PowerApps App in a Day

Overview and Pre-requisites

Hands-on Lab Step-by-Step

July 2018

Lab Overview and Pre-requisites

Abstract and Learning Objectives

This is a beginner level lab for you to get hands on experience with Microsoft Business Application Platform technologies – PowerApps, Microsoft Flow and Common Data Service for Apps. The lab includes step-by-step instructions for someone new to these technologies to build a device ordering solution in less than a day. Technologies covered:

> **PowerApps**: 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 for Apps** (CDS for Apps): 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 PowerApps.
>
> **Microsoft Flow**: 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.

Once you've completed the lab, please share your feedback using the survey at http://aka.ms/appinadayLabSurvey.

For a list of additional learning resources and introductory videos, see http://aka.ms/powerapps-resources.

Lab structure and Learning Objectives

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

1. **01-PowerApps Canvas App Lab Manual**:
   Focuses on the basic concepts involved in building PowerApps Canvas apps. You will learn how to:
   - Connect to data sources and filter results based on certain 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 for Apps Lab Manual**:
   Introduces you to the Common Data Service for Apps (CDS for Apps). You will learn how to:
   - Create and customize a custom entity
   - Use the Form control
   - Save data into the Common Data Service using the Form control

3. **03-PowerApps Model-driven App Lab Manual**:
   Introduces you to building Model-driven PowerApps. You will learn how to:
   - Create a standalone Model-driven app.
   - Customize forms for the Model-driven app
   - Use of a Business Process Flow to guide the user through a process

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4. **04-Microsoft Flow Lab Manual**:
   Introduces you to Microsoft Flow. You will learn how to:
   - Create a flow that is triggered when a new Common Data Service record is created
   - Automate sending approval requests
   - Customize the approval based on the CDS record
   - Use the Approval center

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

Pre-requisites: Before starting the hands-on lab

Task 1: Download the Lab Files

1. **Save a local copy of the lab contents:** Download the **PAHandsOnLabContent.zip** file for the lab from **http://aka.ms/appinaday**. 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 PowerApps

1. **Confirm that you are licensed to use PowerApps:** Go to http://web.powerapps.com and sign-in with your business or school account. This is the same as your Office 365 or Dynamics 365 login.

2. **Plan 2 Trial of PowerApps:** Usage of the Common Data Service requires a PowerApps Plan 2 license. Go to https://powerapps.microsoft.com/pricing to start a free 30-day trial for Plan 2. For more detailed information on signing up for a free Plan 2 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 PowerApps Studio, which will run in a browser: Microsoft Edge, Internet Explorer 9+, Google Chrome, or Safari.

NOTE: If you are unable to sign-up for a PowerApps Plan 2 license using your organization credentials, you may provision a free Office365 demo tenant at http://aka.ms/Office365E5Trial. Use the demo tenant credentials to sign up for a PowerApps Plan 2 Trial.

Task 3: Install the PowerApps and Flow mobile applications

1. **Install the PowerApps mobile application**: Go to the app store on your mobile device. Search for "**PowerApps**" and install the PowerApps mobile application. If prompted, keep push notifications enabled.

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2. **Install the Microsoft Flow mobile application**: Go to the app store on your mobile device. Search for "Microsoft Flow" and install the Flow application. If prompted, keep push notifications enabled.

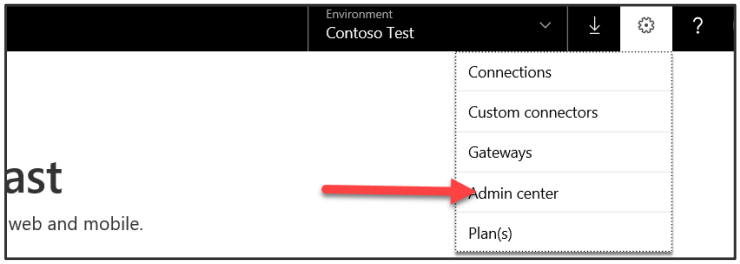
Task 4: Create a new environment and CDS for Apps database instance

You must have a newly created CDS for Apps environment and database instance, that was **created after Apr 1, 2018**. 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 PowerApps admin center by navigating to http://admin.powerapps.com in a web browser.

