# **Ruckus SmartZone**

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: 161.53.2.74

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

Ruckus R310 (110.0.0.683)

Ruckus Virtual SmartZone (5.1.1.0.598)

## Konfiguracija

Ruckus SmartZone je cloud managed rješenje koje za konfiguraciju i upravljanje zahtijeva 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:

```
set ipaddr wan 10.10.10.150 255.255.255.0 10.10.10.1
```

2. Konfiguracija SmartZone adrese

set scg ip AAA.BBB.CCC.DDD reboot

#### GUI

- 1. Povežite se na SmartZone i kliknite na karticu Access Points
- 2. Unutar svoje Domene, kreirajte novu Zonu klikom na +



#### 3. Konfigurirajte Zonu

Virtual SmartZone	Configure Group	× > 💁 🕜
Dashboard	* Name: SRCE Description:	h Map
System	Type: (e) Cone AP Group Parent Group: SRCE	2 ±
Access Points		(G) Latenc
Switches	Configuration	
Wireless LANs	General Options	
Clients	* AP Firmware: 5.1.1.0.2150	
Applications	Country Code: Croatia   Different countries have different regulations on the usage of radio channels.	
Services & Profile	To ensure that this zone is using an authorized radio channel, select the correct country code for your location.	
Depart	Location: (example: Ruckus HQ)	
	Location Additional Information: (example: 350 W Java Dr. Sumyvale, CA, USA)	× 1 ×
Troubleshooting	UP 3 Son Universe Language. UPSample: 37.411272, -122.01701b)	
Administration	OK Cancel	v
Events & Alarms		

Unesite ime zone pod **General Options > Name** Odaberite Croatia pod **General Options > Cuntry Code** Kreirajte novi korisnički račun za pristup AP-u pod **General Options > AP Admin Logon** Odaberite isključivo kanale 1, 6 i 11 pod **Radio Options > Channel Range (2.4G)** Postavite širinu kanala na 20 pod **Radio Options > Radio Options (2.4 GHz) > Channelization** Za završetak kreiranja Zone kliknite na **OK** 

4. Prebacite AP iz Staging Zone u novokreiranu Zonu klikom na Move

Virtual SmartZone - High Scale	≡			MLRuckusvSZ-H 2020-04-30 11:12:00	C default • 🗘 💁	0
Dashboard	Access Points (6)	2 online 0 flagged 4 offline		View Ma	ide: List <b>Group</b> Mesh Map	
System 🕨	System - RuckusAP (C8:03:F5:15:19:	60)				
Access Points	+ 🖉 🖄 🗙 More 🗸 📿 🔇	🖉 Configure 😂 Move 📋 Delete	More 🔻	search	table 🔍 Q 🗸 🕹	
	- D System 4	MAC Address 🔺 AP Name	Status Alarm	IP Address Total Traffic (1hr)	Clients Latency (2.4G) Laten	¢
Switches	E DA SRCE	4C:B1:CD:02:81:20 AP4 kolonija	Offline	192.168.11.42 N/A		
	\pm 🗾 Staging Zone 🥑	54:EC:2F:15:20:C0 RuckusAP	Offline	172.16.3.16 N/A		
Wireless LANs		54:EC:2F:39:A7:20 RuckusAP	Offline 0	172.16.3.15 N/A	0 0	č
Clients ►		C8:03:F5:15:19:60 RuckusAP	Online 0	10.10.10.150 N/A	0 0	
		EC:58:EA:1B:02:D0 RuckusAP	Offline 0	192.168.5.42 N/A	0 0	
Applications		EC:58:EA:22:5F:60 DZ_m510_1	Online 0	192.168.0.1 N/A	0	
Services & Profiles						
Report 🕨					6 records « 1 »	
Troubleshooting	General Configuration Health	Traffic Alarm Event Clients	Wired Clients GPS Location			
Administration F	AP Info				W	
Events & Alarms 🔹 🕨	AP MAC Address C	3:03:F5:15:19:60	Firmware Version	5.1.1.0.2150		

5. Klikom na karticu Services & Profiles > Authentication > Create kreirajte postavke svog RADIUS poslužitelja

RUCKUS"	=				a 🗖		0	<u>.</u>	0
Virtual SmartZone + High Scale		Create AAA Server	×	120-03-03 16.22.37					
	Non-Proxy (AP Authenticato								
		General Options					Q		
	- D System	Nome: gatekeeper-auch						1	¢
	+ Das SRCE	Description:				No data		-	
		Backup RADIUS: Deable Secondary Server							
		Primary Server							
		* IP Address: 161.53.2.74							
		* Shared Secret:							
		* Confirm Secret:							
		User Role Mapping							
		+ Create 🖉 Configure 🗈 Delete							
		Group Attribute Value A User Role User Traffic Profile							
		OK Cancel							
			_						

