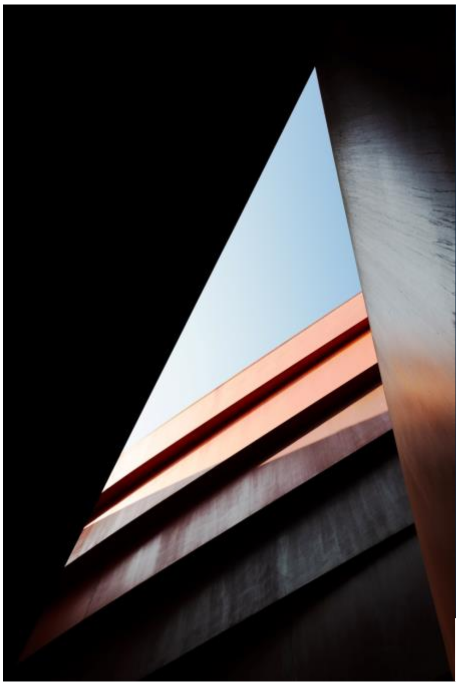


BPM Toolkit Setup guide (preview)

@sergeluca

BPM Toolkit release 02_07_2021
Serge Luca, aka Doctor Flow
@sergeluca

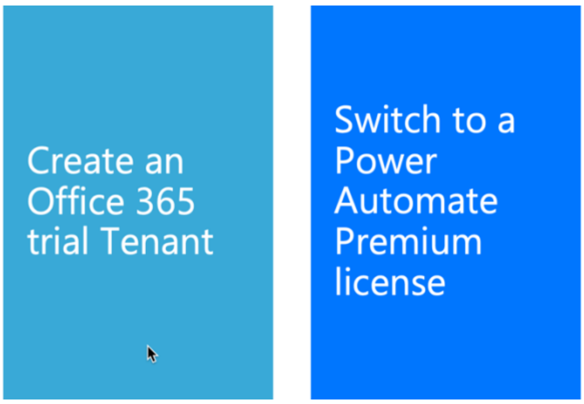
Installing the BPM Toolkit (preview)

The set-by-step instructions are described in the following video: (link to do)

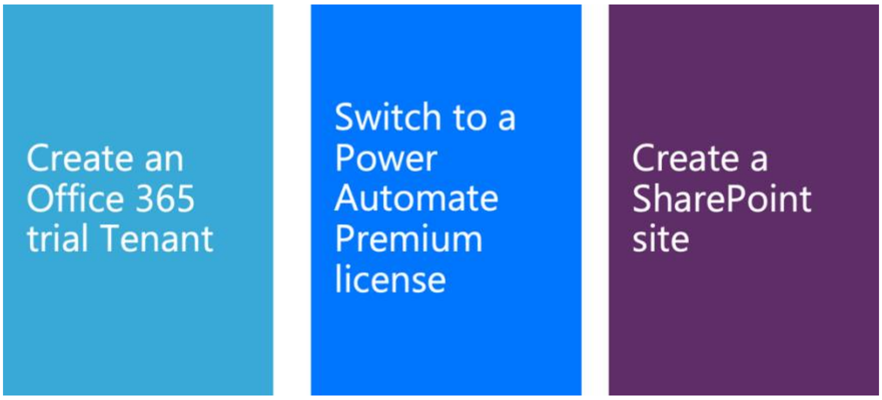
1. Download the file **BPMToolkit Setup_12_24_2020**.zip from GitHub.

2. (Video 4’10’’) Create an Office 365 E3 trial from the following URL:

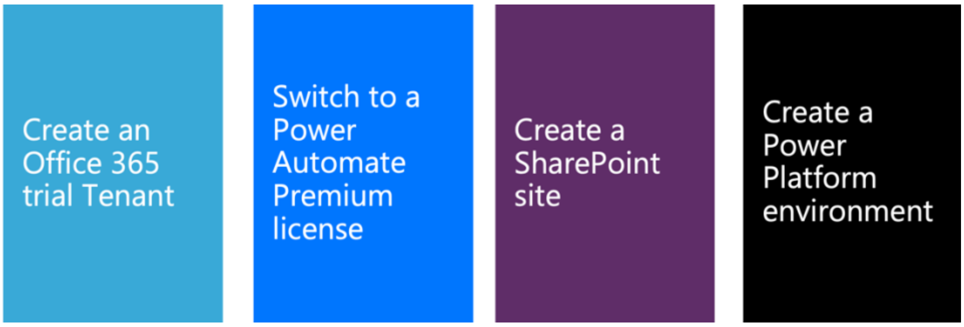
https://www.microsoft.com/en-us/microsoft-365/enterprise/office-365-e3?activetab=pivot%3aoverviewtab
I’ve skipped some steps in the video for privacy reasons (phone numbers, e-mail…)



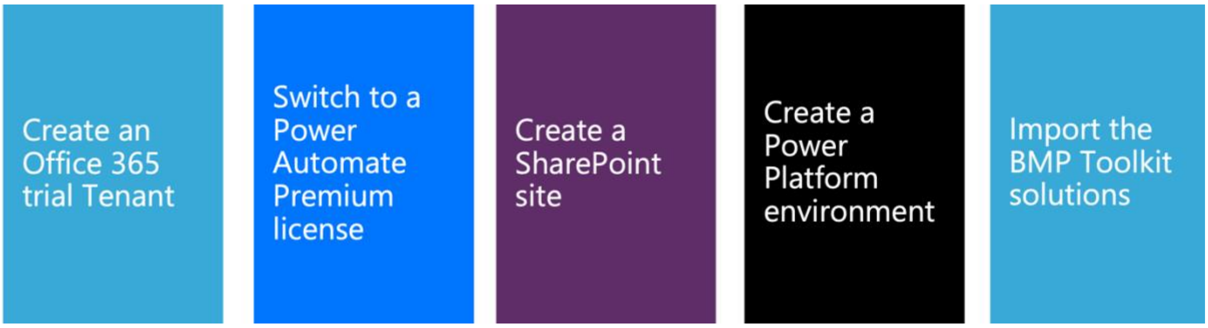
3. (Video 8' 16'') Select a Power Automate **Per user trial plan with attended RPA;** use this URL: https://flow.microsoft.com/en-us/pricing/



4. (Video 9' 14'') Create a SharePoint Online team site.