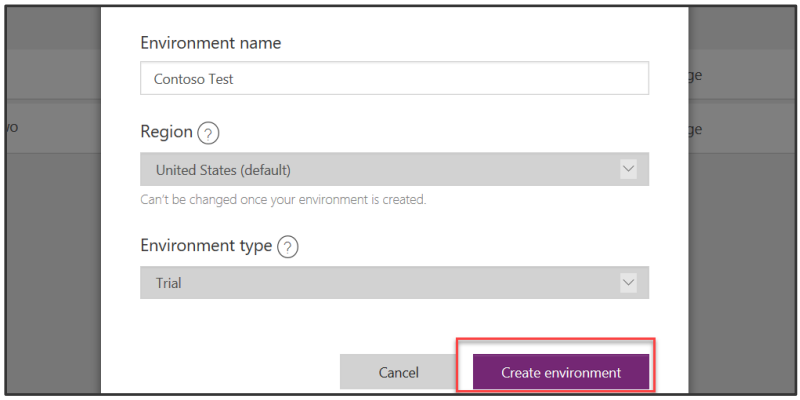
2. You may be prompted to sign up for a free PowerApps Plan 2 trial if you did not already complete this as part of a previous step.. Follow the prompts to start your Plan 2 trial, which will give you access to the admin center.

   Note: you can also access the admin center by signing in at http://web.powerapps.com and clicking the settings icon in the top right and selecting **Admin center.**



3. In the Admin center, select the **+New environment** option in the top right of the screen.

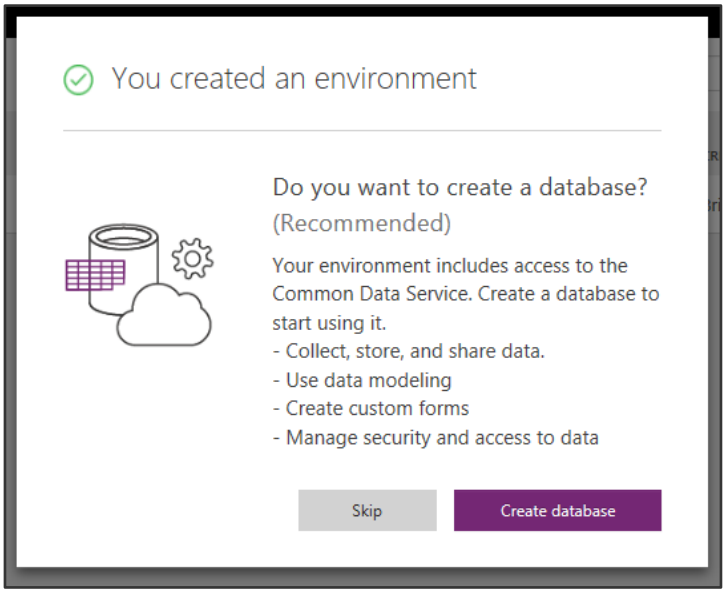
4. Provide a name for the environment**.** A common practice is to use your name followed by "Test" so it is clear this is a test environment.



