

aruba

This section was kindly provided by John Mitchell, Glen Johnson (both University of Alaska), Dave Worth, Philippe Hanset (both University of Tennessee) and Jeff Hagley (Internet2).

Configuring Aruba Wireless controllers for eduroam is no different than any other 802.1x wireless network on your campus.

1. **Create RADIUS Server(s)**
Configuration > Authentication > Servers > RADIUS Server > Add
2. **Create RADIUS Server Group**
Configuration > Authentication > Servers > Server Group > Add
3. **Create 802.1x Group Auth. Profile**
Configuration > Authentication > L2 Auth. > 802.1x Auth. Profile > Add
4. **Create User Roles**
Configuration > Access Control > User Roles > Add
5. **Create AAA Profile**
Configuration > Authentication > AAA Profiles > Add
6. **Create SSID Profile**
Configuration > All Profiles > Wireless LAN > SSID Profile > Add
7. **Create Virtual AP**
Configuration > All Profiles > Wireless LAN > Virtual AP Profile > Add
Select SSID and AAA Profiles created above

The following screenshots show these steps in the web configuration interface:

Step 1:

RADIUS Server > Radius1 - eduroam Show Reference Save As Reset

Host	Your RADIUS server IP	Key Retype:
Auth Port	1812	Acct Port	1813
Retransmits	3	Timeout	5 sec
NAS ID	eduroam	NAS IP	The IP from which RADIUS requests arrive
Use MD5	<input type="checkbox"/>	Mode	<input checked="" type="checkbox"/>

NAS-Identifier for filtering

Step 2:

Server Group > eduroam Show Reference Save As Reset

server configs include NAS-Identifier of "eduroam"

Name	Server-Type	trim-FQDN	Match-Rule	Actions
Radius1 - eduroam	Radius	No		Edit Delete ▲ ▼
Radius2 - eduroam	Radius	No		Edit Delete ▲ ▼

Server Rules

Priority	Attribute	Operation	Operand	Type	Action	Value	Validated	Actions
New								

Step 3:

802.1X Authentication Profile > eduroam Show Reference Save As Reset

Basic Advanced

Max authentication failures	<input type="text" value="0"/>
Enforce Machine Authentication	<input type="checkbox"/>
Machine Authentication: Default Machine Role	<input type="text" value="guest"/>
Machine Authentication: Default User Role	<input type="text" value="guest"/>
Reauthentication	<input type="checkbox"/>
Termination	<input type="checkbox"/>
Termination EAP-Type	<input type="checkbox"/> eap-tls <input type="checkbox"/> eap-peap
Termination Inner EAP-Type	<input type="checkbox"/> eap-mschapv2 <input type="checkbox"/> eap-gtc

Step 4:

Security > Access Control > User Roles

User Roles System Roles Policies Time Ranges Guest Access

Name	Firewall Policies	Bandwidth Contract	Actions
default-via-role	allowall	Up:Not Enforced Down:Not Enforced	Show Reference Edit Delete
eduroam-authenticated	common-block-dhcp-serving,common-block-netbios,eduroam-block-gateways,allowall	Up:Not Enforced Down:Not Enforced	Show Reference Edit Delete
eduroam-logon	blockall	Up:Not Enforced Down:Not Enforced	Show Reference Edit Delete

Step 5:

AAA Profile > Show Reference

Initial role	<input type="text" value="eduroam-logon"/>	MAC Authentication Default Role	<input type="text" value="guest"/>
802.1X Authentication Default Role	<input type="text" value="eduroam-authenticated"/>	User derivation rules	<input type="text" value="--NONE--"/>
Wired to Wireless Roaming	<input type="checkbox"/>	SIP authentication role	<input type="text" value="--NONE--"/>

MAC Authentication Profile	
MAC Authentication Server Group	default
802.1X Authentication Profile	eduroam
802.1X Authentication Server Group	eduroam
RADIUS Accounting Server Group	eduroam
XML API server	
RFC 3576 server	

Step 6:

SSID Profile > eduroam Show Reference Save As Reset

Basic **Advanced**

Network

Network Name (SSID)

802.11 Security

Network Authentication None 802.1x/WEP WPA WPA-PSK WPA2 WPA2-PSK
 Mixed

Encryption AES

Keys

Step 7:

SSID Profile > eduroam Show Reference Save As Reset

Basic **Advanced**

SSID enable **ESSID**

Encryption

<input type="checkbox"/> opensystem	<input type="checkbox"/> static-wep
<input type="checkbox"/> dynamic-wep	<input type="checkbox"/> wpa-tkip
<input type="checkbox"/> wpa-aes	<input type="checkbox"/> wpa-psk-tkip
<input type="checkbox"/> wpa-psk-aes	<input checked="" type="checkbox"/> wpa2-aes
<input type="checkbox"/> wpa2-psk-aes	
<input type="checkbox"/> wpa2-psk-tkip	
<input type="checkbox"/> wpa2-tkip	

- eduroam
- AAA Profile eduroam
- 802.11K Profile default
- SSID Profile eduroam
- WMM Traffic Management Profile