



Microsoft Teams Shift Integration

visit [HR Management in the Microsoft Dynamics 365 Business Platform \(dynamics-hr-management.com\)](https://dynamics-hr-management.com)

1. User Mapping

The integration synchronizes the Teams Shifts Users with Employees in HR for Dynamics regularly. The mapping is made using the Email address. For an Employee to be found, the Email Address should be the same as the Email Address of a Teams Shifts User. If no Employee can be found, the Teams Shifts member needs to be manually mapped to an Employee.

2. Time off

Leave Requests can be synchronized to Teams Shifts and will create time off in there.

Interface set up

Required Solutions to install:

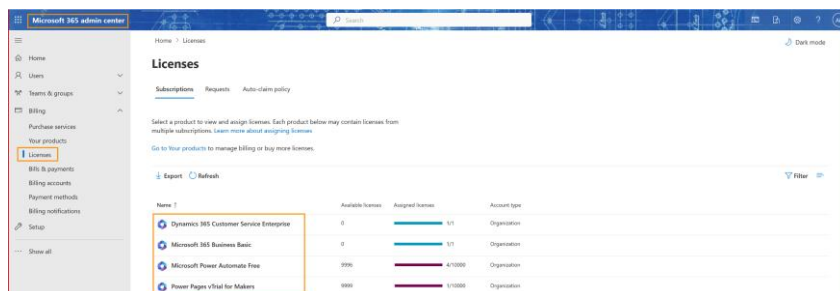
- HR for Dynamics – Roll Up (RU) 33 or later
- HR for Dynamics Teams Shifts Integration Solution

Pre-requisites/ Pre-Configuration before Microsoft Teams Shift integration configuration

In order to use Microsoft Teams Shift Integration for HR for Dynamics, at least the following licenses are required in addition to HR for Dynamics Licenses:

- Dynamics 365 Customer Service Enterprise
- Microsoft 365 Business Basic
- Microsoft Power Automate Free
- PowerPages vTrial for Makers

Normally, System Administrators and Company IT Administrators handle licensing regarding Microsoft Teams and Office 365.

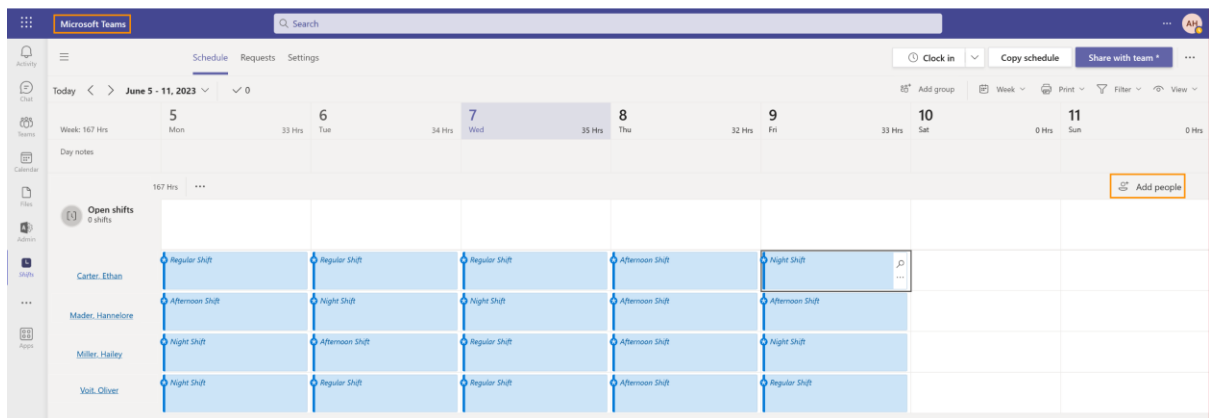


We assume your company is already using the Shift App in Microsoft Teams, or if not, the App Administrator or people in your organization who have access to Teams Shift can create new schedules/teams and add team members inside them.

