

GLOBAL POWER PLATFORM BOOTCAMP 2023

Organized Globally, Held Locally







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Governance and ALM at scale with Managed Environments and Pipelines in Power Platform

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- Low Code Cloud Solution Architect and former Business Applications Customer Success Manager
- Besides job title, I support customers in their **digital transformation journey** for a **successful adoption of Microsoft Power Platform**
- I have deepened a strong interest on Power Platform Governance as I believe it is a key differentiator for our solution



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Governance is key to an Enterprise Scale Platform

Do any of these challenges sound familiar to you?



Business data security concerns regarding connectors



Environment health regarding trial setup



Maintenance challenges regarding app and flow distribution



Security risks regarding "shadow IT"



Compliancy issues regarding GDPR



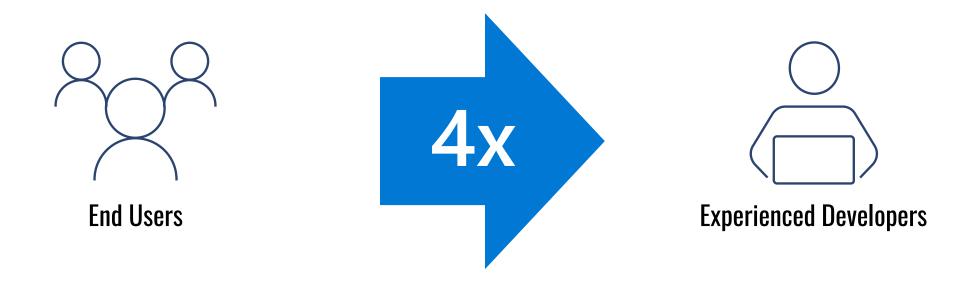
ALM support regarding apps being created/deployed



Staff turnover challenges regarding app or flow ownership



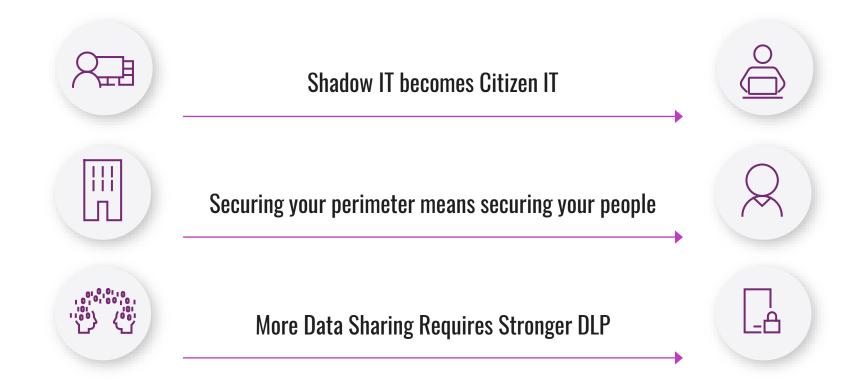
A MATTER OF NUMBERS...



End users will be creating many more apps than experienced developers in the coming years

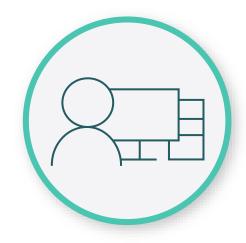


...A MATTER OF TRANSFORMATION...





...A MATTER OF PEOPLE!







Experienced Developers



End Users



EVERY PROBLEM UNCOVERS AN OPPORTUNITY!

