Registering the Microsoft Teams Bot in Azure

In order to complete the steps below, you must have Application Administrator or Global administrator role in Azure.

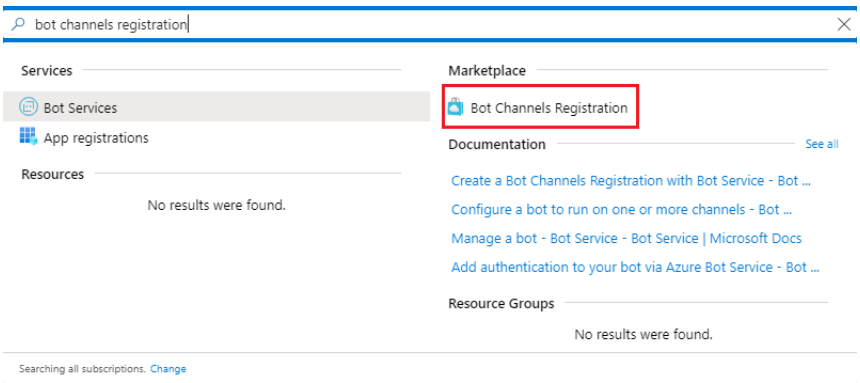
The registration consists of the following steps:

The following steps have to be done only once per bot. Once it's done, the bot can be used in multiple Azure tenants.

Creating a Bot Channel Registration (App Registration and Bot Service)

Step 1 - Log in to the Azure portal.

Step 2 - Search for **Bot Channels Registration** in the search box on the top, then click on the link under the **Marketplace** section.



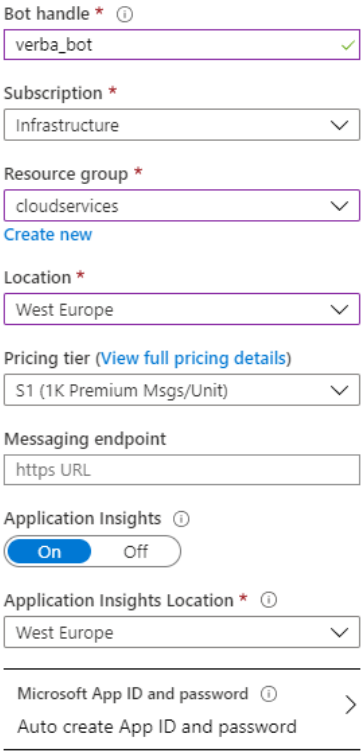
Step 3 - In the left panel, provide a unique name at the **Bot handle**, then select the **Subscription**, the **Resource group**, and the **Location** of the bot channel registration. The Location should be the same region where the Verba Bot virtual machine resides in Azure.

Registering the Microsoft Teams Bot using Azure CLI and PowerShell

The Microsoft Teams Bot can be also registered using Azure CLI and PowerShell commands.

Step 1 - Download and install the **Azure CLI**.

Step 2 - Open PowerShell and log in to Azure using the **az login** command. For example:

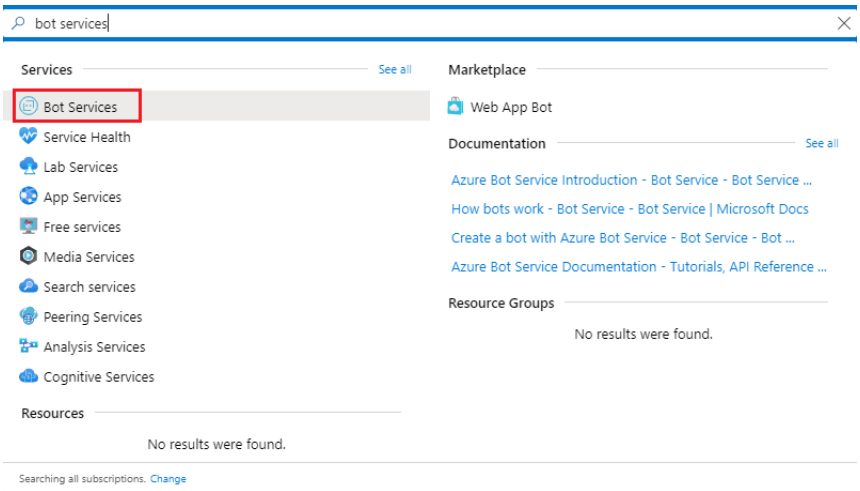


Step 4 - Click on the **Create** button. Creating the Bot Channel Registration may take some seconds. Azure will acutllay create an App Registration and a Bot Service assigned to it.

