1 Table of Contents

1.1 Revision History

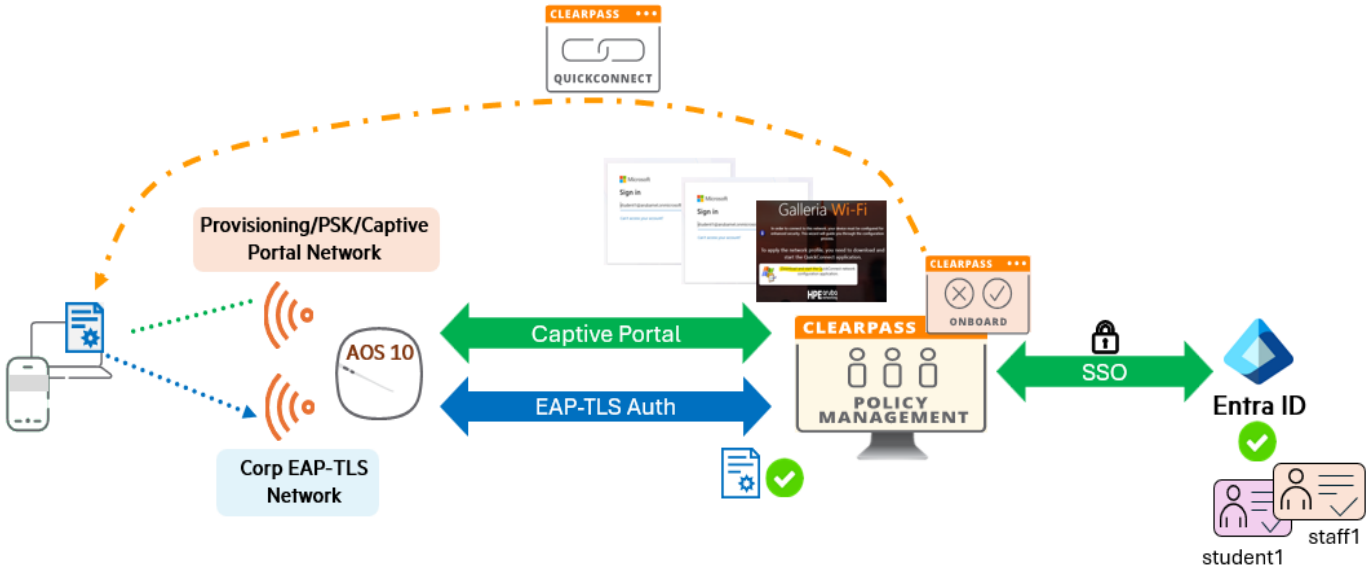
DATE	VERSION	EDITOR	CHANGES
09 Apr 2026	0.1	Ariya Parsamanesh	Initial creation
24 Apr 2026	0.2	Ariya Parsamanesh	Added the testing section

2 Overview

Here we'll configure ClearPass Onboard to generate and issue user certificates for Entra ID users. This will use single sign-on (SSO) to authenticate Entra ID users and onboard new devices. This solution is well suited for Bring your own Device (BYOD) policy in which the Entra ID users can onboard their devices based on the policy of the organisation.

Most of today's organisations use some kind of SSO. Because SSO system allows the user to sign-on once and use all the applications and/or websites without reauthenticate again. If you like to access an application, the authentication is done in the background, and you have a seamless and uninterrupted workflow.

For this post, I will use ClearPass SSO with Entra ID, which uses Security Assertion Markup Language (SAML) in the background to exchange the authentication data and then it uses ClearPass Onboard Certificate authority to issue a user certificate and installs it on the device along with the necessary wireless profile.



ClearPass can leverage either SAML or OAuth 2.0 to authorise against cloud identity providers. Here we'll be using SAML to authorise against Entra ID and the use ClearPass Onboard to issue user certificates and onboard the clients to use EAP-TLS authentication to connect to the organisation's secure WLAN.

2.1 Things you need

- APs running AOS10 firmware version (I am using 10.7.1.1)
- Valid HPE Aruba Central account and subscriptions
- ClearPass 6.11.x with Access and Onboard licenses. (I am using 6.11.14)
- ClearPass requires a valid public server certificate for HTTPS and an FQDN matching the certificate CN that clients can resolve via DNS.
- Entra ID administrator access
- ClearPass date and time are synched with NTP
- User has permission to access Entra Cloud services for SSO authentication.

3 ClearPass SSO Integration with Entra ID

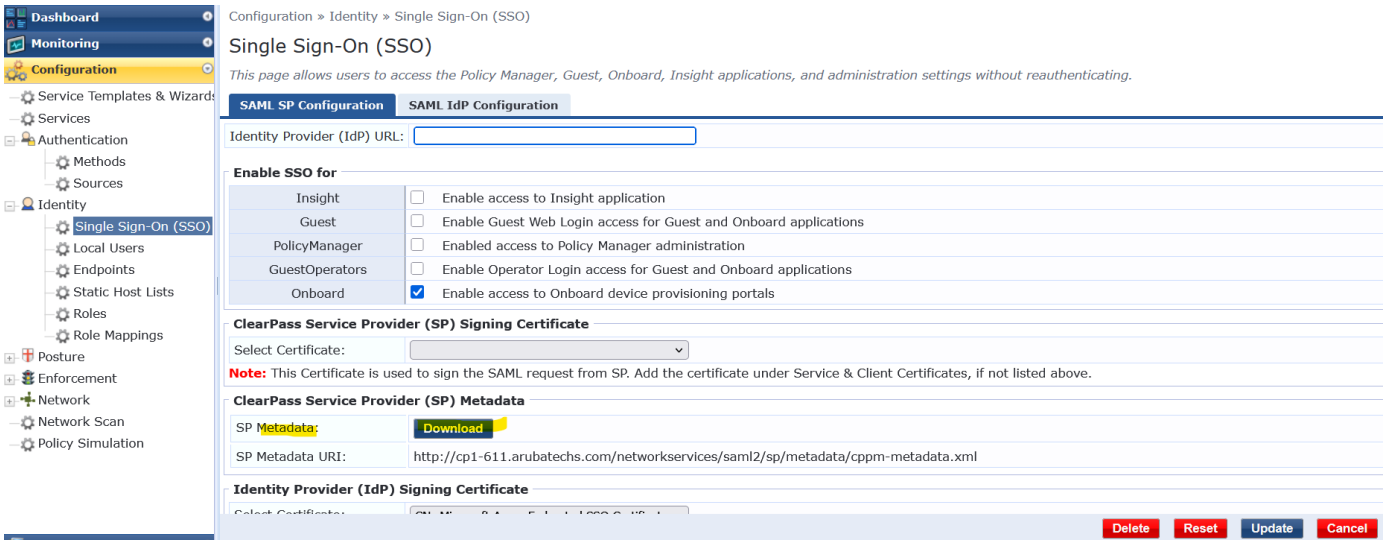
Here are the main tasks:

1. Configure Identity SSO in ClearPass Policy Manager.
2. Configure SSO application service in ClearPass Policy Manager.
3. Configure Entra's corresponding Enterprise app to use SAML with ClearPass as SP.
4. Assigning user group to use this Entra SAML app (to be done in Entra).
5. Download the Microsoft SSO federated certificate (to be done in Entra).
6. Adding Entra's Federated SSO certificate to the Certificate Trust list on Policy Manager.
7. Adding Entra as IdP on ClearPass SSO and selecting Onboard for device provisioning.
8. Configuring the onboard provisioning in ClearPass Onboard side of things.
9. Modify the existing EAP-TLS service to allow and different access for the BYODs with Onboard certificate.

SSO involves two main components: one is an Identity Provider (IdP) that authenticates users and manages identities (e.g., Okta, Entra ID), and the other is a Service Provider (SP) that provides the apps/services the user wants to access. Here Entra ID will be IdP and ClearPass will be SP.

For SAML federation a unique URI and often a URL is used that acts as the official, permanent name for an application. In our case ClearPass is SP and we need the entity ID. We can get this from SSO Identity page.

Navigate to the path shown and download the metadata.



We'll open it and copy the URL with the FQDN of your ClearPass. When we configure Entra ID for SSO, it will require two pieces of information one is the Entity ID and the other is the "Reply URL" (Assertion Consumer Service URL).

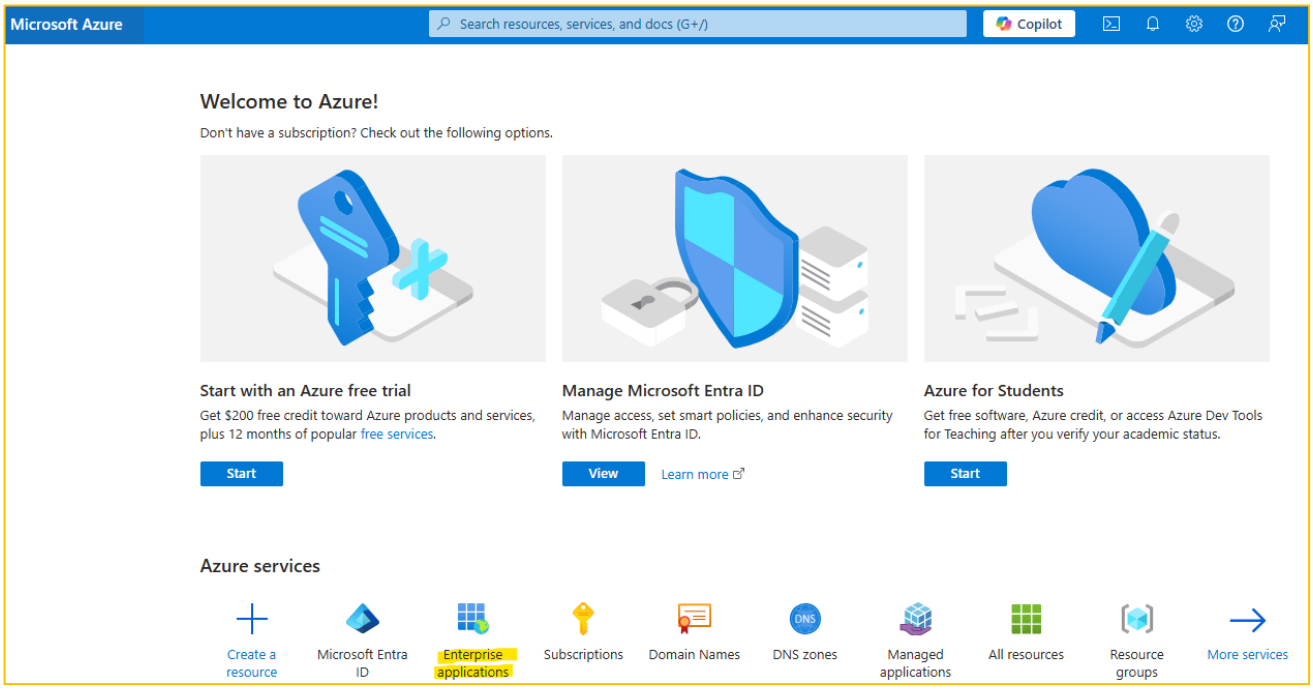
```
<?xml version="1.0" encoding="UTF-8"?><EntitiesDescriptor xmlns="urn:oasis:names:tc:SAML:2.0:metadata"><EntityDescriptor
xmlns="urn:oasis:names:tc:SAML:2.0:metadata" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi=
"http://www.w3.org/2001/XMLSchema-instance" entityID="https://cp1-611.arubatechs.com/networkservices/saml2/sp">
<SPSSODescriptor protocolSupportEnumeration="urn:oasis:names:tc:SAML:2.0:protocol">                    <NameIDFormat>
urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified</NameIDFormat>        <AssertionConsumerService index="1" Binding=
"urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"                    Location=
"https://cp1-611.arubatechs.com/networkservices/saml2/sp/acs" />       <AttributeConsumingService index="1">
                <ServiceName xml:lang="en">ClearPass Policy Manager</ServiceName>                    <ServiceDescription
xml:lang="en">ClearPass Policy Manager as service provider</ServiceDescription>                <RequestedAttribute
xml:lang="en" Name="SAMLResponse"/>       </AttributeConsumingService>
</SPSSODescriptor></EntityDescriptor><EntityDescriptor xmlns="urn:oasis:names:tc:SAML:2.0:metadata" xmlns:ds=
"http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" entityID=
"https://CP2-611/networkservices/saml2/sp">    <SPSSODescriptor protocolSupportEnumeration=
"urn:oasis:names:tc:SAML:2.0:protocol">                    <NameIDFormat>urn:oasis:names:tc:SAML:1.1:nameid-format:unspecifie
</NameIDFormat>        <AssertionConsumerService index="1" Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
                Location="https://CP2-611/networkservices/saml2/sp/acs" />       <AttributeConsumingService index="1"
                <ServiceName xml:lang="en">ClearPass Policy Manager</ServiceName>                    <ServiceDescription
xml:lang="en">ClearPass Policy Manager as service provider</ServiceDescription>                <RequestedAttribute
xml:lang="en" Name="SAMLResponse"/>       </AttributeConsumingService>
</SPSSODescriptor></EntityDescriptor></EntitiesDescriptor>
```

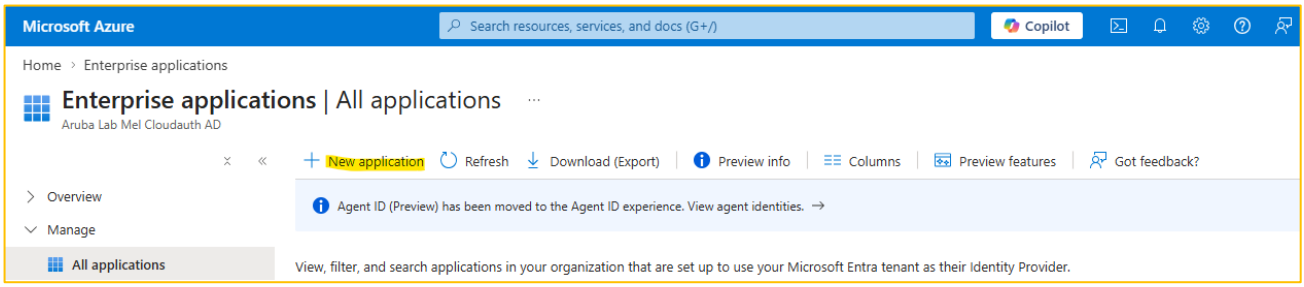
```
https://cp1-611.arubatechs.com/networkservices/saml2/sp
https://cp1-611.arubatechs.com/networkservices/saml2/sp/acs  index = 1
```