There are 3 types of teams:

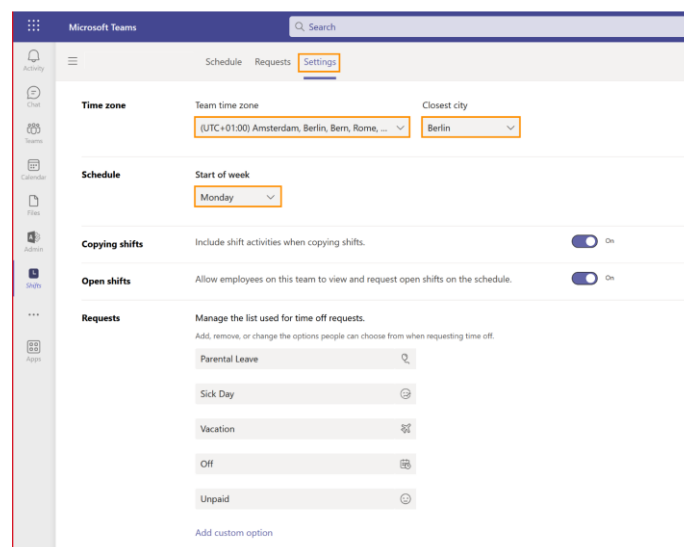
- Public
- Private
- Org-wide

Members need permissions to join a private team. Team owners can add members inside a private team/schedule via the **Add people** button.

