ProConomics Installation Guide

Complete guide to installing and configuring ProConomics in your environment.

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7. Update Client Secret
8. Azure Budget & Cost Control

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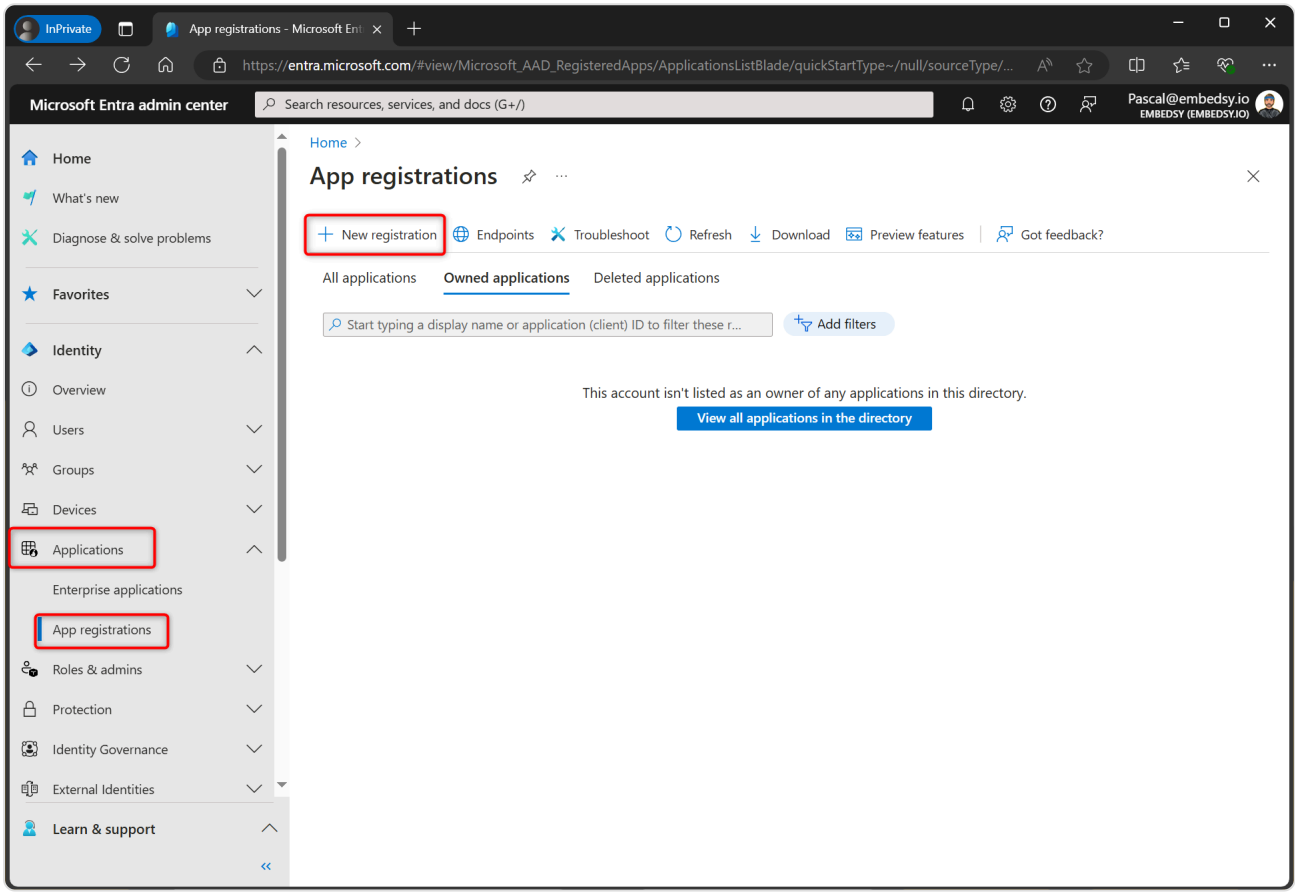
1. Service Principal

How to create a Service Principal in Microsoft Entra.

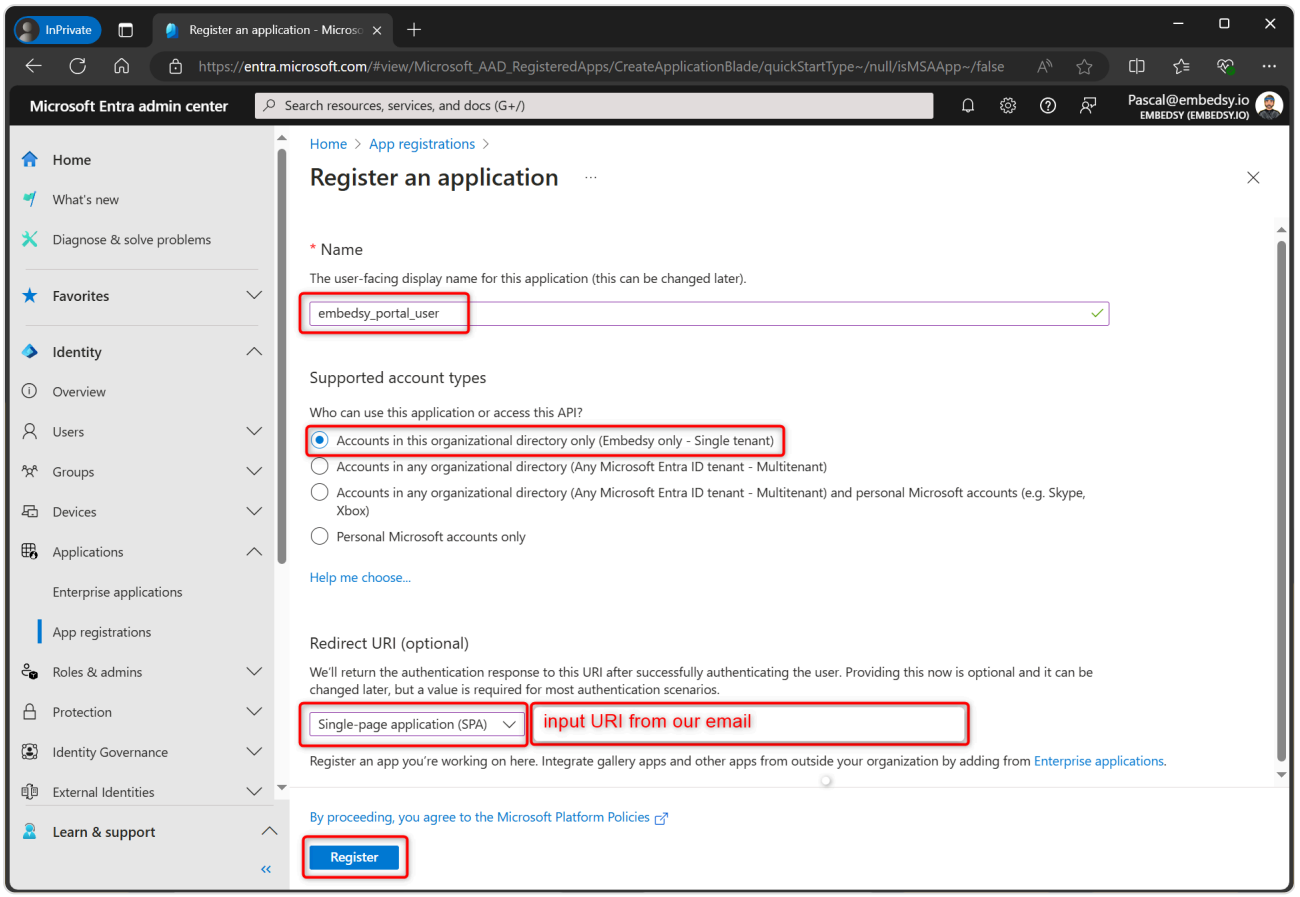
Step 1

Go to Microsoft Entra and navigate to App Registrations.



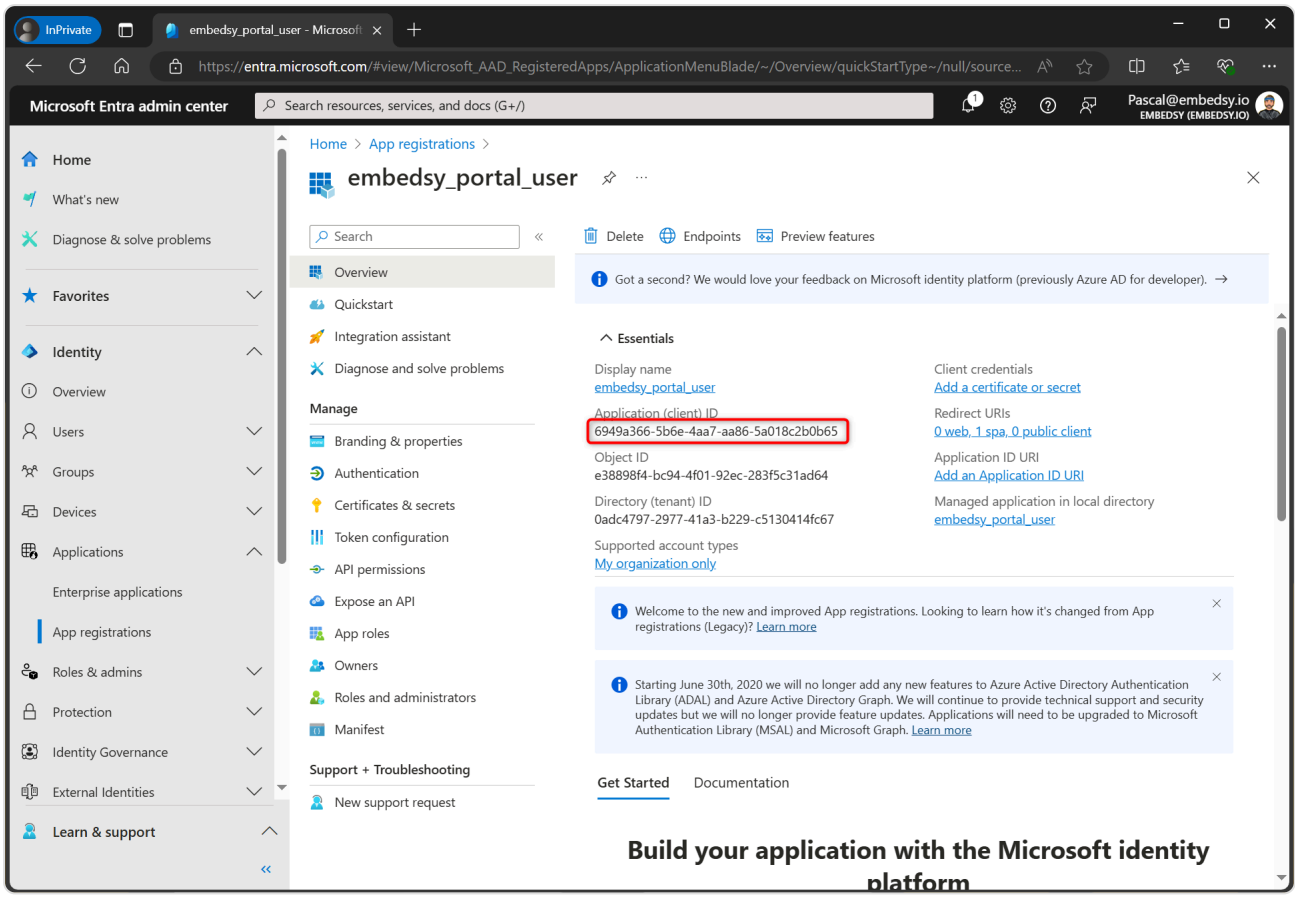
Step 2

Click on New Registration.



