Exercise 4-2 - Deploy SharePoint Framework solutions to Microsoft Teams

In this exercise, you'll create a SharePoint Framework web part solution that will work in both SharePoint Online and as a tab in Microsoft Teams.

Important: The instructions below assume you are using v1.11.0 of the SharePoint Framework Yeoman generator.

Open a command prompt and change to the folder where you want to create the SharePoint Framework project. Then, run the SharePoint Yeoman generator by executing the following command:

yo @microsoft/sharepoint

Use the following to complete the prompt that is displayed (if additional options are presented, accept the default answer):

* **What is your solution name?**: spfxteams
* **Which baseline packages do you want to target for your component(s)?**: SharePoint Online only (latest)
* **Where do you want to place the files?**: Use the current folder
* **Do you want to allow the tenant admin the choice of being able to deploy the solution to all sites immediately without running any feature deployment or adding apps in sites?**: Yes
* **Will the components in the solution require permissions to access web APIs that are unique and not shared with other components in the tenant?**: No
* **Which type of client-side component to create?**: Web Part
* **What is your Web Part name?**: SPFx Teams Together
* **What is your Web Part description?**: SPFx Teams Together description
* **Which framework would you like to use?** React

After provisioning the folders required for the project, the generator will install all the dependency packages by running npm install automatically. When NPM completes downloading all dependencies, open the project in **Visual Studio Code**.

## Enable the web part to be used in Microsoft Teams

Locate and open the file **./src/webparts/spFxTeamsTogether/SpFxTeamsTogetherWebPart.manifest.json**:

Within the web part manifest file, locate the property supportedHosts:

"supportedHosts": ["SharePointWebPart"],

Add another option to enable this web part to be used as a tab in a Microsoft Teams team:

"supportedHosts": ["SharePointWebPart", "TeamsTab"],

## Create and deploy the SharePoint package

In order to test the web part in SharePoint and Microsoft Teams, it must first be deployed to an App Catalog.

Open a browser and navigate to your SharePoint Online tenant App Catalog site.

Select the menu item **Apps for SharePoint** from the left-hand navigation menu.

Build the project by opening a command prompt and changing to the root folder of the project. Then execute the following command:

gulp build

Next, create a production bundle of the project by running the following command on the command line from the root of the project:

gulp bundle --ship

Finally, create a deployment package of the project by running the following command on the command line from the root of the project:

gulp package-solution --ship

Locate the file created by the gulp **package-solution** task in the **./sharepoint/solution** folder with the name **\*.sppkg**.

Drag this file into the **Apps for SharePoint** library in the browser:

In the **Do you trust...?** dialog, select the checkbox **Make this solution available to all sites in the organization** and then select **Deploy**.

This will make the web part available to all site collections in the tenant, including those that are behind a Microsoft Teams team.

The last step is to publish the Microsoft Teams app to your tenant's Microsoft Teams store. Select the SharePoint package you uploaded. Then, using the ribbon, select the **Files** tab and then the **Sync to Teams** button. Since we did not build our own Teams Manifest file, SharePoint will build us a default one.

## Test the SharePoint Framework web part in SharePoint

In the browser, navigate to a modern SharePoint page.

Select the **Edit** button in the top-right of the page.

Select the (+) icon to open the SharePoint web part toolbox and locate the web part **SPFx Teams Together**:

The SharePoint Framework web part will be displayed on the page as shown in the following figure:

## Test the SharePoint Framework web part in Microsoft Teams

If you do not have a MS Teams team to use for testing, you will need to create one. If you already have a MS Teams team, skip to the section called “Install the Microsoft Teams application as a new tab.”

Using the same browser where you're logged into SharePoint Online, navigate to [https://teams.microsoft.com](https://teams.microsoft.com/). When prompted, load the web client.

If you don't have any teams in your tenant, you'll be presented with the following dialog. Otherwise, select the **Join or create a team** at the bottom of the list of teams:

On the **Create your team** dialog, select **Build a team from scratch**:

On the **What kind of team will this be?** dialog, select **Public**:

When prompted, use the name **My First Team**.

## Install the Microsoft Teams application as a new tab

NOTE: If you are using a previously created team, replace **My First Team with your team name in the following sections.**

Select the **My First Team** team previously created.

Select the **General** channel.

Add a custom tab to the team using the SharePoint Framework web part.

At the top of the page, select the + icon in the horizontal navigation:

In the **Add a tab** dialog, select **More Apps**

Select **Built for [your tenant name]**.

Select the **SPFx Teams Together** app.

In the **SPFx Teams Together** dialog, select the **Add to a team** button.

In the next dialog, select the **General** channel in the **My First Team** team and select **Set up a tab**.

The next dialog will confirm the installation of the app. Select **Save**.

The application should now load in Microsoft Teams within the **General** channel under the tab **SPFx Teams Together**.

Select the **X** in the upper-right corner of the property pane to close the initial configuration.

## Summary In this exercise, you created a SharePoint Framework web part solution that works in both SharePoint Online and as a tab in Microsoft Teams.