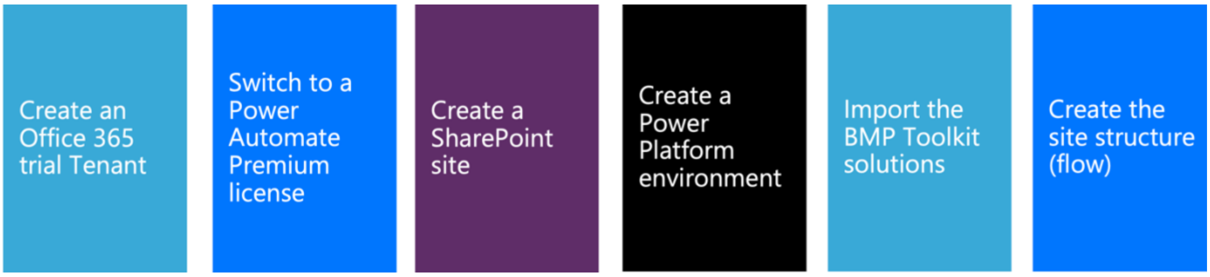


5. (Video 10' 49'') Create a trial Power Platform environment with a database.



6. (Video 12'00'') Decompress the BPM Toolkit setup file and import the solution packages in the following sequence (this will also create the corresponding references during the import):

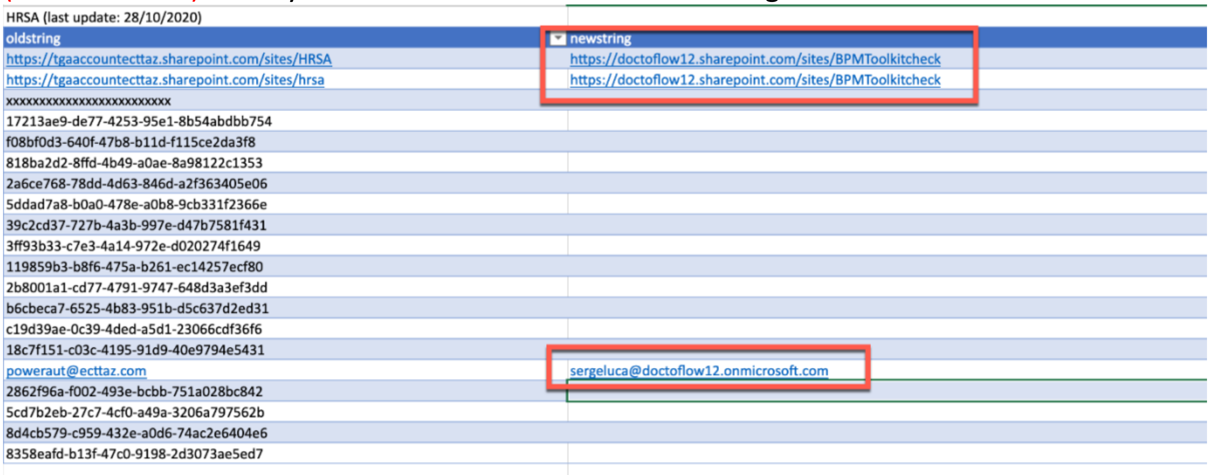
   a. **BPMToolkit.zip**
   b. **BPMToolkitALM.zip**
   c. **BPMToolkitDemo.zip**



(Video 24') We will now create the **SharePoint site structure**

7. (Video 24'21'') Import the **AlmInfos.xlsx** file into the SharePoint document library.
8. (Video 26'20'') Update the Excel actions of the following flows to point to the new Excel document and table
   a. BPM Toolkit – ALM – Search and Replace (2 actions to update)
   b. BPM Toolkit – ALM – Update ALM Spreadsheet (1 action to update)

9. (Video 28'33'') Update the Excel document with your SharePoint site URL (in the "newstring" column, just in front of the old reference site). You have to fill in two cells with your site URL. (see the next picture). When the URL is stored in the 2 Excel rows, double-check to make sure it is the correct SharePoint URL!
10. (Video 29' 21'') Fill-in your service account in the new string:



HRSA (last update: 28/10/2020)

