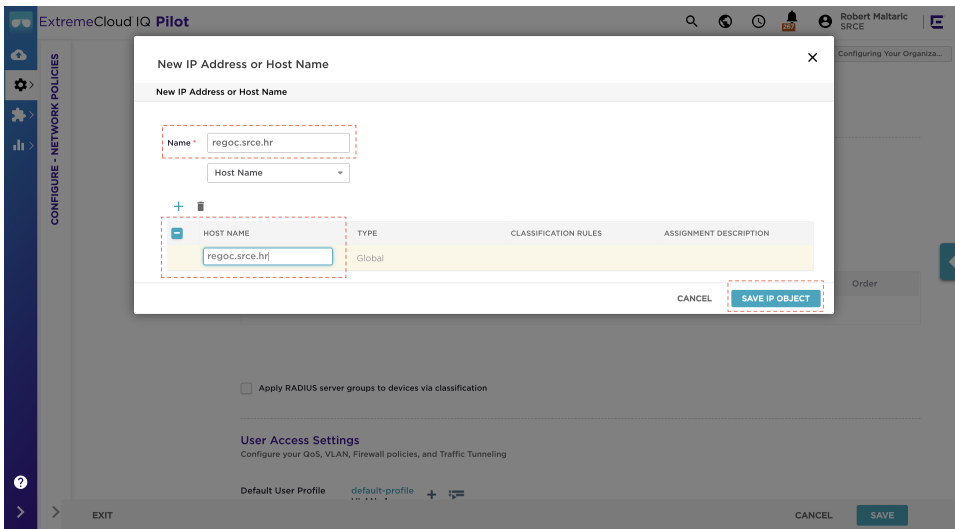
- Pod **RADIUS Server Group Name** unesite ime grupe prema želji
Na kartici **EXTERNAL RADIUS SERVER** kliknite **+** za dodavanje novog poslužitelja



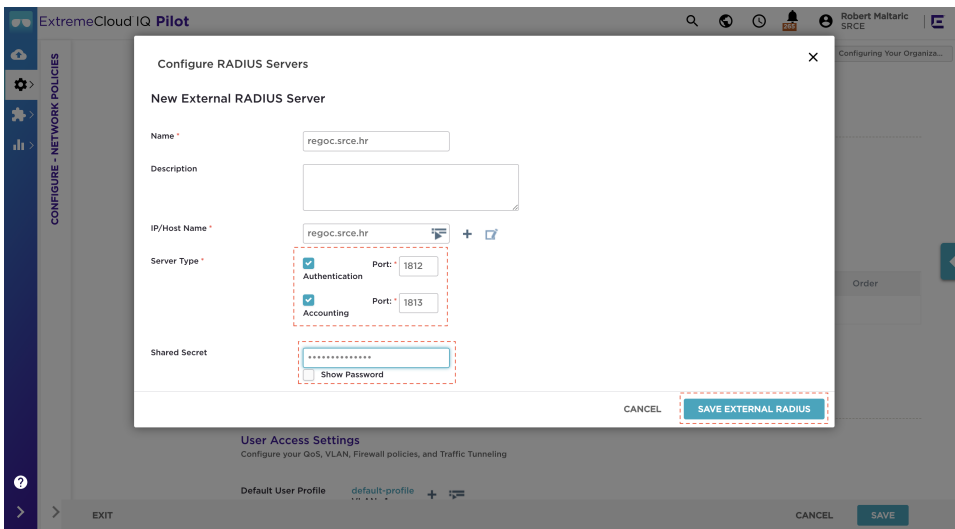
- Pod **Name** unesite ime vašeg RADIUS poslužitelja
Pod **IP/Host Name** odaberite **+** za dodavanje nove IP adrese ili DNS imena poslužitelja