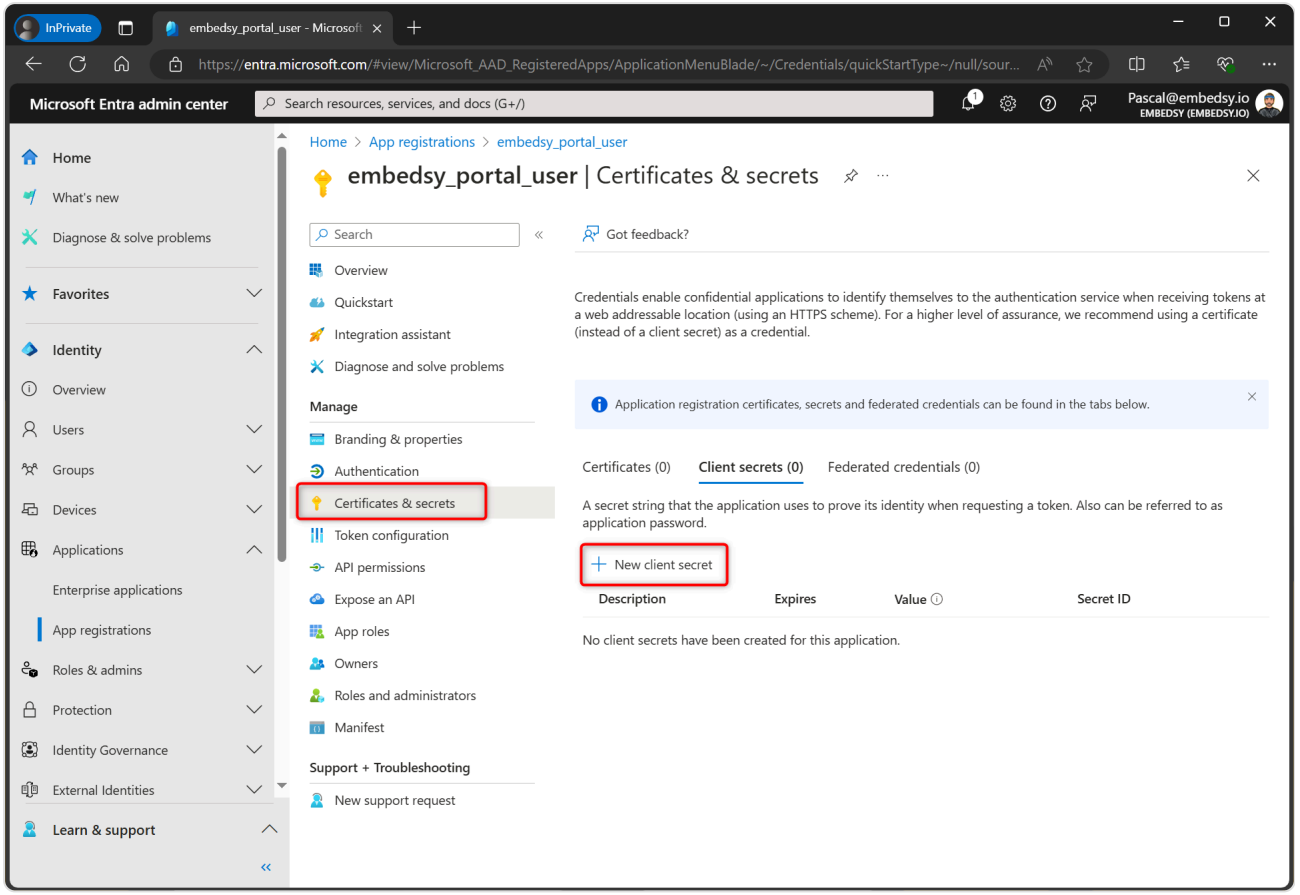
Step 3

Give this Service Principal a name. In the Redirect URI section, select Web and enter a redirect URI. This is the URL that the user will be redirected to after authentication. If you do not have a custom domain yet, you can use the default azurewebsites.net URI. If you have one, use it. You can always change this later.



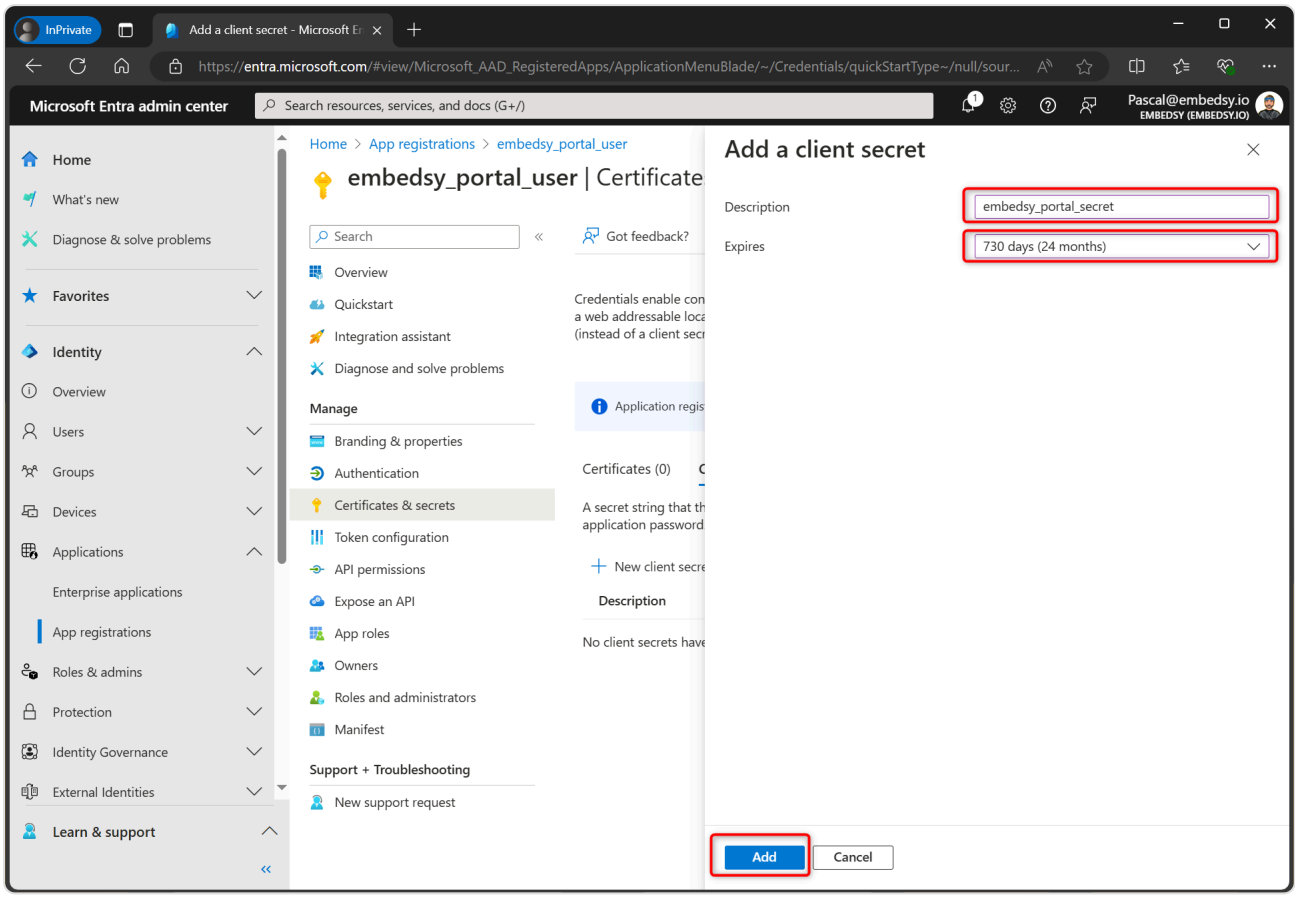
Step 4

Copy the Application (client) ID. This you will need later, and it will be referred to as the Client ID.



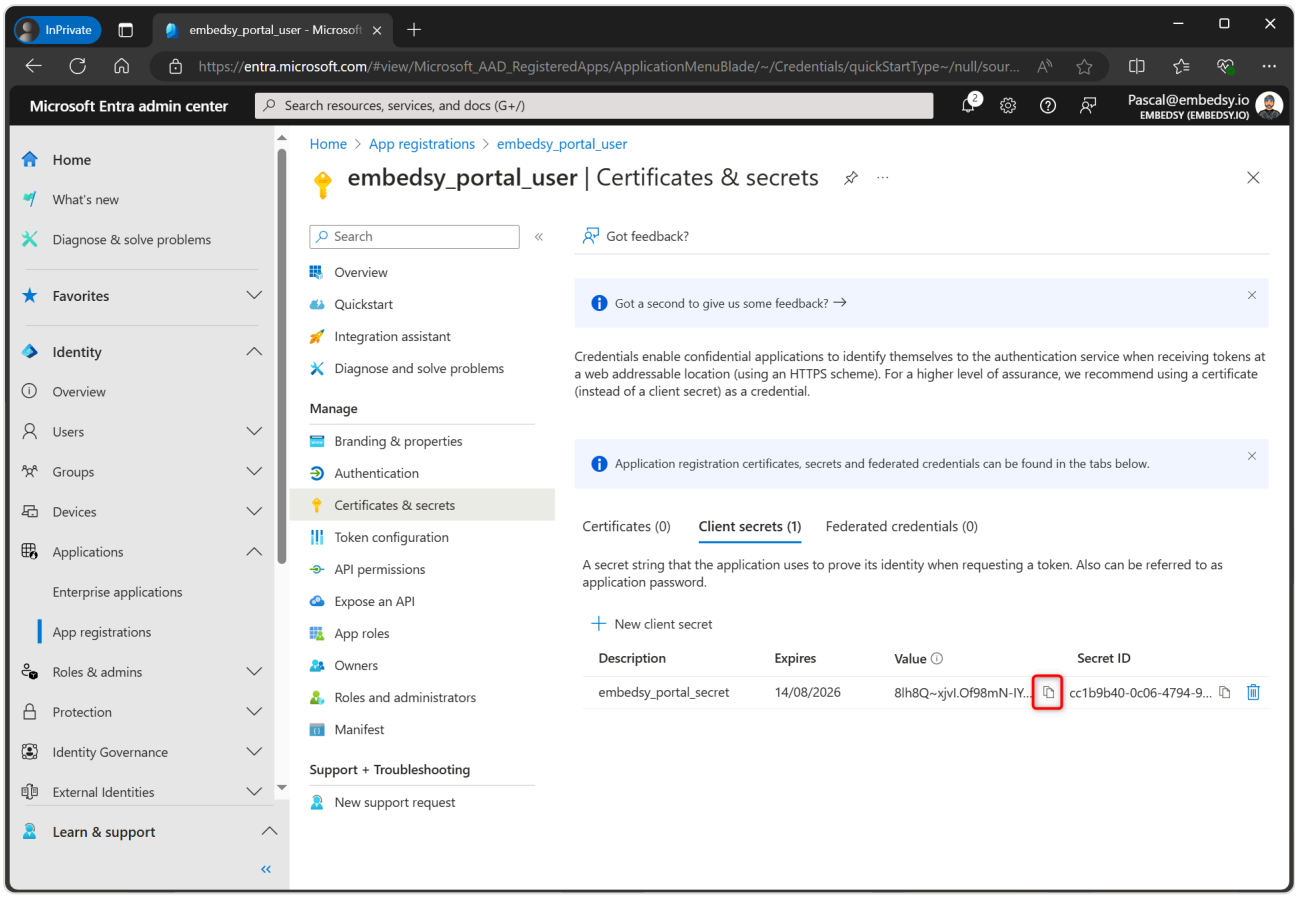
Step 5

Navigate to the Redirect URI section to add an additional Redirect URI. Click on Add a platform.



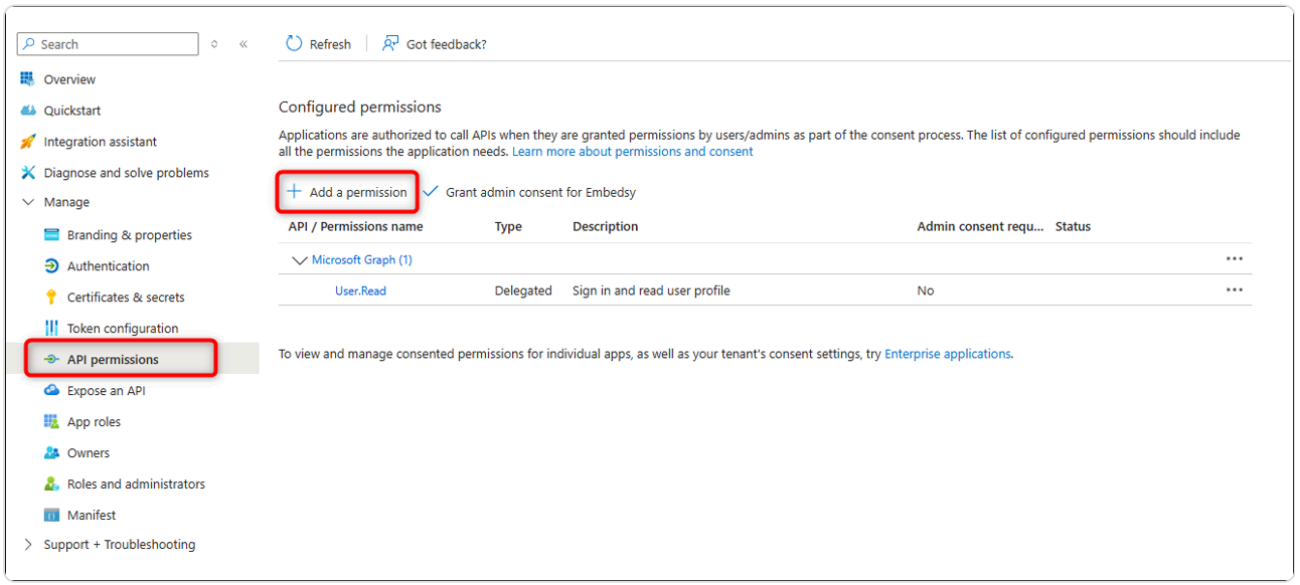
Step 6

Select Single-page application.



