

# Power Platform

## Build your own Power Apps Solution

Overview and Pre-requisites

Hands-on Lab Step-by-Step

June 2021

# Lab Overview and Pre-requisites

## Abstract and Learning Objectives

This is a beginner level lab for you to get hands on experience with Microsoft technologies –[Power BI](#), [Microsoft Teams](#), [Power Virtual Agent](#), and [Power Apps Portals](#). The lab includes step-by-step instructions for someone new to these technologies. Technologies covered are:

**Power Apps:** A software as a service application platform that enables power users in line of business roles to easily build and deploy custom business apps. You will learn how to build Canvas and Model-driven style of apps.

**Power Automate:** A business service for line of business specialists and IT pros to build automated workflows intuitively.

**Power BI:** A suite of business analytics tools that deliver insights throughout your organization.

**Microsoft Teams:** A hub for teamwork that includes chat, meetings & video conferencing, content collaboration with the power of Office applications, and the ability to create and integrate the apps and workflows that your business relies on.

**Power Virtual Agent:** A SaaS offering that empowers teams to easily create powerful bots using a guided, no-code interface without the need for data scientists.

**Power Apps Portals:** External-facing websites that allow users outside their organizations to sign in with a wide variety of identities, create and view data in Dataverse, or even browse content anonymously.

Make sure to follow all the pre-requisite steps listed in this document before starting the labs. Because the Power Platform is a cloud-based solution, you can complete all labs remotely.

For a list of additional learning resources and introductory videos, see [Learning Resources](#)

## Lab structure and Learning Objectives

The lab is divided into four modules, with one lab document provided for each module.

The labs download includes a completed solution for the standard App in a Day course. The labs listed here continue building the functionality for apps built during the App in a Day course and will require you to import the standard App in a Day completed solution before working on them. Steps for doing so can be found later in this document.

## Supplemental labs

### 1. S01-Power BI

Introduces you to Power BI. You will learn how to:

- Connect Power BI to the Dataverse
- Transform Dataverse data for use in visualizations
- Create visualizations on the Dataverse data
- Combine Dataverse data with other data sources

### 2. S02-Microsoft Teams

- Introduces you to Microsoft Teams. You will learn how to:

- Set up Teams, channels and invite Team members
- Import your Device ordering App to Teams
- Update your approval automation to Teams
- Include Power BI in Teams
- Add Power Virtual Agent to Teams

### 3. **S03-Power Virtual Agent**

Introduces you to Power BI. You will learn how to:

- Create a topic and add trigger phrases
- Build a flow in Power Automate
- Add actions to the flow
- Test your bot

### 4. **S04-Power Apps Portals**

Introduces you to Power Apps Portals. You will learn how to:

- Provision a Portal
- Create an entity form
- Personalize the portal
- Configure security to Restrict anonymous users.

## Pre-requisites: Before starting the hands-on lab

### Task 1: Download the Lab Files

1. Download file [Lab Files](#)
2. **Save a local copy of the lab contents:** Download the zip file for the lab from [Lab Files](#). Save it to a local folder, such as C:\ BYOPAS. Extract the ZIP package. This package contains the sample data for the app, PDF copies of the lab manuals, and the pre-built solution file from App in a Day.

### Task 2: Sign-in to Power Apps

1. **Confirm that you are licensed to use Power Apps:** Go to [Make Power Apps](#) and sign-in with your business or school account. This is the same as your Office 365 or Dynamics 365 login. If you are not able to use Power Apps with your organizational credentials, you may review the instructions for provisioning a demo tenant at the notes below.
2. **Start a trial of Power Apps:** Usage of the Dataverse requires a Power Apps premium license. Go to [Power Apps Pricing](#) and select the "Try free" option to start a free 30-day trial. For more detailed information on signing up for a free trial, see [here](#). For information on signing up for a free community plan for individual use, see [here](#).