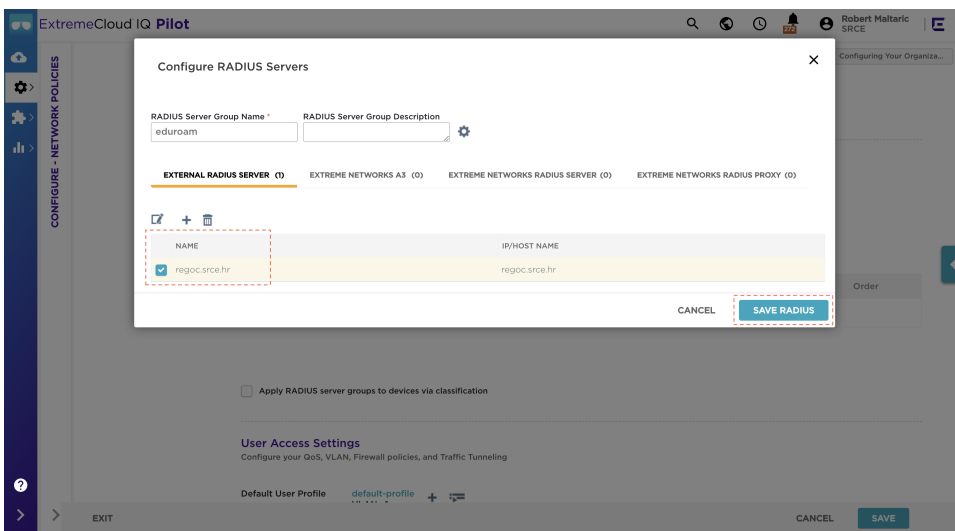
- Pod **Name** unesite ime poslužitelja a pod **Host Name** unesite DNS ime poslužitelja te nakon toga kliknite **SAVE IP OBJECT**



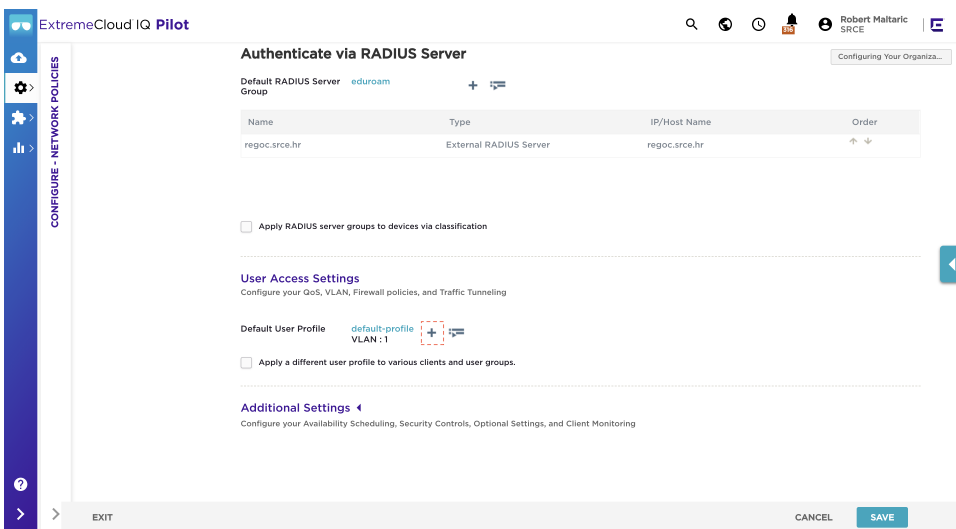
10. Pod **Server Type** označite **Authentication** i **Accounting** te u polja **Port** unesite odgovarajuće portove
U polje **Shared Secret** unesite lozinku definiranu na RADIUS poslužitelju i kliknite **SAVE EXTERNAL RADIUS**



