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1.1 Revision History

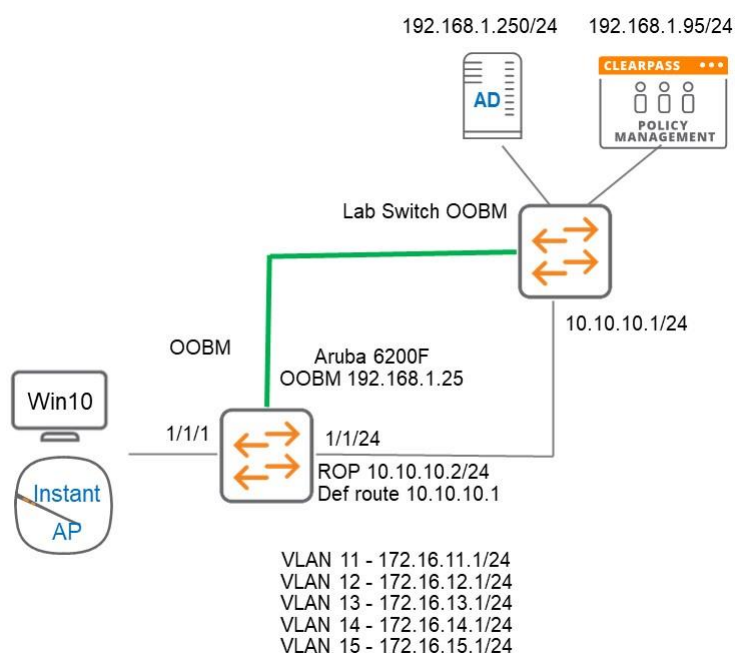
DATE	VERSION	EDITOR	CHANGES
10 Jan 2023	0.1	Ariya Parsamanesh	Initial creation

2 ClearPass Wired Enforcement for CX Switches Part 6

This is the final part of 6x parts series on Aruba CX switch wired enforcement and the main objective of this guide is to build on the first four parts. Here we'll cover downloadable user roles (DUR).

We'll use DUR for

- Instant APs (IAP) that use dot1x for AP authentication.
- IAP profiling
- Wireless clients that connect to IAPs



2.1 Things you need

- ClearPass Policy Manager 6.9.7 (VM)
- Aruba CX switch running firmware version 10.10.1020
- Instant AP firmware version 8.11.0.1
- A wired connected laptop.

We assume the reader has gone through the first five parts of this 6x parts series.

3 Downloadable User Roles for IAPs

3.1 DUR with Instant APs – dot1x

When using DUR for Aruba Instant APs we need to first configure a DUR enforcement profile.

Enforcement Profiles - CX-DUR-InstantAP-1x

Summary	Profile	Attributes		
Profile:				
Name:	CX-DUR-InstantAP-1x			
Description:				
Type:	RADIUS			
Action:	Accept			
Device Group List:	-			
Product:	AOS-CX			
Attributes:				
Type	Name	Value		
1.	Radius:Aruba	Aruba-CPPM-Role	=	class ip IP-Any-Any2 10 match any any any
				port-access policy InstantAP-Pol2 10 class ip IP-Any-Any2
1.	Radius:Aruba	Aruba-CPPM-Role	=	port-access role DUR-InstantAP-1x description DUR-for-IAPs associate policy InstantAP-Pol2 auth-mode device-mode poe-priority critical trust-mode dscp vlan trunk native 15 vlan trunk allowed 11-12

Here is the details of the attribute value

```
class ip IP-Any-Any2
  10 match any any any

port-access policy InstantAP-Pol2
  10 class ip IP-Any-Any2

port-access role DUR-InstantAP-1x
  description DUR-for-IAPs
  associate policy InstantAP-Pol2
  auth-mode device-mode
  poe-priority critical
  trust-mode dscp
  vlan trunk native 15
  vlan trunk allowed 11-12
```

Now I'll just update the enforcement policy for our DUR dot1x service.