NOTE: If you are unable to sign-up for a Power Apps premium license using your organization credentials, you may provision a free Office365 demo tenant at [Microsoft Demo Site](#). Use the demo tenant credentials to sign up for a Power Apps Trial

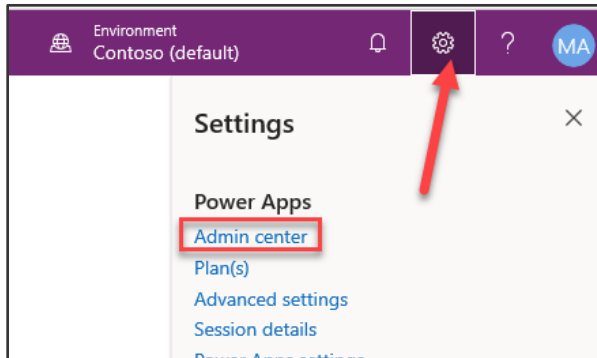
### Task 3: Create a new environment and Dataverse database instance

You must have a newly created Dataverse environment and database instance, that was **created just for this lab**. If you don't have a new environment or have an older environment, follow the steps below to create the environment and provision the database instance.

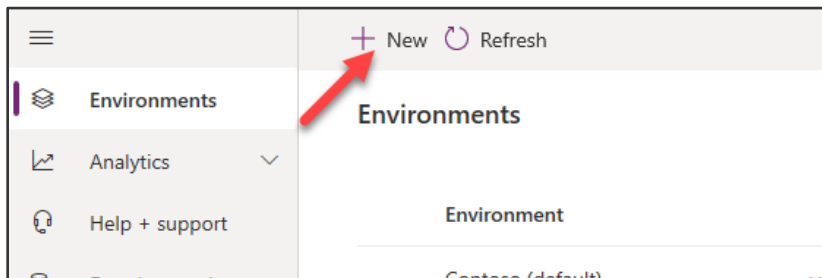
1. Open the Power Apps admin center by navigating to [Admin Power Apps](#) in a web browser.

- You may be prompted to sign up for a free Power Apps trial if you did not already complete this as part of a previous step. Follow the prompts to start your trial, which will give you access to the admin center.

**Note:** you can also access the admin center by signing in at [Make Power Apps](#) and clicking the settings icon in the top right and selecting **Admin center**.



- In the Admin center, select **Environments** and click **+New**.



- Provide a name for the environment. A common practice is to use your name followed by "Test" so it is clear this is a test environment.
- Select **Trial**, select your **Region**, and set **Create a database** to **Yes**, and click **Next**.

A screenshot of the 'New environment' dialog box. It has a title bar 'New environment' with a close button. The form contains: a 'Name' field with 'Contoso Test'; a 'Type' dropdown menu set to 'Trial'; a 'Region' dropdown menu set to 'United States - Default'; a 'Purpose' text area with the placeholder 'Describe the environment purpose'; and a toggle switch for 'Create a database for this environment?' which is turned 'Yes'. At the bottom are 'Next' and 'Cancel' buttons.

- Select your **Language**, your **URL**, and your **Currency**. Check **Yes** for Deploy sample apps and data, and then click **Save**.

**Add database**

Language \*  
Default language for user interfaces in this environment  
English

URL \*  
AIADTrial  
crm.dynamics.com

Currency \*  
Reports will use this currency  
USD (\$)

Enable Dynamics 365 apps  
In addition to Power Apps. Learn more  
☐ No

⚠ Currently, Dynamics 365 apps can only be enabled for production environment. You can create trial here

Deploy sample apps and data  
☒ Yes

Security group  
Restrict environment access to people in this security group. Otherwise, everyone can access. Learn more  
+ Select

Save Cancel

**Note:** You can choose your local language and currency. However, the lab manuals were created using US dollars and English language configurations.

7. You will see a screen listing all environments that will show the newly created environment.

NAME	TYPE	REGION	CREATED
Contoso Test (org05e8a284)	Trial (29 days)	United States	01/30/2020

8. **IMPORTANT:** You need to wait for the database to finish provisioning before trying to create an application. The **Status** will change to Ready when done.