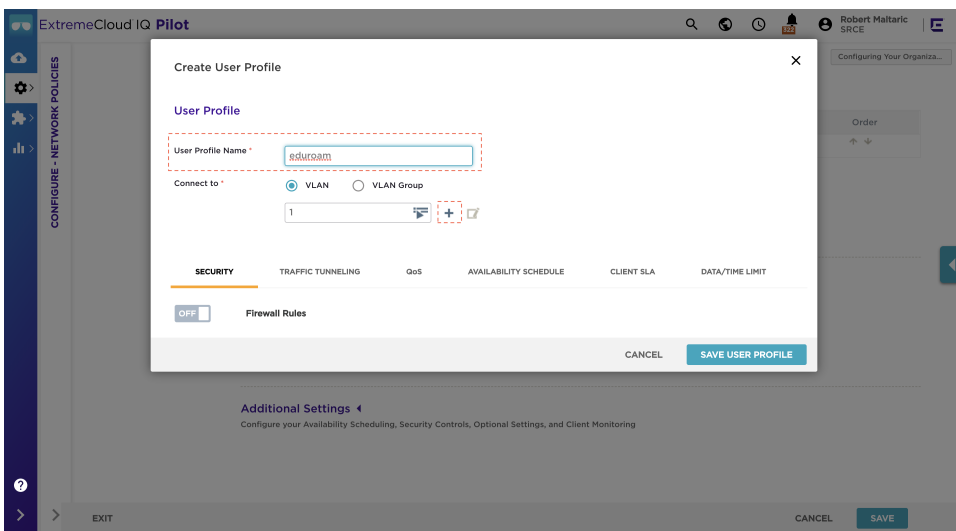
11. Na popisu poslužitelja označite prethodno kreirani poslužitelj te kliknite **SAVE RADIUS**



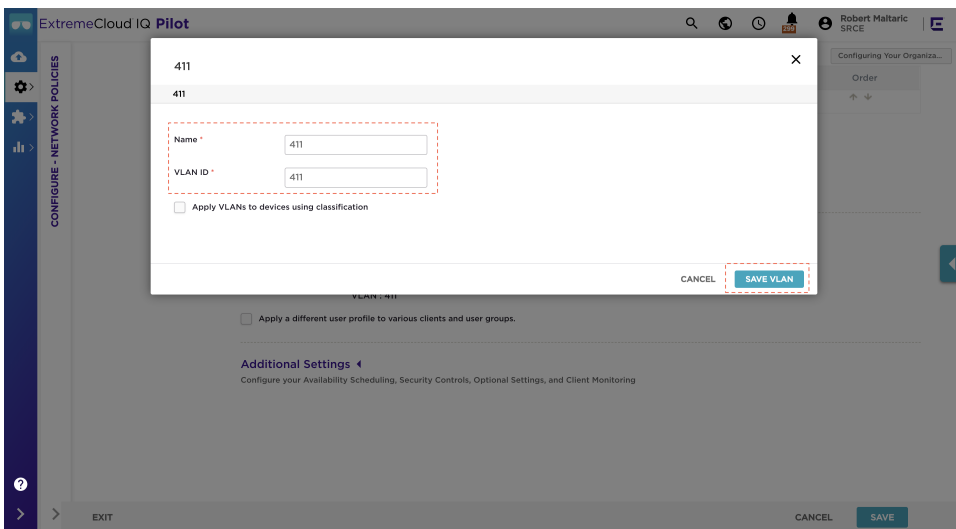
12. U sekciji **User Access Settings** kliknite na **+** pod **Default User Profile** za kreiranje novog korisničkog profila