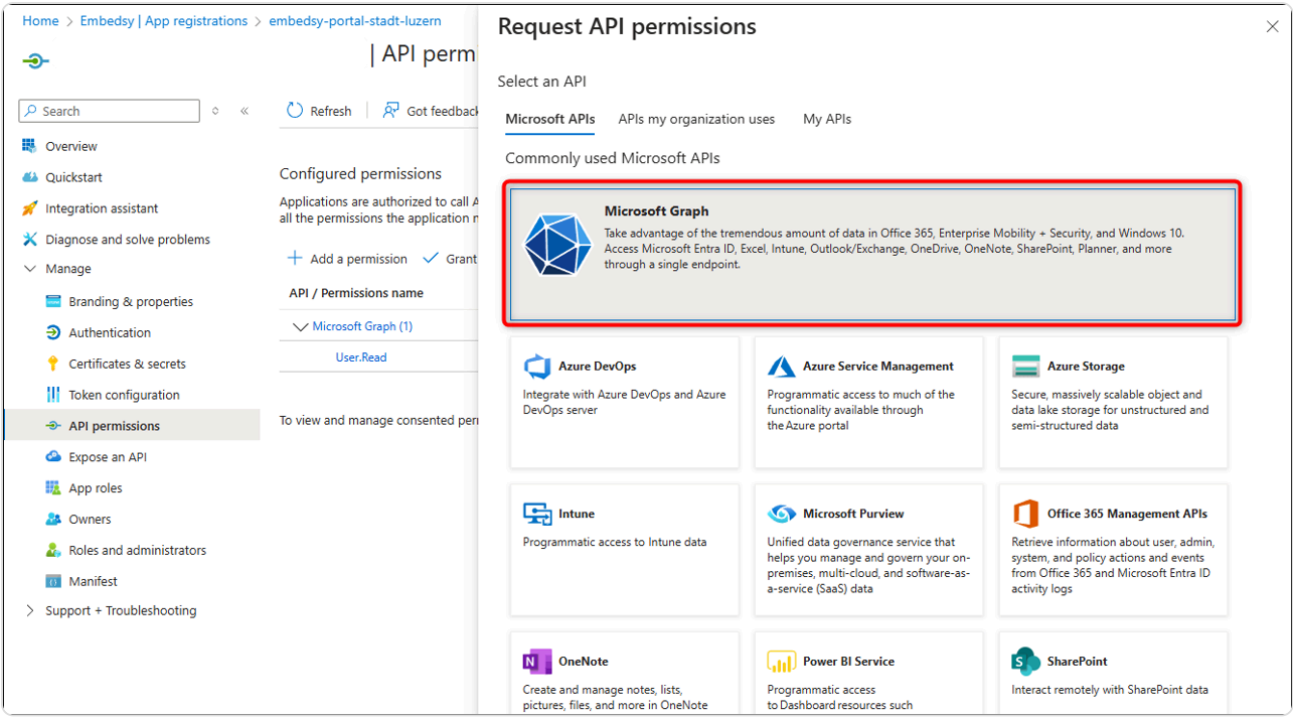
Step 7

Enter the same Redirect URI as in step 3 but append /login/auth-callback to it.



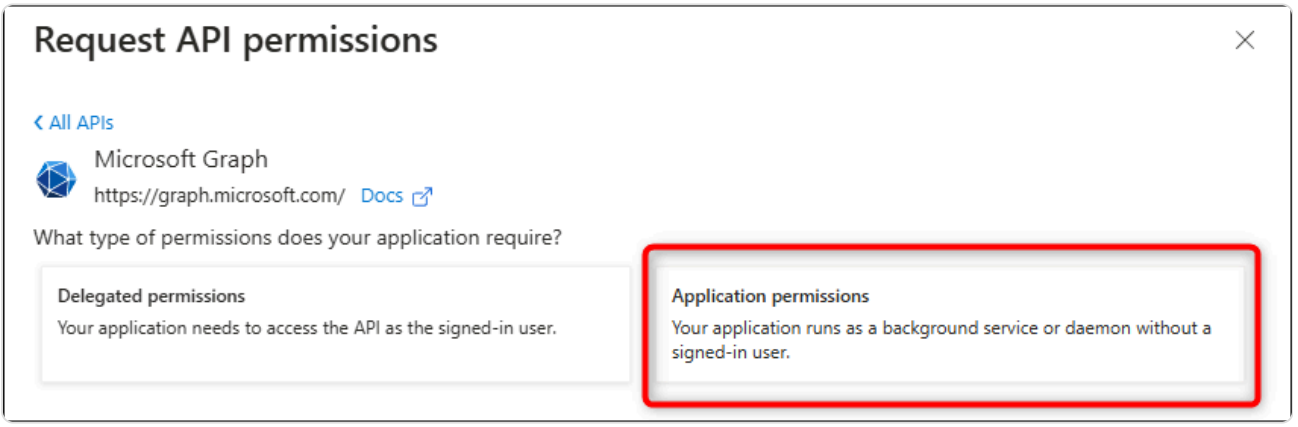
Step 8

Navigate to the Certificates & secrets section and click on New client secret.



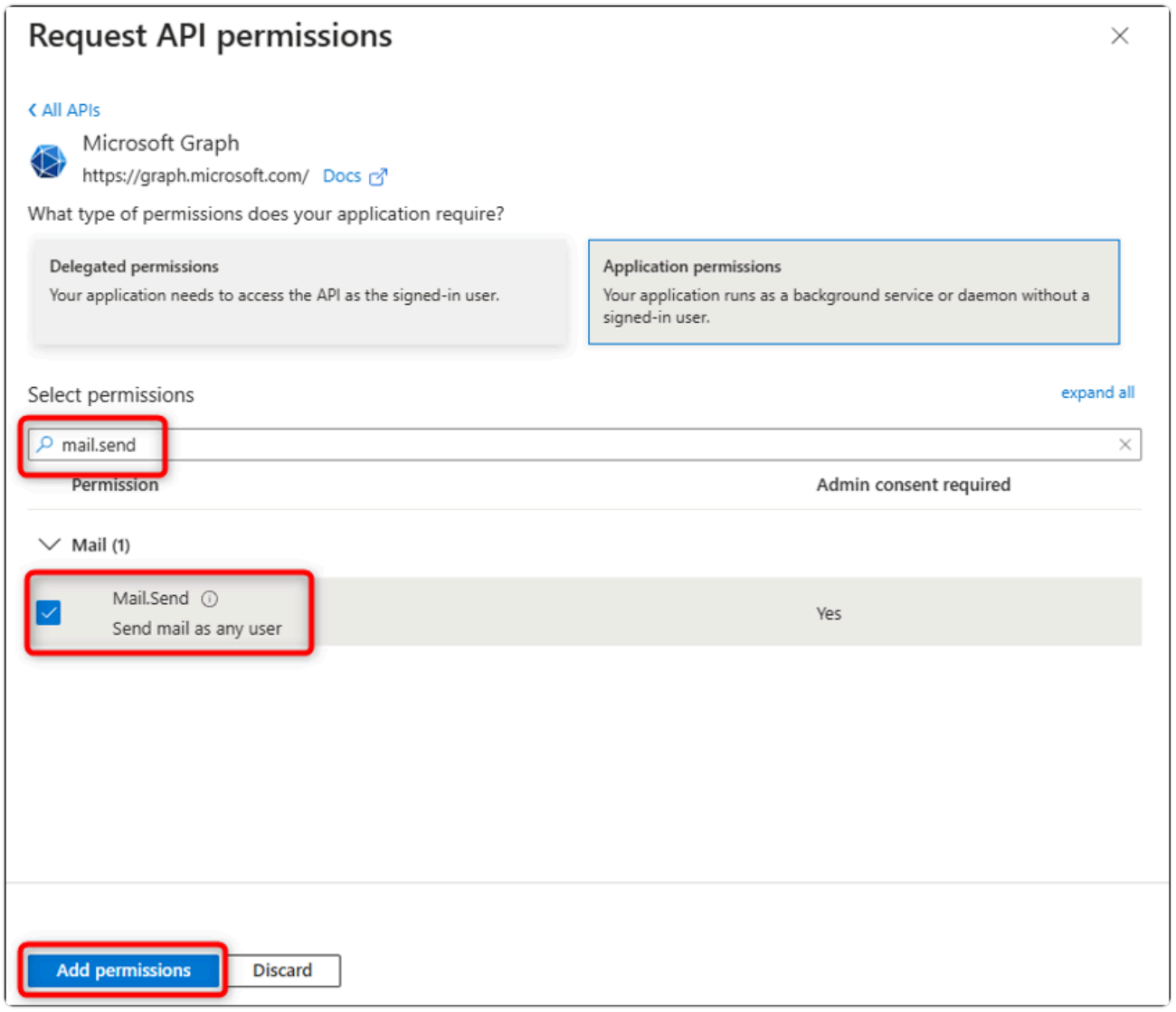
Step 9

Add a description and select the expiration period. Click Add.



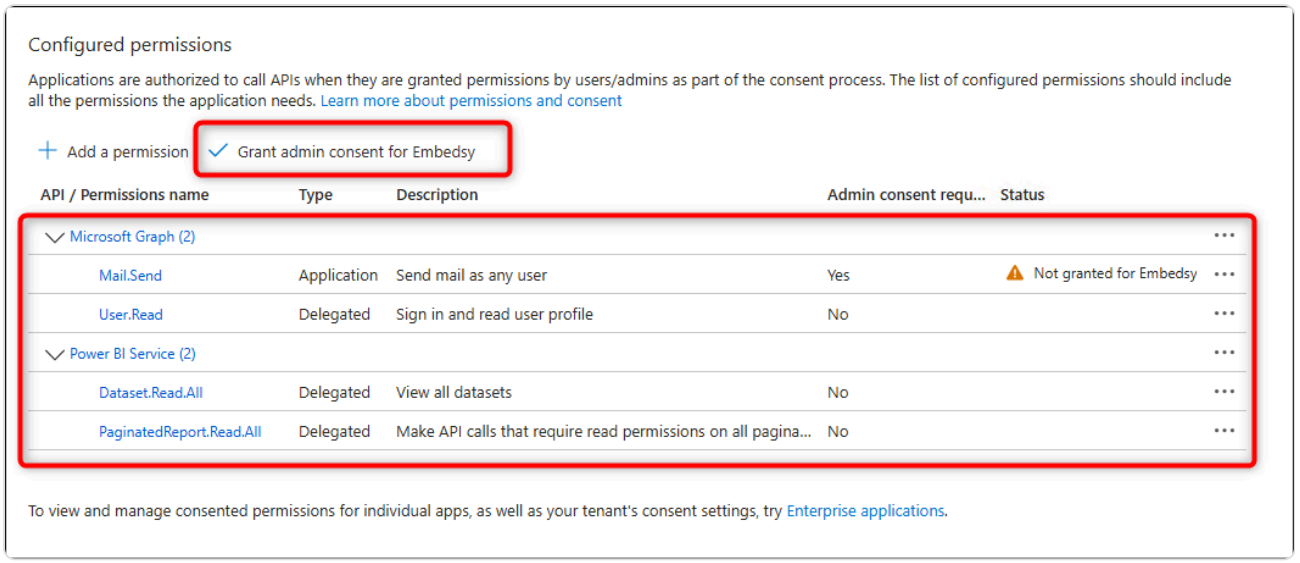
Step 10

Copy the Value of the client secret. This you will also need later, and it will be referred to as the Client Secret.



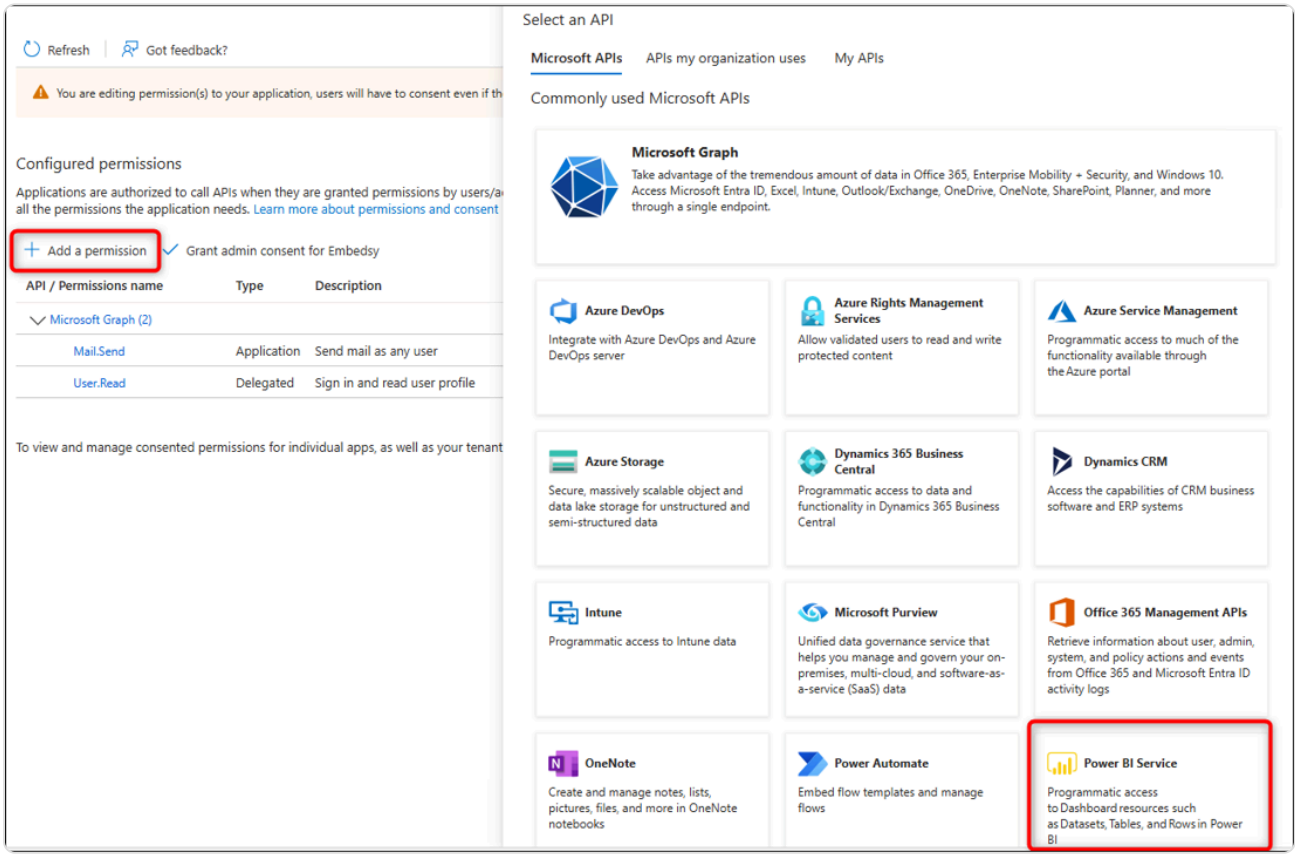
Step 11

Navigate to API permissions and click on Add a permission.



