Microsoft Cloud for Retail

in a Day

Lab 04: Dynamics 365 Commerce and Microsoft Teams integration

Step-by-Step Lab

60 minutes

March 2022

Contents

Overview

Retail workforce management helps you digitize managerial tasks like store scheduling.

With retail workforce management, manage shifts seamlessly, easily connect to your existing workforce, simplify task dissemination, and help your team complete tasks more easily.

With retail workforce management, offer **seamless scheduling:**

Manage shifts seamlessly – enable managers to easily create and manage their team's schedule and let employees set their availability and easily adjust schedules to fluctuating business needs

Track time & attendance with easy clock in and out with geo detection and digital time tracking sheets.

Enable Shifts connectors with workforce management systems for real-time visibility into labor scheduling, time and attendance, and store operation scheduling in a single interface—ensuring a seamless and accurate scheduling experience

Also, experience **task management made easy:**

Enable corporate employees like corporate communications nor retail operations team easily create, distribute and track task assignments to targeted location.

Equip managers to manage tasks regionally and assign them to the right individuals in the store

Provide frontline workers from executing tasks locally with clear, detailed directions from HQ/Operations.

Learning Objectives

Retail Story

This lab will focus on the retail story of Fabrikam Retail.

In the following exercises, you will be playing the role of a System Administrator, a Retail Communications Manager, Store Manager and a Retail Employee:

- In Exercise 1, you will be creating an App registration and setup the required permissions.
- In Exercise 2, you will be enabling the integration between D365 Commerce and Teams Task management app.
- You will then play the role of a Retail communications manager who will login into Teams and publish a task "Setup Women's Spring Lineup Display" as part of Exercise 3 – Task 1.
- Later, in Exercise 3 – Task 2, you will play the role of a Store manager who will login into D365 Commerce POS application to view the tasks and assign the new task to a store employee.
- In Exercise 3 – Task 3, you will play the role of a store employee who will view the assigned tasks and marks it as complete once the task is completed.

Prerequisites

- D365 Commerce
- Microsoft Teams
- Create an Azure Active Directory app

Exercise 1: App Registration and Permissions

***Note**: If you are in an instructor led lab then please skip this exercise and tasks as this has been completed by your instructor.*

Dynamics 365 Commerce is integrating with **Microsoft Teams** to help customers and their employees improve productivity by synchronizing task management between the two applications. The seamless task management that Commerce and Teams integration provides let store managers and employees create task lists, assign tasks to multiple stores, and track the status of tasks across stores, from either application.

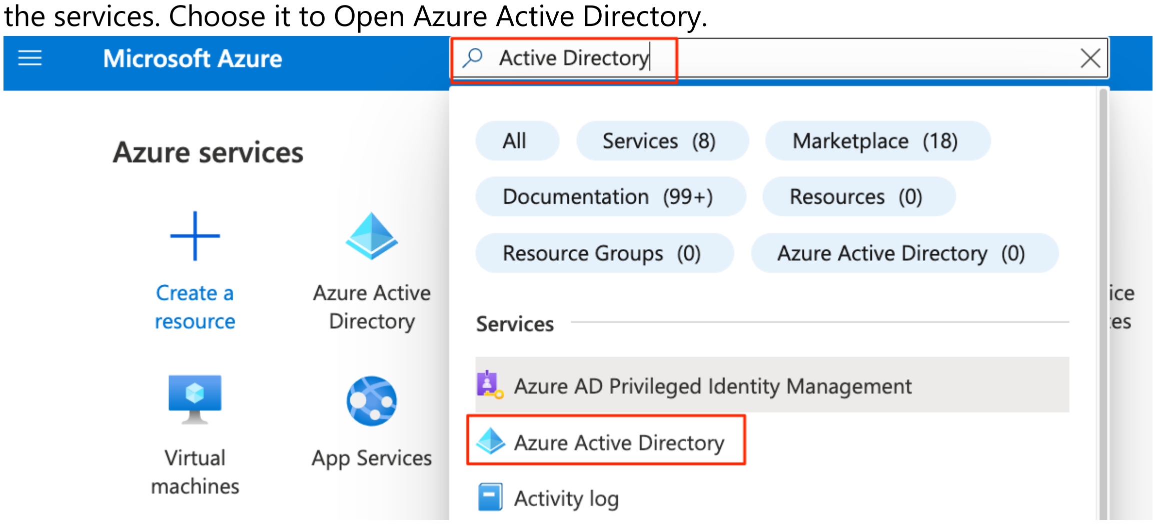
Before you can enable Microsoft Teams integration with Commerce, you must register the Teams application with your tenant in the Azure portal.

In this exercise, you will be doing the following:

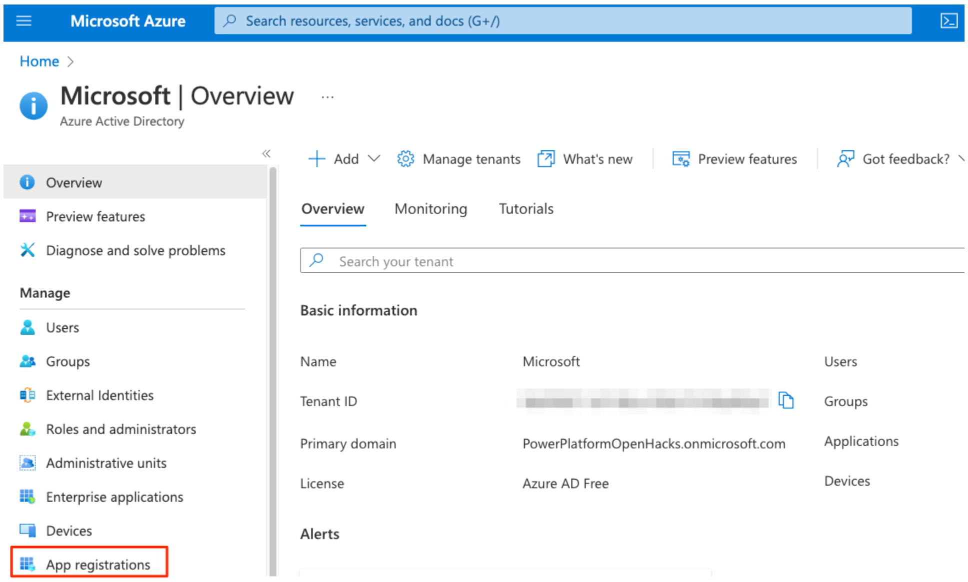
1. App Registration with Azure Active Directory
2. Add a Secret to the registered App.
3. Adding API permissions to the registered App
4. Configure registered application to expose a web API
5. Configure a client application to access a web API

Task 1: App Registration with Azure Active Directory

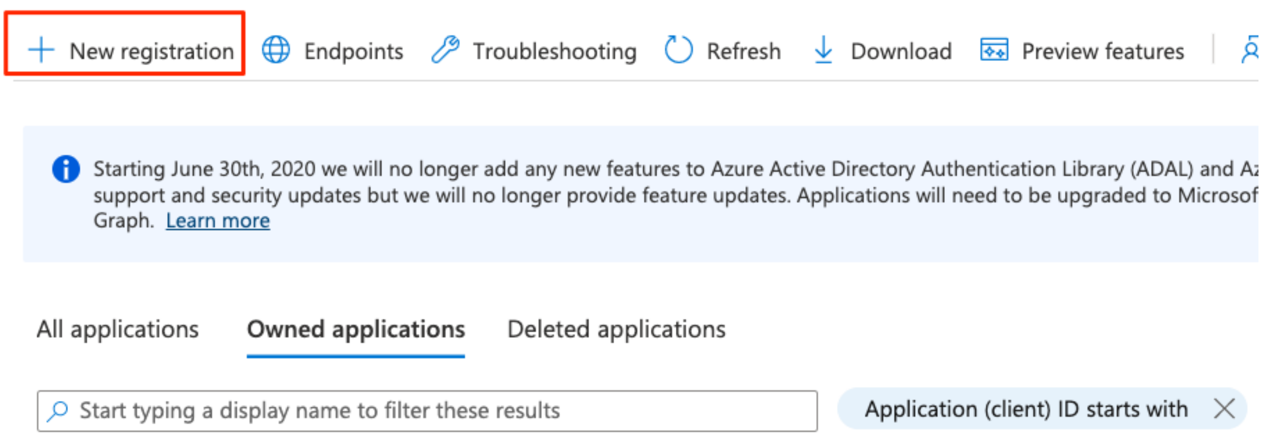
1. In the Azure Portal search bar, search for "Active Directory", the Azure Active Directory will show up in the services. Choose it to Open Azure Active Directory.



2. In the Azure Active Directory, Click on App registrations



3. In the App registrations, click on add New registration.

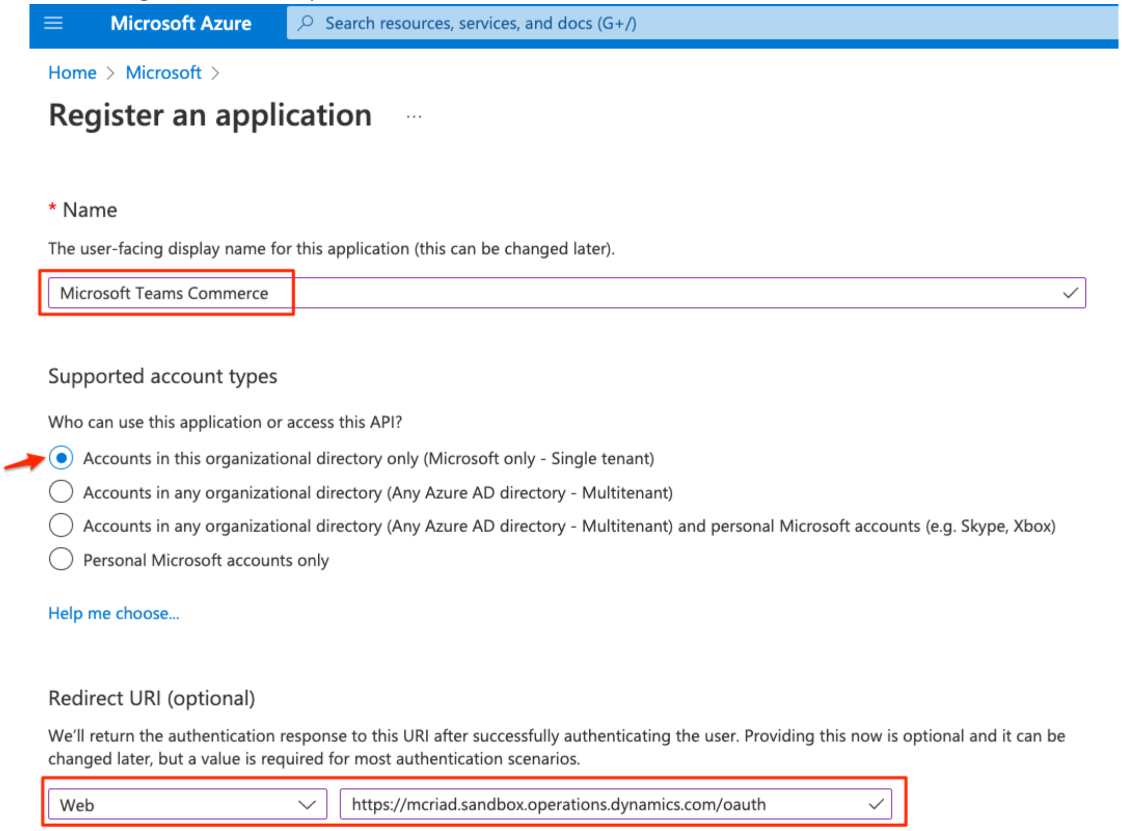


4. Name the App registration as “Microsoft Teams Commerce”

5. Under Supported account types: Choose “Accounts in this organizational directory only” (Microsoft only – Single tenant)

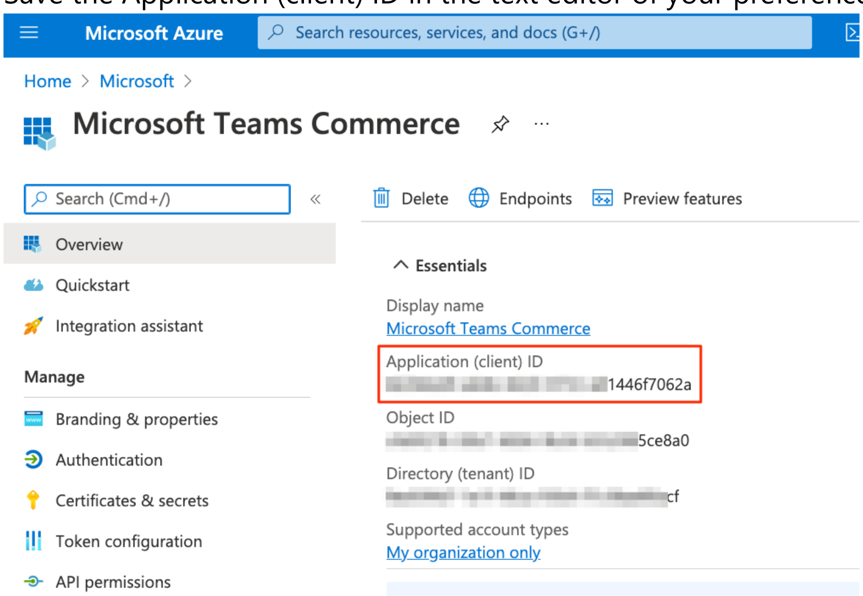
6. Under Redirect URI: Select Web and provide the Commerce Finance and Operations URL and add the “oath” suffix. The full URL should look like https://fabrikam.sandbox.operations.dynamics.com/oath

7. Click in Register to complete.



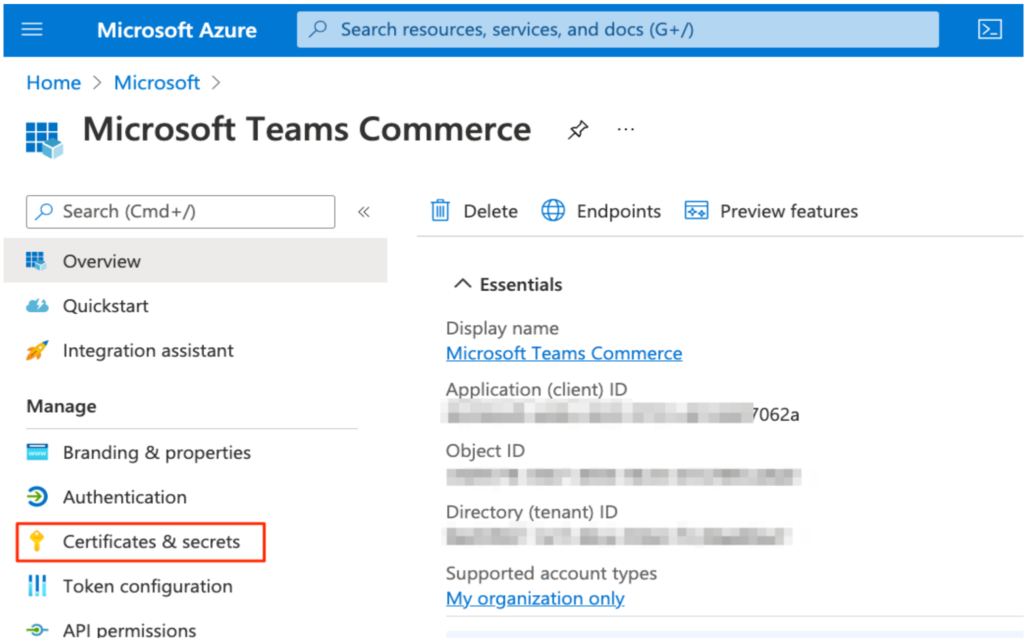
Important

8. Save the Application (client) ID in the text editor of your preference. It will be used in later steps.

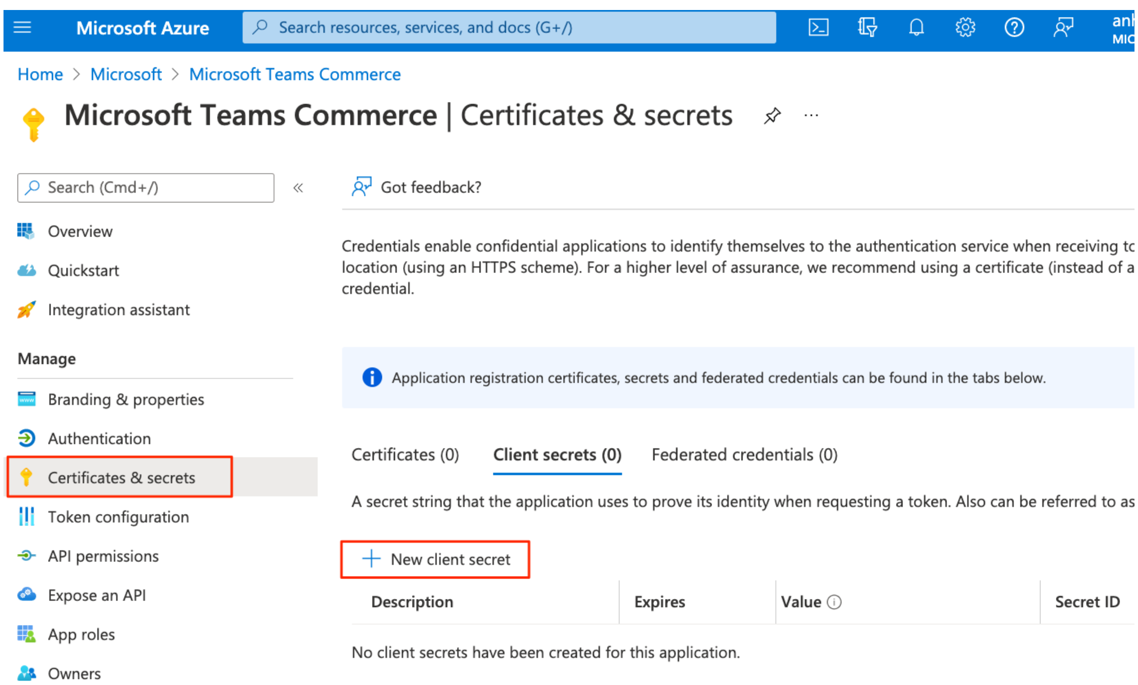


Task 2: Add a Secret to the registered App

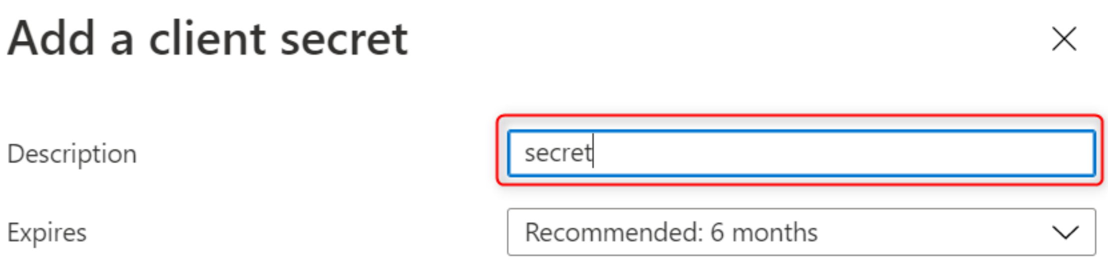
1. In the Microsoft Teams Commerce registered App. Click in Certificates & Secrets



2. Click Add New Client Secret

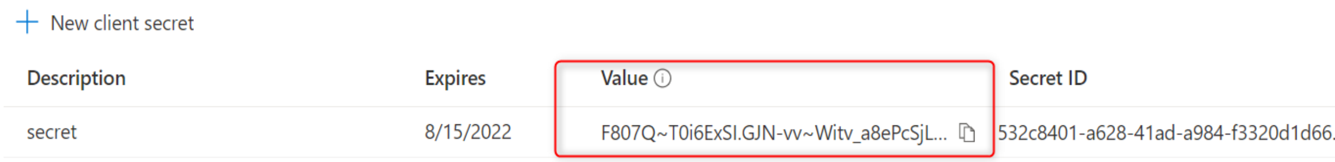


3. In the **Description**, provide a name of your choice for the client secret and click **Add**.



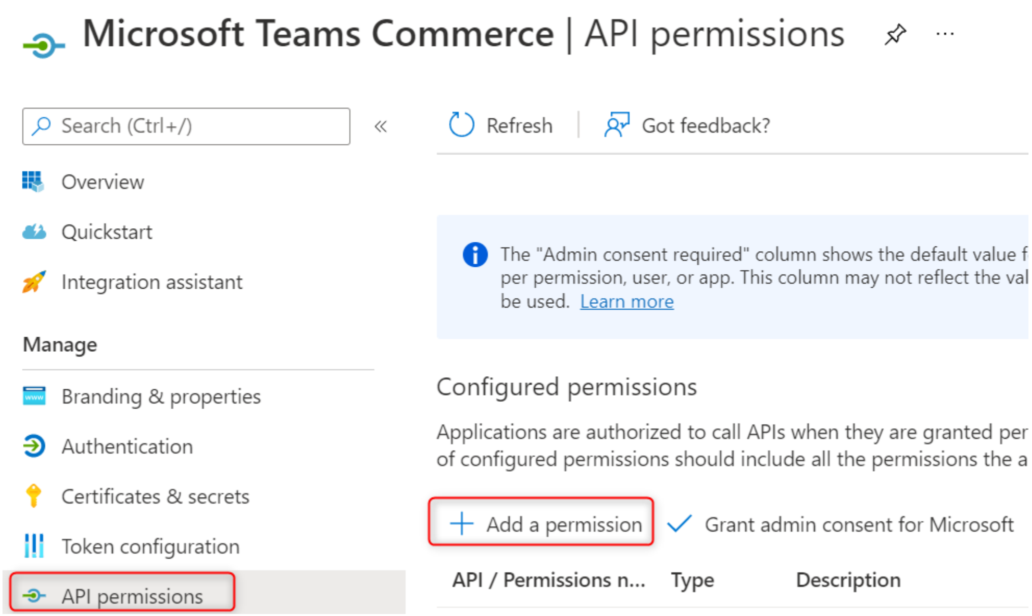
Important

4. Copy the key value generated for the client secret and save it in and text editor of your choice. The client secret value will be used in future steps. After closing this window, it will not be possible to retrieve the key again and it will require generating a new client secret.

