Center of Excellence Starter Kit

The Center of Excellence (CoE) starter kit is a collection of components and tools that are designed to help get started with developing a strategy for adopting and supporting the Power Platform, with a focus on Power Apps and Power Automate.

Download the most updated assets from the **GitHub repository**.

The entire content package can be downloaded directly at **aka.ms/CoEStarterKitDownload**

1/3/20

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DISCLAIMER

The Center of Excellence (CoE) Starter Kit is not supported by the Power Platform product team (which is true for all tools available in this GitHub repo). We are a small team in Engineering who built this unsupported community sample solution for anyone to use and modify as their own, made available to customers on an as-is basis via an MIT license. It's possible you might run into some issues, such as installation problems, authorization issues, or bugs in the apps and flows within the solution.

Please, **do not raise support tickets for issues related to this toolkit** in the Power Platform Admin Center or any official product portal. Instead, kindly.

1. Make sure you have read through the entire documentation
2. If the issue is not addressed in the documentation, raise a new issue in the issues tab of this repo. Someone from the team will respond to your issue there.

PURPOSE OF THIS DOCUMENT

This document is targeted toward the person or department responsible for setting up a Microsoft Power Platform CoE in their organization. The goal of the document is to help you understand what the motivation as well as responsibilities of a Center of Excellence are, as well as walk you through the pre-requisites, setup instructions and individual components of the CoE Starter Kit.

HOW TO GET STARTED

While we recommend absorbing the document in its entirety, we thought it might be useful to give you some suggested areas on which to focus.

Motivation
• Learn about the goals, roals and responsibilities of a Microsoft Power Platform Center of Excellence

Pre-Requisites
• Get familar with the pre-requisites to install the CoE Starter Kit

Setup Instructions
• Follow the setup instructions carefully to set up the CoE Starter Kit in your environment

Individual Components
• Find out what components, apps and flows are in the CoE Starter Kit

MOTIVATION

Power Apps and Power Automate have drastically matured as a platform since 2017. When it was first announced and gained popularity, there was more focus on understanding and adjusting to the nature of the product and how it could best be utilized on an individual level. Nowadays, Power Apps and Power Automate have achieved much more widespread adoption, and companies are looking to understand how to scale adoption throughout their own organizations in a maintainable way to fully benefit from it.

Developing a Power Platform Center of Excellence (CoE) is a high-level goal, a Center of Excellence is a coordinating function which ensures that change initiatives are delivered consistently and well, through standard processes and competent staff.[1] Establishing a Microsoft Power Platform CoE means investing in and nurturing organic growth while maintaining governance and control. A CoE is designed to drive innovation and improvement, and through its central function can break down geographic and organizational silos in order to bring together like minded people with similar business goals to share knowledge and success, experiment and encourage each other, whilst at the same time providing standards, consistency and governance to the organization. In summary, a CoE can be a powerful way for an organization to align around business goals rather than individual department metrics.

There are multiple responsibilities of an established CoE, and it's up to each organization to figure out how they decide to define parameters for those responsibilities.

| Administration & Governance	Nurture	Support & Operations
Secure	Evangelism and training	Level 2/3 Support
Monitor	Technical guidance	Helpdesk awareness
Alert and Act	Standards and components	Application Lifecycle Management
		Infrastructure automations

The Center of Excellence Starter Kit is a template that might not match every organization's requirements, so it's recommended that you extend the solution to fit your organization's requirements defined by your CoE.

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[1] Stephen Jenner and Craig Kilford, in Management of Portfolios

PHILOSOPHY

A Power Platform Center of Excellence is a group in an organization that takes ownership of the Power Platform administration, nurturing and operations support. Part of devising a strategy for this requires interaction with the platform directly.

Follow this process when thinking about the medium in which a Center of Excellence strategy should be executed:

| Admin Center | Platform extensions | Templates and customizations |
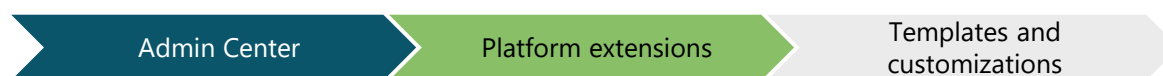
Admin Center The core, most important capabilities for admins and makers exist in the supported product portal features. These features are designed to be the easiest and most robust way to complete tasks, and are fully supported by the engineering team:

- Environment and Environment Security management
- Data Loss Prevention (DLP) policy management
- Data integration and Gateway management
- Admin Analytics (to view Capacity and activity on CDS, PowerApps and Flow)
- Support ticket requests

The admin centers include:

- Power Platform Admin Center
- Power Apps Admin Center
- Power Automate Admin Center
- Dynamics 365 Admin Center

Platform extensions There are four connectors that provide access to the same APIs that the out-of-box product use. These have been exposed through the connectors library to give users the ability to create custom solutions to execute administrative or governance related tasks.

Admin connectors (Announcement):

- Power Platform for Admins
- PowerApps for Admins
- Flow Management
- PowerApps for App Makers

Templates & customizations The CoE starter kit falls into this category, which is a set of templates that use the admin connectors in combination with other connectors and formulas to achieve some specified goal. The nature of a template is to provide a good solution for that specific task, but it might not have the exact functionality that everyone needs and could require adjustment to achieve what others might be looking for. It is better to first explore the other two options before instantiating a template, unless it's clear that the template has everything you need from the start.

COE STARTER KIT EXPLAINED

The CoE Starter Kit is a collection of components and tools that are designed to help get started with developing a strategy for adopting and supporting the Power Platform, with a focus on Power Apps and Power Automate. It contains solutions that **help** manage resources and information about those resources.

The kit **does not represent the entire Center of Excellence**, because **managing a CoE requires more** than the tools alone; the Center of Excellence also requires people, communication, defined requirements and processes. The tools provided here are just a means to get to the end goal, but the Center of Excellence itself must be thoughtfully designed by each organization based on their needs and preferences.

Download the most updated assets from the GitHub repository aka.ms/coestarterkitrepo.

The kit provides some automation and tooling to help teams build monitoring and automation necessary to support a CoE. The foundation of the kit is a Common Data Service (CDS) data model and workflows to collect resource information across the environments in the tenant. The kit includes multiple Power Apps and Power BI analytics to view and interact with the data collected. The kit also provides several assets that provide templates and suggested patterns and practices for implementing CoE efforts.

The CoE Starter Kit is shipped in three modules:

1. **Center of Excellence – Core Components**
   These components provide the core to get started with setting up a CoE – they sync all your resources into entities and build admin apps on top of that to help you get more visibility of what apps, flows and makers are in your environment. Additionally, apps like the DLP Editor and Set New App Owner help with daily admin tasks.
   The Core Components solution only contains assets relevant to admins.
2. **Center of Excellence – Audit and Report Components**
   Once you are familiar with your environments and resources, you might start thinking about audit and compliance processes for your apps. You might want to gather additional information about your apps from your makers, you might want to audit specific connectors or app usage - the apps and flows part of this solution help you get started.
   The Audit and Report Components solution contains assets relevant to admins and makers.
3. **Center of Excellence – Nurture Components**
   An essential part of establishing a CoE is nurturing your makers and an internal community. You will want to share best practices and templates and onboard new makers – the assets part of this solution can help develop a strategy for this motion.
   The Nurture Components solution contains assets relevant to everyone in the organization, admins, makers as well as end users of apps and flows.

We recommend getting started and familiar with the **Center of Excellence – Core Components** before adding the Audit&Report and Nurture components.

PREREQUISITES

The following are prerequisites for installing the CoE starter kit as it comes in the solution.

1. **Admin account**
   a. Power Platform Service Admin, Global tenant admin or Dynamics 365 service admin for access to all tenant resources through the PowerApps APIs.
   b. This solution will still work for Environment admins, but the view will be restricted to only the environments an Environment admin has access to.
   c. Dynamics 365 service admin is required for getting details on Model Driven Apps and Solution Aware Flows.
2. **PowerApps Premium License** (Per App, Per User or Dynamics 365 Online licenses)
   This is for using the CDS solution.
3. **Environment with a CDS instance**, where the user installing the solution has System Administrator security role.
4. **Download of the Center of Excellence Solution** and Power BI dashboard files to your device.
5. Both the Audit and Report Components and Nurture components solution require the **Core Components solution to be installed**

These are the requirements for using the solution.

1. Power Apps Premium License (Per App, Per User or Dynamics 365 Online licenses)
2. For the **Core Components** solution, only the admins need a Premium License. For the Audit and Report Components, all makers require a Premium License. For the Nurture components, everyone will require Premium License.

WHERE THE DATA COMES FROM

The "Admin | Sync Template" Flows crawl through all the resources stored in the Power Platform and makes a copy of details in each resource (e.g., apps and flows) to the CDS (entity definitions are provided in this solution). All data displayed in most of the starter kit components are dependent on the data first being in CDS, which means that the sync template must be configured for everything else to work.
The Sync Flows run daily overnight. When you first set up the CoE Starter Kit, you can manually start the **Admin | Sync Template v2** which will start the process of crawling and storing the information in CDS.

NOTE: INSTRUCTIONS TO GRANT ACCESS AND ASSIGN SECURITY ROLES CAN BE FOUND IN THE SETUP INSTRUCTIONS SECTION.

COE SOLUTION GUIDE

Follow these steps to install the CoE Starter Kit in your tenant:

1. **Download the starter kit** at aka.ms/coestarterkitrepo
2. **Extract the .zip file –** it will contain the solutions (CenterofExcellencexxxComponents_x_xx_managed.zip), the documentation as well as all non-solution aware components
3. **Select a non-production environment**, or create a new one that has a CDS instance provisioned (example name: "Center of Excellence Development")
4. **Locate and install the MANAGED Core Components solution** "CenterofExcellenceCoreComponents_x_xx_managed.zip"
5. Follow to **setup instructions** to finishing setting up the CoE Starter Kit

If you wish to extend the CoE Starter Kit by making modifications to the solution components:

6. **Create a new UNMANAGED solution**
7. **Choose components from the CoE starter kit to add to your new solution**, you decide which ones you want to use.
    a. It is mandatory to include the Environment Variables in your new unmanaged solution and setting the Default Value for them
8. **Extend the CoE starter kit** by making modifications to the solution components in the context of your new unmanaged solution.
9. If you are **extending canvas apps**, create a copy of the app from the managed solution and add the unmanaged copy of the app to your unmanaged solution.
10. **Deploy to test and production**. We recommend making modifications and installing updates pushed by our team to the solution in a development environment dedicated to this kit and hosting a production environment that has the real data. If data is being accessed and contributed by other end users, that would be a scenario to have a dev/test/prod environment.

NOTE: FULL INSTALLATION INSTRUCTIONS CAN BE FOUND IN THE INSTALLATION SECTION.

RECENT CHANGES TO THE COE STARTER KIT

Previously, the CoE Starter Kit was shipped as one package (solution). In order to make it easier for you to get started with the installation and deployment, we have split the components into three solutions.

1) If you are **new** to the CoE Starter Kit, start by installing the CoE Starter Kit – Core Components by following the Setup Instructions
2) If you have **previously installed the CoE Starter Kit UNMANAGED solution**, uninstall the solution before installing the CoE Starter Kit – Core Components solution.
3) If you have **previously installed the CoE Starter Kit MANAGED solution** and have already started collecting metadata for your apps through the Developer Compliance Center, export the data in the PowerApps App entity, uninstall the CoE Starter Kit solution, install the CoE Starter Kit – Core Components solution and re-import the PowerApps App entity data
    a) Navigate to make.powerapps.com → Solutions → Center of Excellence solution

b) Open the PowerApps App entity
c) Select Export Data

d) Wait for the export to be done and download the exported data

Export data

Download exported data

e) Navigate back to the solution and select Delete

f) After you install the new solution, navigate to the solution and open the PowerApps App entity
g) Select Get Data → Get Data from Excel and upload the Excel file

INSTALLING UPDATES

Periodically, the solution will receive updates to implement new features and fixes for bugs or optimizations. These updates will be announced on the GitHub repo and can be downloaded from there or the direct download at https://aka.ms/CoEStarterKitDownload

Install the updates by importing the latest version to the environment where you originally installed the solution.
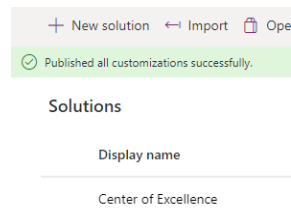
Known Limitations: Currently, only model-driven components and CDS entities will be updated with managed solution updates. Canvas Apps and Flows will be replaced during an update. If you are extending and customizing canvas apps, you will need to make a copy of the app first (which will not receive updates).

If you originally installed the UNMANAGED solution, uninstall that solution and re-install the MANAGED solution to correctly receive all updates.

COMPONENTS OVERVIEW

The following section provides an overview of each component included in the CoE starter kit. Some are included in the solution package (called 'Solution Aware'), and others live just outside of the package ('Non- Solution Aware').

Solution	Scenario	Starter Kit Component
Core Components	Catalog tenant resources	1. CDS Entities: Environments, Apps, Flows 2. Admin | Sync Template v2 (Flows) – all, Apps, Flows, Custom Connectors, Connectors, Model Driven Apps 3. Admin | Sync Audit Log (Flow) 4. Power BI Dashboard 5. Custom Connector for Office 365 Audit Logs 6. Power Platform Admin View (Model Driven App)
	DLP Strategy and Visibility	7. DLP Editor (Canvas App) 8. DLP Customizer (Canvas App)
	Change App Ownership	9. Set New App Owner (Canvas App)
Audit and Report Components	Sample Audit Process	10. Developer Compliance Center (Canvas App) 11. Flow – Compliance detail request 12. Business Process Flow for Auditing resources
	Archive unused apps	13. App Archive and Clean Up – Start Approval and Check Approval (Flows)

		14. App Archive and Clean Up Admin View (Model Driven App)
	Act based on certain connector usage	15. Find and add admins as owners for apps that leverage certain connectors (Flow) 16. Find and disable flows that leverage certain connectors (Flow)
Nurture Components	Onboard new makers, provide training and share best practices	17. Admin | Welcome Email (Flow) 18. Template Catalog (Canvas App) 19. Admin | Newsletter with Product Updates (Flow) 20. Training in a day Management and Registration (Canvas Apps) 21. Training in a day Feedback Reminder, Registration Confirmation and Reminder (Flow)
	Encourage Adoption	22. App Catalog (Canvas App)

Find more info about the individual components under **Detailed Overview of all components.**

CORE COMPONENTS - SETUP INSTRUCTIONS

There are multiple components provided in this starter kit, each will require some configuration to install. The installation instructions have been segmented based on the set of components that should be grouped and installed together, and dependencies on other segments are outlined in each section.