5. Select your **Region**.

6. Select "Trial" as the **Environment Type.**

7. Click **Create Environment.**

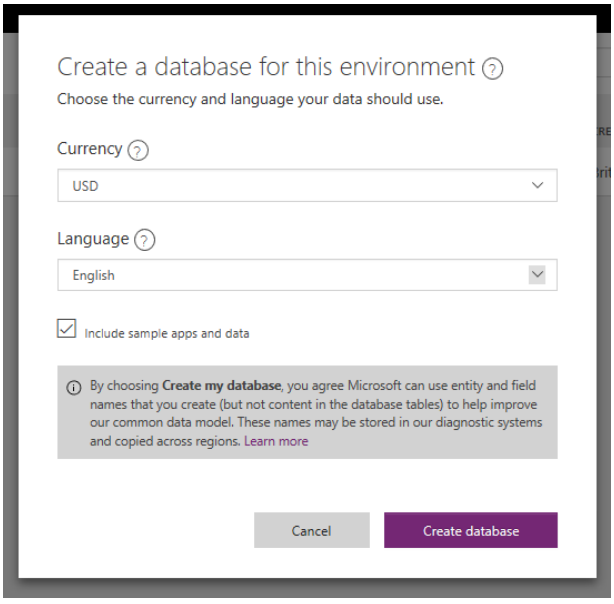


8. On the next screen, click **Create database**.

9. Select your **Currency.**

10. Select your **Language.**

11. Click **Create database**.



12. You will see a screen listing all environments that will show the newly created environment. Notice that the new CDS for Apps environment has a unique ID in the name, such as "org93c6433d" in the screenshot below. This is an easy way to differentiate the newer CDS for Apps environments from older CDS environments.

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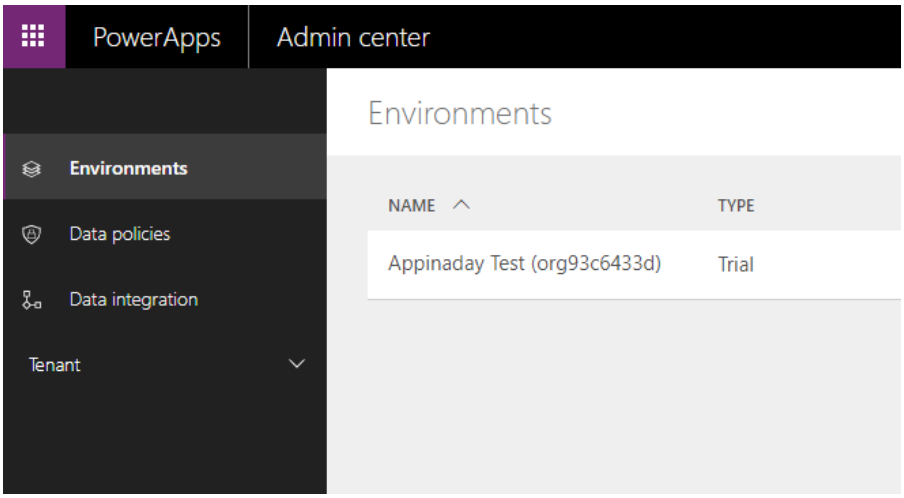
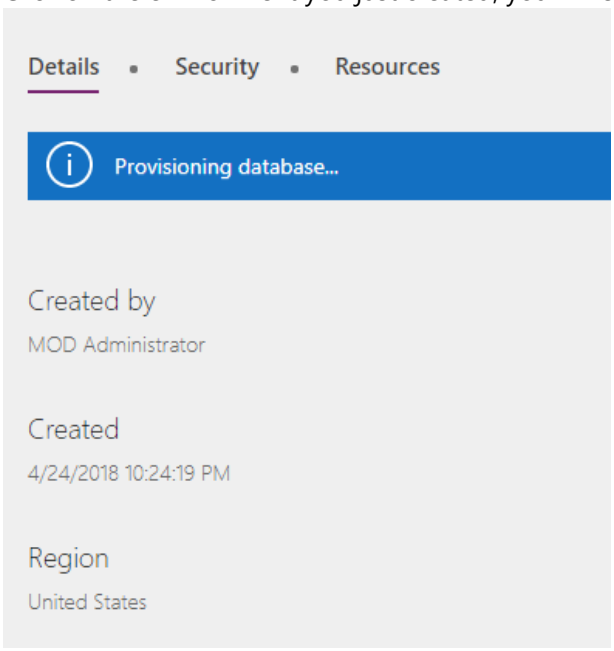


13. **IMPORTANT**: You need to wait for the database to finish provisioning before trying to create an application.

14. Click on the environment you just created, you will see a message – "Provisioning database…".



15. This may take a 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 "Provisioning database" message. You can then go 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 – PowerApps, Common Data Service, Microsoft Flow, and on (B) the lab content – the value of the learning experience and the quality of the documentation.

Please use the survey at **http://aka.ms/appinadayLabSurvey** to share your feedback.

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

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