

IdP Setup: Microsoft Entra ID (Azure)

What

Before we can use AzureAD for authentication from FileWave, we must create a new application in the Azure Portal and give FileWave access to it. The whole purpose of this configuration is to give FileWave permissions to talk to your Microsoft Entra ID environment.

When/Why

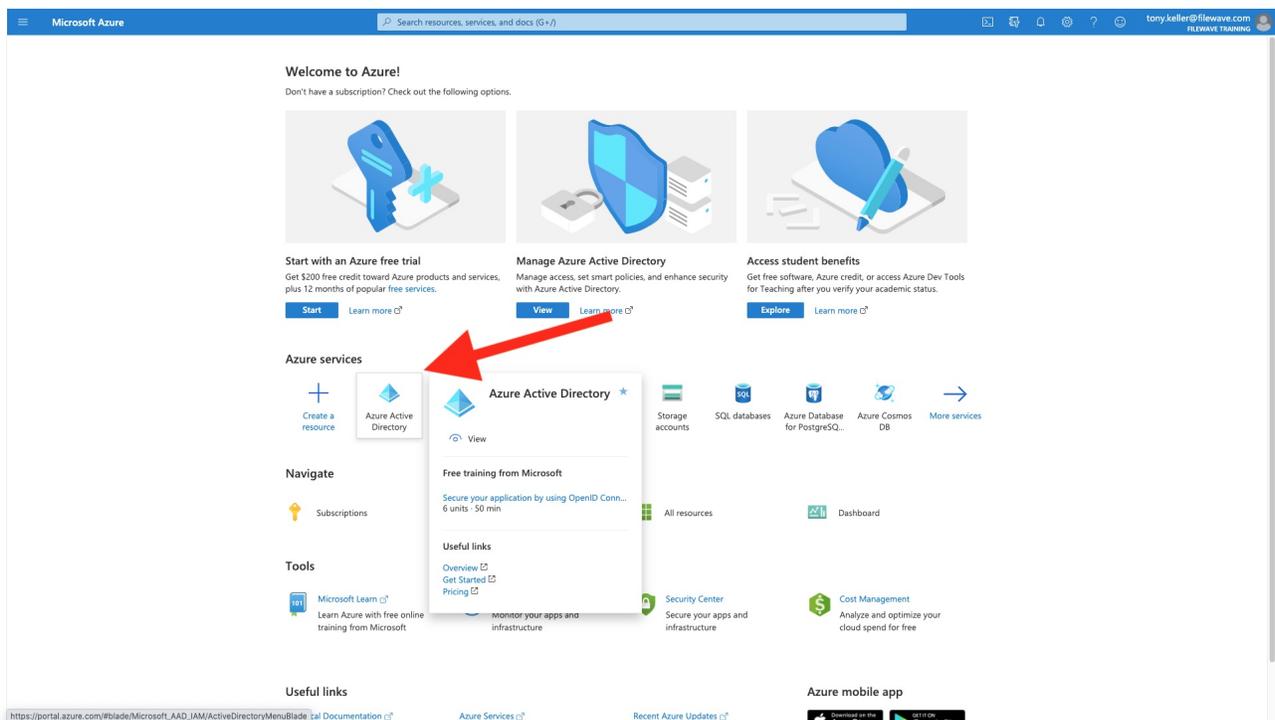
This configuration is required if you want to use AzureAD for authentication during device enrollment or during login to the FileWave Web and Native administrator consoles.

How

The configuration for access is all driven through an Microsoft Entra ID application, so we need to start with:

Part 1: Login to Microsoft Entra ID Portal

First, we'll login to Microsoft Entra ID at portal.azure.com with an administrator's account and click on Microsoft Entra ID as shown:



And make note of the domain info shown below:

Microsoft Azure | FileWave Training | Overview

Azure Active Directory

Switch tenant | Delete tenant | Create a tenant | What's new | Preview features | Got feedback?

Azure Active Directory can help you enable remote work for your employees and partners. [Learn more](#)

FileWave Training

Search your tenant

Tenant information

Your role: Global administrator [More info](#)

License: Azure AD Free

Tenant ID: 00487120-4139-4b67-b1db-962-[b1db-962-...](#)

Primary domain: **fvtraining.onmicrosoft.com**

Azure AD Connect

Status: Not enabled

Last sync: Sync has never run

Sign-ins

Sign-ins: 15

Create

User | Guest user | Group | Enterprise application | App registration

Featured services

It is a good idea to take all of these elements and label/paste them into a document you store securely. Although we'll use them to configure FileWave, you can't access many of them from FileWave once they are stored.

Part 2: Create an App

Now we have to create an app for FileWave to talk to, and assign some right to it. First go to the app registrations menu, then click "new registration":

Microsoft Azure | FileWave Training | App registrations

Azure Active Directory

+ New registration | Endpoints | Troubleshooting | Download | Preview features | Got feedback?

Try out the new App registrations search preview! [Click to enable the preview.](#)

Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure AD Graph. We will continue to provide technical support and security updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph. [Learn more](#)

All applications: **Owed applications**

Start typing a name or application ID to filter these results

Display name	Application (client) ID	Created on	Certificates & secrets
FileWave Integration	065ccb0e-86cd-4887-a54c-b8b08a086a2c	2/14/2020	-
PW Beta	34a993c3-fb0c-4900-83f1-bc2d998d0a6bb	12/28/2020	-
PW Beta	61a5f712-3c20-4b88-878d-ce9214a99166	1/13/2021	Current

Specify a name for your app that is meaningful to you, and Register the app (we'll set the login URIs later).

Microsoft Azure

Search resources, services, and docs (G+)

Home > FileWave Training >

Register an application

* Name
The user-facing display name for this application (this can be changed later).

FW Beta 2

Supported account types
Who can use this application or access this API?