Services - CX DUR dot1x Wired

Summary	Service	Authentication	Roles	Enforcement
Use Cached Results:		☐ Use cached Roles and Posture attributes from previous sessions		
Enforcement Policy:		Wired 802.1X Wired DUR Enforcement Policy ▼ Modify		Add New Enforcement Policy
Enforcement Policy Details				
Description:				
Default Profile:		CX dot1x Wired Default Profile		
Rules Evaluation Algorithm:		first-applicable		
Conditions		Enforcement Profiles		
1.	(Authorization:Lab-AD:memberOf CONTAINS Staff)	CX-DUR-Staff, [Update Endpoint Known]		
2.	(Authorization:Lab-AD:memberOf CONTAINS Student)	CX-DUR-Student, [Update Endpoint Known]		
3.	(Tips:Role EQUALS InstantAP)	CX-DUR-InstantAP-1x		

3.2 Testing DUR with Instant APs Dot1x

Before we connect the IAP to interface 1/1/1 of the switch, just ensure that you've configured the IAP for dot1x authentication. We covered that in part 2 of the series.

Now checking the ClearPass access tracker

Filter:	Request ID	contains		Go	Clear Filter	S
#	Server	Source	Username	Service	Login Status	Enforcement Profiles
1.	192.168.1.95	RADIUS	InstantAP	CX DUR dot1x Wired	ACCEPT	CX-DUR-InstantAP-1x

Summary	Input	Output
Login Status:	ACCEPT	
Session Identifier:	R00000001-01-63bf6331	
Date and Time:	Jan 12, 2023 12:32:33 AEDT	
End-Host Identifier:	20-4C-03-23-A7-C0 (Access Points / Aruba / Aruba IAP)	
Username:	InstantAP	
Access Device IP/Port:	192.168.1.25:1 (CX-SW1 / Aruba)	
Access Device Name:	6200-Lab	
System Posture Status:	UNKNOWN (100)	
Policies Used -		
Service:	CX DUR dot1x Wired	
Authentication Method:	EAP-PEAP,EAP-MSCHAPv2	
Authentication Source:	Local:localhost	
Authorization Source:	[Local User Repository]	
Roles:	InstantAP [User Authenticated]	
Enforcement Profiles:	CX-DUR-InstantAP-1x	

Summary	Input	Output	Accounting
Enforcement Profiles:	CX-DUR-InstantAP-1x		
System Posture Status:	UNKNOWN (100)		
Audit Posture Status:	UNKNOWN (100)		
RADIUS Response			
Radius:Aruba:Aruba-CPPM-Role	<pre>CX_DUR_InstantAP_1x-3029-4 class ip IP-Any-Any2 10 match any any any port-access policy InstantAP-Pol2 10 class ip IP-Any-Any2 port-access role DUR-InstantAP-1x description DUR-for-IAPs associate policy InstantAP-Pol2 auth-mode device-mode poe-priority critical trust-mode dscp vlan trunk native 15 vlan trunk allowed 11-12</pre>		

From the switch we can see this

```
6200-Lab# sh port-access clients
```

Port Access Clients

Status Codes: d device-mode, c client-mode, m multi-domain

Port	MAC-Address	Onboarding	Status	Role
Device Type		Method		
d 1/1/1	20:4c:03:23:a7:c0	dot1x	Success	CX_DUR_InstantAP_1x-3029-4

```
6200-Lab# sh port-access clients detail
```

Port Access Client Status Details:

Client 20:4c:03:23:a7:c0, InstantAP

=====

Session Details

Port : 1/1/1
Session Time : 326s
IPv4 Address :
IPv6 Address :
Device Type :

VLAN Details

VLAN Group Name :
VLANs Assigned : 11-12,15
Access :
Native Untagged : 15
Allowed Trunk : 11-12

Authentication Details

Status : dot1x Authenticated
Auth Precedence : dot1x - Authenticated, mac-auth - Not attempted
Auth History : dot1x - Authenticated, 287s ago
mac-auth - Authenticated, 316s ago
dot1x - Unauthenticated, Supplicant-Timeout, 316s ago

Authorization Details

Role : CX_DUR_InstantAP_1x-3029-4
Status : Applied

Role Information:

Name : CX_DUR_InstantAP_1x-3029-4

Type : clearpass

Status: Completed

Reauthentication Period :
Cached Reauthentication Period :
Authentication Mode : device-mode
Session Timeout :
Client Inactivity Timeout :
Description : DUR-for-IAPs
Gateway Zone :

```

UBT Gateway Role           :
UBT Gateway Clearpass Role :
Access VLAN                :
Native VLAN                : 15
Allowed Trunk VLANs        : 11-12
Access VLAN Name           :
Native VLAN Name           :
Allowed Trunk VLAN Names   :
VLAN Group Name            :
MTU                        :
QOS Trust Mode              : dscp
STP Administrative Edge Port :
PoE Priority                : critical
PVLAN Port Type            :
Captive Portal Profile      :
Policy                     : InstantAP-Pol2_CX_DUR_InstantAP_1x-3029-4
Device Type                 :

```

Access Policy Details:

```

Policy Name   : InstantAP-Pol2_CX_DUR_InstantAP_1x-3029-4
Policy Type   : Downloaded
Policy Status : Applied

```

SEQUENCE	CLASS	TYPE	ACTION
10	IP-Any-Any2_CX_DUR_Instan...	ipv4	permit

Class Details:

```

class ip IP-Any-Any2_CX_DUR_InstantAP_1x-3029-4
  10 match any any any

```

6200-Lab#

3.3 DUR with Instant APs – Profiling

Following on with the same concepts, we'll now disable supplicant dot1x authentication for IAPs and now ClearPass will profile them and based on the fact that they are Instant APs. The IAPs will be pushed into their user-role. The enforcement profile will be DUR-IAP as shown below.

Enforcement Profiles - CX-DUR-InstantAP

Summary	Profile	Attributes
Profile:		
Name:	CX-DUR-InstantAP	
Description:		
Type:	RADIUS	
Action:	Accept	
Device Group List:	-	
Product:	AOS-CX	
Attributes:		
Type	Name	Value
1.	Radius:Aruba	Aruba-CPPM-Role
		=
		class ip IP-Any-Any2 10 match any any any port-access policy InstantAP-Pol2 10 class ip IP-Any-Any2 port-access role DUR-InstantAP description DUR-for-IAPs associate policy InstantAP-Pol2 auth-mode device-mode poe-priority critical trust-mode dscp vlan trunk native 15 vlan trunk allowed 11-12

and this needs to be reference in the MAC auth service policy

Services - CX DUR MAC Auth

Summary	Service	Authentication	Authorization	Roles	Enforcement	Profiler
Use Cached Results:	☐ Use cached Roles and Posture attributes from previous sessions					
Enforcement Policy:	Ariya Wired-CX DUR MAC Auth Modify					Add New Enforcement Policy
Enforcement Policy Details						
Description:						
Default Profile:	CX-DUR-Guest-CaptivePortal					
Rules Evaluation Algorithm:	first-applicable					
Conditions				Enforcement Profiles		
1.	(Authorization:[Endpoints Repository]:Conflict EQUALS true)				Wired-CX-MAC-Spoof-CP	
2.	(Tips:Role EQUALS School-Asset)				CX-DUR-CorpDev	
3.	[Guest] [User Authenticated])				CX-DUR-MAC-Auth-Guest, CX Return-Endpoint-Username	
4.	(Tips:Role EQUALS [MAC Caching]) AND (Endpoint:Guest Role ID EQUALS AD-User)				CX-DUR-ADGuest, CX Return-Endpoint-Username	
5.	(Authorization:[Endpoints Repository]:Device Name EQUALS Aruba IAP)				CX-DUR-InstantAP, [Update Endpoint Known]	

So now our ClearPass services are as shown here.

10.	☐	10	CX dot1x Wired	RADIUS	802.1X Wired	
11.	☐	11	CX DUR dot1x Wired	RADIUS	802.1X Wired	
12.	☐	12	CX MAC Auth	RADIUS	MAC Authentication	
13.	☐	13	CX DUR MAC Auth	RADIUS	MAC Authentication	
14.	☐	14	CX GuestWebAuth	WEBAUTH	Web-based Authentication	

Once we have disabled supplicant dot1x on IAP, we need to reboot it.

3.4 Testing DUR with Instant APs – Profiling

As we described it in part 2 of the series, the workflow will be:

- when a new Instant AP connects to the wired network, the switch sends the MAC auth followed by DHCP request (using ip-helper command) to ClearPass.
- ClearPass will allow all the MAC authentication and checks the MAC vendor OUI and puts it in the Captive-portal user role.
- While in this user-role which is quite restrictive, the AP will do a DHCP request which ClearPass can see and then profiles it to be Instant AP along with AP name, etc.