### STEP 1: INSTALL THE SOLUTION

DESCRIPTION

This is the first setup step of the installation process and is required for any other component in the starter kit to work.
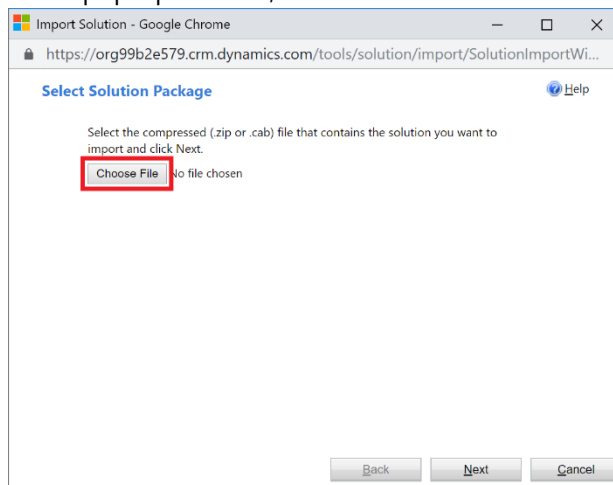
First, import the Center of Excellence – Core Components solution but follow the same steps below once you are ready to install the Audit and Nurture components.

INSTRUCTIONS
1. Make sure you've downloaded the CoE starter kit compressed file (aka.ms/CoeStarterKitDownload)
2. Go to a **non-default** Environment where the solution will be installed
   a. Go to https://make.powerapps.com
   b. Navigate to the Environment the CoE solution will be hosted in. In the screenshots example, we're importing to the Environment called 'Contoso CoE'.
3. Select Solutions on the left navigation bar.
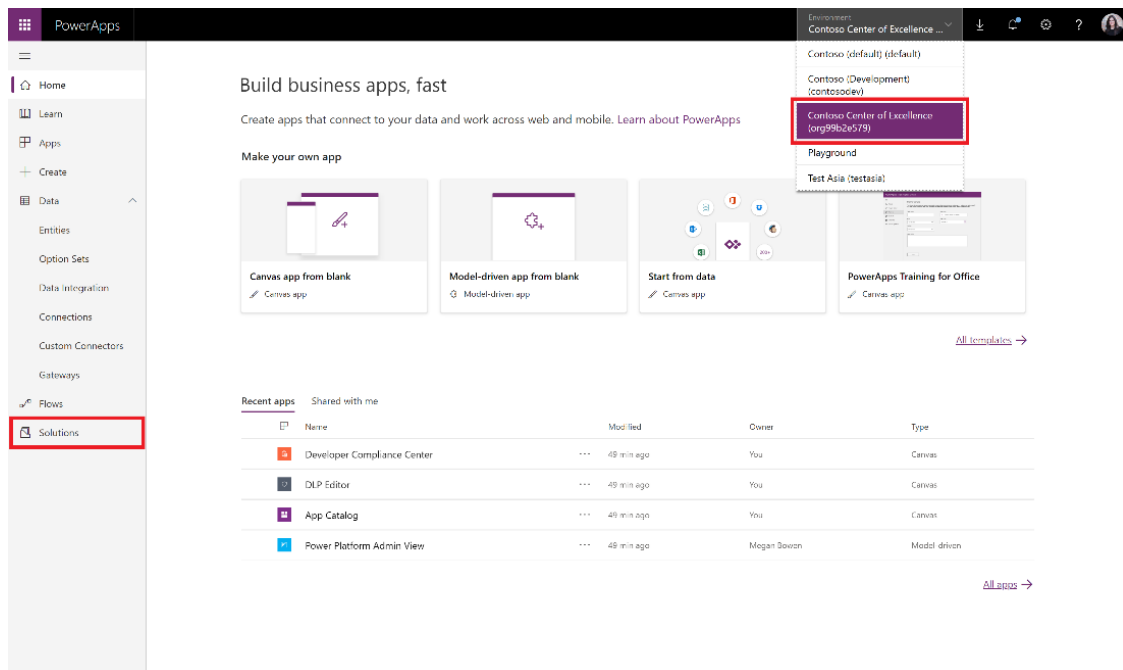
4. Select **Import**, and a pop-up window will appear (make sure to disable the pop-up blocker in your browser and try again if nothing happens when clicking the Import button).

5. In the pop-up window, select **Choose File**.

6. Choose the MANAGED **Power Platform** solution from the file explorer (CenterOfExcellenceCoreComponents_x_x_x_xx_managed.zip).
7. When the solution compressed (.zip) file has been loaded, click **Next**.
8. Review, click **Next**, then click **Import**. (This can take some time.)
9. When the import succeeds, the list of the components that were imported is displayed.

NOTE: SOMETIMES FLOW COMPONENTS SHOW A WARNING MESSAGE AND A DUPLICATE RECORD OF THAT COMPONENT. YOU CAN IGNORE WARNINGS FOR FLOWS

10. Click **Publish All Customizations**. This is good practice to follow whenever you make changes to a solution, but especially so when importing.

STEP 2: CONFIGURE COE SETTINGS

DESCRIPTION

This section explains how to enter data in this entity, which represents the settings for other components in the solution. It should be completed second.

DEPENDENCIES

- **Canvas Apps**. The optional branding details (e.g., logo, brand colors) in all the canvas apps are pulled from this entity. Optional support and community channel links are also used.
- **Optional Flows**. The optional branding details and support channel links are used in the Flows used for communication. You also will configure links to the canvas apps in the settings. The main Flow that syncs data to the resource entities do not depend on this setting configuration.

INSTRUCTIONS

1. Navigate to https://make.powerapps.com/, click on Apps and open the Power Platform Admin View model driven app in Play mode.
2. In the left navigation, click on Configure (under Settings)
3. In the Settings view screen, click on "+ New" to create a new record
4. Provide values

Brand Logo	Link to your Brand Logo
Brand Primary Color	HEX Value of your primary brand color (#cccccc)
Brand Secondary Color	HEX Value of your secondary brand color (#dddddd)
Email End User Support	Email Address for your Helpdesk or EUC Support Team
Email Maker Support	Email Address for your Power Platform Maker Support Team
Link to Community Channel	Link to your internal Power Platform Community (Yammer, Teams)
Link to Learning Resource	Link to internal Power Platform Learning Resources or Training or you could link to aka.ms/PowerUp
Link to Policy Documentation	Link to internal Power Platform Policies, these could be hosted in a Teams Channel or SharePoint site

5. Save by clicking CTRL + S or by clicking the Save button in the bottom right corner.
6. Do not add more records to the CoE Settings table, there is no need. The dependent components will always get values from the first record so there only needs to be one record in this table.

STEP 3: UPDATE ENVIRONMENT VARIABLES

DESCRIPTION

This step should be completed after the first two steps above. The Environment Variables are used to store application and flow configuration data. This means, you only have to set the value once and it will be used in all necessary flows and apps.

DEPENDENCIES

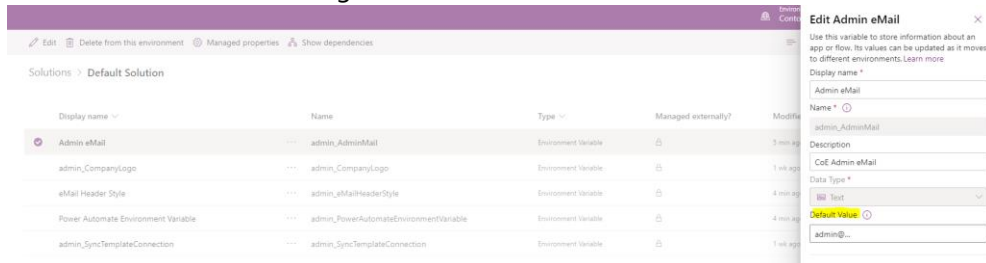The 'Sync' flows depend on all Environment Variables being configured.

INSTRUCTIONS

1. Go to the **Default Solution** solution.
   a. Navigate to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
   b. In the left navigation, click on **Solutions**, then select the **Default Solution** solution

2. You will see an error at the top, notifying you that Environment Variables need to be configured. Note: For the Core Components solution, it will be **3** environment variables that need to be configured.

   ⚠ 9 environment variables need to be updated. See environment variables

3. Filter the Default Solution to only show Environment Variables by changing the view to Environment variable on the right hand side
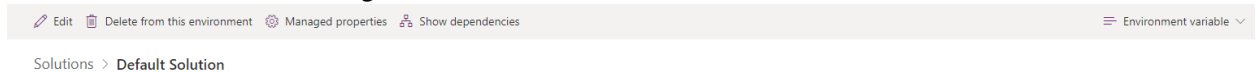
4. Click on a variable and configure the **Default Value**

5. You will configure the following Variables for the Core Components solution

Power Automate Environment Variable	For a US environment https://us.flow.microsoft.com/manage/environments/ For an EMEA Environment https://emea.flow.microsoft.com/manage/environments/
Admin eMail	eMail address used in Flows to send notifications to Admins, either your email address or a distribution list
eMail Header Style	CSS Style used to format emails that are sent to admins and makers.

We recommend the following value for the eMail Header Style:

```
<head> <style>
body {
    background-color: #efefef;
    font-family: Segoe UI;
    text-align: center;
}

#content {
    border: 1px solid #742774;
    background-color: #ffffff;
    width: 650px;
    margin-bottom: 50px;
    display: inline-block;
}

#logo {
    margin-left: 52px;
    margin-top: 40px;
    width: 60px;
    height: 12px;
}

#header {
    font-size: 24px;
    margin-left: 50px;
    margin-top: 20px;
    margin-bottom: 20px;
}

#ribbon {
    background-color: #742774;
}

#ribbonContent {
    font-size: 20px;
    padding-left: 30px;
    padding-top: 10px;
    padding-bottom: 20px;
    color: white;
    width: 100%;
    padding-right: 10px;
}

#message > td {
    font-size: 14px;
    padding-left: 60px;
    padding-right: 60px;
    padding-top: 20px;
    padding-bottom: 40px;
}

#footer > td {
    font-size: 12px;
    background-color: #cfcfcf;
    height: 40px;
    padding-top: 15px;
    padding-left: 40px;
    padding-bottom: 20px;
}

#form {
    width: 100%;
    border-collapse: collapse;
}

#app {
    width: 60%;
    font-size: 12px;
}

.label {
    color: #5f5f5f
}

table {
    border-collapse: collapse;
    width: 100%;
}

th, td {
    padding: 8px;
    text-align: left;
    border-bottom: 1px solid #ddd;
}

</style> </head>
```

6. Confirm values by clicking **Save**

STEP 4: INSTALL THE SYNC TEMPLATE FLOWS

DESCRIPTION

This step should be completed after the first three steps above. The Flows with the prefix 'Sync' are required for populating data in the 'resource' related CDS entities (Environments, PowerApps Apps, Flows, Connectors and Makers).

DEPENDENCIES

The 'Sync' Flows are used to write data from the admin connectors into the CDS entities. None of the other components will work if the Sync Flows aren't successfully configured and have executed.

There are multiple ways to import these Flows, and not all the Flows are required. Please read the description of each Flow to understand which ones are required and how to import it.

Required Flows to sync data to the resource entities:

1. **Admin | Sync Template v2**
    Flow type: Scheduled (daily by default)
    Description: This Flow syncs environment details to the CoE CDS Entity 'Environments'
2. **Admin | Sync Template v2 (Apps, Custom Connectors, Flows, Model Driven Apps)**
    Flow type: Automated
    Description: This Flow rely on the Admin | Sync Template v2 and are triggered automatically when environment details are created or modified in the CoE CDS Entity 'Environments'. These Flows then crawl environment resources and store app, flow, connector data in the entities 'PowerApps App', 'Flow', 'Connection Reference', 'Maker'.
3. **Admin | Sync Template v2 (Connectors)**
    Flow type: Scheduled (daily by default)
    Description: This Flow stores all connector information in the CDS Entity 'PowerApps Connector'.
4. **Admin | Sync Template v2 (Sync Flow Errors)**
    Flow type: Scheduled (daily by default)
    Description: If any of the Sync Flows fail, the failure is stored in the CDS Entity 'Sync Flow Errors'. This scheduled flow sends a report of failures to the admin.

Optional Flows to sync audit log data (unique users and launches):

5. **Admin | Sync Audit Logs**
    Do not install this Audit Log Flow yet. This will be covered in the Audit Logs setup instructions because it has additional requirements. Also, although this flow is provided in the solution, you will be installing the Flow package outside of the solution.

INSTRUCTIONS

The Flows are all stored in the solution. It is automatically available in the Environment when you import the solution, but there are two options to consider. Option 1 takes longer to configure than option 2 but is also easier to receive updates.

#### OPTION 1: KEEP FLOW IN THE SOLUTION AND UPDATE EACH ACTION CONNECTION

Use this option if you would like to continue receiving updates to the Flow through this solution. This takes longer to set up because the connections for each action need to be individually configured.