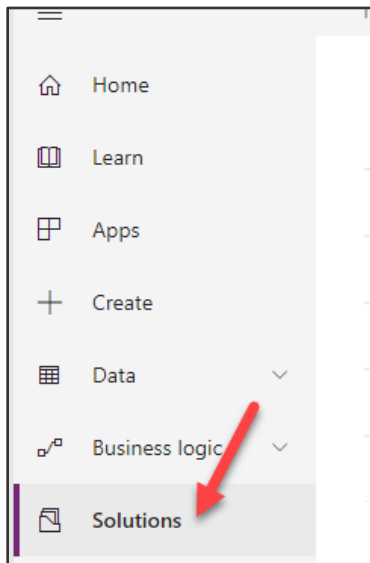
Environment	Type	State	Region	Create
Contoso (default)	...	Default	United States	12/11/
Contoso Test	...	Trial	United States	02/10/

9. This may take few minutes to complete. Wait for it to complete before proceeding with creating an app. If it has been over two minutes, try refreshing the browser. Once the database has been created you should no longer see this "Preparing Instance" message. You can then proceed with the lab.

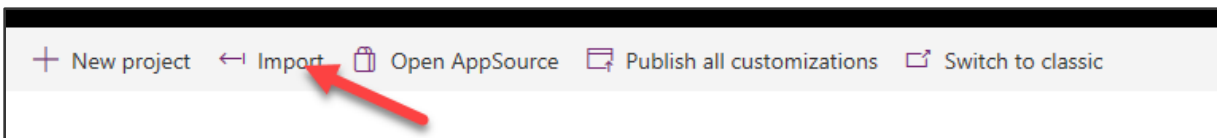
## Task 4: Import the solution

In this task, you will import the completed solution.

1. Navigate to [Power Apps maker portal](#)
2. Make sure you are in the **Contoso Test** Environment you created.
3. Select **Solutions**.



4. Click **Import**.



5. Click **Browse**.








6. Select the **Completed Solution** zip file and click **Open**.
7. Click **Next**.
8. Click **Next** again.
9. Click on the connection dropdown for the **Common Data Service** and select + **New connection**.


### Connections

Re-establish connections to activate your solution. If you create a connection you must Refresh. You will not lose your import progress.

5 updates needed

	<b>Approvals *</b> new_sharedapprovals_eb3fc	Select a connection
	<b>Common Data Service *</b> new_sharedcommondataservice_7bd13	Select a connection
	<b>Microsoft Teams *</b> new_sharedteams_016a9	<div><div>+</div> <b>New connection</b></div>
	<b>Office 365 Outlook *</b> new_sharedoffice365_b8d91	Select a connection
	<b>Microsoft Dataverse *</b> new_sharedcommondataserviceforapps_d...	Select a connection

10. Click **Create**.



## Microsoft Dataverse (legacy)

Microsoft Premium

Provides access to the environment database in Microsoft Dataverse.

Cancel

Create

11. Select your credentials.

12. You should now have one connection listed. Close the connections browser tab or window

13. Click **Refresh**.

### Apply changes

If you've created any new connections, Refresh to add them to the connection list. You will not lose your progress.

Refresh

Cancel

14. The connection you added should get selected. Follow the same steps to add the rest of the connection.
15. Add the connections and click **Import**.

Refresh

**Connections**

Re-establish connections to activate your solution. If you create a connection you must Refresh. You will not lose your import progress.

5 updates needed

Approvals *	new_sharedapprovals_eb3fc	Approvals
Common Data Service *	new_sharedcommondataservice_7bd13	admin@M365x245552.onmicrosoft.com
Microsoft Teams *	new_sharedteams_016a9	admin@M365x245552.onmicrosoft.com
Office 365 Outlook *	new_sharedoffice365_b8d91	admin@M365x245552.onmicrosoft.com
Microsoft Dataverse *	new_sharedcommondataserviceforapps_d...	admin@M365x245552.onmicrosoft.com

**Import** Cancel

16. Wait for the solution import to complete.
17. Once the import is complete, Click **Publish All Customizations**.

+ New solution ← Import Open AppSource Publish all customizations Switch to classic See history

✓ Solution "Completed Solution" imported successfully.