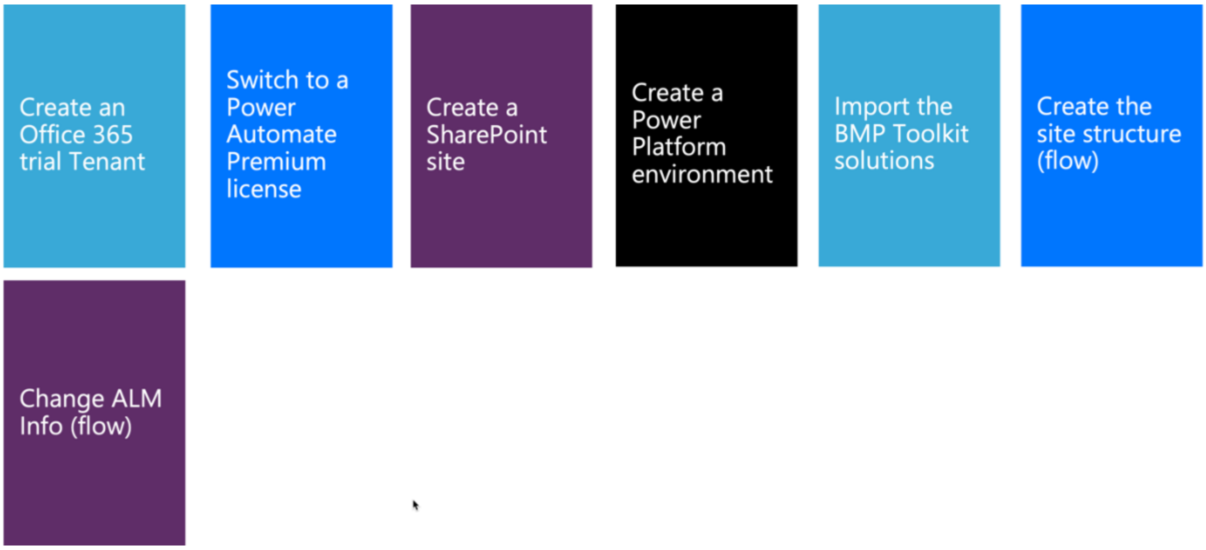
oldstring	newstring
https://tgaaccountecttaz.sharepoint.com/sites/HRSA	https://doctoflow12.sharepoint.com/sites/BPMToolkitcheck
https://tgaaccountecttaz.sharepoint.com/sites/hrsa	https://doctoflow12.sharepoint.com/sites/BPMToolkitcheck
xxxxxxxxxxxxxxxxxxxxxxxxx	
17213ae9-de77-4253-95e1-8b54abdbb754	
f08bf0d3-640f-47b8-b11d-f115ce2da3f8	
818ba2d2-8ffd-4b49-a0ae-8a98122c1353	
2a6ce768-78dd-4d63-846d-a2f363405e06	
5ddad7a8-b0a0-478e-a0b8-9cb331f2366e	
39c2cd37-727b-4a3b-997e-d47b7581f431	
3ff93b33-c7e3-4a14-972e-d020274f1649	
119859b3-b8f6-475a-b261-ec14257ecf80	
2b8001a1-cd77-4791-9747-648d3a3ef3dd	
b6cbeca7-6525-4b83-951b-d5c637d2ed31	
c19d39ae-0c39-4ded-a5d1-23066cdf36f6	
18c7f151-c03c-4195-91d9-40e9794e5431	
poweraut@ecttaz.com	sergeluca@doctoflow12.onmicrosoft.com
2862f96a-f002-493e-bcbb-751a028bc842	
5cd7b2eb-27c7-4cf0-a49a-3206a797562b	
8d4cb579-c959-432e-a0d6-74ac2e6404e6	
8358eafd-b13f-47c0-9198-2d3073ae5ed7	

11. Ensure the Excel document is not open in Excel rich client (to avoid locking), but it can be open in Excel web.
12. (Not in the video!) Make sure all flows in the BPM Toolkit ALM solution are activated (turned on) and activate them all.
13. (Video 29' 42'') Run the flow **BPM Toolkit – ALM – Create BPM Toolkit structure** (in the BPM Toolkit ALM solution). This flow creates all the lists of your SharePoint site. The flow duration is between 6 and 9 minutes.

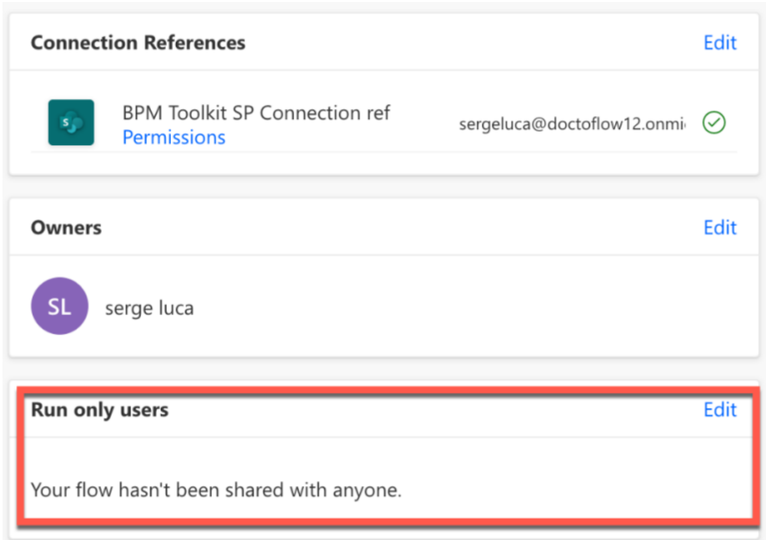
14. (Video 30'38'') Check your Excel document, all the entries must be filled in:

HRSA (last update: 28/10/2020)

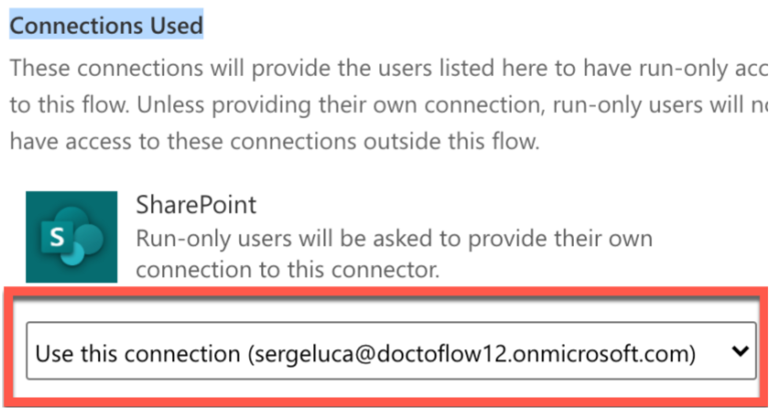
oldstring	newstring
https://tgaaccountecttaz.sharepoint.com/sites/HRSA	https://doctoflow12.sharepoint.com/sites/BPMToolkitcheck
https://tgaaccountecttaz.sharepoint.com/sites/hrsa	https://doctoflow12.sharepoint.com/sites/BPMToolkitcheck
xxxxxxxxxxxxxxxxxxxxxxxxx	031c986b-4407-476d-a259-fa88c3bb682d
17213ae9-de77-4253-95e1-8b54abdbb754	4945cb61-7c7a-495f-8db5-f70ded294de9
f08bf0d3-640f-47b8-b11d-f115ce2da3f8	01aab417-6721-4f8c-85ee-7e2743b58a21
818ba2d2-8ffd-4b49-a0ae-8a98122c1353	071724d3-56bd-4f6e-9d7e-37260803a5ac
2a6ce768-78dd-4d63-846d-a2f363405e06	cbba3bbb-62b7-4a27-8302-5a1cd61d10e3
5ddad7a8-b0a0-478e-a0b8-9cb331f2366e	a240e311-de7e-4371-8ae4-4a342577e809
39c2cd37-727b-4a3b-997e-d47b7581f431	5b75dc52-b9b1-4583-a8a9-9743f52c05d9
3ff93b33-c7e3-4a14-972e-d020274f1649	82c32b65-7b99-4832-8653-8885a0acca66
119859b3-b8f6-475a-b261-ec14257ecf80	b7932558-f432-4ae2-b754-6a6d38afc017
2b8001a1-cd77-4791-9747-648d3a3ef3dd	7f2df1df-9c94-4c80-9727-92bd235fd148
b6cbeca7-6525-4b83-951b-d5c637d2ed31	9312b6e4-d532-4f8b-ac8b-82bf9ce7c56e
c19d39ae-0c39-4ded-a5d1-23066cdf36f6	3eb8219d-5107-43f3-9196-15051e304a11
18c7f151-c03c-4195-91d9-40e9794e5431	f03cf5d6-66a2-4a67-9a8d-6a7e580f720c
poweraut@ecttaz.com	sergeluca@doctoflow12.onmicrosoft.com
2862f96a-f002-493e-bcbb-751a028bc842	f61d9c0b-a039-4c2a-9600-bf8976cd949a
5cd7b2eb-27c7-4cf0-a49a-3206a797562b	492e10f3-b79d-4ad7-b7ad-d5babbfa1868
8d4cb579-c959-432e-a0d6-74ac2e6404e6	56cb77ae-32d5-4417-b5e9-cb57d55ca13b
8358eafd-b13f-47c0-9198-2d3073ae5ed7	95415804-9e02-43c1-9200-c0c8c05375c0