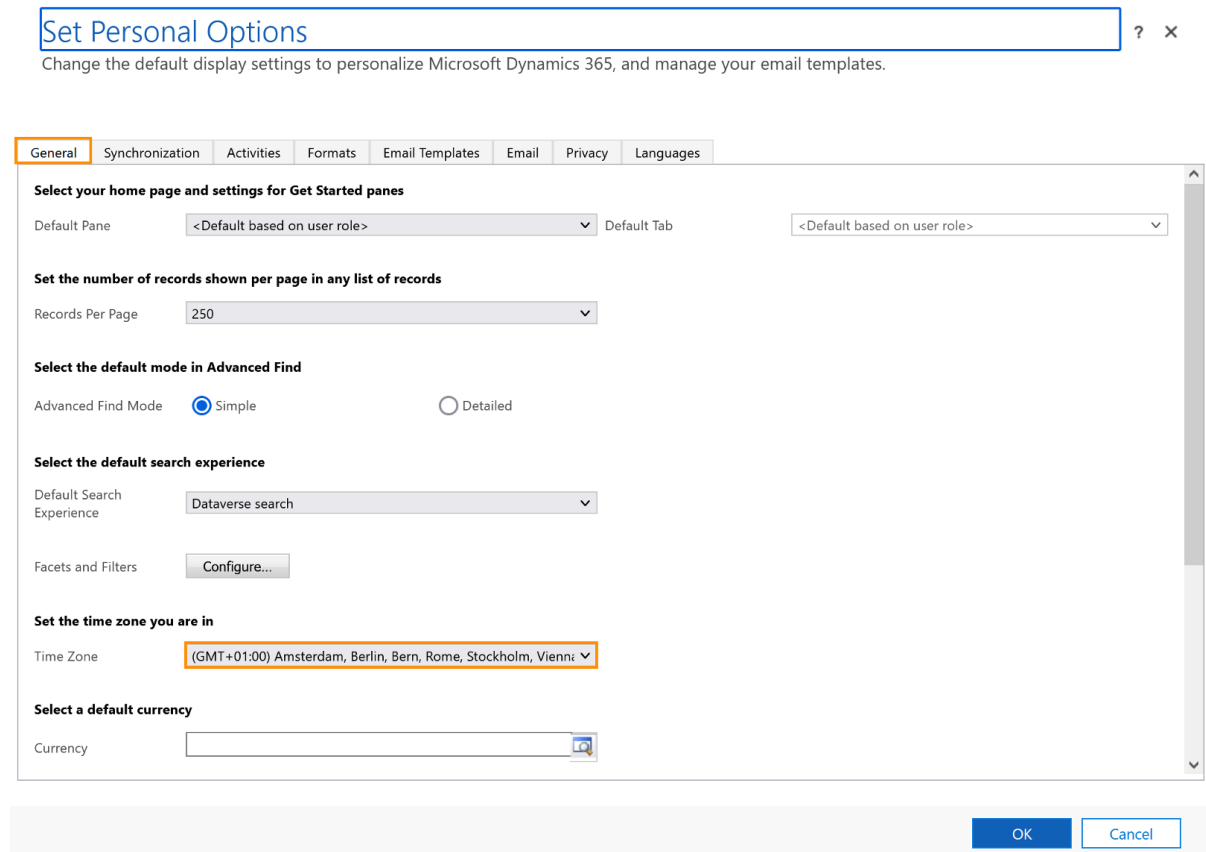


Make sure that the time zone of the team is same as the time zone of the team members inside the team. Otherwise, the time off/leave requests and shifts synchronizations will show the wrong dates.

You can check the time zone of the team in the **Settings** tab of Teams Shifts:



To check your individual time zone, go to your **Environment**, click on the **gear icon** -> then chose **personalization settings** and check for the Time Zone in the **General** tab.



3. Application User

Prerequisites

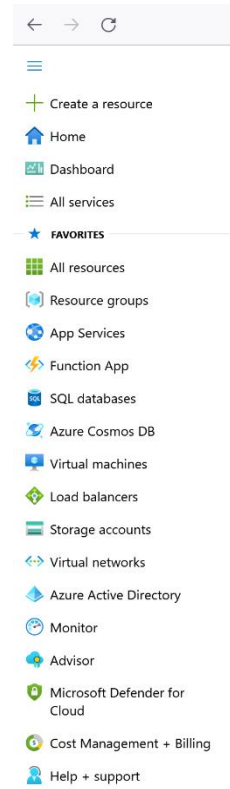
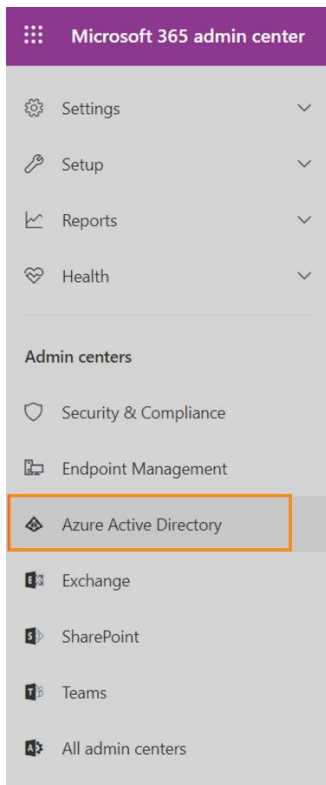
Before you proceed, make sure you have below permissions:

- Administrative access to Azure AD of Office 365 tenant
- Permissions to create flow in Power Automate (prior MS Flow)

Create an application in Azure AD

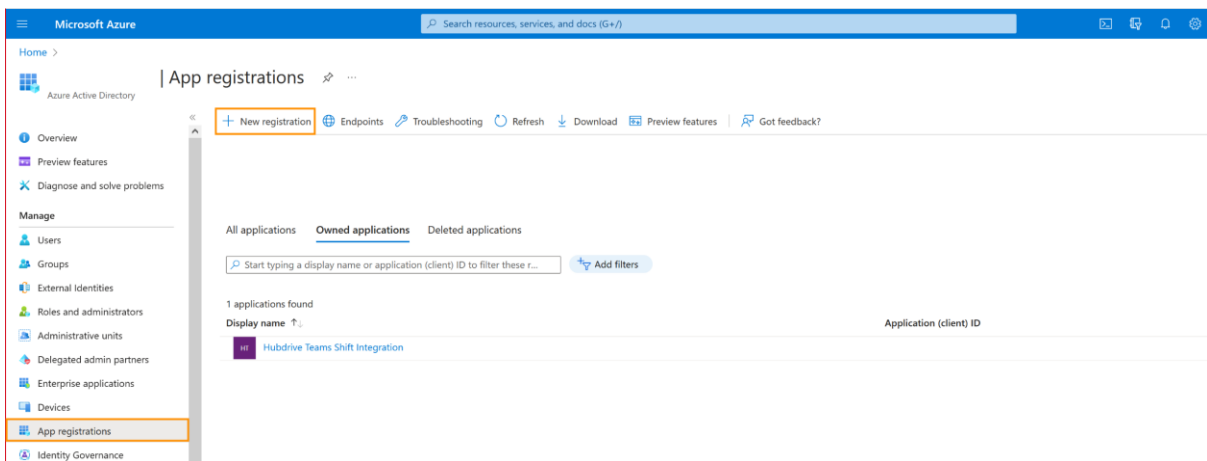
You will start by *registering an application in Azure AD*. Follow the below steps to create an application in Azure AD:

1. Login to Microsoft 365 Portal (<https://portal.office.com>)
2. Open Microsoft 365 admin center (<https://admin.microsoft.com>)
3. From the left menu, under “**Admin centers**”, click “**Azure Active Directory**”



4. From the left menu, click **“Azure Active Directory”**

5. Click **“App registrations”**



6. Click **“New registration”**

7. Provide the **application name, supported account type** and leave the **Redirect URI** blank

Register an application

* Name

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

Supported account types

Who can use this application or access this API?

- Accounts in this organizational directory only (My organization 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.

Select a platform

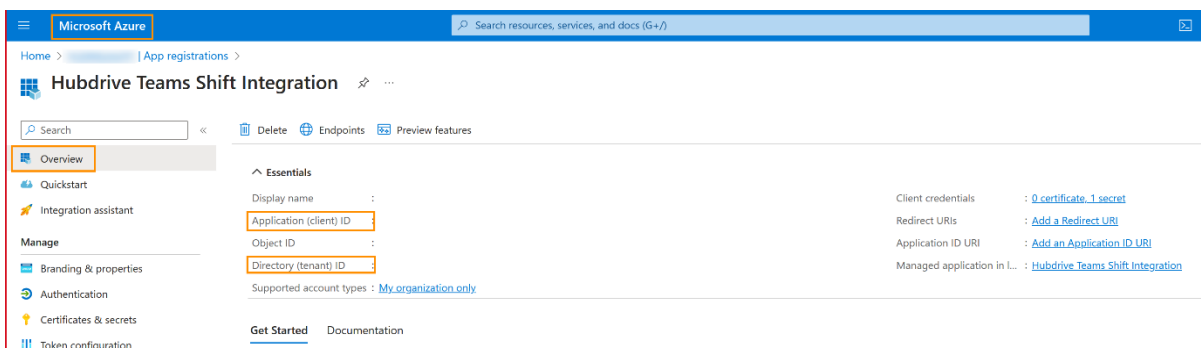
Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by adding from [Enterprise applications](#).

By proceeding, you agree to the [Microsoft Platform Policies](#)

Register

8. Click **Register**

9. Note down **Application and Directory IDs** to use later in the flow



10. From the left menu, click **“API permissions”** to grant some permissions to the application

11. Click **“+ Add a permission”**

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

Home > App registrations > Hubdrive Teams Shift Integration

Hubdrive Teams Shift Integration | API permissions

Search | Refresh | Got feedback?

Overview

Quickstart

Integration assistant

Manage

- Branding & properties
- Authentication
- Certificates & secrets
- Token configuration
- API permissions**
- Expose an API

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 HubMaster01

API / Permissions name	Type	Description	Admin consent requ...	Status
Microsoft Graph (9)				

To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try [Enterprise applications](#).