Power Platform empowers IT admins with governance capabilities



Makes governance a mandate



Helps Develop & Implement a Strategy



Allows flexibility when needed



GOVERNANCE IS A MULTI-STEP APPROACH

Security

Monitoring

Alert & Action

Product discovery: understand the origin of apps & flows

Know your environments

Learn the 5 layers of security + the one that maters most

Setup data loss prevention policies

Review out-of-box analytics

Configure audit logs

Leverage management connectors & PowerShell as powerful reporting tools

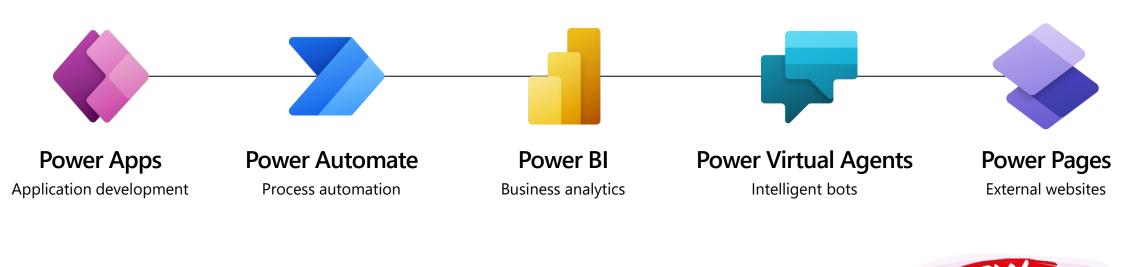
Leverage management connectors & PowerShell to automate your policies

Welcome new makers and foster best practices

Identify and empower champions

Admin and governance best practices - Microsoft Power Platform - Power Platform | Microsoft Learn







Announcing the general availability of Managed Environments | Microsoft Power Apps

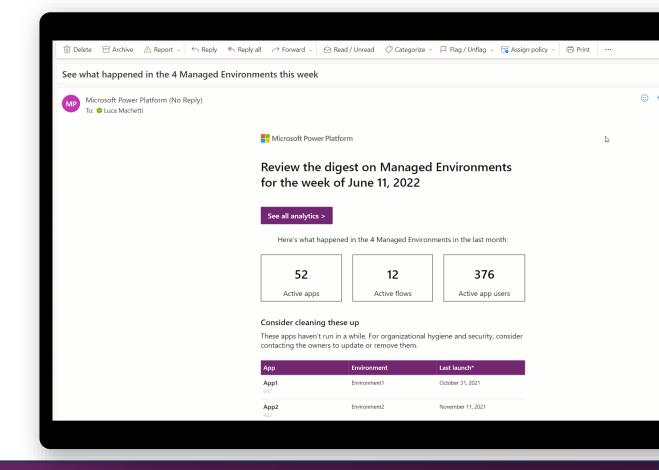


MANAGED ENVIRONMENTS = POWERFUL GOVERNANCE

More visibility into the apps and automations in your organization

More control over which apps are deployed and who builds them

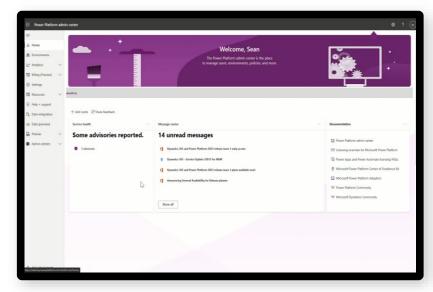
Less effort to manage and govern your entire application estate



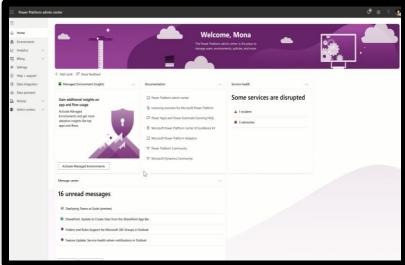


THE RIGHT TOOLS FOR YOUR GOVERNANCE REQUIREMENTS

Power Platform Admin Center



Managed Environments



Center of Excellence Kit



Standard governance offering:

- Build guardrails around data, apps, and environments
- View analytics on low code assets across your organization

Premium governance offering:

- Enable governance-at-scale without additional IT resources
- Proactively build and enforce best practices

Extensible governance add-on:

- Enhance your governance journey with powerful open-source tools
- Drive innovation and improvement faster