- Accounts in this organizational directory only (FileWave Training only - Single tenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)
- Personal Microsoft accounts only

Help me choose...

Redirect URI (optional)
We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web e.g. https://myapp.com/auth

By proceeding, you agree to the Microsoft Platform Policies

Register

Part 3: Add a Platform and URI Addresses

Within the app configuration, we'll choose Authentication, then Add a Platform, of type Web:

Microsoft Azure

Search resources, services, and docs (G+)

Home > FileWave Training > FW Beta 2

FW Beta 2 | Authentication

Platform configurations
Depending on the platform or device this application is targeting, additional configuration may be required such as redirect URIs, specific authentication settings, or fields specific to the platform.

+ Add a platform

Supported account types
Who can use this application or access this API?

- Accounts in this organizational directory only (FileWave Training only - Single tenant)
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Help me decide...

Advanced settings
Allow public client flows

Enable the following mobile and desktop flows:

- App collects plaintext password (Resource Owner Password Credential Flow) [Learn more](#)
- No keyboard (Device Code Flow) [Learn more](#)
- SSO for domain-joined Windows (Windows Integrated Auth Flow) [Learn more](#)

Configure platforms

Web applications

- Web**
Build, host, and deploy a web server application. .NET, Java, Python
- Single-page application
Configure browser client applications and progressive web applications. JavaScript.

Mobile and desktop applications

- iOS / macOS
Objective-C, Swift, Xamarin
- Android
Java, Kotlin, Xamarin
- Mobile and desktop applications
Windows, UWP, Console, IoT & Limited-entry Devices, Classic iOS + Android

And for the web configuration, we'll need to copy some address from your FileWave server. You'll get them from the WebAdmin, Settings:, New AzureAD IDP, and then Get URLs as shown

FileWave Admin

Model Number: 108

Search for Devices

TonyK

Settings

Devices

Android ChromeOS iOS macOS tvOS Windows Other/Unknown All

Groups	Name	Groups	Asset Tag	Comment	User	Model	IP Addr
Root	3183a5776d58cee0	SG Mixed, SG Mixed 1 (test), ...					
All iOS (non-inv)	ARKONE	All Windows (inv), FileWave Cl...			Administrator	16	99.203...
All macOS (inv)	DESKTOP-T3SL86S	All Windows (inv), FileWave Cl...			joe	0	184.198...
All Windows (inv)	filewave's Mac	All macOS (inv), FileWave Cle...			filewave	11	184.198...
BAM Devices	FOUNDRY1	All Windows (inv), FileWave Cl...	FW-ASSET		keller90	83	172.58...
Chromebooks	FW-DMP991ZTHG5...	All iOS (non-inv), TK Client De...					172.58...
FileWave Client Version	ipad Main	All iOS (non-inv), Have Asset T...	FW-657394				172.58...
FileWave Client Version 42	PeeCee-McPC	All Windows (inv), FileWave Cl...					172.58...
Have Asset Tags	Surface-McPC	All Windows (inv), FileWave Cl...	Mine		tk_fir	105	172.58...
SG Mixed	Tony Keller MBPro	All macOS (inv), FileWave Cle...	FW-123456		keller90	108	172.58...
SG Mixed 1 (test)							
Test Android							
TK Client Devices							