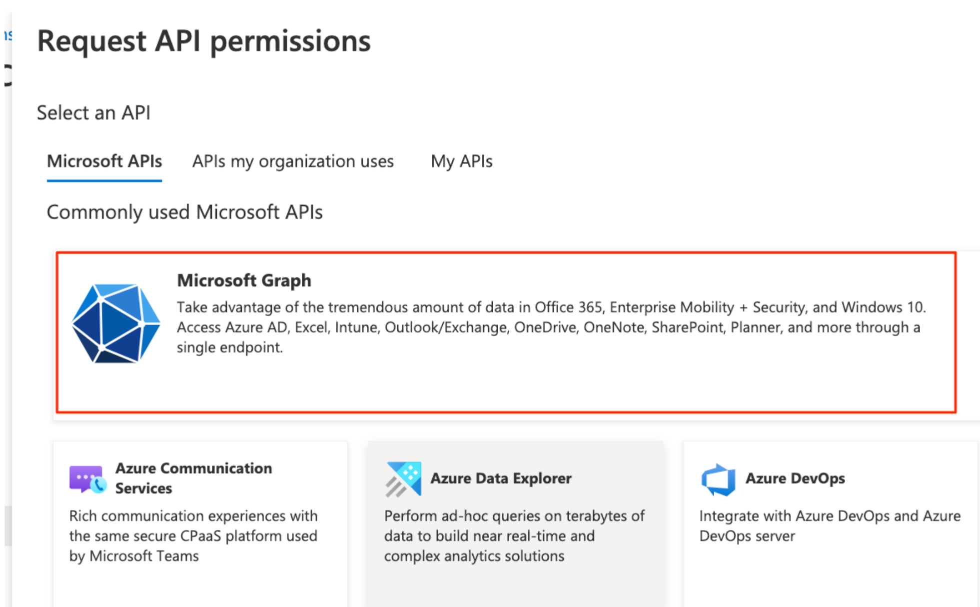


Task 3: Adding API permissions to the registered App

1. Click on **API permissions** in the left tab, then click on + **Add a permission.**

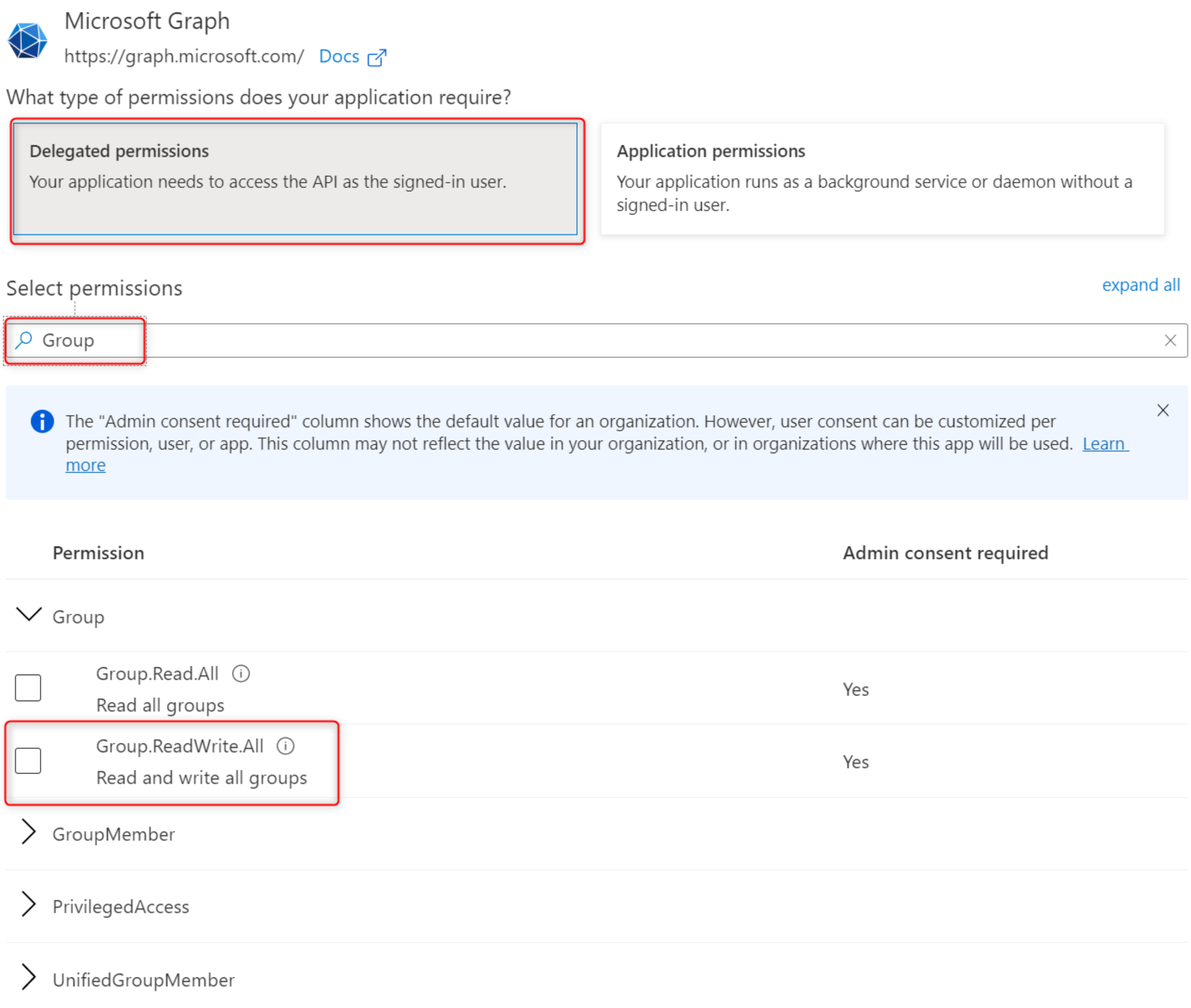


2. In the **Request API permissions** pop-up and select **Microsoft Graph**.

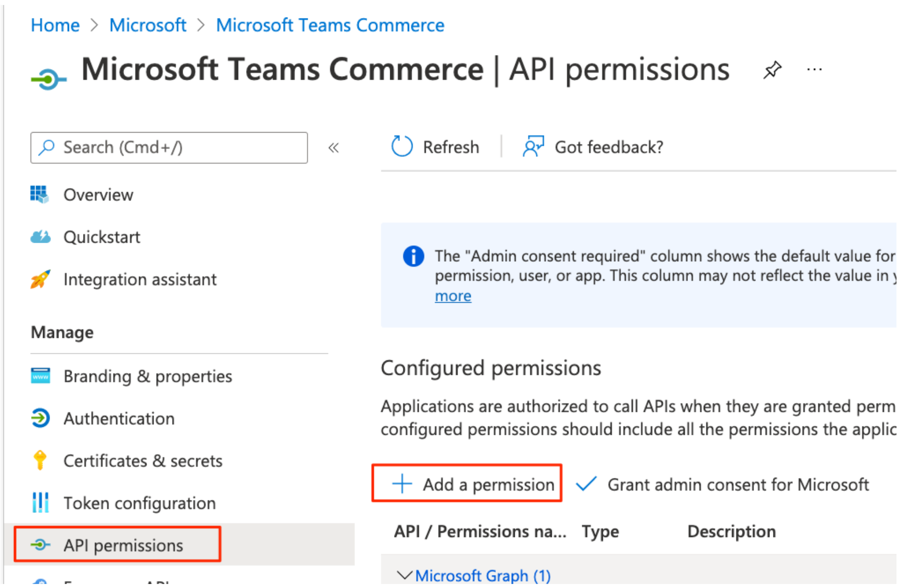


3. Select **Delegated permissions**, then in **Select permission** type **Group** to filter results.

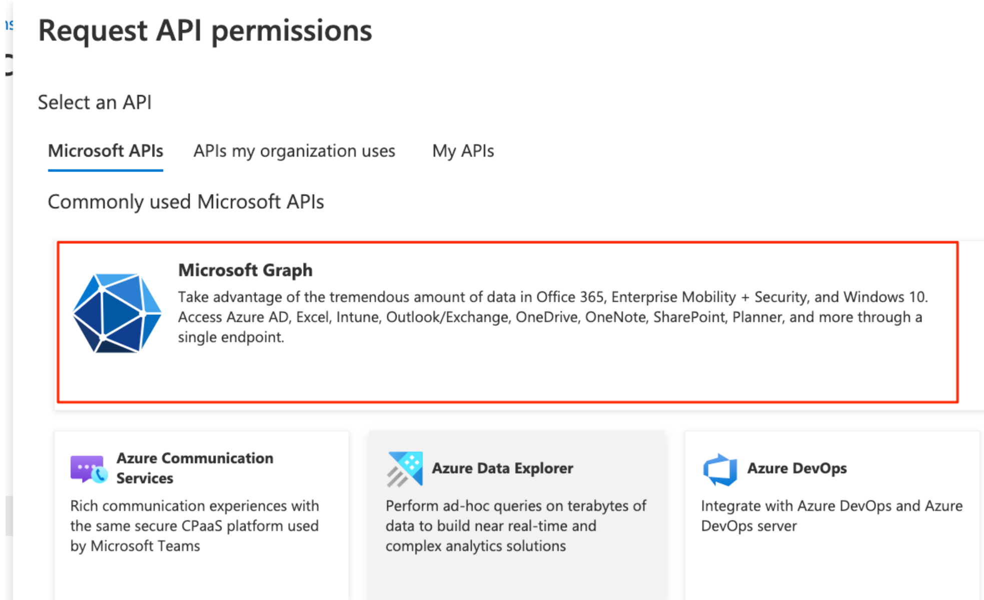
4. Under **Group** and check **Group.ReadWrite.All**, then click **Add permissions** button.



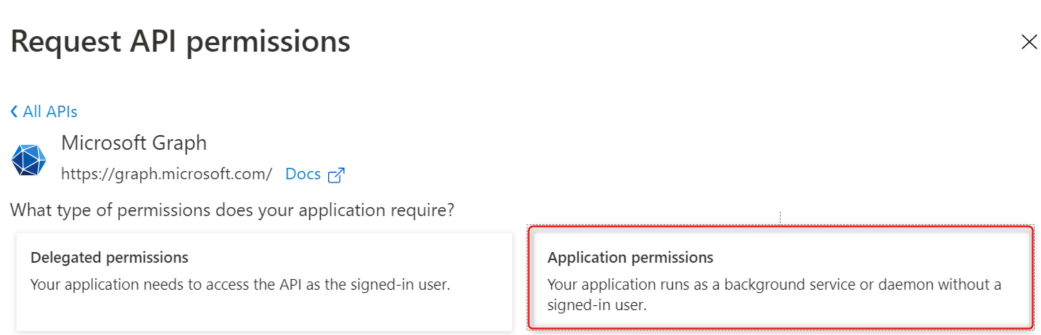
5. Click on **+ Add permission** again to add additional permissions.



6. In the Request API permissions pop-up and choose **Microsoft Graph.**

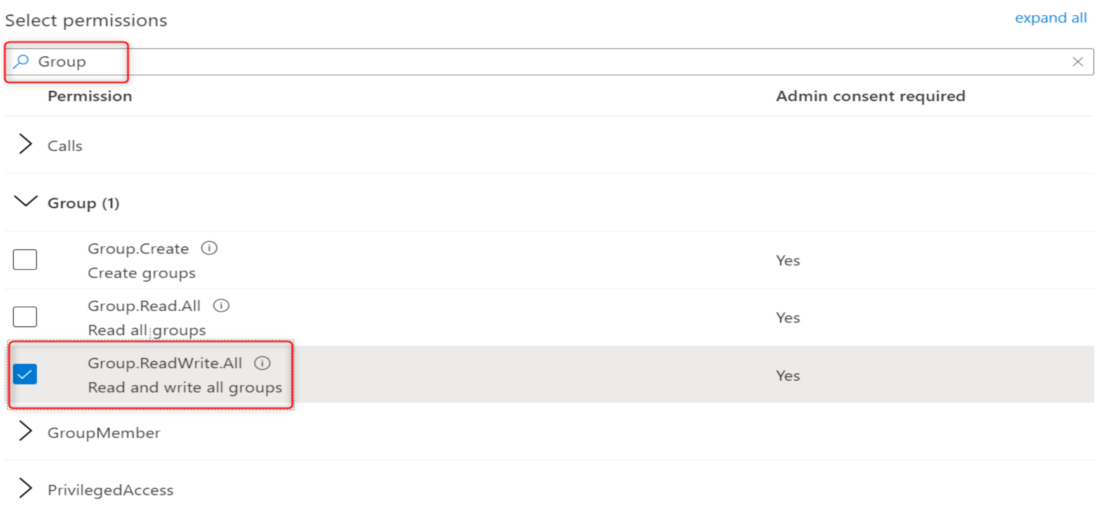


7. Select **Application permissions**

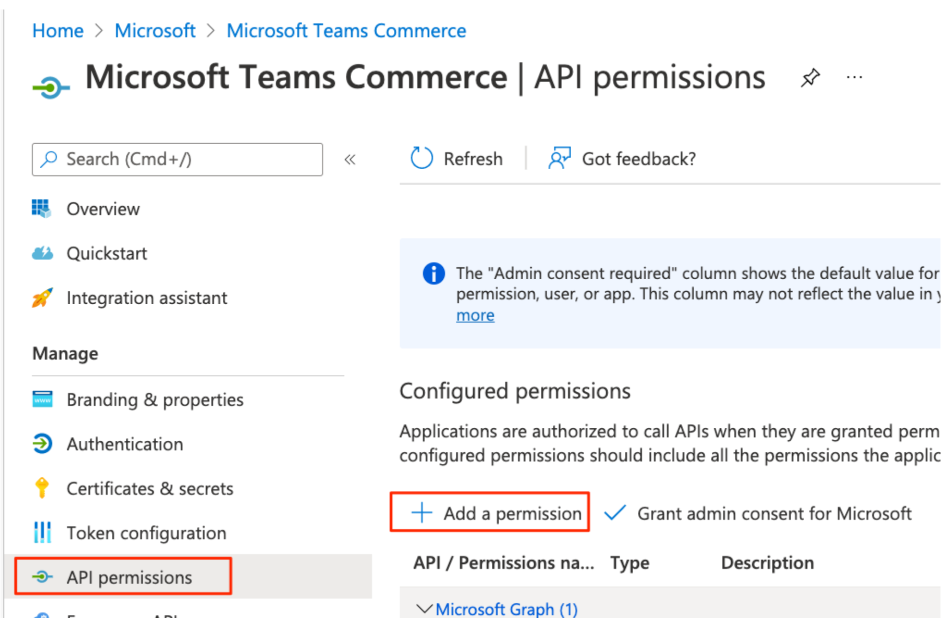


8. With **Application permissions** selected, then in **Select permissions** search field type **Group** to filter results.

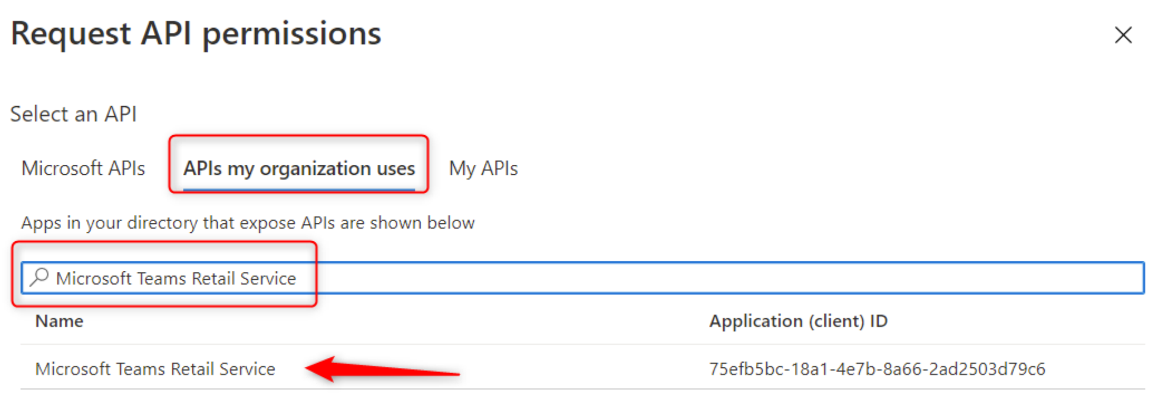
9. Click in **Group to** expand and check **Group.ReadWrite.All**, then click **Add permissions** button.



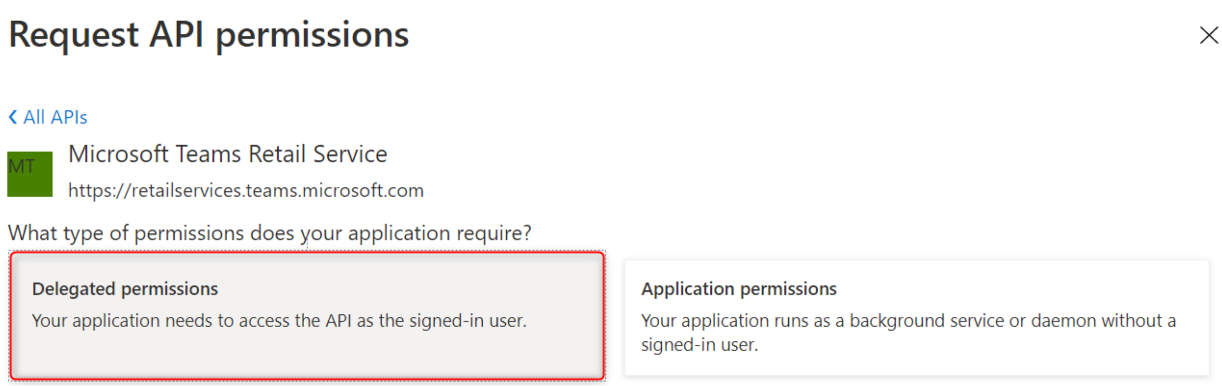
10. In API permissions, click + Add Permission.



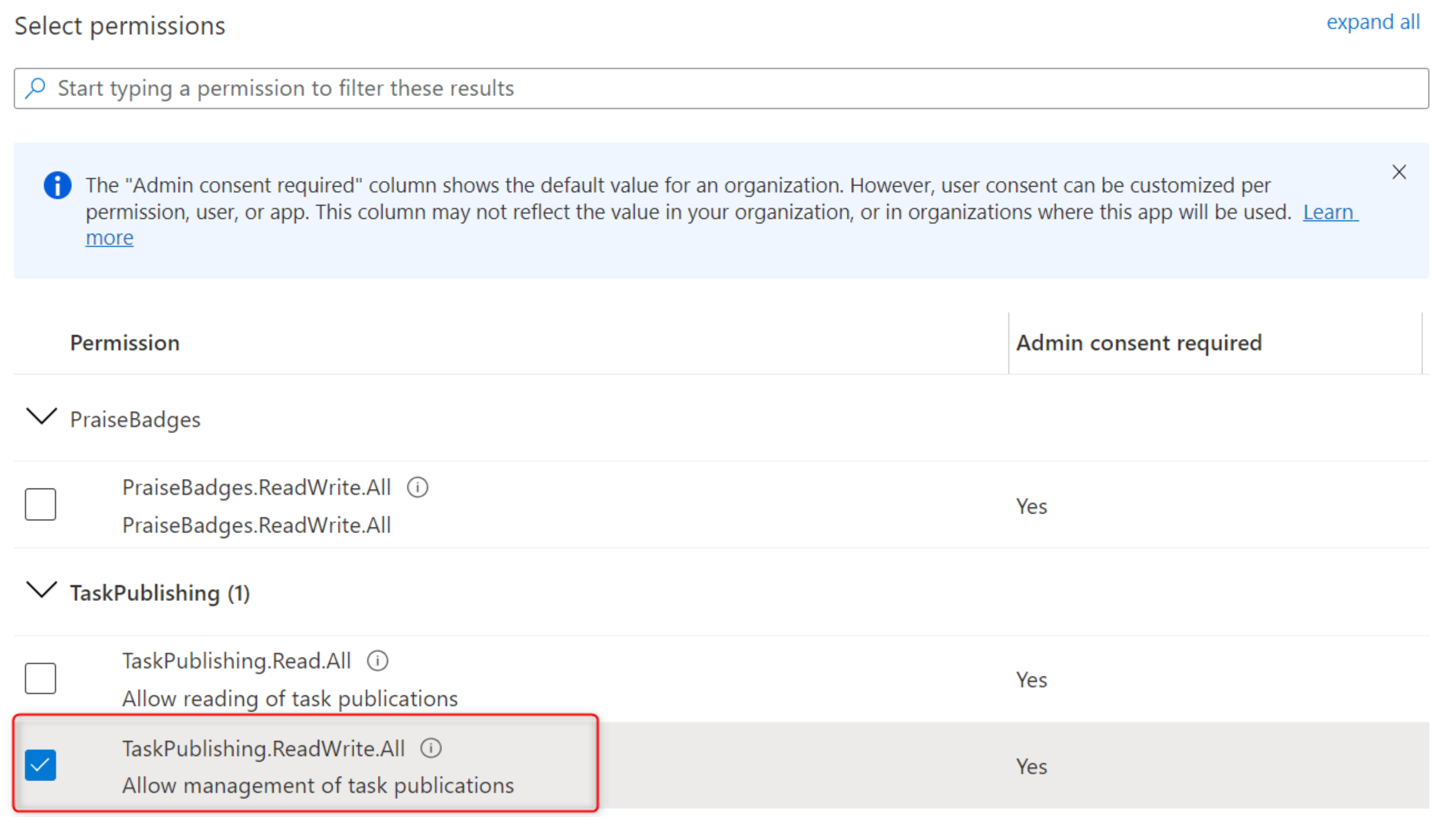
12. In the **Request API permissions** pop-up, select **APIs my organization uses** tab, then search for **Microsoft Teams Retail Service** and click on it.