15. (Video 31’40’’) Run the flow **BPM Toolkit – ALM _ Search and Replace** (from the BPM Toolkit solution). Select the parameter “pass1”. This flow takes between 10 and 15 minutes to complete.
16. Double-check that all flows have been activated:
    a. in the BPM Toolkit solution (except for the **BPM Toolkit workflow runtime**)
    b. in the BPM Toolkit Demo solution
    c. (Video 35’31’’) In the BPM Toolkit solution, edit the flow **BPM Toolkit – Delegation – Pending task to delegate**.
        i. Edit the setting Run only users:

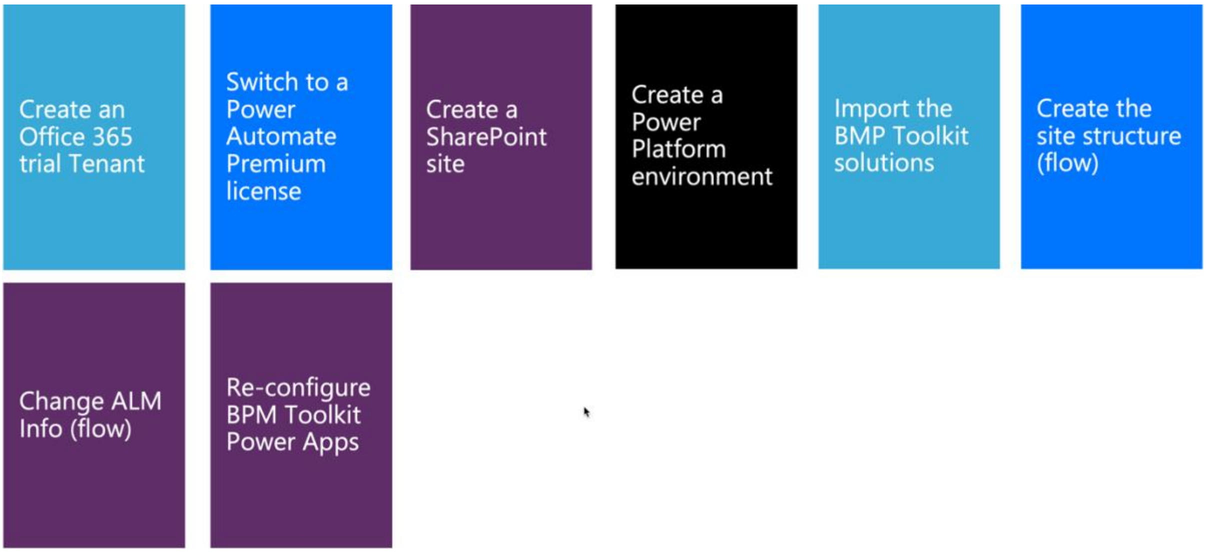


ii. Change to setting to use your service account:



And save the change.
Usually, this modification is automatically done for all flows who need it, but we still need to understand why we must force it manually. We will automate that later.

17. (Video 35’39’’) Run the flow **BPM Toolkit – ALM _ Search and Replace** (from the BPM Toolkit solution). Select the parameter “**pass2**”. This flow takes less than a minute to complete.
18. Check to make sure all flows, including the **BPM Toolkit – Workflow Runtime,** have been activated.
19. Check in the **BPM Toolkit Demo** solution that the flow **PPA-Submit Form Data - Proxy** has been activated. Activate it manually if it is not activated.
20. (not in the video) Go to the BPM Toolkit solution and run the flow **BPM Toolkit – Configuration** (pass the e-mail of your service account as a parameter).



Now we are ready for **re-configuring the BPM Toolkit Power Apps applications**:
(Video 37’00’’)

Solutions	Applications
BPM Toolkit	BPM Toolkit – Workflow Control Center
BPM Toolkit	BPM Toolkit – Workflow Panel
BPM Toolkit	BPM Toolkit – Your Dashboard
BPM Toolkit Demo	PPA_Order

21. (Video 37’ 52’’) Edit the Power Apps application **BPM Toolkit – Workflow Control Center**

    - Remove the following datasources:
        - **BPM Statistics**
        - **BPM Person in Roles**
        - **Case Lifecycle**
        - **Case Workflows**
    - Add the same data sources by adding the SharePoint connector (provide your site URL, and select the corresponding lists).
    - Remove the datasource BPMToolkit – Statistics – GetMainKPI Proxy
    - To avoid breaking the existing source code, add a screen, select the screen, and add the Power Automate action. Make sure you are pointing to the correct flow. Many flows are duplicated like “flow xxxx” and “flow xxx proxy”; the distinction of the flow names is confusing in Power Apps.
    - Remove the dummy screen you have added.
    - Save, publish, and share the application with everyone.