1. Go to the Center of Excellence solution.
   a. Navigate to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
   b. In the left navigation, click on **Solutions**, then select the **Center of Excellence** solution

2. Click on the Flow name to get to the details screen, then select 'Edit'
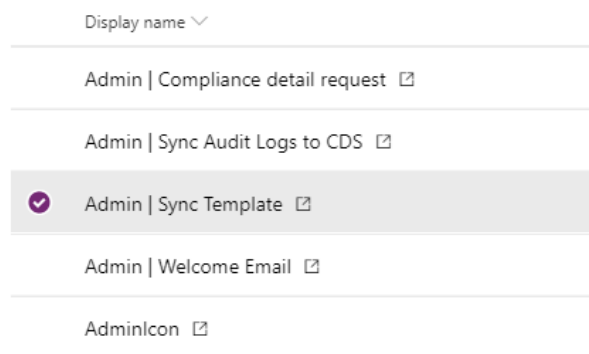
3. The Flow will open in the maker studio. For each action that requires a connection, there will be a warning icon on the right side of the action. This indicates the need for a connection to be selected.
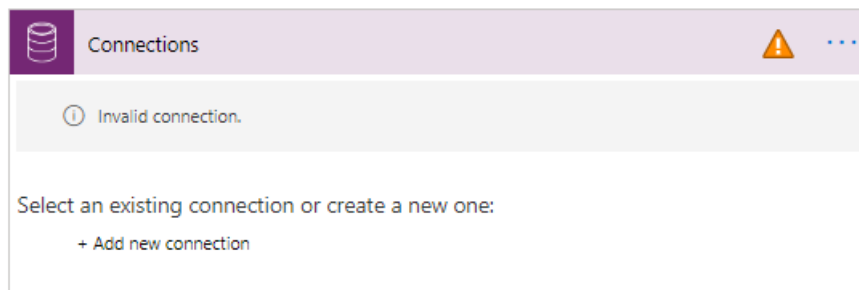

   a. Some connections will need to be created if not already available
   b. Some actions might be hidden within other built in actions, such as a condition or scope. Expand these actions to find the hidden ones so

4. Once all actions have a connection, save the Flow.
5. Repeat the above steps for Admin | Sync Template v2 – Apps, Connectors, Custom Connectors, Flows, Model Driven Apps and Sync Flow Errors
6. Ensure the Flows are Turned On

OPTION 2: SAVE A COPY OF THE FLOW OUTSIDE OF THE SOLUTION

Save a copy of the Flow from the solution and the connections are created automatically for you. The drawback from this method is that if you copy the Flow from the solution, the copy Flow does not get updated when you update the solution package with newer versions. You will just have to import the individual flow package updates instead or re-install the updated versions.
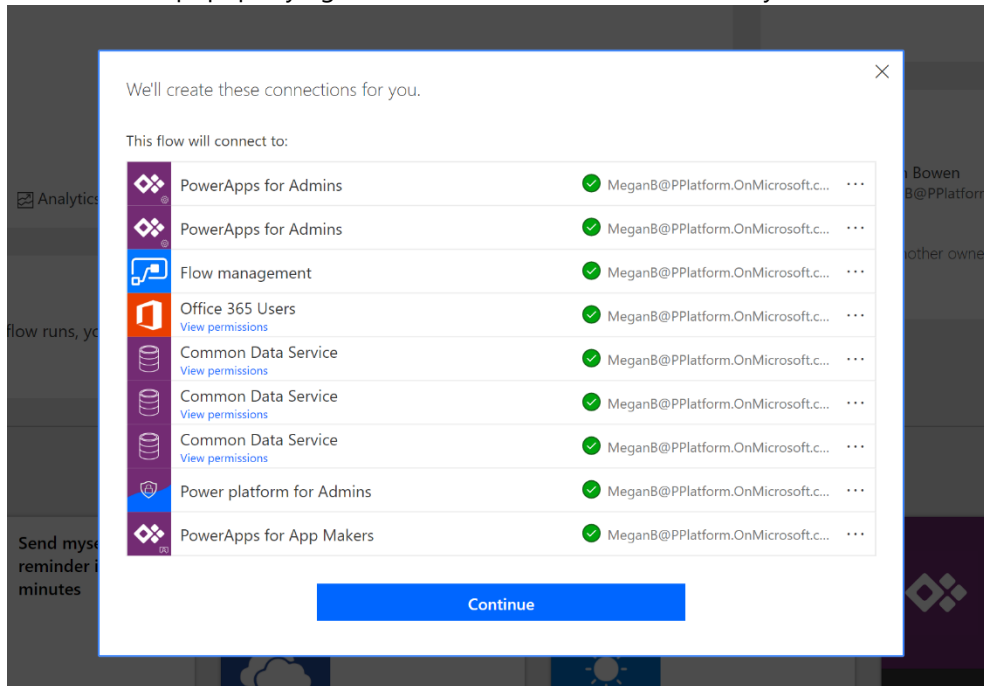
1. Go to the Center of Excellence solution.
   a. Navigate to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
   b. In the left navigation, click on **Solutions**, then select the **Center of Excellence** solution

2. Click on the display name of the Flow you want to enable. This will open a new tab to the Flow's details page.
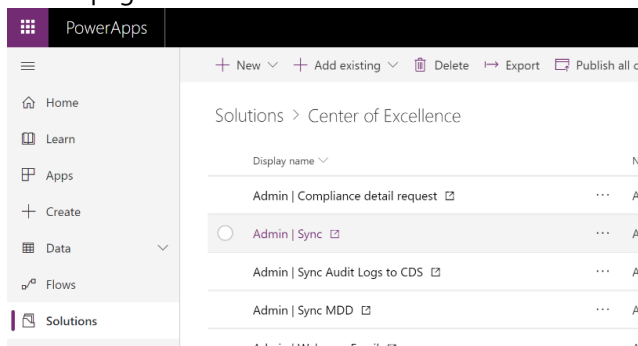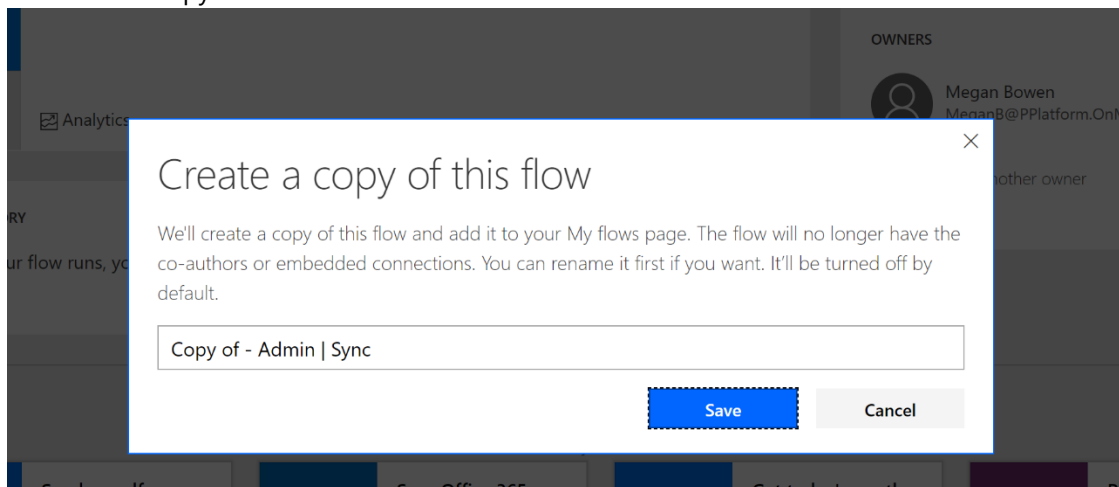

3. Select **Save As** in the ribbon
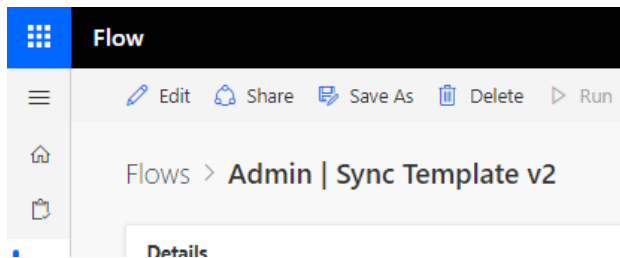
4. A window will popup saying, "We'll create these connections for you". Click Continue.


5. Rename the copy if desired. Click **Save**.

6. At this point, the copy has been created. You can view the Flow in the **My Flows** page in the left navigation. Remember that the copy of the Flow will NOT be visible in the Center of Excellence solution.

STEP 5: CONFIGURE THE POWER BI DASHBOARD

INSTRUCTIONS

1. Get the organization URL
   a. Go to the Power Platform Admin Center (https://aka.ms/ppac)

b. Click on Environments, and select the Environment where the Center of Excellence solution is installed

c. Copy the organization URL in the details window.
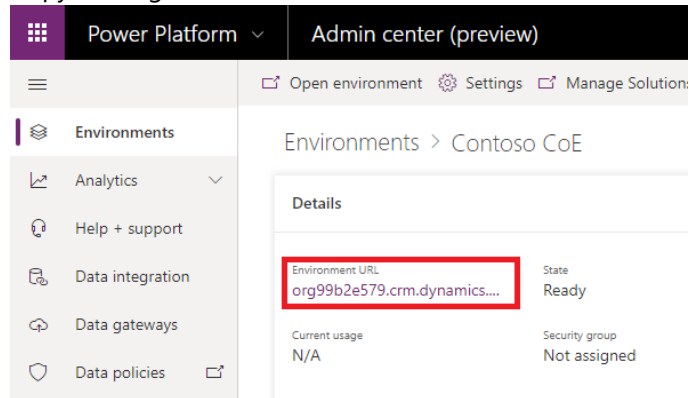
d. If the URL is cut off, you can see the full URL by clicking See all > Environment URL
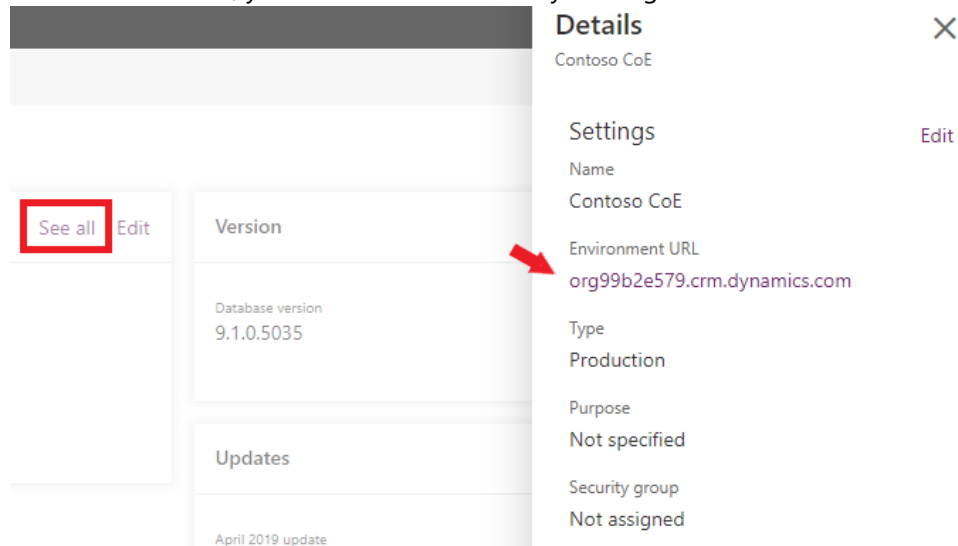
2. Open the **PowerPlatformAdminDashboard.pbix** file, which can be found in the CoE Starter Kit pack you downloaded.

3. Sign-in to your account that has access to the entities.

4. Go to **Edit Query** in the top ribbon (under Home).
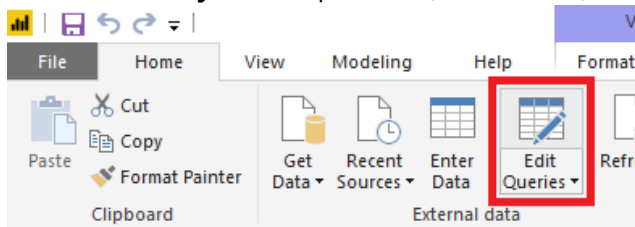
5. Select the OrgUrl parameter and replace the URL with your instance's URL. Make sure to keep the 'http**s**://'.
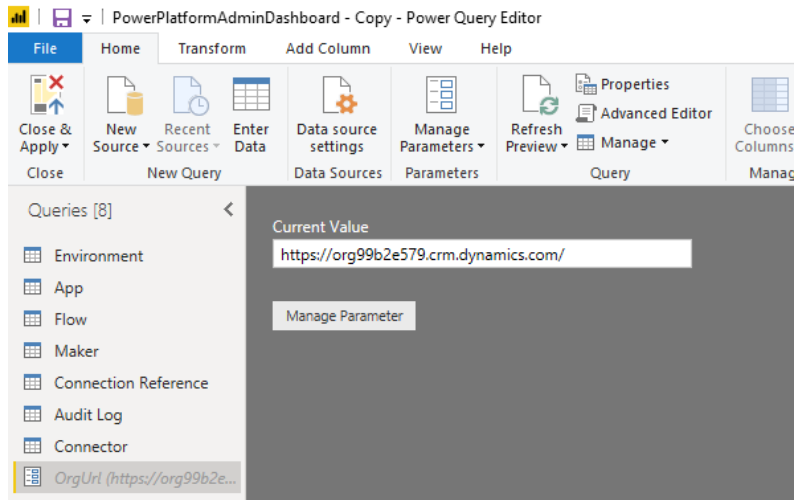
6. Click **Edit Credentials**
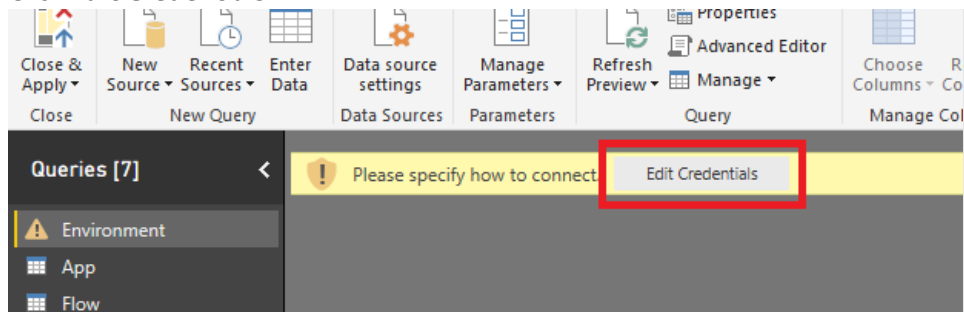
7. Sign-in to your Organizational account. Once signed in, click **Connect**.
8. A preview of the data will load into your table.

9. You may publish this report to a workspace if desired.
10. Click **Close & Apply**.

STEP 6: SETUP AUDIT LOG SYNC

DESCRIPTION

This Flow connects to the Office 365 Audit Log to gather telemetry data (unique users, launches) for Power Apps apps. The Flow uses a custom connector to connect to the Office 365 Audit Log. In the instructions below, we will setup the custom connector and configure the Flow.

DEPENDENCIES
This step is optional, however if you skip it, the usage information will show up as blank in the Power BI dashboard.