13. Select **Delegated permissions**



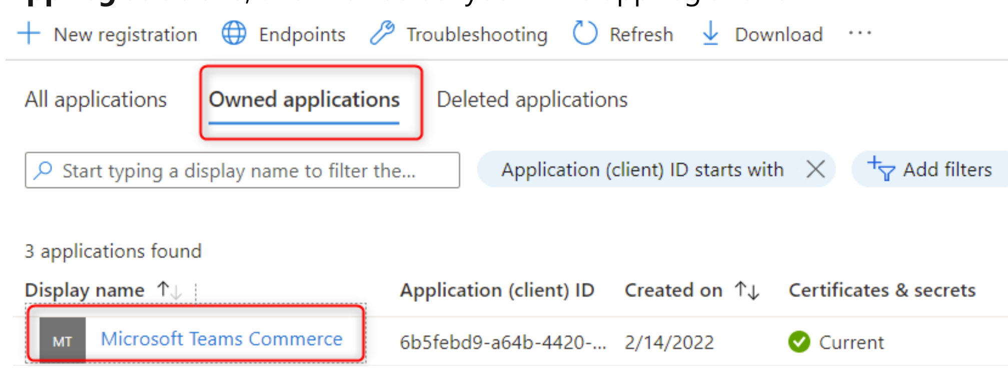
14. Click on **TaskPublishing** to expand, check **TaskPublising.ReadWrite.All**, then click **Add permissions** button.



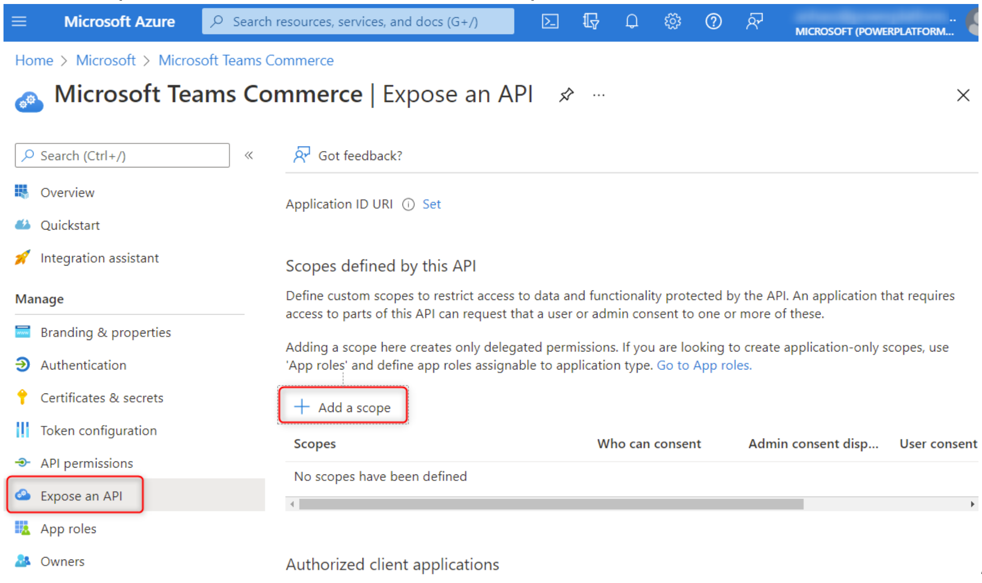
Task 4: Configure registered application to expose a web API

1. In Azure Portal go to **Azure Active Directory**

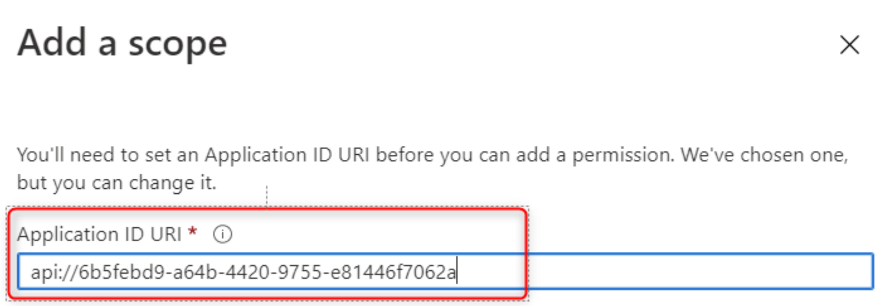
2. **App registrations**, and then select your API's app registration.



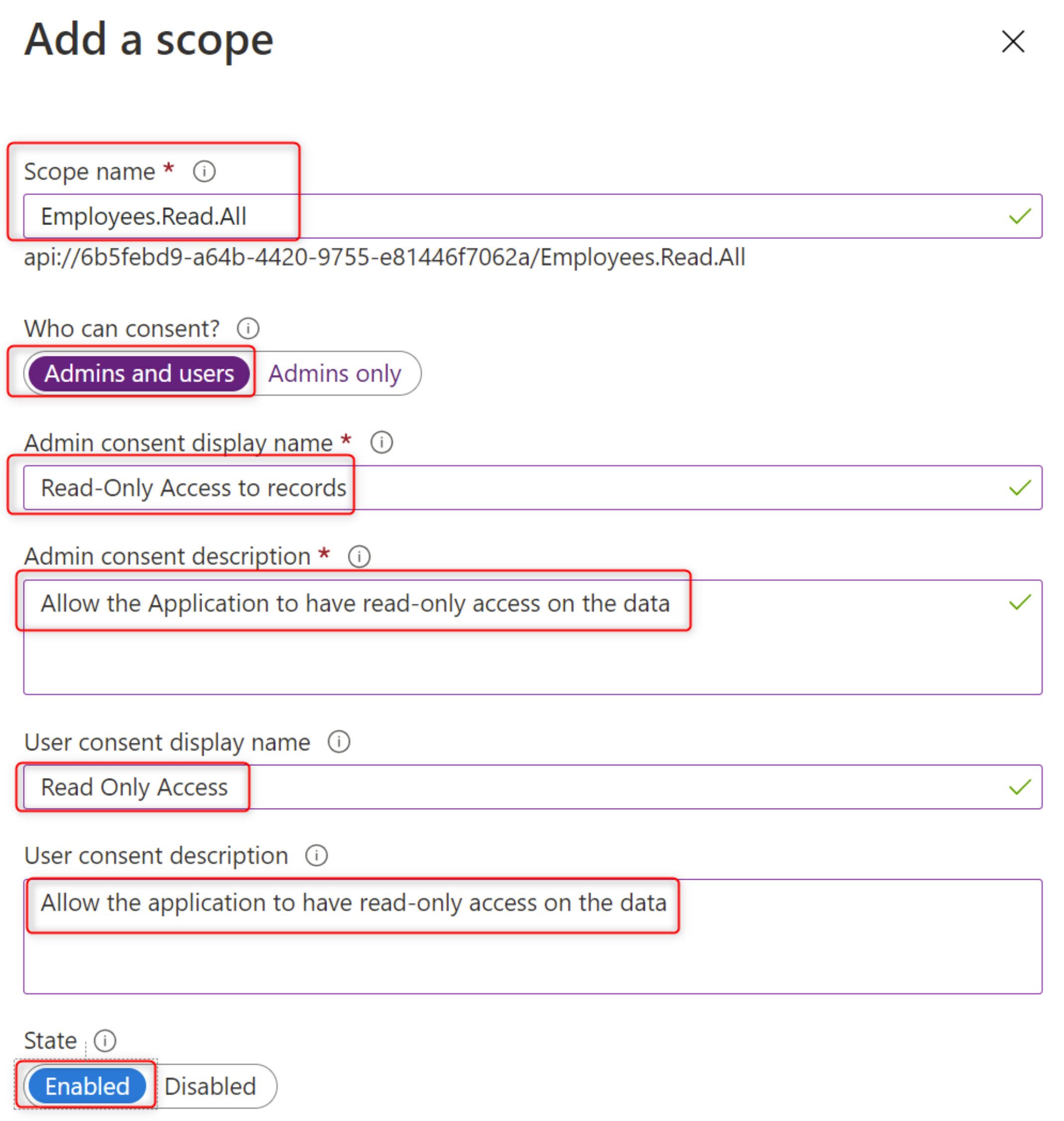
4. Select Expose an API and then Add a scope.



5. You can use the default value provided, which is in the form api://<application-client-id>, or specify a more readable URI like https://contoso.com/api.



6. Click save and Continue
7. In Add a Scope page fill the form with the following values:

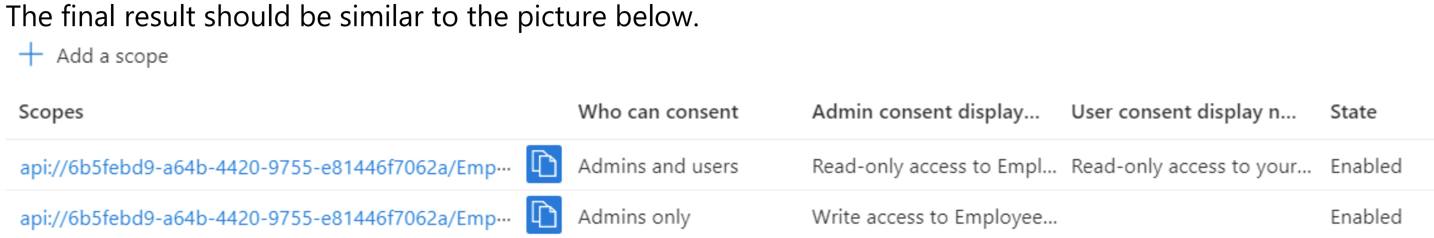


8. Add another scope by clicking in Add Scope and use the following values.

Scope name	Employees.Write.All
Who can consent	Admins only
Admin consent display name	Write access to records
Admin consent description	Allow the application to have write access to all Employee data.

9. Leave the remaining fields empty and make sure the state is set to Enabled.
10. Click Add Scope

11. The final result should be similar to the picture below.

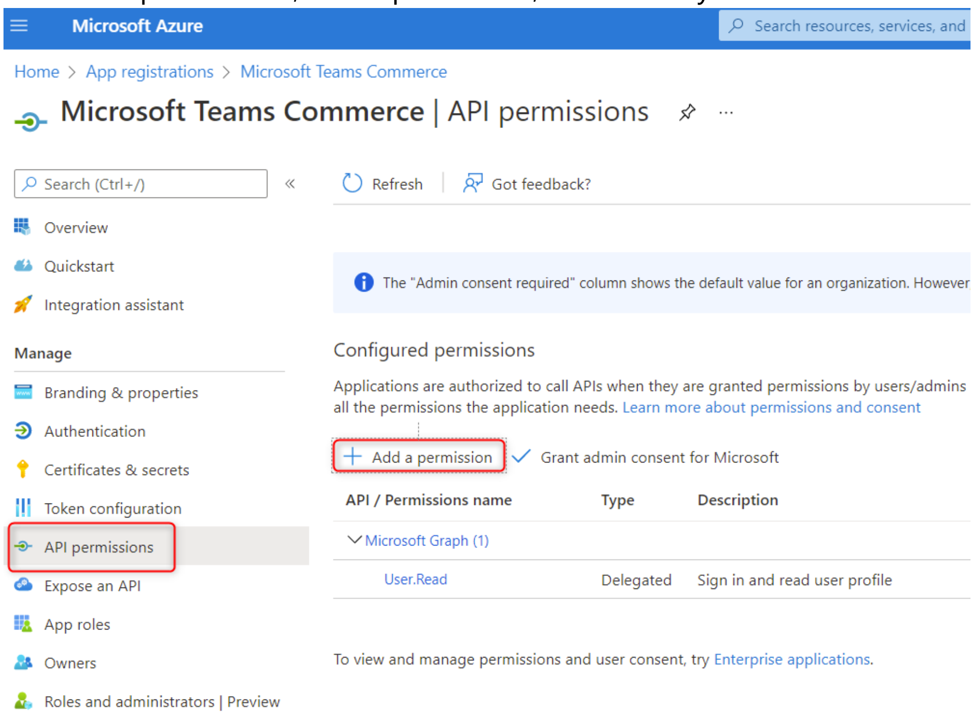


Task 5: Configure a client application to access a web API

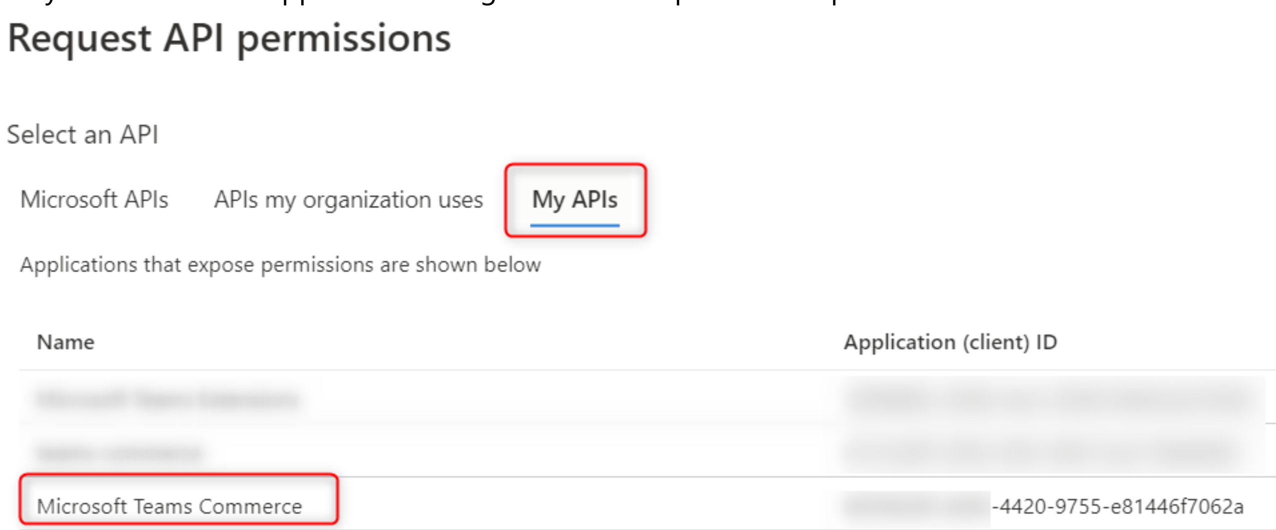
1. In Azure Portal go to **Azure Active Directory**

2. **App registrations**, and then select your API's app registration.

3. Select API permissions, Add a permission, and then My APIs.

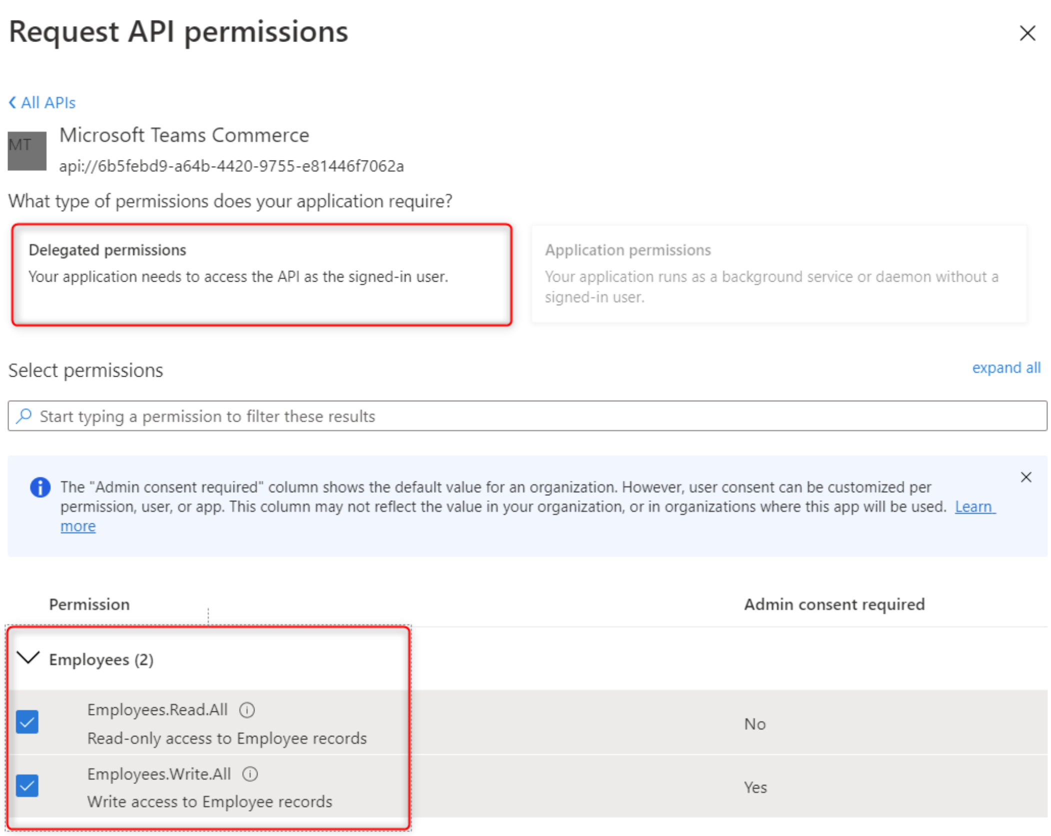


4. In My APIs select the Application ID registered in the previous step.



5. Under Select permissions, expand the resource whose scopes you defined for your web API, and select the permissions.

6. If you used the example scope names specified in the previous quickstart, you should see Employees.Read.All and Employees.Write.All.

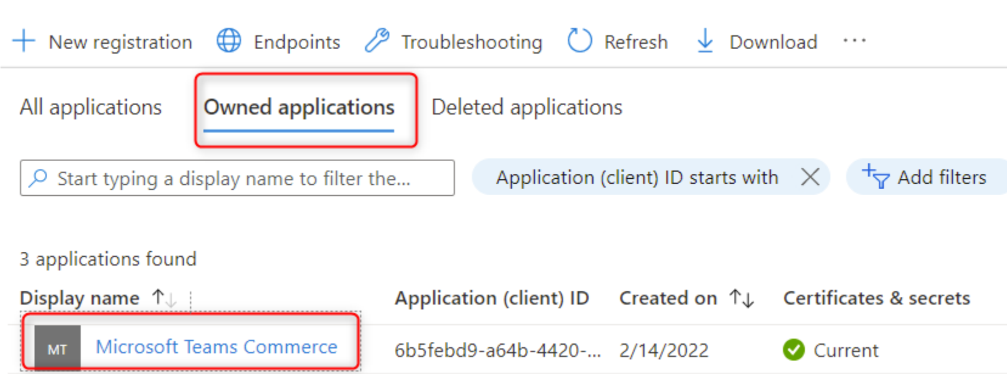


7. Click Add Permissions

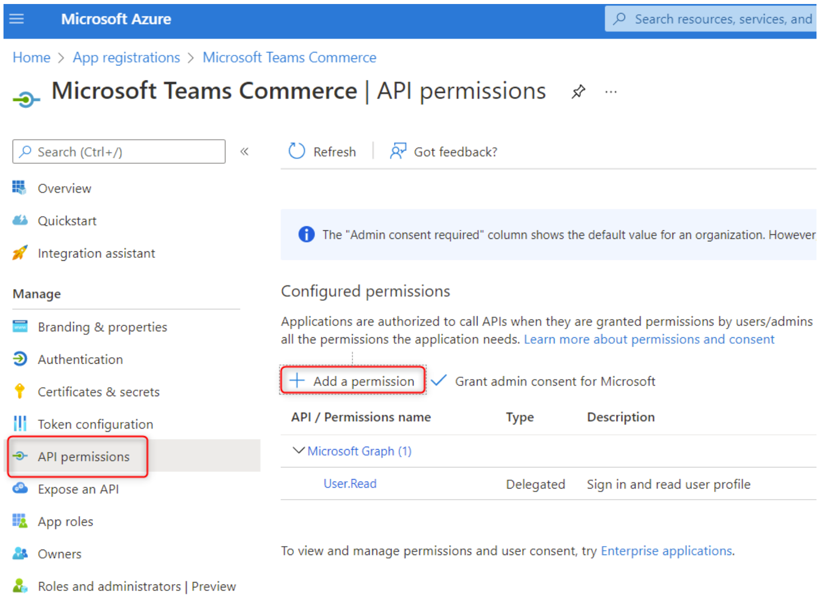
Task 7: Add Delegated permissions to access Microsoft Graph

1. In Azure Portal go to Azure Active Directory

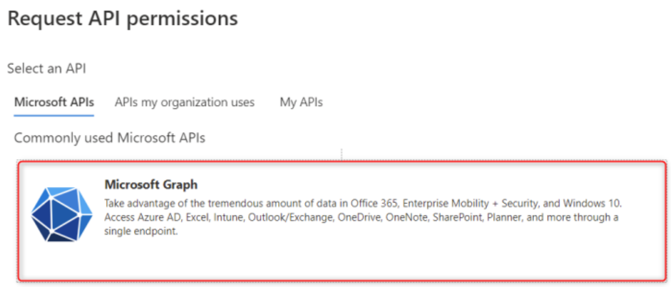
2. App registrations, and then select your API's app registration.