STREAMLINE GOVERNANCE AT SCALE



More visibility

Usage insights
Admin digest
License reports
Data policy view



More control

Sharing limits
Solution checker
Maker onboarding

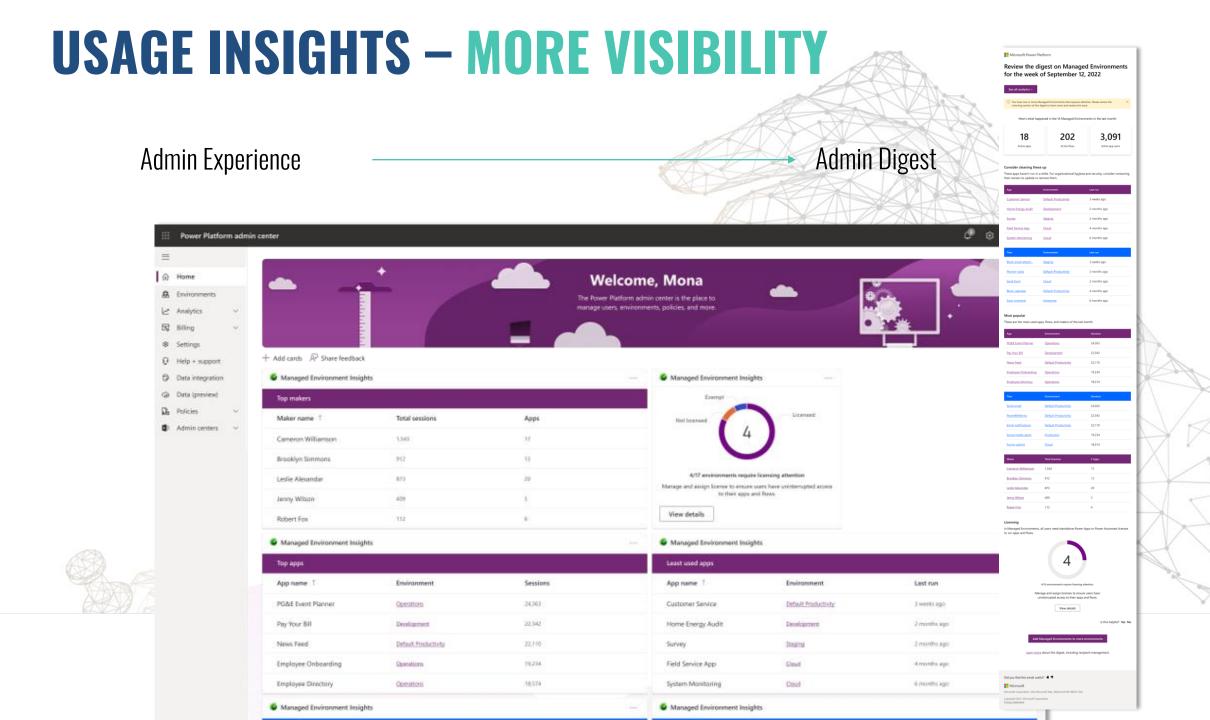


Less effort

Easy activation Automated ALM

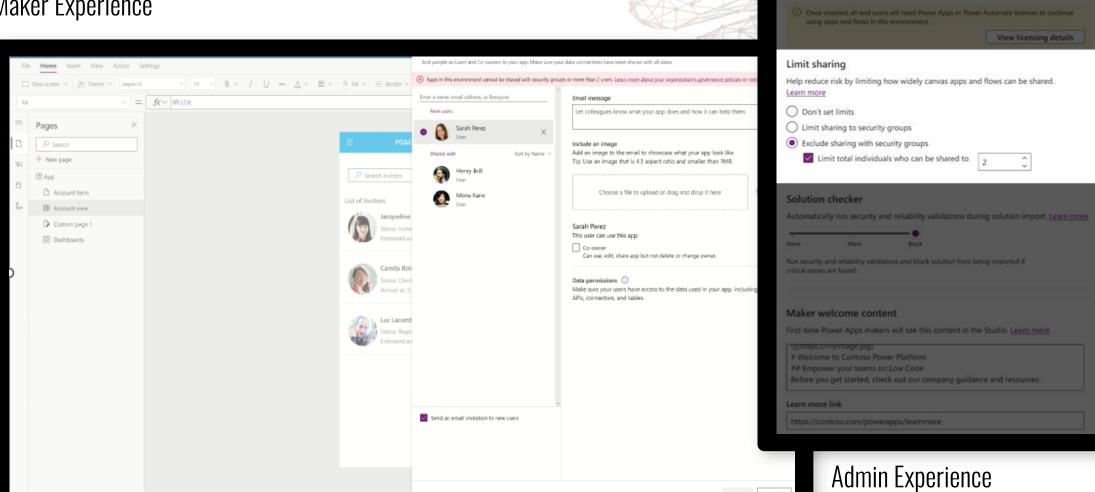
<u>Managed Environments overview - Power Platform | Microsoft Learn</u>