KNOWN ISSUES
If your Admin account is protected with MFA, using Basic Authentication to authenticate will not work. We are working on documentation for setting the custom connector up for accounts that use MFA.

INSTRUCTIONS
Make sure the account that is used to configure this section has permission to access the audit logs. Global tenant admins have access to the audit logs by default and can grant access to the audit logs for other user accounts or groups through the Exchange Admin Center.

Keep in mind that once a user account has access to the audit logs, they have access to all audit logs across every Microsoft service that reports telemetry to audit logs.

1. Install the custom connector
   a. Go to https://flow.microsoft.com and set the current Environment to the same Environment where the Center of Excellence solution is installed.
   b. In the left navigation, expand Data and click Custom Connectors
   c. Click + New custom connector – Import an Open API file
   d. Provide a connector name (Office 365 Audit Logs) and select the .swagger file that is which can be found in the CoE Starter Kit pack you downloaded.

   e. Click on **Create Connector**
   f. You don't need to change the Security and Definition information, to test the connector select 4. Test

g. Click on New Connection to create a connection to your connector

h. Enter the email address and password of the user that has access to the Audit Logs in the connection window and select Create connection

i. Select the refresh icon in the right-hand corner of the Connections area to ensure the new connection is selected

j. Provide a Start Date and End Date for the GetActivitiesByOperation

k. Click **Test Operation**

l. You should receive a (200) response which indicates a successful execution of the query

m. You can find more information on how to configure a custom connector here: https://docs.microsoft.com/en-us/connectors/custom-connectors/define-openapi-definition#import-the-openapi-definition

2. Import the Flow Template compressed (.zip) package called SyncAuditLogs.zip.
    a. Go to https://flow.microsoft.com and set the current Environment to the same Environment where the Center of Excellence solution is installed.
    b. In the left navigation, navigate to the Flows tab
    c. Click Import in the top
    d. Select the **Flow-SyncAuditLogs.zip** package, click import
    e. Connect the connections
    f. Once the connections are configured, click Import
    g. Open the Flow and make sure there are no errors for any of the actions.
    h. Click the back arrow in the upper left to go back to the Flow details screen. If the Flow is not yet on, turn on the Flow and run it to start syncing audit log data to the CDS entity.

STEP 7: SHARE APPS WITH OTHER ADMINS

The Core Components solution does not contain any apps for makers or end users, but only admin specific apps:

1. Power Platform Admin View
2. DLP Editor
3. DLP Customizer
4. Set New App Owner

The user account who uploaded the solution and the Environment admin of the Environment the solution exists in will have full access to the solution, however you might want to share these apps with specific other users. Find more information on sharing in the Appendix Sharing Apps.

Once the Sync Flows have finished running (depending on the number of environments and resources, this can take a few hours) **you are ready to use the Core Components of the CoE Starter Kit**. These components are designed to give admins better visibility and overview of resources and usage in their environments. None of the components are to be shared with makers or end users.

Start by opening the Power Platform Admin View app to see how many apps and flows you have, and who your top makers are and then use the Power BI Dashboard to get even further insights.

AUDIT AND REPORT COMPONENTS - SETUP INSTRUCTIONS

There are multiple components provided in this starter kit, each will require some configuration to install. The installation instructions have been segmented based on the set of components that should be grouped and installed together, and dependencies on other segments are outlined in each section.

STEP 1: INSTALL THE SOLUTION

DESCRIPTION

This is the first setup step of the installation process and is required for any other component in the starter kit to work.

DEPENDENCY

The Audit and Report Components solution requires the Core Components solution to be installed first.

INSTRUCTIONS

1. Follow the instructions detailed under **Core components - Setup Instructions**
2. Import the CenterOfExcellenceAuditComponents_x_x_x_xx_managed.zip

STEP 2: (OPTIONAL) CREATE A SHAREPOINT DOCUMENT LIBRARY

DESCRIPTION

The Archive and Clean Up Flows archive apps to a SharePoint library. If you are intending to make use of those flows, a SharePoint site and document library need to be configured first.

DEPENDENCIES

The Admin | Archive and Clean Up Flow depends on a SharePoint document library.

INSTRUCTIONS

1. Follow the steps described under https://support.office.com/en-us/article/create-a-team-site-in-sharepoint-ef10c1e7-15f3-42a3-98aa-b5972711777d to create a new Team Site
2. Follow the steps described under https://support.office.com/en-us/article/create-a-document-library-in-sharepoint-306728fe-0325-4b28-b60d-f902e1d75939 to add a Document Library to your new Team Site. Name the document library **PowerAppsArchive**
3. Ensure you set up the correct permissions for your SharePoint site, we would recommend only your Admin team should have contribute access to the site.

(OPTIONAL) STEP 3: CREATE AN AZURE AD SECURITY GROUP

DESCRIPTION

The Admin | Find and add admins as owners for apps that leverage certain connectors flow adds the Admin Security Group to apps; it is therefore required to configure the Admin Security Group first.

DEPENDENCIES

The Admin | Find and add admins as owners requires an Azure AD Security Group.

INSTRUCTIONS

1. Follow the steps described here to create a new Azure AD Group https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-groups-create-azure-portal
2. Once created, add your Admin team to the Azure AD Security Group

3. Make note of the **Object Id** of the Group which is needed to share an app with your group.

STEP 4: UPDATE ENVIRONMENT VARIABLES

DESCRIPTION

This step should be completed after the first step above. The Environment Variables are used to store application and flow configuration data. This means, you only have to set the value once and it will be used in all necessary flows and apps.

DEPENDENCIES

All Flows in this solution depend on all Environment Variables being configured.

INSTRUCTIONS

1. Go to the **Default Solution** solution.
   a. Navigate to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
   b. In the left navigation, click on **Solutions**, then select the **Default Solution** solution

2. You will see an error at the top, notifying you that Environment Variables need to be configured. Note: For the Audit and Report Components solution, it will be **4** environment variables that need to be configured.

3. Follow the steps under **Step 3: Update Environment Variables** to update the environment variables for the Audit and Report components solution.

Archive Site URL (SharePoint Site)	The Archive and Clean Up Flow archives app files (.msapp) to a SharePoint site. Paste the URL of the Team site you created under Step 2 above here. Leave blank if you are not planning to use the Archive and Clean Up Flow.

Archive Folder	Folder (Document Library) within the above SharePoint site, where the .msapp file should be stored. Paste the Name of the Document Library you created under Step 2 above here. Leave blank if you are not planning to use the Archive and Clean Up Flow.
Developer Compliance Center	Navigate to the details page of the Developer Compliance Center (Canvas App), part of this solution and copy the Web Link (to launch the app) and paste it into this variable.
Power Platform Admin Security Group	The Admin | Find and add admins as owners for apps that leverage certain connectors flow adds the Admin Security Group to apps; it is therefore required to configure the Admin Security Group first – enter the Azure AD Group ID (Object Id) of the group you created under Step 3 here. Note: Make sure to enter the Object Id, not an email address.

STEP 5: INITIALIZE APPROVAL ENTITIES IN YOUR ENVIRONMENT

DESCRIPTION

The Admin | App Archive and Clean Up – Start Approval and Admin | App Archive and Clean Up – Check Approval flows use the in-built Approval actions of Flow. In the background, the in-built Approval actions use CDS. If you have installed the solution in a blank new environment, the Approval entities need to be initialized first. The easiest way to do this is to create a dummy approval flow.

DEPENDENCIES

The Admin | App Archive and Clean Up – Check Approval relies on the Approval entities being present.

INSTRUCTIONS

1. Navigate to flow.microsoft.com
2. Click on + Create
3. Select "Instant Flow"
4. Pick "manually trigger a flow" as trigger, and enter Admin | Dummy Approval Flow as name
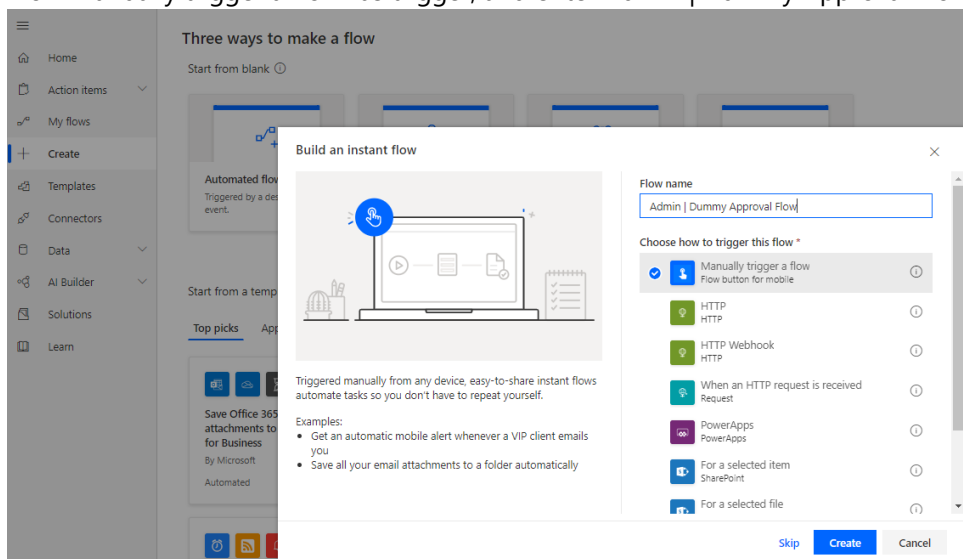
5. Select + New Step to add an approval action to the Flow, search for and select "Create an approval"

6. Select a dummy title and put your email address under "Assigned To"

7. Select Test in the top right corner, and pick "I'll perform the trigger action"

8. Click **Save & Test**

9. Click **Run Flow**

10. This Flow can take up to ten minutes to run initially. Once run, you can delete the flow as it will not be needed anymore

11. Click on Solutions in the right-hand side, and you should now see two new Flow Approvals solutions

Microsoft Flow Approvals	⋯	msdyn_FlowApprovals
Microsoft Flow Approvals Core Solution	⋯	msdyn_FlowApprova...

STEP 6: INSTALL THE FLOWS

DESCRIPTION

This solution contains five Flows:

1. Admin | App Archive and Clean Up – Start Approval
2. Admin | App Archive and Clean Up – Check Approval
3. Admin | Compliance detail request
4. Admin | Find and add admins as owners for apps that leverage certain connectors
5. Admin | Find and disable flows that leverage certain connectors

Familiarize yourself with each Flow before turning it on, as all Flows trigger emails to makers. The purpose of each Flow is explained under **Flows - Audit and Report Components Solution.**

INSTRUCTIONS

Follow the same instructions to configure the Flows as mentioned under Step 4: Install the Sync Template Flows

STEP 7: SHARE APPS WITH MAKERS

The Audit and Report Components solution contains one app, which is used by makers to update compliance details of their application

1. Developer Compliance Center

Share this Application with your makers. Your makers must have a Power Apps Premium license, as mentioned under **Prerequisites**.

STEP 8: (OPTIONAL) CUSTOMIZE THE SOLUTION

The assets described above outline potential apps and flows needed to implement a compliance process for Power Apps and Power Automate. You may have a different form that your makers must fill out in the Compliance Center, or a different Business Process Flow.

See **CoE Solution guide** for how to customize the solution.

NURTURE COMPONENTS - SETUP INSTRUCTIONS

There are multiple components provided in this starter kit, each will require some configuration to install. The installation instructions have been segmented based on the set of components that should be grouped and installed together, and dependencies on other segments are outlined in each section.

STEP 1: INSTALL THE SOLUTION

DESCRIPTION
This is the first setup step of the installation process and is required for any other component in the starter kit to work.

DEPENDENCY
The Audit and Report Components solution requires the Core Components solution to be installed first.

INSTRUCTIONS
3. Follow the instructions detailed under **Core components - Setup Instructions**
4. Import the CenterOfExcellenceNurtureComponents_x_x_x_xx_managed.zip

STEP 2: UPDATE ENVIRONMENT VARIABLES

DESCRIPTION
This step should be completed after the first step above. The Environment Variables are used to store application and flow configuration data. This means, you only have to set the value once and it will be used in all necessary flows and apps.

DEPENDENCIES
All Flows in this solution depend on all Environment Variables being configured.

INSTRUCTIONS
4. Go to the **Default Solution** solution.
    a. Navigate to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
    b. In the left navigation, click on **Solutions**, then select the **Default Solution** solution

5. You will see an error at the top, notifying you that Environment Variables need to be configured. Note: For the Audit and Report Components solution, it will be **2** environment variables that need to be configured.

⚠ 9 environment variables need to be updated. See environment variables

6. Follow the instructions under **Step 3: Update Environment Variables** to configure the environment variables for the Nurture components solution

Power Platform Maker Office 365 Group	The Admin | Welcome Email Flow sends a welcome email to onboard new makers, and adds them to an Office 365 Group – you can use this group to send comms to your makers or invite them to a Yammer/Teams group. Configure the Group ID here.
Training in a day – Feedback Form	The Training in a day package includes a flow that automatically sends a feedback request to attendees on the day of the event. Configure the Form URL (https://forms.office.com/...) here.

STEP 3: INSTALL THE FLOWS

DESCRIPTION

This solution contains five Flows:

6. Admin | Newsletter with Product Updates
7. Admin | Welcome Email
8. Training in a day | Feedback Reminder
9. Training in a day | Registration Confirmation
10. Training in a day | Reminder 3 days prior to event

Familiarize yourself with each Flow before turning it on, as all Flows trigger emails to makers. The purpose of each Flow is explained under **Flows - Nurture Components Solution.**

INSTRUCTIONS

Follow the same instructions to configure the Flows as mentioned under **Step 4: Install the Sync Template Flows**

STEP 5: SHARE APPS WITH MAKERS

The Nurture Components solution contains four app

1. App Catalog – to be shared with entire organization
2. Template Catalog – to be shared with your makers or entire organization
3. Training in a day Management – to be shared with admins only
4. Training in a day Registration – to be shared with entire organization

All end users must have a Power Apps Premium license, as mentioned under **Prerequisites**.

STEP 6: CUSTOMIZE THE SOLUTION

The assets described above outline apps and flows you might find useful in order to encourage further adoption and best practices of the Power Platform. You may have a different processes and will only use these assets as inspiration or as a template.

See **CoE Solution guide** for how to customize the solution.