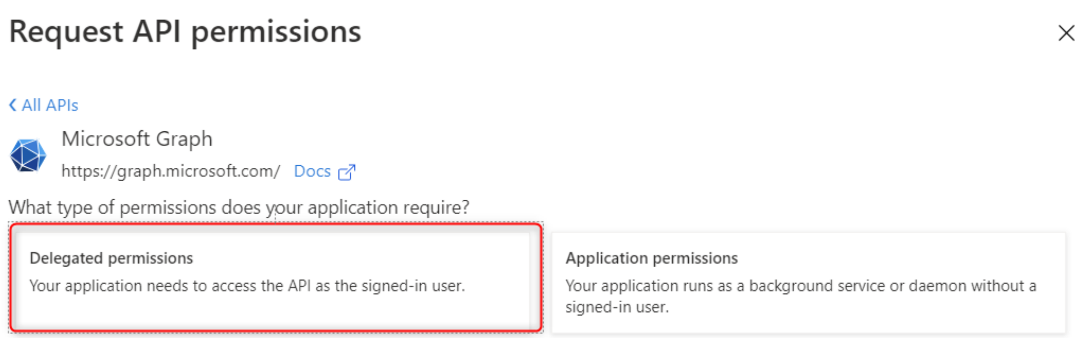
3. Select API permissions, Add a permission, and then Microsoft Graph



4. Choose Microsoft Graph.

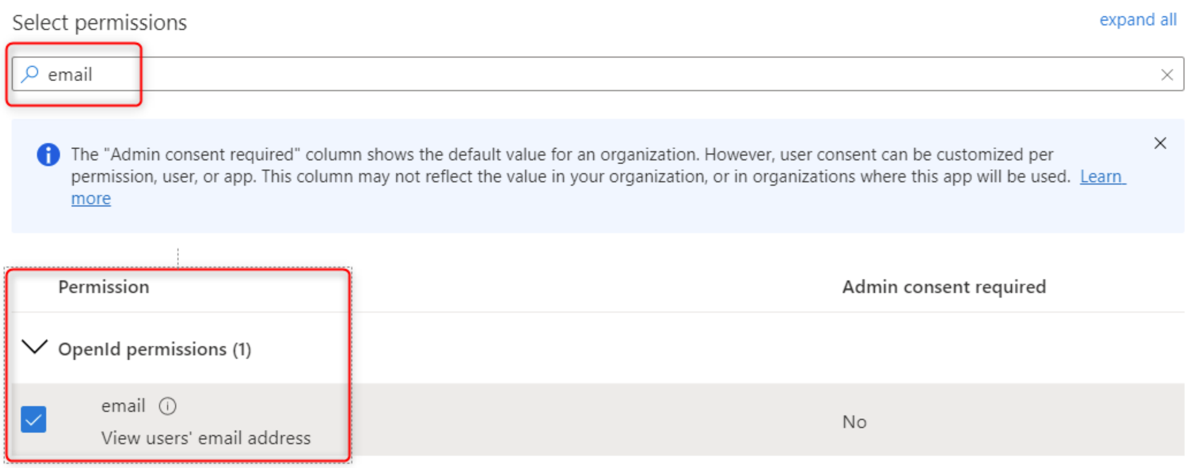


5. Select Delegated permissions.



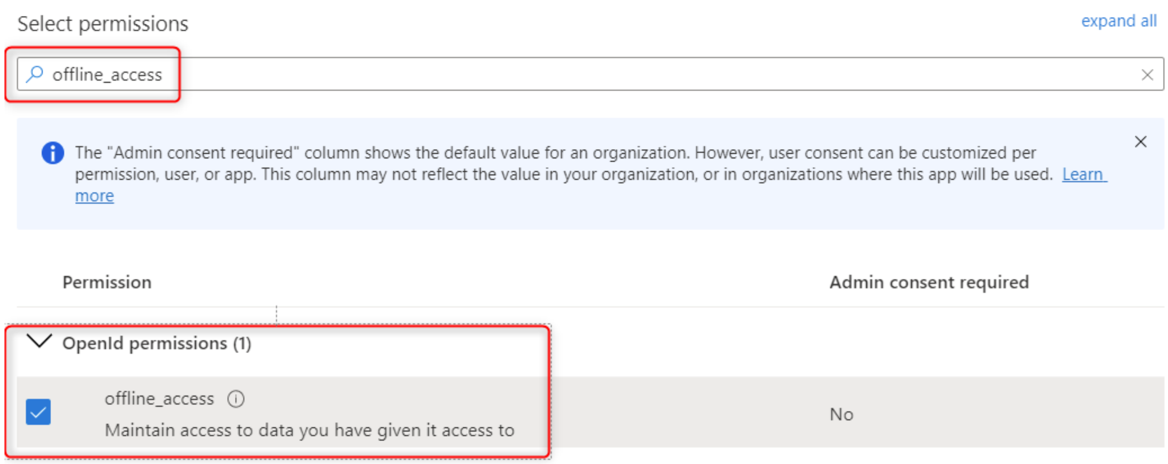
6. In Select Permissions search for email

7. Under Permission, check email



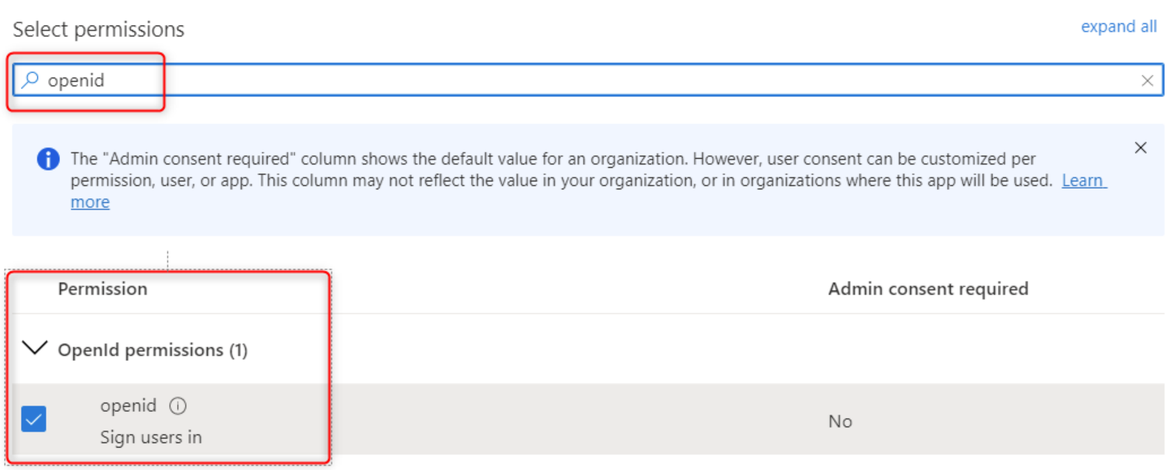
8. In Select Permissions search for offline_access

9. Under Permission, check offline_access



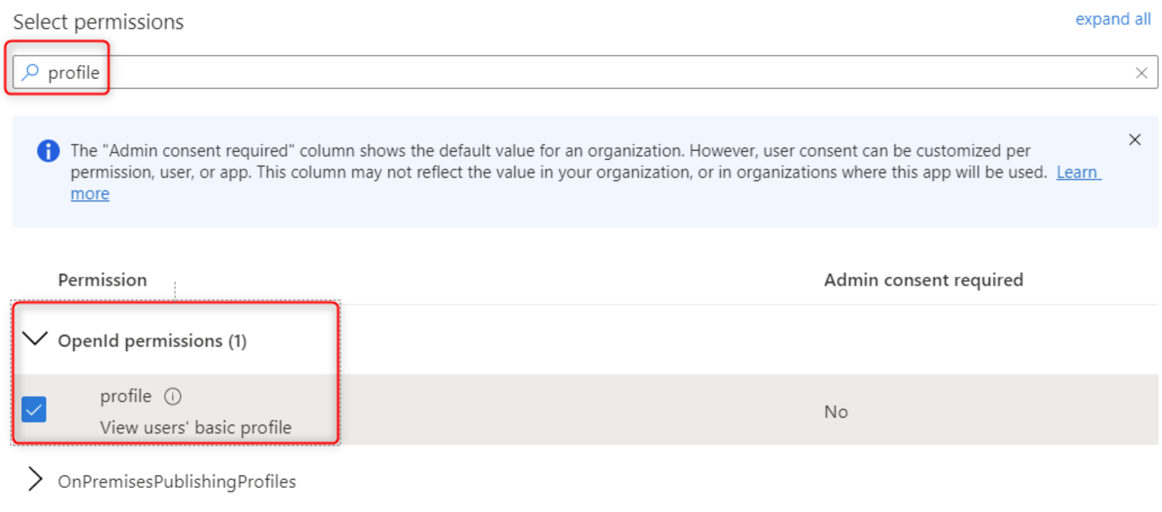
10. In Select Permissions search for openid

11. Under Permission, check openid



12. In Select Permissions search for profile

13. Under Permission, check profile

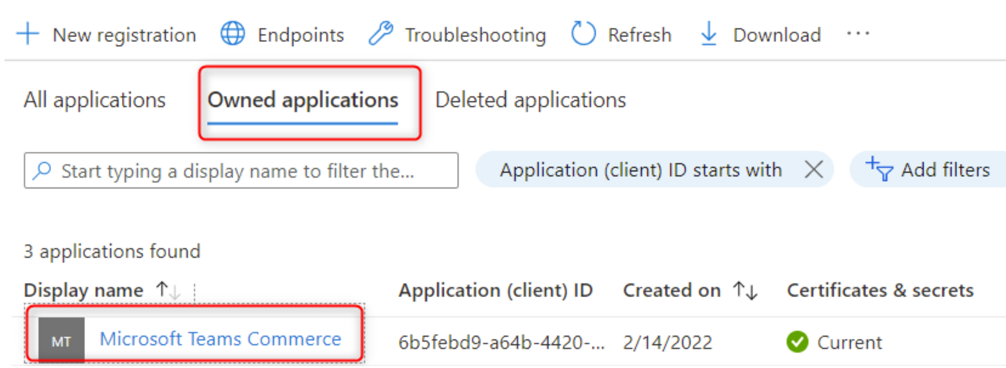


14. Select Add permissions to complete the process.

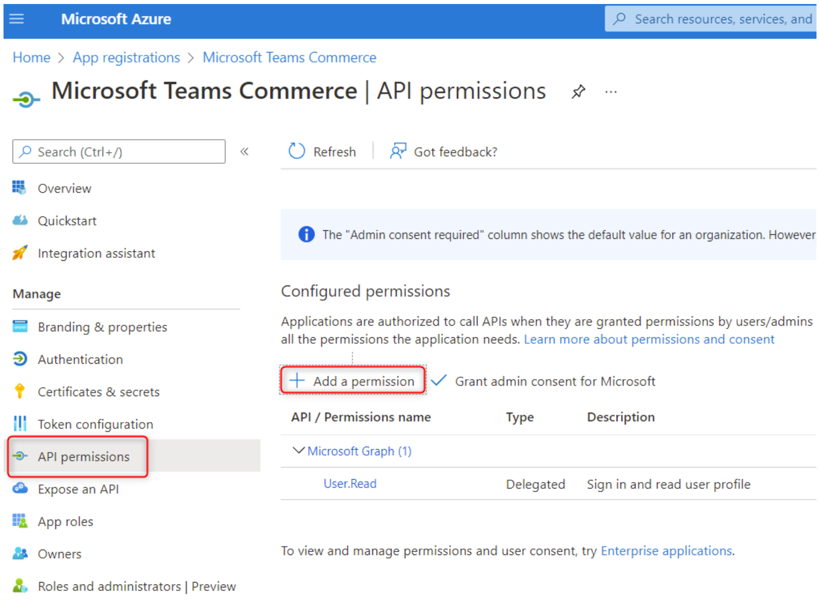
Task 8: Add Application permissions to access Microsoft Graph

1. In Azure Portal go to Azure Active Directory

2. App registrations, and then select your API's app registration.

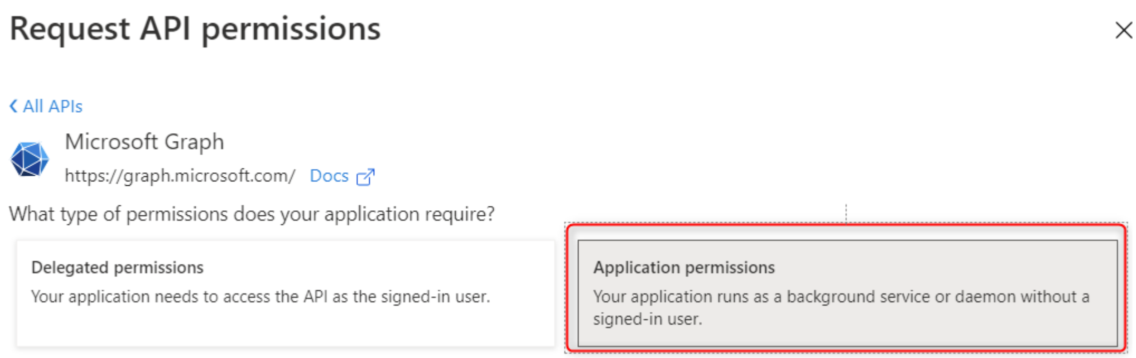


3. Select API permissions, Add a permission, and then Microsoft Graph



4. Choose Microsoft Graph.

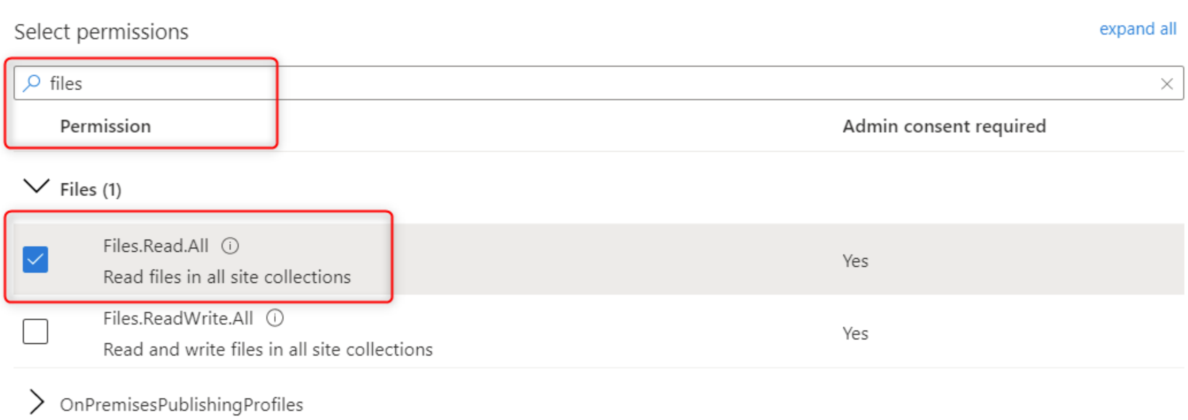
5. Under Request API permissions Select Application Permissions



6. In Select Permissions search for files

7. Under Permission, check Files.Read.All

8. Select Add permissions to complete the process.



Exercise 2: Enable Commerce and Teams Integration

***Note**: If you are in an instructor led lab then please skip this exercise and tasks as this has been completed by your instructor.*

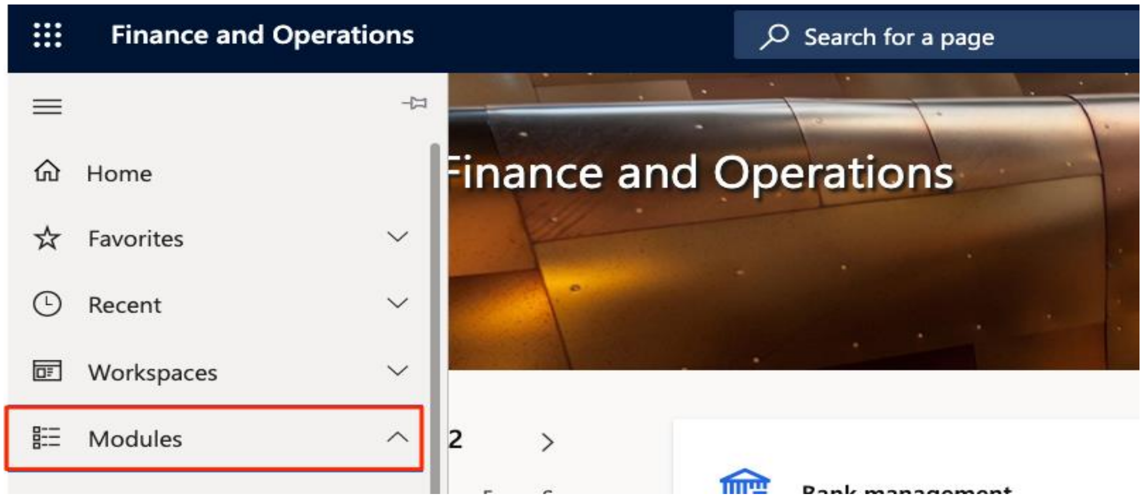
In this Lab, you learn how to enable Microsoft Dynamics 365 Commerce and Microsoft Teams integration.

In this exercise, you will be doing the following:

- Create an external identity for the worker in Commerce Finance and Operations.
- Add store manager to the Publisher Task Manager
- Provision Teams in Commerce Finance and Operations
- Validate Teams provisioning in the Teams admin center.
- Download Commerce organizational hierarchy to Teams.
- Install Microsoft Teams PowerShell module.
- Upload organization hierarchy to Teams
- Publish a test task list in Teams

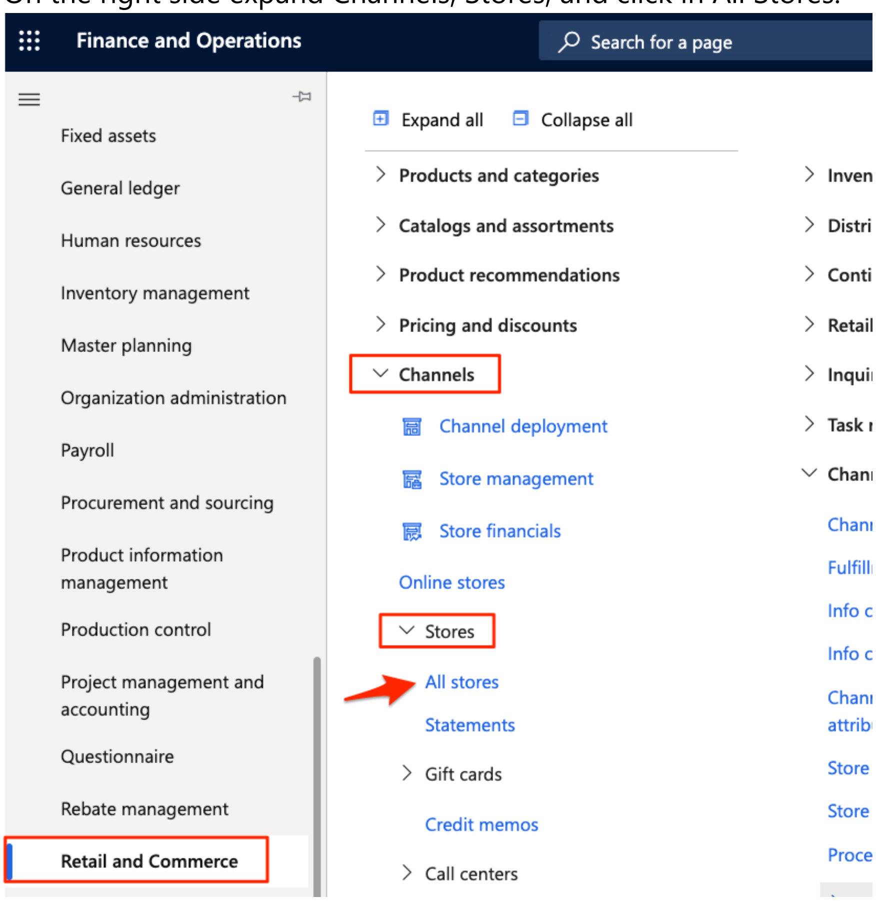
Task 1: Create and external identity for the worker in Commerce Finance and Operations.