SHARING LIMITS - MORE CONTROL

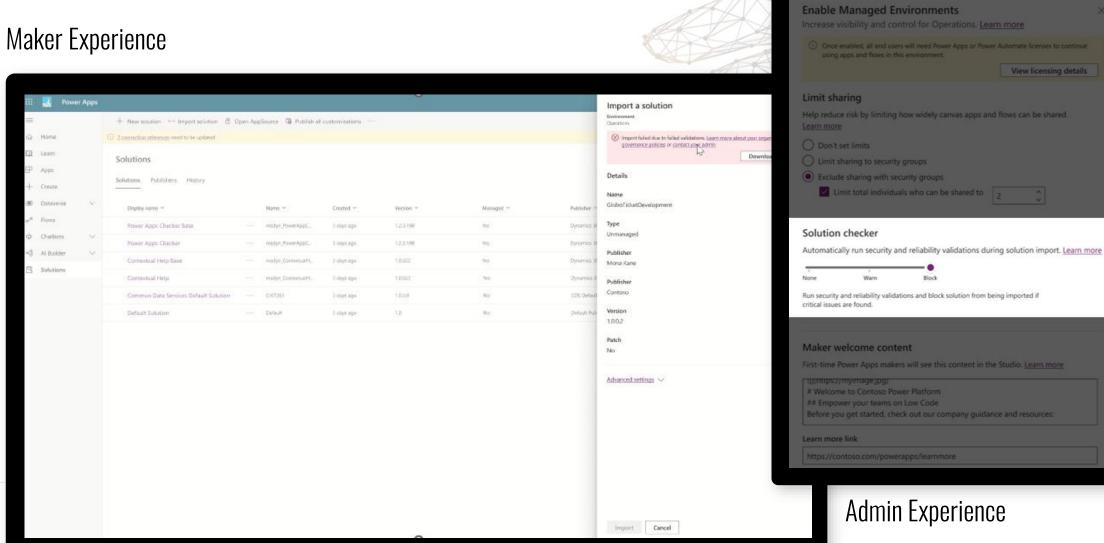
Maker Experience



Enable Managed Environments

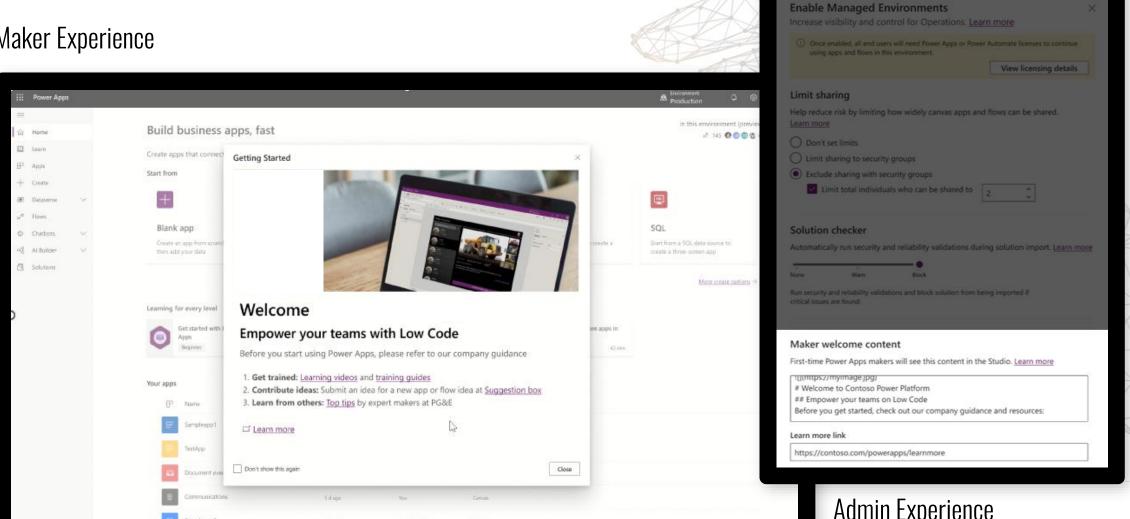
SOLUTION CHECKER — MORE CONTROL





MAKER ONBOARDING - MORE CONTROL

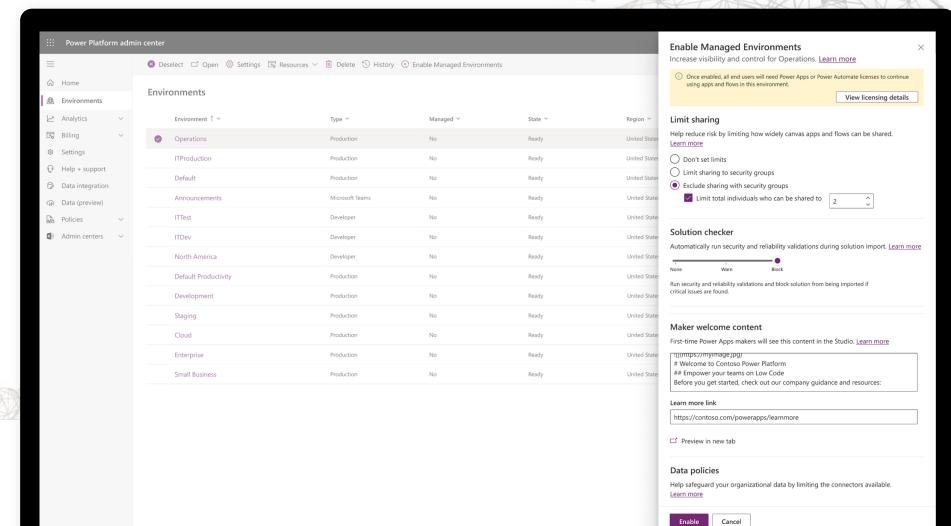




Admin Experience

EASY ACTIVATION – LESS EFFORT







AUTOMATED ALM – LESS EFFORT with Power Platform Pipelines

Pipelines in Power Platform aim to democratize application lifecycle management (ALM) for Power Platform customers by bringing ALM automation and continuous integration and continuous delivery (CI/CD) capabilities into the service in a manner that's more approachable for all makers, admins, and developers.



AdminsSetup Pipeline in < 2 min



Citizen Devs Initiate deployment



Pro DevsRun pipelines via CLI

Overview of pipelines in Power Platform - Power Platform | Microsoft Learn





GENERAL AVAILABILITY (GA) FOR PIPELINES

Microsoft has just announced General Availability (GA) for Pipelines in Power Platform.

Customer adoption and feedback during preview have been overwhelmingly positive with many customers expressing desire to use pipelines in production.

GA date has then been anticipated with respect to the original one (June 2023) provided that lots of updates during the preview have improved overall quality, reliability, and ensured backward compatibility for upcoming releases.