DETAILED OVERVIEW OF ALL COMPONENTS

COMMON DATA SERVICE ENTITIES

These entities are defined in the solution package.

Core Components	• **ENVIRONMENT** Represents the Environment object, which contains PowerApps, Flows and Connectors. • **POWERAPPS APP** Represents a PowerApps App.

	• **FLOW** Represents a Flow. • **POWERAPPS CONNECTOR** Represents a standard or custom connector. • **CONNECTION REFERENCE** Represents a connection used in a PowerApp or Flow. • **MAKER** Represents a user who has created a PowerApp, Flow, Custom Connector or Environment. • **AUDIT LOG** Represents session details for PowerApps. • **COE SETTINGS** Settings configurations live in a record here. This is an important entity to populate data into during the setup process, because it contains details that are important for configuring the branding and support aspect of the solution • **SYNC FLOW ERRORS** Represents daily occurrence of Sync Flow errors to provide a summary email to admin
Audit and Report Components	• **ARCHIVE APPROVAL** Represents archival approval tasks started during the App Archive and Clean Up Flow
Nurture Components	• **INADAYATTENDEES** Represents attendees that have registered for a Training in a day course using the Training in a day registration canvas app • **INADAYEVENT** Represents training events available and created through the Training in a day management canvas app

SECURITY ROLES

- **POWER PLATFORM ADMIN SR**
  Gives full access to create, read, write and delete operations on the custom entities.
- **POWER PLATFORM MAKER SR**
  Gives read and write access to the custom entities (e.g., Environments, Apps, etc).
- **POWER PLATFORM USER SR**
  Gives read only access to the resources in the custom entities.

FLOWS - CORE COMPONENTS SOLUTION

ADMIN | SYNC AUDIT LOGS

Uses the Office 365 Audit logs custom connector to write audit log data into the CDS Audit Log entity. This will generate a view of usage for PowerApps. This Flow also comes in a separate package outside of the solution when you download the CoE Starter Kit because it's easier to import the package separately with the custom connector. Follow the instructions in the audit log section to learn more.

ADMIN | SYNC TEMPLATE V2

Runs on a schedule and updates environments. This and subsequent 'Sync Template V2' Flows are an optimized version of the Sync Template V1, split out into separate Flows to make it easier to read and modify.

ADMIN | SYNC TEMPLATE V2 (APPS)

runs when an environment is created/modified and gets App information, also updates record if Apps are deleted.

ADMIN | SYNC TEMPLATE V2 (FLOWS)

runs when an environment is created/modified and gets Flow information, also updates record if Flows are deleted.

ADMIN | SYNC TEMPLATE V2 (CONNECTORS)

runs once daily on a schedule and gets Connector information.

ADMIN | SYNC TEMPLATE V2 (CUSTOM CONNECTOR)

runs when an environment is created/modified and gets Custom Connector information.

ADMIN | SYNC TEMPLATE V2 (SYNC FLOW ERRORS)

runs on a schedule and sends an email of environments that failed to sync with a link to the Flow instance to the admin

FLOWS - AUDIT AND REPORT COMPONENTS SOLUTION

ADMIN | COMPLIANCE DETAIL REQUEST

Sends an email to users who have PowerApps apps in the tenant who are not compliant with specific thresholds:

- The app is shared with > 20 Users or at least 1 group and the business justification details have not been provided.
- The app has business justification details provided but has not been published in 60 days or is missing a description.
- The app has business justification details provided and has indicated high business impact and has not submitted a mitigation plan to the attachments field.

The Flow has a template you can customize in the email sent out by the Flow, but will otherwise look like the following:
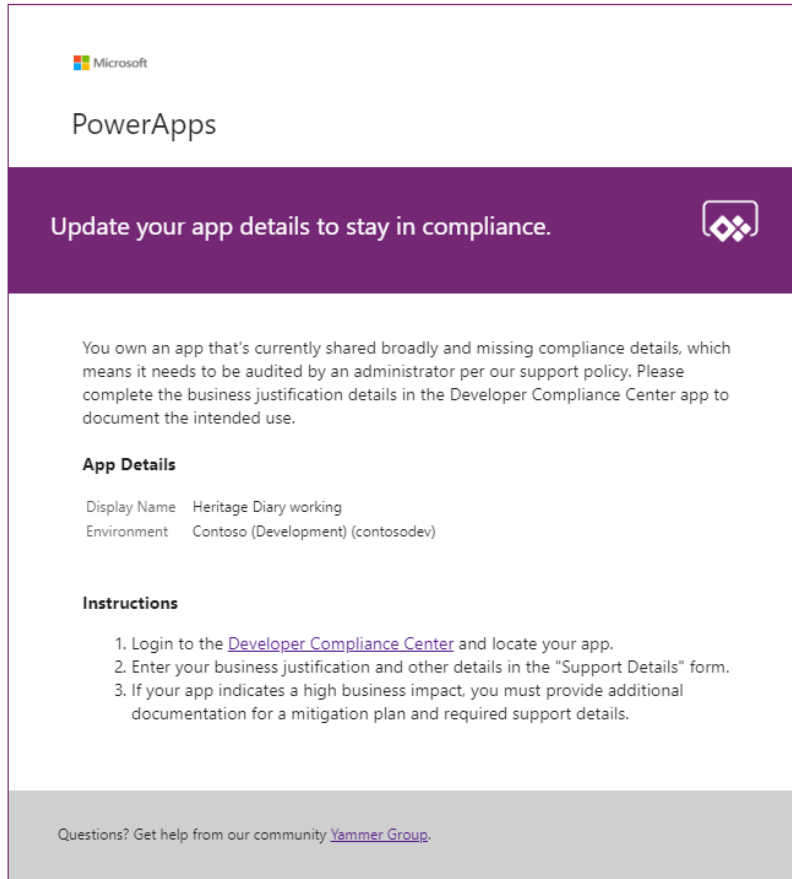
SCREENSHOT: COMPLIANCE REQUEST EMAIL

ADMIN | APP ARCHIVE AND CLEAN UP – START APPROVAL

Checks for apps that have not been modified in the last six months (configurable) and asks the app owner (via Flow Approvals) if the app can be archived.

This Flow starts the approval and writes the Approval Task to the 'Archive Approval' CDS Entity.

ADMIN | APP ARCHIVE AND CLEAN UP – CHECK APPROVAL

Monitors Approval Responses of the App Archive and Clean Up – Start Approval Flow and, if approved, archives the app file to SharePoint.
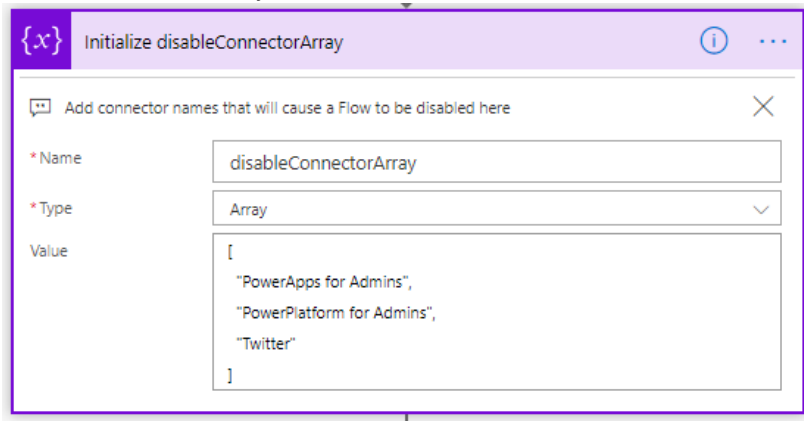
Pre-Requisite: Create a SharePoint document library to store the archived apps and configure this in Flow

Update: By default, this Flow will archive the application but not remove it or its permission from the environment. Update this Flow based on your requirements, to delete the app from the environment, or remove app permissions.

ADMIN | FIND AND DISABLE FLOWS THAT LEVERAGE CERTAIN CONNECTORS

Checks if any Flows are using specific connectors, notifies the Flow maker and disables the Flow. The admin will receive a report.

Update: Specify what connectors you want to audit by editing the Flow and updating the disableConnectorArray
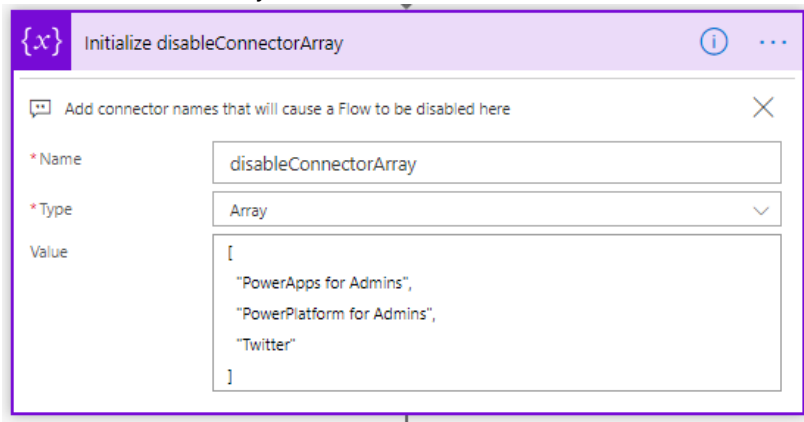
Admin | Find and add admins as owners for apps that leverage certain connectors

Checks for apps that leverage certain connectors; notifies the app maker and shares the app with the admin security group.

Update: Specify what connectors you want to audit by editing the Flow and updating the disableConnectorArray

FLOWS - NURTURE COMPONENTS SOLUTION

ADMIN | WELCOME EMAIL

Sends an email to a user who created a Power App, Flow, Custom Connector or Environment. This Flow gets triggered when a new record is created in the Maker table.

SCREENSHOT: WELCOME EMAIL

ADMIN | NEWSLETTER WITH PRODUCT UPDATES

Sends a weekly email with a summary of product updates, consisting of blog posts from the PowerApps / Flow / Power BI Product blogs and PowerApps Community blog

SCREENSHOT: NEWSLETTER WITH PRODUCT UPDATES

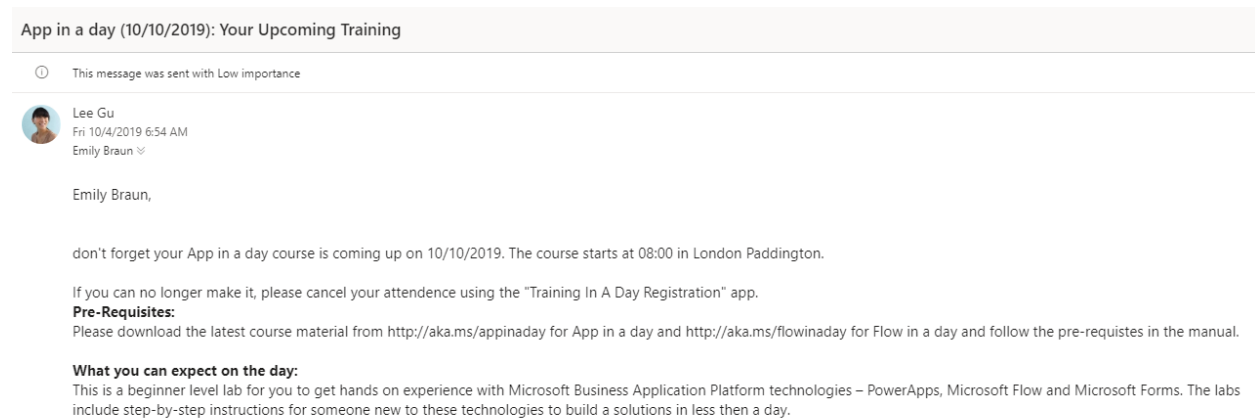## TRAINING IN A DAY | FEEDBACK REMINDER

Sends an email to attendees of a training in a day event on the day and requests feedback

TRAINING IN A DAY | REGISTRATION CONFIRMATION

Sends an email to an attendee when they register for a training in a day event

TRAINING IN A DAY | REMINDER 3 DAYS PRIOR TO EVENT

Sends an email to an attendee of a training in a day event 3 days prior to the event

App in a day (10/10/2019): Your Upcoming Training

ⓘ This message was sent with Low importance

Lee Gu
Fri 10/4/2019 6:54 AM
Emily Braun ⌄

Emily Braun,

don't forget your App in a day course is coming up on 10/10/2019. The course starts at 08:00 in London Paddington.

If you can no longer make it, please cancel your attendence using the "Training In A Day Registration" app.
Pre-Requisites:
Please download the latest course material from http://aka.ms/appinaday for App in a day and http://aka.ms/flowinaday for Flow in a day and follow the pre-requistes in the manual.

What you can expect on the day:
This is a beginner level lab for you to get hands on experience with Microsoft Business Application Platform technologies – PowerApps, Microsoft Flow and Microsoft Forms. The labs include step-by-step instructions for someone new to these technologies to build a solutions in less then a day.

SCREENSHOT: SAMPLE APP IN A DAY REMINDER EMAIL

CHANGE WELCOME EMAIL FROM OFFICE 365 GROUP TO AZURE AD SECURITY GROUP

If you would prefer to use an Azure AD Security Group instead of an Office 365 Group for your makers, the **Admin | Welcome Email** Flow needs amending.
Note: Using an Azure AD Security Group will allow you to share apps with this your maker security group. Currently, apps can not be shared with Office 365 Groups

1. Go to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
2. Click **Solutions** > **Center of Excellence**
3. Select Flow from the Filter option at the top
4. Select the ellipse (...) menu of Admin | Welcome Email and > **Edit**
5. Update the "**Initialize Office 365 Group ID**" with your Azure AD Group ID (you can rename the variable and action as well)

6. Remove the List Group members action underneath
7. In the same place, select + Add an action, search for and insert "**Get Group Members**" from the Azure AD connector. Set the Group ID to the office365GroupID variable from dynamic

content.

8. Click on the **condition** and on the string expression in the left hand value. Update 'List_group_members' to 'Get_group_members' in the body of the expression – the expression should look like the highlighted below.