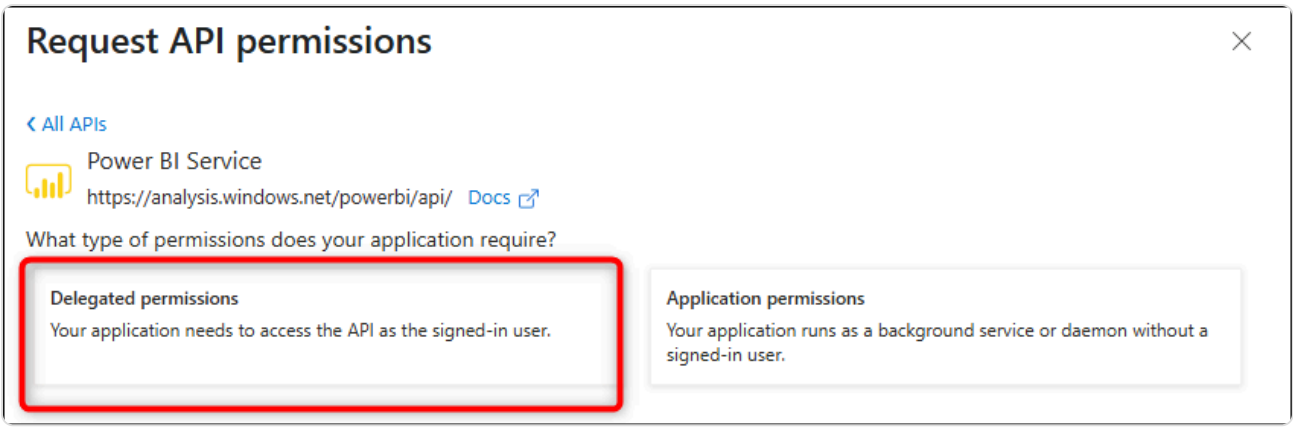
Step 12

First, add the mail.send permission from Microsoft Graph (Application permissions). This is needed to send emails from the ProConomics Portal.



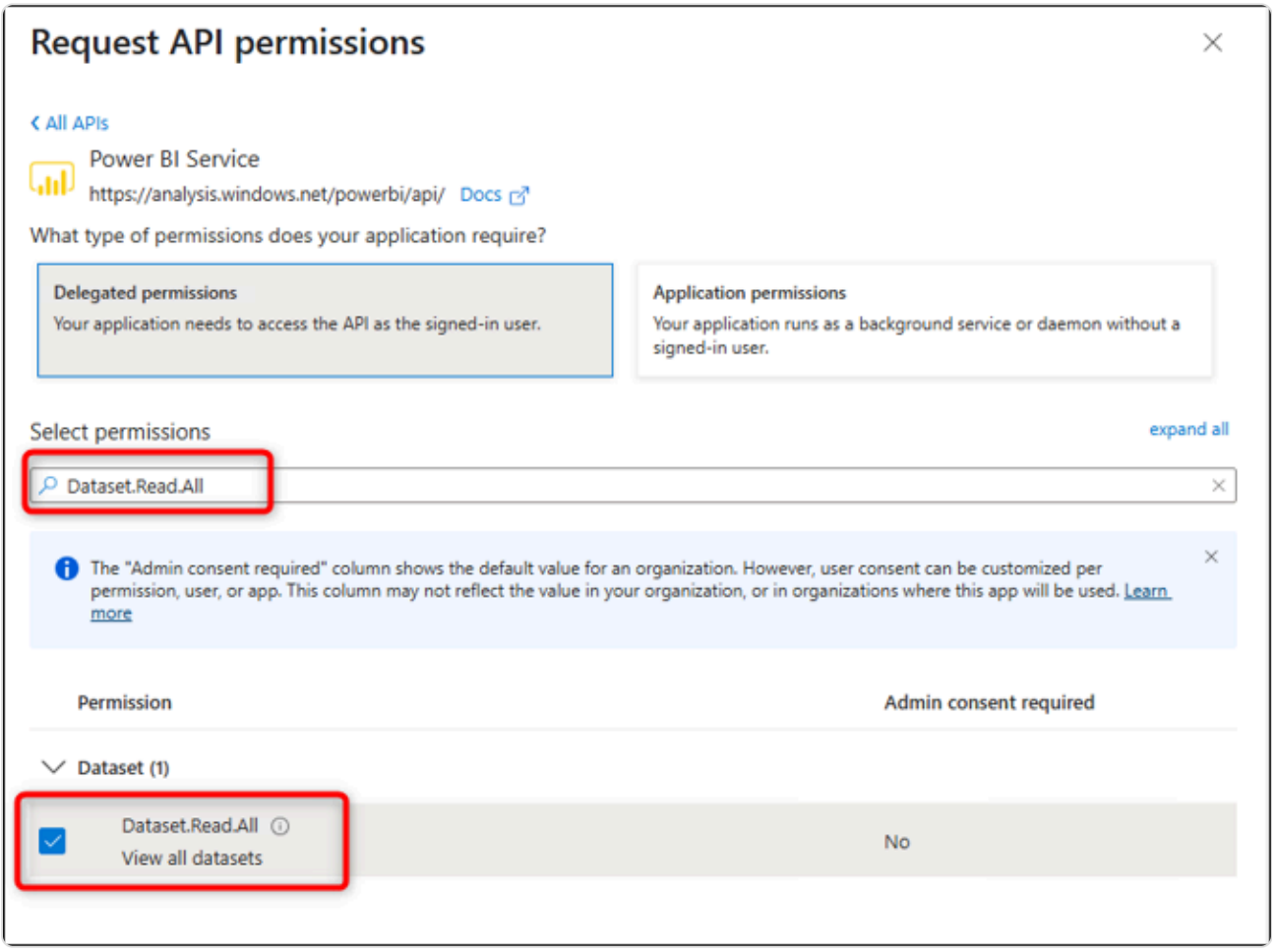
Step 13

Then add the Power BI Service permissions. Select Delegated permissions and add Dataset.Read.All and Report.Read.All.



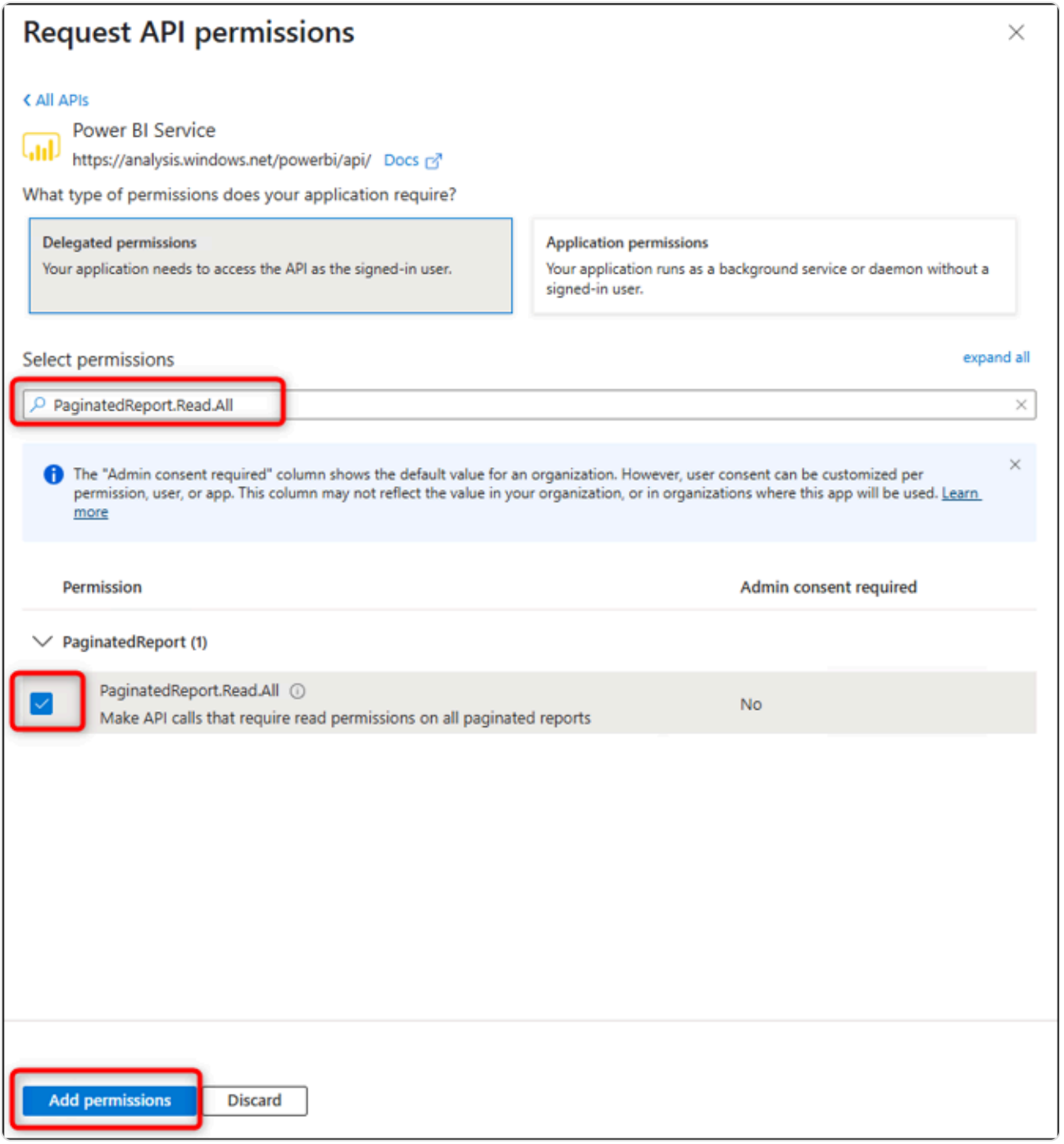
Step 14

If you want to use Paginated Reports, also add the PaginatedReport.Read.All permission.



Step 15

After adding all the permissions, click on Grant admin consent for your organization.



Step 16

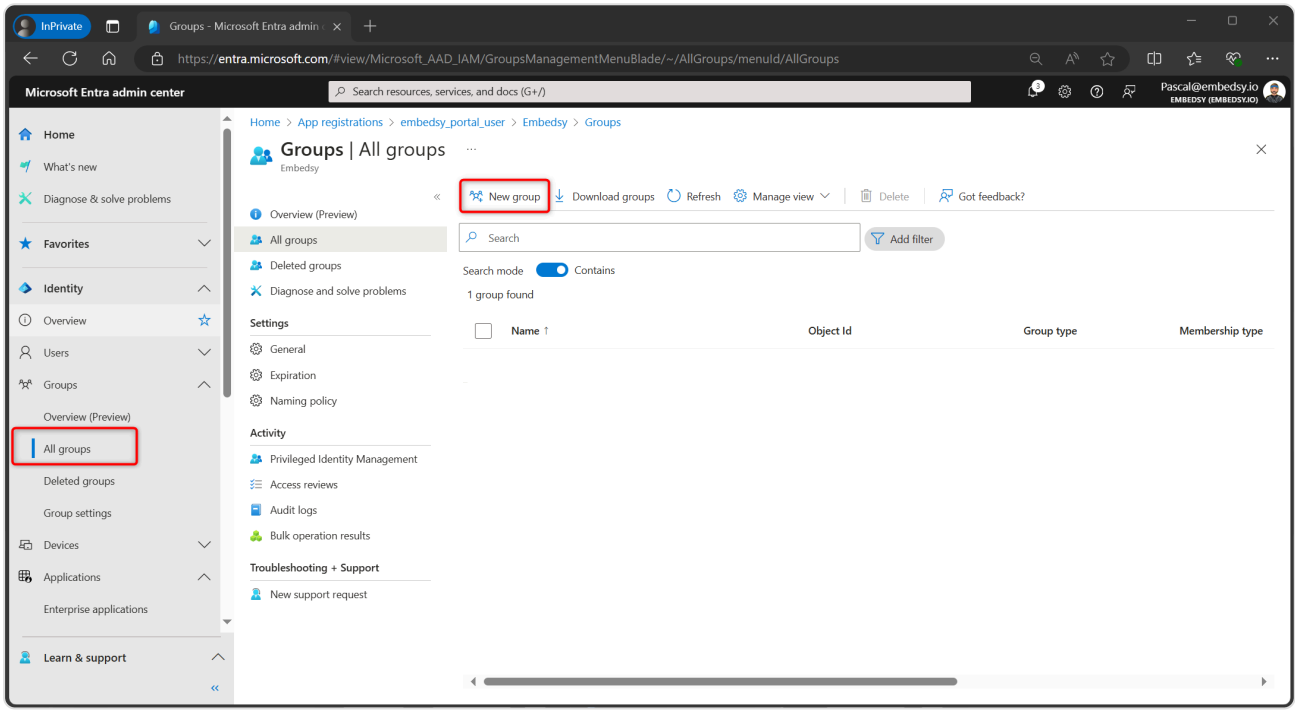
The final result should look like this. All permissions should have a green checkmark under the Status column.