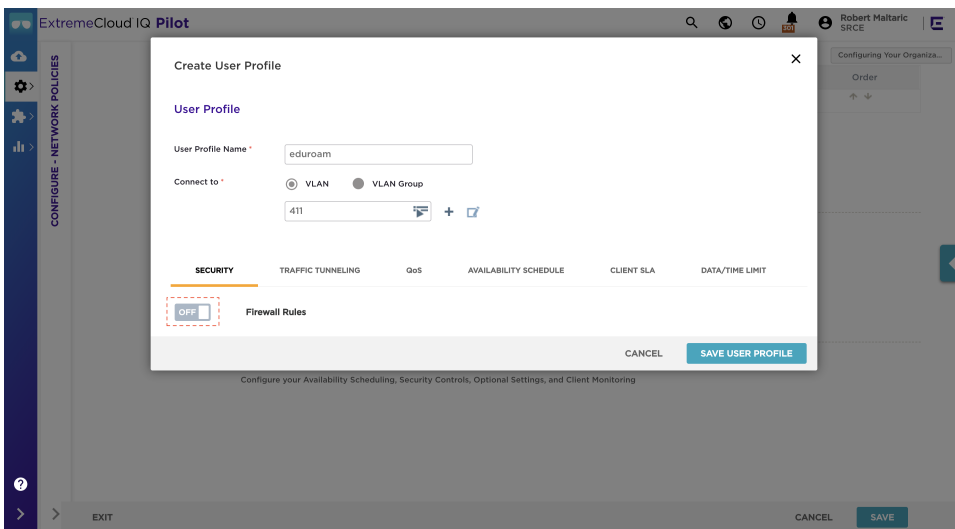
13. Pod **User Profile Name** upišite ime profila te kliknite na **+** za definiranje VLAN-a



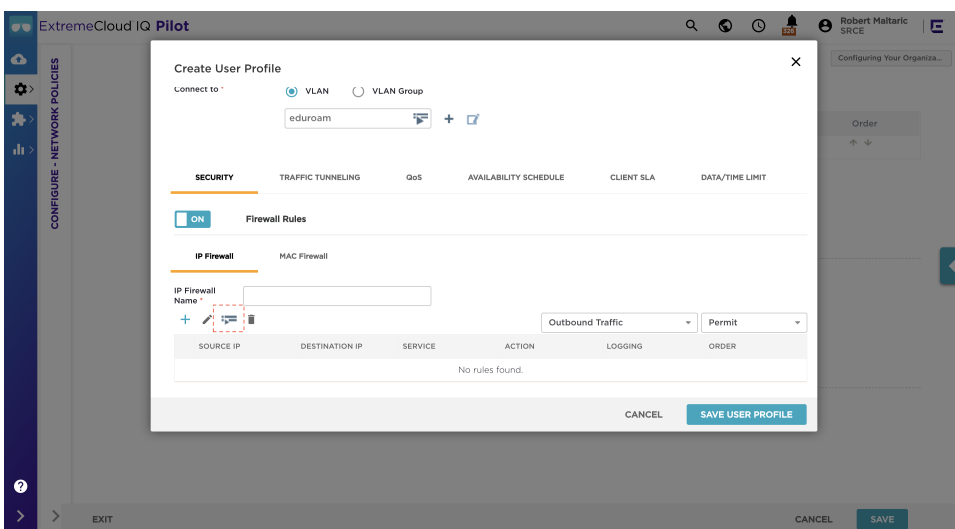
14. Pod **Name** upišite ime VLAN-a
Pod **VLAN ID** upišite ID VLAN-a i kliknite **SAVE VLAN**