9. Open the No branch of the condition and remove the **Add member to group** action
10. In the same place, select + Add an action, search for and insert "**Add user to group**" from the Azure AD connector. Set the Group ID to the office365GroupID variable and the User Id to Maker (from Dynamic Content)
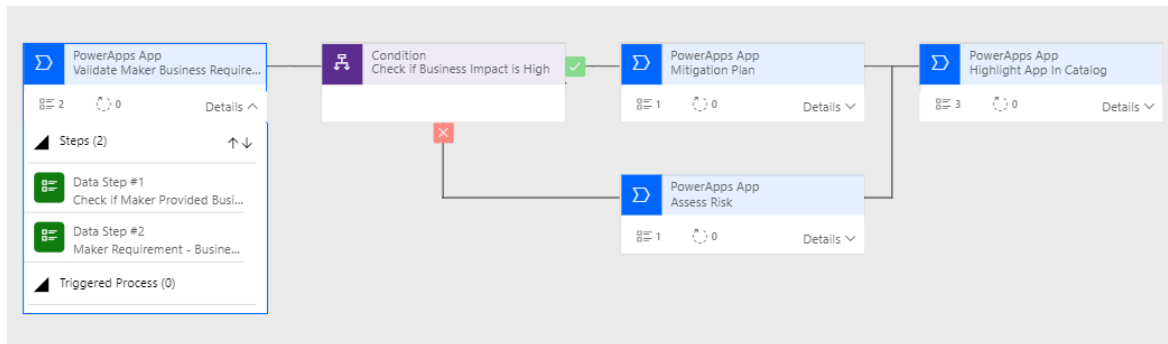

11. Save the Flow

BUSINESS PROCESS FLOWS
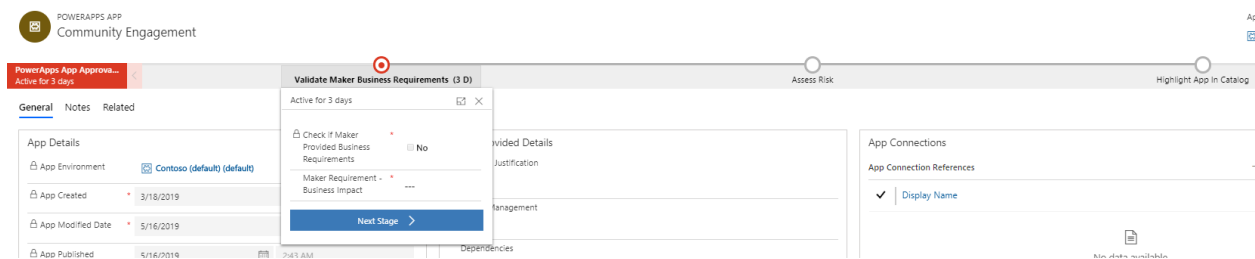
PowerApps App Approval BPF

This process helps the admin audit the PowerApps App audit process by providing a visual placeholder for the stage in the process they are currently on.

SCREENSHOT: AN IMPLEMENTATIN OF AN AUDITING PROCESS USING A BUSINESS PROCESS FLOW COMPONENT

SCREENSHOT: THE BPF VIEW WHILE PLAYING THE MODEL DRIVEN APP, ON THE APP FORM.

ACTIVATE BUSINESS PROCESS FLOW

The PowerApps App Approval BPF, that helps admins implement an audit process, is disabled by default. In order to enable it

1. Go to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
2. Click **Solutions** > **Center of Excellence**
3. Select Process from the Filter option at the top
4. Select the ellipse (...) menu of PowerApps App Approval BPF and > **Turn On**

CANVAS APPS – CORE COMPONETNS SOLUTION

DLP EDITOR

Canvas app that reads and updates DLP policies while showing a list of apps that are affected by the policy configurations.

Use this app to make changes to the DLP policies and see what impact it will have, and mitigate the risk of breaking a Flow / App through DLP changes.

Permission: Intended to be used only by admins, Power Platform Service Admin or Global Admin permission required. Share with your CoE Admins.
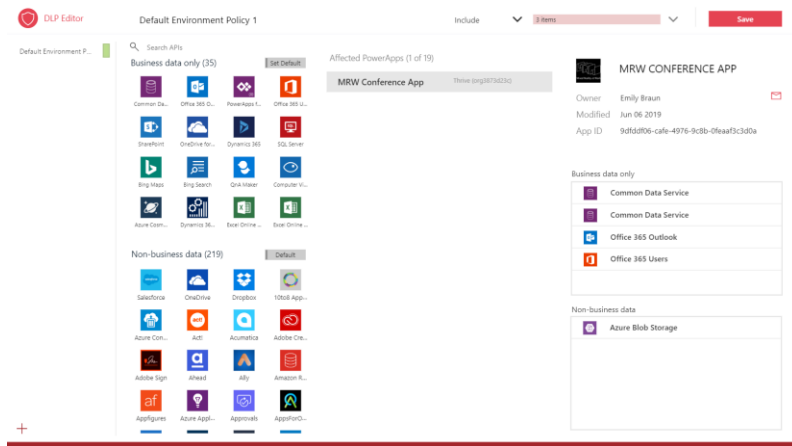

DLP CUSTOMIZER

Canvas app that allows you to add Custom Connectors to the Business Data Group of a DLP Policy.

SET NEW APP OWNER

Canvas app that an admin can use to discover apps by app or maker name, and provides ability to set a new app owner or add new co-owners

Permission: Intended to be used only by admins, Power Platform Service Admin or Global Admin permission required. Share with your CoE Admins.

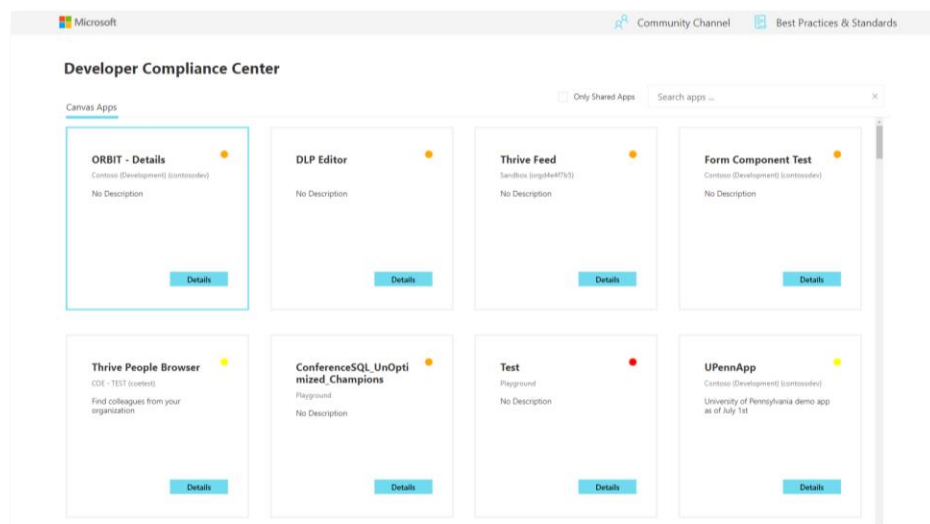## CANVAS APPS – AUDIT COMPONETNS SOLUTION
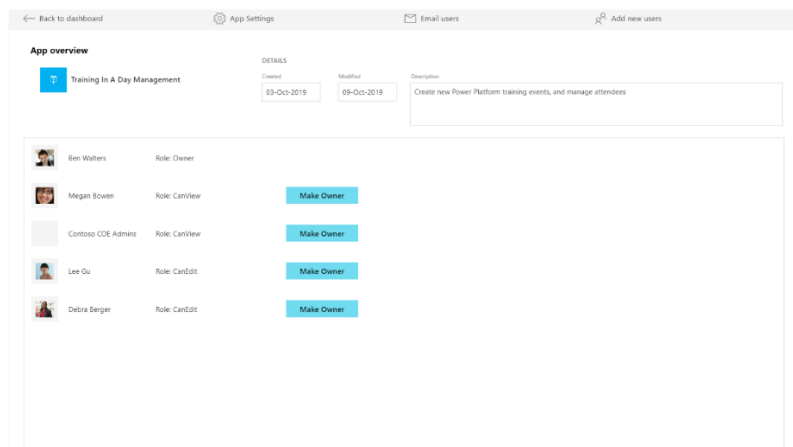
DEVELOPER COMPLIANCE CENTER

This app is used in the PowerApps App Auditing Process, defined later in this document, as a tool for users to check if their app is compliant and to submit information to the Center of Excellence admins as business justification to stay in compliance. They can also use the app to update the description and re-publish, which are other ways to stay in compliance.

Permission: Once you are using the Compliance process, this app needs to be shared with your App Makers. If you are intending to use this process, modify the "Welcome email" Flow to add users to a Security Group and then share this app with the Security Group.

Pre-Requisite: This app uses CDS, a Premium license is therefore required.

Update: Verify the Support Details form matches your requirement, and update if necessary.

## CANVAS APPS – NURTURE COMPONETNS SOLUTION

APP CATALOG

A Canvas app that gives access to the entire organization to make apps more discoverable. Admins audit and validate certain apps which are graduated to the app catalog if the app is meant to be shared broadly.

When you first open the App Catalog, you will not see any apps there at first. There is a field on the PowerApps App entity called "In App Catalog", which is a two-option set type field (aka Boolean). If the value is set to "Yes", the app will show up in the catalog. Following the Compliance Business Process in the Admin app will allow you to publish an app to the App Catalog.

Permission: Once you are using this process, the App Catalog can be shared with the entire organization.

Pre-Requisite: This app uses CDS, a Premium license is therefore required.
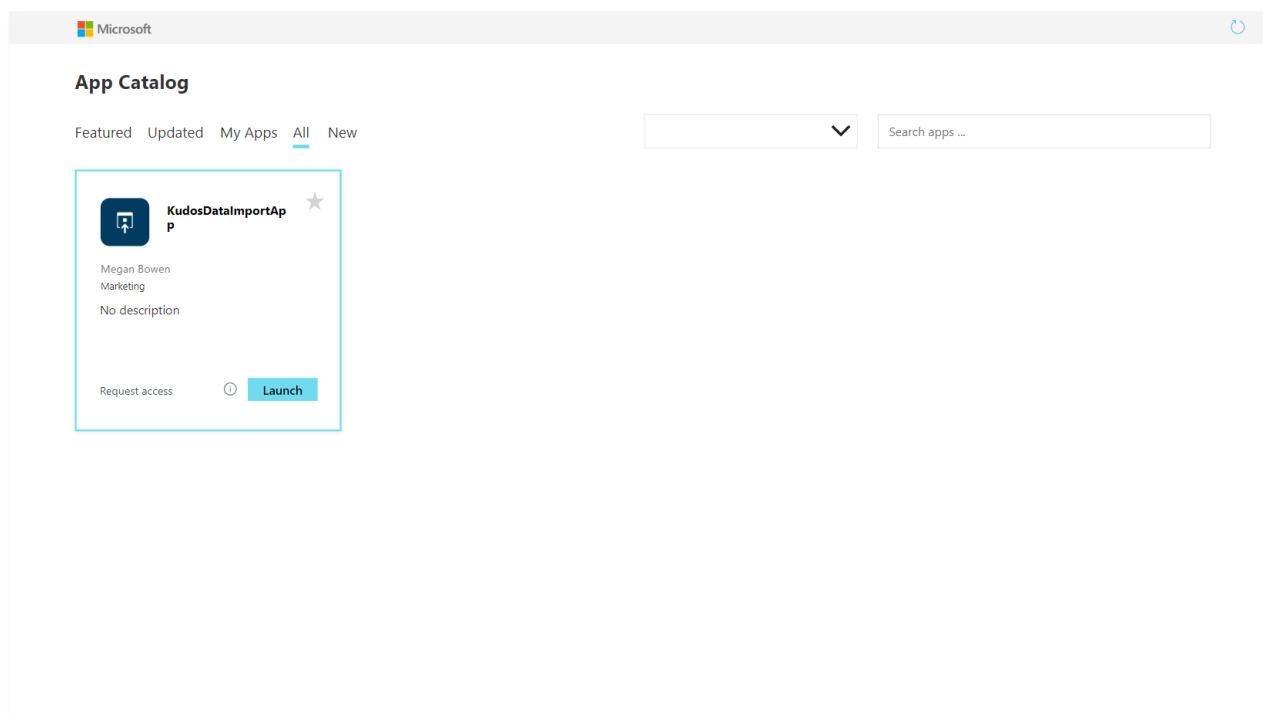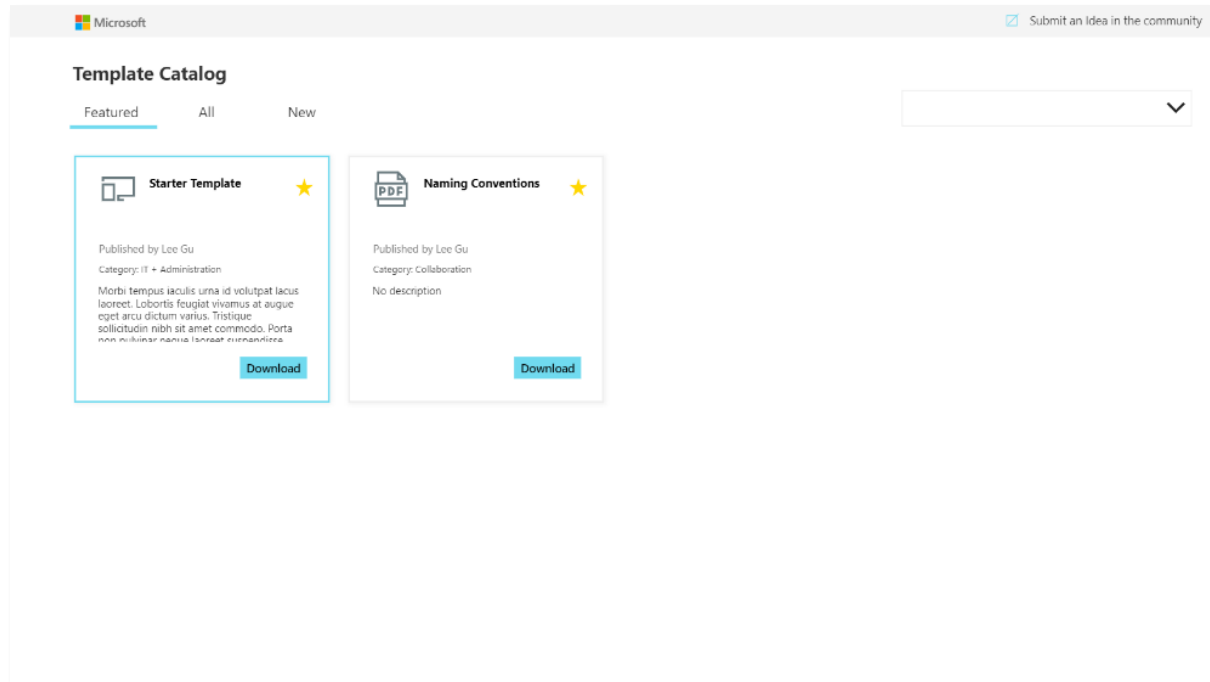
TEMPLATE CATALOG

Canvas app that allows CoE Admins to share app and component templates as well as best practice documents with their makers.

