



# Power Platform App in a Day

Overview and Pre-requisites

Hands-on Lab Step-by-Step

August 2020

# Lab Overview and Pre-requisites

## Abstract and Learning Objectives

This is a beginner level lab for you to get hands on experience with the [Microsoft Power Platform](#) technologies – [Power Apps](#), [Power Automate](#), [Power BI](#), and [Common Data Service \(CDS\)](#). The lab includes step-by-step instructions for someone new to these technologies to build a device ordering solution within a day. 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.

**Common Data Service (CDS):** Make it easier to bring your data together and quickly create powerful apps using a compliant and scalable data service and app platform that's integrated into Power Apps.

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

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.

Once you've completed the lab, please share your feedback using the survey at [Lab Survey](#)

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. Additionally, you may choose to do supplemental and crisis response labs for Power BI, Teams, and Power Virtual Agent, the Crisis Communication App, and the Crisis Communication Bot.

### 1. **01-Power Apps Canvas App Lab Manual:**

Focuses on the basic concepts involved in building Power Apps Canvas apps. You will learn how to:

- Connect to data sources and filter results based on specified criteria
- Work with screens and navigation
- Use controls, properties, formulas and actions to customize the user experience
- Display the logged in user's name
- Configure app settings
- Save and share an app
- Run an app on a mobile device

### 2. **02- Common Data Service Lab Manual:**

Introduces you to CDS you will learn how to:

- Create and customize a custom entity
- Use the Form control
- Save data into Common Data Service using the Form control

### 3. **03-Power Apps Model-driven App Lab Manual:**

Introduces you to building Model-driven Power Apps. You will learn how to:

- Create a standalone Model-driven app.
- Customize forms for the Model-driven app
- Use a Business Process Flow to guide users through a process

#### 4. **04-Power Automate Lab Manual:**

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

- Create a flow that is triggered when a new CDS record is created
- Automate sending approval requests
- Customize the approval based on the CDS record
- Use the Approval center

## Additional available labs

The following labs are included as part of the Power Platform App in a Day download package. They are available to you to complete in addition to the labs included in the curriculum. The **supplemental labs** listed here require you to have complete the standard App in a Day modules before working on them. The **crisis response labs** have been tested in an environment with the App in a Day solution, but do not require you to complete the App in a Day modules to complete these labs.

## Supplemental labs

The following labs continue building the functionality for the apps you build in the App in a Day course.

#### 1. **S01-Power BI**

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

- Connect Power BI to the CDS
- Transform CDS data for use in visualizations
- Create visualizations on the CDS data
- Combine CDS 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

## Crisis response labs

The following labs are designed to help you configure and deploy the Microsoft crisis response apps created as a response to COVID-19. These apps were developed by Microsoft and released in response to the COVID-19 crisis to aid front-line workers manage communication and assets. You can learn more about these, and additional assets, [here](#).

### 1. **CR01-Crisis Communication App**

Introduces you to the Crisis Communication App. You will learn how to:

- Configure SharePoint site
- Import and configure communication app
- Setup and test the app
- Import and configure the notification flow

### 2. **CR02-Crisis Communication Bot**

Introduces you to the Crisis Communication Bot. You will learn how to:

- Create topics for the bot
- Test the topics
- Change the greeting
- Publish the bot

## How to start a module without completing previous module(s)

The lab package includes a **\Completed** folder which consists of a set of app packages. If you wish to start on a module without having completed the previous module(s), you may import a partially built app package. See the corresponding instructions in each of the subfolders within the "Completed" folder.

- To directly start working on Module 2 -> see instructions in \Completed\Module1 subfolder
- To directly start on Module 3 -> see instructions in \Completed\Module2 subfolder
- To directly start on Module 4 -> see instructions in \Completed\Module3 subfolder
- To directly start on any supplemental modules -> see instructions in \Completed\Module4 subfolder

## 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 **PAHandsOnLabContent.zip** file for the lab from [Lab Files](#). Save it to a local folder, such as C:\AppInADay. Extract the ZIP package. This package contains the sample data for the app, PDF copies of the lab manuals, and pre-built app packages.

### 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 Common Data Service 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: This lab documentation assumes that you will use the web version of the Power Apps Studio, which will run in a browser: Microsoft Edge, Internet Explorer 11, Google Chrome, or Safari.

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: Install the Power Apps and Power Automate mobile applications

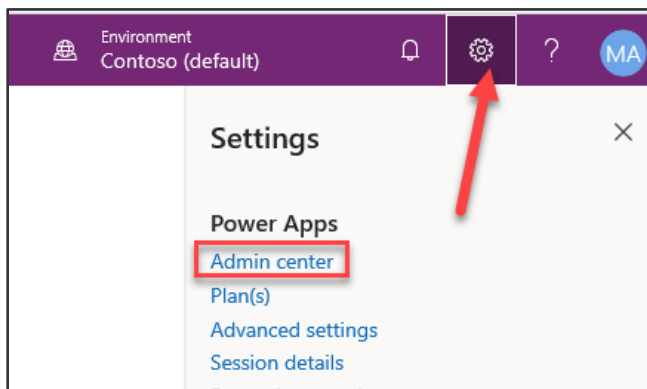
1. **Install the Power Apps mobile application:** Go to the app store on your mobile device. Search for “**Power Apps**” and install the Power Apps mobile application. If prompted, keep push notifications enabled.
2. **Install the Power Automate mobile application:** Go to the app store on your mobile device. Search for “Power Automate” and install the application. If prompted, keep push notifications enabled.