15. (Opcionalno): Na kartici **SECURITY** omogućite opciju **Firewall Rules**

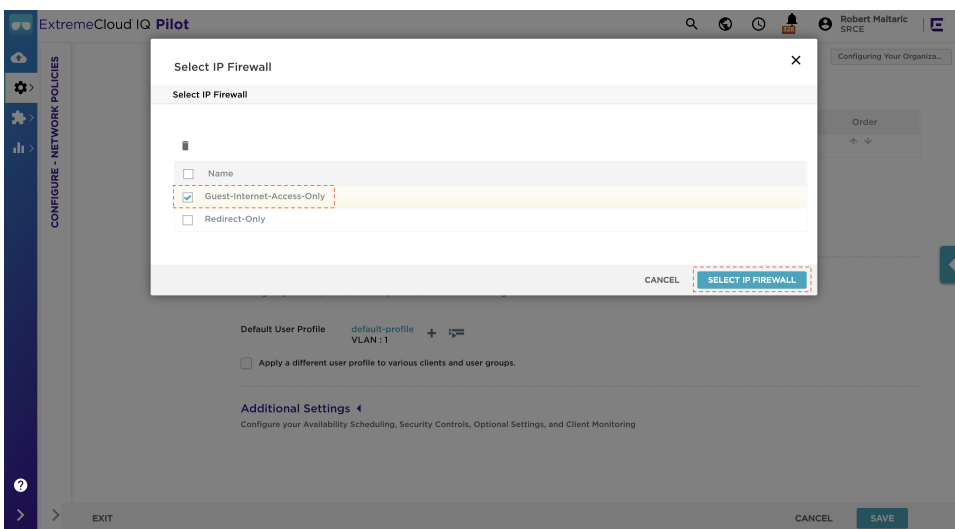


16. (Optionalno): Na kartici **SECURITY > IP Firewall** kliknite na ikoncu za odabir predefiniranih pravila

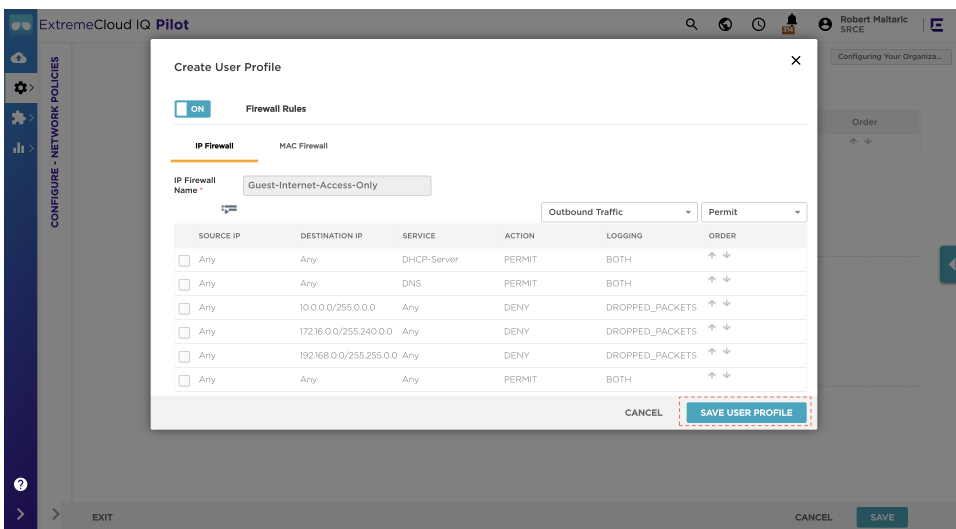


17. (Optionalno): Odaberite profil vatrozida **Guest-Internet-Access-Only** koji će korisnicima omogućiti pristup internetu uz zabranu pristupa internim resursima.