12. Select "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 Communication Services

Rich communication experiences with the same secure CPaaS platform used by Microsoft Teams



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

13. Select Application permissions

14. Grant the needed permissions (Please refer table below for example)

15. Click "Add permissions"

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 permission to filter these results

Permission

Admin consent required

> AccessReview

> Acronym

> AdministrativeUnit

> AgreementAcceptance

> Agreement

> APIConnectors

> AppCatalog

> Application-RemoteDesktopConfig

> Application

Add permissions

Discard

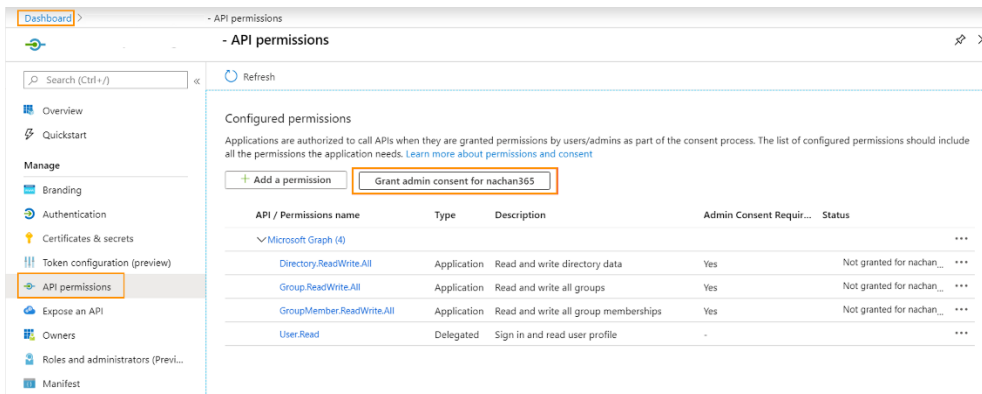
Below are the needed application permissions to perform the operations.

Permission	Application permissions
Directory	Directory.ReadWrite.All
Group	Group.ReadWrite.All
GroupMember	GroupMember.ReadWrite.All
Schedule	Schedule.ReadWrite.All
TeamMember	TeamMember.Read.All TeamMember.ReadWrite.All TeamMember.ReadWriteNonOwnerRole.All

4. Grant required permissions to the application

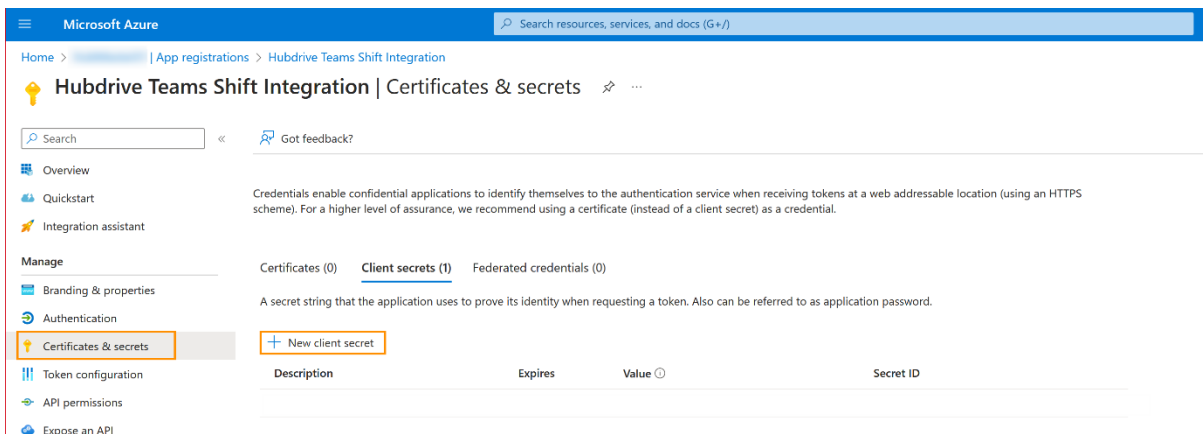
After creating the permissions, you need to grant consent to the application to allow the application to access Graph API without a consent screen.

1. Click “Grant admin consent for ...”



2. From the left menu, click “Certificates & secrets”

3. Under “Client secrets”, click “+ New client secret”



4. Provide a description and select an expiry time for the secret

Add a client secret

Description

Expires

In 1 year

In 2 years

Never

Add a client secret

Description

Expires

5. Click **“Add”**.

6. Make a note of the secret value in the customer OneNote.

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

Description	Expires	Value	
...	12/26/2020	...	<input type="button" value="Copy"/> <input type="button" value="Delete"/>

Teams Shifts Licenses

To use Microsoft Teams, you will need at least a “Microsoft 365 Business Basic” license.

