

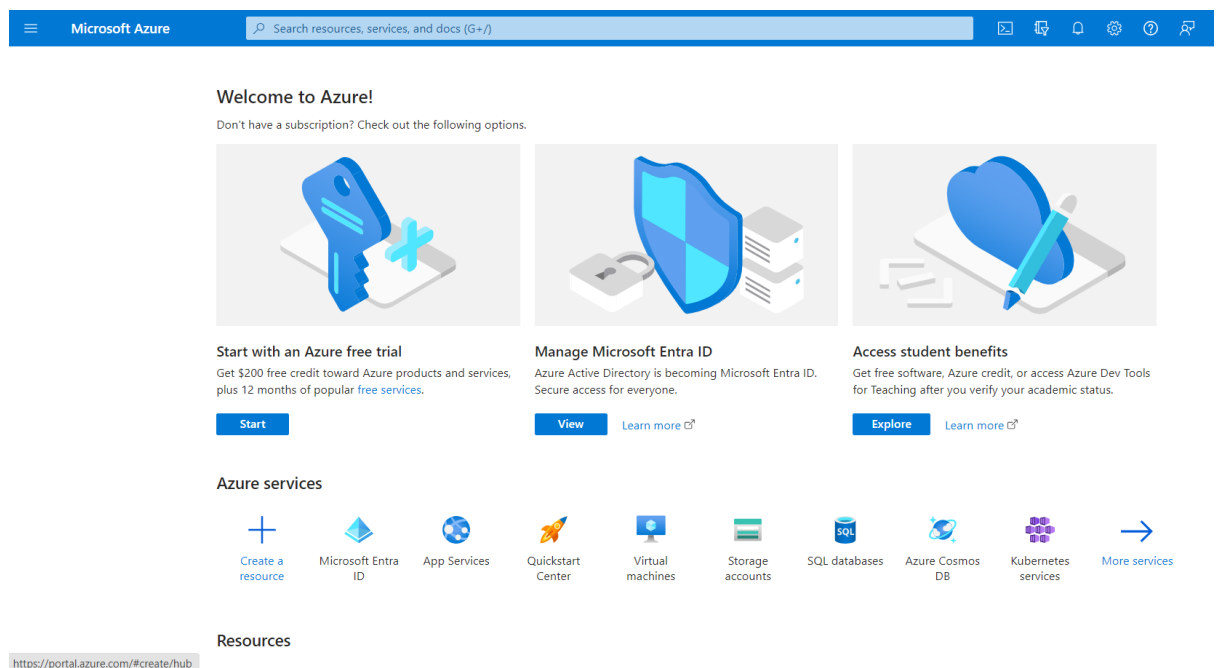
POC for SSO Integration with Azure using Java and React JS

Microsoft Azure Single Sign-On (SSO) is a cloud-based identity and access management service that enables users to securely sign in once and gain access to various applications and services without the need to re-authenticate. It simplifies user access to a multitude of applications, enhancing productivity and providing a seamless and secure authentication experience.

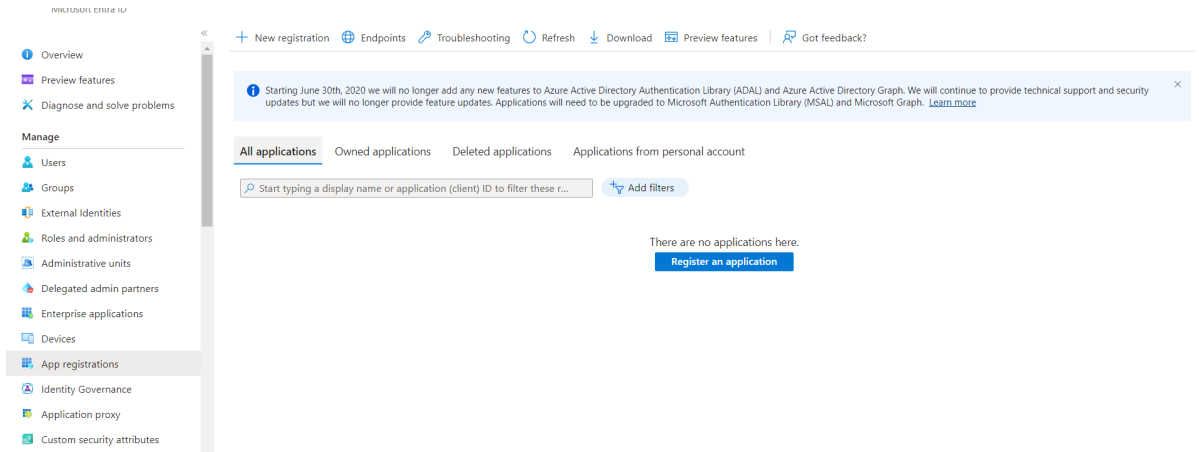
Here are few steps which required to setup the azure account