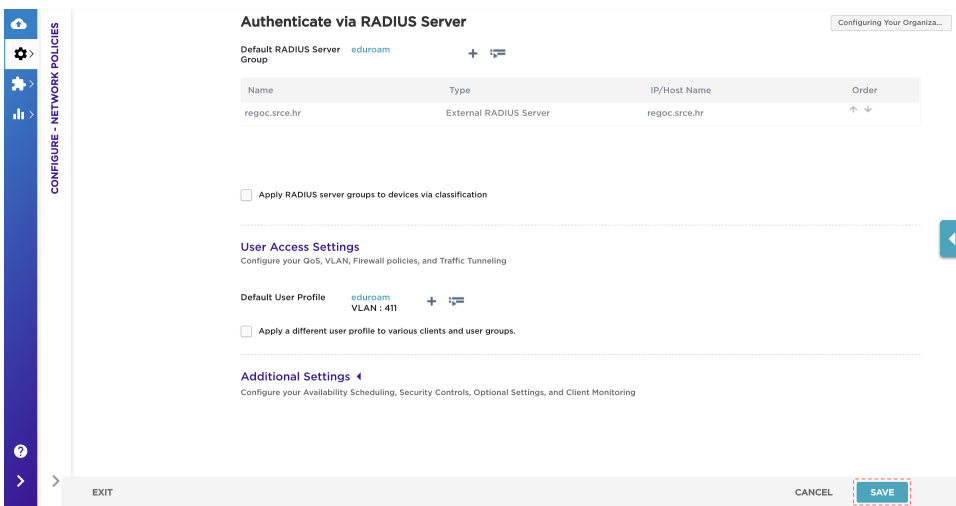
Kliknite na **SELECT IP FIREWALL**



18. Završite kreiranje profila klikom na **SAVE USER PROFILE**



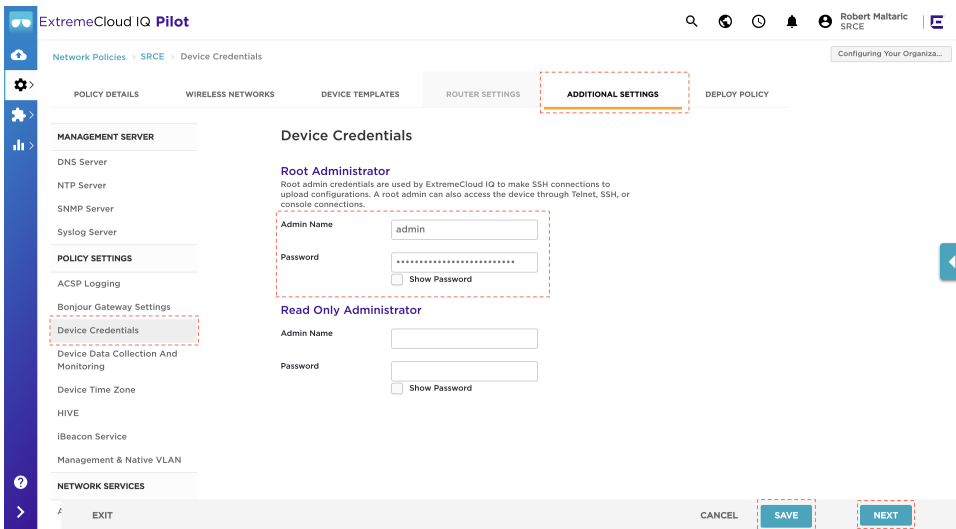
19. Završite kreiranje profila eduroam bežične mreže klikom na **SAVE**



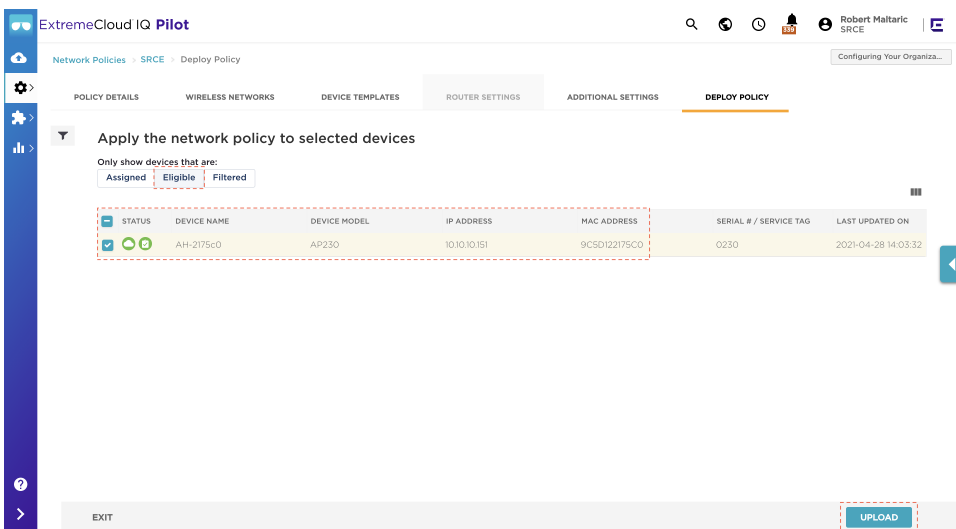
20. Odaberite karticu **ADDITIONAL SETTINGS > POLICY SETTINGS > Device Credentials**