<https://www.microsoft.com/de-de/microsoft-365/business/compare-all-microsoft-365-business-products?market=de>

5. Configuration

Application User

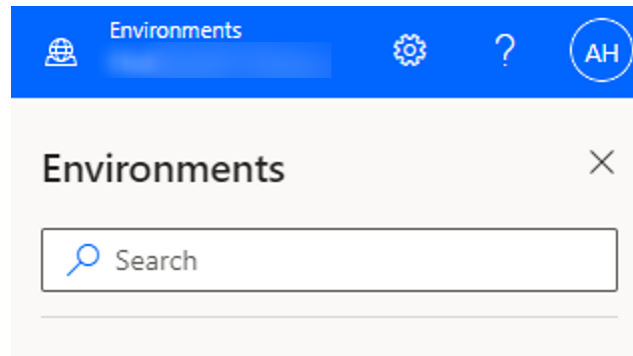
1. Go to make.powerapps.com
2. Select the correct **environment**
3. Click on **Solutions**
4. Select **HR for Dynamics Teams Shift Integration**
5. Click on **environment variables**

The Application user details needs to be configured in the flow environment variables. Therefore the already existing Environment variables need to be added to an unmanaged solution and configured.

The following Environment Variables need to be configured:

Display name <input type="button" value="v"/>	Name
Application User Id	... xrm1_application_user_id
Application Id	... xrm1_shifts_application_id
Secret	... xrm1_shifts_secret
Tenant Id	... xrm1_shifts_tenant_id

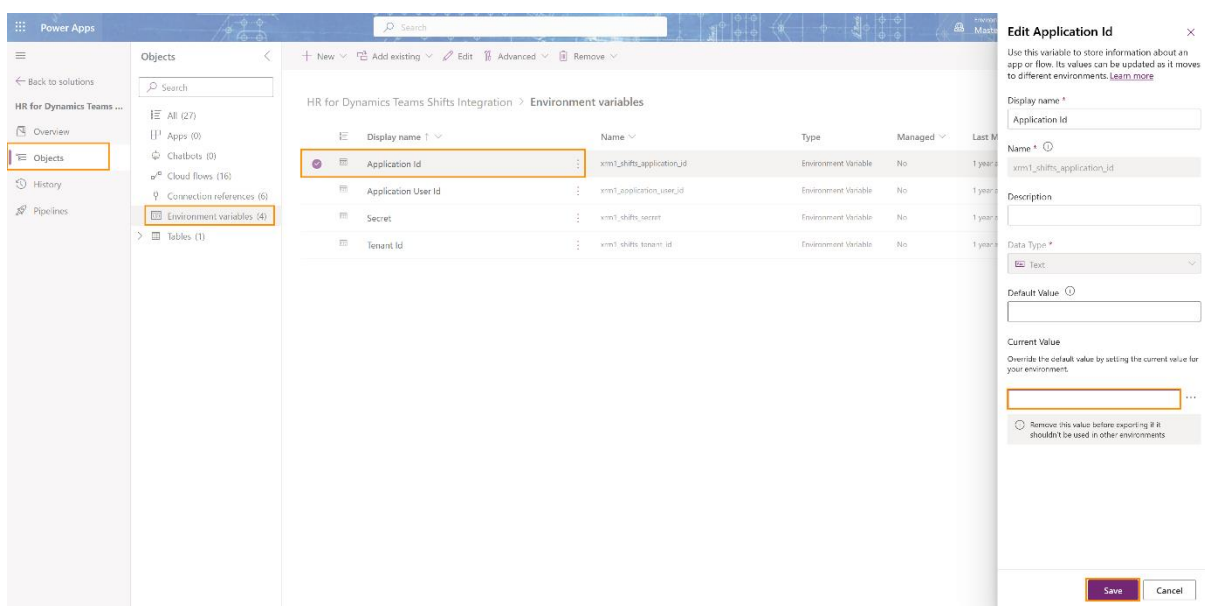
Therefore login to make.powerautomate.com or make.powerapps.com, and select the correct Environment first. (on the right upper side)



Navigate to **Solutions** and either add them to an existing solution or create a new solution and add them afterwards.