1. Log into Commerce Finance and Operations.
2. On the left side menu click in Modules

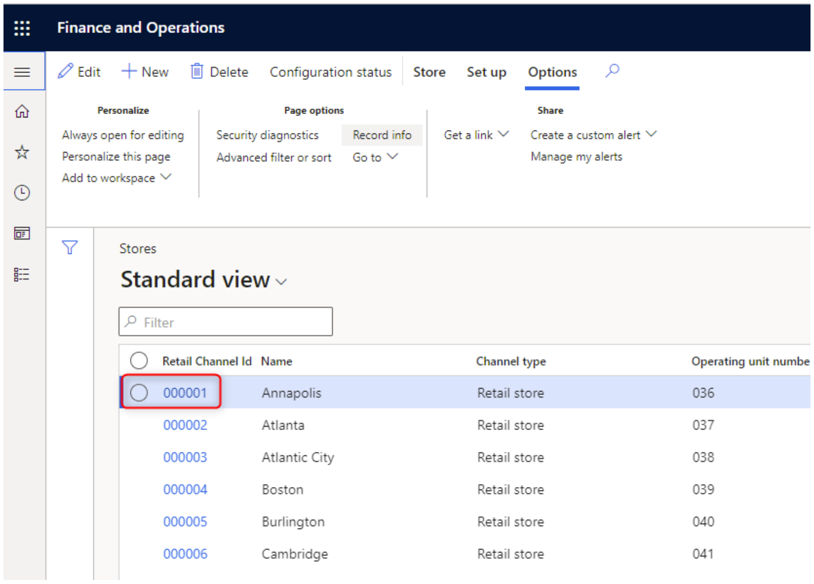


3. Scroll down in the list of options until you find **Retail and Commerce**.

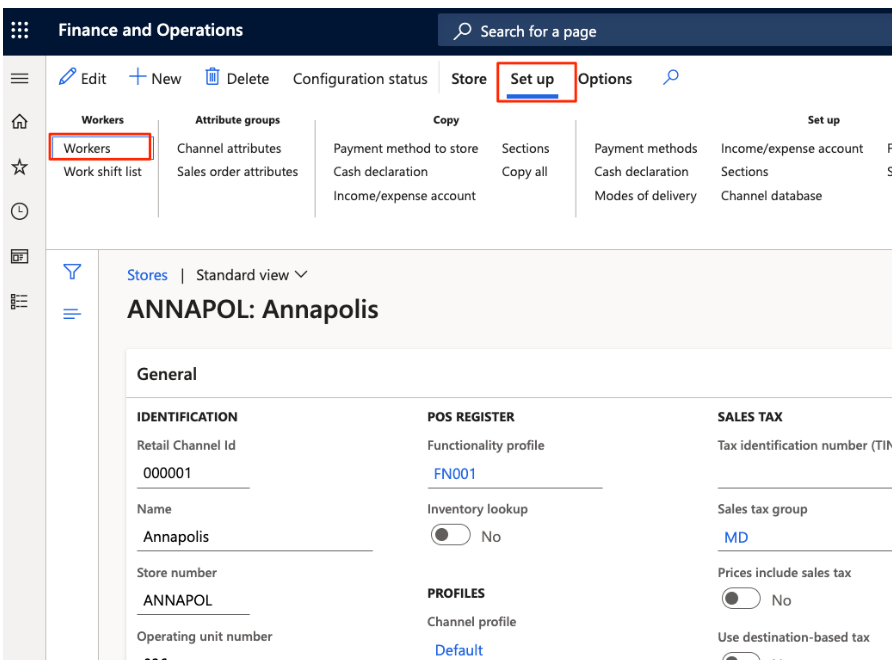
4. On the right side expand Channels, Stores, and click in All Stores.



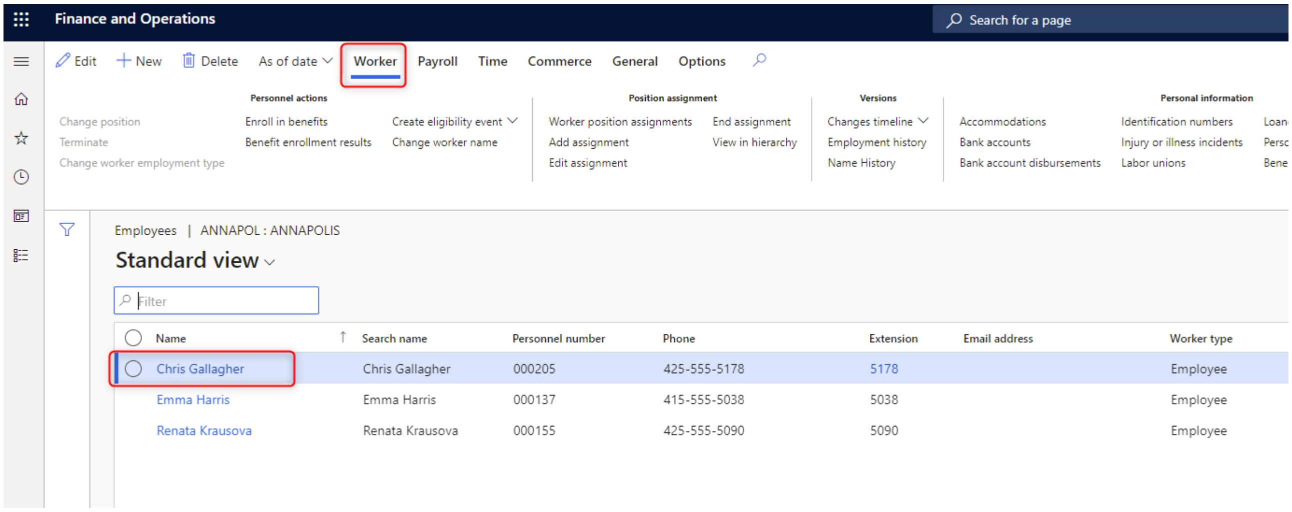
5. Click on the **Retail Channel id** for the first store on the list.



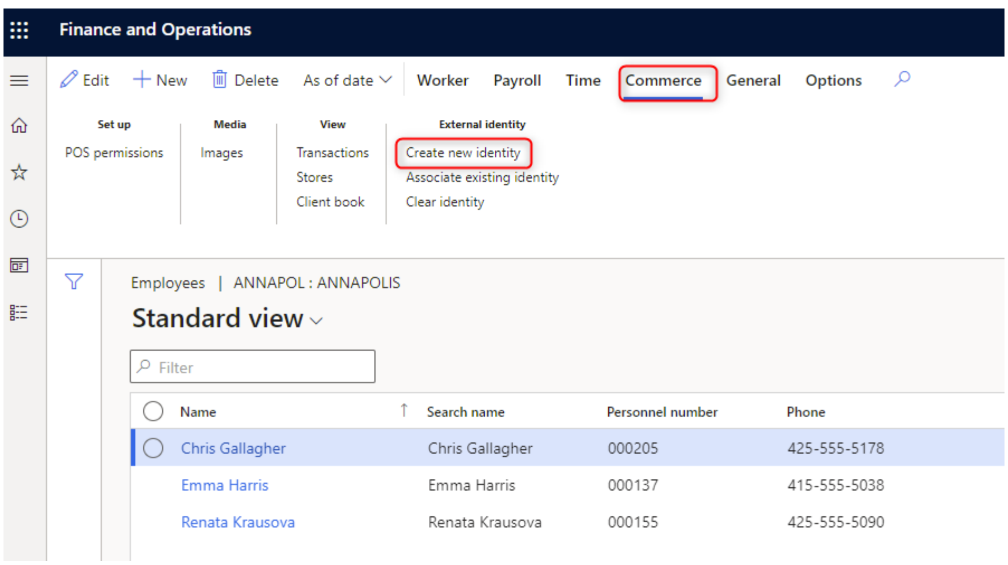
6. On the top menu, click in Set up and then Workers.



7. Find the employee who is the store manager. You can find the role details by clicking on the employee's name.



8. After identifying the store manager, create an Azure Active Directory identity for the employee to be able to log in to Microsoft Teams. Click in **Commerce** and then **Create new identity.**



9. In Alias, define a unique alias that is based on the worker's name. First letter of first name and last name is the naming conventions used in the example below.

10. The UP will be filled automatically.

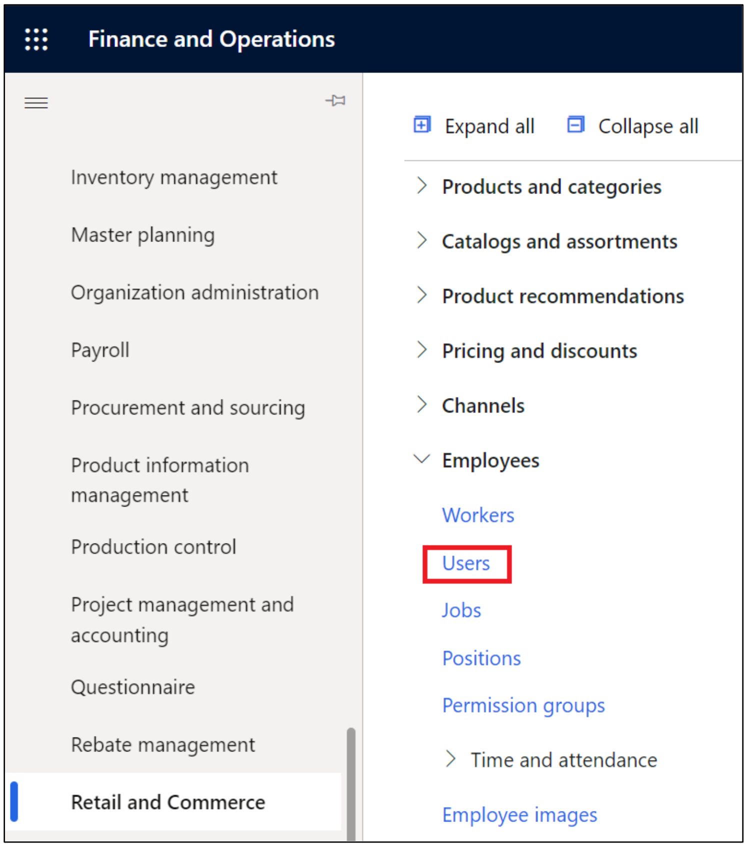
11. In the password field, define a strong password for the new identity.

12. In the password field, define a strong password for the new identity.

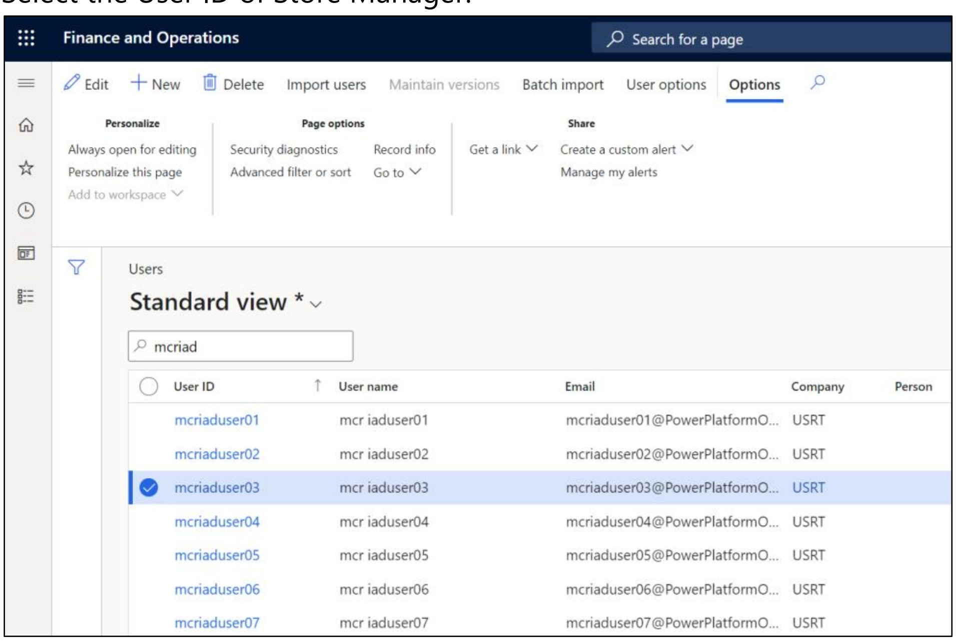
13. Repeat the same steps for all the stores you want to integrate with Microsoft Teams.

Task 2: Assign store manager to the Retail Task Manager Role

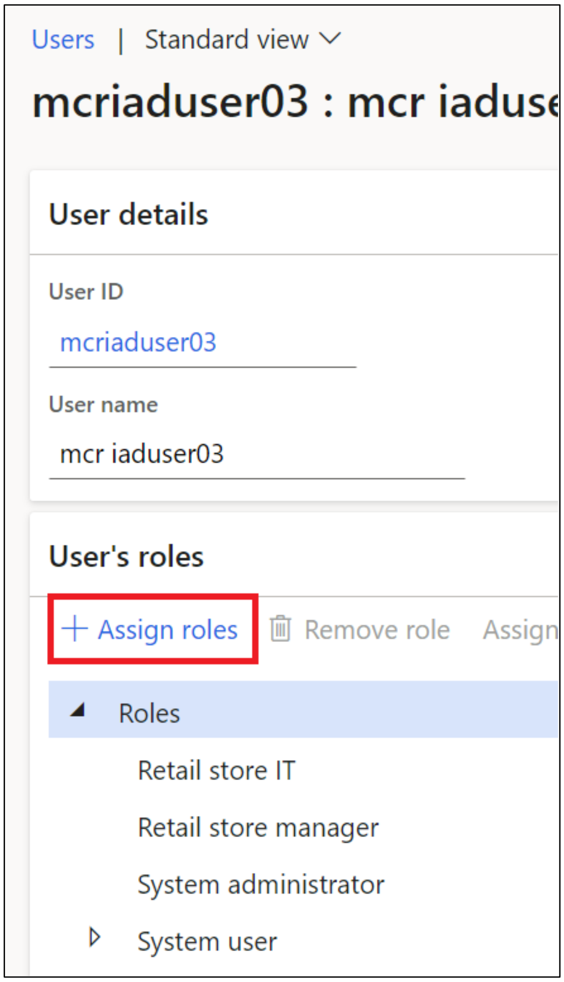
1. Navigate to Retail and Commerce>Employees>Users



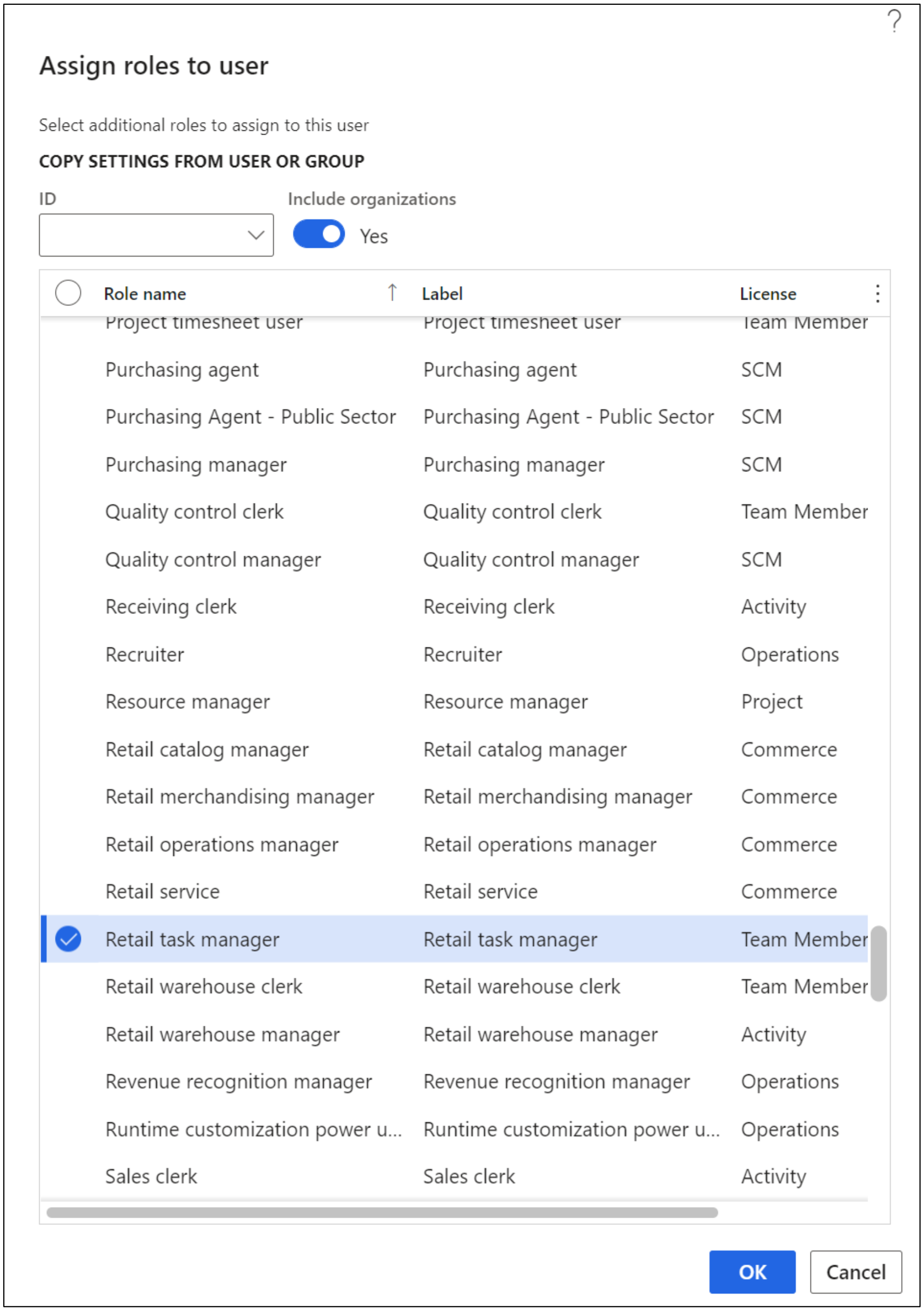
2. Select the User ID of Store Manager.



3. Select **+Assign Roles**.



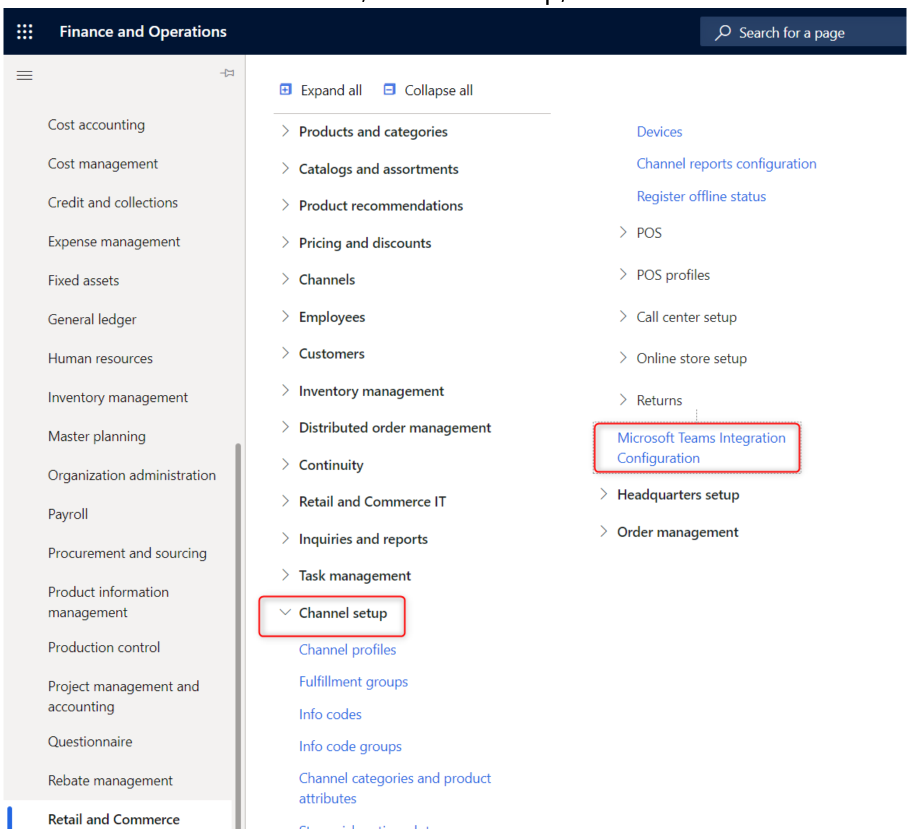
4. Select **Retail Task Manager** and then select **OK** button.



Congratulations! You have successfully assigned Retail Task manager role to the task manager.