2. Entra Security Group

How to create a Microsoft Entra Security Group and add the Service Principal to it.

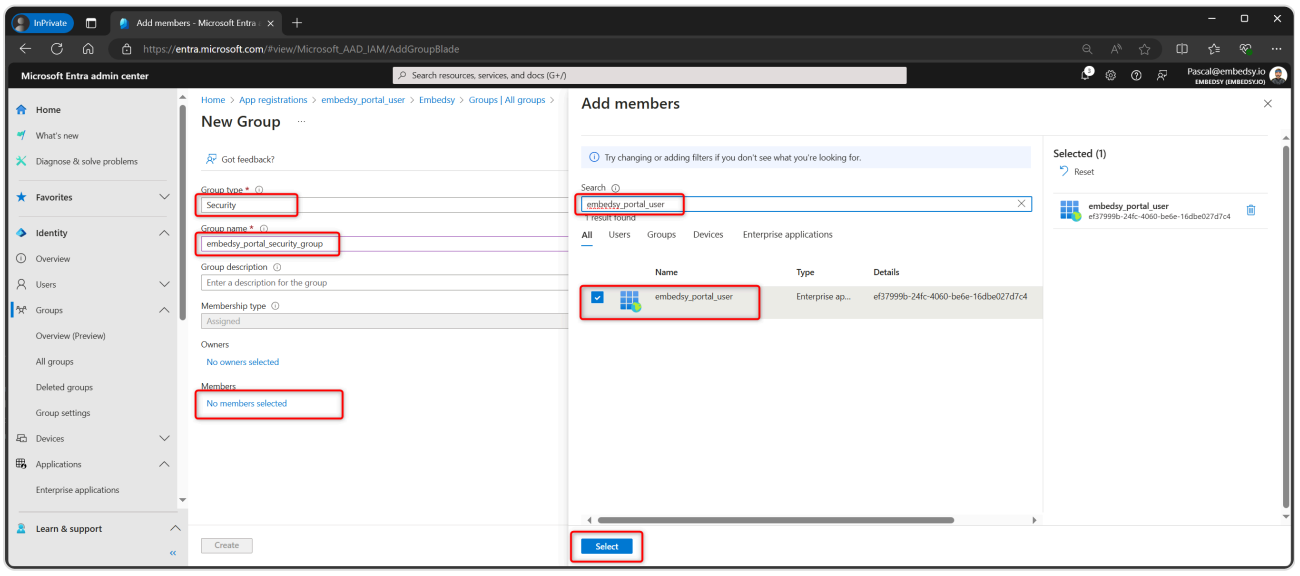
Step 1

Navigate to Microsoft Entra and go to Groups. Click on New group.



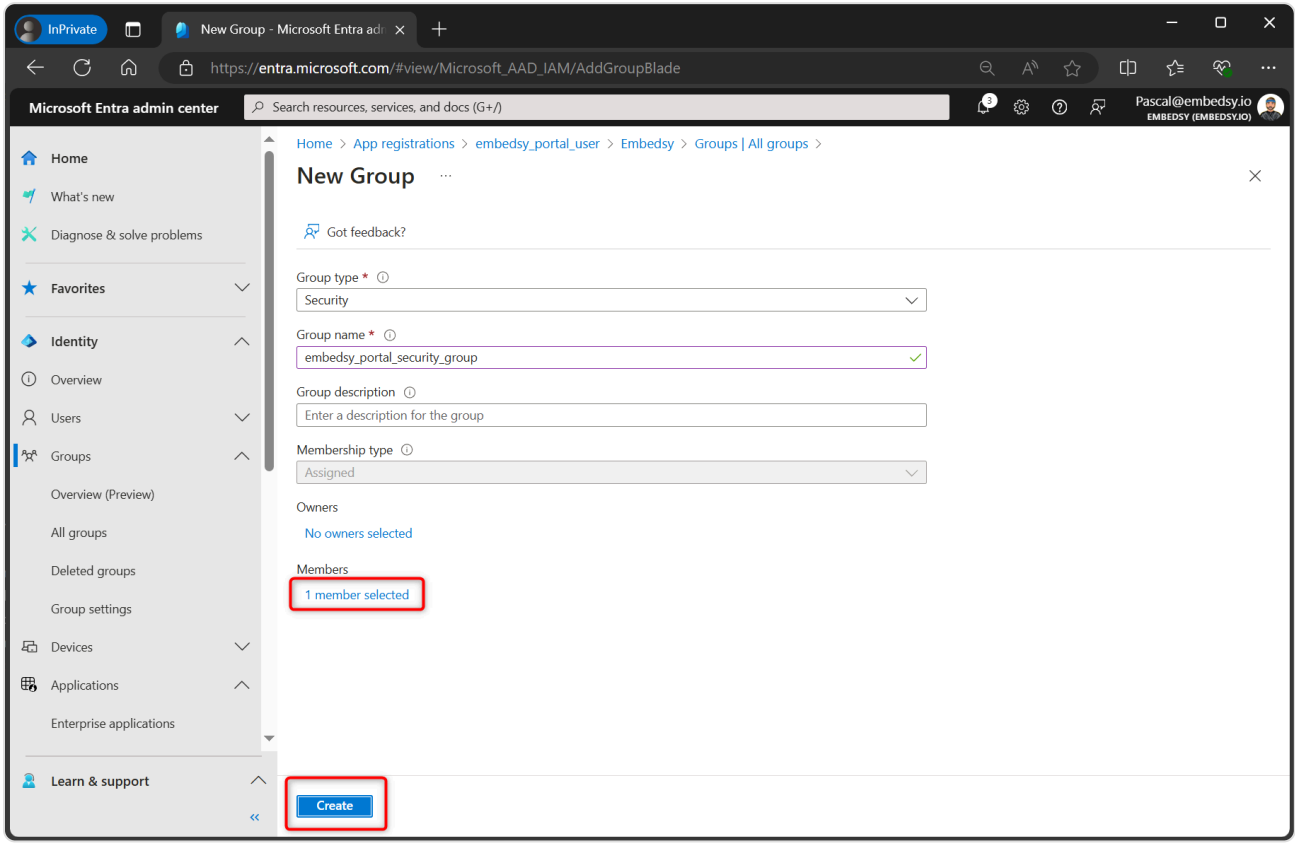
Step 2

Select Security as the Group type and give it a name. Under Members, add the Service Principal you created in the previous step.



Step 3

Verify that the Service Principal is listed as a member and click Create.



3. Use Custom Domain

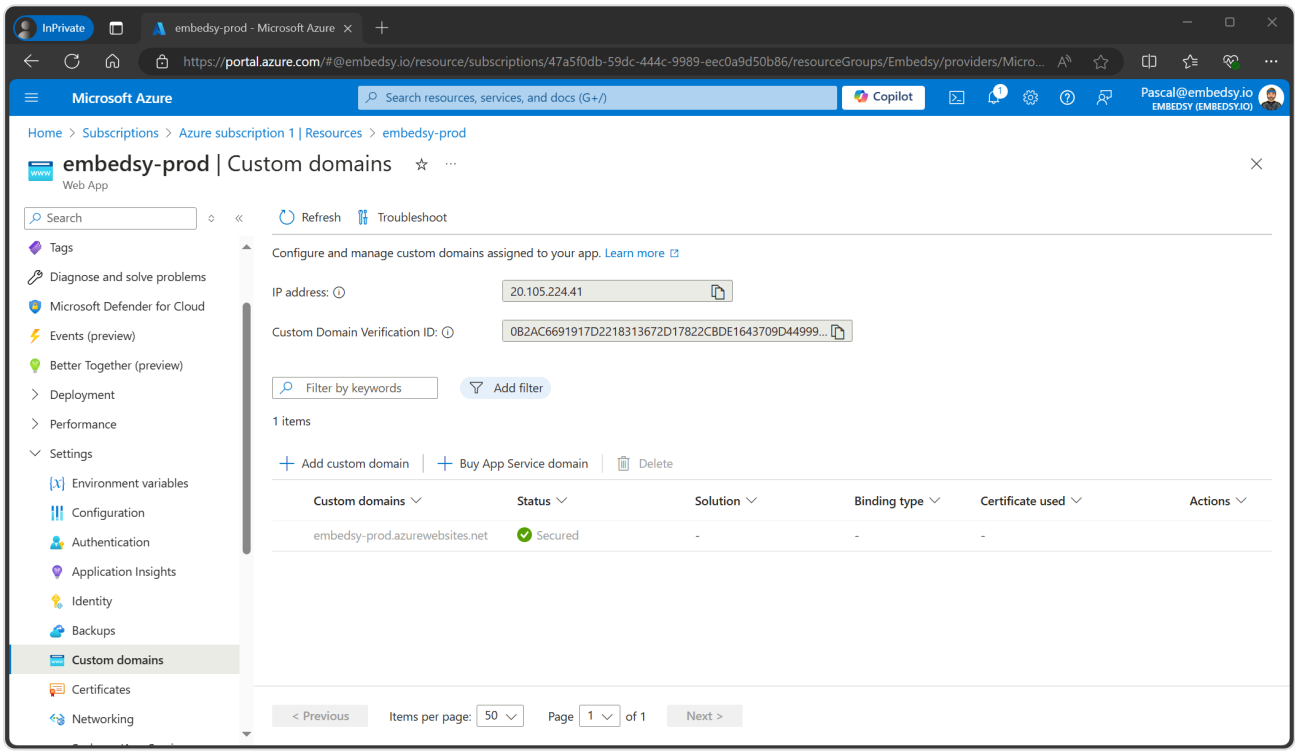
How to configure a custom domain for your ProConomics Portal.

Step 1

Register a custom domain with your preferred domain registrar if you haven't already.

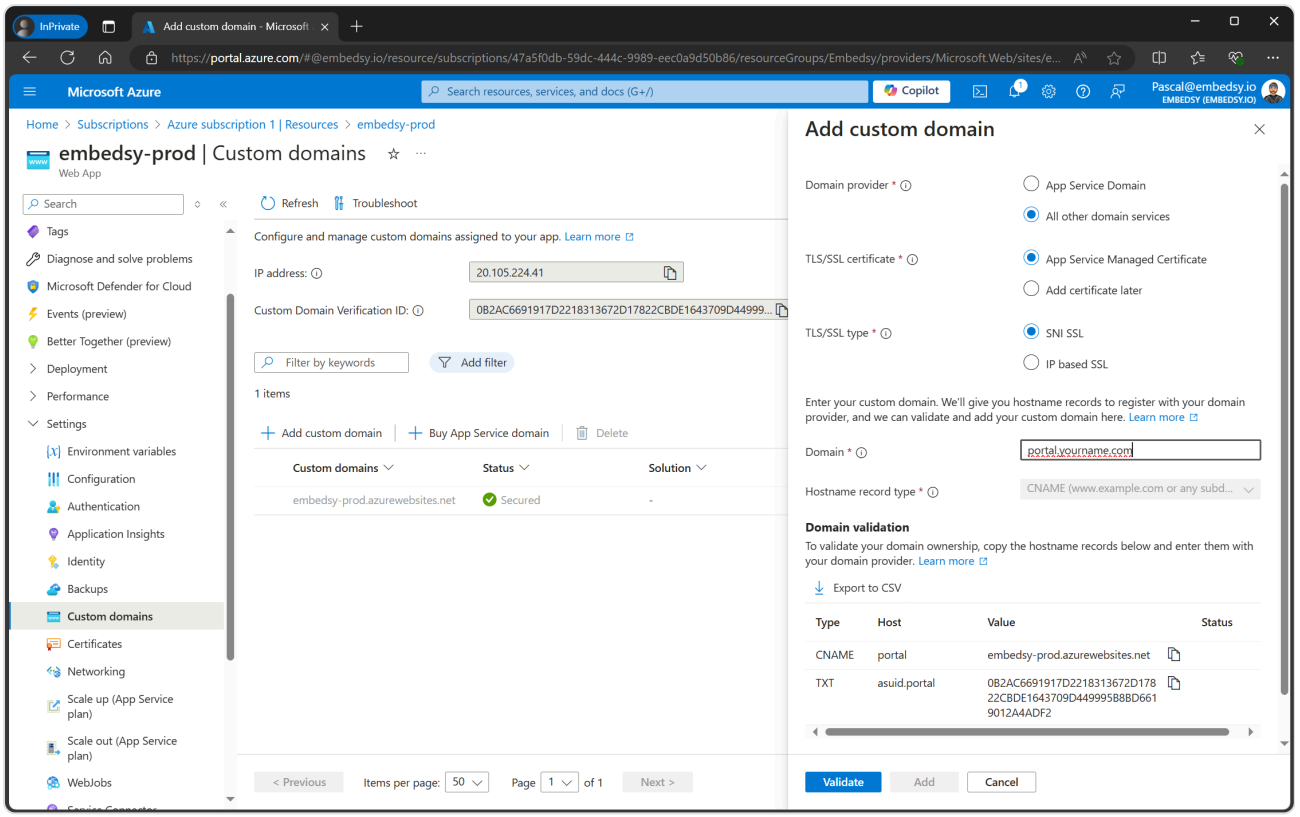
Step 2

Add the required DNS records. You will need to add a CNAME record pointing to your Azure Web App URL.