Find out more here: <u>Pipelines in Power Platform is Generally Available (GA) |</u>
<u>Microsoft Power Apps</u>





PIPELINES – ADMINS

Manage access and view all deployment activity across your organization within the same location

Pipelines enable admins to centrally govern citizen-led and pro-dev-led projects at scale with less effort. Admins set up the appropriate safeguards that govern and facilitate solution development, testing, and delivery across the organization.

Common setup scenario:

- Power Platform Administrator role
- one environment to host Pipelines solution
- at least two environments, one "development" and one "target" with a Dataverse database (however three are recommended for a typical ALM process)
- Managed Environments enabled on all the environments that will be part of a pipeline*

*this will not be enforced until the second half of 2023



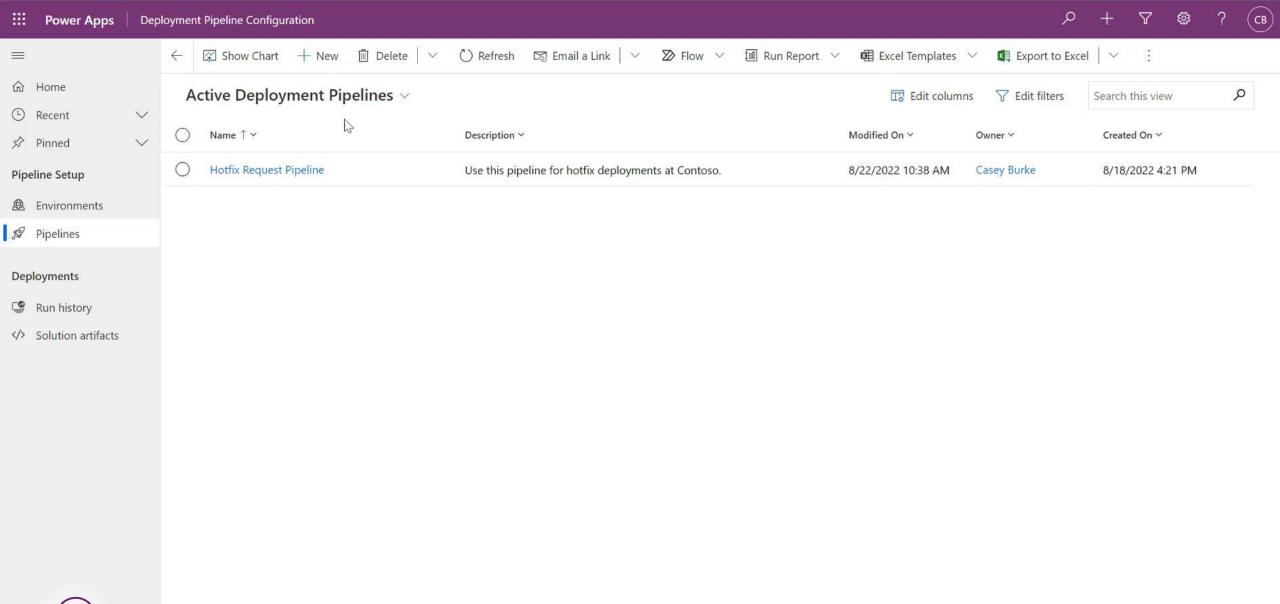
PIPELINES - ADMINS

A closer look to environment setup

Environment purpose	Environment type	Managed Environment	Standalone license
Host	Production	No	No
Development	Developer/Production	Yes (at GA)	No/Yes
Quality/Test	Developer/Production	Yes (at GA)	No/Yes
Production	Production	Yes (at GA)	Yes

Host environment is a special-purpose environment that acts as storage and management for all pipeline configuration, security and run history. Pipeline solution is automatically installed via Dynamics 365 apps resources.