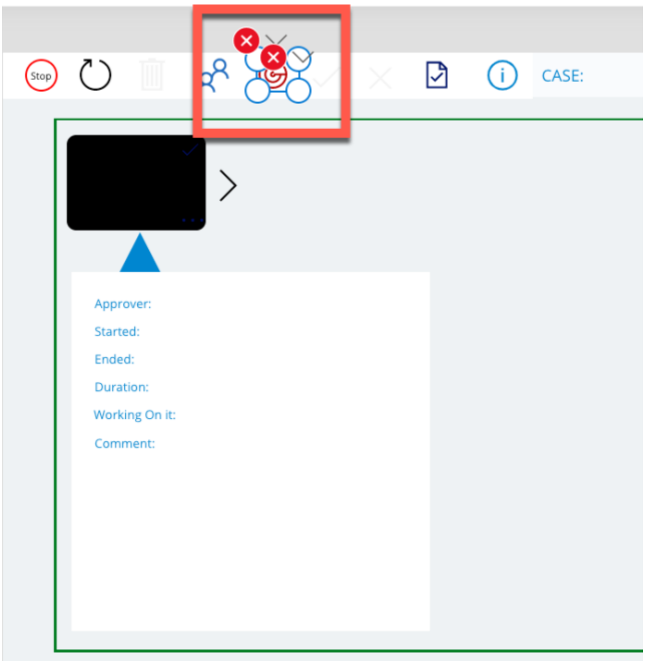
22. (Video 44’ 45’’) Edit the Power Apps application **BPM Toolkit – Workflow Panel**

- Remove the datasources:
    - **Cases**
    - **BPM Internal Messages**
    - **BPM Persons in Roles**
    - **BPM Roles**
    - **Case Workflows**
    - **Case Lifecycle**
    - **BPM Parameters**

- Add the same data sources by adding the SharePoint connector (provide your site URL, and select the corresponding lists).

- Remove the flow datasources :
    - **BPMToolkit-RemoveCaseProxy**
    - **BPMToolkit-Messages-AddMessageToCaseProxy**
    - **BPMToolkit-SkipOrReassignStepProxy**
    - **BPMToolkit.ActonTaskProxy**
    - **BPMToolkit-StopWorkflowProxy**
    - **BPMToolkit-InsertnewStepProxy**
    - **BPMToolkit.RedirecttoActorProxy**
    - **BPMToolkit-RedirectToStepproxy**
    - **BPMToolkit-TakeCaseStepOwnershipProxy**
    - **BPMToolkit-ReleaseStepOwnershipProxy**

- Add a screen, and add the reference to the previous flows and remove this dummy screen
- You should see the following error in the “Single-case Workflow Screen”:



Update the code with the suffix proxy:

- Save, publish and share the application with everyone
- Copy the Application URL.
- Edit the application Workflow Center, open the event OnVisible of FullDashBoard screen and replace the Workflow panel URL you've copied and don't forget to append the url with the query string **?itemid=**

```
Set(
    gblCaseDetailUrl,
    "https://apps.powerapps.com/play/fbb93025-9466-4951-a5d2-b8aad9c9c4cc?tenantId=2798645b-6f00-414c-8a15-e35c7009f7fd?itemid="
);
```

- Save, publish, and share with everyone the Workflow Control Center application.

23. (Video 1h06'00'') Edit the Power Apps application **BPM Toolkit – Your Dashboard**

- Remove the data sources:
  - **Case Lifecycle**
  - **BPM Forms**
  - **Case Delegations**
  - **Cases**
- Add the same datasources by adding the SharePoint connector (provide your site URL, and select the corresponding lists).
- Remove the flow data sources:

    - **BPMToolkit-Delegation-CreatenewDelegationProxy**
    - **BPMToolkit-Delegation-RemoveDelegationProxy**
    - **BPMToolkit-ActonTaskProxy**
    - **BPMToolkit-StopWorkflowproxy**
    - **BPMToolkit-RemoveCaseproxy**

- Add a screen, and add the reference to the previous flows and remove this dummy screen.
- Save, publish, and share the application with everyone.

24. (Video 1h15’05’’) Edit the Power Apps application **PPA_ORDER** (you will find it in the BPM Toolkit Demo solution). This is a demo application that we will detail in another tutorial.
    - Remove the data sources:

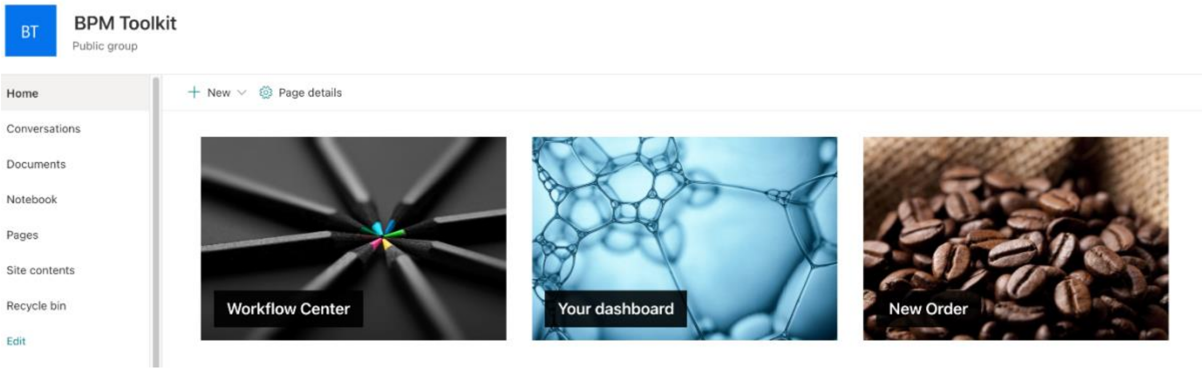
      PPA_ORDERS
      BPMToolkit-SubmitFormData-Proxy