Adding a Teams Channel to the Bot Service

Step 5 - Once the Bot Channels Registration is completed, search for **Bot Services** in the search box on the top, then click on the Bot Services link under the **Services** section.

(Alternatively, the Bot Services can be also found by opening the **hamburger menu** in the upper right corner, then selecting **All services**, then the **AI + machine learning** category.)



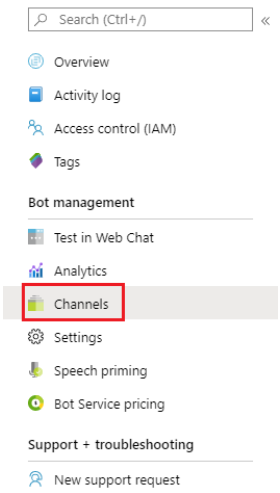
Step 6 - Select the Bot Service from the list that was created previously using the name provided at Step 3 (Bot handle).

```
az login -u "[user_UPN]" -p "[password]"
```

Step 3 - Create the App registration using the **az ad app create** command. Provide an **App secret** also. When it is done, take a note of the **App Id**; it will be needed in the later commands, in Verba configuration, and in the Teams recording policy.

```
$app = az ad app create --display-name "[
```

Step 7 - In the second left panel, under the **Bot management** section, click on the **Channels** menu.

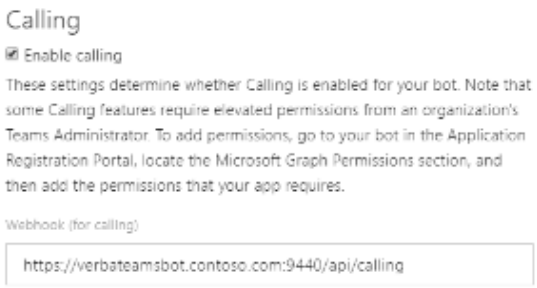


Step 8 - Under the **Add featured channel** section select the **Teams** icon (Configure Microsoft Teams channel).

Step 9 - Select the **Calling** tab, then tick the **Enable calling** checkbox.

Step 10 - At the **Webhook (for calling)** setting, provide the following URL: https://verba_bot_vm.domain.com:9440/api/calling

Replace the verba_bot_vm part with the hostname of the Azure virtual machine which will host the Verba Bot service. At the domain part, use the domain of the Teams tenant (also specified in the SSL certificate).



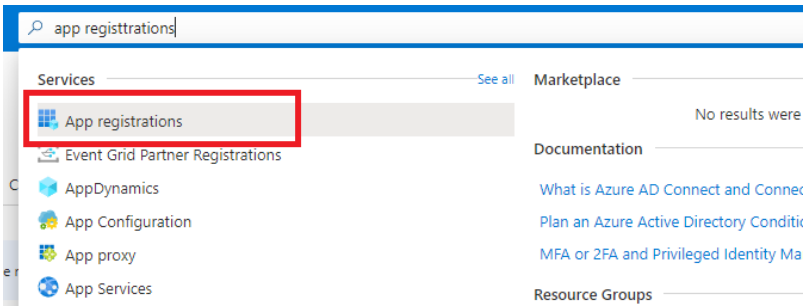
Step 11 - Click on the **Save** button. Agree with the terms of service.

Configuring authentication for the App Registration

Step 12 - Search for **App registrations** in the search box on the top, then click on the **App registrations** link under the **Services** section.

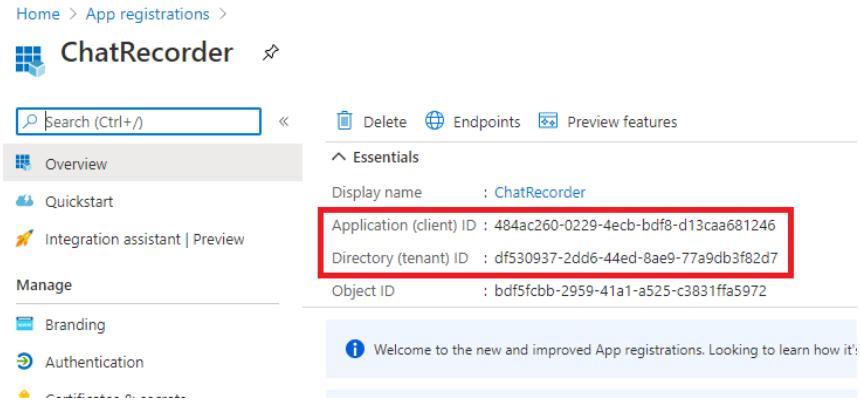
(Alternatively, the App registrations can be also found by opening the **hamburger menu** in the upper right corner, then selecting the **Azure Active Directory**, then selecting **App registrations** in the left panel.)

```
app_display_name]" --available-to-other-tenants --reply-urls "https://www.verba.com" --password "[app_secr
```