### Task 4: Create a new environment and Common Data Service database instance

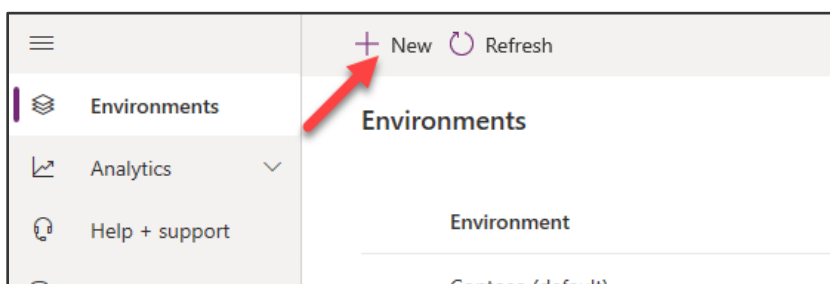
You must have a newly created CDS environment and database instance, that was **created just for this lab**. If you don’t have a new environment or have an older environment, follow the steps below to create the environment and provision the database instance.

1. Open the Power Apps admin center by navigating to [Admin Power Apps](#) in a web browser.
2. 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**.

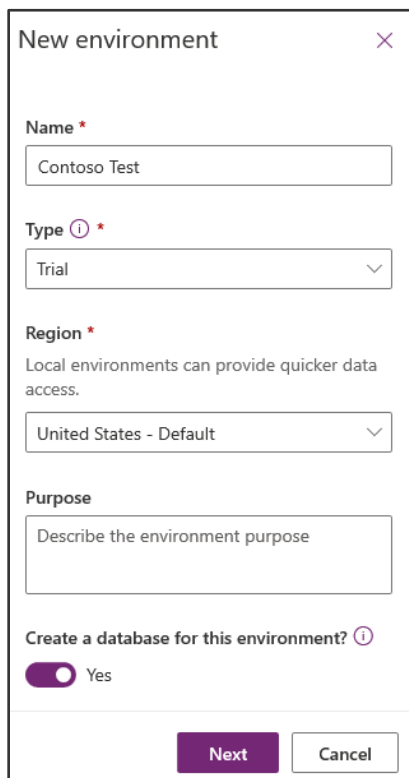


3. In the Admin center, select **Environments** and click **+New**.



4. 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.

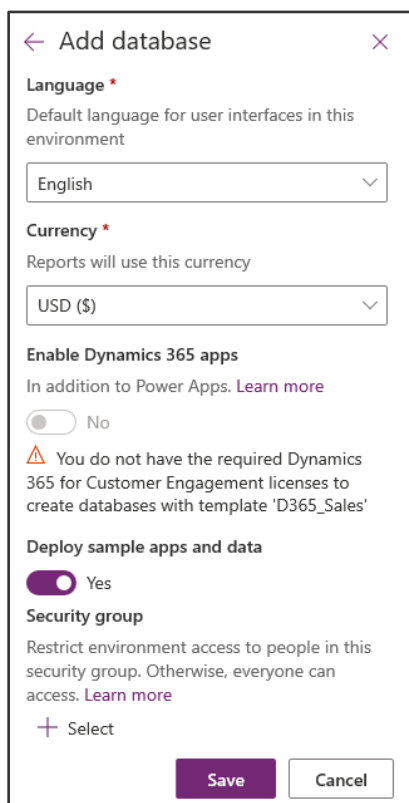
5. Select **Trial**, select your **Region**, and set **Create a database** to **Yes**, and click **Next**.



The 'New environment' dialog box contains the following fields and controls:

- Name \***: Text input field with 'Contoso Test' entered.
- Type ⓘ \***: Dropdown menu with 'Trial' selected.
- Region \***: Text input field with 'United States - Default' entered. Below it, a note states: 'Local environments can provide quicker data access.'
- Purpose**: Text input field with the placeholder text 'Describe the environment purpose'.
- Create a database for this environment? ⓘ**: Toggle switch set to 'Yes'.
- Buttons**: 'Next' (purple) and 'Cancel' (white) buttons at the bottom right.

6. Select your **Currency**, your **Language**, check **Yes** for Deploy sample apps and data, and then click **Save**.



The 'Add database' dialog box contains the following fields and controls:

- Language \***: Text input field with 'English' entered. Below it, a note states: 'Default language for user interfaces in this environment'.
- Currency \***: Text input field with 'USD (\$)' entered. Below it, a note states: 'Reports will use this currency'.
- Enable Dynamics 365 apps**: Toggle switch set to 'No'. Below it, a note states: 'In addition to Power Apps. [Learn more](#)'.
- Warning**: A yellow triangle icon followed by the text: 'You do not have the required Dynamics 365 for Customer Engagement licenses to create databases with template 'D365\_Sales''.
- Deploy sample apps and data**: Toggle switch set to 'Yes'.
- Security group**: Text input field with 'Select' entered. Below it, a note states: 'Restrict environment access to people in this security group. Otherwise, everyone can access. [Learn more](#)'.
- Buttons**: 'Save' (purple) and 'Cancel' (white) buttons at the bottom right.

**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.

Environments			
NAME ^		TYPE	REGION
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.

Environments				
Environment ↑	Type	State	Region	Create
Contoso (default)	...	Default	Ready	United States
Contoso Test	...	Trial	Ready	United States

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.

## Lab survey

Once you've completed the lab, we would appreciate your feedback on: (A) the product technologies that you learned about today – Power Apps, CDS, Power Automate, and on (B) the lab content – the value of the learning experience and the quality of the documentation.

Please use the [Survey](#) to share your feedback.

You may provide feedback for all modules at once, or as you complete each module. Thank you!

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