Task 3: Provision Teams in Commerce Finance and Operations

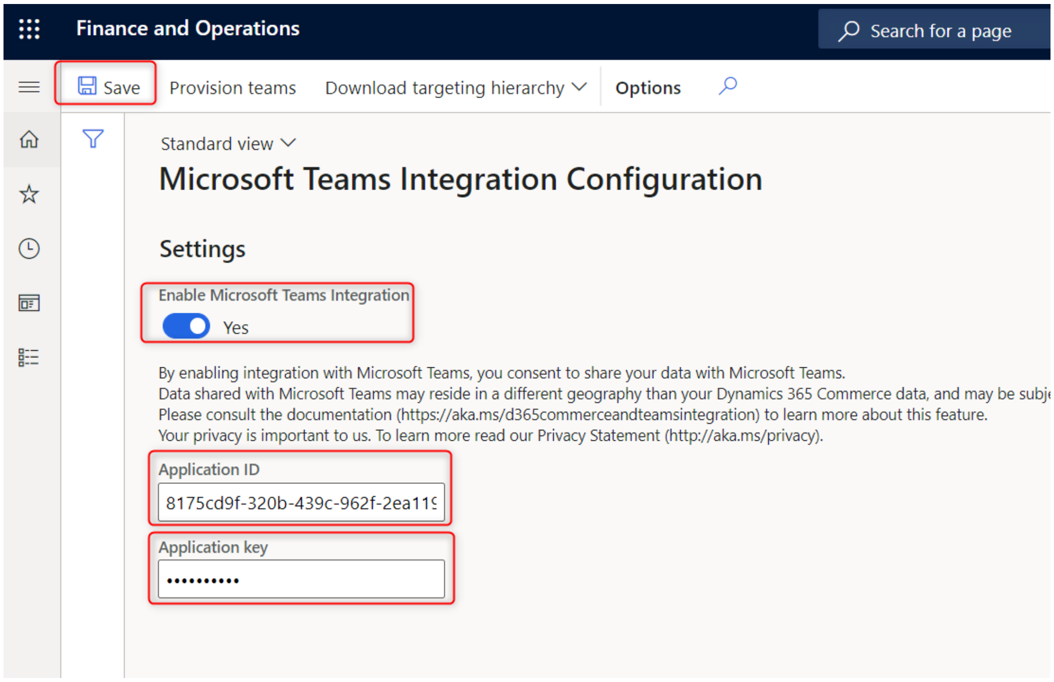
1. Go to Retail and Commerce, Channel setup, and then Microsoft Teams Integration Configuration.



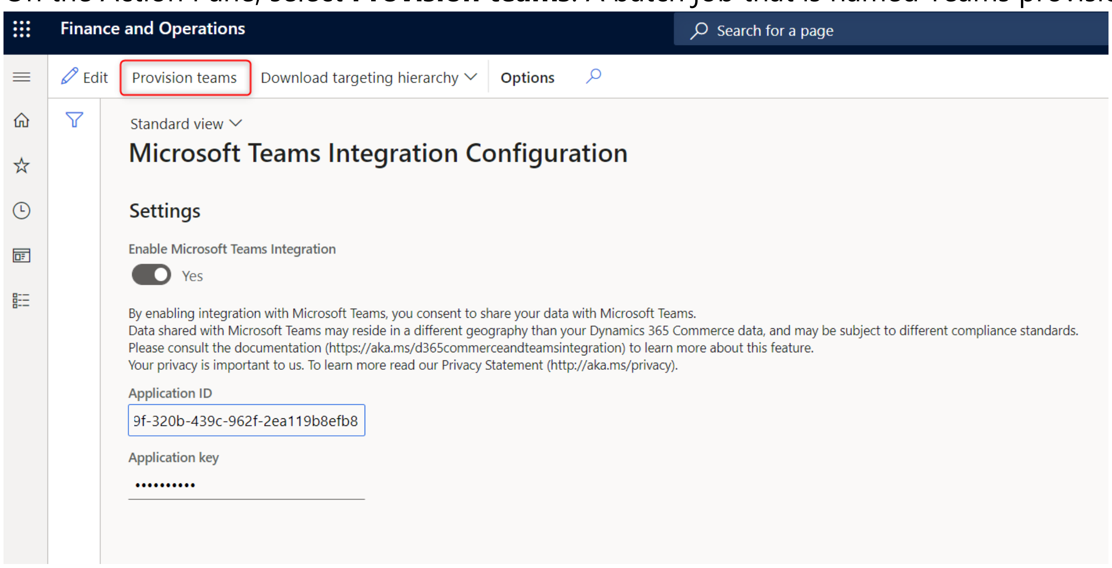
2. On the **Enable Microsoft Teams Integration** under settings, change to **Yes**.

3. Provide the **Application ID** sometimes referred to as Client ID, generated during the Application registration process.
4. Provide the **Application Key**. Application Key sometimes referred to as App Password, it is the value generated from the **Application Secret key** generated in the previous steps.

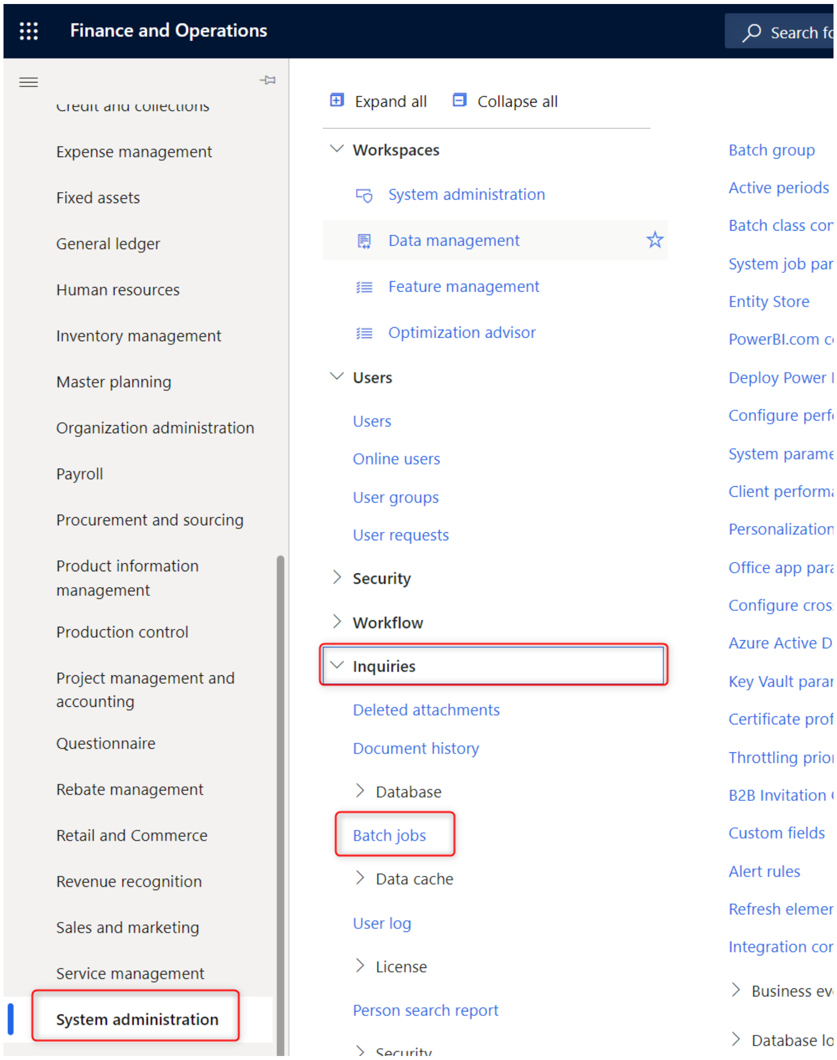
5. Click **Save** once you update all the values.



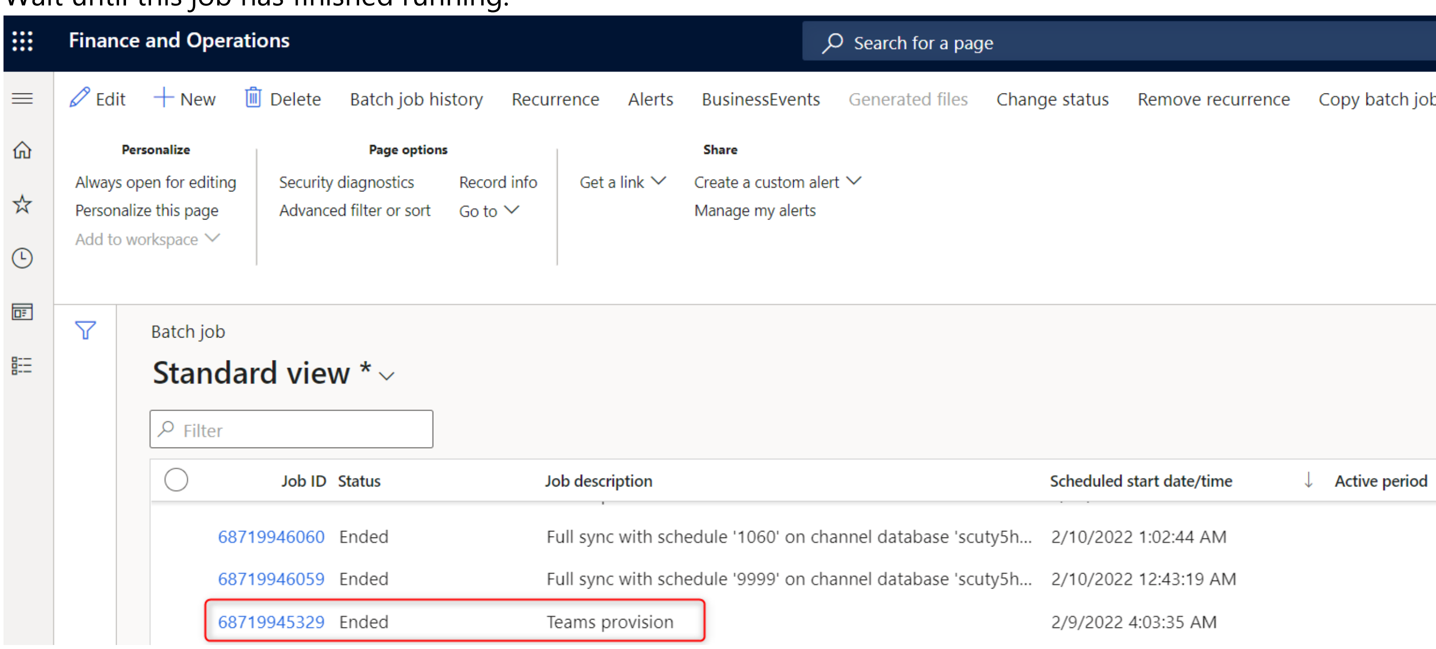
6. On the Action Pane, select **Provision teams**. A batch job that is named Teams provision is created.



7. Go to **System administration**, **Inquiries** and then **Batch jobs**, and find the most recent job that has the description **Teams provision**.



8. Wait until this job has finished running.

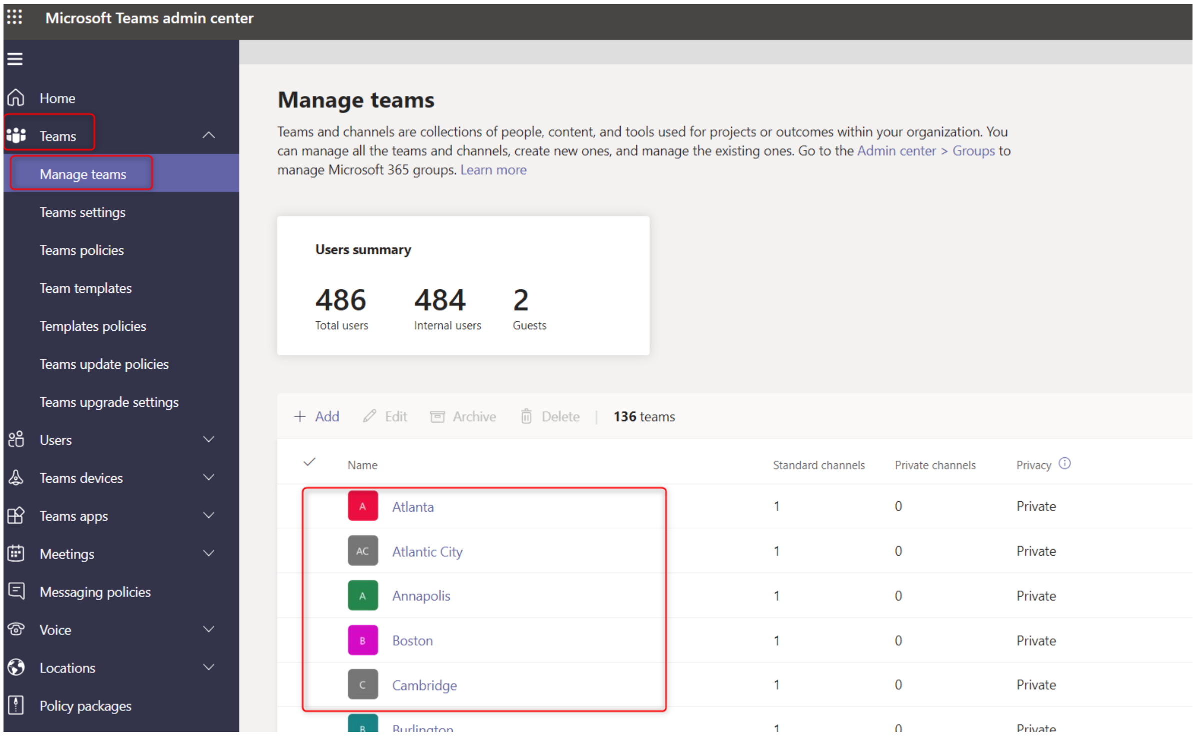


Task 4: Validate Teams provisioning in the Teams admin center

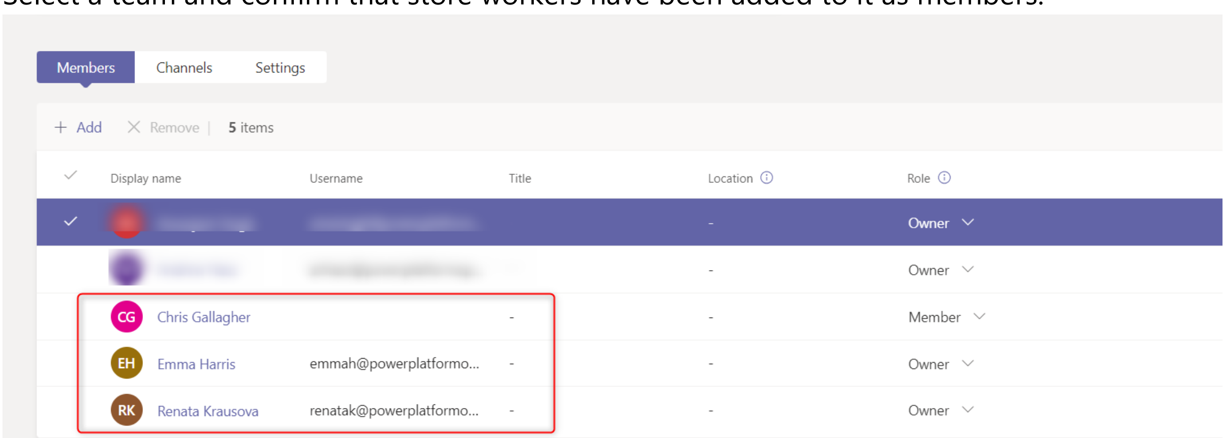
1. Go to the [Teams admin center](), and sign in as the administrator of your e-commerce tenant.

2. In the left navigation pane, select **Teams** to expand it, and then select **Manage teams**.

3. Confirm that one team has been created for each Commerce retail store.

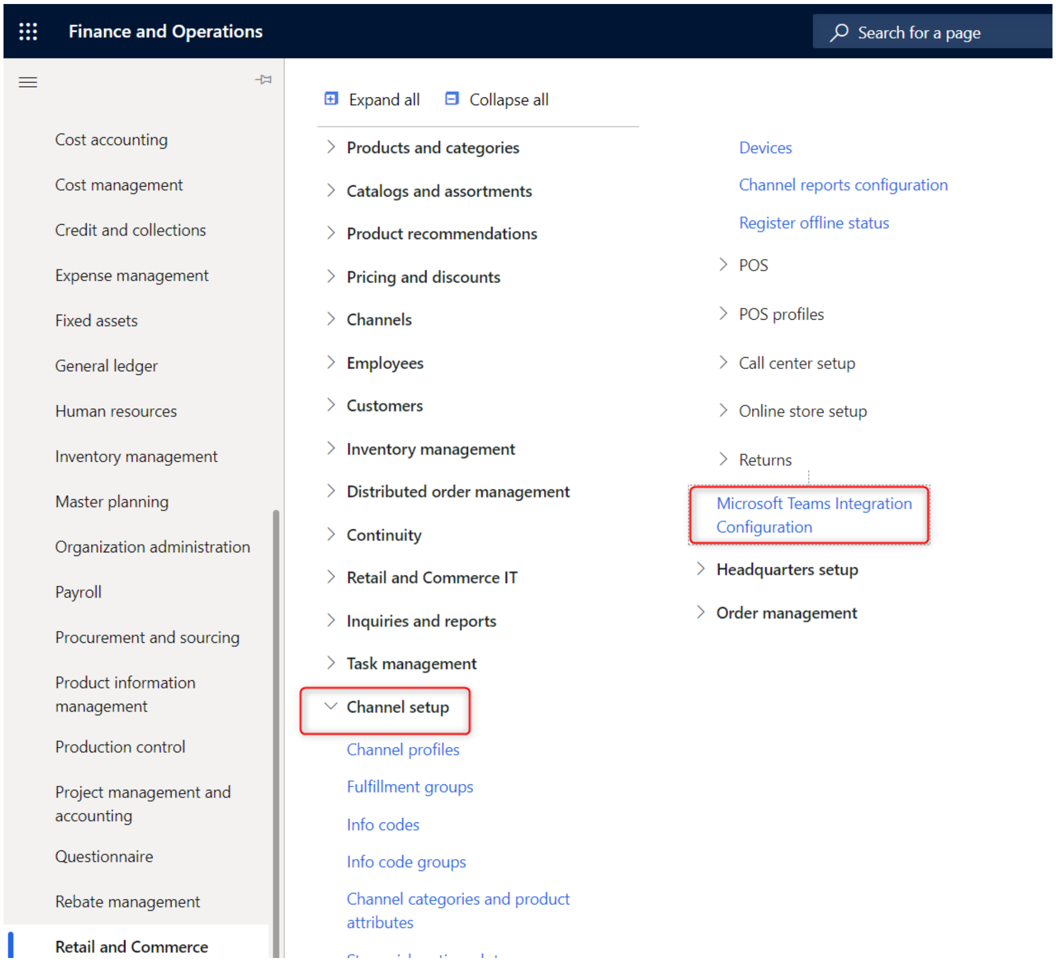


4. Select a team and confirm that store workers have been added to it as members.



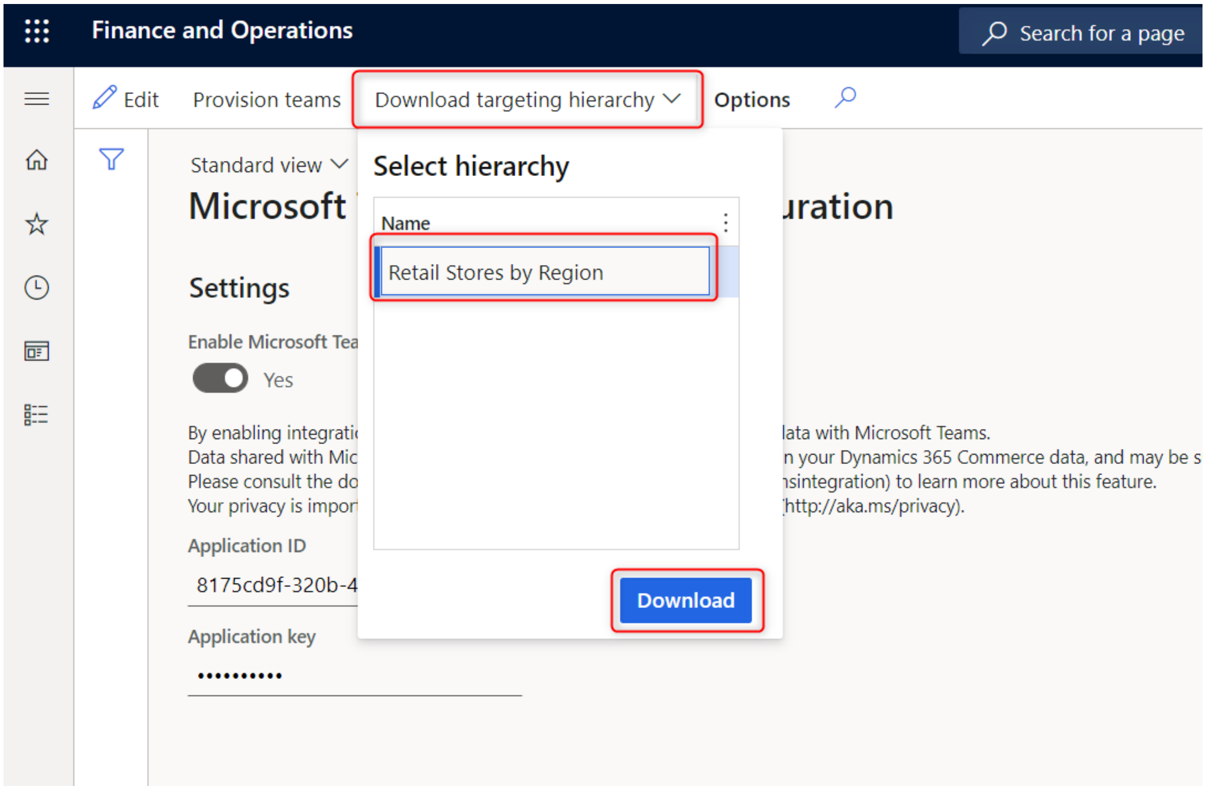
Task 5: Download Commerce organizational hierarchy to Teams

1. In Commerce Finance and Operations, go to Retail and Commerce, Channel setup and then Microsoft Teams Integration Configuration.



