

Power Automate Flows with Dataverse

- Deployment Practices-

Takamitsu Endo Min Rao



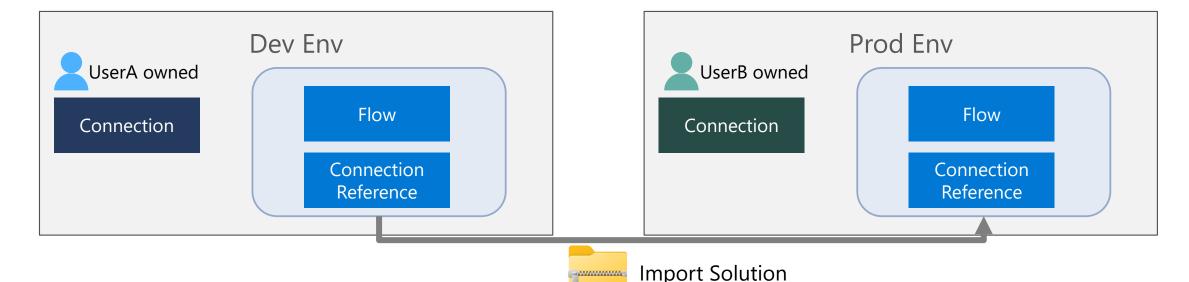
What is the Best Practice to migrate Power Automate Flows?

Why would my Flows get deactivated every time after importing solution?

Common Challenges

Flows get deactivated after importing solution

- Cause
 - No connection reference
 - Connection Reference exists, but Connection doesn't exist
 - Connection Reference and Connection exists, but import user cannot read that Connection in a target env



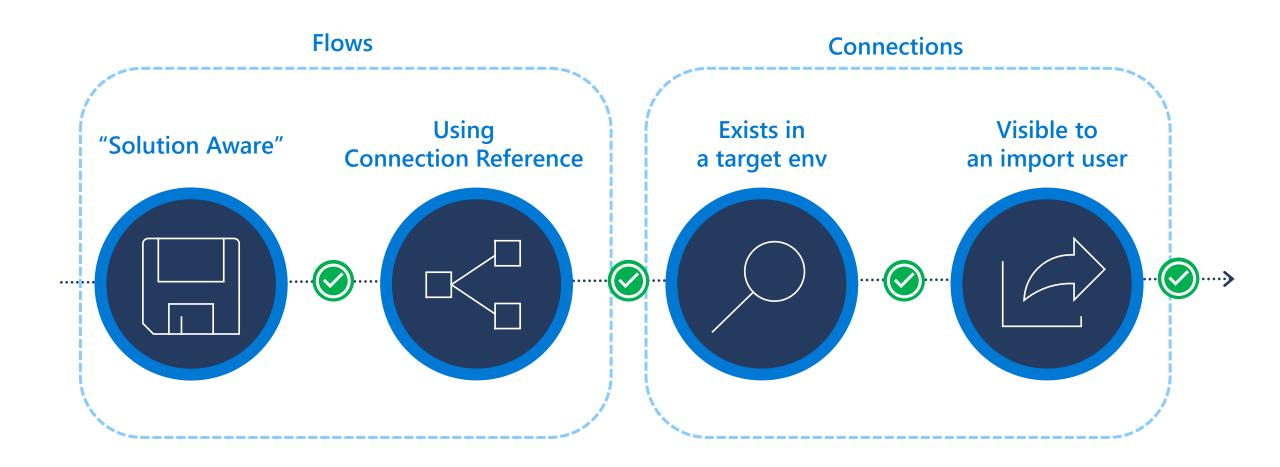
Common Challenges

Flows get deactivated after importing solution

- Owner of a connection matters
 - Connections can only be read by the Owner who created them.
 - You will see the issue when...
 - Multiple members in your team are working on the same solution and any of them may perform solution import.
 - You are using Azure DevOps pipeline with Service Principal to import solutions
- If your Flows get deactivated,
 - You can reactivate flows from UI, PowerShell, or Flow (with impersonation if necessary)
 - However, you need to fix problems around connections first, if you have one

Migrate Flows without getting deactivated

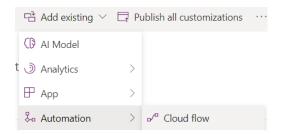
Migrate Flows without getting deactivated



Are your Flows...

"Solution Aware"?

- If you have created your flows in your solution in maker page, they are solution aware.
- If you haven't,
 - Open your solution and "Add existing" -> "Automation"->"Cloud flow"



2. Select "**Outside Dataverse**" tab in "Add existing cloud flows" pane, add your flow(s)

Using Connection Reference?

- If you have created a new flow from "+New" in your solution, Connection Reference was automatically created.
- If you have added your flow from "Add existing", Connection Reference was NOT automatically created.
 - To create a connection reference, see:
 <u>Updating a flow to use connection</u>
 references instead of connections
 (https://learn.microsoft.com/en-us/power-apps/maker/data-platform/create-connection-reference#updating-a-flow-to-use-connection-references-instead-of-connections)

Connections in a target env...

Already exists?

- "Connection" itself cannot be carried in solutions.
- If connection doesn't exist in target environment, you need to create manually before/when you import solutions with connection references.
- This needs to be done from UI (You cannot create connections with API so far)

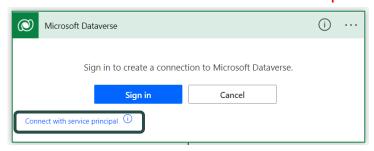
Visible to an import user?