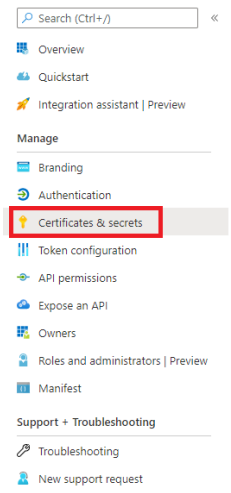


Step 13 - Select the App Registration from the list that was created previously using the name provided at Step 3 (Bot handle).

Step 14 - Take a note of the **Application (client) ID** and the **Directory (tenant) ID**. They will be needed later.



Step 15 - Select the **Certificates & secrets** menu in the left panel.



Step 16 - Under the Client secrets section, click on the **New Client Secret** button.

Step 17 - Provide a **Description**, set when the secret **Expires**, then click on the **Add** butt on.

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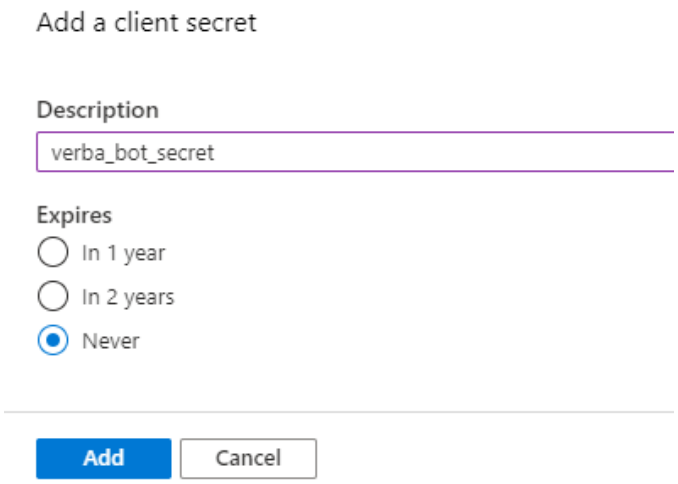
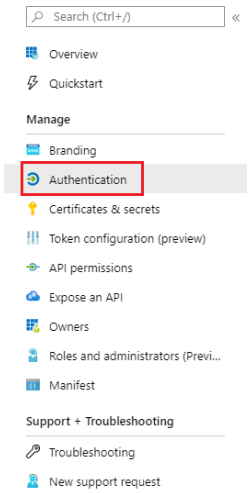


Step 18 - Take a note of the new **Client secret**. It will be needed later.

Step 19 - In the left panel, under the **Manage** section, click on the **Authentication** menu.

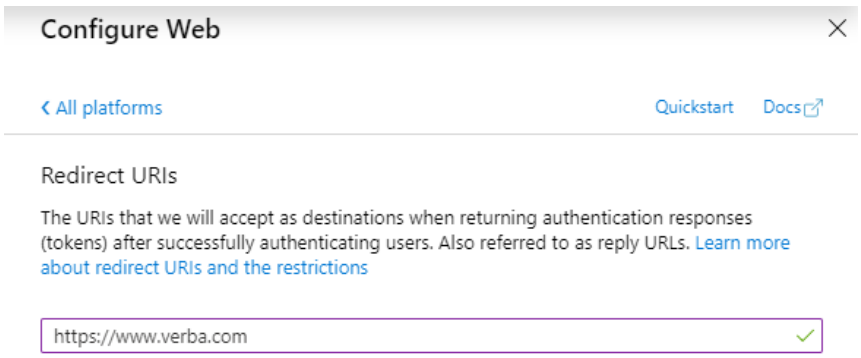


Step 20 - Under the **Platform configuration** sections, click on the **Add a platform** button.

Step 21 - In the right panel, select **Web**.

Step 22 - Provide a **Redirect URI**. It can be any website. Take a note of the URI provided, it will be needed later.

Step 23 - Click on the **Configure** button in the bottom.

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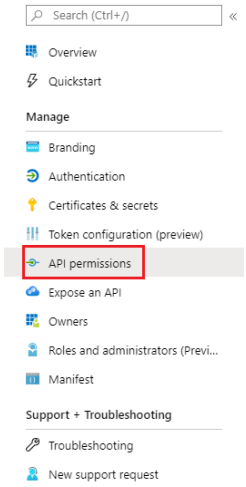
Step 4 (Optional) - Assign an user to the App registration as owner using the **az ad app owner add** command:

Configuring permissions for the App Registration

Step 24 - In the left panel, under the **Manage** section, click on the **API permissions** menu.