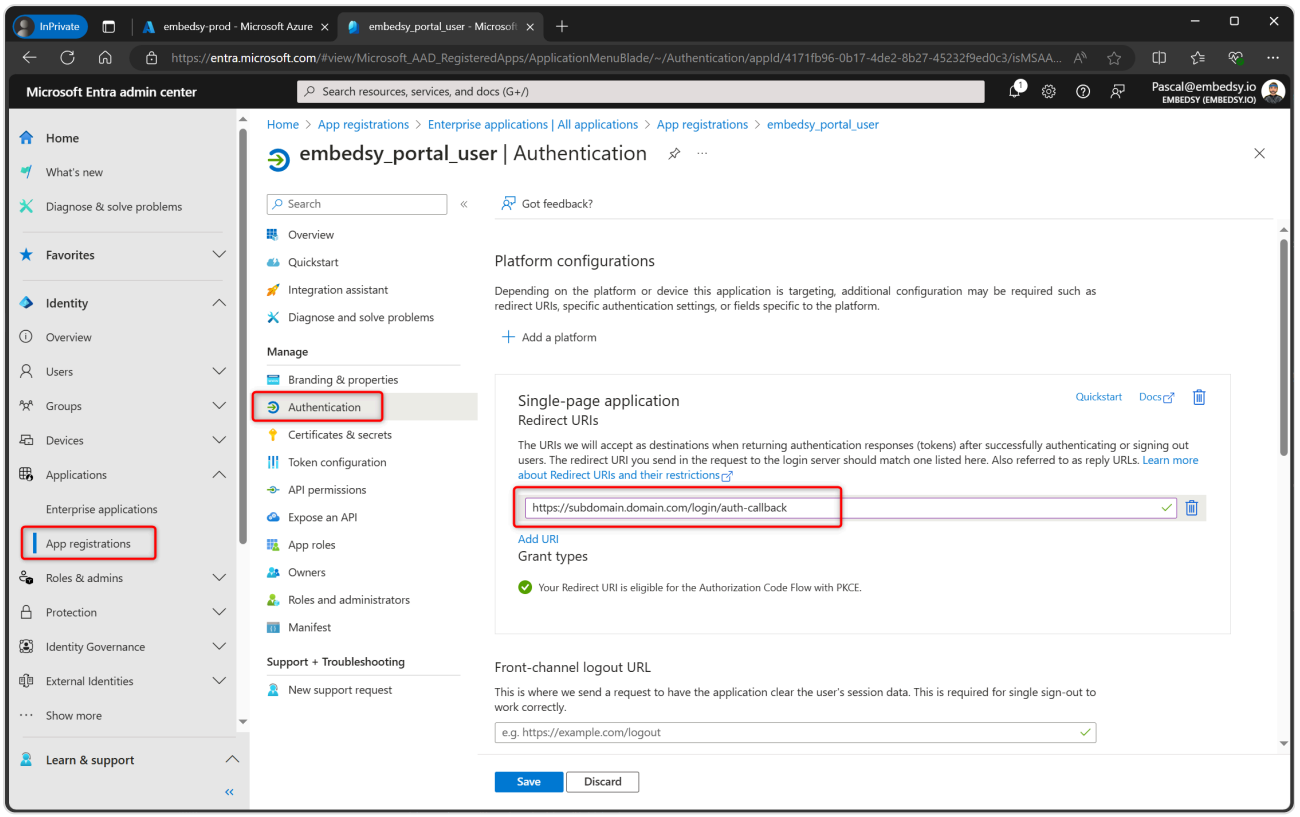
Step 3

Navigate to your Azure Web App and go to Custom domains. Click on Add custom domain and enter your domain name.



Step 4

After the domain is validated, Azure will automatically provision an SSL certificate for your custom domain.



Step 5

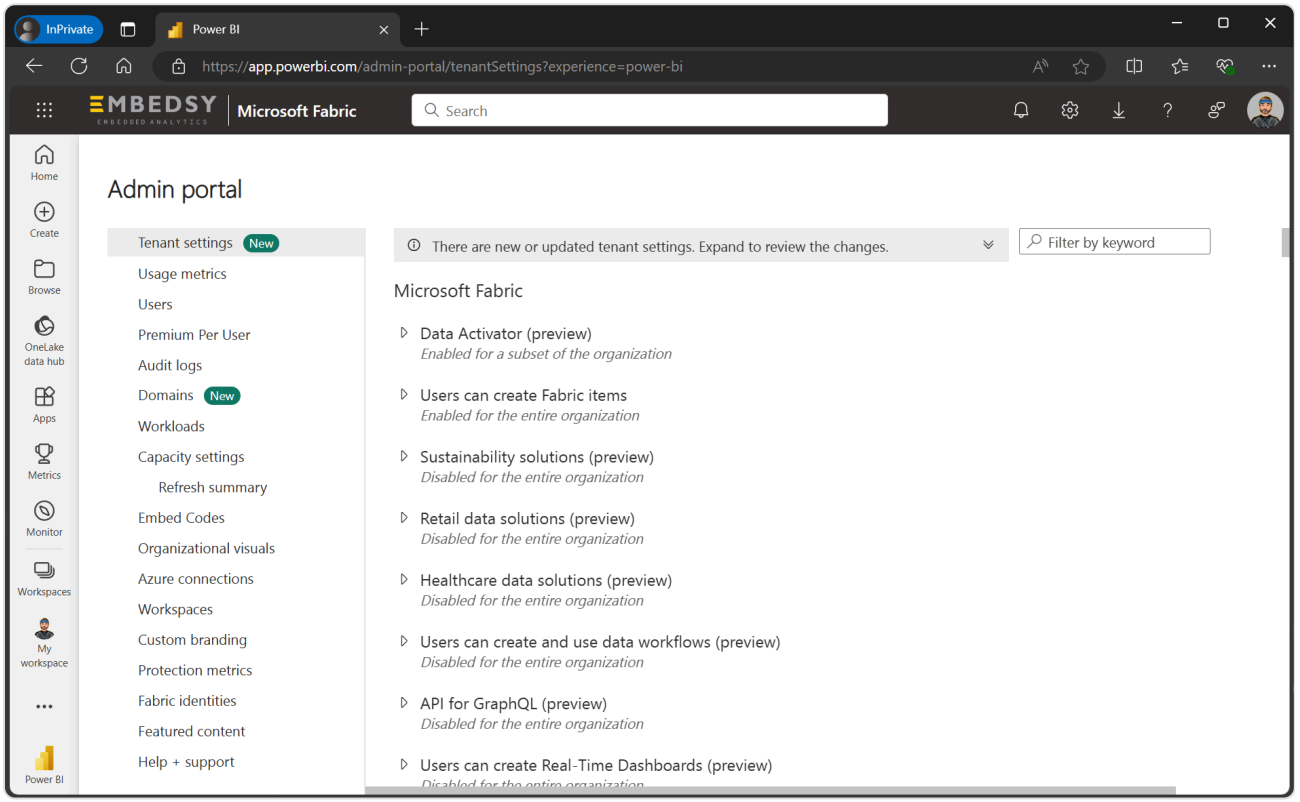
Finally, update the Redirect URI in your Service Principal to include the custom domain. Go back to Microsoft Entra > App Registrations > your Service Principal > Authentication, and add the new redirect URI with your custom domain.

4. Fabric Admin Settings

How to change the Fabric / Power BI Admin settings to allow the Service Principal to embed content.

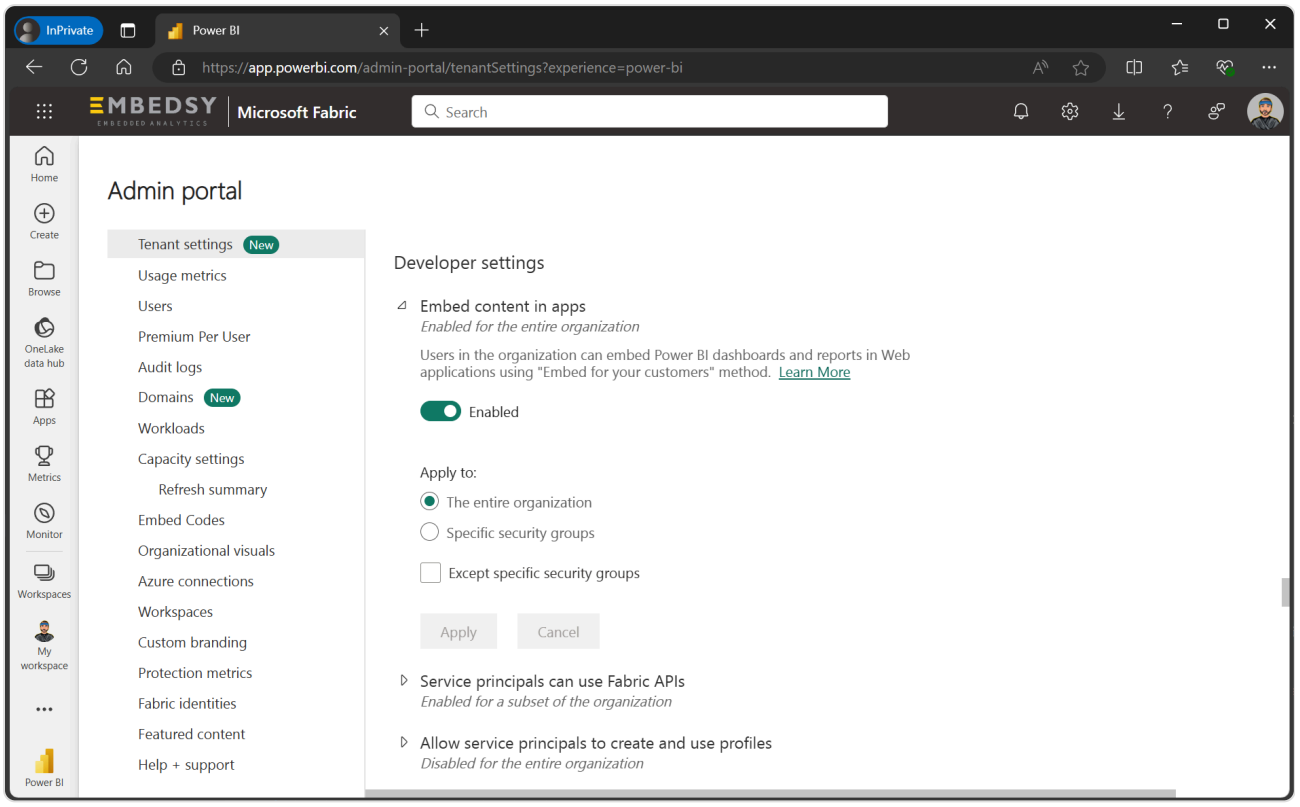
Step 1

Navigate to the Fabric Admin Portal. Go to Tenant Settings.



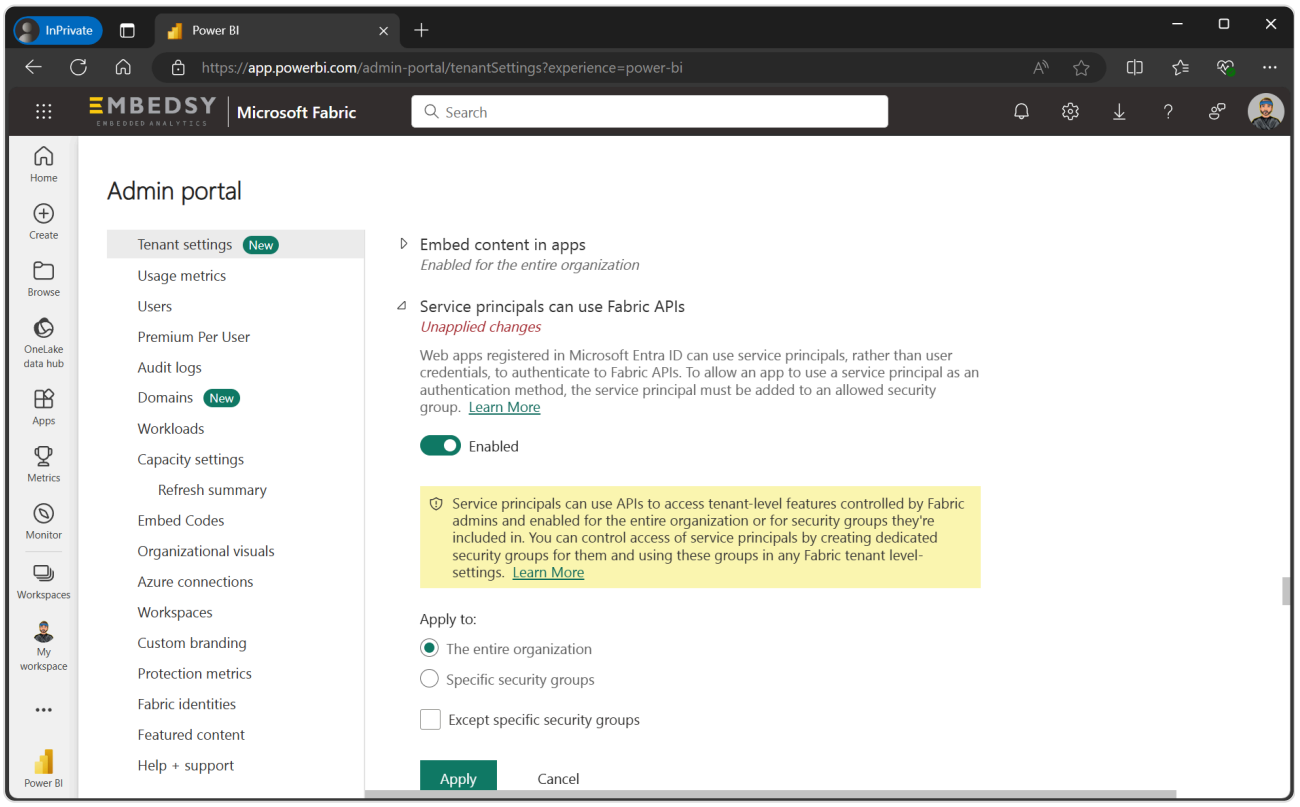
Step 2

Search for "Embed content in apps" and enable it. Apply it to the Security Group you created in the previous step.