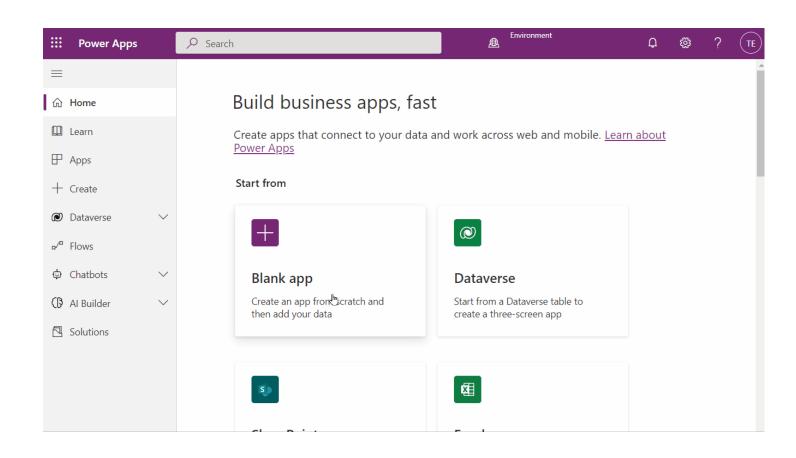
- Connection is owned by an user who created it.
 - An user who import a solution needs to own connections for flows in that solution
 - Or...
- You can "share" connection with Service
 Principals, but not with other users
- If you are importing solutions from...
 - Pipelines: You need to share connections with the service principal you will use for your pipeline.
 - Ul(maker page): You need to use a single user account.

Share connections with Service Principals

How to share?

- Go to "make.powerapps.com"
- Click "Dataverse"->"Connections"
- Find connection you want to share
- Click "..."->"Share"
- Note 1: Connection Owner is different from "Connect with Service Principal"





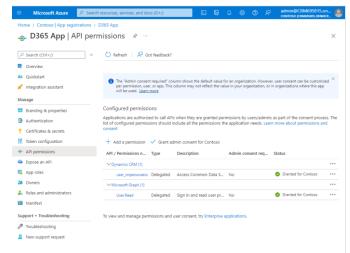
Note 2: Power Platform Request Limits are applied based on the Owner of a Flow itself, not Connection Owner
 <u>Types of Power Automate licenses - Power Platform | Microsoft Learn</u>

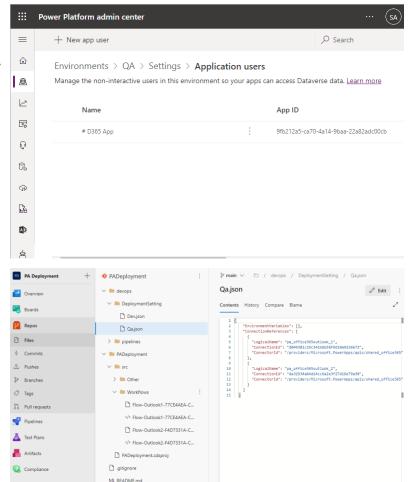
Deploy Flows with Azure Pipelines

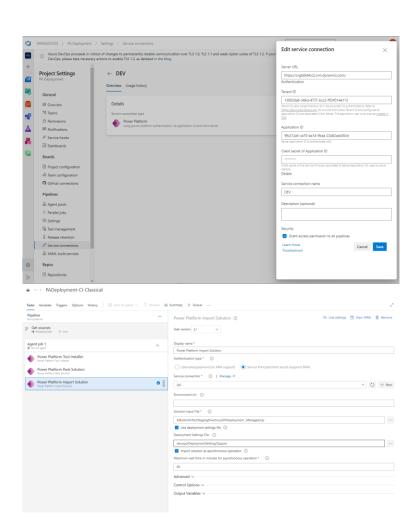
Deploy Flows with Azure Pipelines

How to deploy?

- Prerequisites(Service Principal, Service Connection, Application User.)
- GIT.
- Deployment setting file.
- Azure Pipeline

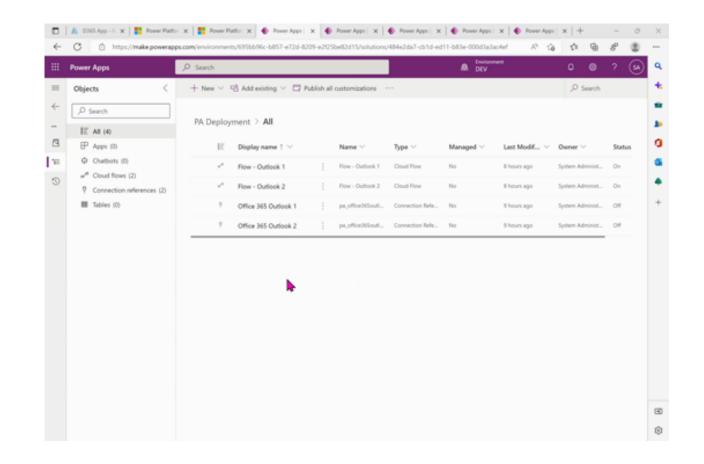






Deploy Flows through Azure Pipelines(Demo)

- Export/import solution with a pipeline
- Configure pipeline to specify connections with deployment settings file
- See the difference in behavior between shared and unshared connections





Thank you