**Solutions**

18. Select **Apps**, click on the ... button of the application you imported and click **Play**.

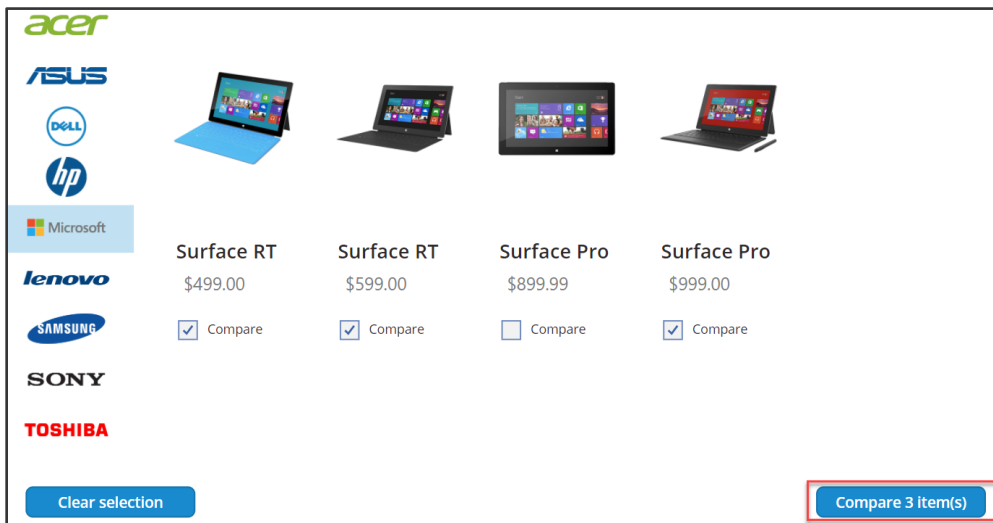
**Apps** Component libraries (preview)

Name	Modified	Owner
Device Procurement	6 min ago	MOD Administrator
Device Ordering App	6 min ago	MOD Administrator
Asset Checkout		MOD Administrator
Innovation Challenge		MOD Administrator