- Now because we have enabled “profile endpoints” for this service, we have added a rule in the profile tab that if there is any change in the initial endpoint classification, use CoA to bounce the switch port.
- Now once ClearPass profiles the Instant AP, it’ll update the endpoint category which then bounce the switch port.
- There will be a new MAC auth and this time because Instant AP has been profiles, we can match it with any attribute of the endpoint repository like device name which will be “Aruba IAP”

Ensure that you delete the IAP’s entry in the Endpoint database so that ClearPass does the profiling and changes the user role.

Here are the two MAC auth entries we see in access tracker.

#	Server	Source	Username	Service	Login Status	Enforcement Profiles	
1.	192.168.1.95	RADIUS	204c0323a7c0	CX DUR MAC Auth	ACCEPT	[Update Endpoint Known], CX-DUR-InstantAP	1
2.	192.168.1.95	RADIUS	204c0323a7c0	CX DUR MAC Auth	ACCEPT	CX-DUR-Guest-CaptivePortal	1

Session#2 shows the IAP is getting Captive portal user role.

Summary	Input	Output	Accounting	RADIUS CoA	Alerts
Login Status:	ACCEPT				
Session Identifier:	R00000004-01-63bf698a				
Date and Time:	Jan 12, 2023 12:59:38 AEDT				
End-Host Identifier:	20-4C-03-23-A7-C0 (Access Points / Aruba / Aruba IAP)				
Username:	204c0323a7c0				
Access Device IP/Port:	192.168.1.25:1 (CX-SW1 / Aruba)				
Access Device Name:	6200-Lab				
System Posture Status:	UNKNOWN (100)				
Policies Used -					
Service:	CX DUR MAC Auth				
Authentication Method:	MAC-AUTH				
Authentication Source:	None				
Authorization Source:	[Guest User Repository], [Guest Device Repository], [Endpoints Repository], [Insight Repository], [Time Source]				
Roles:	[Other], [User Authenticated]				

Summary	Input	Output	Accounting	RADIUS CoA	Alerts
Enforcement Profiles:	CX-DUR-Guest-CaptivePortal				
System Posture Status:	UNKNOWN (100)				
Audit Posture Status:	UNKNOWN (100)				
RADIUS Response					
Radius:Aruba:Aruba-CPPM-Role		CX_DUR_Guest_CaptivePortal-3023-11 class ip ClearPass2 10 match tcp any 192.168.1.95 eq 80 20 match tcp any 192.168.1.95 eq 443 class ip DHCP-DNS2 10 match udp any any eq 67 20 match udp any any eq 53 class ip ICMP2 10 match icmp any any class ip Web-Traffic2 10 match tcp any any eq 80 20 match tcp any any eq 443			

Summary	Input	Output	Accounting	RADIUS CoA	Alerts
CoA Action# 1					
Date and Time	Jan 12, 2023 13:00:19 AEDT				
Application Name	Policy Manager				
RADIUS CoA Action Type	CoA				
RADIUS CoA Action Name	[AOS-CX - Bounce Switch Port]				
Status Code	1				
Status Message	Radius [AOS-CX - Bounce Switch Port] successful for client 204c0323a7c0.				
RADIUS CoA Attributes	Event-Timestamp = 1673488817 User-Name = 204c0323a7c0 Aruba-Port-Bounce-Host = 12 NAS-Identifier = 6200-Lab Calling-Station-Id = 20-4C-03-23-A7-C0 NAS-Port = 1				

Then once it is profiled by ClearPass, the switch bounce will happen and the next auth request comes in. This time it will match with the 5th rule in the enforcement policy and gets the CX-DUR-InstantAP enforcement profile.