Pod **Root Administrator** unesite administratorske korisničke podatke za pristup uređaju

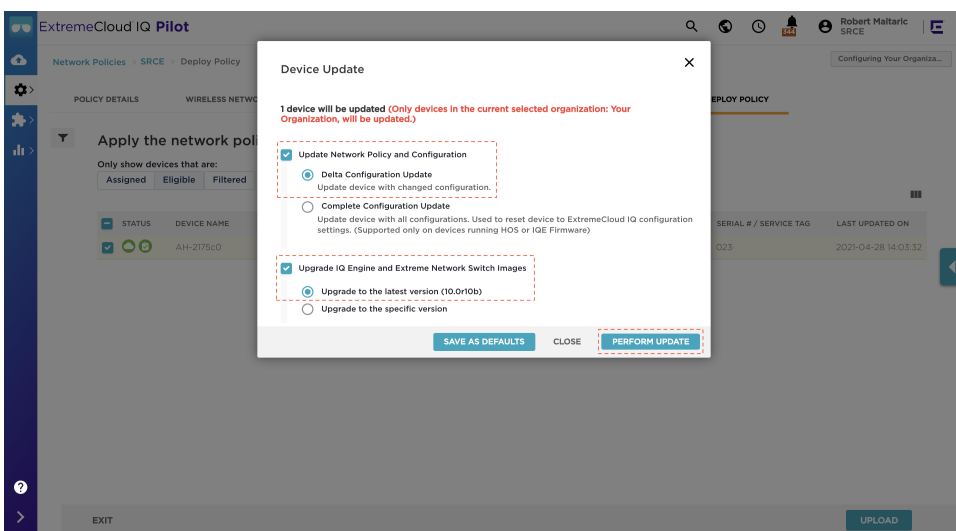
Kliknite **SAVE** te nakon toga na **NEXT**



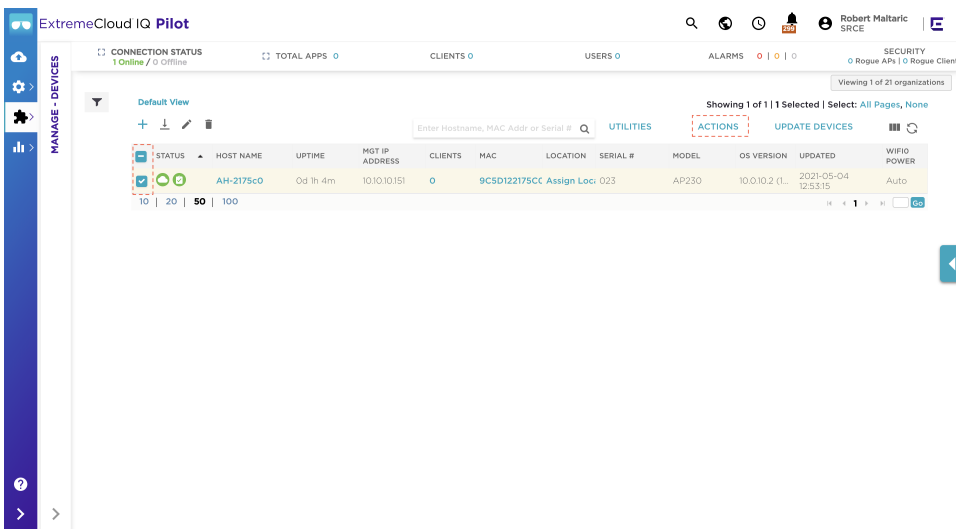
21. Pod karticom **DEPLOY POLICY** odaberite **Eligible** kako bi se prikazali uređaji na koje možete primjeniti kreiranu mrežnu politiku
Odaberite jedan ili više uređaja na koje želite primjeniti mrežnu politiku te kliknite na **UPLOAD**