Unesite ima poslužitelja pod **General Options > Name** Odaberite tip poslužitalja kao **RADIUS** pod **General Options > Type** Unesite IP adresu poslužitelja pod **Primary Server > IP Address** Unesite RADIUS authentication port pod **Primary Server > Port** Unesite tajnu lozinku za vašeg RADIUS klijenta pod **Primary Server > Shared Secret** Ponovite tajnu lozinku za vašeg RADIUS klijenta pod **Primary Server > Shared Secret** Završite kreiranje RADIUS poslužitelja klikom na **OK** 

6. Klikom na karticu Services & Profiles > Accounting > Create kreirajte postavke svog RADIUS poslužitelja

Mintual SmartZone - High Scale			MLRuckusy52-H 2020-05-05 18:33:39 20 default 🔹 🕸 🏩 🕜
Dashboard	Non-Proxy Proxy Realm Based Proxy		
System 🕨		Edit Zone AAA Server: gatekeeper-acct ×	search table Q
Access Points	- D System		0
Switches	+ DA SRCE	General Options	
Wheless LANs		Name: gatekeeper-acct	
Clients •		Type:	
Applications		Backup RADIUS: Correl Enable Secondary Server	
Services & Profiles 🛛 🔻		Primary Server V	
Hotspets & Portals		* IP Address: 161.53.2.74 * Port: 1813	
Access Control		* Shared Secret:	
Application Control			
URL Filtering		OK Cancel	
WI-FI Calling		·	
Authentication			
Accounting			

Unesite ima poslužitelja pod **General Options > Name** Odaberite tip poslužitalja kao **RADIUS Accounting** pod **General Options > Type** Unesite IP adresu poslužitelja pod **Primary Server > IP Address** Unesite RADIUS accounting port pod **Primary Server > Port** Unesite tajnu lozinku za vašeg RADIUS klijenta pod **Primary Server > Shared Secret** Ponovite tajnu lozinku za vašeg RADIUS klijenta pod **Primary Server > Shared Secret** Završite kreiranje RADIUS poslužitelja klikom na **OK** 

7. Klikom na karticu Wireless LANs > Create kreirajte postavke za novi SSID



#### 8. Podesite postavke za eduroam SSID

Virtual SmartZone - H	Create WLAN Configuration	×	🗢 🏯 🕜
Dashboard	Augusta Augusta		lst Group
System	General Options		
Access Points	* Name: 1 educam * SSID: educam		Q 2 VLA 🍄
Switches	Description:		
Wireless LANs	* LONE: CONE: Contact * *		
Cients	Authentication Options		
Applications	* Authentication Type: @ Standard usage (For most regular Hotspot (MISPy) Guest Access Web Authentication wireless networks)		
Services & Profiles	Hotpot 2.0 Access Hotpot 2.0 Orboarding WeChat		
Report	metrior. O open the accuration of the models of a control and a model		
Troubleshooting	Encryption Options  * Method: WPA4 VWPA4 WEP-44 (40 bits) WEP-128 (104 bits) Hone		
Administration			
Events & Alarms	OK Cancel		

Unesite ime eduroam za naziv profila pod General Options > Name Unesite naziv eduroam kao ime mreže pod General Options > SSID Odaberite konfiguriranu zonu pod General Options > Zone Odaberite konfiguriranu AP grupu pod General Options > WLAN Group Kao način autentikacije pod Authentication Options > Authentication Type odaberite Standard usage Kao metodu autentikacije pod Authentication Options > Method odaberite 802.1X EAP Kao metodu enkripcije pod Encription Options > Method odaberite WPA2 Kao algoritam enkripcije pod Encription Options > Algorithm odaberite AES Odaberite ranije kreirani RADIUS authentication poslužitelj pod Authentication and Accounting Services > Authentication Service Odaberite ranije kreirani RADIUS accounting poslužitelj pod Authentication and Accounting Services > Accounting Services Uključite Options > Wireless Client Isolation za međusobnu izolaciju klijenata na bežičnoj mreži Unesite VLAN ID od vaše eduroam mreže pod Advanced Options > VLAN ID



#### Isključite Advanced Options > AAA Override

Završite kreiranje eduroam SSID klikom na OK

9. Nakon nakoliko minuta na kartici Clients > Wireless Clients provjerite uspješnu autentikaciju na AP



10. Kreirajte pravilo za automatsku registraciju i propagaciju novih AP-ova pod karticom System > AP Settings > AP Registration



11. Spojite ostale AP-ove i podesite detaljne postavke sustava prema dizajnu bežične mreže i prema vlastititm potrebama.