Setup Azure account with default directory

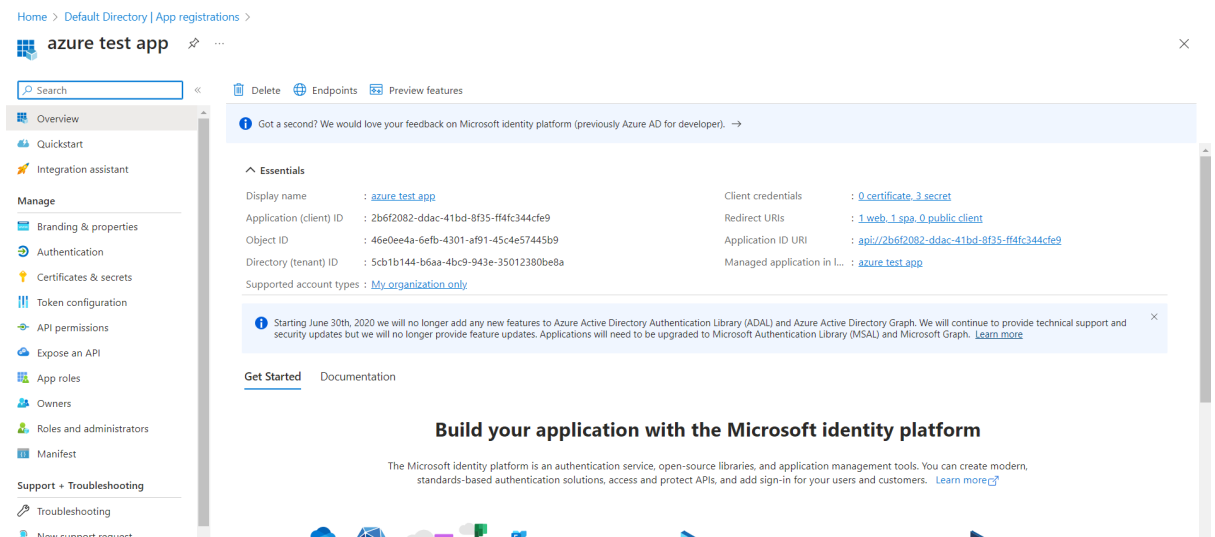
Sign in to azure portal by clicking this <https://portal.azure.com/>. After signing in, the home page will be displayed as shown in the image, and after that click on **Manage Microsoft Entra ID**.