Permission: Once you have content ready, the Template Catalog can be shared with the entire organization.

Pre-Requisite: This app is using SharePoint in the background and requires a SharePoint site to be configured.

SharePoint setup:

Create a document library to store templates on a SharePoint site of your choice – we recommend having a dedicated PowerApps CoE SharePoint site. Ensure everyone has read-only and download access to this library.

	Name	Type
	AppTemplates	Document library

Add the following meta-data columns to your library, upload your templates and update the meta-data information.

Title	Single line of text
Description	Multiple lines of text
Featured	Yes/No
Display Name	Single line of text
Category	Choice
Template Type	Choice

PowerApps setup:

Open the Template Catalog PowerApps and edit the SharePoint connection to point to your new Document library.

TRAINING IN A DAY – MANAGEMENT

If you are planning to run internal App / Flow / Custom in a day event, this canvas app will enable you to create and manage events

Permission: Share with CoE Admins or the owners of your internal training events.

Pre-Requisite: This app uses CDS, a Premium license is therefore required.
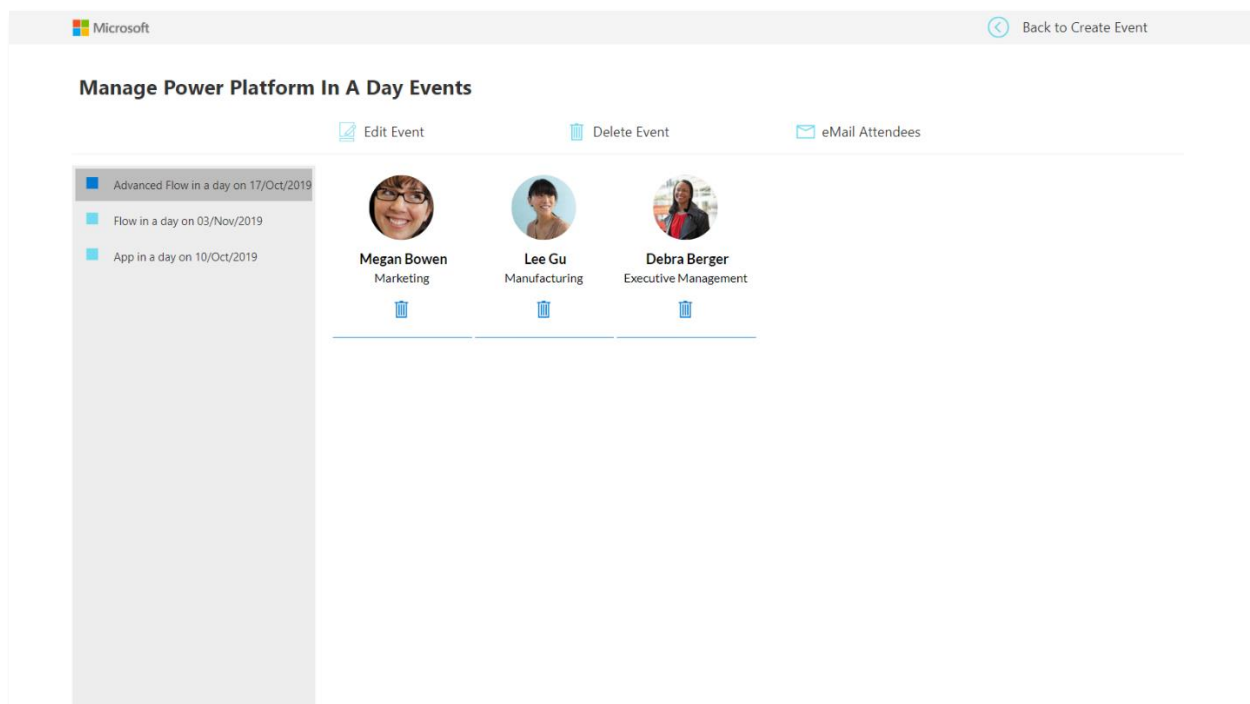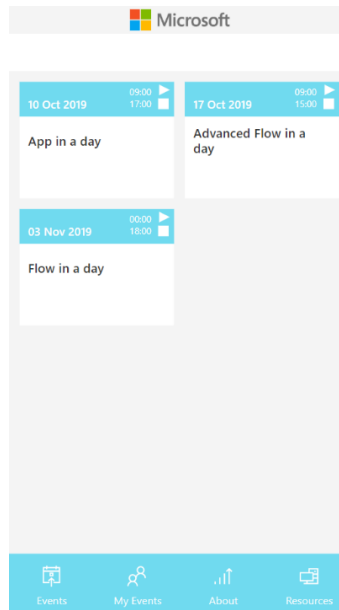
TRAINING IN A DAY – REGISTRATION

If you are planning to run internal App / Flow / Custom in a day event, this canvas app will enable your end users to register for upcoming events

Permission: Once you are running internal training events, share with everyone in the organization.

Pre-Requisite: This app uses CDS, a Premium license is therefore required.

MODEL DRIVEN APPS – CORE COMPONENTS

POWER PLATFORM ADMIN VIEW

A model driven app that provides an interface used to navigate the items in the CDS custom entities. It provides access to views and forms for the custom entities in the solution.
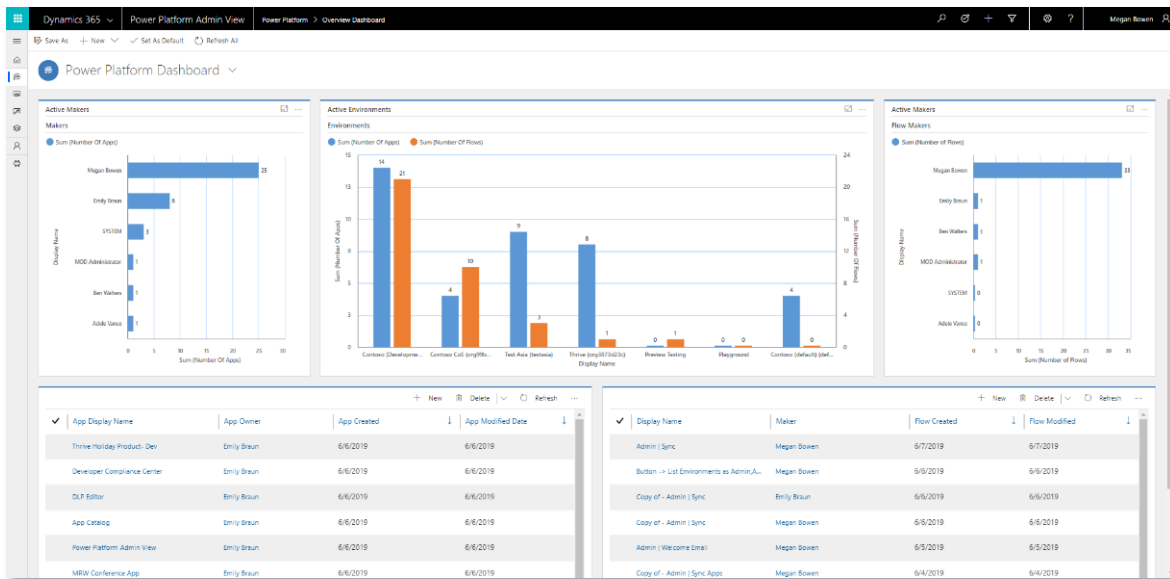
MODEL DRIVEN APPS – AUDIT AND REPORT COMPONENTS

APP ARCHIVE AND CLEAN UP VIEW

A model driven app that provides an interface to apps that have been highlighted for archiving, and their approval status.

NON-SOLUTION AWARE

POWER BI REPORT

Provides a wholistic view with visualizations and insights of data in the CDS entities: Environments, PowerApps Apps, Flows, Connectors, Connection References, Makers and Audit Logs.

Tenant Details

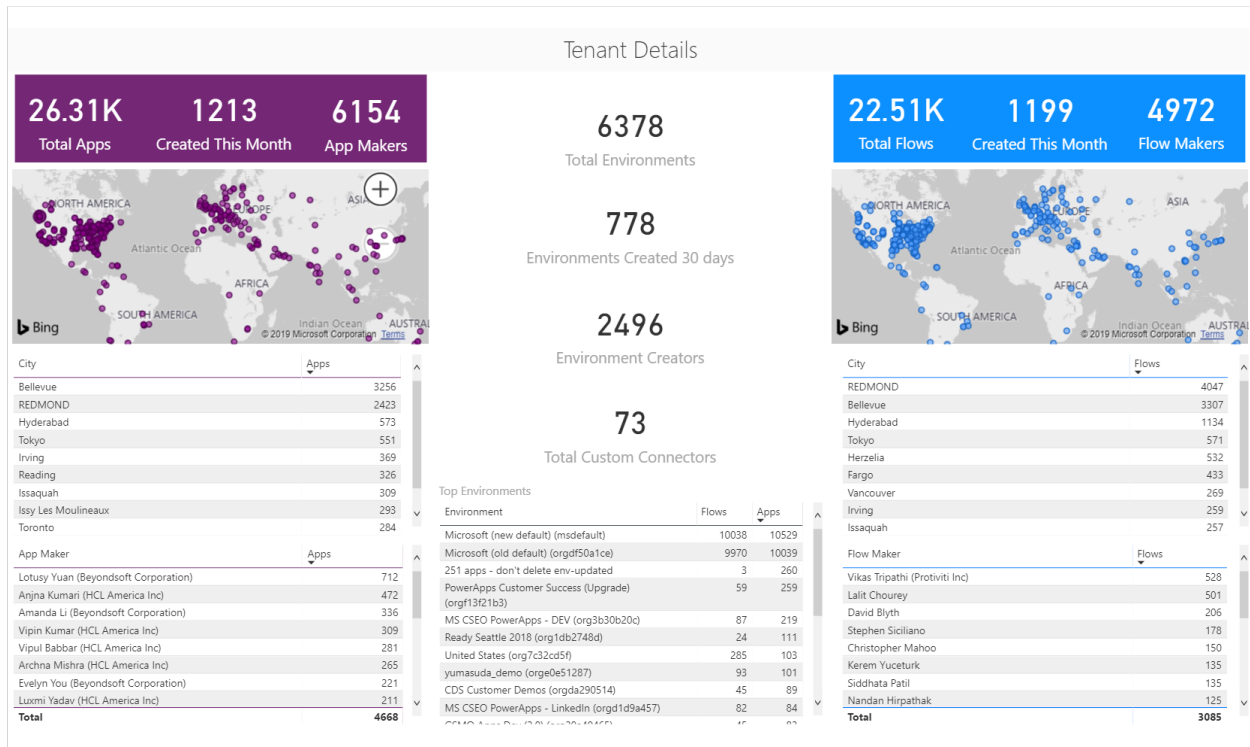| | 26.31K | 1213 | 6154 | | | 22.51K | 1199 | 4972 |
| Total Apps | | Created This Month | App Makers | | Total Flows | | Created This Month | Flow Makers |

6378
Total Environments

778
Environments Created 30 days

2496
Environment Creators

73
Total Custom Connectors

City	Apps
Bellevue	3256
REDMOND	2423
Hyderabad	573
Tokyo	551
Irving	369
Reading	326
Issaquah	309
Issy Les Moulineaux	293
Toronto	284

App Maker	Apps
Lotusy Yuan (Beyondsoft Corporation)	712
Anjna Kumari (HCL America Inc)	472
Amanda Li (Beyondsoft Corporation)	336
Vipin Kumar (HCL America Inc)	309
Vipul Babbar (HCL America Inc)	281
Archna Mishra (HCL America Inc)	265
Evelyn You (Beyondsoft Corporation)	221
Luxmi Yadav (HCL America Inc)	211
Total	**4668**

Top Environments

Environment	Flows	Apps
Microsoft (new default) (msdefault)	10038	10529
Microsoft (old default) (orgdf50a1ce)	9970	10039
251 apps - don't delete env-updated	3	260
PowerApps Customer Success (Upgrade) (orgf13f21b3)	59	259
MS CSEO PowerApps - DEV (org3b30b20c)	87	219
Ready Seattle 2018 (org1db2748d)	24	111
United States (org7c32cd5f)	285	103
yumasuda_demo (orge0e51287)	93	101
CDS Customer Demos (orgda290514)	45	89
MS CSEO PowerApps - LinkedIn (orgd1d9a457)	82	84

City	Flows
REDMOND	4047
Bellevue	3307
Hyderabad	1134
Tokyo	571
Herzelia	532
Fargo	433
Vancouver	269
Irving	259
Issaquah	257

Flow Maker	Flows
Vikas Tripathi (Protiviti Inc)	528
Lalit Chourey	501
David Blyth	206
Stephen Siciliano	178
Christopher Mahoo	150
Kerem Yuceturk	135
Siddhata Patil	135
Nandan Hirpathak	125
Total	**3085**

AUDIT LOG CUSTOM CONNECTOR

The Open API definition for the custom connector that can be used to connect to the Audit Logs. This uses Basic authentication to connect to the API, which requires a username and password of an account that has access to the Audit logs. This appears in the download pack as "Office-365-Audit-Logs.swagger.json".

The Flow called Admin | Sync Audit Logs comes in a zip file, which is called a Flow package. The Flow is much easier to import as a Flow package than it is through the solution right now because of the custom connector action. Follow the instructions at the end of this document for more detailed information.

EXAMPLE PROCESSES

The components listed above are designed for multiple uses, including an implementation of some the example processes. These are meant to showcase common patterns that exist, and hopefully act as inspiration on how to define your own processes to manage.