Step 3

Search for "Service principals can use Fabric APIs" and enable it. Apply it to the same Security Group.

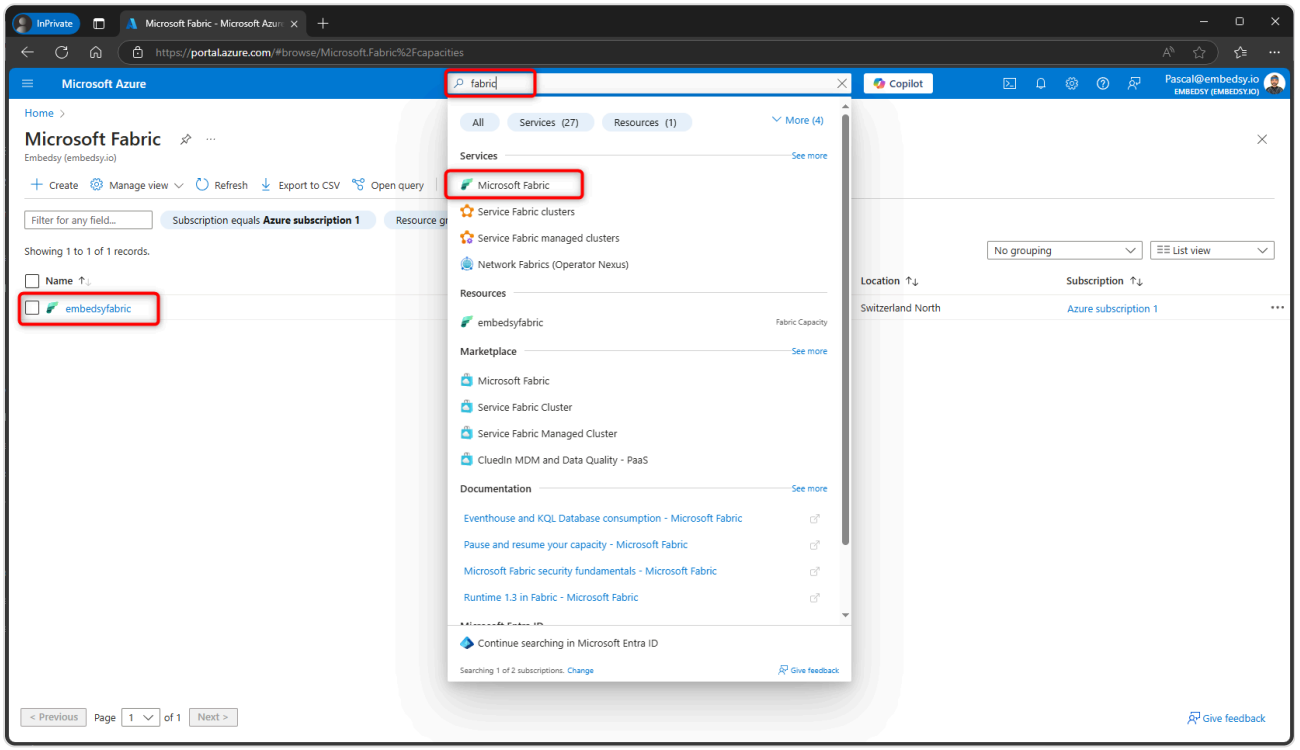


5. Capacity Settings

How to assign the Service Principal to Fabric / Embedded capacity.

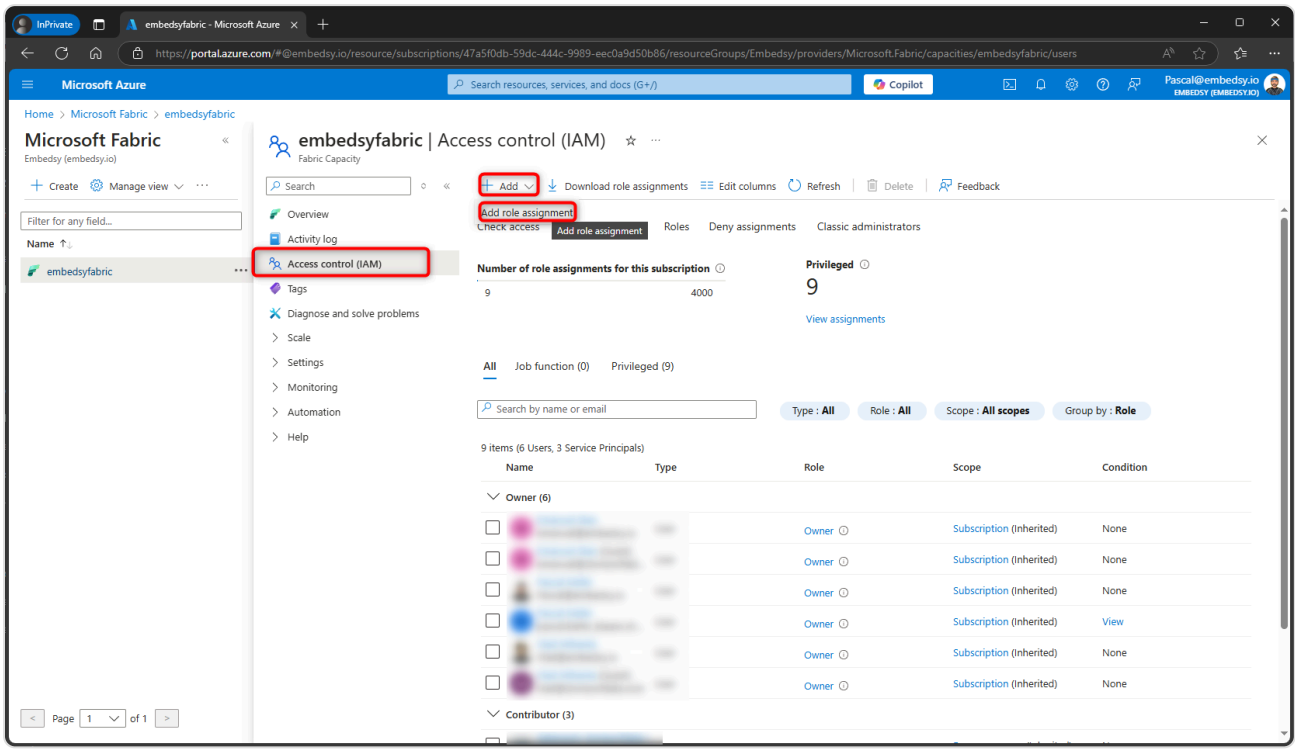
Step 1

Navigate to the Azure Portal and find your Fabric or Power BI Embedded capacity resource.



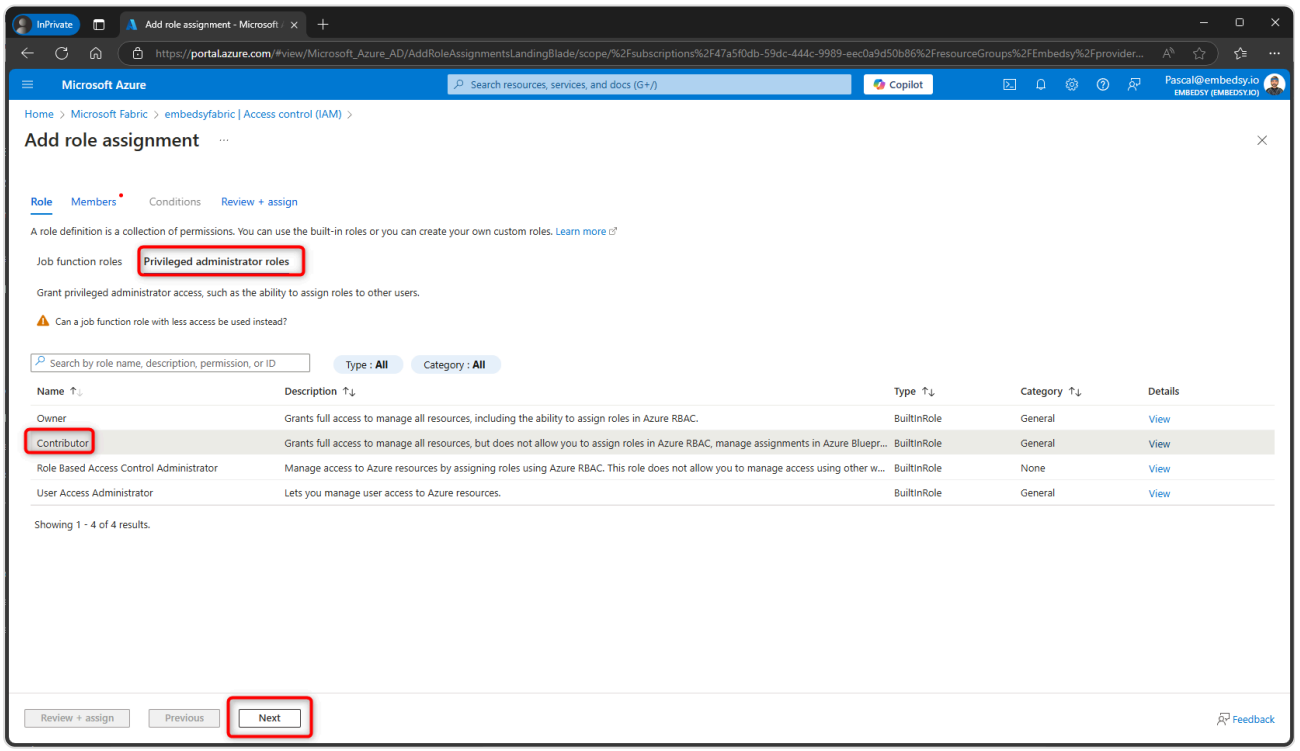
Step 2

Go to Access control (IAM) and click on Add role assignment.



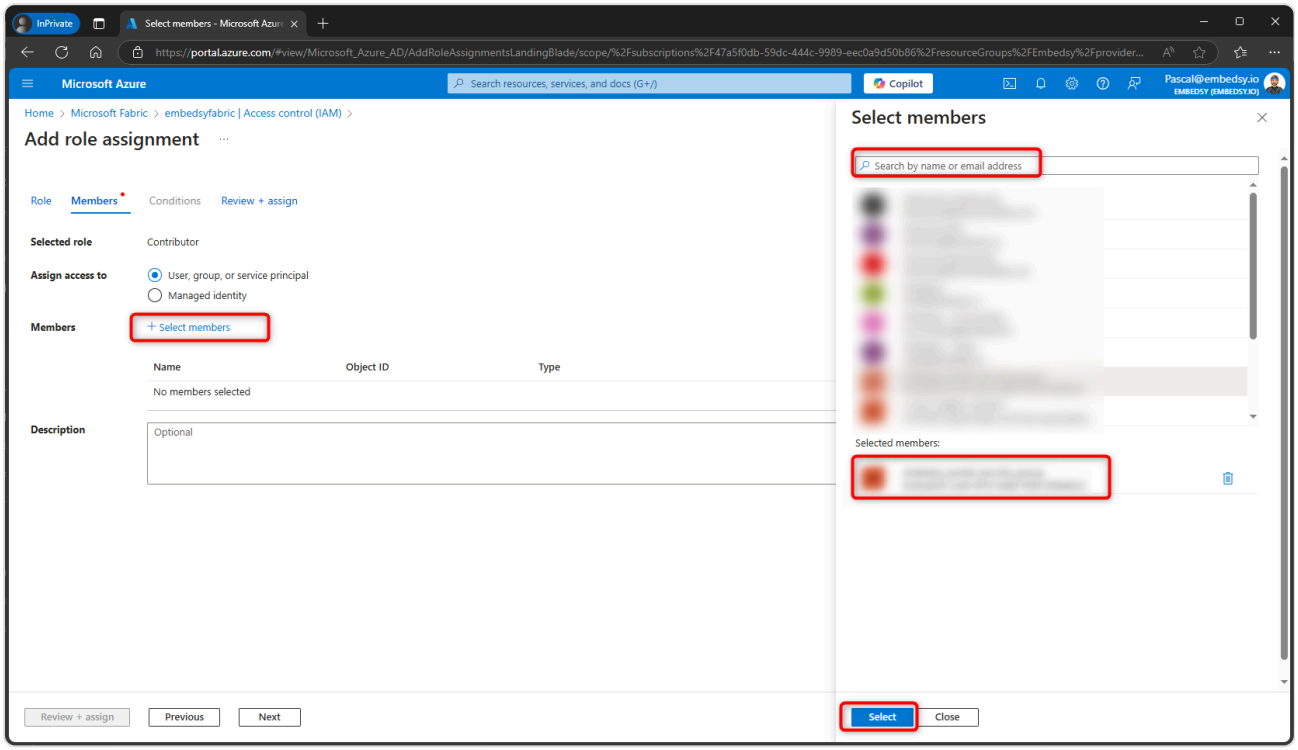
Step 3

Select the Contributor role.