2. Select Download targeting hierarchy, and then select Retail Stores by Region to download a comma-separated values (CSV) file of the organizational hierarchy.

3. Click in Download to save to a local folder in your computer.

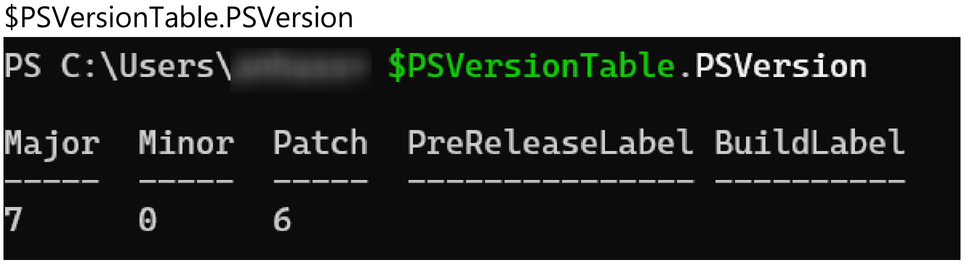


Task 6: Install Microsoft Teams PowerShell module

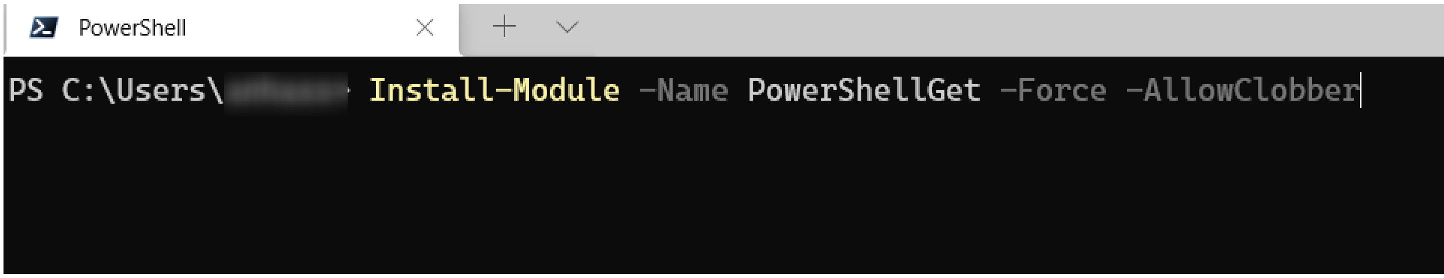
Requirements

Microsoft Teams PowerShell module requires PowerShell 5.1 or higher on all platforms. Install the [latest version of PowerShell] available for your operating system.

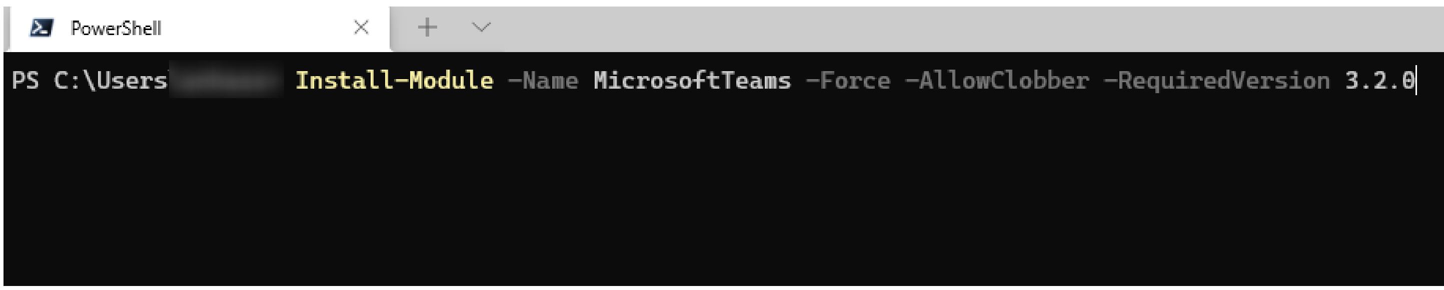
1. Check your PowerShell version. To check your PowerShell version, run the following command from within a PowerShell session:
2. $PSVersionTable.PSVersion



3. Installing using the PowerShellGallery
4. Install-Module -Name PowerShellGet -Force -AllowClobber

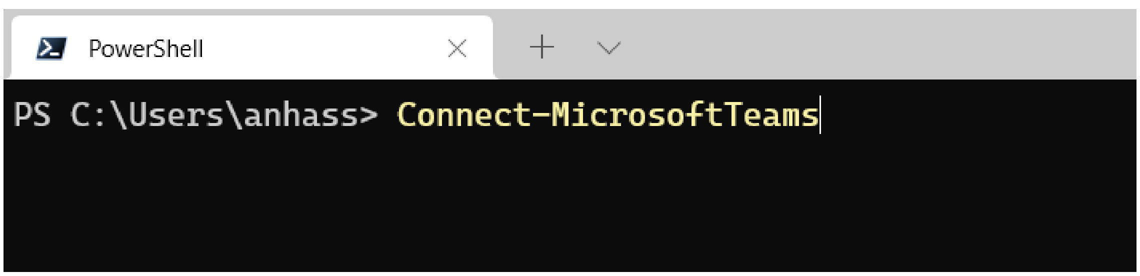


5. Install the Teams PowerShell Module.
6. **Install-Module -Name MicrosoftTeams -Force -AllowClobber**



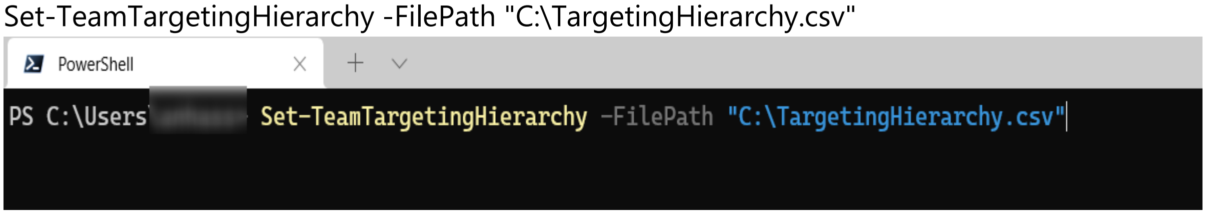
Task 7: Upload organization hierarchy to Teams.

1. To start working with Microsoft Teams PowerShell module, sign in with your Azure credentials.
2. **Run** the following command in PowerShell **to authenticate**.
3. Connect-MicrosoftTeams



4. Upload the TargetingHierarchy.csv to Microsoft Teams. You will use Microsoft Teams PowerShell module and cmdlet Set-TeamTargetingHierarchy installed in the previous steps.

5. Set-TeamTargetingHierarchy -FilePath "C:\TargetingHierarchy.csv"



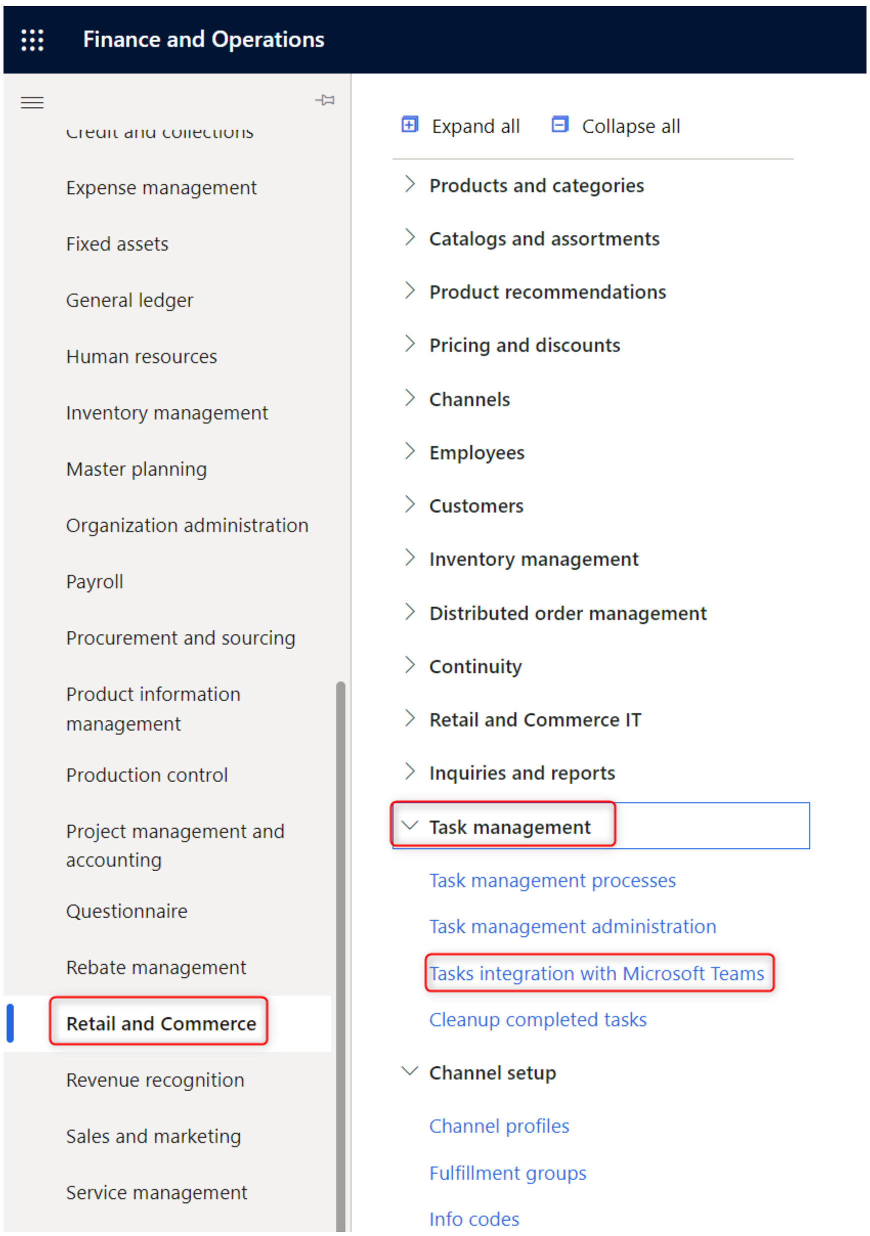
6. Run the following command to check the status of your hierarchy upload.
7. Get-TeamTargetingHierarchyStatus
8. The command will return the following fields:

Field	Description
Id	The unique ID for the upload.

Status	Upload status. Values include **Starting**, **Validating**, **Successful**, and **Failed**
ErrorDetails	Details if there's an upload error. For more information about the error details, see the Troubleshooting section. If there's no error, this field is blank.
LastUpdatedAt	Timestamp and date of when the file was last updated.
LastModifiedBy	The ID of the last user who modified the file.
FileName	The file name of the CSV.

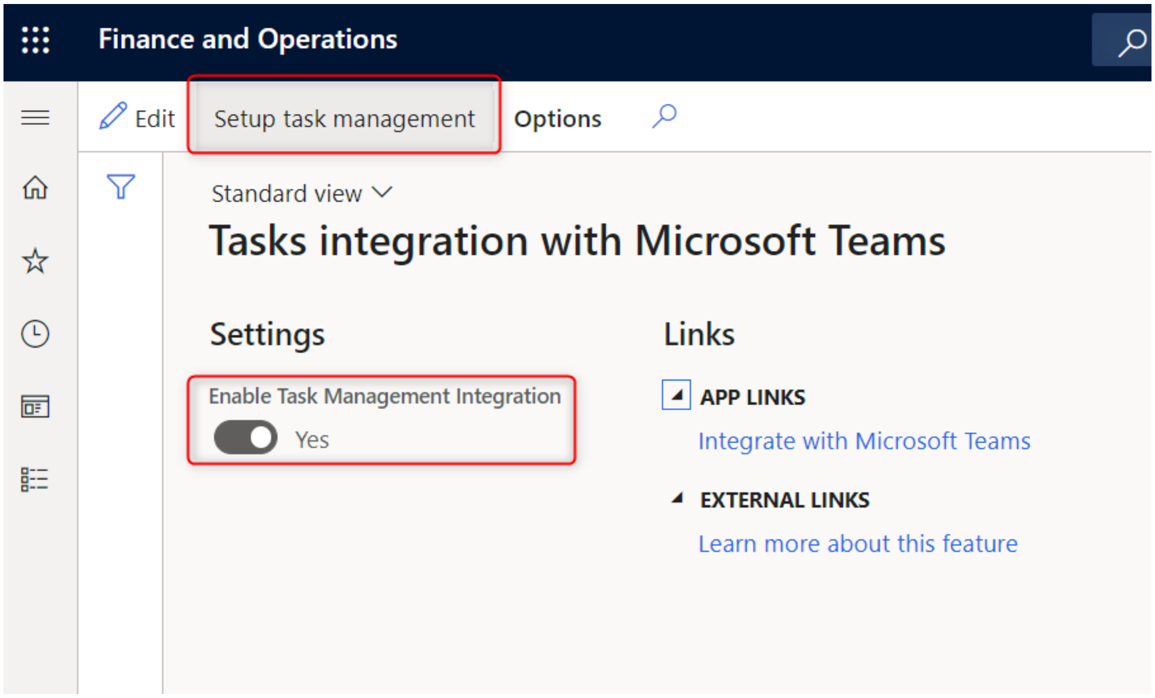
Task 8: Link POS and Teams for task management

1. Go to Retail and Commerce, Task management, and Tasks integration with Microsoft Teams.

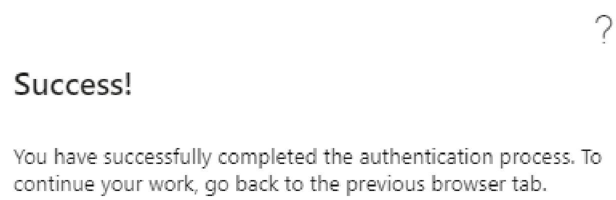


2. Flip the Enable Task Management Integration to Yes

3. On the Action Pane, select Setup task management. You should receive a notification that indicates that a batch job that is named Teams provision is being created.



4. Provide your credentials if ask for authentication. Click close to continue.



5. Go to System administration, Inquiries, and then Batch jobs, and find the most recent job that has the description Teams provision. Wait until this job has finished running.
6. Run the CDX job 1070 to publish the plan ID and store references to Retail Server.

The Dynamics 365 Commerce POS application has task management features that let store managers and workers manage tasks and update task status. Store workers can access tasks either by selecting the **Tasks** tile on the POS home page or by selecting task notifications.

By default, store workers are taken to the **My tasks** tab, where they can view the tasks that are assigned to them. However, they can easily switch to the **Overdue tasks**, **Open tasks**, and **Task lists** tabs.

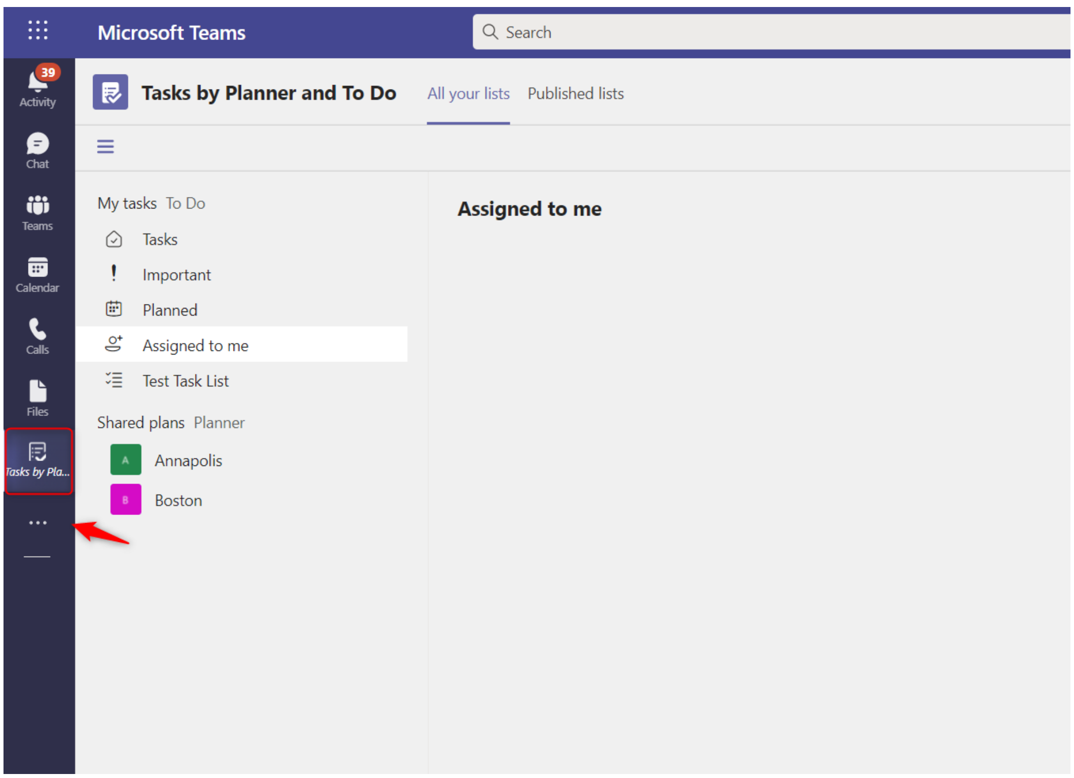
Exercise 3: Task Management in POS

In this exercise, you will play the role of a Retail communications manager who will login into Teams and publish a task "Setup Women's Spring Lineup Display" and then you will play the role of a Store manager who will login into D365 Commerce POS application to view the tasks and assign the new task to a store employee. Finally, you will play the role of a store employee who will view the assigned tasks and marks it as complete once the task is completed.

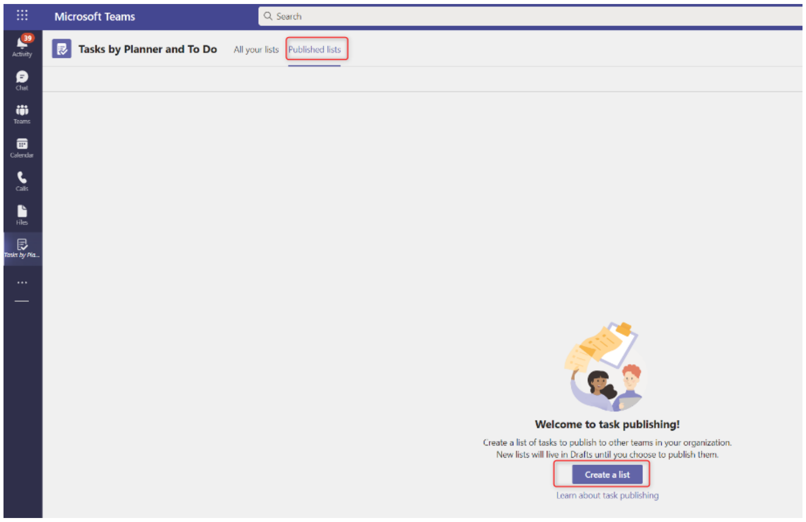
Task 1: Publish a test task list in Teams

In this task, you will login into Teams as a Retail Communications Manager, create a list of tasks and assigns it to all stores in a region.

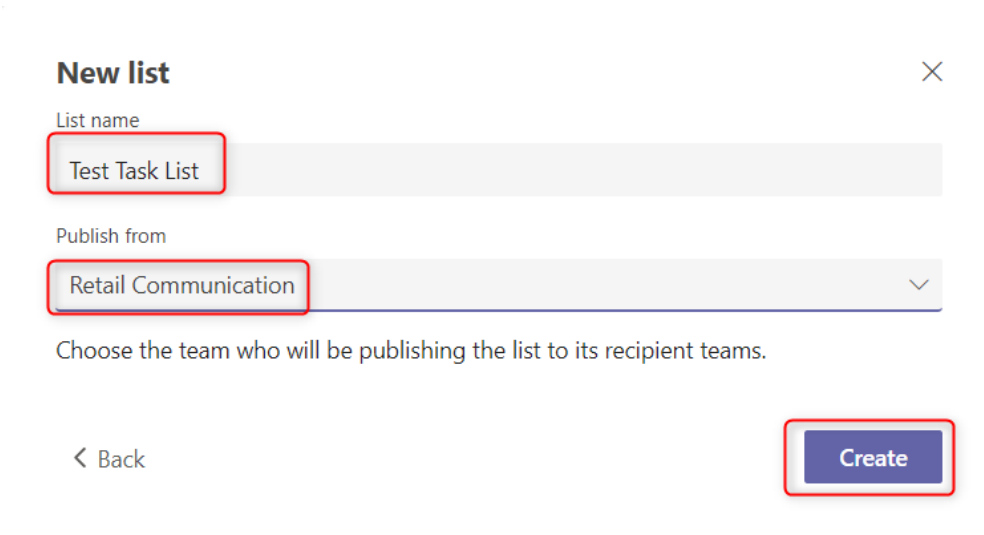
1. Sign into Teams as a communications manager. Typically, communications managers are users who have the **Regional manager** role in Commerce.
2. In the left navigation pane, select **Tasks by Planner**. If it does not show-up in your Teams click on the three dots located lower in the left navigation pane.