14.2.0-27f6f628e

Then choose an Microsoft Entra ID IDP Provider

Settings

Identity Provider

Back to FileWave Admin

+ New Identity Provider

Identity Provider

Select Identity Provider you want to setup

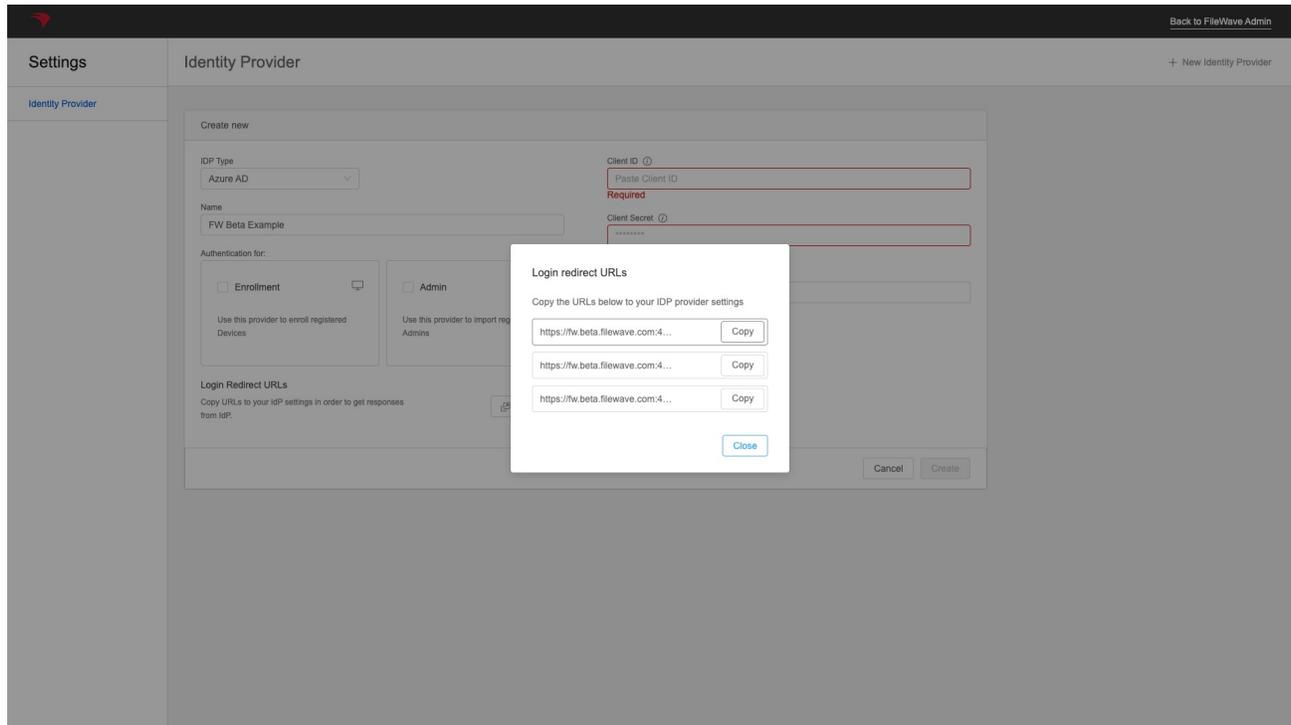
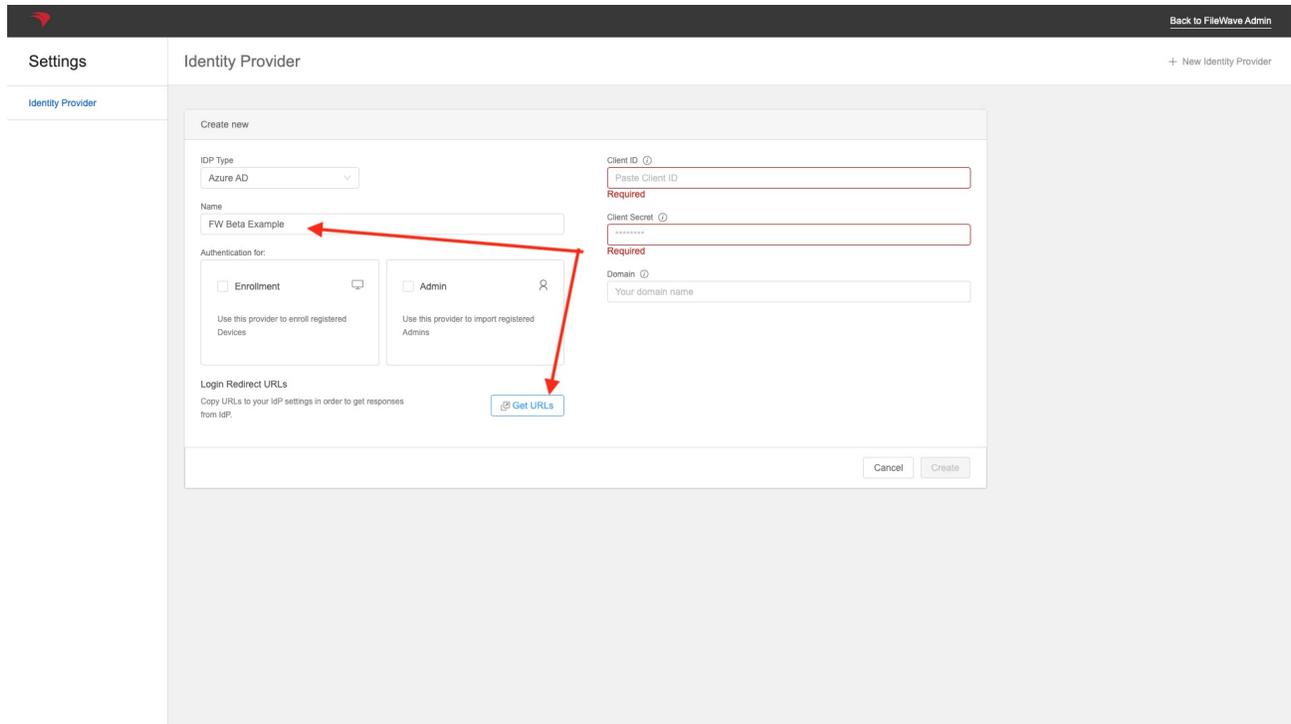


Setup Okta



Setup Microsoft Azure AD

You can add a name now (or later), but you'll get the URLs from the "Get URLs" button:



So now we'll enter one of the redirects, and click configure:

FW Beta 2 | Authentication

Search (Cmd+J) Save Discard Got feedback?

Platform configurations

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+ Add a platform

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Help me decide...

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Enable the following mobile and desktop flows: Yes No

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- No keyboard (Device Code Flow) [Learn more](#)
- SSO for domain-joined Windows (Windows Integrated Auth Flow) [Learn more](#)

Configure Web

All platforms Quickstart Docs

Redirect URIs

The URIs we will accept as destinations when returning authentication responses (tokens) after successfully authenticating or signing out users. Also referred to as reply URIs. [Learn more about Redirect URIs and their restrictions](#)

Front-channel logout URL

This is where we send a request to have the application clear the user's session data. This is required for single sign-out to work correctly.

Implicit grant and hybrid flows

Request a token directly from the authorization endpoint. If the application has a single-page architecture (SPA) and doesn't use the authorization code flow, or if it invokes a web API via JavaScript, select both access tokens and ID tokens. For ASP.NET Core web apps and other web apps that use hybrid authentication, select only ID tokens. [Learn more](#).

Select the tokens you would like to be issued by the authorization endpoint:

Access tokens (used for implicit flows)
 ID tokens (used for implicit and hybrid flows)

Configure **Cancel**

And then add the other two from here:

FW Beta 2 | Authentication

Search (Cmd+J) Save Discard Got feedback?

Got a second to give us some feedback? →

Platform configurations

Depending on the platform or device this application is targeting, additional configuration may be required such as redirect URIs, specific authentication settings, or fields specific to the platform.

+ Add a platform

Web Quickstart Docs

Redirect URIs

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Add URI

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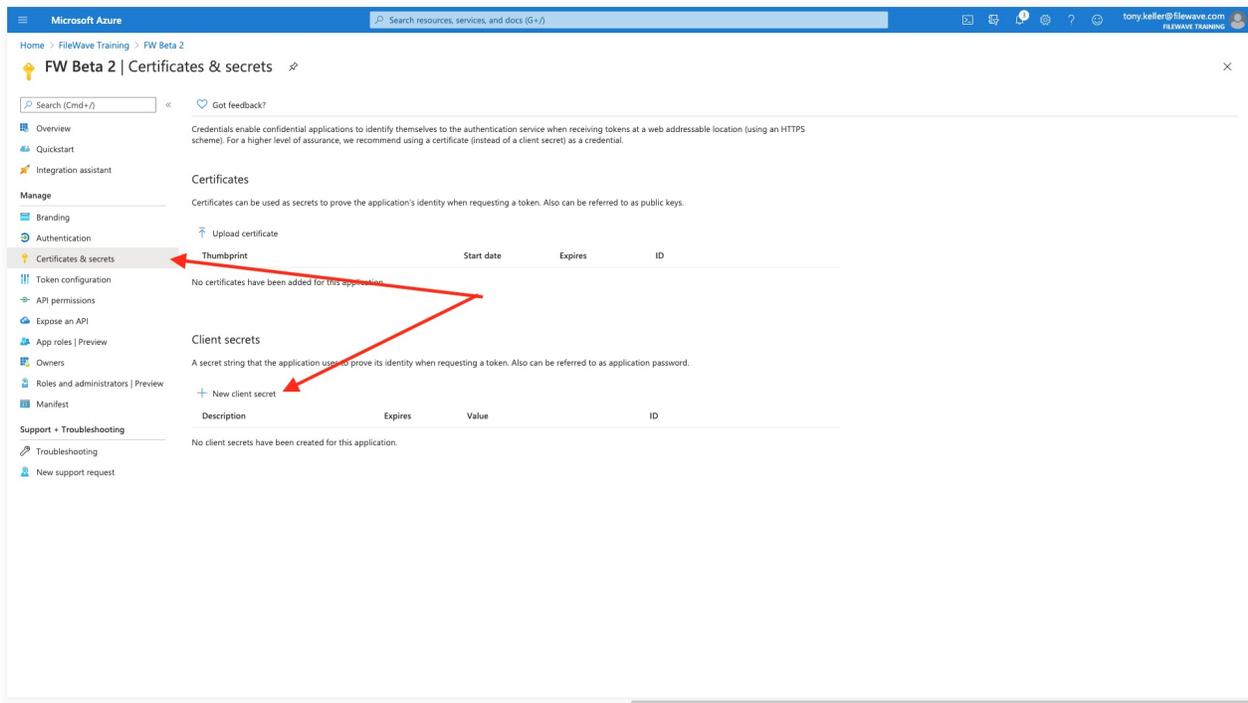
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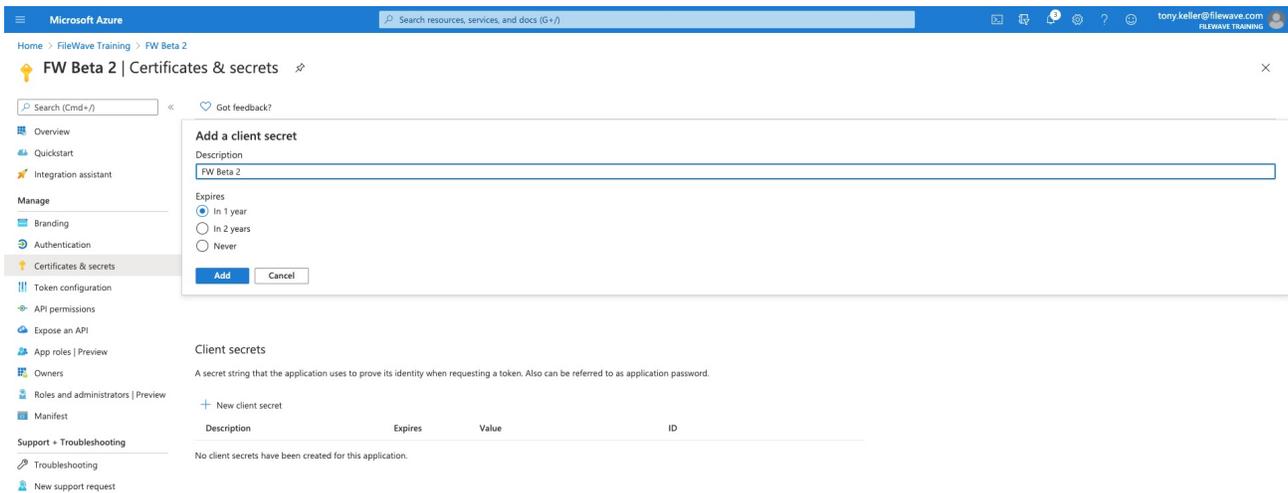
Make sure to hit Save at the top after you have entered all three.

Part 4: Cert & Secrets

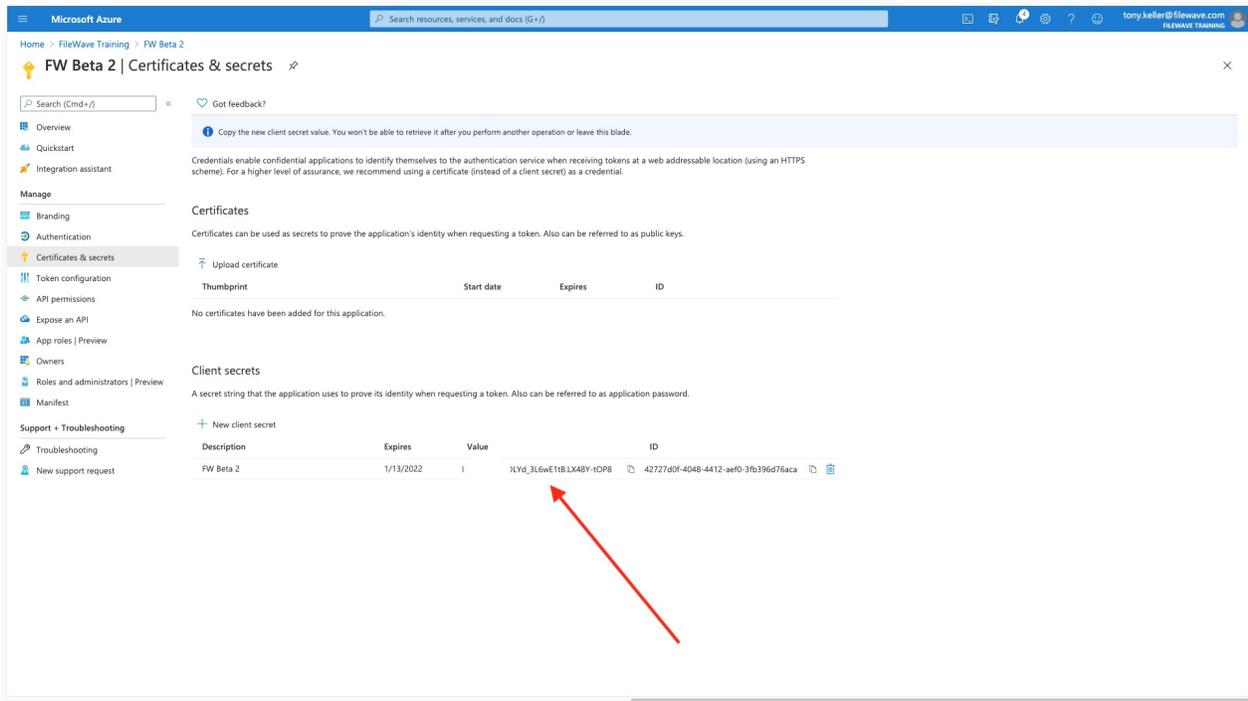
Now we are going to go to Certificates & Secrets to provide a way for FileWave to authentication to our new application. Click on New client secret



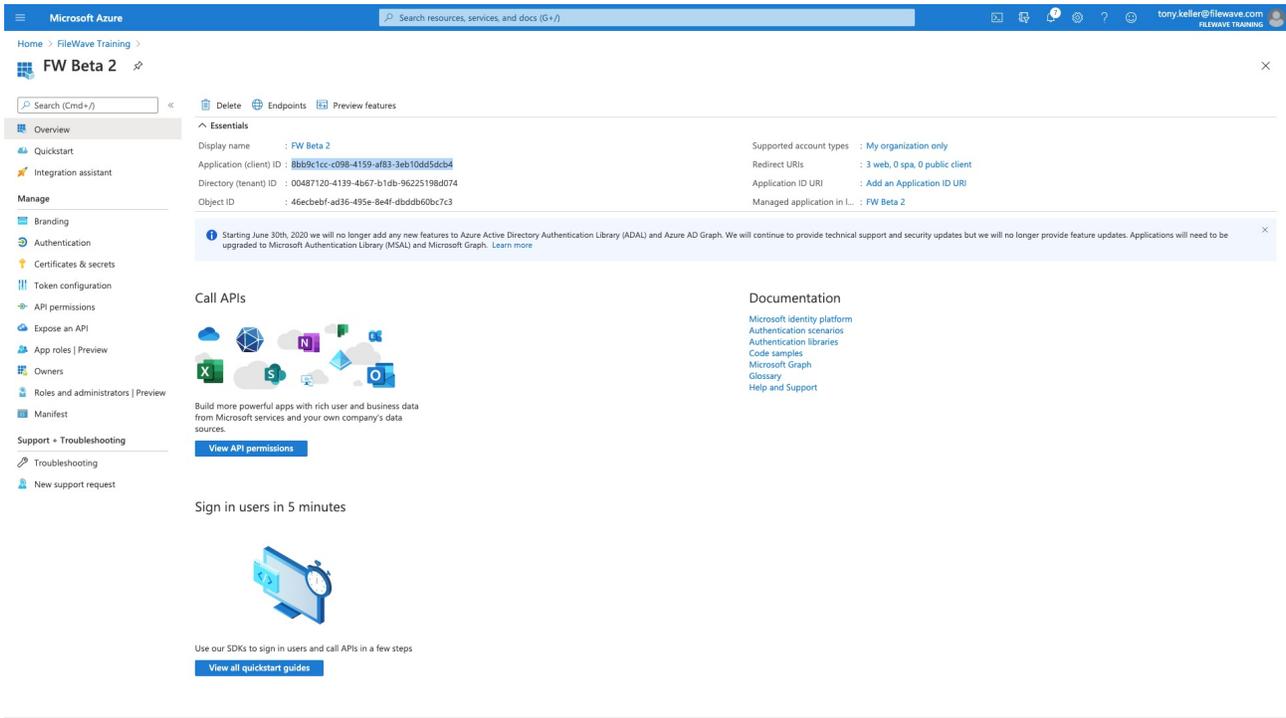
Then we give it a descriptive name:



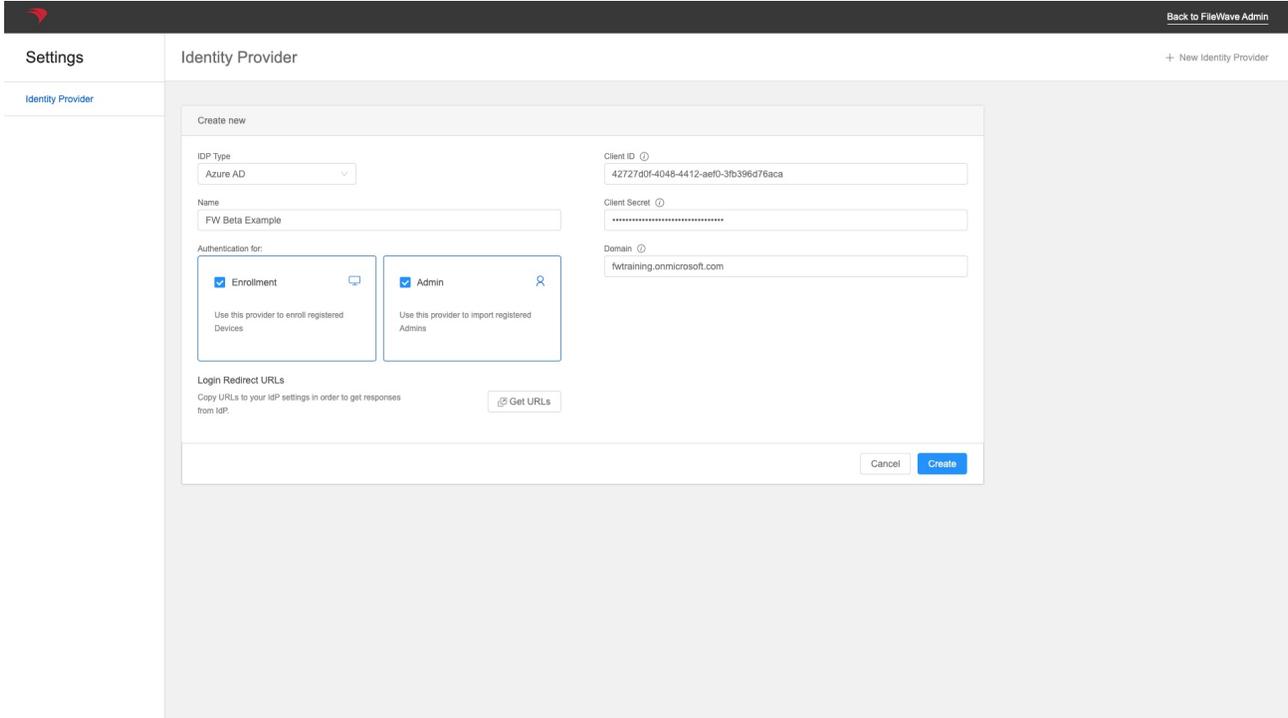
And then we'll want to get a copy of the Client Secret, and this is the ONLY time you can copy it. The one we need is under the 'Value' column.



Lastly, we get the The Client ID, you get from the overview page:



Each of the relevant values then gets copied into the FileWave config below:

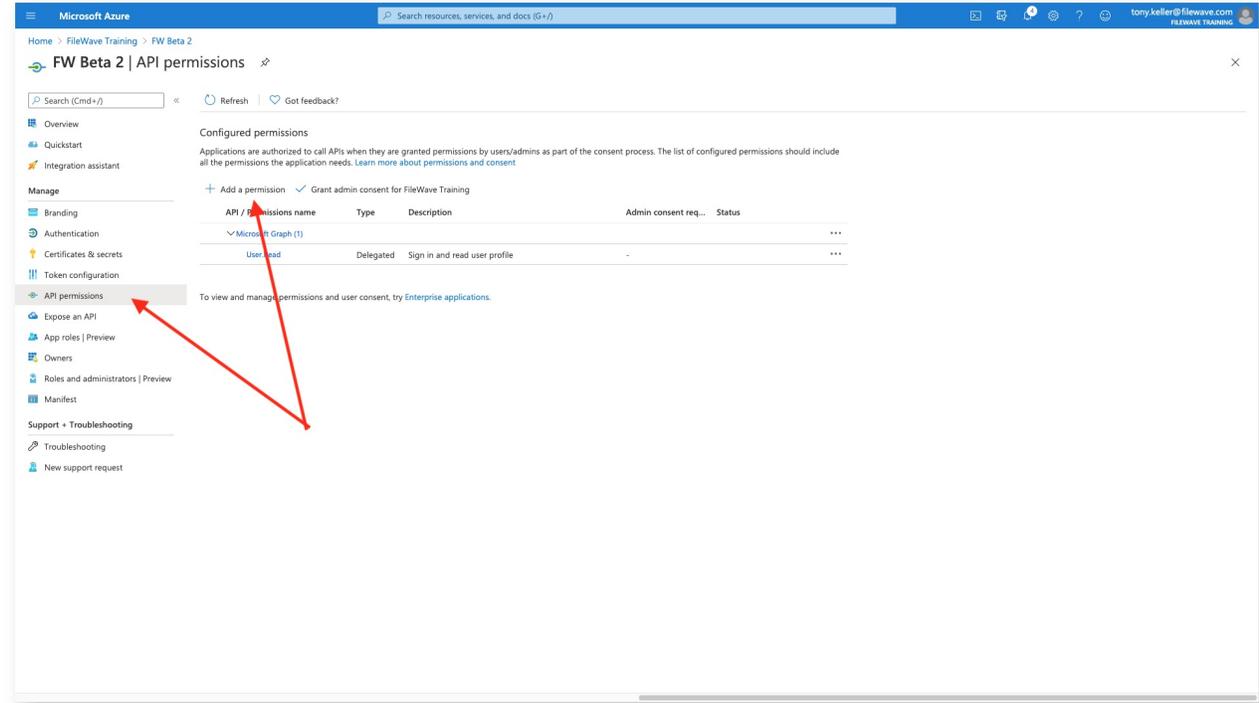


You'll check the checkbox for "Admin" if you want to be able to use AzureAD for login to the FileWave admin with AzureAD, and "Enrollment" if you want to use it for Apple device enrollment authentication. Note that multiple IDPs can be used for admin login, but only one for device enrollment.

Part 5: App Permissions

Now we have to give our app permissions to read the directory so that it can pull group information into FileWave for browsing and rights assignment.

So, we'll go to the App Permissions section and start Adding Permissions



Our permissions are going to be for Microsoft Graph

Request API permissions

Select an API

Microsoft APIs | APIs my organization uses | My APIs

Commonly used Microsoft APIs

- Microsoft Graph**: Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.
- Azure Rights Management Services**: Allow validated users to read and write protected content.
- Azure Service Management**: Programmatic access to much of the functionality available through the Azure portal.
- Dynamics 365 Business Central**: Programmatic access to data and functionality in Dynamics 365 Business Central.
- Intune**: Programmatic access to Intune data.
- Office 365 Management APIs**: Retrieve information about user, admin, system, and policy actions and events from Office 365 and Azure AD activity logs.
- SharePoint**: Interact remotely with SharePoint data.
- Skype for Business**: Integrate real-time presence, secure messaging, calling, and conference capabilities.

More Microsoft APIs

- Azure Batch**: Schedule large-scale parallel and HPC applications in the cloud.
- Azure Data Catalog**: Programmatic access to Data Catalog resources to register, annotate and search data assets.
- Azure Data Explorer**: Perform ad-hoc queries on terabytes of data to build near real-time and complex analytics solutions.
- Azure Data Explorer (with Multifactor Authentication)**: Perform ad-hoc queries on terabytes of data to build near real-time and complex analytics solutions.
- Azure Data Lake**: Access to storage and compute for big data analytic scenarios.
- Azure DevOps**: Integrate with Azure DevOps and Azure DevOps server.

We'll start with an application permission:

Request API permissions

All APIs

Microsoft Graph
https://graph.microsoft.com/ Docs

What type of permissions does your application require?

- Delegated permissions**: Your application needs to access the API as the signed-in user.
- Application permissions**: Your application runs as a background service or daemon without a signed-in user.

Add permissions | Discard

For Group Read All AND User Read All (not shown, but you can pick two at once):

Microsoft Azure | Search resources, services, and docs (G+)

Home > FileWave Training > FW Beta 2

FW Beta 2 | API permissions

Search (Cmd+F) Refresh Got feedback?

Overview Quickstart Integration assistant

Manage

- Branding
- Authentication
- Certificates & secrets
- Token configuration
- API permissions**
- Expose an API
- App roles | Preview
- Owners
- Roles and administrators | Preview
- Manifest

Support + Troubleshooting

- Troubleshooting
- New support request

Configured permissions

Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of all the permissions the application needs. [Learn more about permissions and consent](#)

+ Add a permission Grant admin consent for FileWave Training

API / Permissions name	Type	Description	Admin consent req...
Microsoft Graph (1)			
User.Read	Delegated	Sign in and read user profile	-

To view and manage permissions and user consent, try [Enterprise applications](#).

Request API permissions

All APIs

- tdgAssignments
- EduRoster
- EntitlementManagement
- ExternalItem
- Files
- Group (1)
- Group.Create Create groups Yes
- Group.Read.All Read all groups Yes**
- Group.ReadWrite.All Read and write all groups Yes
- GroupMember
- IdentityProvider
- IdentityRiskEvent
- IdentityRiskUser
- IdentityUserFlow
- InformationProtectionPolicy
- MailboxSettings
- Mail

Add permissions Discard

Then we'll add more permissions, but "delegated permissions" for open id and profile as shown:

Microsoft Azure | Search resources, services, and docs (G+)

Home > FileWave Training > FW Beta 2

FW Beta 2 | API permissions

Search (Cmd+F) Refresh Got feedback?

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API / Permissions name	Type	Description	Admin consent req...
Microsoft Graph (3)			
Group.Read.All	Application	Read all groups	Yes
User.Read	Delegated	Sign in and read user profile	-
User.Read.All	Application	Read all users' full profiles	Yes

To view and manage permissions and user consent, try [Enterprise applications](#).

Request API permissions

All APIs

Microsoft Graph <https://graph.microsoft.com/> Docs

What type of permissions does your application require?

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions expand all

Start typing a reply url to filter these results

Permission	Admin consent required
OpenId permissions (2)	
email View users' email address	-
offline_access Maintain access to data you have given it access to	-
openid Sign users in	-
profile View users' basic profile	-
AccessReview	-
AdministrativeUnit	-
AgreementAcceptance	-
Agreement	-
Analytics	-
APIConnectors	-

Add permissions Discard

Our permissions then should look like this when we have them all

Microsoft Azure | Search resources, services, and docs (G+)

Home > FileWave Training > FW Beta 2

FW Beta 2 | API permissions

Search (Cmd+/) Refresh Got feedback?

You are editing permission(s) to your application, users will have to consent even if they've already done so previously.

Configured permissions

Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of configured permissions should include all the permissions the application needs. [Learn more about permissions and consent](#)

+ Add a permission Grant admin consent for FileWave Training

API / Permissions name	Type	Description	Admin consent req...	Status
Microsoft Graph (5)				
Group.Read.All	Application	Read all groups	Yes	Not granted for FileWav...
openid	Delegated	Sign users in	-	
profile	Delegated	View users' basic profile	-	
User.Read	Delegated	Sign in and read user profile	-	
User.Read.All	Application	Read all users' full profiles	Yes	Not granted for FileWav...

To view and manage permissions and user consent, try [Enterprise applications](#).