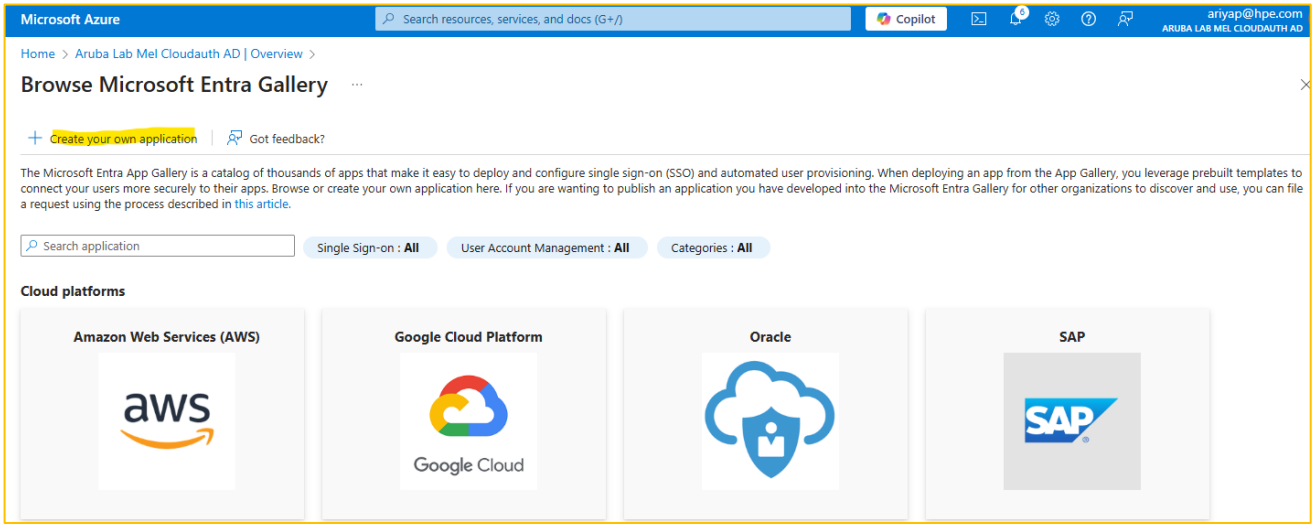
Note that ACS is Assertion Consumer Service, that is part of SAML authentication process.

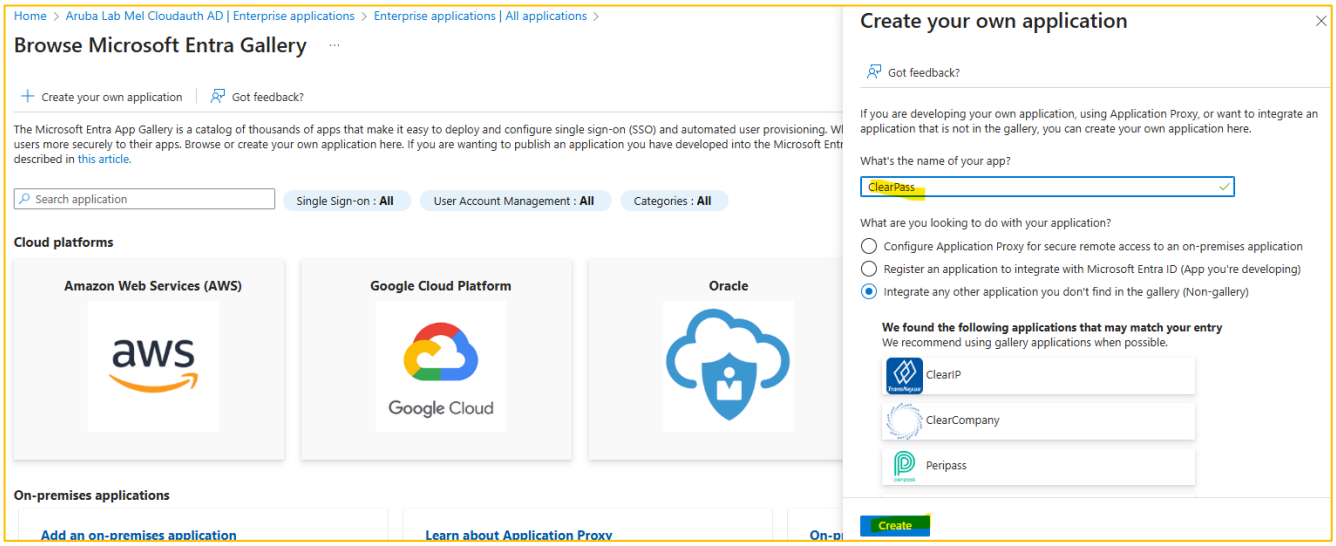
3.1 Entra ID Configuration

You need to go to Enterprise Application and create a new Application. That we'll use to interact with ClearPass and interchange the entity ID, etc.

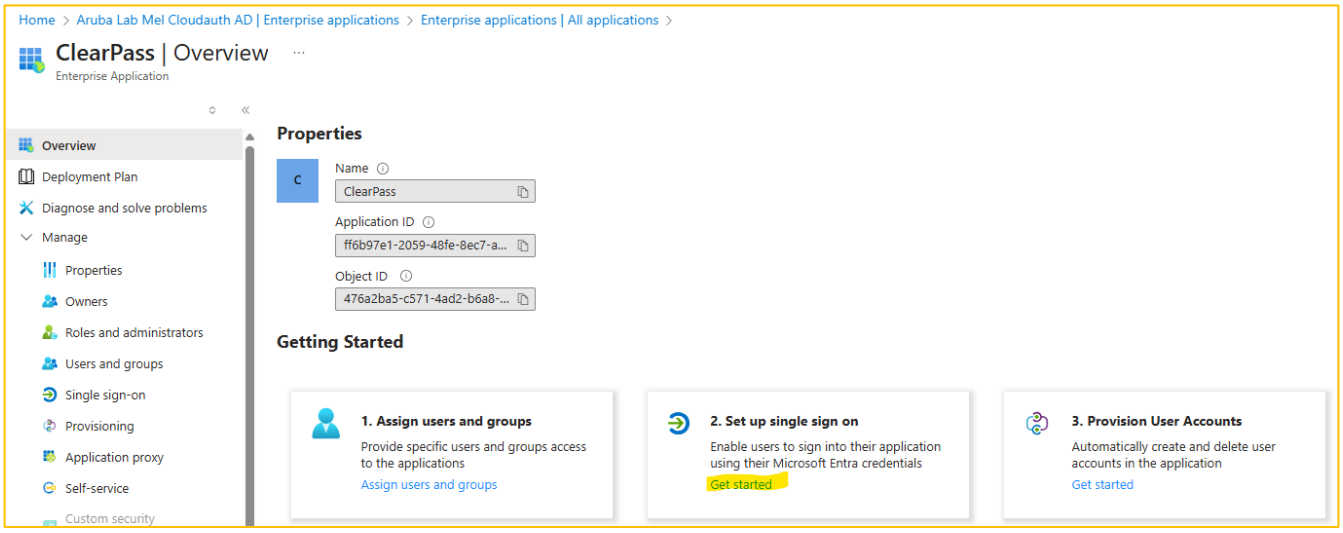


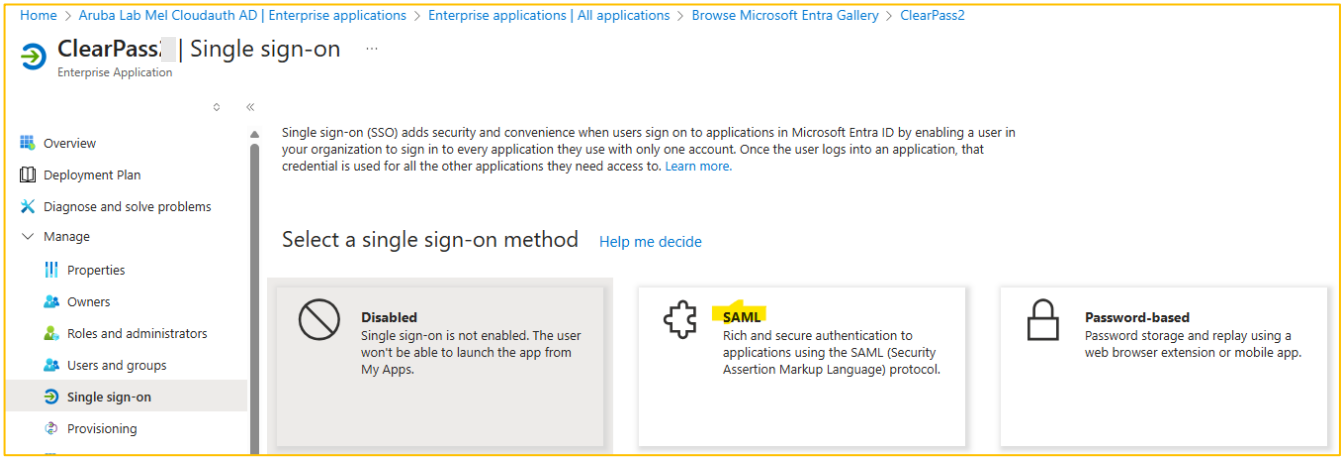






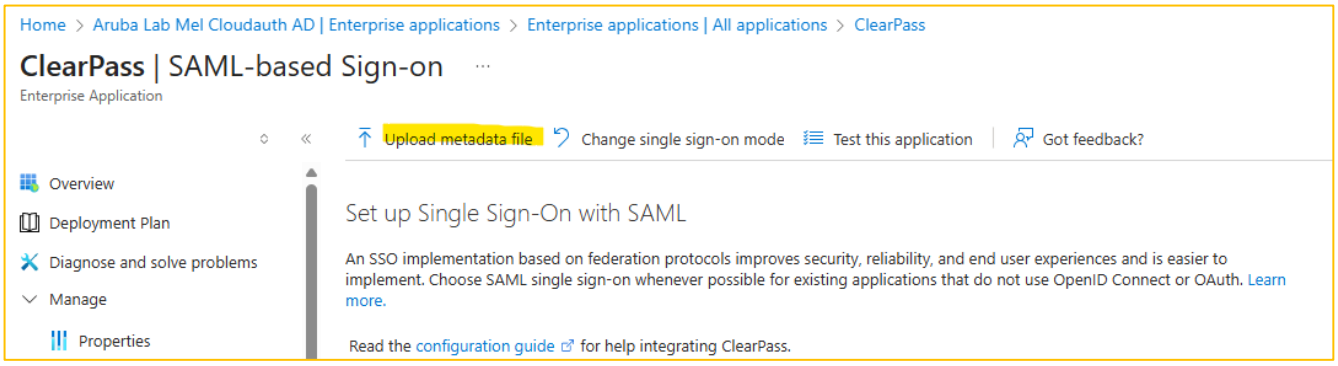
Once you have added a new application, continue with SSO setup.



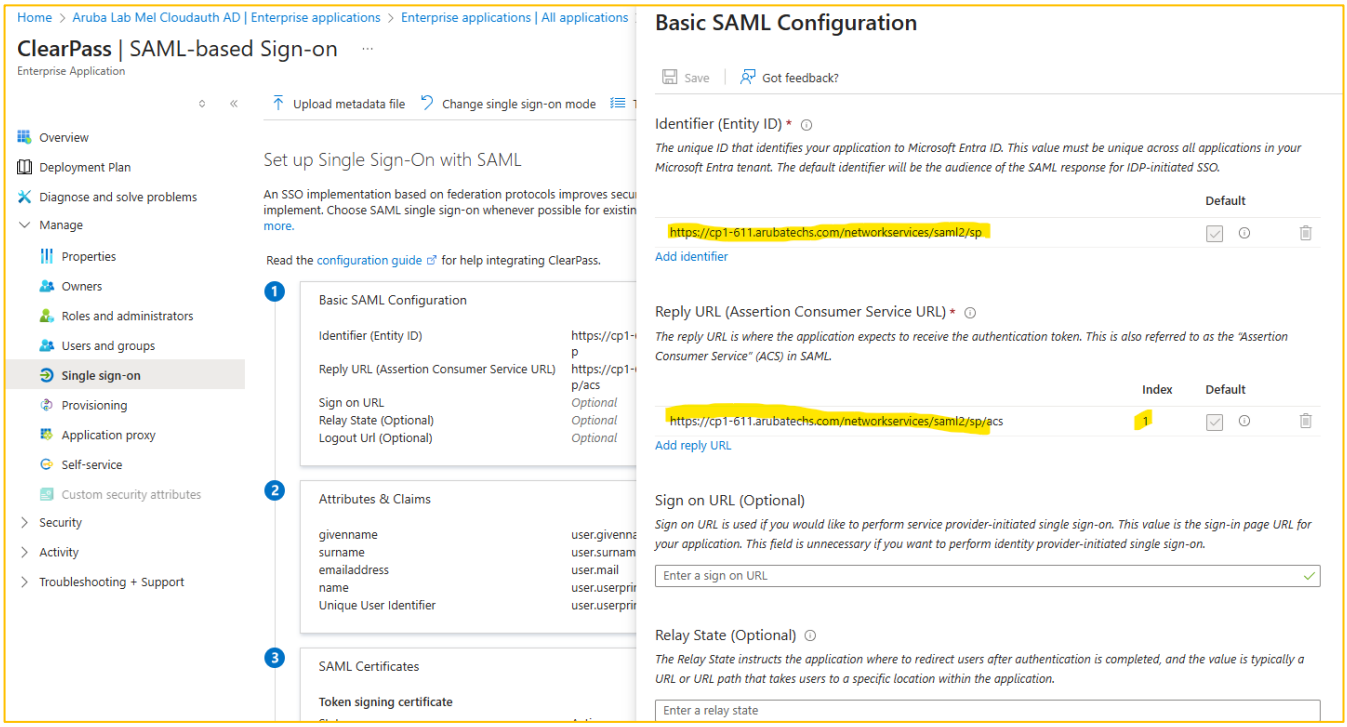


You need two pieces of information which you should get from ClearPass SSO metadata.