3. On the **Published lists** tab, select **Create list** in the lower right.
   Important - If there are existing tasks, the Create a List button will be located on the left lower corner.



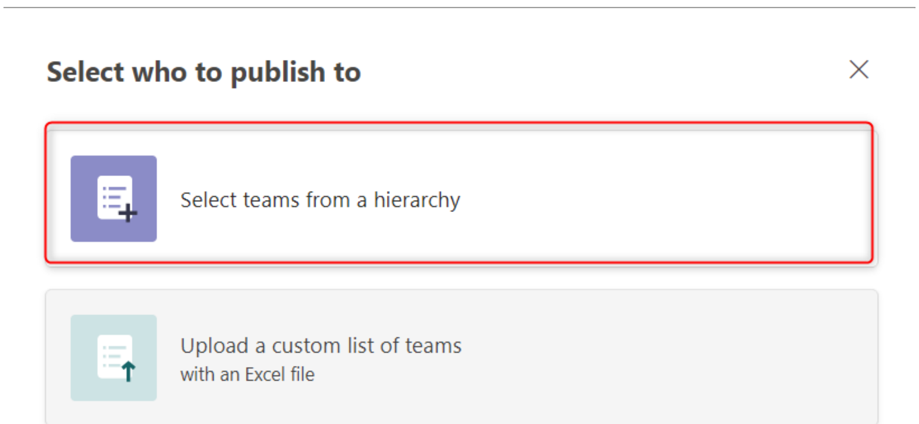
4. Name the new list **Test task list** from **Retail Communication** and Click Create.



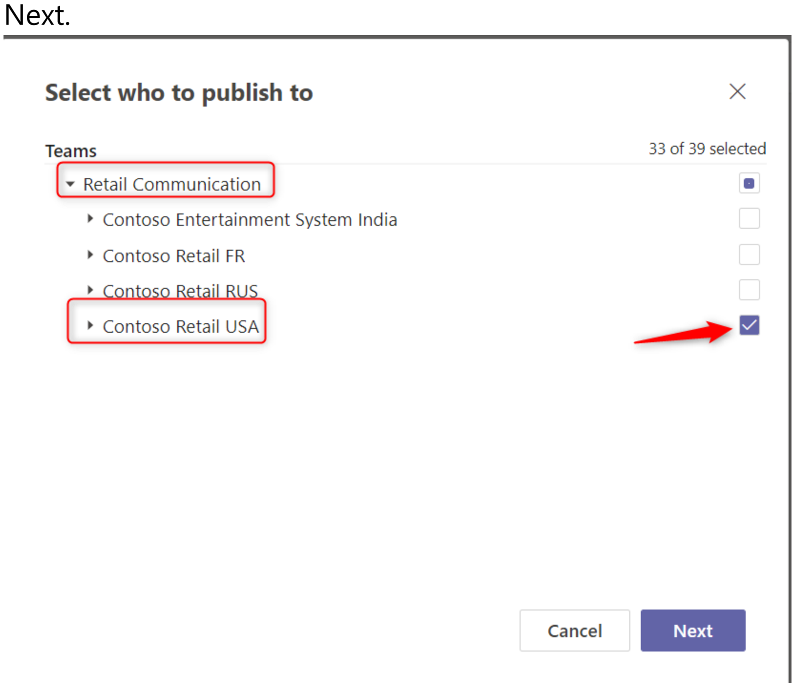
5. Under **Task title**, give the first task the title **Testing Teams integration**. Then select **Enter or Click on the check mark on the right.**

6. In the **Drafts** list, select the task list. Then select **Publish** in the upper-right corner.

7. In the **Select who to publish to** dialog box, Click on **Select the teams from hierarchy**.

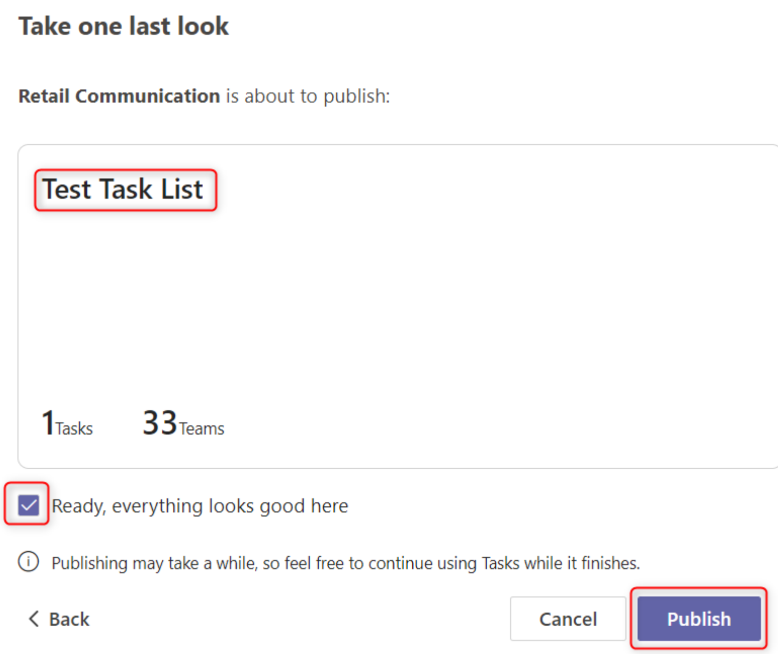


8. Expand **Retail Communication**, check the **Contoso Retail USA** box on the left side, and then click Next.

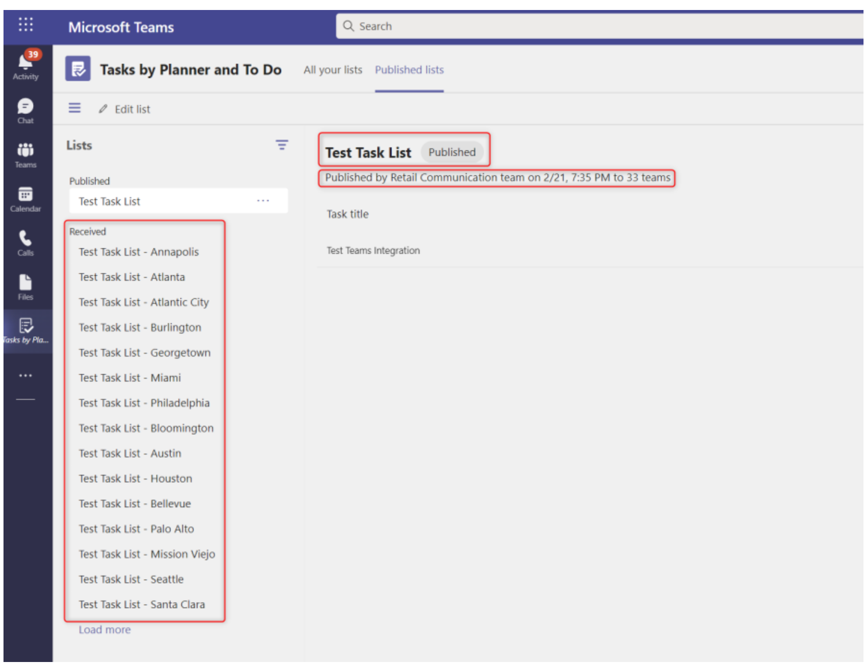


9. On Take One last look, notice the Test Task List created in the step below is ready to be published to 33 Teams.

10. Check Ready, everything looks good here, and click Publish.



11. The Test Task List has been published to all 33 Teams. **It** is **now** possible to see **under** Received **that** all the Teams for each stores has received the published task.

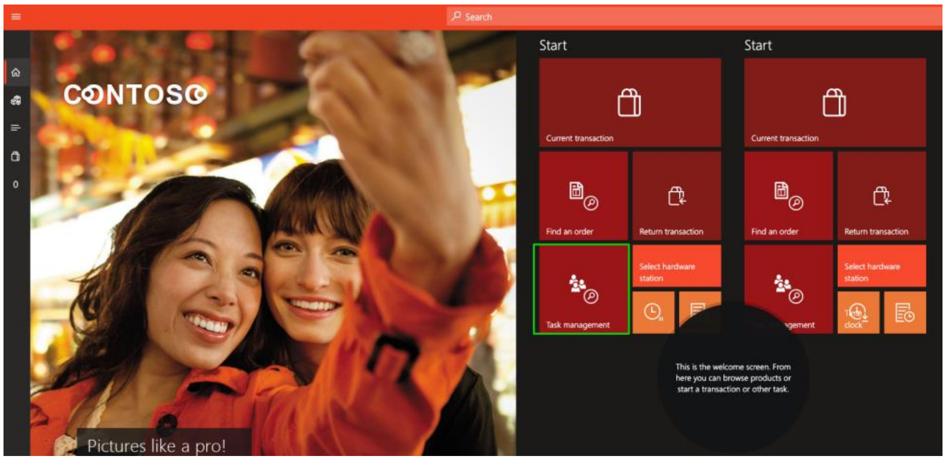


Congratulations! You have successfully created a list of tasks and assigned to all stores in a region.

Task 2: View and assign the tasks in D365 Commerce POS

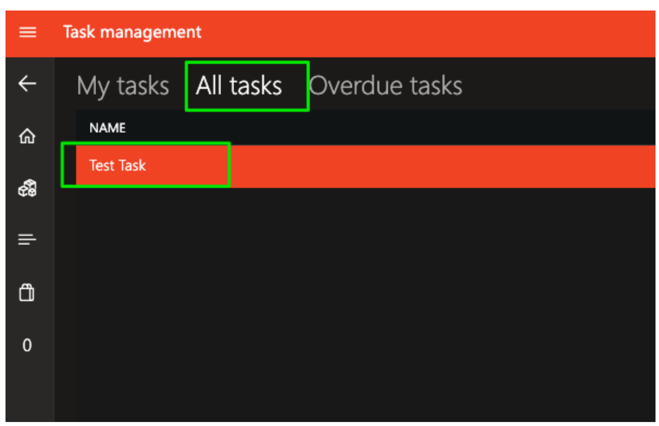
In this task, you will login into D365 Commerce POS store, view unassigned tasks and assign it to the store employees.

1. Log into Commerce POS and Select a Store to Manage and Assign Tasks.
2. Once logged into Commerce POS Click on Task Management.

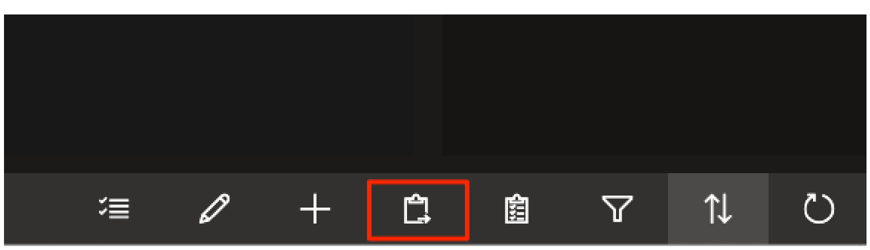


3. In **Task Management,** click on **All Tasks.** The Test Task created in Teams completed in previous exercise should show-up in the **All Tasks** list.

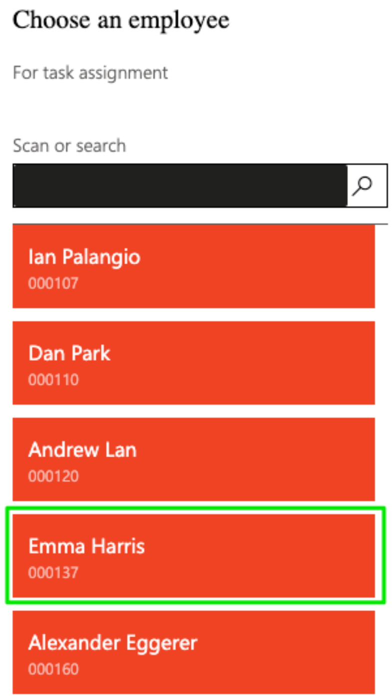
4. Select the **Test Task**



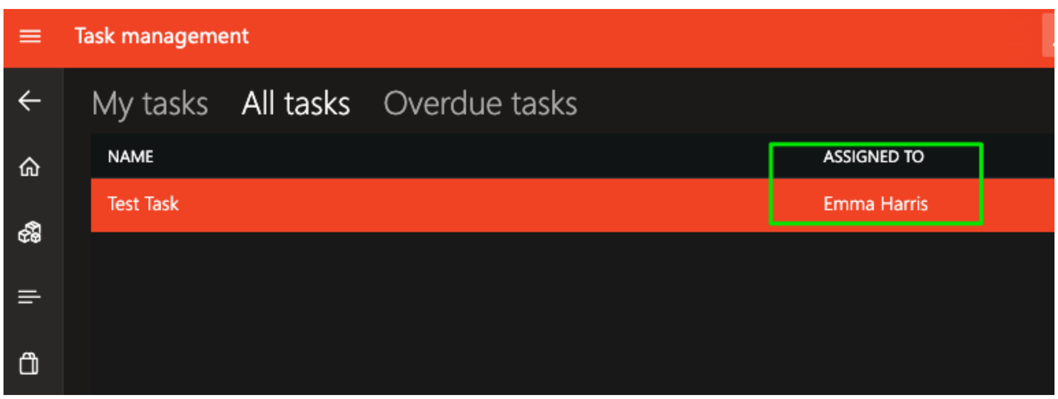
5. Click on **Assign a Task** at the right lower corner of the screen.



6. Choose Emma Harris to assign the **Test Task.**



7. On the Task List **Assigned to** field, confirm the task has been assigned to Emma Harris

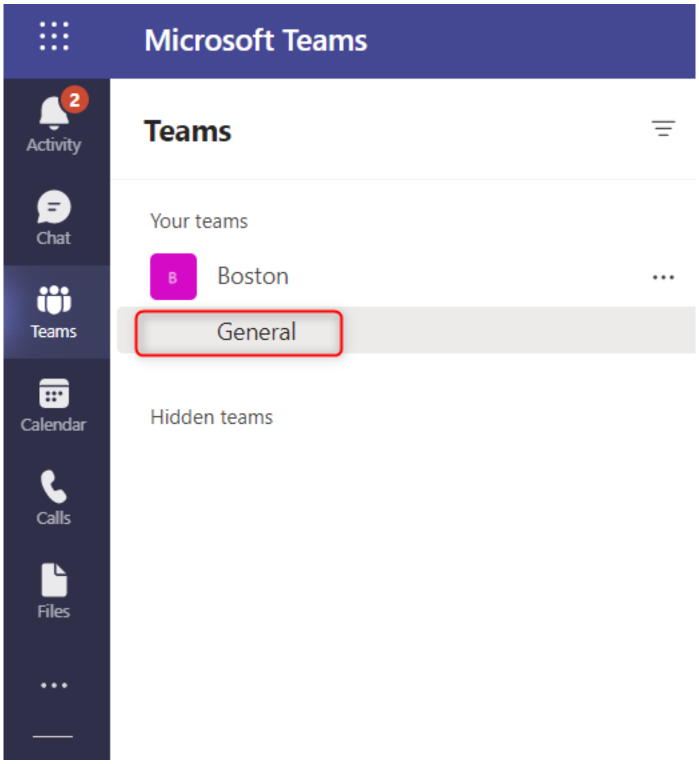


Congratulations! You have successfully viewed the unassigned tasks and assigned them to store employees.

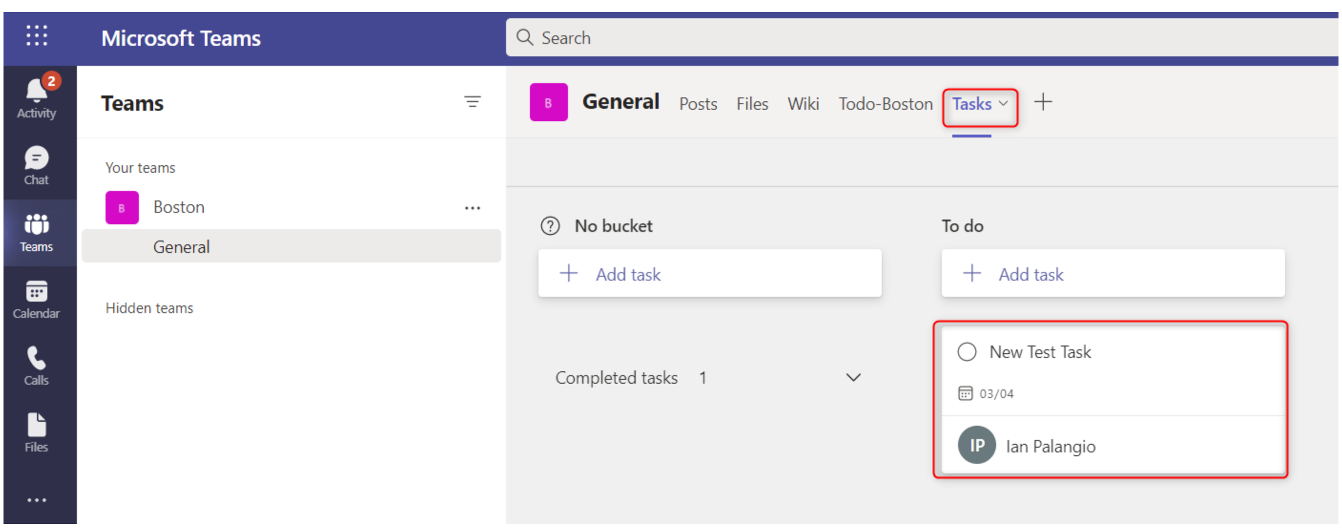
Task 3 - Review assigned Tasks in Teams and mark them as complete

In this task, you will act as employee and review the assigned tasks in Teams and mark them as complete once the assigned task is completed.

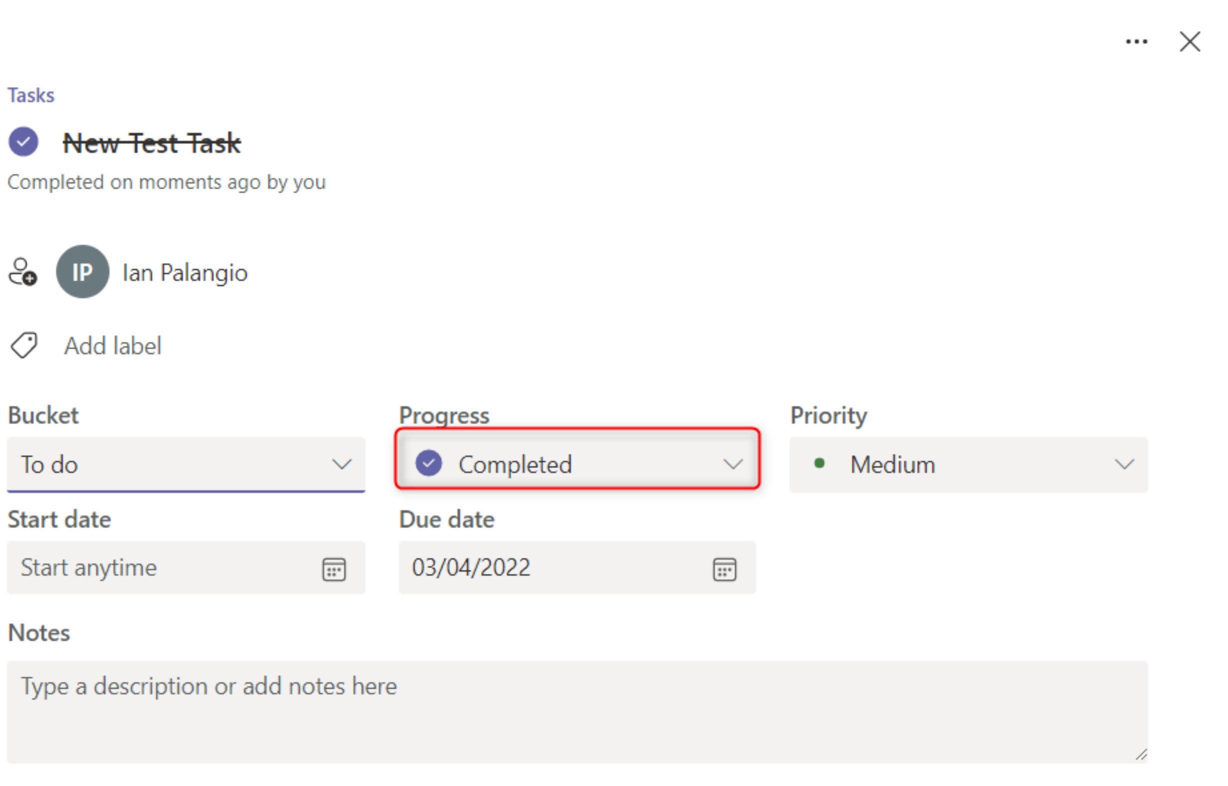
1. Log into Teams and navigate to the assigned store



2. View the assigned tasks, click on New Test Task.



3. Mark the New Test Task as complete.



Congratulations! You have successfully learned the steps to view the assigned tasks and marked them as complete.