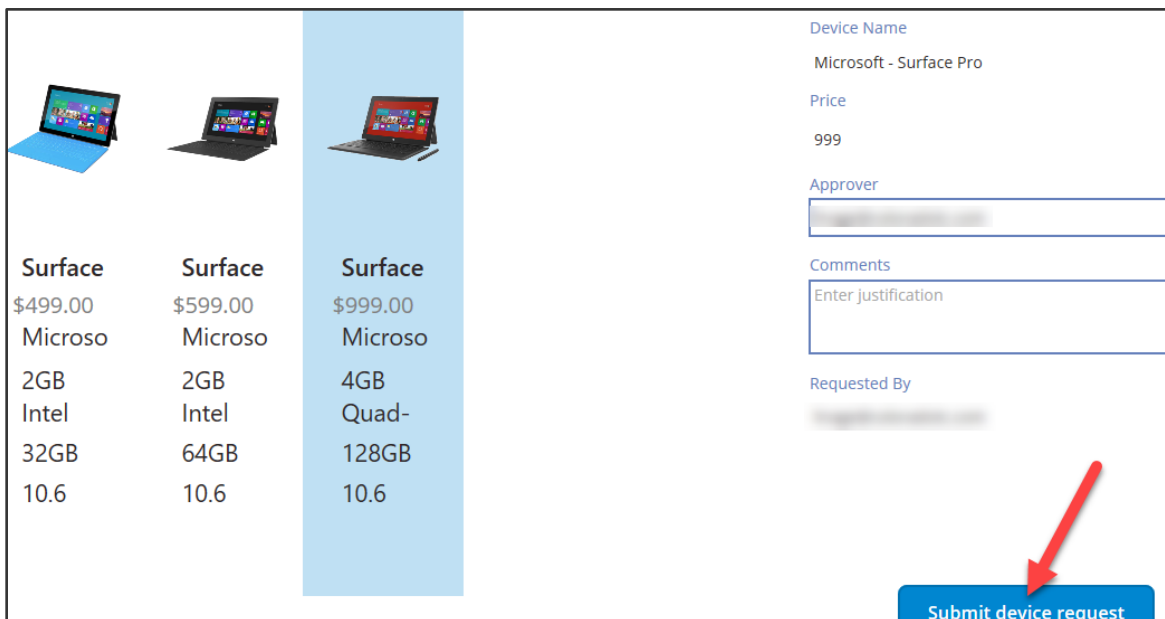
Edit Play

19. Click **Allow**.
20. Select few devices and click **Compare**.





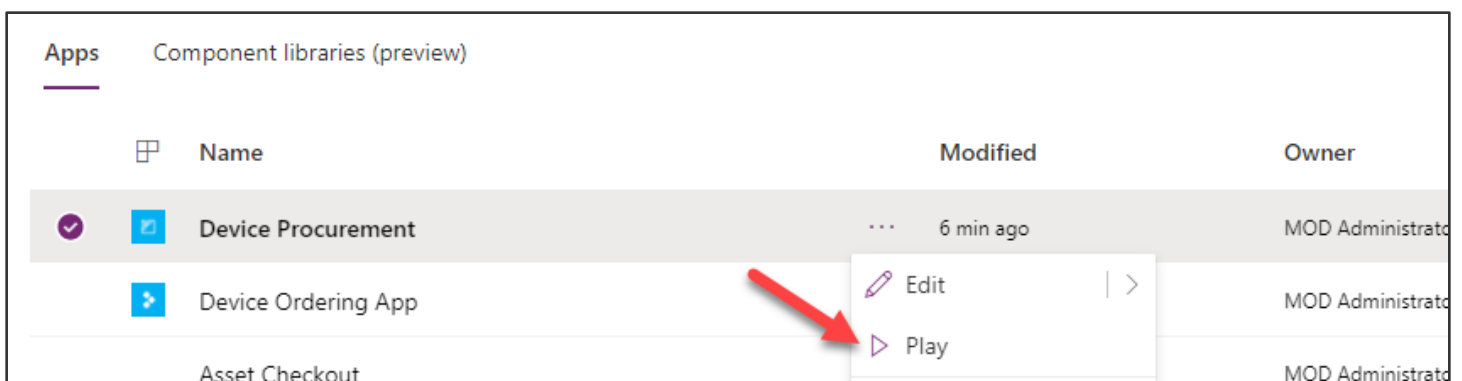
21. Select one of the devices and click **Submit**.



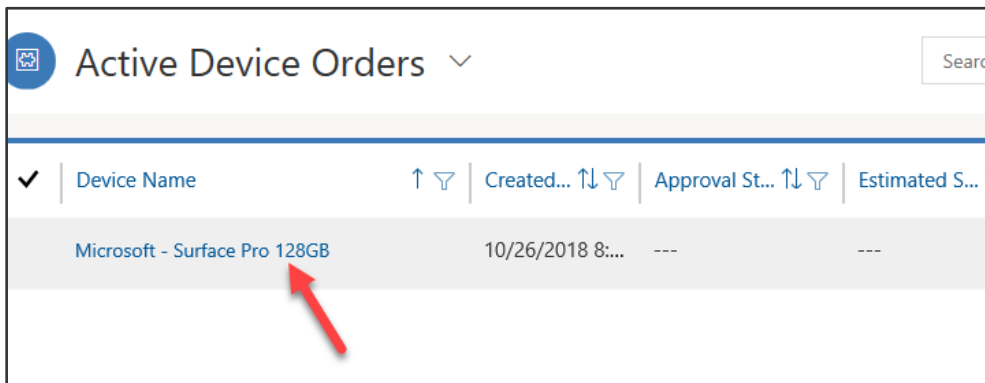
22. Click **OK**.