- Click on **Solutions**
- Open the **HR for Dynamics Teams Shifts Integration**
- Open the **Environment Variables**
- Click on the 3 dots

Click on the three little dots next to the Display Name and then enter the right values to 'Current Value' for Application Id, Secret and Tenant Id.



Display name	Name	Type	Managed	Last Modified
Application Id	xrm1_shifts_application_id	Environment Variable	No	1 year ago
Application User Id	xrm1_application_user_id	Environment Variable	No	1 year ago
Secret	xrm1_shifts_secret	Environment Variable	No	1 year ago
Tenant Id	xrm1_shifts_tenant_id	Environment Variable	No	1 year ago

Edit Application Id

Use this variable to store information about an app or flow. Its values can be updated as it moves to different environments. [Learn more](#)

Display name *
Application Id

Name *
xrm1_shifts_application_id

Description

Data Type *
Text

Default Value

Current Value
Override the default value by setting the current value for your environment.

Remove this value before exporting if it shouldn't be used in other environments

Save Cancel

For the Application User Id, take the ID of the Admin User from the Azure Active Directory Admin Center.

Identity

Name	Admin	First name	Admin	Last name	
User Principal Name	admin@.com	User type	Member		
Object ID		Source	Azure Active Directory		Manage B2B collaboration

The Application Id gets taken from the section App registrations -> Owned applications -> Application (client) ID.

Microsoft Azure | App registrations

Overview | Preview features | Diagnose and solve problems

Manage | Users | Groups | External Identities | Roles and administrators | Administrative units | Delegated admin partners

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 upgrade to Microsoft Authentication Library (MSAL) and Microsoft Graph. [Learn more](#)

All applications | **Owned applications** | Deleted applications

Start typing a display name or application (client) ID to filter these r... | Add filters

1 applications found

Display name	Application (client) ID
Hubdrive Teams Shift Integration	

The Tenant ID can be copied from the Dashboard of the Active Directory Admin Center:

Microsoft Azure | Overview

Overview | Preview features | Diagnose and solve problems

Manage | Users | Groups | External Identities | Roles and administrators | Administrative units | Delegated admin partners | Enterprise applications

Search your tenant

Basic information

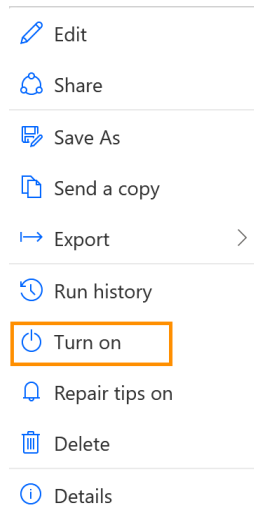
Name	Users	4
Tenant ID	Groups	2
Primary domain	Applications	2
License	Devices	0

Azure AD Free

Flows

****Check if the flows are turned on (with the connection reference they will be turned on)****

All Flows of the Interface are turned off by default. To turn them on, login to make.powerapps.com. Navigate to the **Flow Solution** in the Environment and select all flows which start with 'Teams Shifts - '. On the ribbon select '**Turn on**' to activate them.



If that step fails, take first the once which start with 'Teams Shifts - Child flow -' and then the remaining. If that still fails, enter the failing flow, click on Edit in the Ribbon and then **Save**.

Open the flow '**Teams Shifts - Child flow - Create Time off for given Leave Request**' click on Edit in the Ribbon and then continue and **Save**.

Now The Employee needs to be mapped to a Teams Shifts User, and this will be done by the HR Manager, as the configurations of the Time off Reasons, inside the Absence Type Settings (in Hubdrive solution). [Teams Shift Usage for HR Manager](#)