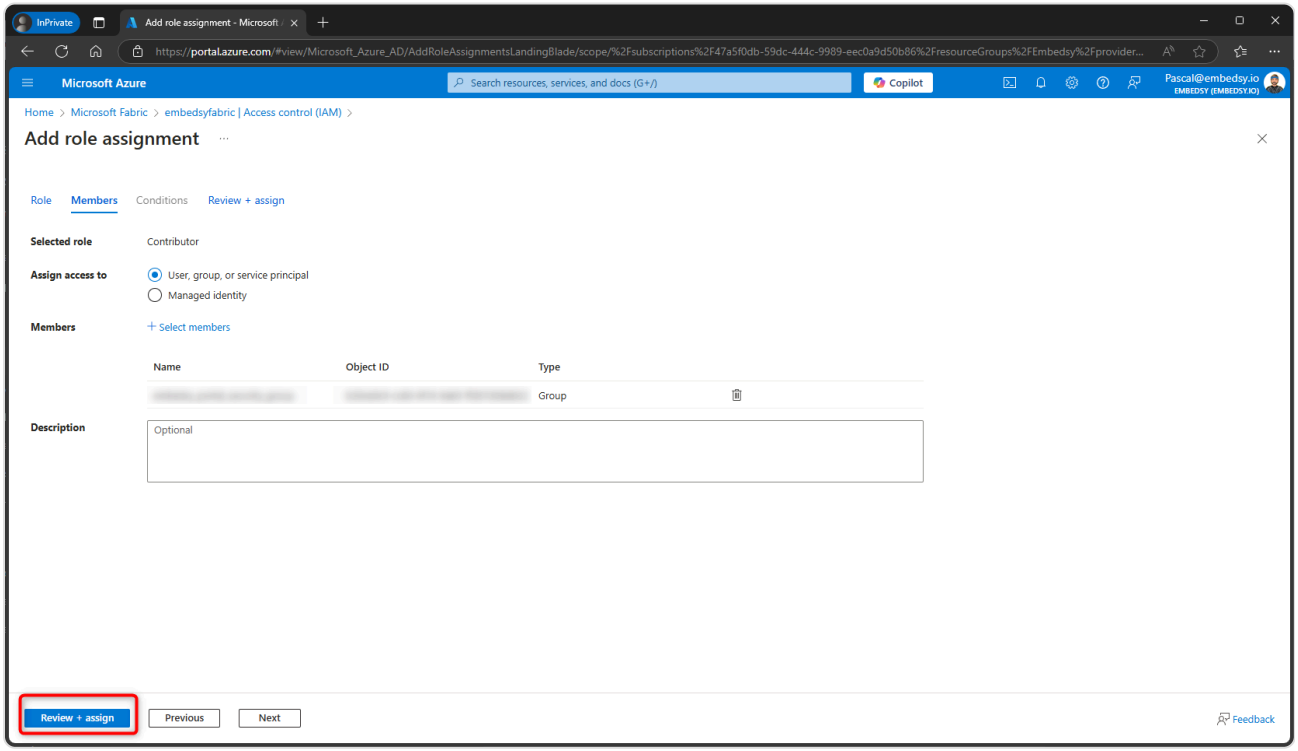
Step 4

Search for and select the Service Principal you created earlier.



Step 5

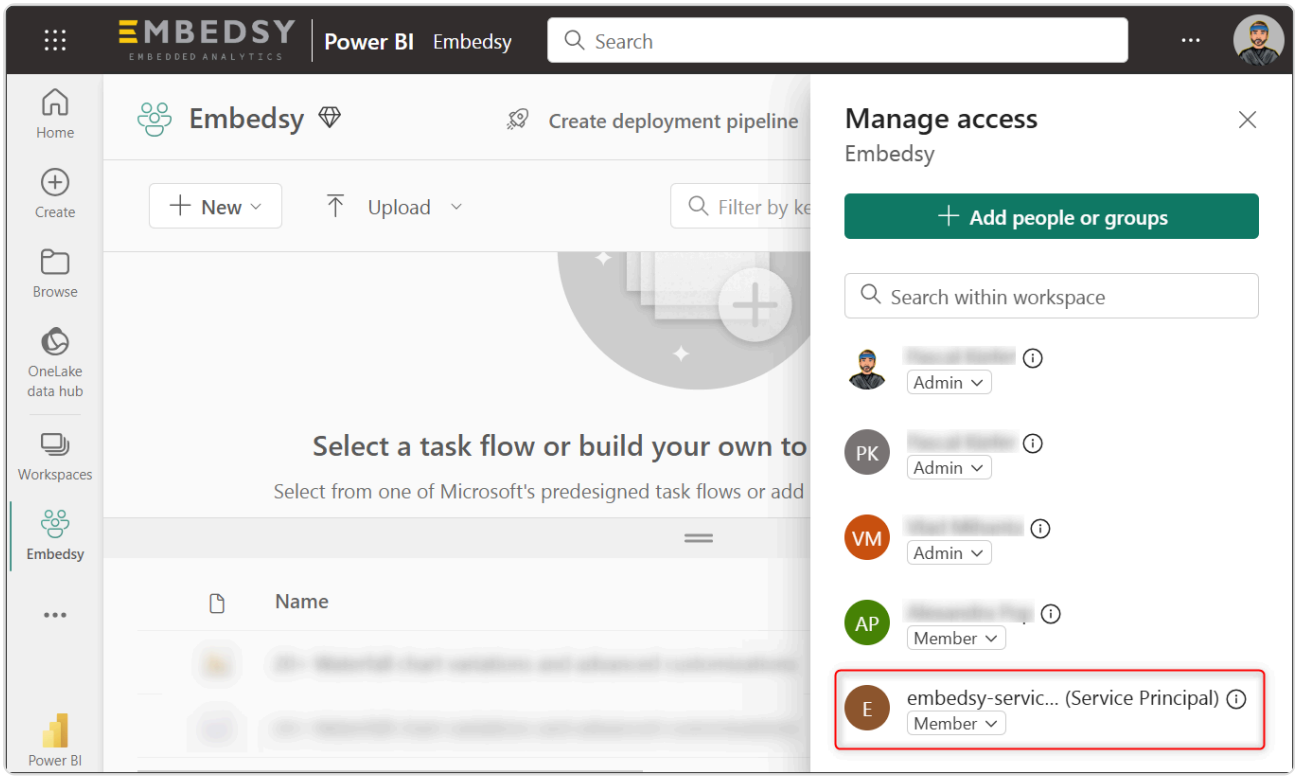
Review and assign the role. The Service Principal should now have Contributor access to the capacity.



6. Workspace Configuration

How to add the Service Principal or Entra Security Group to your Power BI workspaces.

Add the Service Principal or the Entra Security Group as a Member to each Power BI workspace that you want to embed reports from. This allows the ProConomics Portal to access the reports in those workspaces.

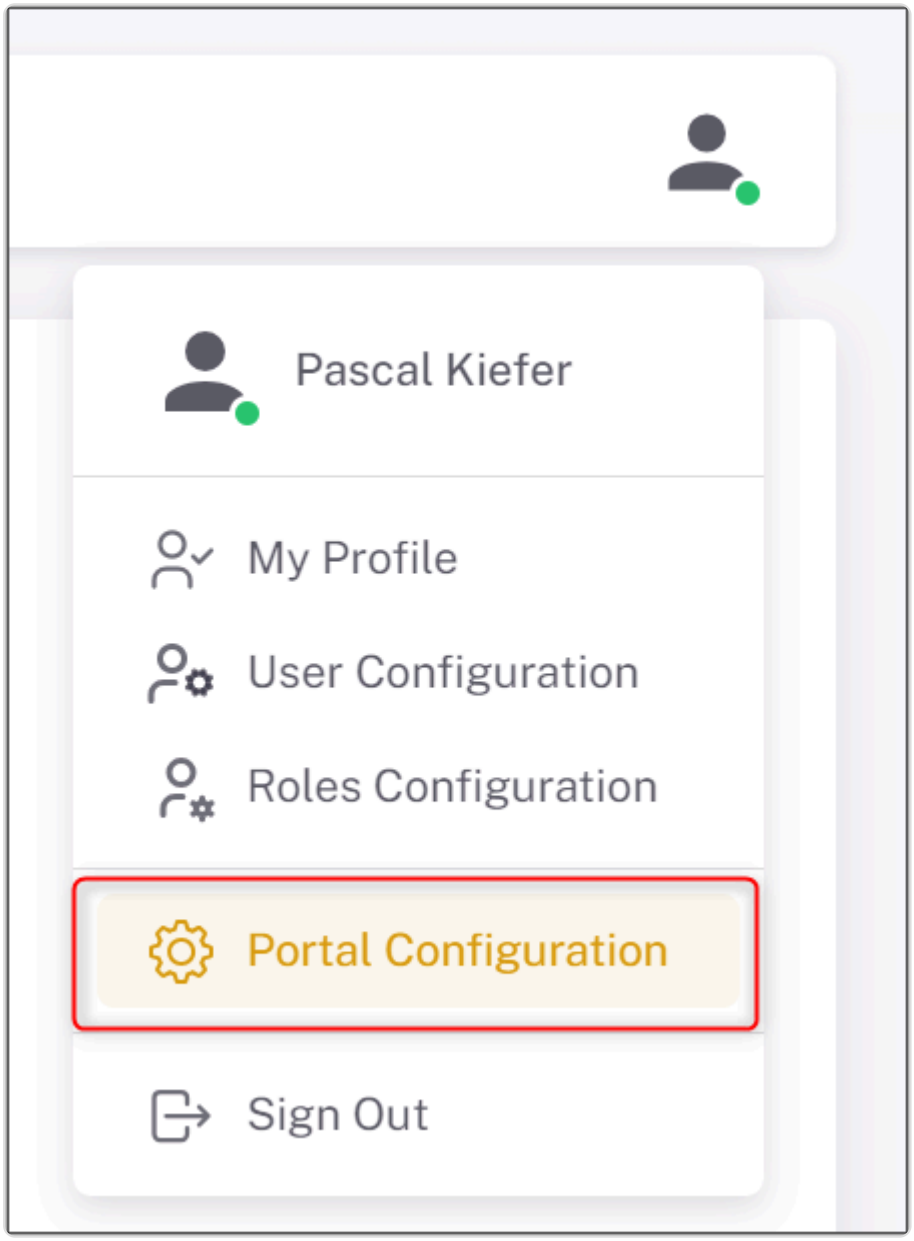


7. Update Client Secret

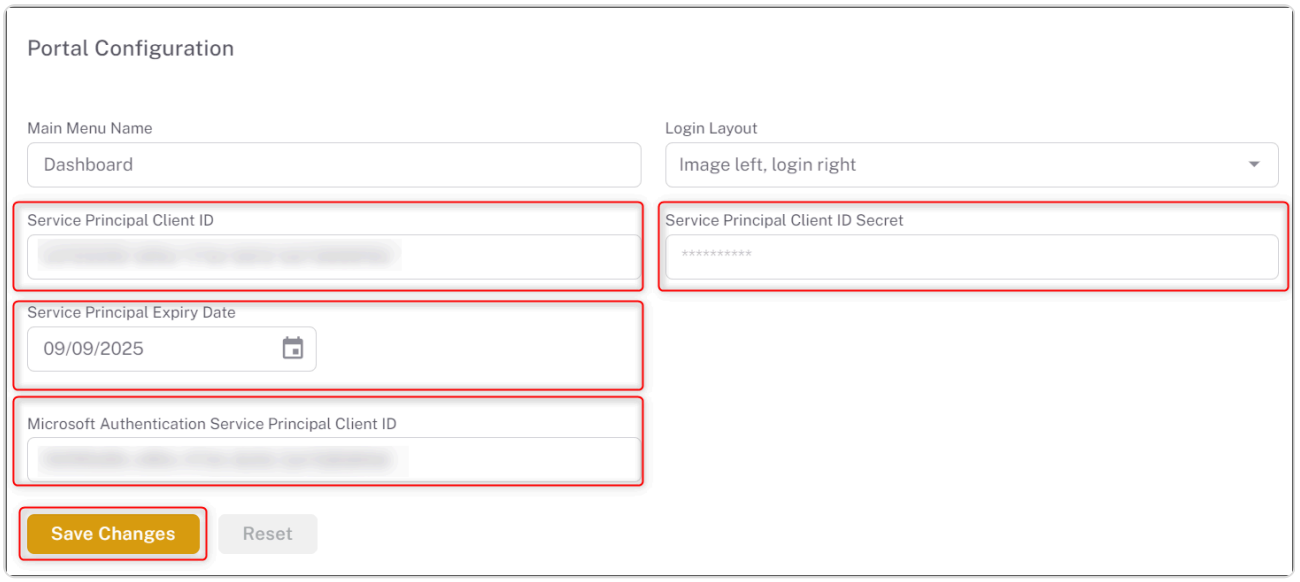
How to add the Client ID and Client Secret to the ProConomics Portal.

After creating the Service Principal and obtaining the Client ID and Client Secret, you need to add these values to the ProConomics Portal settings.

Navigate to the ProConomics Portal configuration page and enter the Client ID.



Enter the Client Secret and save the configuration.


Portal Configuration
Main Menu Name
Dashboard
Login Layout
Image left, login right
Service Principal Client ID
Service Principal Client ID Secret
****
Service Principal Expiry Date
09/09/2025
Microsoft Authentication Service Principal Client ID
Save Changes
Reset

8. Azure Budget & Cost Control

How to control costs in Azure.

We always recommend to set up a budget in Azure to control your costs. This way you will receive an alert when your costs reach a certain threshold.

You can set up a budget in the Azure Portal by navigating to Cost Management + Billing. From there, you can create a new budget and set the amount and the alert threshold.

For more information, see the Microsoft documentation on creating budgets.