    - Add the same data source, by adding using the SharePoint connector (provide your site URL, and select the corresponding lists).
    - Add a dummy screen, add the reference to the flow, and remove the dummy screen.
    - You will quickly notice an error in the screens **OrderFormScreen** and **ToWorkflowScreen**
    - Edit the errors and update the code like this:

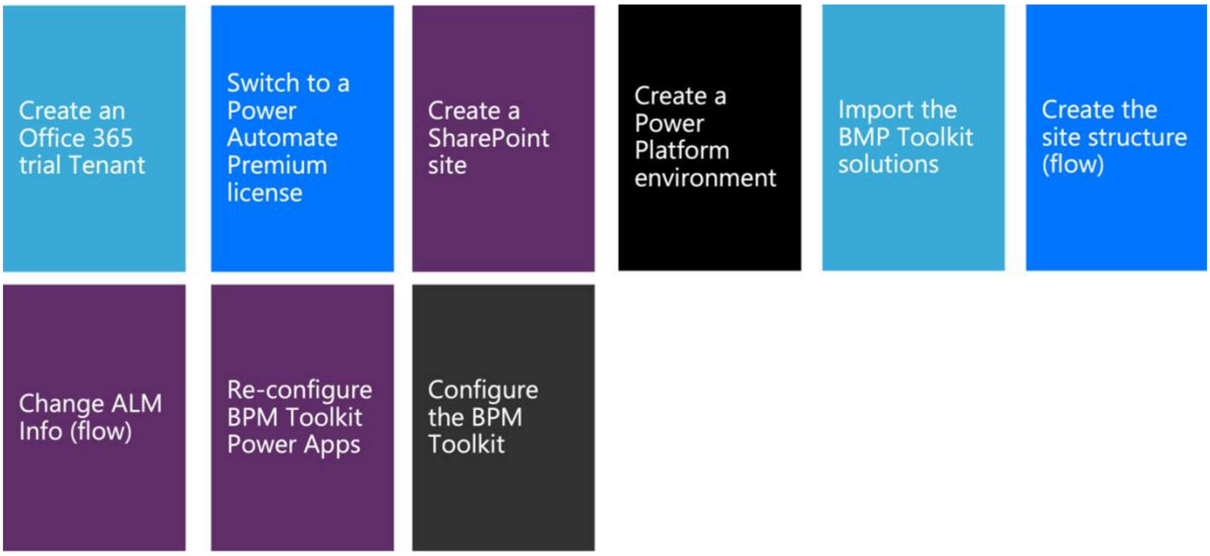
```
Set ( newOrder, 'BPMToolkit-SubmitFormData-Proxy'.Run(
    JSON(
        gblOrder,
        IndentFour
    )

));
```

    - Save, publish, and share the application with everyone.

25. (Video 1h20’00’’) Edit the SharePoint site homepage, add a new 3 columns section, and add 3 pictures like this:



The pictures should point to the Power Apps Workflow Command Center (not the Panel), the Dashboard, and the Order applications. Grab their URLs and paste them in the corresponding picture settings.



The BPM Toolkit has been configured. What will follow is what we will have to do for each new request, and like before, more automation will be provided in the next releases of the BPM Toolkit ☺. A flow will automatically perform the following actions. But right now, you have to do it manually.

26. You will now configure the BPM Toolkit for the following scenario:
    A user submits an order.
    The order must be reviewed by 3 teams of people:

    ORDER_SUPPORT_PARIS,
    ORDER_SUPPORT_NYC,
    ORDER_SUPERVISOR

27. If you edit the PPA_ORDER application, you will notice than when the user submits his order request, the type of request must be provided to the BPM Toolkit: in this case, the type of request is “**PPA_ORDER**”: (Video 1h27’51’’)

```
Set (
    gblOrder,
    {
        /* Mandatory for BPM Toolkit */
        CaseID: gblCaseID,
        /* Mandatory for BPM Toolkit */
        Submitter: gblSubmitter,
        /* Mandatory for BPM Toolkit */
        OnBehalfOf: gblOnBehalfOf,
        /* Mandatory for BPM Toolkit, Must be FINAL o
        CaseSubmissionStatus: "DRAFT",
        /* Mandatory for BPM Toolkit */
        RequestType: "PPA_ORDER",
        /* Mandatory for BPM Toolkit */
        CaseDescr: gblCaseDescr,  /* Optional for BPM
        Actors: "",
        Product: gblProduct,
        Amount: gblAmount,
        Account: gblAccount,
        Contact: gblContact,
        ContactEmail: gblContactEmail
    }
```

Nothing else has been configured yet regarding this type of request—Let 'see what happens when we submit an order.

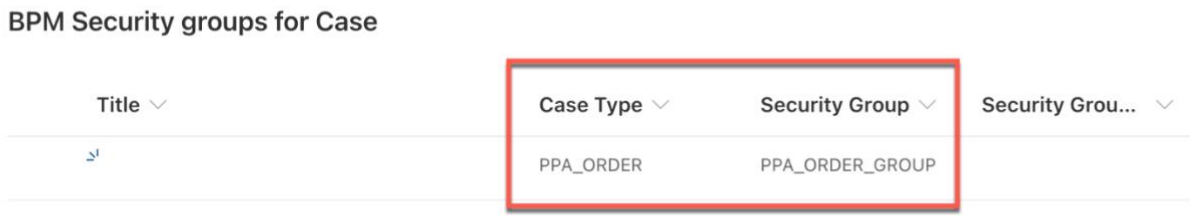
28. The BPM Toolkit is designed to deal with highly confidential information, like HR, medical data, or defense sensitive data. Therefore, the information related to the request must be end to end secured:
29. only the user who submits the information (or the person who submits the request on behalf of the user) can see the information.
    If the request is submitted for review/approval, only people in the review/approval pipeline can see the information. This is typically the case in HR or DOD (Department of Defense) systems.

30. (Video 1h28'30'') Let's define a SharePoint security group for the type PPA_ORDER.