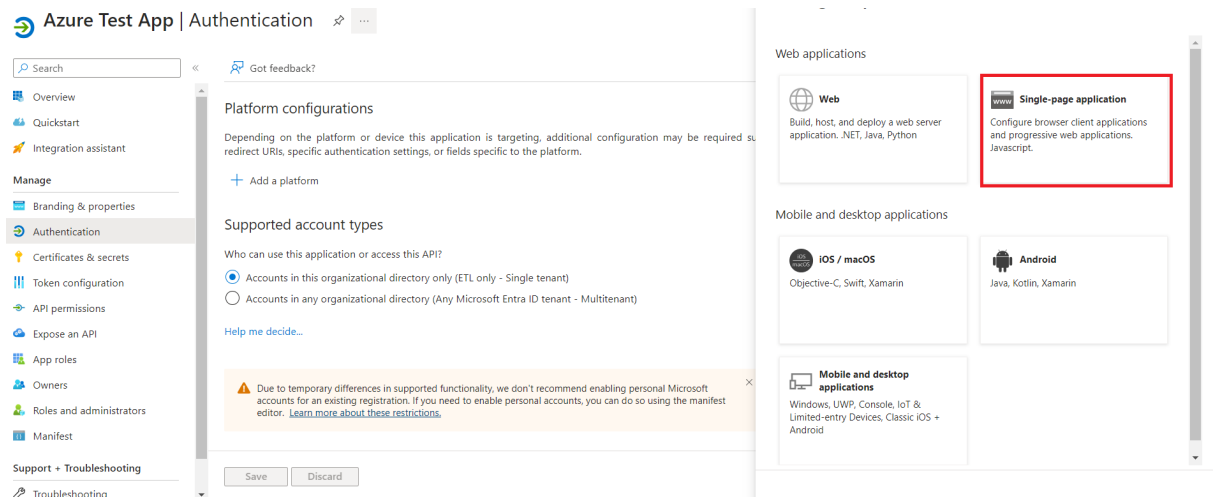
After clicking on Microsoft Entra Id, the Default directory will be displayed.
Now go to **App Registration -> New Registration**



After successful application registration, the application overview page will be displayed. And application information will be displayed like Client Id, Tenant Id

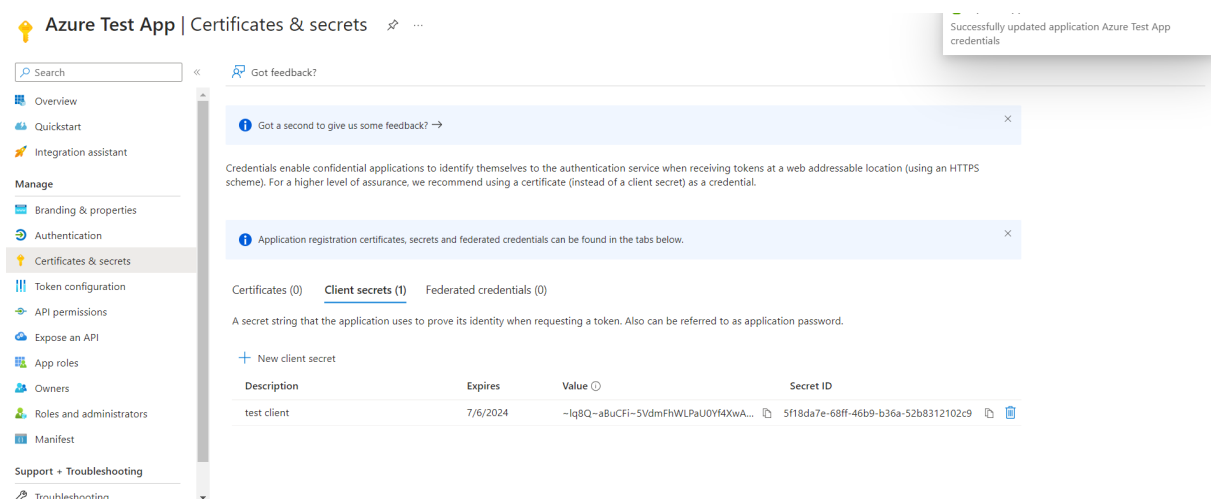


To set up a redirect(Callback) url, click on Authentication -> Add a platform. As we will create authentication from react so we will choose a **single page application** and provide a redirect URL. In this demo, we have provided the URL as <http://localhost:3000/>. And choose Access tokens for authorization endpoint.



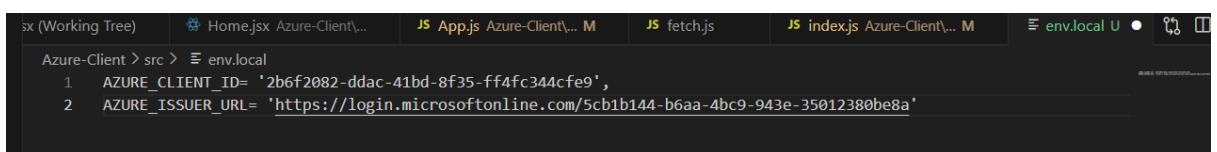
Generate client secret for authentication:

To generate client secret for authentication, go to **Certificates and Secrets** and generate client secret and copy that secret value.