This is session #1

Summary	Input	Output	Accounting
Login Status:	ACCEPT		
Session Identifier:	R00000005-01-63bf69cd		
Date and Time:	Jan 12, 2023 13:00:45 AEDT		
End-Host Identifier:	20-4C-03-23-A7-C0 (Access Points / Aruba / Aruba IAP)		
Username:	204c0323a7c0		
Access Device IP/Port:	192.168.1.25:1 (CX-SW1 / Aruba)		
Access Device Name:	6200-Lab		
System Posture Status:	UNKNOWN (100)		
Policies Used -			
Service:	CX DUR MAC Auth		
Authentication Method:	MAC-AUTH		
Authentication Source:	None		
Authorization Source:	[Guest User Repository], [Guest Device Repository], [Endpoints Repository], [Insight Repository], [Time Source]		
Roles:	[Other], [User Authenticated]		

Summary	Input	Output	Accounting
Enforcement Profiles:	[Update Endpoint Known], CX-DUR-InstantAP		
System Posture Status:	UNKNOWN (100)		
Audit Posture Status:	UNKNOWN (100)		
RADIUS Response			

Radius:Aruba:Aruba-CPPM-Role	CX_DUR_InstantAP-3026-5 class ip IP-Any-Any2 10 match any any any port-access policy InstantAP-Pol2 10 class ip IP-Any-Any2 port-access role DUR-InstantAP description DUR-for-IAPs associate policy InstantAP-Pol2 auth-mode device-mode poe-priority critical trust-mode dscp vlan trunk native 15 vlan trunk allowed 11-12
------------------------------	---

Here we see the switch first showing the captive portal DUR user role and then the InstantAP DUR role

```
6200-Lab# sh port-access clients
```

Port Access Clients

Status Codes: d device-mode, c client-mode, m multi-domain

Port	MAC-Address	Onboarding	Status	Role
Device Type		Method		
c 1/1/1	20:4c:03:23:a7:c0	mac-auth	Success	
	CX_DUR_Guest_CaptivePortal-	3023-11		

```
6200-Lab# sh port-access clients
```

No port-access clients found.

```
6200-Lab#
```

```
6200-Lab#
```

```
6200-Lab# sh port-access clients
```

Port Access Clients

Status Codes: d device-mode, c client-mode, m multi-domain

Port	MAC-Address	Onboarding	Status	Role
Device Type		Method		
d 1/1/1	20:4c:03:23:a7:c0	mac-auth	Success	CX_DUR_InstantAP-
3026-5				

```
6200-Lab#
```

```
6200-Lab# sh port-access clients de
```

Port Access Client Status Details:

Client 20:4c:03:23:a7:c0, 204c0323a7c0

=====

Session Details

Port : 1/1/1

Session Time : 563s

IPv4 Address :

IPv6 Address :

Device Type :

VLAN Details

VLAN Group Name :

VLANs Assigned : 11-12,15

Access :

Native Untagged : 15

Allowed Trunk : 11-12

Authentication Details

Status : mac-auth Authenticated

Auth Precedence : dot1x - Unauthenticated, mac-auth - Authenticated

Auth History : mac-auth - Authenticated, 553s ago

dot1x - Unauthenticated, Supplicant-Timeout, 553s ago

Authorization Details

```

Role    : CX_DUR_InstantAP-3026-5
Status  : Applied

```

Role Information:

```

Name   : CX_DUR_InstantAP-3026-5
Type   : clearpass
Status: Completed

```

```

-----
Reauthentication Period      :
Cached Reauthentication Period :
Authentication Mode          : device-mode
Session Timeout              :
Client Inactivity Timeout    :
Description                   : DUR-for-IAPs
Gateway Zone                  :
UBT Gateway Role              :
UBT Gateway Clearpass Role    :
Access VLAN                   :
Native VLAN                   : 15
Allowed Trunk VLANs           : 11-12
Access VLAN Name              :
Native VLAN Name              :
Allowed Trunk VLAN Names      :
VLAN Group Name               :
MTU                           :
QOS Trust Mode                : dscp
STP Administrative Edge Port  :
PoE Priority                   : critical
PVLAN Port Type               :
Captive Portal Profile        :
Policy                        : InstantAP-Pol2_CX_DUR_InstantAP-3026-5
Device Type                   :

```

Access Policy Details:

```

Policy Name   : InstantAP-Pol2_CX_DUR_InstantAP-3026-5
Policy Type    : Downloaded
Policy Status  : Applied

```

SEQUENCE	CLASS	TYPE	ACTION
10	IP-Any-Any2_CX_DUR_Instan...	ipv4	permit

Class Details:

```

class ip IP-Any-Any2_CX_DUR_InstantAP-3026-5
  10 match any any any

```

6200-Lab#

This is to check the interfaces on the CX switch.

6200-Lab# sh int brief

Port	Native	Mode	Type	Enabled	Status	Reason	Speed
Description	VLAN						(Mb/s)
1/1/1	15	trunk	1GbT	yes	up		1000 --
1/1/2	15	access	1GbT	yes	down	Waiting for link	-- --
1/1/3	1	access	1GbT	yes	down	Waiting for link	-- --

3.5 DUR for Wireless Clients for Instant APs

Like LAN switches, you can use DUR for Aruba Instant APs as well. The same concept apply here too. At first you need to configure the authentication with FQDN instead of the IP address and add the ClearPass username and password.

New Authentication Server

Type: ☒ RADIUS, ☐ LDAP, ☐ TACACS

RADIUS Type: ☐ Dynamic Authorization Only

Name: ClearPass-FQDN

RadSec: ☐

IP Address: victory2.arubatechs.com

Auth port: 1812

Accounting port: 1813

Shared key:

Retype key:

Timeout: 5 sec.

Retry count: 3

Dynamic Authorization: ☒

AirGroup CoA port: 5999

Status-Server: ☐ Authentication, ☐ Accounting

NAS-IP-Address: (optional)

NAS-Identifier: (optional)

Dead time: 5 min.

DRP IP:

DRP Mask:

DRP VLAN:

DRP Gateway:

Service-Type Framed-User: ☐ 802.1X, ☐ Captive Portal, ☐ MAC

CPPM username: iap-dur

CPPM password:

[Cancel](#) [OK](#)

The username/password should match the user credentials configured in ClearPass.

Administration » Users and Privileges » Admin Users

Admin Users

This page allows super admins to add administrator user types, set the admin password policy, change the admin password, and disable admin user accounts.

Filter: User ID contains [] [Go](#) [Clear Filter](#) Show 20

#	☐	User ID ▲	Name	Privilege Level	Status
1.	☐	admin	Super Admin	Super Administrator	Enabled
2.	☐	apladmin	API Admin	API Administrator	Enabled
3.	☐	cx-dur	cx-dur	Aruba User Role Download	Enabled
4.	☐	iap-dur	iap-dur	Aruba User Role Download	Enabled

Aruba Instant can also download the root certificate for ClearPass automatically.

Next you need to configure the WLAN that will use the DURs, here we are reconfiguring Test WLAN. Here we are only highlighting the relevant changes you need to make to this WLAN.

Name & Usage

Name
ES

Type
Wireless

Primary usage
Employee

Security Level

Security Level
Enterprise

Key management
WPA2-Enterprise

Authentication server 1
ClearPass-FQDN

Authentication server 2
-- Select Server --

EAP offload

Access Rules

Access Rules
Unrestricted

Download roles

No restrictions on access based on destination or type of traffic

At this point we are done with Instant AP configurations. We'll just quickly check to see if the root certificate has been downloaded.

```

20:4c:03:23:a7:a0# sh clearpassca

Default clearpass CA Certificate:
Version      :2
Serial Number :01
Issuer       :/C=GB/ST=Greater Manchester/L=Salford/O=Comodo CA Limited/CN=AAA Certificate Services
Subject      :/C=GB/ST=Greater Manchester/L=Salford/O=Comodo CA Limited/CN=AAA Certificate Services
Issued On    :Jan  1 00:00:00 2004 GMT
Expires On   :Dec 31 23:59:59 2028 GMT
RSA Key size :2048 bits
Signed Using :RSA-SHA1

20:4c:03:23:a7:a0#
  
```

Next, we'll configure ClearPass by starting with enforcement profiles

Configuration » Enforcement » Profiles

Enforcement Profiles

Each enforcement policy contains enforcement profiles that match conditions (role, posture, and time) to actions (enforcement profiles).

Filter:
Name
contains
dur s
Go
Clear Filter

#	Name	Type	Description
1.	school 1xWiFi DUR Staff	RADIUS	
2.	school 1xWiFi DUR Student	RADIUS	

We'll need the following enforcement profiles for our testing

Summary	Profile	Attributes
Profile:		
Name:	school 1xWiFi DUR Staff	
Description:		
Type:	RADIUS	
Action:	Accept	
Device Group List:	-	
Attributes:		
Type	Name	Value
1. Radius:IETF	Session-Timeout	= 28800
2. Radius:Aruba	Aruba-CPPM-Role	= wlan access-rule Staff rule any any match any any any permit
3. Radius:Aruba	Aruba-User-Vlan	= 11

Summary	Profile	Attributes
Profile:		
Name:	school 1xWiFi DUR Student	
Description:		
Type:	RADIUS	
Action:	Accept	
Device Group List:	-	
Attributes:		
Type	Name	Value
1. Radius:IETF	Session-Timeout	= 28800
2. Radius:Aruba	Aruba-CPPM-Role	= wlan access-rule Student-DUR rule any any match udp 67 68 permit rule any any match any any any permit
3. Radius:Aruba	Aruba-User-Vlan	= 12

And here is the service that we'll be using to reference these enforcement profiles

Services - School 802.1X WiFi

Summary	Service	Authentication	Roles	Enforcement
Use Cached Results:	☐ Use cached Roles and Posture attributes from previous sessions			
Enforcement Policy:	IAP DUR 802.1X WiFi Enforcement Policy Modify			Add New Enforcement Policy
Enforcement Policy Details				
Description:				
Default Profile:	[Deny Access Profile]			
Rules Evaluation Algorithm:	first-applicable			
Conditions		Enforcement Profiles		
1.	(Authorization:Lab-AD:memberOf CONTAINS Staff)	school 1xWiFi DUR Staff, [Update Endpoint Known]		
2.	(Authorization:Lab-AD:memberOf CONTAINS Student)	school 1xWiFi DUR Student, [Update Endpoint Known]		

3.6 Testing DUR for Wireless Clients for Instant APs

Now we are ready to connect a user. Here we have staff1 connect to the "ES" SSID.

Filter:	Request ID	contains		+	Go	Clear Filter	Show
#	Server	Source	Username	Service	Login Status	Enforcement Profiles	
1.	192.168.1.95	RADIUS	staff1	School 802.1X WiFi	ACCEPT	[Update Endpoint Known], school 1xWiFi DUR Staff	

Summary	Input	Output	Accounting
Login Status:	ACCEPT		
Session Identifier:	R00000007-01-63bf7428		
Date and Time:	Jan 12, 2023 13:44:57 AEDT		
End-Host Identifier:	F0-D5-BF-4B-67-11 (Computer / Windows / Windows 10)		
Username:	staff1		
Access Device IP/Port:	172.16.15.10		
Access Device Name:	172.16.15.25		
System Posture Status:	UNKNOWN (100)		
Policies Used -			
Service:	School 802.1X WiFi		
Authentication Method:	EAP-PEAP,EAP-MSCHAPv2		
Authentication Source:	AD:192.168.1.250		
Authorization Source:	Lab-AD		
Roles:	[User Authenticated]		
Enforcement Profiles:	[Update Endpoint Known], school 1xWiFi DUR Staff		

Summary	Input	Output	Accounting
Enforcement Profiles:	[Update Endpoint Known], school 1xWiFi DUR Staff		
System Posture Status:	UNKNOWN (100)		
Audit Posture Status:	UNKNOWN (100)		
RADIUS Response			
Radius:Aruba:Aruba-CPPM-Role	school_1xWiFi_DUR_Staff-3030-9 wlan access-rule Staff rule any any match any any any permit		
Radius:Aruba:Aruba-User-Vlan	11		
Radius:IETF:Session-Timeout	28800		
Status-Update:Endpoint	Known		

Now checking the Instant AP's Web UI

VIRTUAL CONTROLLER | IAP-LabVC

Dashboard

Overview

Networks

Access Points

Clients

Mesh Devices

Configuration

Networks

Access Points

Wireless (1) | Wired (0)

Name	IP Address	MAC address	OS	ESSID	Access Point	Channel	Type	Role
staff1	172.16.11.23	f0:d5:bf:4b:67:11	Win 10	ES	20:4c:03:23:a7:c0	52+	AN	school_1x...

Overview

AppRF

Info

Name	staff1	IPv6 Address	fe80::eac6:491f:8fa8:1aa5
IP Address	172.16.11.23	MAC address	f0:d5:bf:4b:67:11
OS	Win 10	ESSID	ES
Access Point	20:4c:03:23:a7:c0	Channel	52+
Type	AN	Role	school_1xWiFi_DUR_Staff-3030-9

RF Dashboard

Client	Signal
staff1	
Access Point	Utilization
20:4c:03:23:a7:c0	