Support + Troubleshooting

- Troubleshooting
- New support request

And then we just need to click Grant Consent to finish with the permissions

Microsoft Azure | Search resources, services, and docs (G+)

Home > FileWave Training > FW Beta 2

FW Beta 2 | API permissions

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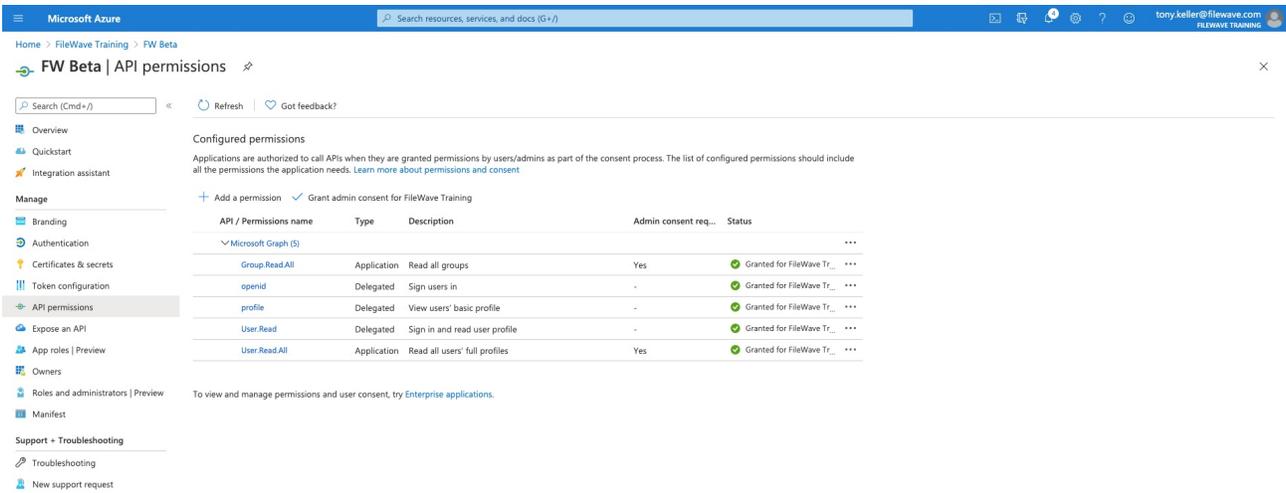
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profile	Delegated	View users' basic profile	-	
User.Read	Delegated	Sign in and read user profile	-	
User.Read.All	Application	Read all users' full profiles	Yes	Not granted for FileWav...

To view and manage permissions and user consent, try [Enterprise applications](#).

Support + Troubleshooting

- Troubleshooting
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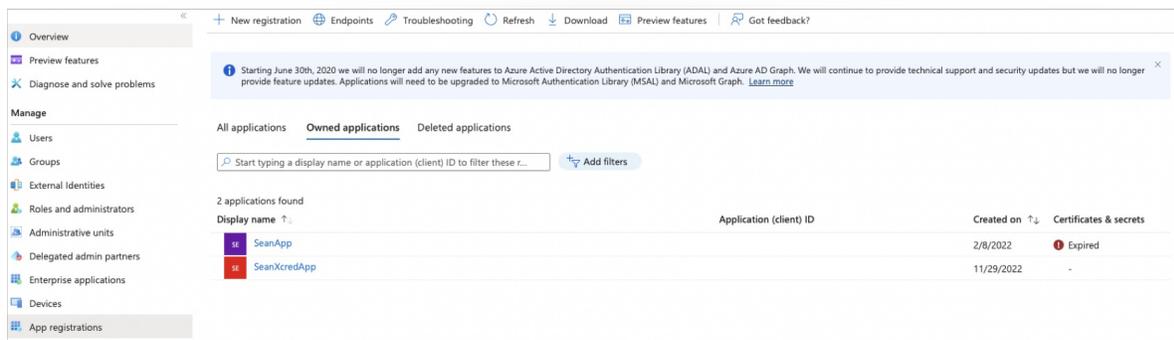
When they show as green, we are all done!



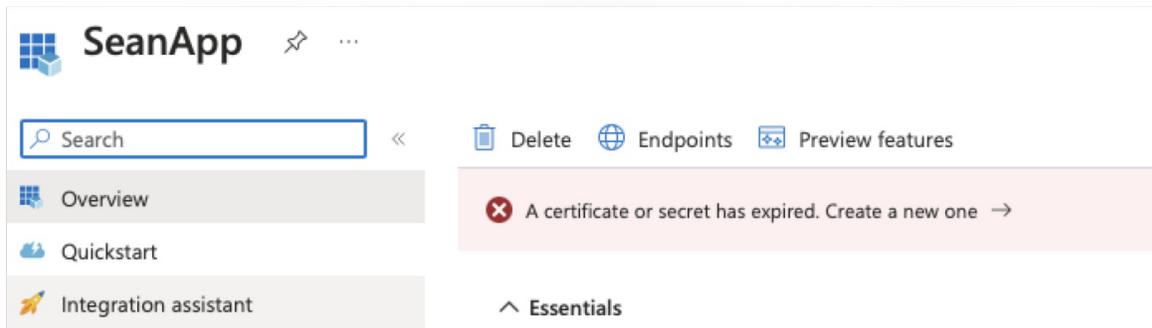
Part 6: App Registration Renewal

At some point the Certificate of the App will expire and a new certificate should be generated. The maximum you can set before expiry is 2 years.

From the App Registration view, expired certificates may be observed



For renewal, click on the Display Name of the App, followed by 'Create a new one ->'



Then generate a 'New client secret' similar to part 4 of this KB.

- Add a description
- Copy the secret from the 'Value' column, not the 'Secret ID'. Be sure to copy it just after creating your new secret, otherwise it will appear obfuscated the next time you attempt to view it.

This time though, you will only need to edit the current IdP in FileWave Anywhere:

- Open Settings in the FileWave Admin
- Choose Edit from the selected IdP
- Paste in the new secret value and 'Save'

✔ The old, expired certificate may be deleted from within the Azure portal.

Related Content

- [Adding IdP Groups for FileWave Authentication](#)
- [Configuring DEP Profiles for IDP Authentication](#)
- [Admin Login in Using an IdP Provider](#)

🕒Revision #12

★Created 21 June 2023 20:18:10 by Josh Levitsky

✍Updated 21 April 2025 23:06:07 by Zachary Butterfield