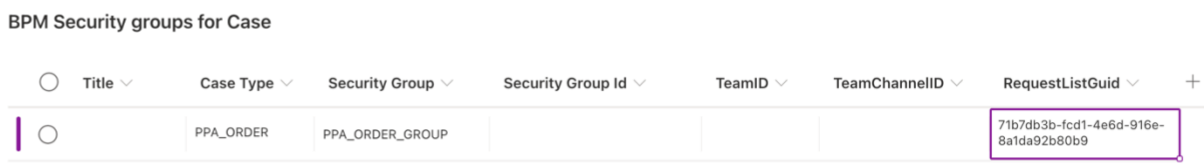
- Go to the SharePoint list **BPM Security Groups for Case**. Add a new entry: type PPA_ORDER in the Case Type column. Save the information.

- (Video 1h29'05'') We will specify the Security group associated with PPA_ORDER in the security group column, but let's define the SharePoint security group.
    a. Go to the **site settings**- **site permissions**- advanced **permissions settings**
    b. Create a Group named PPA_ORDER_GROUP with **read** permissions.

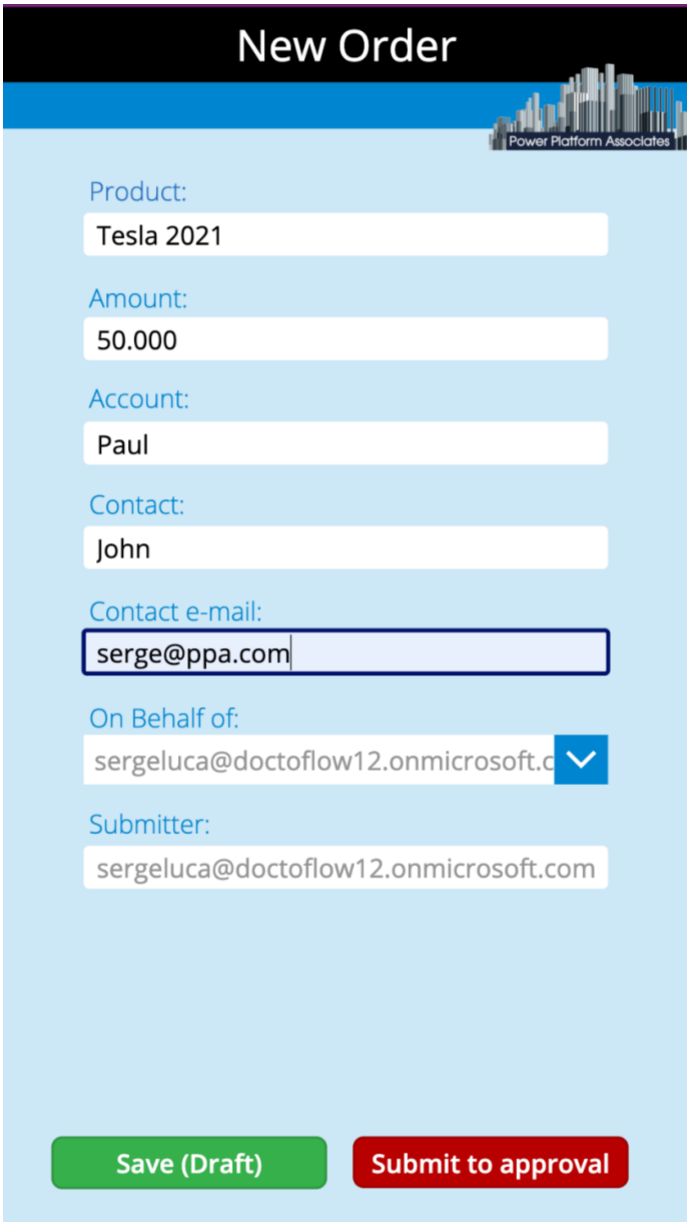
- (Video 1h30’14’’) Go to the SharePoint list **BPM Security Groups for Case** and select PPA_ORDER_GROUP in the security group column



31. (updated 1/5/2021) Not in the video: in the same list (BPM Security Groups for Case), specify the PPA_ORDER list guid in the **RequestListGuid** column: (you will find the guid in the Excel ALM file you did fill-in before)



32. (Video 1h30’41’’) On your SharePoint home page, click on the new Order picture.
33. Fill in the form:



(Video 1h32'31'') Click on **Save (Draft).** No workflow has been defined yet for the PPA_ORDER request, so we will just try to save, view, and edit the form. The form calls a flow that will store the right in a dedicated list. Each request type must have its dedicated list (or Entity in the Dataverse version of the BPM Toolkit).

The PPA_ORDER requests are saved in the PPA_ORDERS list and are secured by the BPM Toolkit.

Saving a request (even in draft mode) already creates a Case. If you check the Case list, you will see your request.

Go to your SharePoint site homepage and click on the picture Your Dashboard.

The Dashboard is where users can manage all their requests, approve/review tasks, and delegate their activities to other users for a specific timeframe.

Your request is a draft; filter the draft requests by clicking on the grey circle:

If you want to edit, view the request, click the icon in the Action column (don't click the delete icon yet) : nothing happens. The reason is that when a request is created, the associated View and Edit forms must be specified. You will do it in the next step.

34. (Video 1h34'21'') To associate these forms with the request PPA_ORDER:

- Copy the PPA_ORDER application URL
- go to the SharePoint list **BPM Forms**
- Create a new entry with CaseType = PPA_ORDER, paste the app URL in ViewForm and EditForm.
- For ViewForm append the url with**?action=view&CaseID=**
- For EditForm append the url with**?action=edit&CaseID=**

35. Go back to MyDashboard app, refresh the app in the browser (F5) and view and edit your request and save it. Check if the modifications have been saved.
Don't submit the request for approval yet; we still have to define the workflow logic for the reviewal/approval.

Define request Categories

36. If you take a look at the MyDashboard the type column of your draft request is empty

All Waiting Rejected Approved Draft Stopped

Status	Submitted on	Request Id	Name of requester	Type	Action
	22/12/2020 09:40	Req-2020-12-22T09:40:33.6694635	sergeluca		

37. (Video 1h41'29'') This is the request category. Let's define the request category in the BPM Case Categories: add the following entries:

BPM Case Categories

Title	Workflow	Case Category	Case Type Int...	Case Type Frie...
		PPA_ORDER	PPA_ORDER	PPA_ORDER

The existing request won't get the category name, but if you create a new draft request you will see the category:

Status	Submitted on	Request Id	Name of requester	Type	Action
	22/12/2020 10:52	Req-2020-12-22T10:52:14.3105561	sergeluca	PPA_ORDER	
	22/12/2020 09:40	Req-2020-12-22T09:40:33.6694635	sergeluca		

Let's define the **workflow**.