POWERAPPS APP AUDITING PROCESS

Problem statement: There are many apps in the Contoso tenant. IT does not know what all these apps are intended for, how to support individual apps when the helpdesk is called, and it's unclear if all the apps are being maintained to any standard. They can see details like the description and number of shared users from the PowerApps for Admins connector, but they need to communicate directly with the app owner to fully understand the situation around their apps. Especially in a large organization like Contoso, it's not feasible for the IT team to be responsible for manually reaching out to each owner individually for the apps, and those details cannot be stored in email conversations.

Solution: The CoE has decided there should be an auditing process on an app-level basis, using the CDS as a data store for business justification details. They decide to use apps and Flows built around the data to facilitate this process.

The Flow called **'Admin | Compliance detail request'** is used to iterate through all the apps in the tenant and check if the apps are compliant. If the owner has not submitted a business justification and the app was indicated to have been shared broadly (in this example, with more than 20 users or at least 1 group), then the Flow will send the owner an email to notify them that the specific app is not compliant with the company's policy. The email contains a link to the Developer Compliance Center canvas app where they can provide the business justification details in a form submission. The app also contains details about the compliance thresholds and has links to the app settings so they can configure the description and re-publish if needed.

Once the maker has proven compliance by adding these details, the admin can review those details and the app itself. A business process flow in the Power Platform Admin View (model driven app) helps facilitate the auditing process.
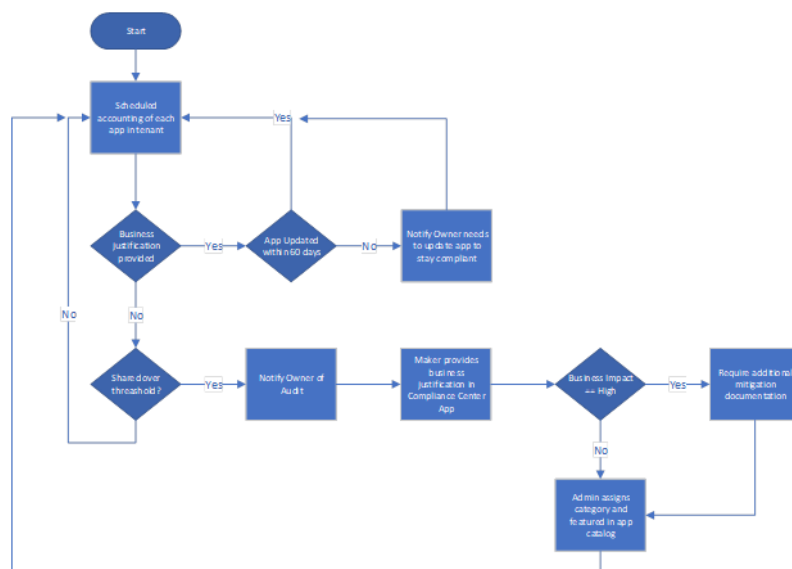
LIMITATIONS

There is no 'one size fits all' solution for a Center of Excellence. Some companies will want a very restrictive set of rules on their organization in the mind-frame of mitigating the unknown, while others will want to let users personally explore without limitations. Because of this, the CoE starter kit does not come equipped with a set of design patterns for everyone. For example, there are no components that are configured to automatically delete resources, because we did not want to provide a tool that might have unintentionally disrupted a business when installed. Therefore, if more restrictive implementations are desired, it must be implemented in addition to these tools.

In addition to this high-level warning, there are some additional notes on some components:

ADMIN | SYNC TEMPLATE V2

- The CDS connector might experience some throttling limits if the tenant has a lot of resources. If you see 429 errors in the Flow run history occurring in the later runs, you can configure a Retry Policy.

DLP EDITOR

- The Environments call only returns the first 2000 environments. We will be updating the tool to accommodate up to 6000, but you can also follow the pattern that's implemented and implement it yourself.
- Cannot write back Environment-type policies.

GOVERNMENT COMMUNITY CLOUD ENVIRONMENTS

- The CoE Starter Kit is currently not available for GCC Environments, as the Flow Management Connector and the Custom Connector to connect to Office 365 Audit Logs are not available for GCC environments yet.

OTHER RESOURCES

- Find training resources, including guided learning and step-by-step guides
  aka.ms/PowerPlatformLabs

- Read up on customer success stories and find resources relevant to your experience, technical background and skill level aka.ms/PowerPlatformResources

- Get started with the Microsoft Power Platform path on Microsoft Learn, a free online and interactive training platform https://aka.ms/PowerUp

As an admin looking after the Center of Excellence, you should be familiar with the Administration and Governance of the Power Platform. We recommend the following whitepaper as a resource

- https://aka.ms/powerappsadminwhitepaper

While not part of the CoE Starter Kit, you might find the following template Flows useful

- List new apps, flows and connectors - aka.ms/listpoweractivity
- List new custom connectors aka.ms/newconnectornotification

FEEDBACK AND SUPPORT

Questions, comments, concerns, or ideas of additions? Please post your feedback in the Issues section of the GitHub repository https://aka.ms/CoEStarterKitRepo.

APPENDIX

SHARING APPS

The user account who uploaded the solution and the Environment admin of the Environment the solution exists in will have full access to the solution. There are some features in the starter kit that would warrant sharing with end users, such as:

1. Requiring users to submit more details about their apps to the CDS table
2. Granting users access to the App Catalog
3. Sharing the Training In A Day solution, allowing users to browse and register for internal training events

To share this solution with others, there are some steps needed to configure access.

There are multiple components that must be shared with the end users. The components that must be configured for sharing include:

a. Security role assignment. Security groups can manage assignment of security roles to users.

b. Canvas Apps require shared permissions on an individual basis or through a Security group

NOTE: SECURITY GROUPS CAN BE USED TO SHARE A SECURITY ROLE WITH MULTIPLE PEOPLE IN ONE ACTION.

SHARE WITH SECURITY GROUPS

You can manage assignment of security roles and access to canvas apps through Azure AD security groups. Make sure the following prerequisites are met:

- Security group for end users (e.g., *Contoso Power Platform Makers*)
- The Power Platform Admin solution is already imported. (The solution contains a pre-configured Security Role called "Power Platform User SR")

Once the security group is configured:

1. Navigate to the Center of Excellence Solution
   a. Go to https://make.powerapps.com and set the current Environment to the same Environment where the Center of Excellence solution is installed
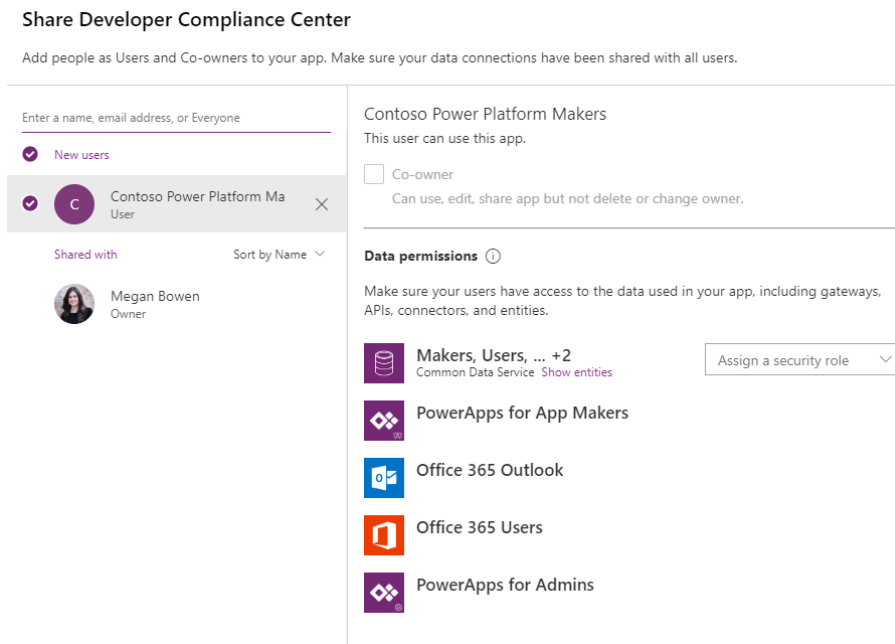   a. Click **Solutions** > **Center of Excellence**

2. Select the ellipse (…) menu of the **Developer Compliance Center** canvas app > **Share**.
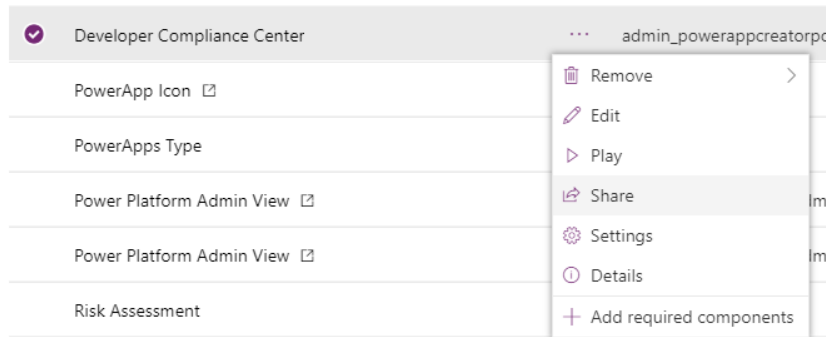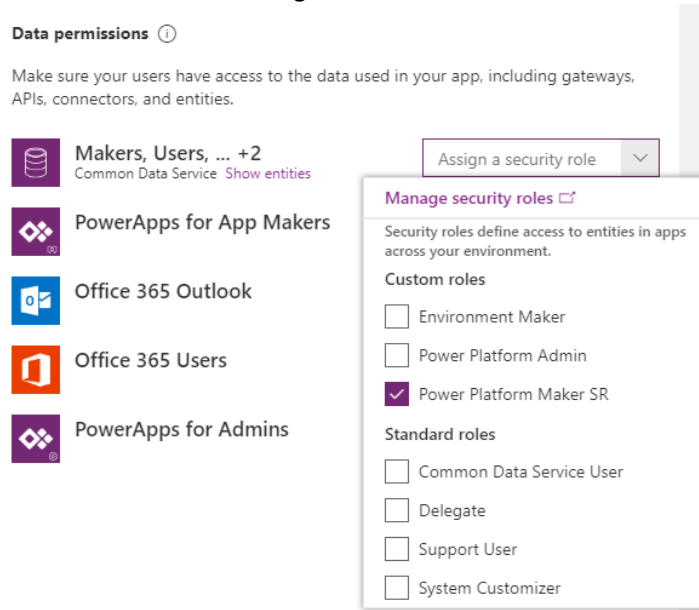

3. In the flyout, search for the security group by name
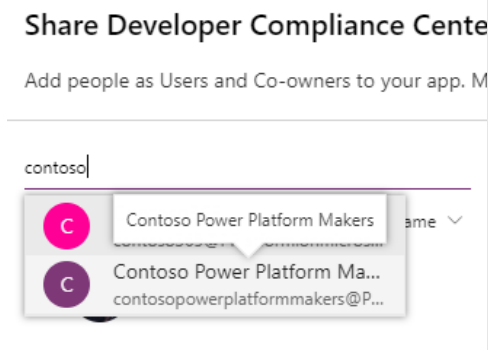
4. When the security group is selected, the Data permissions section on the lower right side of the flyout will populate with details on the connectors.

5. Next to the Common Data Service connector, click the combo box that says **Assign a security role**

6. Select the desired role (e.g. Power Platform Maker SR)

7. Optionally uncheck the "Send an email invitation to new users", then click **Share.**

NOTE: THE SECURITY ROLES WILL BE ASSIGNED TO EACH USER IN THE SECURITY GROUP, AND THE SECURITY GROUP WILL CONTINUE TO MANAGE USER ASSIGNMENT TO THE SECURITY ROLE (E.G., WHEN A USER LEAVES THE SECURITY GROUP, THEY WILL NO LONGER HAVE THE SECURITY ROLE ASSIGNED TO THEM UNLESS THEY WERE INDIVIDUALLY ASSIGNED THE ROLE).

8. Repeat these steps for the **App Catalog** canvas app. Create a different SG that contains the entire organization and is assigned to the Power Platform User SR.

SHARING WITH INDIVIDUAL USERS
Follow the steps in the section above, but search for an individual user account instead of the security group. The steps after selecting the user record will be the same.

SHARING WITH INDIVIDUAL USERS (WITHOUT CANVAS)
The solution can be shared on an individual basis if desired, but it's recommended that you use security groups to share the solution with end users to make access management more maintainable. This section does not share the canvas apps with individual users, in case the canvas app solution is not desired.

1. Navigate to the solution's Environment security
   a. Go to https://admin.powerapps.com.
   b. Select the Environment with the Power Platform Admin solution installed.

c. Click on the **Security** tab.

2. Here, you can add individual sync users to the CDS instance's Users table if they are not already available. If you had created a new Environment for this solution, you will likely need to do this to give other accounts access to the solution.

3. Click on **Assign Security Roles** to view the Users table.

4. In the Users table, select records by checking the check box to the left of each User's name. You can use the search bar at the top right to filter the table by name or email.
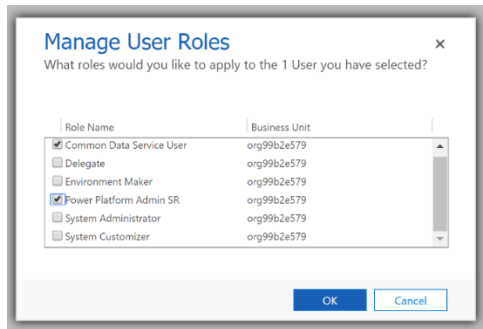

5. With the Users selected, click on **Manage Roles** at the top.

6. Select the checkboxes next to the desired security role. This security role was provided in the solution and only gives read and write access to the custom entities in the solution. Click **OK**.

7. At this point, the individuals who you have assigned to the Security Role to will have access to the data in the custom entities and model driven app that comes in the solution.

NOTE: THIS PROCESS CAN ALSO BE FOLLOWED WITH THE INTENTION OF SHARING POWER PLATFORM ADMIN SR ACCESS TO THE CDS ENTITIES. THIS SECURITY ROLE WILL GIVE MORE CONTROL OVER FULL CRUD OPERATIONS ON THE DATA AND MIGHT MAKE MORE SENSE TO GRANT ON AN INDIVIDUAL BASIS THAN END USERS.

SHARING WITH SECURITY GROUPS (WITHOUT CANVAS)
Please read this article to share the solution without sharing the canvas apps.