23. Close the application by simply closing the browser tab.

24. Select **Apps** and start the **Device Procurement** application.



25. Click to open the record you created in the last task.



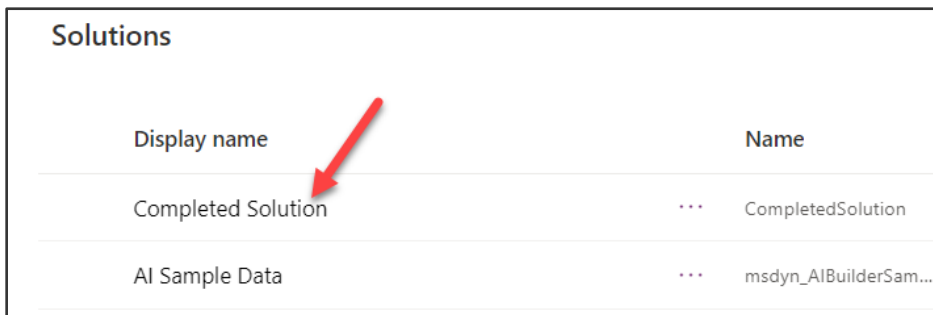
✓	Device Name	↑ ↓	Created... ↑ ↓	Approval St... ↑ ↓	Estimated S... ↑
	Microsoft - Surface Pro 128GB		10/26/2018 8:...	---	---

26. The record should open.

## Task 5: Make sure the cloud flow is turned on

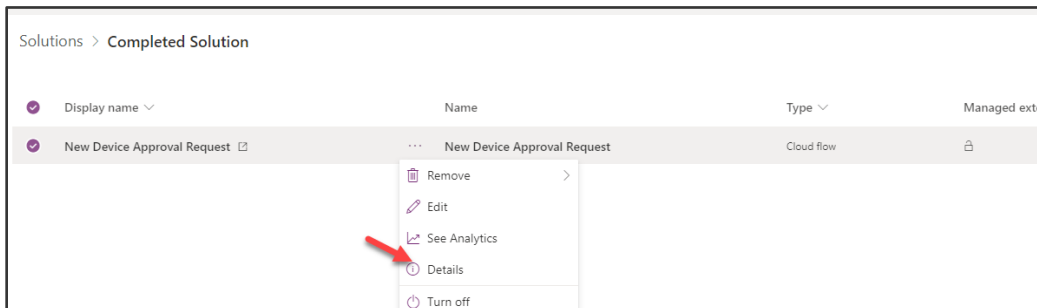
In this task, you will make sure the flow is turned on

1. Navigate to [Power Apps maker portal](#) and make sure you are in the correct environment.
2. Select **Solutions** and click to open the solution you imported.



Display name	Name
Completed Solution	CompletedSolution
AI Sample Data	msdyn_AIBuilderSam...

3. Locate the **New device approval request** cloud flow, click on the .... button, and select **Details**.



Display name	Name	Type	Managed exte
New Device Approval Request	New Device Approval Request	Cloud flow	

Remove

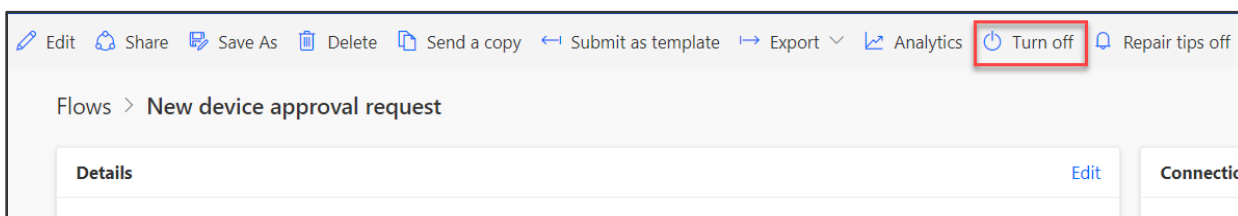
Edit

See Analytics

Details

Turn off

4. Make sure the flow is turned on. If not, turn it on.



Edit	Share	Save As	Delete	Send a copy	Submit as template	Export	Analytics	Turn off	Repair tips off
Flows > New device approval request									
Details									

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