The logic is our PPA_ORDERS must be reviewed by 3 teams that we will define and name:

ORDER_SUPP_PARIS
ORDER_SUPP_NYC
ORDER_SUPERVISORS

38. (Video 1h41'59'') Go to the **Meta workflows** list and define 3 entries (1 for each step of the workflow):

Meta Workflows

Title	Step	Actor	Type of actor	CaseType	ActionExpected
	0	ORDER_SUPP_PARIS		PPA_ORDER	Feedback
	1	ORDER_SUPP_NYC		PPA_ORDER	Feedback
	2	ORDER_SUPERVISORS		PPA_ORDER	Feedback

We need to define what exactly the actors are.

39. (Video 1h44’06’’) Define the actors in the **BPM Roles** list.

BPM Roles

Title	Role
	ORDER_SUPP_PARIS
	ORDER_SUPP_NYC
	ORDER_SUPERVISORS

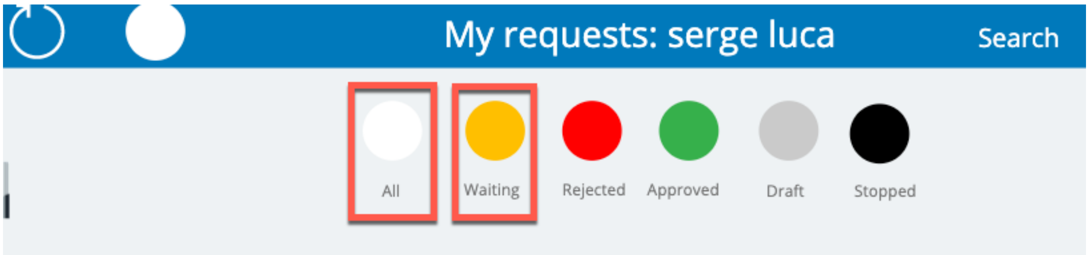
40. (Video 1h45’20’’) Define who is part of which role in the **BPM Persons in roles** list: Add your e-mail for each role.

BPM Persons in Roles

Title	PersonEmail	Active	Role
	sergeluca@doctorflow12.onmicrosoft.com		ORDER_SUPERVISORS
	sergeluca@doctorflow12.onmicrosoft.com		ORDER_SUPP_NYC
	sergeluca@doctorflow12.onmicrosoft.com		ORDER_SUPP_PARIS

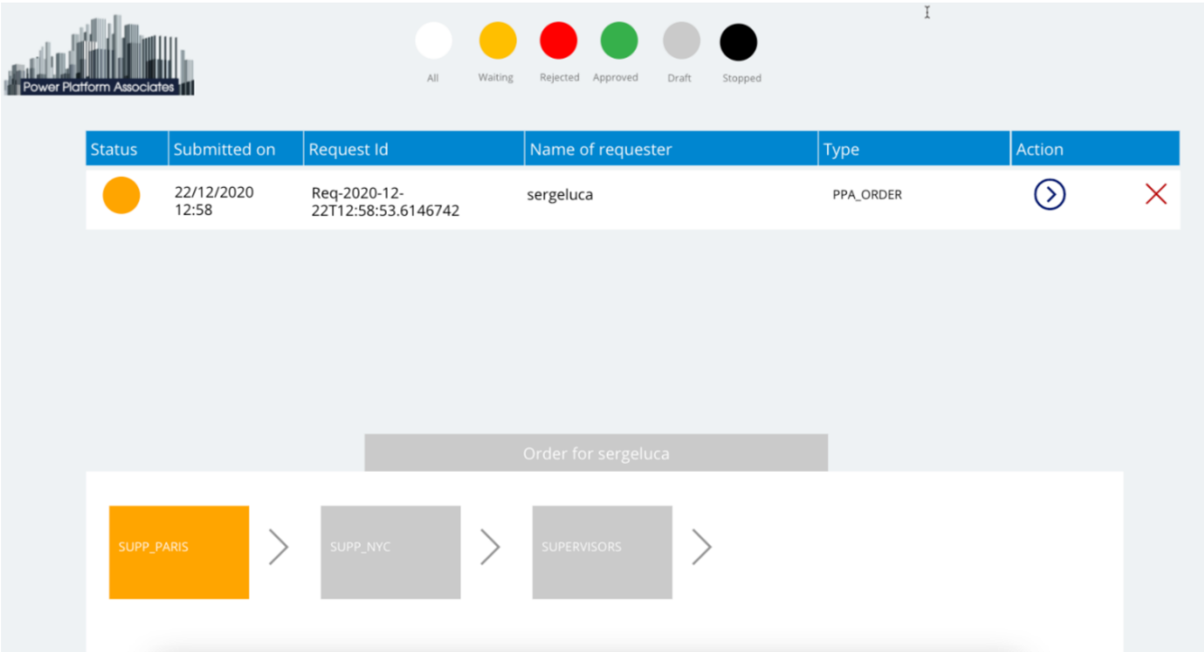
41. (Video 1h46’37’’) Go to the **MyDashoard** app, edit your request, and submit it for approval. Don’t provide any extra approvers.

If you go back to MyDashboard, you will see that the request is not in the draft mode anymore; it is in the "All" category.



It can take a minute to generate and to secure the workflow steps. Click the refresh button until you see that the request becomes orange. At some point (in the waiting category), you will see that the system generates the steps very slowly.

After 1 minute, you should see this:



Next (to be inserted in the document)
Follow the procedure in the video from 1h50 to use the Workflow Command Center.

The Workflow command center is to be used by Officers.
The MyDashboard is for anyone:

To follow the submitted requests,
To delegate tasks
To approve/review/comment tasks

This is not a user guide that illustrates all the functionalities of the BPM Toolkit. What you have seen so far is only a subset of the BPM Toolkit functionalities. This guide will be shared soon.