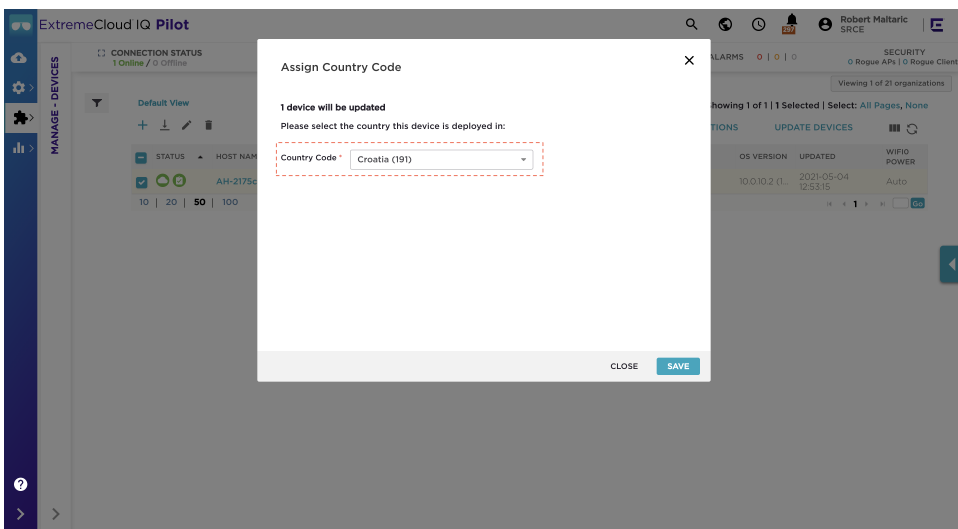
22. Odaberite **Update Network Policy and Configuration > Delta Configuration Update**
(Opcionalno) Odaberite **Upgrade IQ Enging and Extreme Network Switch Images > Upgrade to the latest version**



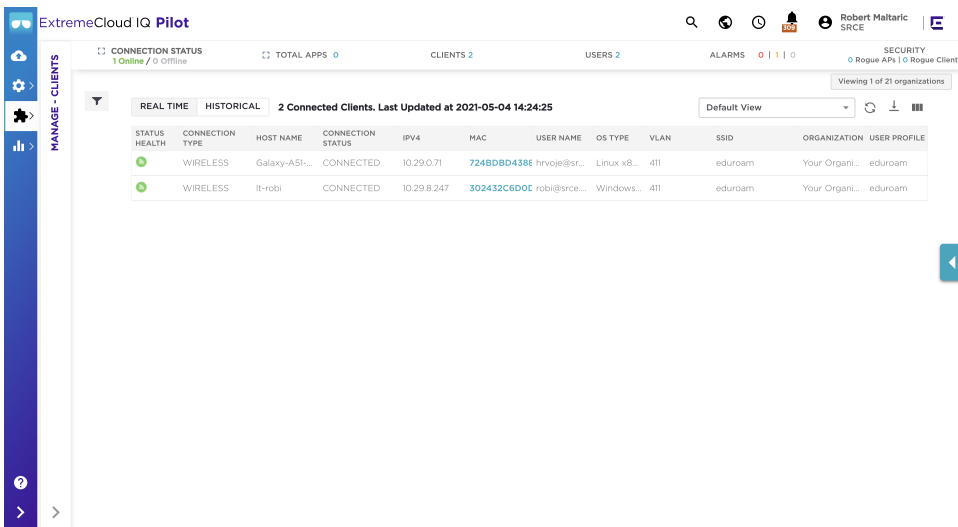
23. Sa lijeve strane prebacite se na karticu **CONFIGURE > DEVICES**
Odaberite jedan ili više uređaja te odaberite **ACTIONS > ASSIGN COUNTRY CODE**



24. Odaberite **Croatia** i kliknite **SAVE** nakon čega će se AP ponovo pokrenuti



25. Nakon ponovnog pokretanja AP-a i njegovog spajanja na ExtremeCloud IQ spojite se na eduroam bežičnu mrežu
 Provjerite uspješno spajanje na **MANAGE > CLIENTS**



26. Podesite ostale postavke prema potrebama i prema dizajnu bežične mreže