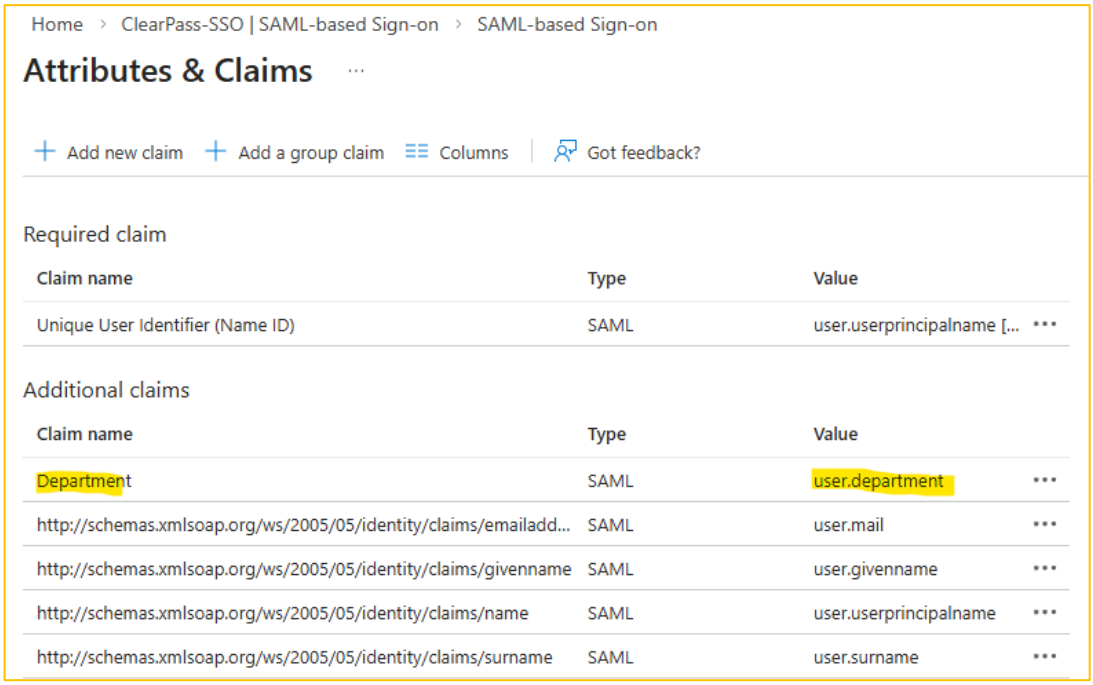
- Identifier (Entity ID)
- Reply URL (Assertion Consumer Service URL)



You can use the upload metadata file or just open it and copy the needed information.

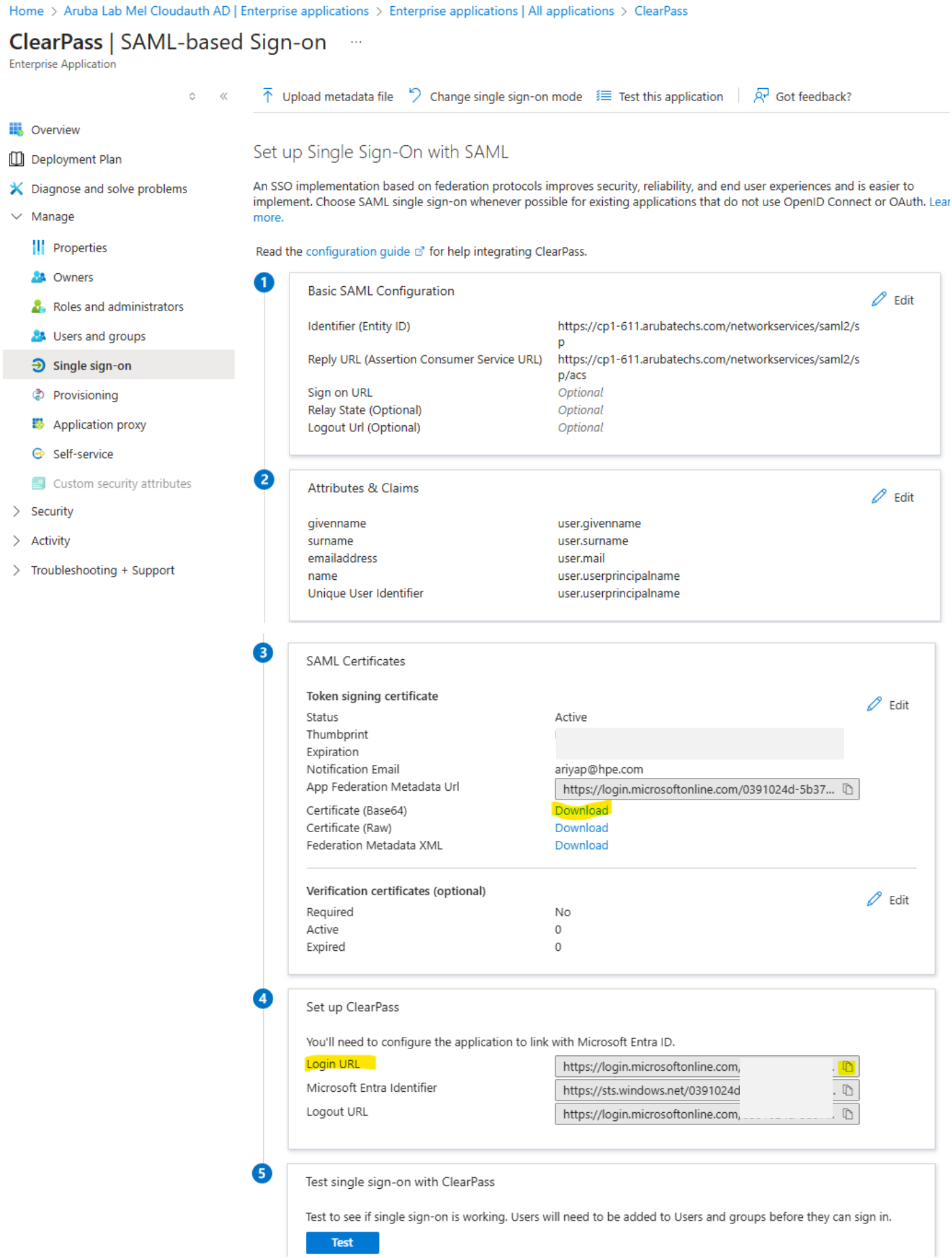


You can also add any other SAML attribute to be sent to ClearPass, look for number 2 “Attributes & Claims”. Here I’ll add the “Department” attribute that I can use as authorisation in my policy.



and then save it.

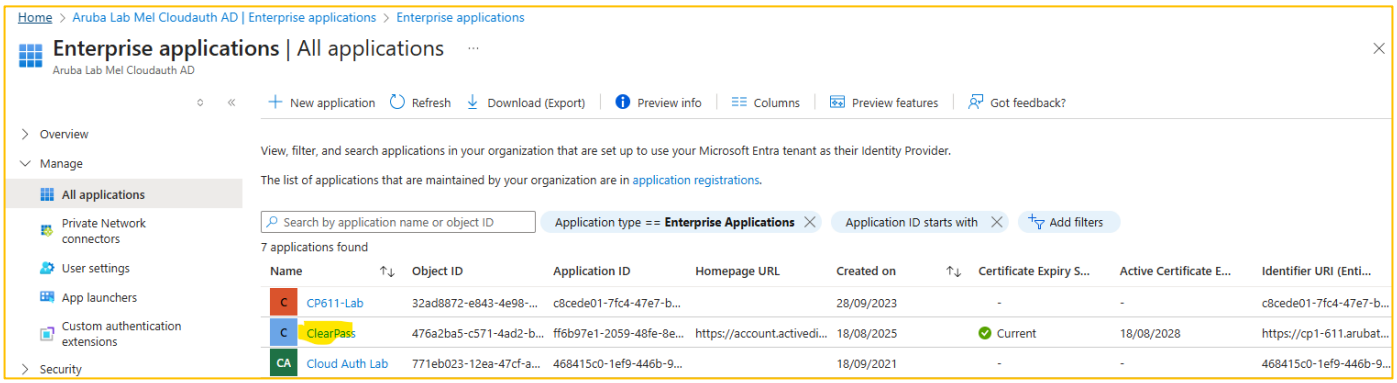
For completeness here is the full configuration page for it.



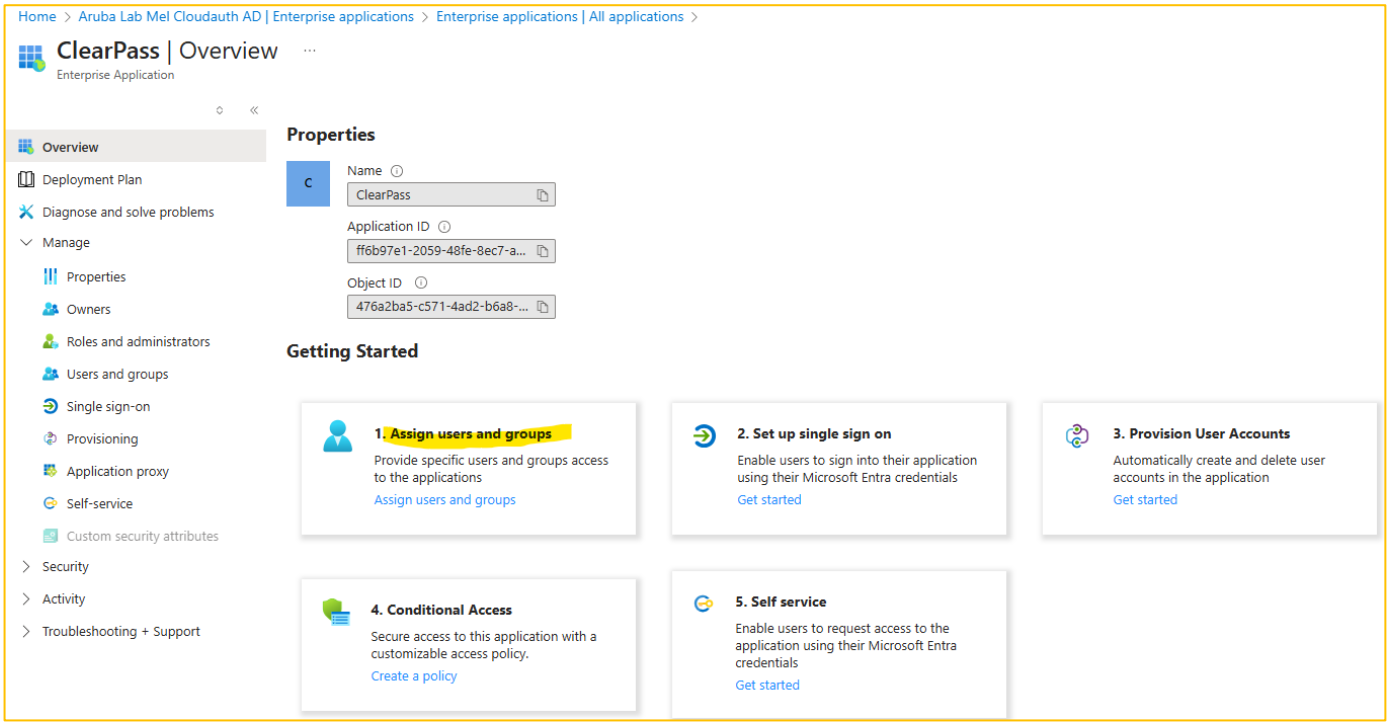
You need to download the “Certificate (Base64)” along with copy the “Login URL” as shown above, because we need it for ClearPass configuration.

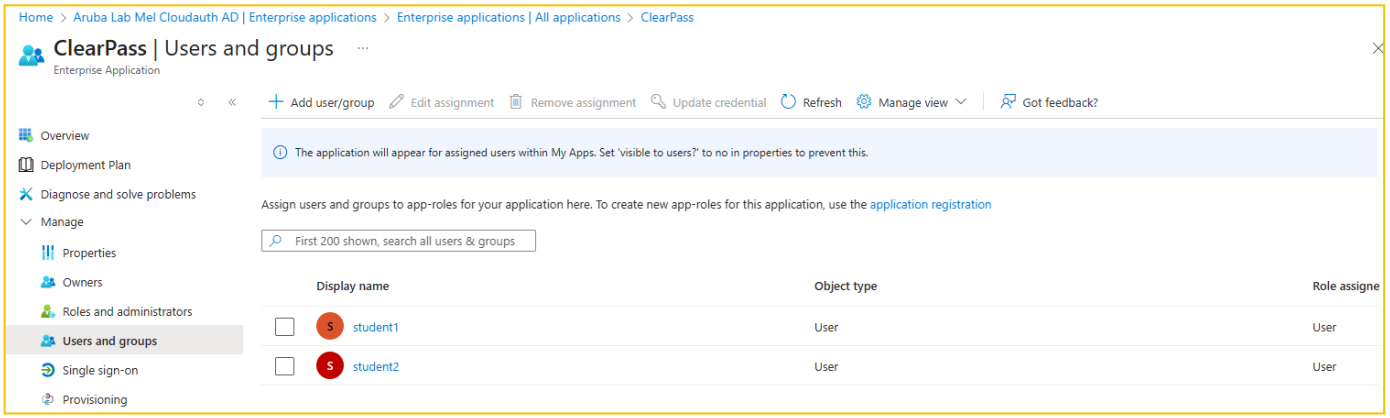
`https://login.microsoftonline.com/0391024d-5[redacted]/saml2`

After you finish the SSO config you should have the new application as shown below.



I'll now assign users. Remember I had two students with each in different departments.

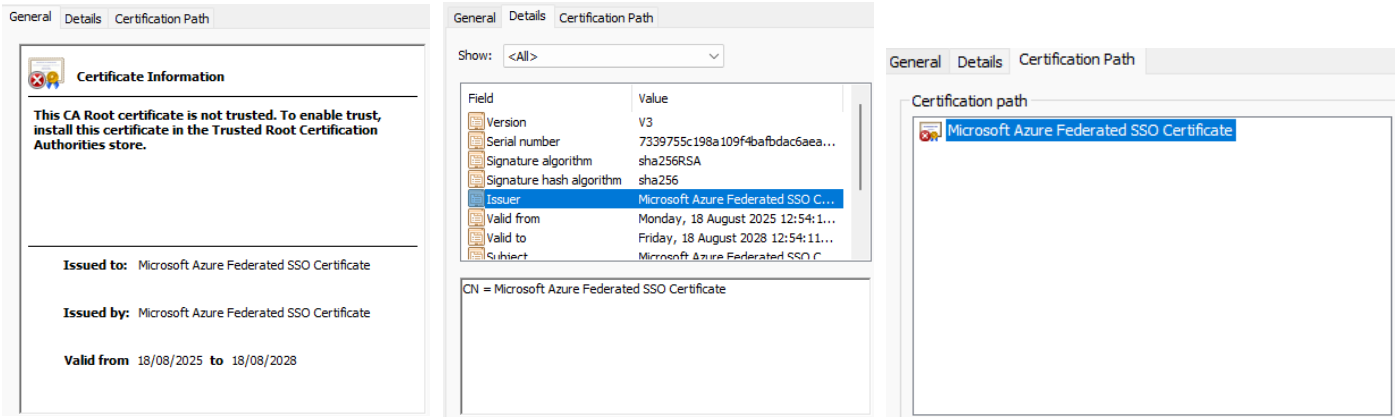




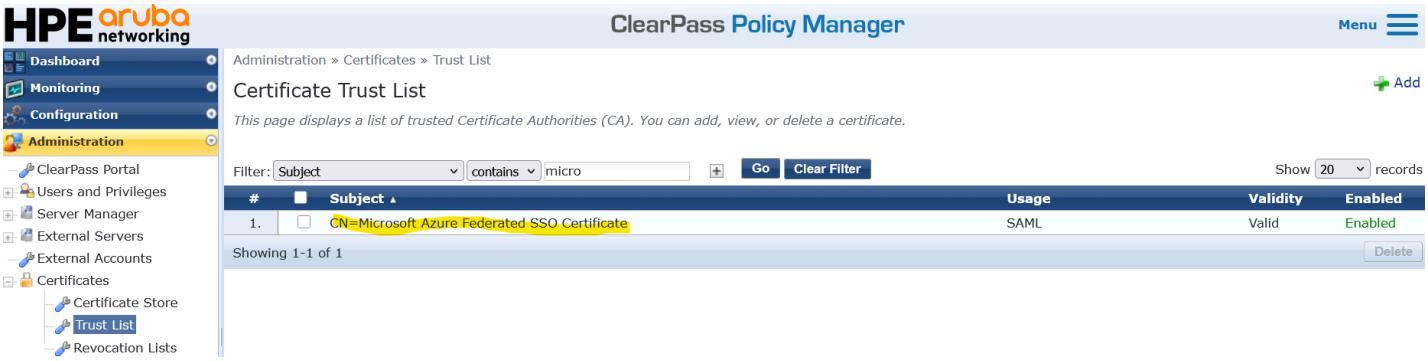
Now we are done with the Azure configuration.

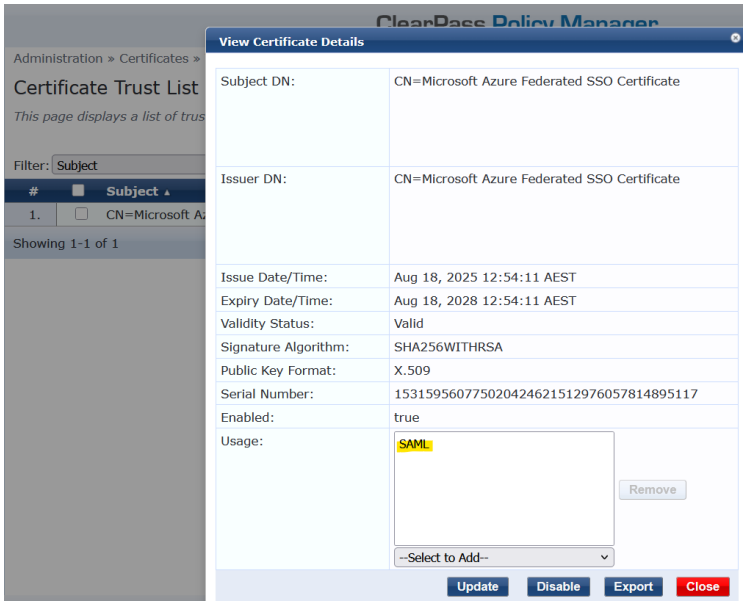
3.2 Adding Microsoft Azure federated SSO certificate in ClearPass

When you download the base64 SAML certificate from your application in Entra and then open it looks like this.



Now I'll add Microsoft Azure federated SSO certificate to ClearPass Certificate Trust List and I'll make sure that the usage type is set to SAML.





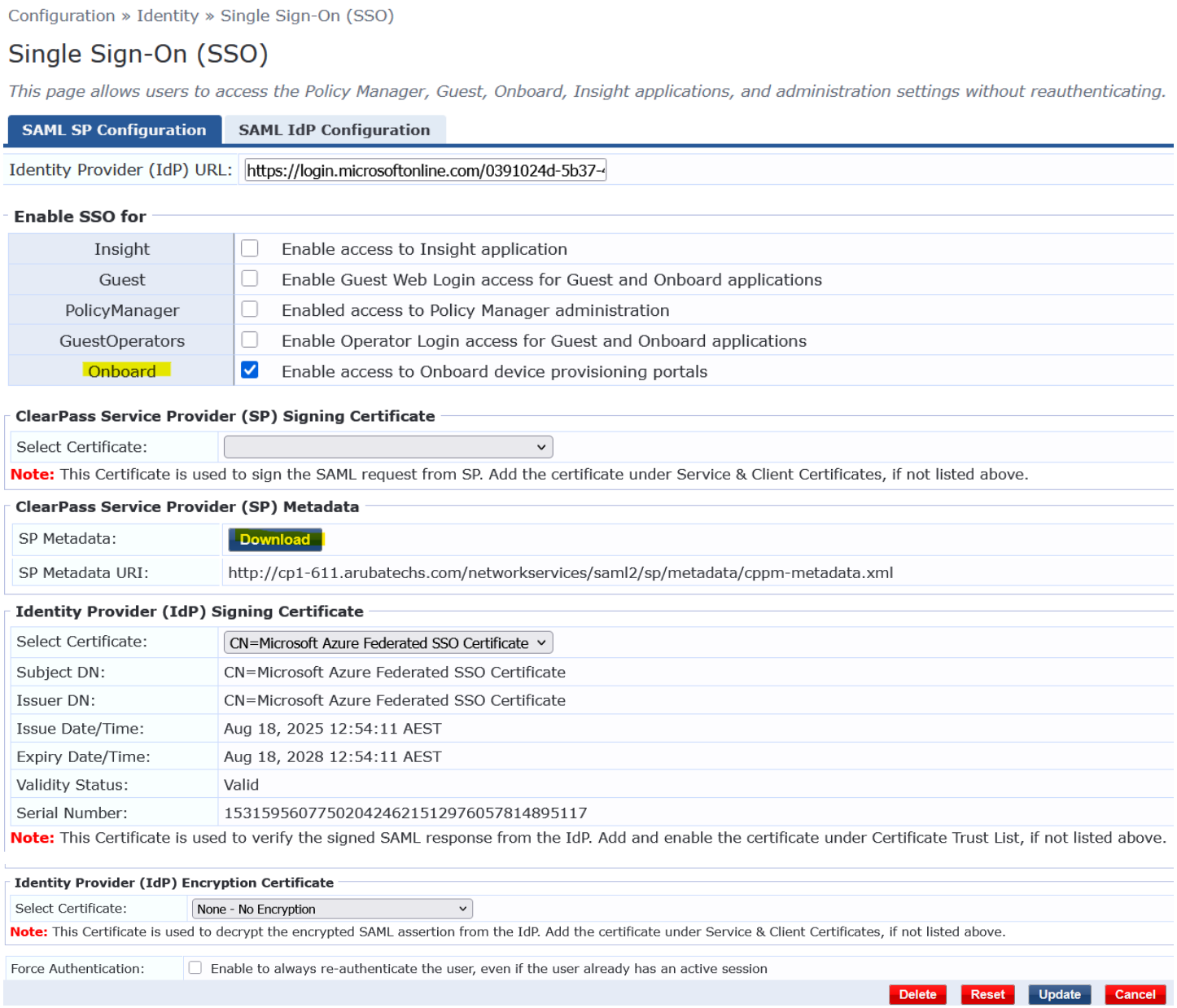
3.3 Policy Manager SSO Identity Configuration

Next, we need to create SSO as an identity.

Here is the copy of the Login URL for the SSO application we created in Entra.

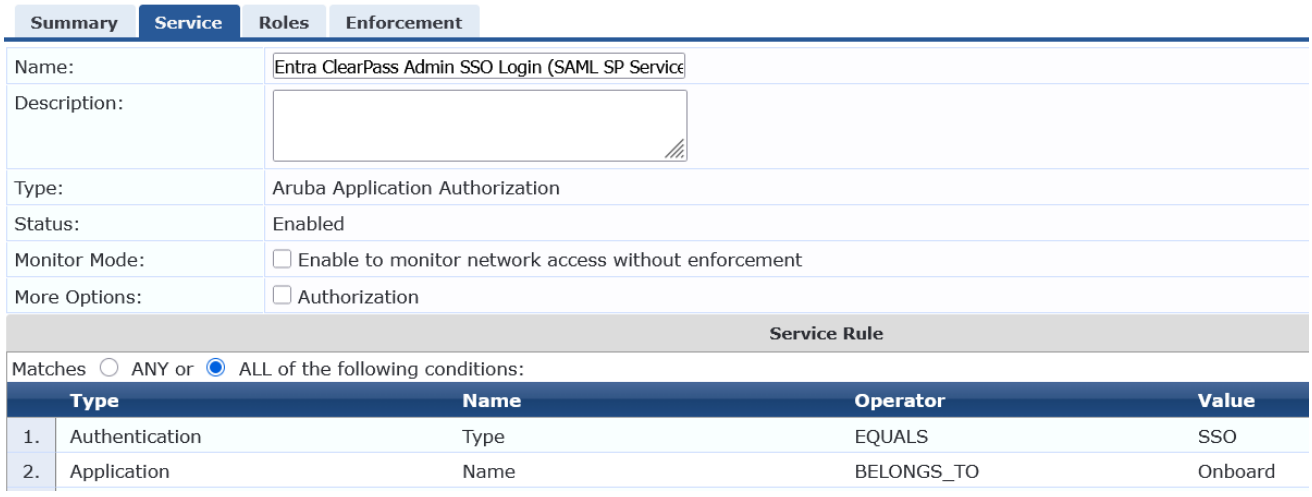
```
https://login.microsoftonline.com/0391024d-[redacted]/saml2
```

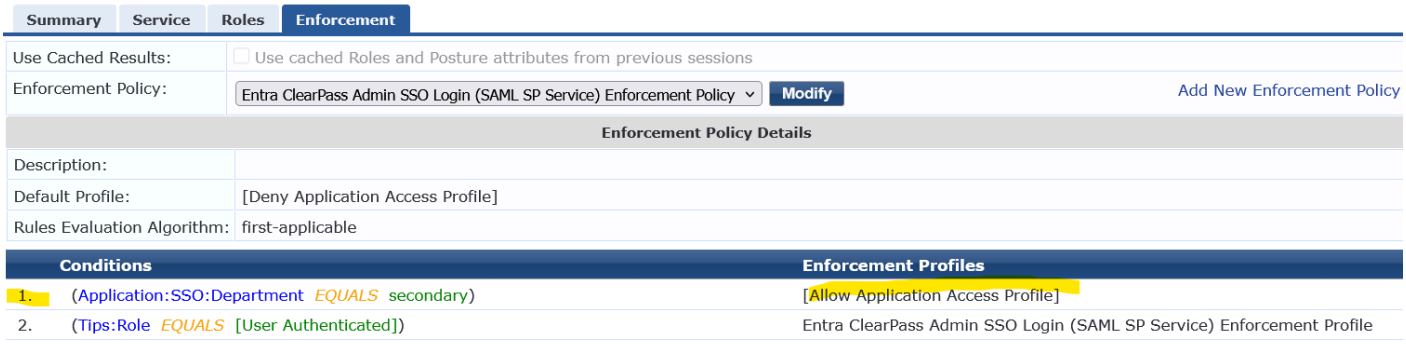
Note that here we'll be using only Onboard application to use this SSO identity as shown below.



3.4 Policy Manager SSO Service

We also need to configure a policy manager service for SAML-based SSO access to ClearPass Policy Manager Onboard via Entra.

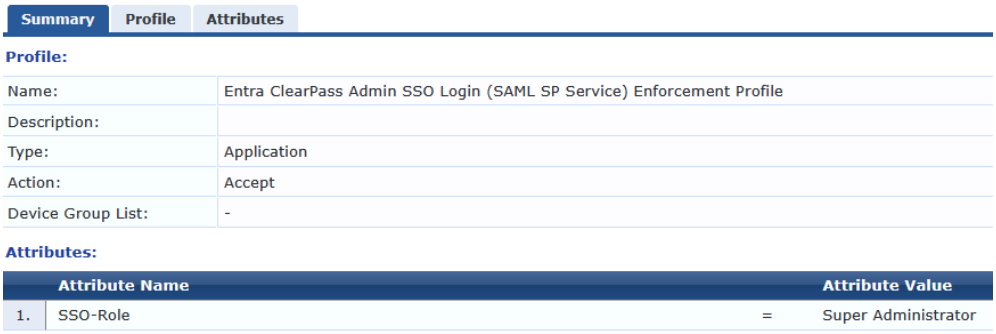




Look at the first rule above, I just wanted to highlight, that you can use this as a SSO authorisation policy. So, assuming you have assigned all the Entra users to use this SSO application, because I have added "Department" SAML attribute, here in this rule I can check for its value and if it is equals "secondary" then only they are allowed to continue to onboard their devices.

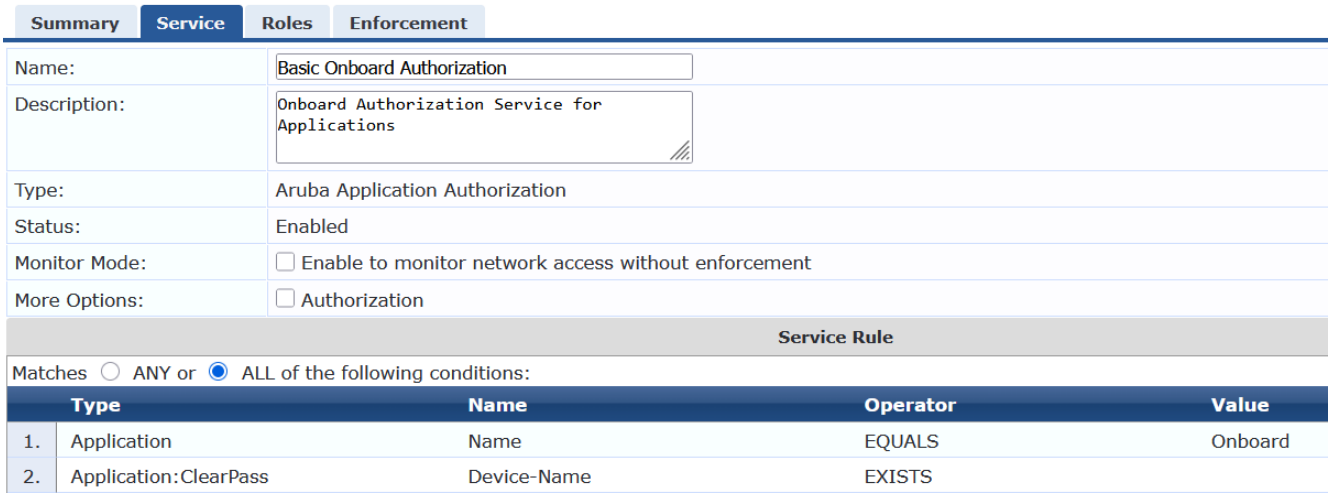
Note that "Department" corresponds to the SSO application dictionary attribute name that you can find navigating to Administration » Dictionaries » Applications. If you add any SAML attribute in Entra application, you need a corresponding name in this dictionary. You can export this dictionary; make you changes to it and then import it back. Also note that it is in XML format.

And here is the enforcement profile "Entra ClearPass Admin SSO Login (SAML SP Service) Enforcement Profile" that is used for the 2nd condition.



3.5 Policy Manager Onboard Authorisation Service

We also need an authorisation service for Onboard application. This is shown below and gets used when the user starts the QuickConnect application to configure /onboard their devices. You'll see it in action in the testing section. But basically, this service will only allow windows devices to be onboarded any day of the week.



Summary | Service | **Roles** | Enforcement

Role Mapping Policy:	oo Onboard AppAuth Role Mapping [Modify]

Role Mapping Policy Details

Description:	
Default Role:	[Guest]
Rules Evaluation Algorithm:	first-applicable

	Conditions	Role
1.	(Application:ClearPass:Device-Name *BEGINS_WITH* Android)	[Onboard Android]
2.	(Application:ClearPass:Device-Name *BEGINS_WITH* Windows)	[Onboard Windows]
3.	(Application:ClearPass:Device-Product *BEGINS_WITH* iPad) *OR* (Application:ClearPass:Device-Product *BEGINS_WITH* iPod) *OR* (Application:ClearPass:Device-Product *BEGINS_WITH* iPhone)	[Onboard iOS]
4.	(Application:ClearPass:Device-Product *BEGINS_WITH* MacBook)	[Onboard macOS]
5.	(Application:ClearPass:Device-Name *BEGINS_WITH* Chrome)	[Onboard Chromebook]
6.	(Application:ClearPass:Device-Name *BEGINS_WITH* Ubuntu)	[Onboard Linux]

Summary | Service | Roles | **Enforcement**

Use Cached Results:	Use cached Roles and Posture attributes from previous sessions
Enforcement Policy:	Basic Onboard AppAuth Enforcement Policy [Modify]

Enforcement Policy Details

Description:	
Default Profile:	[Deny Application Access Profile]
Rules Evaluation Algorithm:	evaluate-all

	Conditions	Enforcement Profiles
1.	(Tips:Role *EQUALS* [Onboard Windows])	[Allow Application Access Profile]
2.	(Date:Day-of-Week *BELONGS_TO* Monday,Tuesday,Wednesday,Thursday,Friday,Saturday,Sunday)	[Allow Application Access Profile]

3.6 Policy Manager EAP-TLS Service

Here I am modifying the exiting EAP-TLS service to cater for the BYODs with Onboard certificates.

Summary | **Service** | Authentication | Authorization | Roles | Enforcement

Name:	Basic Aruba Wireless dot1x-TLS
Description:	dot1x service for AOS10
Type:	Aruba 802.1X Wireless
Status:	Enabled
Monitor Mode:	☐ Enable to monitor network access without enforcement
More Options:	☑ Authorization ☐ Posture Compliance ☐ Audit End-hosts ☐ Profile Endpoints ☐ Accounting Proxy

Service Rule

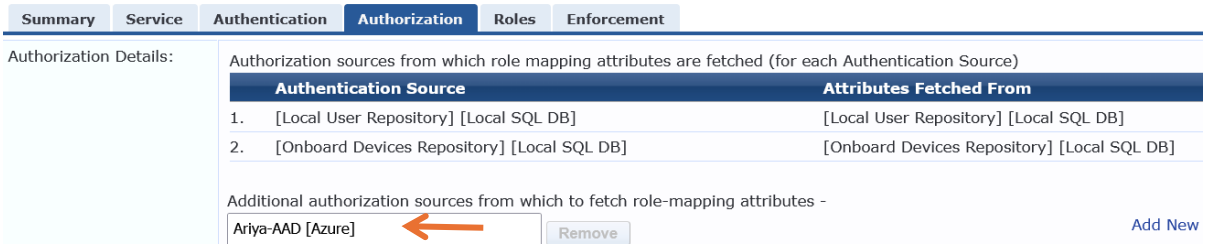
Matches ○ ANY or ◉ ALL of the following conditions:

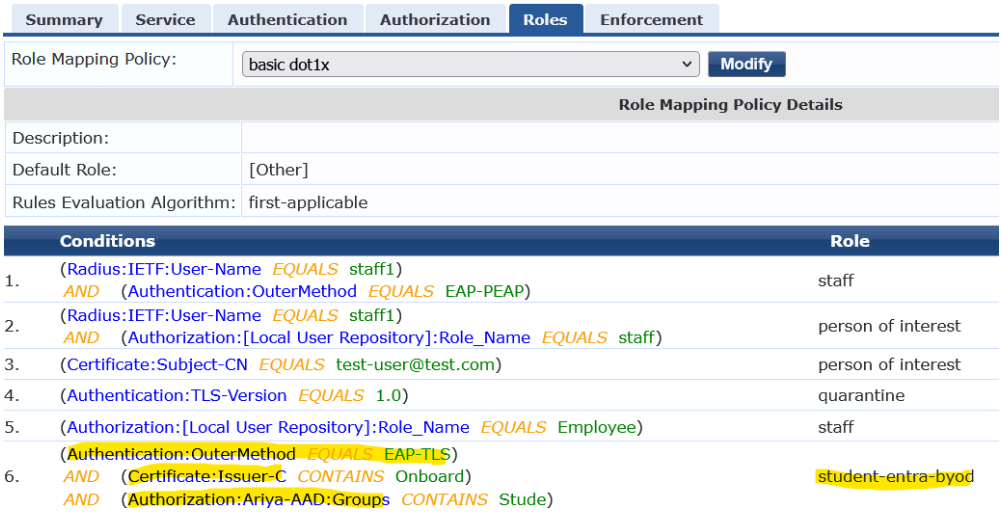
	Type	Name	Operator	Value
1.	Radius:IETF	NAS-Port-Type	EQUALS	Wireless-802.11 (19)
2.	Radius:IETF	Service-Type	BELONGS_TO	Login-User (1), Framed-User (2), Authenticate-Only (8)
3.	Radius:Aruba	Aruba-Essid-Name	EXISTS	

Summary | Service | **Authentication** | Authorization | Roles | Enforcement

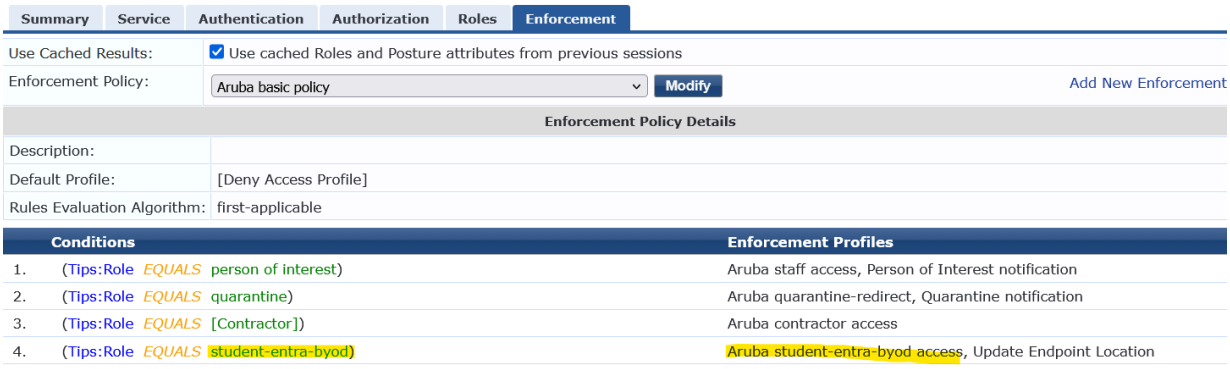
Authentication Methods:	EAP-TLS No Auth OCSP [Move Up ↑] [Move Down ↓] [Remove] [View Details] [Modify] --Select to Add--
Authentication Sources:	[Local User Repository] [Local SQL DB] [Onboard Devices Repository] [Local SQL DB] [Move Up ↑]

I am adding the Entra ID authorisation source (shown below) so that I can get user group information that I'll make use of, in my role-mapping policy.





Based on the above criteria, these devices will have student-entra-byod role that I am using in the enforcement policy.

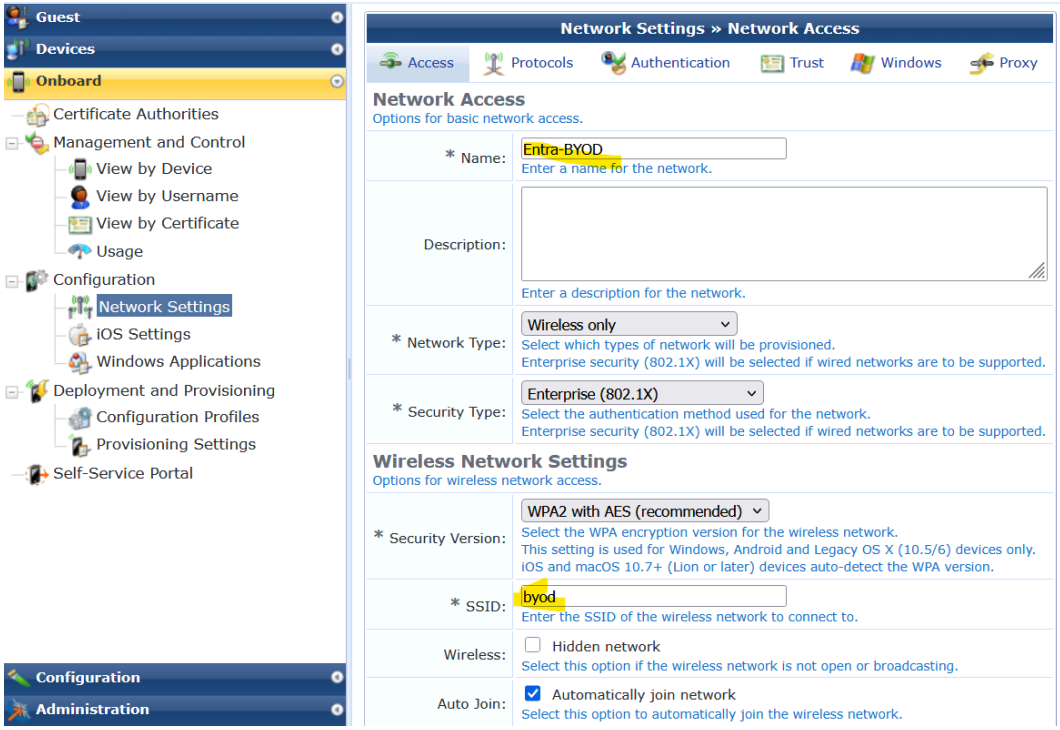


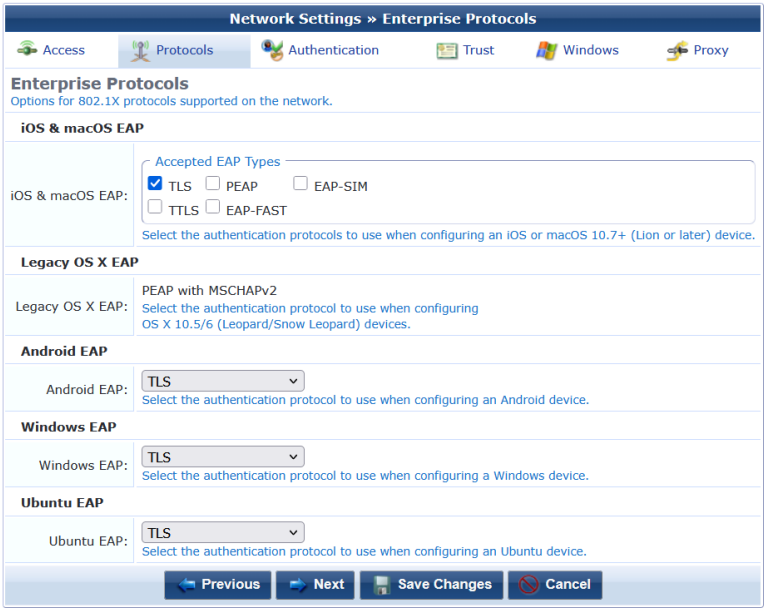
3.7 ClearPass Onboard Configuration

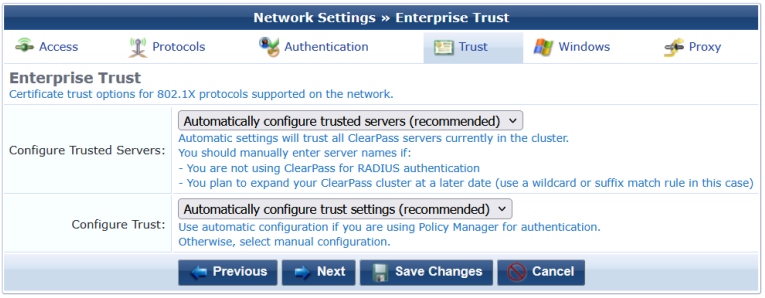
Here we'll configure ClearPass Onboard.

3.7.1 Network Setting

Home » Onboard » Configuration » Network Settings

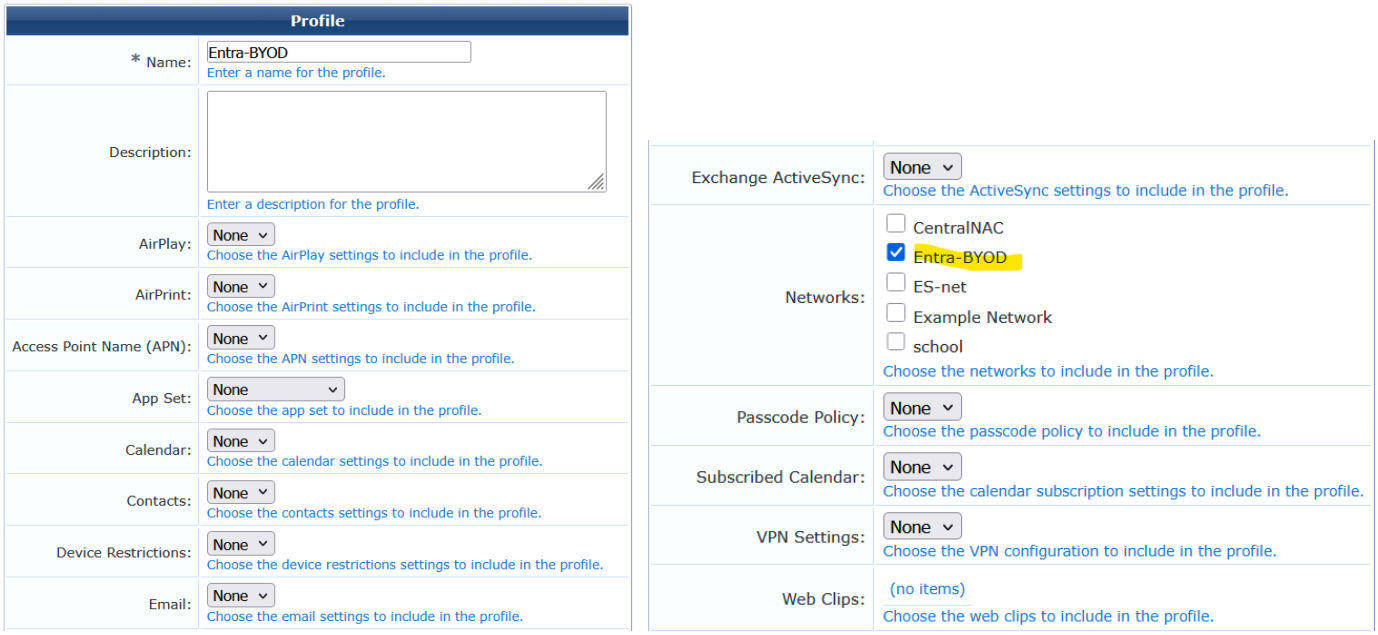






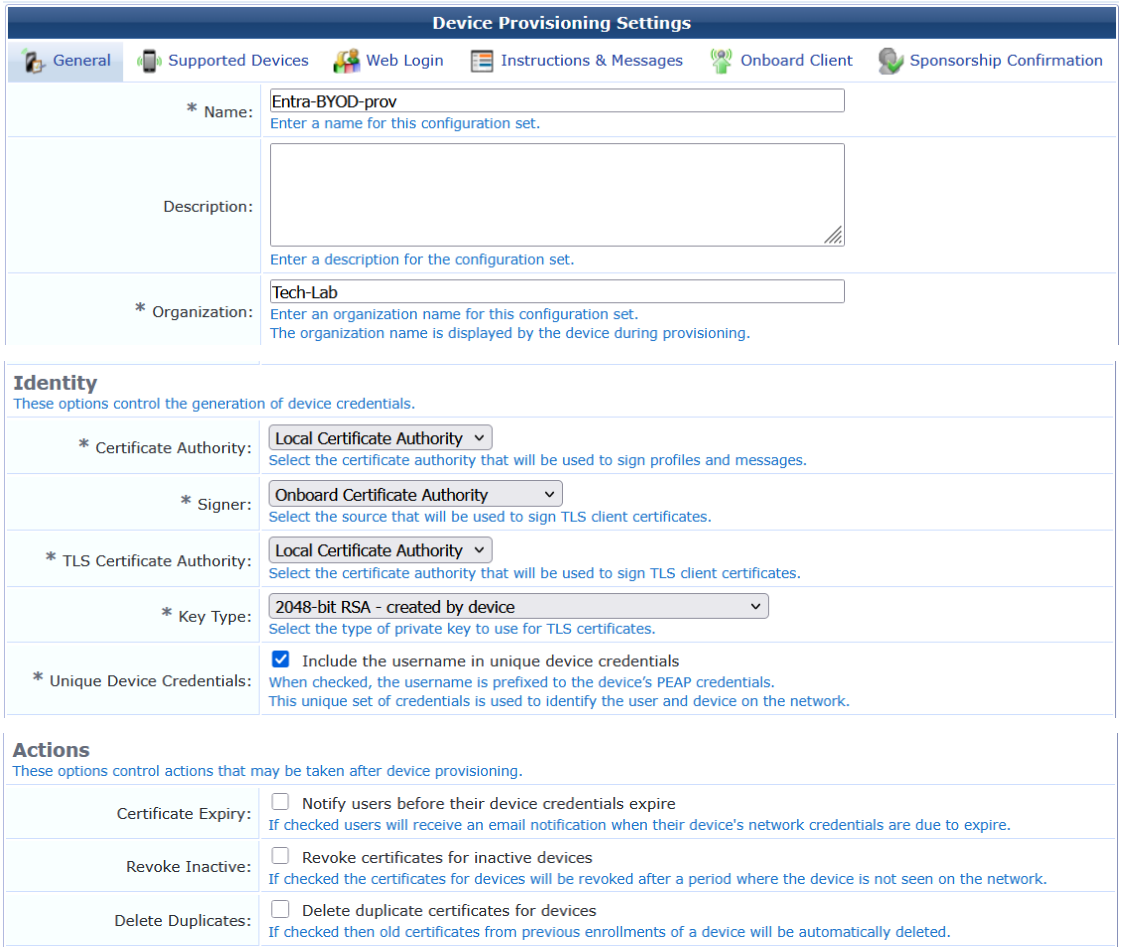
3.7.2 Configuration Profile

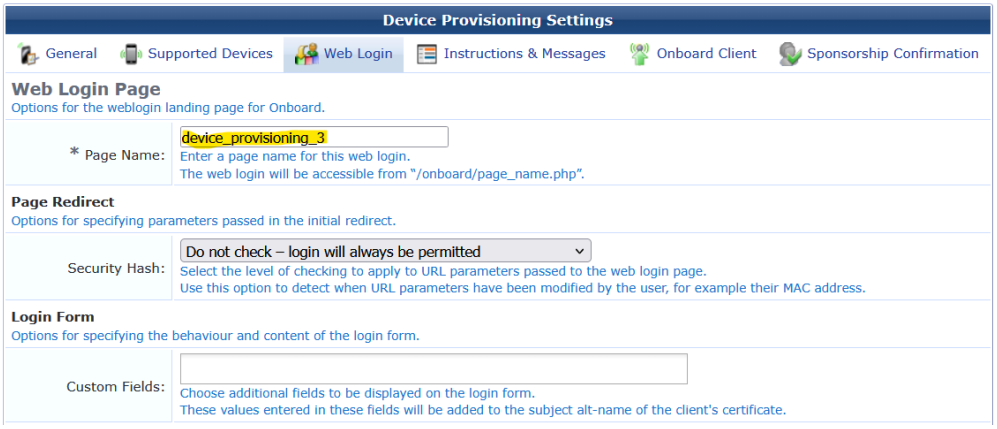
Home » Onboard » Deployment and Provisioning » Configuration Profiles



3.7.3 Provisioning Setting

Home » Onboard » Deployment and Provisioning » Provisioning Settings





Note that the complete URL for client onboarding is http://<FQDN for clearpass>/ guest/<weblogin page name>

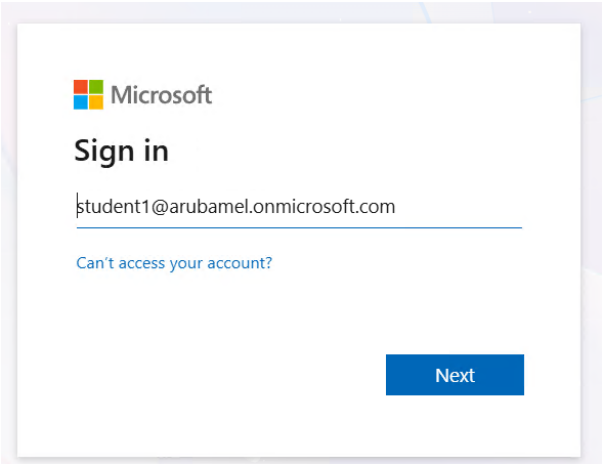
In my case it is https://cp1-611.arubatechs.com/guest/device_provisioning_3.php

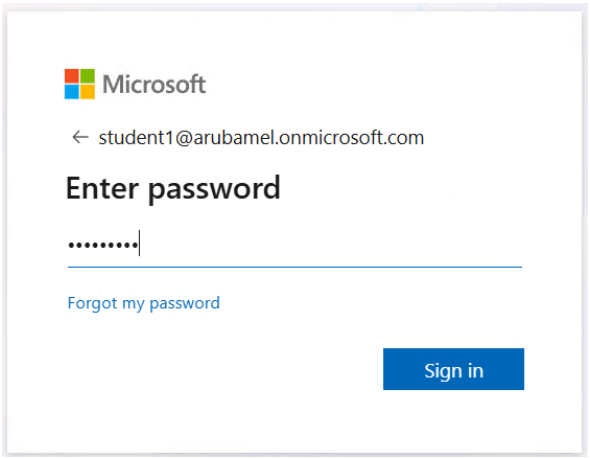
The above URL will use SSO and get the login prompt from Entra ID application.

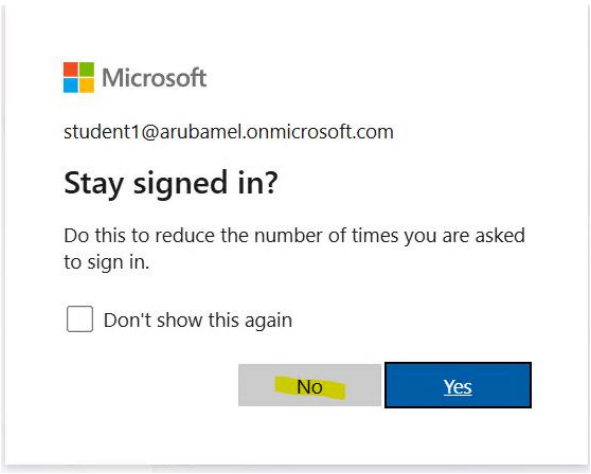
4 User Onboarding Test

You can provide the full onboarding URL on your web portal for users or include it as part of a guest captive portal. In this scenario, we assume it has been added to the organisation's web portal and is accessible to all users. When users visit the onboarding URL, they are redirected to Microsoft Entra via SSO integration and prompted to log in.

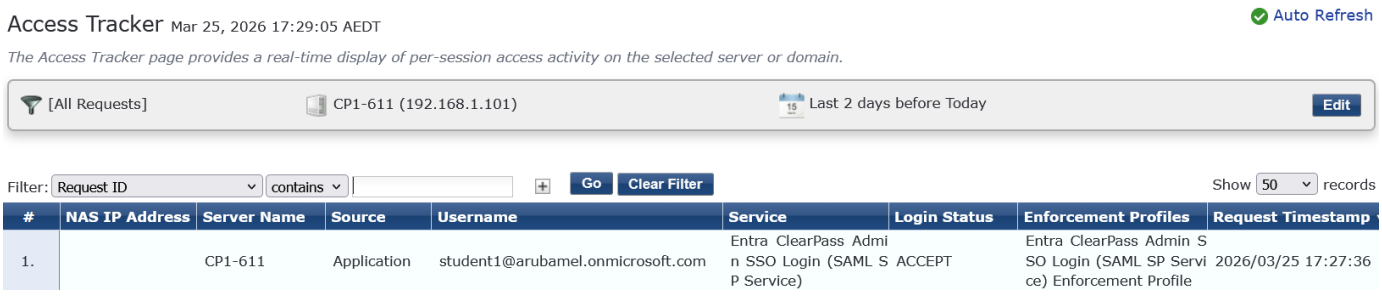
Here is the workflow for student1 that clicks on the ClearPass onboarding URL and gets redirected to Microsoft Entra SSO login page.







At this point you'll see the first authentication session in ClearPass access tracker.



As shown above it is matching the SSO application service that we created earlier. Let's look at the details.

Summary | Input | Output

Login Status:	ACCEPT
Session Identifier:	W00000004-05-69c38056
Date and Time:	Mar 25, 2026 17:27:36 AEDT
End-Host Identifier:	-
End-Host Profile:	-
End-Host Status:	
Username:	student1@arubamel.onmicrosoft.com
Access Device IP (Port):	-
Access Device Name:	-
System Posture Status:	UNKNOWN (100)

Policies Used -

Service:	Entra ClearPass Admin SSO Login (SAML SP Service)
Authentication Method:	Not applicable
Authentication Source:	-
Authorization Source:	[Local User Repository]
Roles:	[User Authenticated]
Enforcement Profiles:	Entra ClearPass Admin SSO Login (SAML SP Service) Enforcement Profile
Service Monitor Mode:	Disabled
Online Status:	Not Available

Summary | Input | Output

Username:	student1@arubamel.onmicrosoft.com
End-Host Identifier:	-
Access Device IP (Port):	-
Access Device Name:	-

Computed Attributes

Application:Name	Onboard
Application:SSO:http://schemas.microsoft.com/claims/authnmethodsreferences	http://schemas.microsoft.co identity/authenticationmeth
Application:SSO:http://schemas.microsoft.com/identity/claims/displayname	student1
Application:SSO:http://schemas.microsoft.com/identity/claims/identityprovider	https:// sts.windows.net/0391024d- ba8477cbfa8d/
Application:SSO:http://schemas.microsoft.com/identity/claims/objectidentifier	87df4a5b-9e1b-4306-9564-
Application:SSO:http://schemas.microsoft.com/identity/claims/tenantid	0391024d-5b37-4bb6-8e40-
Application:SSO:http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname	Student1
Application:SSO:http://schemas.xmlsoap.org/ws/2005/05/identity/claims/name	student1@arubamel.onmicr
Authentication:Full-Username	student1@arubamel.onmicr
Authentication:Full-Username-Normalized	student1@arubamel.onmicr
Authentication:Status	User
Authentication:Type	SSO
Authentication:Username	student1@arubamel.onmicr
Authorization:Sources	[Local User Repository]
Connection:Protocol	Application
Connection:Src-IP-Address	192.168.1.149
Date:Date-of-Year	2026-03-27
Date:Date-Time	2026-03-27 09:31:48
Date:Day-of-Week	Friday
Date:Time-of-Day	09:31:48

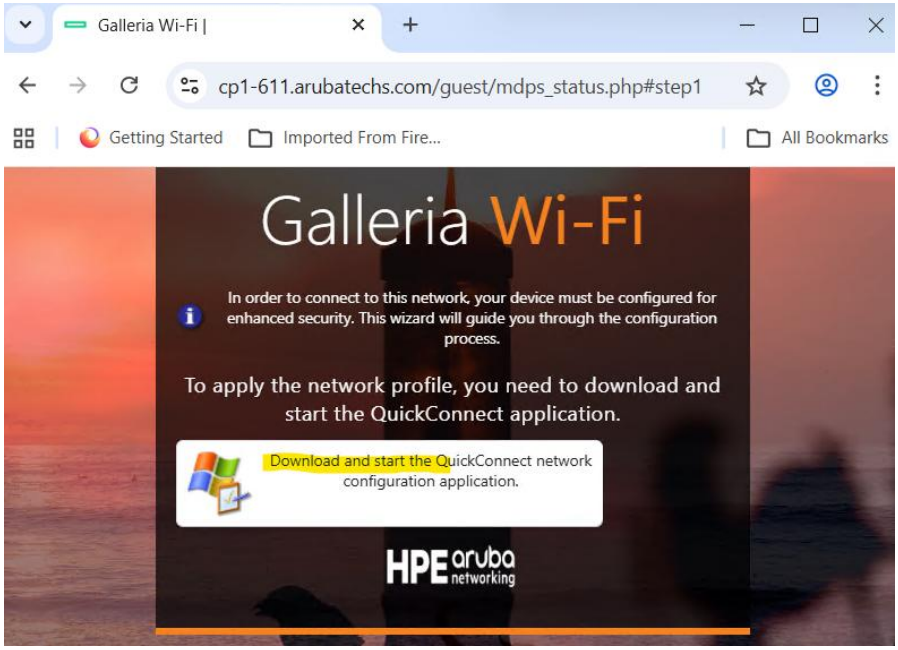
Summary | Input | Output

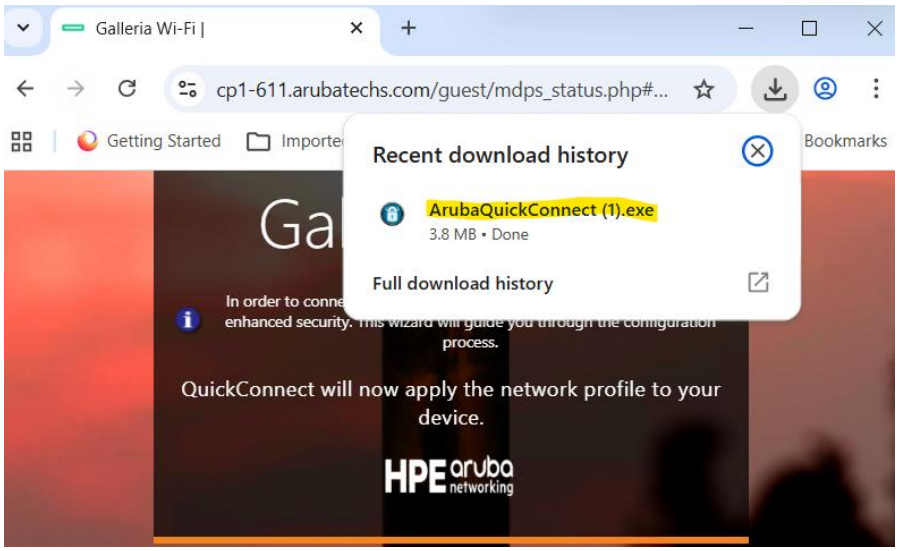
Enforcement Profiles:	Entra ClearPass Admin SSO Login (SAML SP Service) Enforcement Profile
System Posture Status:	UNKNOWN (100)

Application Response

Application:SSORole	Super Administrator

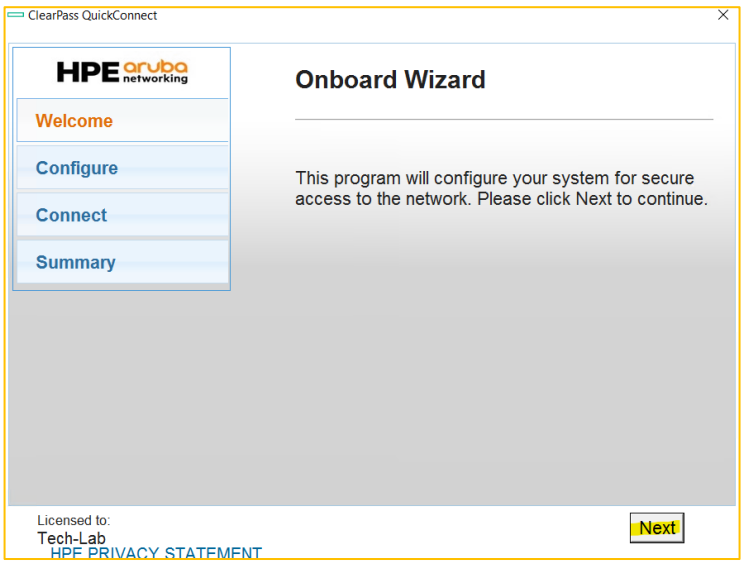
Back to the studnet1's workflow, studnet1 is now shown this captive portal to download QuickConnect network configuration application for a windows laptop.

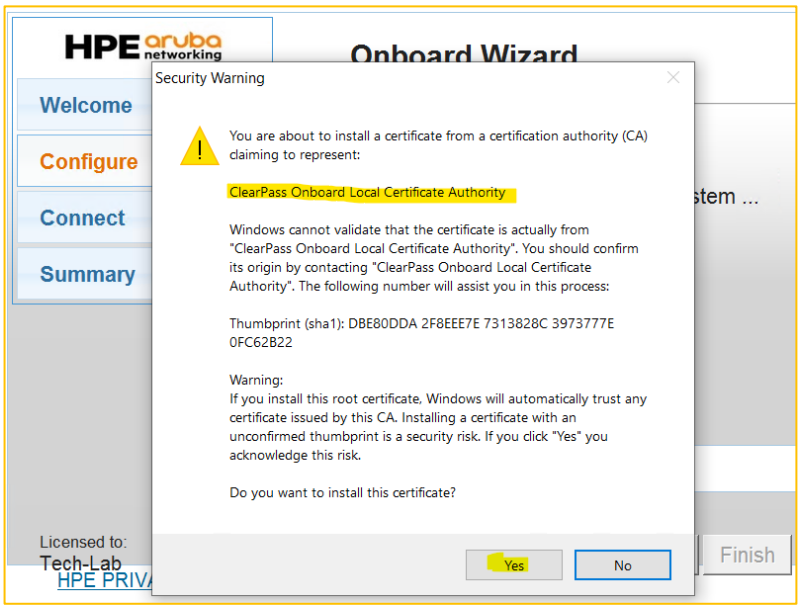


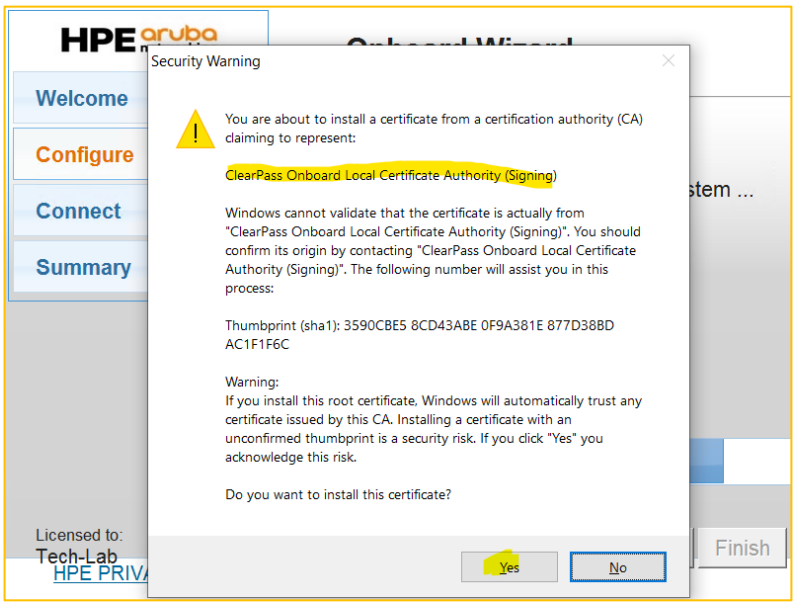


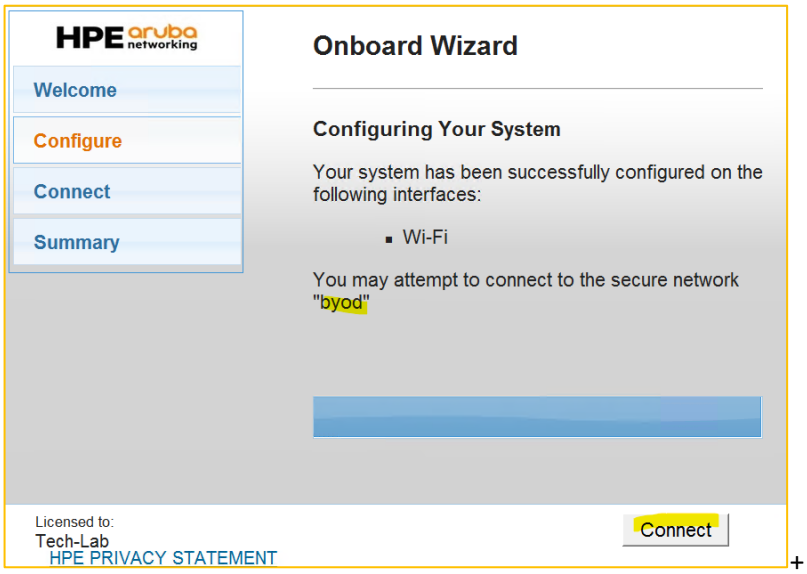
Then when I run the application it adds the user certificate and the server/signing certificate (both from ClearPass Onboard) on the laptop. It also configures the WLAN profile for the SSID with EAP-TLS authentication.

So now studnet1 has double clicked on the ArubaQuickConnect.exe



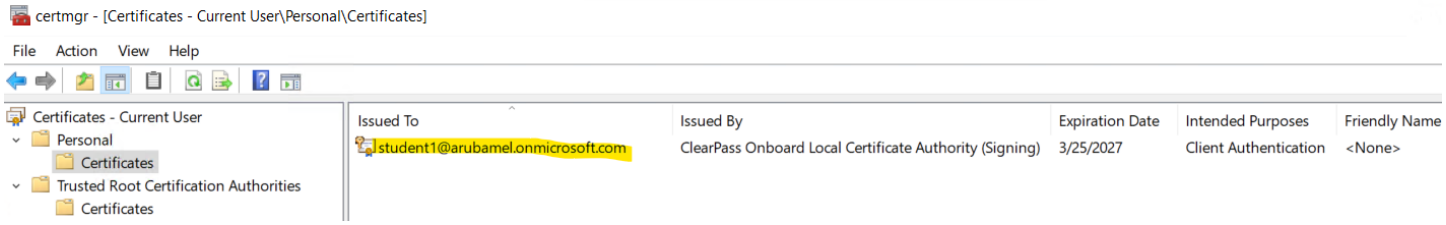




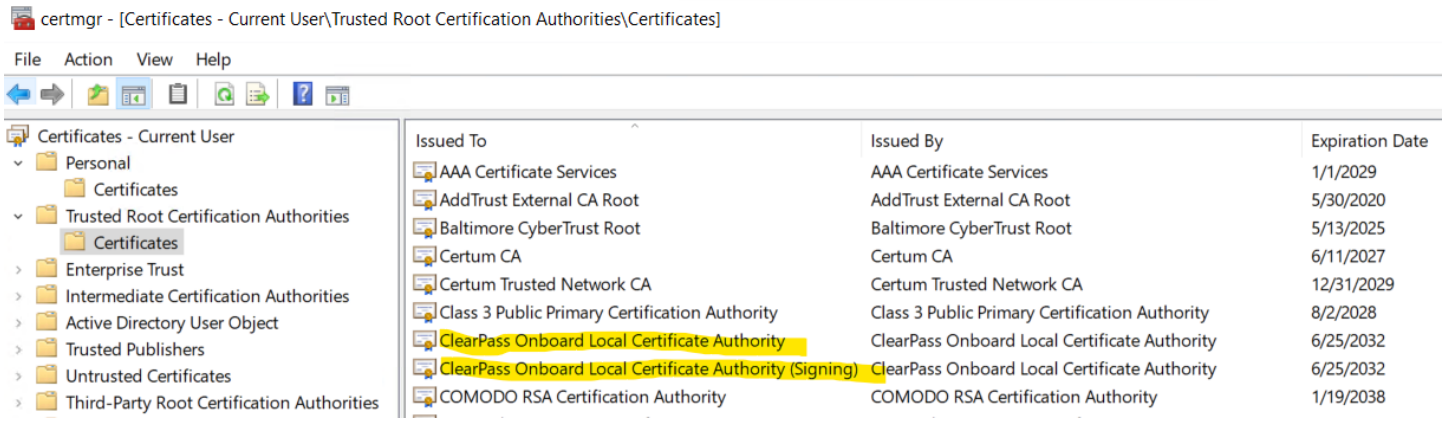


Once you click on the Connect button, it will automatically connect to the “byod” SSID.