Step 25 - Click on the **Add a permission** button.

Step 26 - Select Microsoft Graph, then select **Application permissions**.

Step 27 - Select the following permissions:

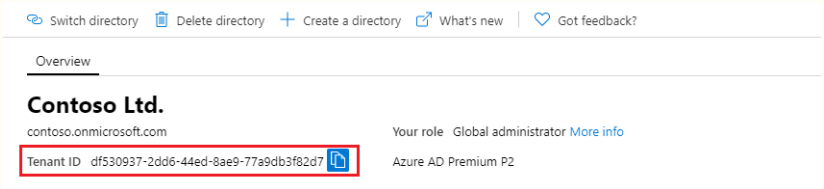
- Calls.AccessMedia.All
- Calls.Initiate.All
- Calls.InitiateGroupCall.All
- Calls.JoinGroupCall.All
- Calls.JoinGroupCallAsGuest.All
- OnlineMeetings.Read.All
- User.Read.All

Step 28 - Click on the **Add permissions** button.

Granting admin consent to the permissions

Separate Azure tenants for the recording provider (bot) and for the Teams environment to record

In the case when the recorded Teams environment and the recording bot are in separate Azure tenants, the following steps have to be done using the Tenant ID of the Azure tenant where the Teams environment to record resides, and also using a user that has the Teams Service Admin or Global Admin role in that tenant. In order to gather the Tenant ID for Step 29, you have to log in to the Azure portal of that tenant, then go to the **Azure Active Directory**.



Multi-Tenant configuration:

If the same bot is being used in multiple tenants, then the following steps have to be done for each tenants using the guidelines above.

```
az ad app owner add --id $appID --owner-object-id "[user_object_id]"
```

Step 5 - Add permissions to the App registration using the **az ad app permission add** command:

```
az ad app pe rmission ad
```

Step 29 - Build the consent URL. The format is the following:

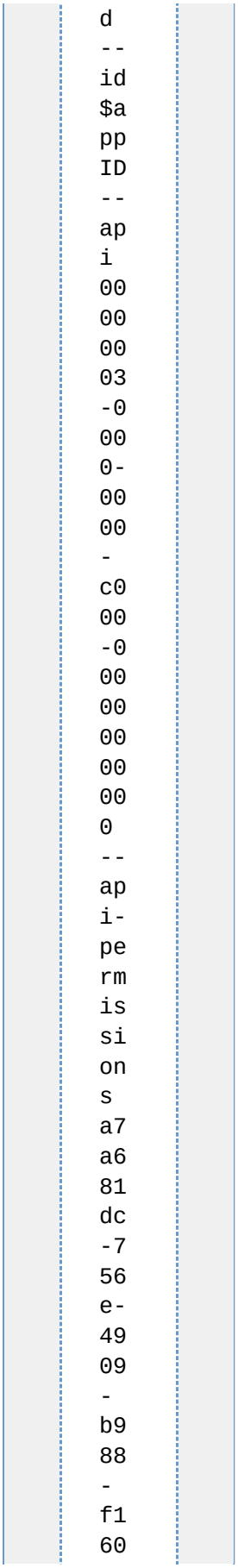
```
https://login.microsoftonline.com/{tenant_id}
/adminconsent?client_id={microsoft_app_id}
&state=12345&redirect_uri={redirect_uri}
```

Replace the {tenant_id} part with the Directory (tenant) ID and the {microsoft_app_id} part with the Application (client) ID from **Step 14.** Replace {redirect_uri} part with the URI from **Step 22**.

Step 30 - Copy the previously created consent URL into the browser, then hit enter. Log in with a **Teams Service Admin** or **Global Admin** user of the Azure tenant where the Teams environment to record resides. Click on the Accept button. The page will redirect to the webpage provided in the Redirect URI setting.

2N Recording

In the case of 2N recording, all the steps above have to be done twice. Take a note of the second **Application (client) ID** also at **Step 14**. It will be needed in the next part of the configuration guide.



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Step 6 - Grant admin consent using the **az ad app permission admin-consent** command:

```
az ad app permission admin-consent --id $appID
```

Step 7 - Create the Bot channels registration using the **az bot create** command:

```
az bot create -n "[bot_channels_registration
```

```
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    -k "registration"
    --appid $appID
    --subscription "[Azure_subscription_name]"
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Step 8 - Add the Teams channel to the Bot channels registration using the **az bot msteams create** command:

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