Add Azure Properties in React App:

We need to create react project and add azure configuration properties in the React application in the env file.



So by running the react application, we will be able to login using Microsoft Azure and get the **Access Token** of azure.

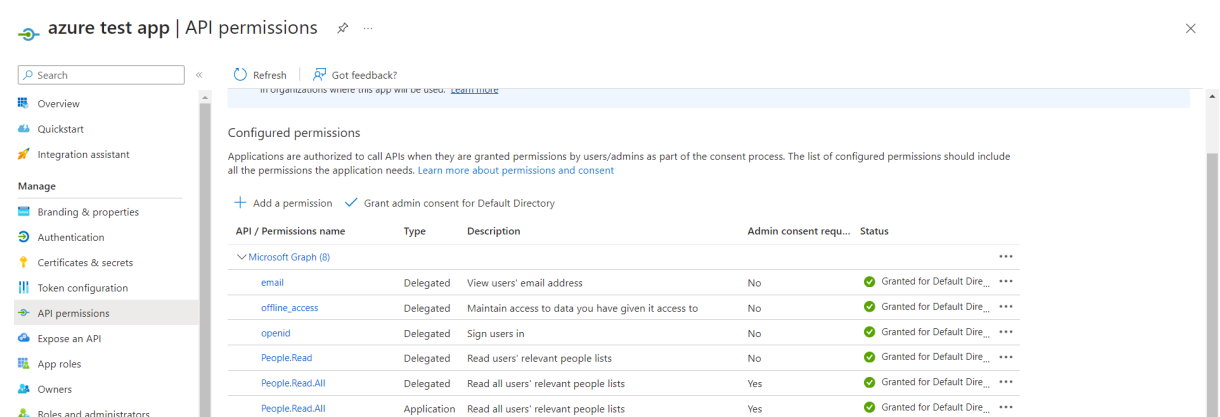
And with the help of access token, we can access APIs of Microsoft Azure. Here we have used Access Token in Bearer authentication to fetch the profile data of signed in user by using

API Endpoint: <https://graph.microsoft.com/v1.0/me>

Method: Post

Authorization: Bearer + AccessToken

To access the Azure APIs, we need to provide permissions from the App **Permission** section and provide admin consent to the directory.



azure test app | API permissions

Search Refresh Got feedback?

in organizations where this app will be used: [Learn more](#)

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 Default Directory

API / Permissions name	Type	Description	Admin consent requ...	Status
▼ Microsoft Graph (8)				
email	Delegated	View users' email address	No	✓ Granted for Default Dire... ***
offline_access	Delegated	Maintain access to data you have given it access to	No	✓ Granted for Default Dire... ***
openid	Delegated	Sign users in	No	✓ Granted for Default Dire... ***
People.Read	Delegated	Read users' relevant people lists	No	✓ Granted for Default Dire... ***
People.Read.All	Delegated	Read all users' relevant people lists	Yes	✓ Granted for Default Dire... ***
People.Read.All	Application	Read all users' relevant people lists	Yes	✓ Granted for Default Dire... ***

Authenticate using Java

To authenticate Microsoft Azure using java, we need to add below dependency to our pom.xml file

```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-oauth2-client</artifactId>
</dependency>
<dependency>
  <groupId>com.azure.spring</groupId>
  <artifactId>spring-cloud-azure-starter-active-directory</artifactId>
</dependency>
```

And add client secret value, redirect URL, tenant id and client Id

```
spring.cloud.azure.active-directory.credential.client-secret=ez-8Q~lMGDL2VYXvkSDm8sUMDkx0uc00FNuf.  
spring.cloud.azure.active-directory.redirect-uri=http://localhost:8080/login/oauth2/code  
spring.cloud.azure.active-directory.enabled=true  
spring.cloud.azure.active-directory.profile.tenant-id=5cb1b144-b6aa-4bc9-943e-35012380be8a  
spring.cloud.azure.active-directory.credential.client-id=2b6f2082-ddac-41bd-8f35-ff4fc344cfe9
```

So by configuring azure properties, we can successfully login to azure using java and react.