Admins

PIPELINES – CITIZEN DEVELOPERS

Have an intuitive user experience for solution deployment in just a few click

Once pipelines are in place, makers can initiate in-product deployments with a few clicks. They do so directly within their development environments. Other benefits to makers include:

- no prior knowledge of ALM processes or systems required. Citizen developers often view pipelines as a guided change management process.
- solution deployments are prevalidated against the target environment to prevent mistakes (i.e. missing dependencies)
- connections and environment variables are provided upfront and validated before the deployment begins.
- no needs of manual post-processing steps



PIPELINES – CITIZEN DEVELOPERS

A closer look to permissions and roles to run pipelines

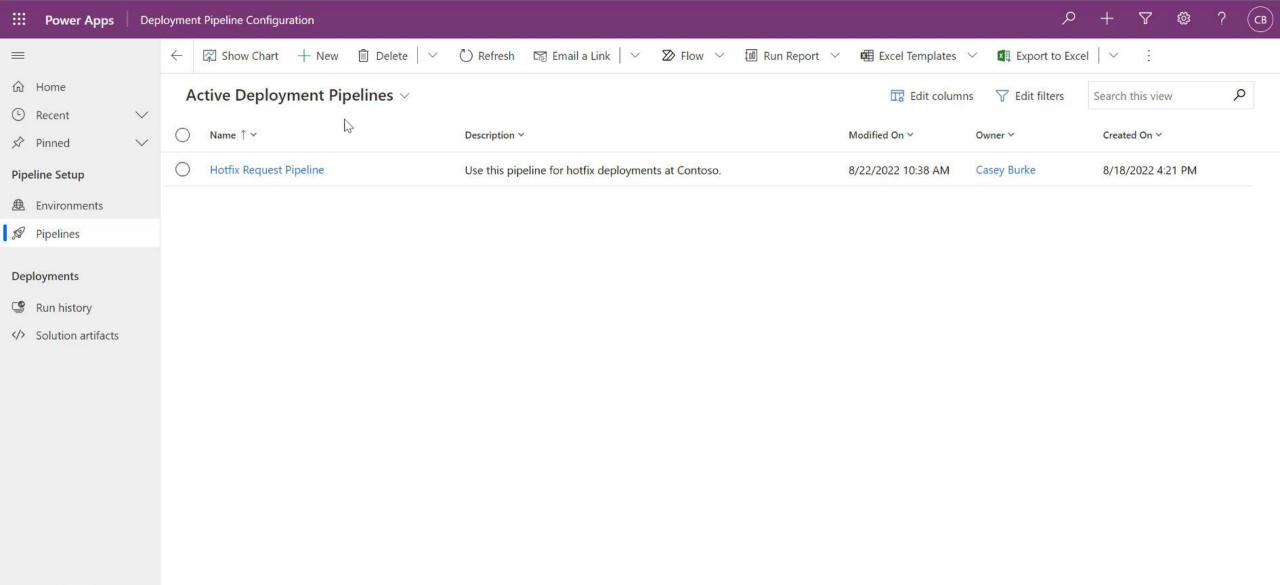
Pipeline security is managed within the Host environment with security roles:

- **Depyloment Pipeline Administrator**: has full control over all pipeline configuration, without needing System Administrator security role membership
- **Deployment Pipeline User:** has privileges to run pipelines that have been shared with them

Sharing a pipeline means:

- sharing the pipeline record with makers (or Azure Active Directory groups); read privilege is sufficient to view and run a pipeline from within the development environment
- be sure that makers has export and import privileges on the source and target environments (i.e. Environment Maker or System Customizer roles)