Let’s do a few checks now. Firstly, check the certmgr to see the user certificate that was installed. We have one for the user.

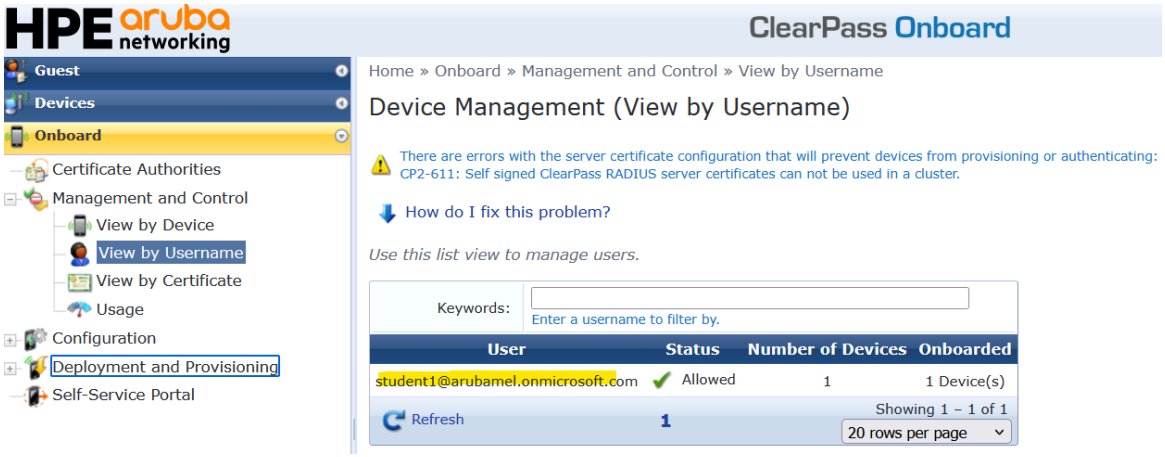


And two server certificates added in the Trusted Root section.



4.1 ClearPass Onboard Certificate Management

Here we'll check the user certificates that were issued by ClearPass Onboard Certificate Authority (CA).



4.2 WLAN Connectivity Test

After I clicked on the “Connect” button of QuickConnect app during studnet1 onboarding, I get the other two authentication sessions that show up in access tracker. So, all up there are three authentication sessions for each client onboarding as shown below.

Filter: Request ID contains Go Clear Filter Show 50 record

#	NAS IP Addres	Server Nam	Source	Username	Service	Login Statu	Enforcement Profiles	Request Timestamp
1.	10.10.10.40	CP1-611	RADIUS	student1@arubamel.onmicrosoft.com	Basic Aruba Wireless dot1x-TLS	ACCEPT	Update Endpoint Location, Aruba student-entra-byod access	2026/03/28 15:28:27
2.		CP1-611	Application	student1@arubamel.onmicrosoft.com	Basic Onboard Authorization	ACCEPT	[Allow Application Access Profile]	2026/03/28 15:28:10
3.		CP1-611	Application	student1@arubamel.onmicrosoft.com	Entra ClearPass Admin SSO Login (SAML SP Service)	ACCEPT	[Allow Application Access Profile]	2026/03/28 15:27:57

Starting with Session #3, this was generated when the user successfully authenticated against Entra SSO.

Summary | Input | Output

Login Status:	ACCEPT
Session Identifier:	W0000000e-05-69c758cc
Date and Time:	Mar 28, 2026 15:27:57 AEDT
End-Host Identifier:	-
End-Host Profile:	-
End-Host Status:	
Username:	student1@arubamel.onmicrosoft.com
Access Device IP (Port):	-
Access Device Name:	-
System Posture Status:	UNKNOWN (100)
Policies Used -	
Service:	Entra ClearPass Admin SSO Login (SAML SP Service)
Authentication Method:	Not applicable
Authentication Source:	-
Authorization Source:	[Local User Repository]
Roles:	[User Authenticated]
Enforcement Profiles:	[Allow Application Access Profile]
Service Monitor Mode:	Disabled
Online Status:	Not Available

Below you’ll see the “Department” SSO attribute that we are matching comes through.

Summary | Input | Output

Username:	student1@arubamel.onmicrosoft.com
End-Host Identifier:	-
Access Device IP (Port):	-
Access Device Name:	-

Computed Attributes

Application:Name	Onboard
Application:SSO:Department	secondary
Application:SSO:http://schemas.microsoft.com/claims/authnmethodsreferences	http://schemas.microsoft.co identity/authenticationmeth
Application:SSO:http://schemas.microsoft.com/identity/claims/displayname	student1
Application:SSO:http://schemas.microsoft.com/identity/claims/identityprovider	https:// sts.windows.net/0391024d-5 ba8477cbfa8d/
Application:SSO:http://schemas.microsoft.com/identity/claims/objectidentifier	87df4a5b-9e1b-4306-9564-l
Application:SSO:http://schemas.microsoft.com/identity/claims/tenantid	0391024d-5b37-4bb6-8e40-
Application:SSO:http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname	Student1
Application:SSO:http://schemas.xmlsoap.org/ws/2005/05/identity/claims/name	student1@arubamel.onmicrc
Authentication:Full-Username	student1@arubamel.onmicrc

Summary | Input | Output

Enforcement Profiles:	[Allow Application Access Profile]
System Posture Status:	UNKNOWN (100)

Session #2, is when the user clicked on the “Configure” or “Next” button of QuickConnect App. This is authorisation check to only allow windows devices to be onboarded.

Summary | Input | Output

Login Status:	ACCEPT
Session Identifier:	W0000000f-05-69c758da
Date and Time:	Mar 28, 2026 15:28:10 AEDT
End-Host Identifier:	-
End-Host Profile:	-
End-Host Status:	
Username:	student1@arubamel.onmicrosoft.com
Access Device IP (Port):	-
Access Device Name:	-
System Posture Status:	UNKNOWN (100)
Policies Used -	
Service:	Basic Onboard Authorization
Authentication Method:	Not applicable
Authentication Source:	-
Authorization Source:	-
Roles:	[Onboard Windows], [User Authenticated]
Enforcement Profiles:	[Allow Application Access Profile]
Service Monitor Mode:	Disabled
Online Status:	Not Available

Summary | Input | Output

Username:	student1@arubamel.onmicrosoft.com
End-Host Identifier:	-
Access Device IP (Port):	-
Access Device Name:	-

Computed Attributes

Application:ClearPass:Device-ICCID	
Application:ClearPass:Device-IMEI	
Application:ClearPass:Device-MAC	28:d2:44:52:c2:38,5c:51:4f:e6:a9:83
Application:ClearPass:Device-Name	Windows 10
Application:ClearPass:Device-Product	
Application:ClearPass:Device-Serial	
Application:ClearPass:Device-UDID	
Application:ClearPass:Device-Version	

Application:ClearPass:Onboard-Request-Type	New
Application:ClearPass:Page-Name	device_provisioning_3
Application:ClearPass:Provisioning-Settings-ID	4
Application:Name	Onboard
Application:WebLoginURL:SSO-Role	
Application:WebLoginURL:sso_token	Dcs5goIwAADAB1Eol0JhQQgsypENKAQ6IIKoEcMV9PW70885UyMof J2pdw6koNnO4qfSnXM6gWLZu0LRxl2lKY04zpEBJBFUhYUzG5D7D1 lbEalxX18w2eSgkfDn8=
Authentication:Full-Username	student1@arubamel.onmicrosoft.com
Authentication:Full-Username-Normalized	student1@arubamel.onmicrosoft.com
Authentication:Status	User
Authentication:Username	student1@arubamel.onmicrosoft.com
Connection:Protocol	Application
Connection:Src-IP-Address	127.0.0.1

Summary | Input | Output

Enforcement Profiles:	[Allow Application Access Profile]
System Posture Status:	UNKNOWN (100)

Session #1, is when the user connects to the EAP-TLs WLAN.

Summary | Input | Output | Alerts | Accounting

Login Status:	ACCEPT
Session Identifier:	R00000002-05-69c758ea
Date and Time:	Mar 28, 2026 15:28:27 AEDT
End-Host Identifier:	5C-51-4F-E6-A9-83 Open in Central
End-Host Profile:	Computer / Windows / Windows 10
End-Host Status:	Unknown Mark as Known
Username:	student1@arubamel.onmicrosoft.com
Access Device IP (Port):	10.10.10.40
Access Device Name:	10.10.10.40
System Posture Status:	UNKNOWN (100)

Policies Used -

Service:	Basic Aruba Wireless dot1x-TLS
Authentication Method:	EAP-TLS
Authentication Source:	None
Authorization Source:	[Local User Repository], [Onboard Devices Repository], Ariya-AAD
Roles:	[User Authenticated], student-entra-byod
Enforcement Profiles:	Update Endpoint Location, Aruba student-entra-byod access
Service Monitor Mode:	Disabled
Online Status:	Online

Summary | Input | Output | Alerts | Accounting

Username:	student1@arubamel.onmicrosoft.com
End-Host Identifier:	5C-51-4F-E6-A9-83 (Computer / Windows / Windows 10)
Access Device IP (Port):	10.10.10.40
Access Device Name:	10.10.10.40

RADIUS Request

Authorization Attributes

Authorization:Ariya-AAD:AccountEnabled	true
Authorization:Ariya-AAD:Department	secondary
Authorization:Ariya-AAD:Groups	Students
Authorization:Ariya-AAD:Mail	

Computed Attributes

Authentication:ErrorCode	0
Authentication:Full-Username	student1@arubamel.onmicrosoft.com
Authentication:Full-Username-Normalized	student1@arubamel.onmicrosoft.com
Authentication:MacAuth	NotApplicable
Authentication:OuterMethod	EAP-TLS
Authentication:Posture	Unknown
Authentication:Status	User
Authentication:TLS-Version	1.2
Authentication:Username	student1@arubamel.onmicrosoft.com
Authorization:Sources	[Local User Repository], [Onboard Devices Repository
Certificate:Extended-Key-Usage	TLS Web Client Authentication
Certificate:Issuer-C	US
Certificate:Issuer-CN	ClearPass Onboard Local Certificate Authority (Signing
Certificate:Issuer-DN	emailAddress=6f520c29-58b7-4ecd-a73c-d288ad2dcf
Certificate:Issuer-emailAddress	6f520c29-58b7-4ecd-a73c-d288ad2dcf50@example.c

Certificate:Issuer-L	Sunnyvale
Certificate:Issuer-O	Aruba Networks
Certificate:Issuer-ST	California
Certificate:Not-Valid-After	2027-03-27 20:54:35
Certificate:Public-Key-Algorithm	rsaEncryption
Certificate:Public-Key-Length	2048
Certificate:Serial-Number	1e
Certificate:Signature-Algorithm	sha512WithRSAEncryption
Certificate:Subject-AltName-DirName-DN	OnboardEmailAddress=student1@arubamel.onmicros 10,OnboardDeviceType=Windows
Certificate:Subject-AltName-DirName-OnboardDeviceName	Windows 10
Certificate:Subject-AltName-DirName-OnboardDeviceType	Windows
Certificate:Subject-AltName-DirName-OnboardEmailAddress	student1@arubamel.onmicrosoft.com
Certificate:Subject-AltName-DirName-OnboardMACAddress	28:d2:44:52:c2:38, 5c:51:4f:e6:a9:83
Certificate:Subject-AltName-DirName-OnboardUserName	student1@arubamel.onmicrosoft.com
Certificate:Subject-AltName-Email	student1@arubamel.onmicrosoft.com
Certificate:Subject-AltName-msUPN	student1@arubamel.onmicrosoft.com

Certificate:Subject-C	US
Certificate:Subject-CN	student1@arubamel.onmicrosoft.com
Certificate:Subject-DN	CN=student1@arubamel.onmicrosoft.com,O=Tech-Lal
Certificate:Subject-L	Sunnyvale
Certificate:Subject-O	Tech-Lab
Certificate:Subject-ST	California
Certificate:Version	3
Connection:AP-Name	Board-Room-AP

Connection:Protocol	RADIUS
Connection:Src-IP-Address	10.10.10.40
Connection:Src-Port	57724
Connection:SSID	byod
Date:Date-Time	2026-03-27 20:39:51
Endpoint:Device Insight Tags	[Computers & Servers]
Endpoint:Device Name	Windows 10
Endpoint:Device Type	Windows
Endpoint:Expanded Device Type	Windows
Endpoint:Last Known Location	10.10.10.40:Board-Room-AP
Endpoint:Owner	student1@arubamel.onmicrosoft.com

Summary | Input | **Output** | Alerts | Accounting

Enforcement Profiles:	Update Endpoint Location, Aruba student-entra-byod access
System Posture Status:	UNKNOWN (100)
Audit Posture Status:	UNKNOWN (100)

RADIUS Response

Endpoint:Last Known Location	10.10.10.40:Board-Room-AP
Radius:Aruba:Aruba-User-Role	Student-entra-byod

And this is the view from Aruba Central.