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PIPELINES - PRO DEVELOPERS

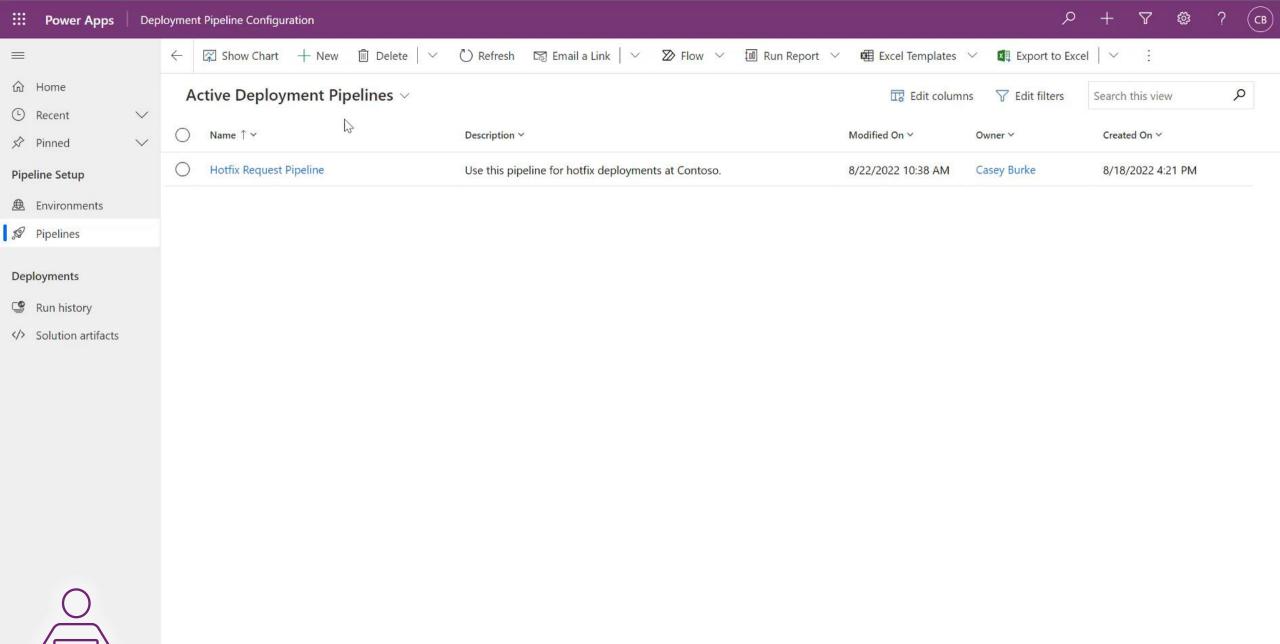
Can (optionally) retrieve pipeline information as well as run pipelines using their preferred tools (as Power Platform CLI)

Professional developers are more productive with pipelines now handling the complex background operations. Developers can tell the system what they want to accomplish instead of executing the various underlying tasks necessary to accomplish the same goal.

Using the Power Platform CLI, developers can:

- list pipelines to view pertinent details such as which stages and environments are ready to deploy their solutions to
- deploy a solution with a single command:
 - o with pipelines, developers simply provide the required parameters and the system orchestrates all the end-to-end deployment operations in compliance with the organizational policies
 - o no need to connect to multiple environments, export solutions, download solution files, manually create connections and populate deployment settings files, import solutions, or handle various other tasks that were required previously





Pro Dev

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PIPELINES – WHAT'S COMING NEXT?

Let's see what has been recently announced and what we can speculate about future evolution of Pipelines from public documentation

Pipelines in Power Platform is Generally Available (GA) | Microsoft Power Apps

- Scheduled deployments -- coming soon!
- Pipelines extensibility with custom logic before and after pipeline execution (including approvals) -- coming soon!
- Delegated deployments -- coming soon!

Pipelines FAQs - Power Platform | Microsoft Learn *

- Pipelines within different tenants? -- Not currently
- Using your own Service Principal? -- Not currently
- Integration with Azure DevOps or GitHub? -- Not currently
- Advanced solution import behaviors (i.e. update?) -- Not currently, now import behavior is *Upgrage with maintain customizations*
- Multiple solutions at once? -- Not currently

* none of these features has officially been announced or confirmed yet



Any Questions?



Please fill out the survey!



https://aka.ms/gppb23mifeedback





THANK YOU

Resources:

