

## WorkshopPLUS Power Platform for Administrators

Power Platform Analytics & Monitoring

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## **Objectives**

After completing this Learning, you will be able to:

Understand....

✓ What Power Platform events are logged in Office 365 Audit Logs

Understand....

✓ How to monitor environments' storage capacity

Understand....

✓ What out-of-the-box analytics and reporting features of Dataverse, Power Apps and Power Automate analytics are available

Understand....

✓ How to check and monitor Power Platform services health



# Activity events in Office 365 Audit Logs

#### **Access Audit Logs**

PowerApps, Power Automate, Dataverse audit records are available at <a href="https://compliance.microsoft.com/auditlogsearch">https://compliance.microsoft.com/auditlogsearch</a>



#### **ACTIVITY LOGGING**

Available with Office E3 or greater license and integrated with Office Security and Compliance center.



Must be enabled at the organization/tenant level

Office provides <u>API's</u> to query this data, which is currently used by many <u>SIEM</u> vendors to use the Activity Logging data for reporting.

#### Monitor Activity Parameters for Power Apps & Automate



#### **Power Automate**

Created flow Edited flow

Deleted flow

Edited permissions

Deleted permissions

Started a paid trial

Renewed a paid trial

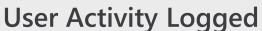


#### **Power Apps**

Created app
Edited/save app (draft)
Published app
Deleted app
Restored an app from app version
Launched app
Marking app as featured
Marking app as hero
Edited app permissions
Deleted app permissions

## Monitor Critical Activity Parameters of the Dataverse





- Admin Activity Logged
- Publishing customizations
- Configuring instances by adding solutions to instance
- Team and user management who was added, deleted, access rights of user/team
- Deletes of attributes
- Backup and Restore actions
- Managing instances New instance added and delete instance

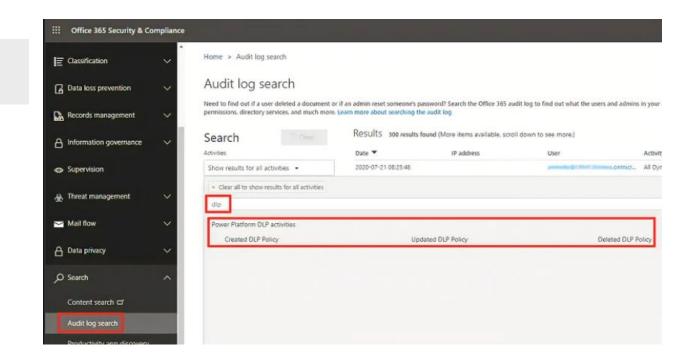
- Creates, Reads, Updates, Deletes on records and Dataverse metadata
- Dataverse record views
- Export to excel
- SDK calls
- Backend Microsoft support engineer CRUD activities
- Reports viewed

## Data loss prevention activity logging



#### **DLP Audited Events**

Created DLP Policy
Updated DLP Policy
Deleted DLP Policy



## **Monitor Connector Activity (preview)**

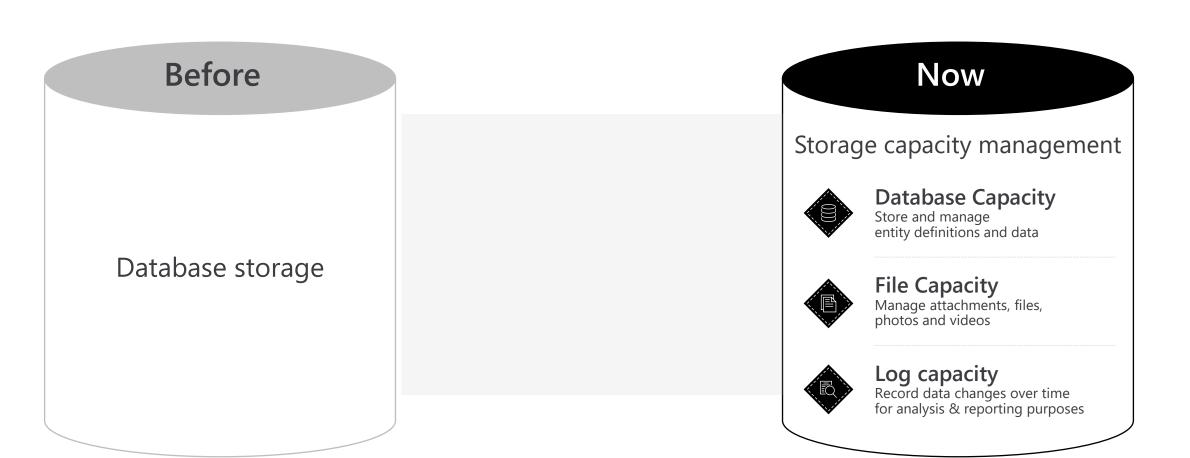


Connector event	Description				
API created	When a custom API is created				
API edited	When a custom API is updated				
API deleted	When a custom API is deleted				
Connection created or edited	When a connection is created or updated				
Connection deleted	When a connection is deleted				
Connection edited	When a connection is updated				
API permission added or edited	When a custom API is shared or the permissions are updated				
API made solution-aware	When a non-solution API is moved to a solution				
API permission removed	When sharing permissions of a custom API are removed				
Connection permission added or edited	When a connection is shared or sharing permissions are updated				
Connection permission removed	When sharing permissions of a connection are removed				
Gateway cluster edited	When a gateway cluster is updated				
Gateway permission added or edited	When a gateway is shared or the sharing permissions are updated				
Gateway permission removed	When sharing permissions of a gateway are removed				

## Monitoring Storage Capacity and Add-On's

## **Evolution of the Microsoft Dataverse storage capacity**

Optimizing data management for database storage, attachments, and audit logs



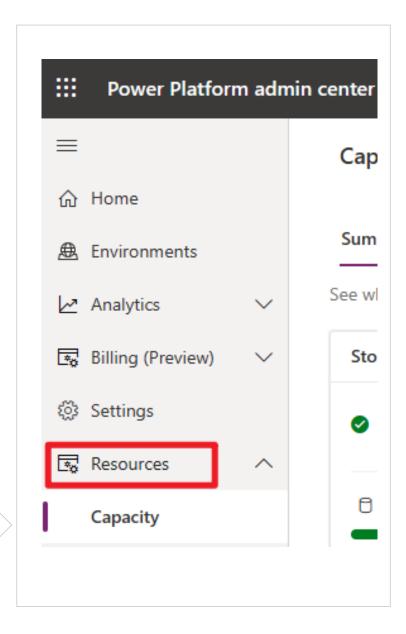
### Gain Deeper Insight on Storage Capacity



#### Capacity management & enforcement

- Understand storage and consumption
- Access for environment admins, power platform service admins, D365 and global admins and individual users who have purchased a license

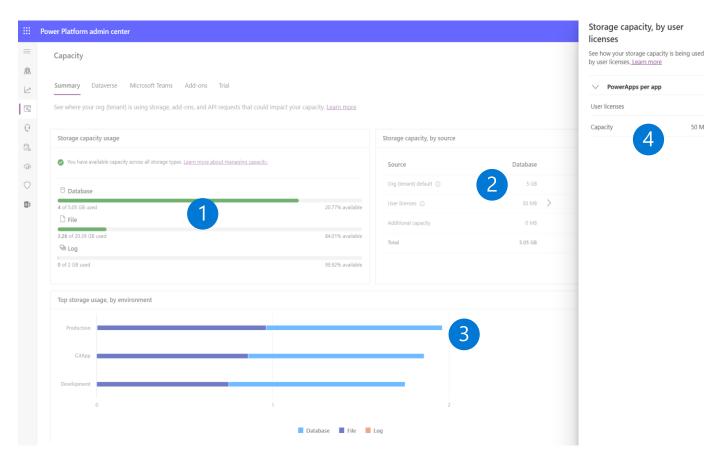
https://aka.ms/ppac



### **Capacity Page Details**

In Power Platform Admin Center, select Resources > Capacity > <u>Summary</u> All tables of Dataverse, including system tables, are included in the storage capacity reports.

- 1. Storage capacity usage
  - Database All tables
  - File Tables having file or image data type as well as Attachment, AnnotationBase, Insights application OOB tables
  - Log AuditBase & PlugInTraceLogBase tables (Audit logging)
- 2. Storage capacity, by source (Database, File, Log)
  - Org (tenant) default
  - User licenses Additional capacity added for every user license purchased
  - Additional storage Any additional storage you bought like add-on
  - Total storage available
- 3. Top storage usage, by environment
- 4. Assigned storage capacity per license

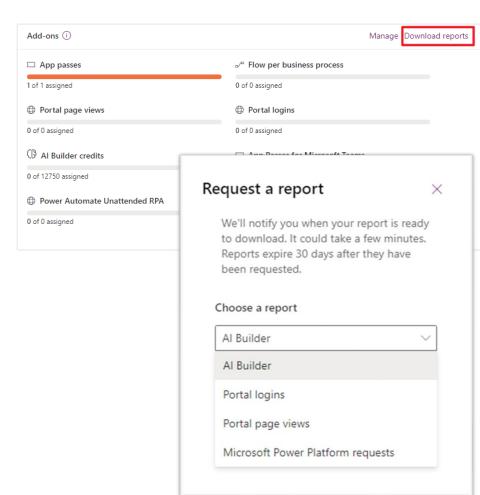


#### Capacity add-on reports

In Power Platform Admin Center, select Resources > Capacity > scroll down to the Add-ons card and click Download Reports

- Al Builder
- Portal logins
- Portal page views
- Microsoft Power Platform requests

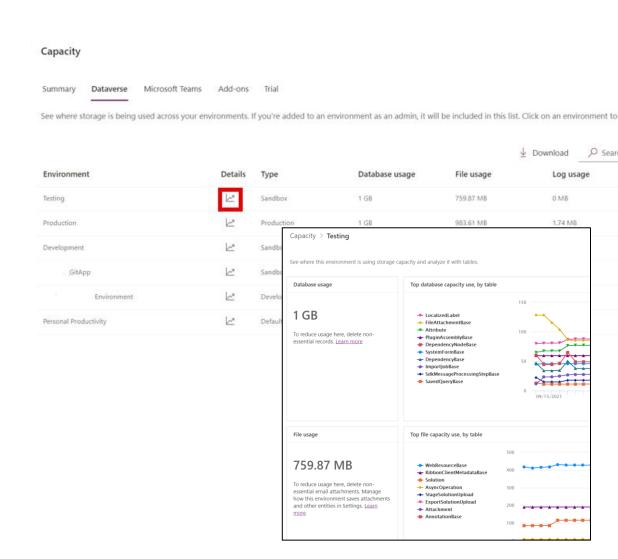
							Total		Power	
Environment	Environment	Caller	Caller			Entitled	Consumed	Dataverse	Automate	Power App
ID 🔻	Name -	ID 🛪	Туре	~	Usage Datetime 🚚	Quantity 🔻	Quantity 💌	Requests 💌	Requests	Requests 💌
eb9e61dd-b6	9 CoE Kit	460be0	User		20/10/2022 0.00	88000	35583	20486	15097	0
eb9e61dd-b6	9 CoE Kit	460be0	User		19/10/2022 0.00	88000	51868	31615	20253	0
eb9e61dd-b6	9 CoE Kit	460be0	User		18/10/2022 0.00	88000	25273	9421	15852	0
eb9e61dd-b6	9 CoE Kit	460be0	User		17/10/2022 0.00	88000	60312	21865	38447	0
eb9e61dd-b6	9 CoE Kit	460be0	User		16/10/2022 0.00	88000	22991	7350	15641	0
eb9e61dd-b6	9 CoE Kit	460be0	User		15/10/2022 0.00	88000	23076	7198	15878	0
eb9e61dd-b6	9 CoE Kit	460be0	User		14/10/2022 0.00	88000	27381	11527	15854	0
eb9e61dd-b6	9 CoE Kit	460be0	User		13/10/2022 0.00	88000	42361	19524	22837	0
eb9e61dd-b6	9 CoE Kit	460be0	User		12/10/2022 0.00	88000	26390	11509	14881	0
eb9e61dd-b6	9 CoE Kit	460be0	User		11/10/2022 0.00	88000	24650	9305	15345	0
eb9e61dd-b6	9 CoE Kit	460be0	User		10/10/2022 0.00	88000	22950	7606	15344	0



#### **Environment level breakdown**

In Power Platform Admin Center, select Resources > Capacity > <u>Dataverse</u>

- Provides similar information as the Summary tab, but with an environment-level view
  - See environment capacity analytics details by clicking ( )
- Note that following environments don't count against capacity and are shown as 0 GB:
  - Trial
  - Preview
  - Support
  - Developer
- You can select an environment that's showing 0 GB, and then go to its Environment Analytics page to see the actual consumption.



#### Capacity of Dataverse for Teams environments

In Power Platform Admin Center, select Resources > Capacity > Microsoft Teams

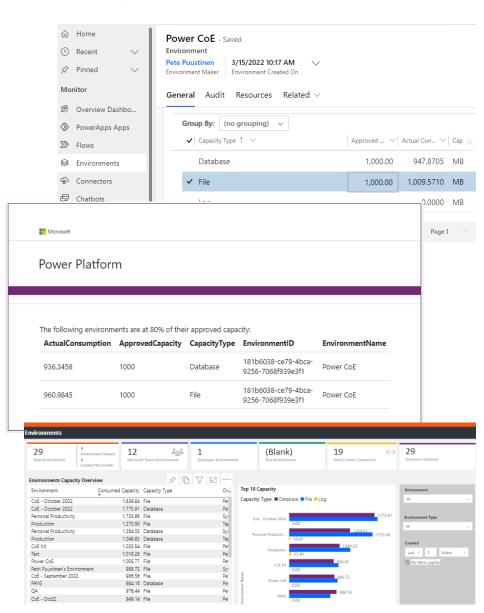
- Provides information about database capacity of Microsoft Teams environments
- As the Summary tab, but with an environment-level view



## **Environment capacity management & alerting (CoE Starter Kit)**

- Power Platform does not currently support environment level capacity and quota management
- CoE Starter Kit, we cover in next module, has functionality which allows admins to define soft capacity limits for Dataverse database, file and log
- With this feature it is possible to monitor environments' database usage and send alert to admins if environments are over or 80% close to approved capacity
- Admins can monitor environment capacities using CoE Power BI dashboard

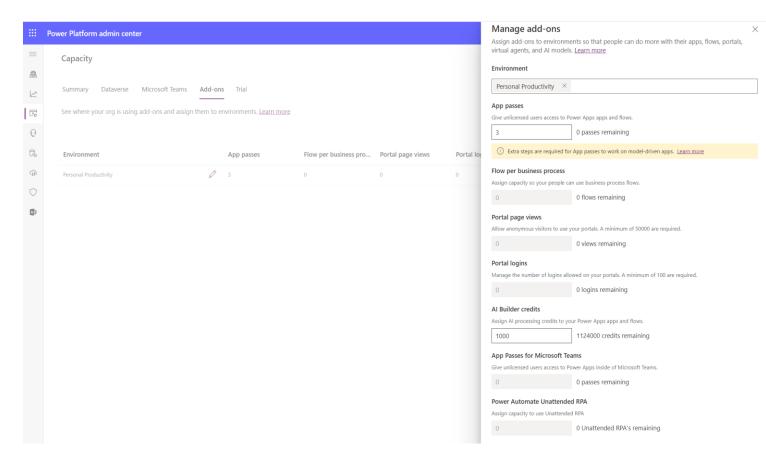
<u>Environment capacity management & alerting - Power Platform</u>
Microsoft Learn



#### Capacity add-on assignments per environment

In Power Platform Admin Center, select Resources > Capacity > Add-ons

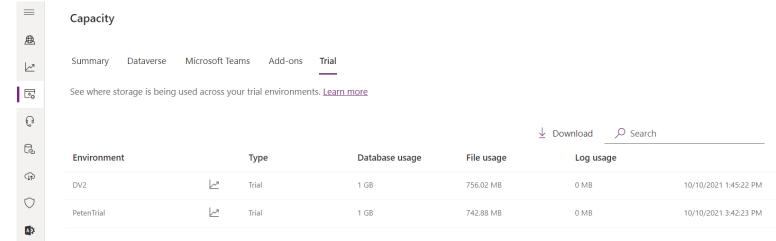
 View and assign capacity add-ons per environment



#### **Trial environments**

In Power Platform Admin Center, select Resources > Capacity > <u>Trial</u>

 Trial environments do not consume tenant level capacity unless converted to production environment

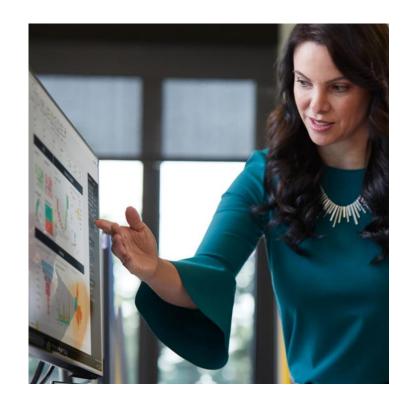


#### **Demonstration**

Power Platform capacity reports

Demo the following:

Go through all capacity reports in PPAC



# Dataverse, Power Apps and Power Automate Analytics

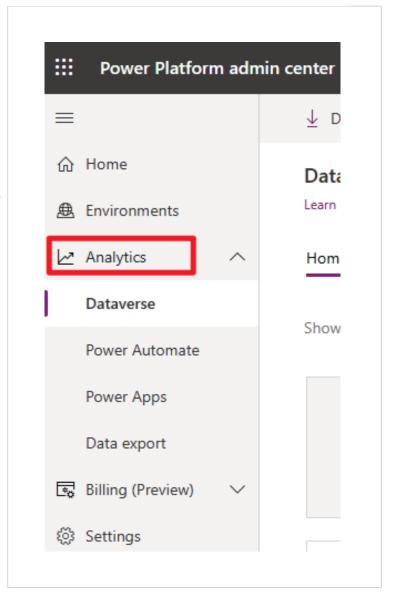
## Gain Deeper Insight on Adoption, & Usage

#### https://aka.ms/ppac



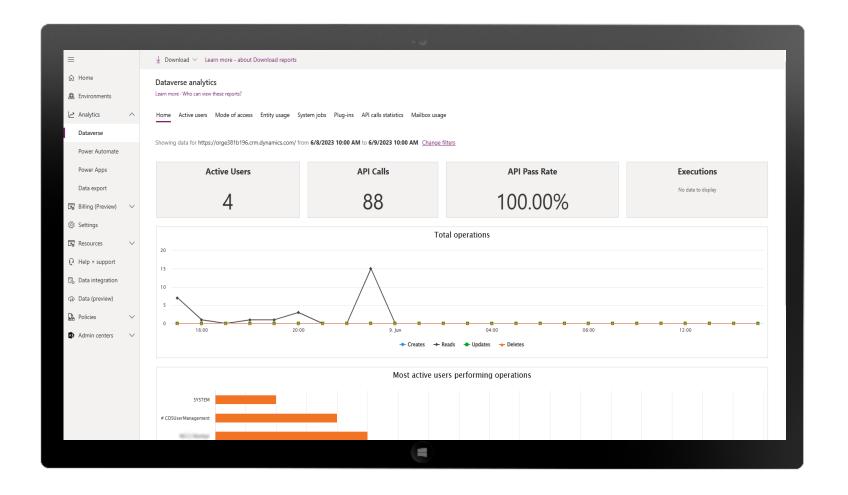
#### **Admin analytics**

- Available from Power Platform admin center
- Tenant and environment level analytics
- Access for environment admins, power platform service admins, D365 and global admins
- Data is stored for 28 days
- Data is refreshed daily



### **Monitoring Microsoft Dataverse**

Click on Change Filters to select from a list of environments you have access to, as well as adjust the date range. The data will only be presented in the prior 28-day period.



#### Detailed Insight on Microsoft Dataverse

#### View insights at the environment level



- Number of active users, trends, top active users
- Mode of access by OS, device type, browser, business unit, security role
- Dataverse out of the box and custom entity usage based of Creates, Reads, Updates, Deletes
- System Jobs, Plug-in's, and API call statistics

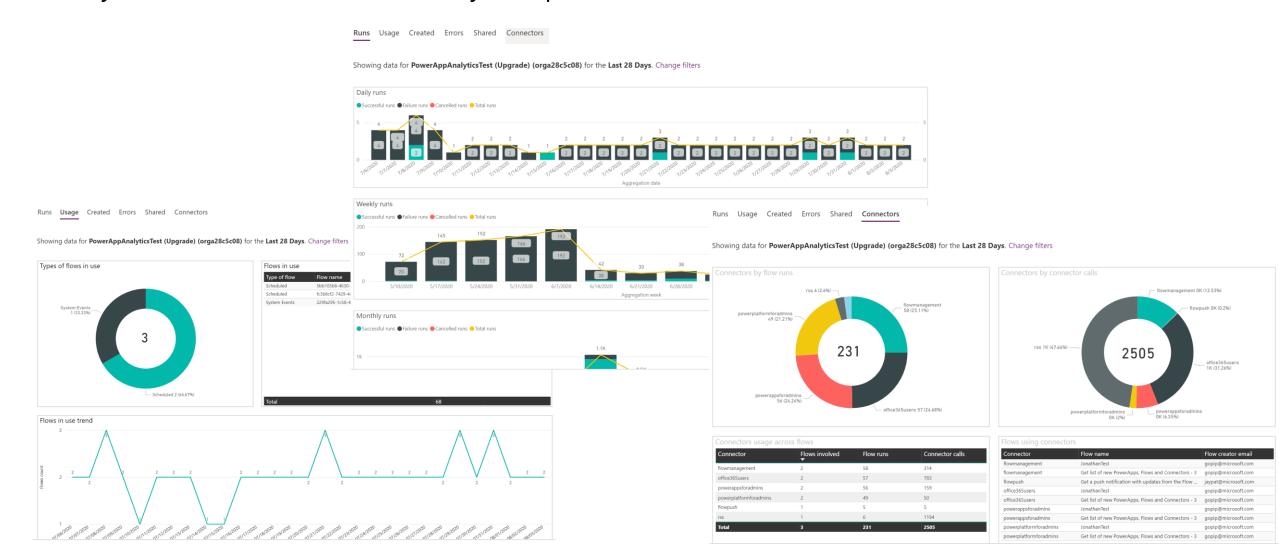


#### As an administrator:

- Confirm access modes by OS, device types or browser is compliant with standards of your organization
- Understand specific CRUD (Create, Read, Update, Delete) activities performed with your apps
- Get an overview of overall health by regular checks on platform API calls, system jobs operating, plugin's used by app makers

#### **Power Automate Environment Level Views**

Analytics is available for a 7, 14, 28-day time periods and allows users to switch between environments.



### **Detailed Insight on Power Automate**

#### Administrators can view data at the environment level



- Type of flows created
- Flow creation trends
- Created flow list of view
- Run metrics Active runs, success and failure
- Flow in use and trend
- Shared flows and types, flow names, number of shares
- Connectors by runs, number of connections, flows involved and drill down on flows



- Total number of errors based off error types
- Errors across flows with list of errors by flow name



#### As an administrator:

- Monitor usage and look for insights related to types of flows that ae in use
- Identify common errors by looking for errors by error type
- Get insights into connector usage per flow along with flow creator email. Adjust data loss prevention policies to ensure no unnecessary flows are created in the environments and ensure overall security of platform

### Maker analytics for Power Automate

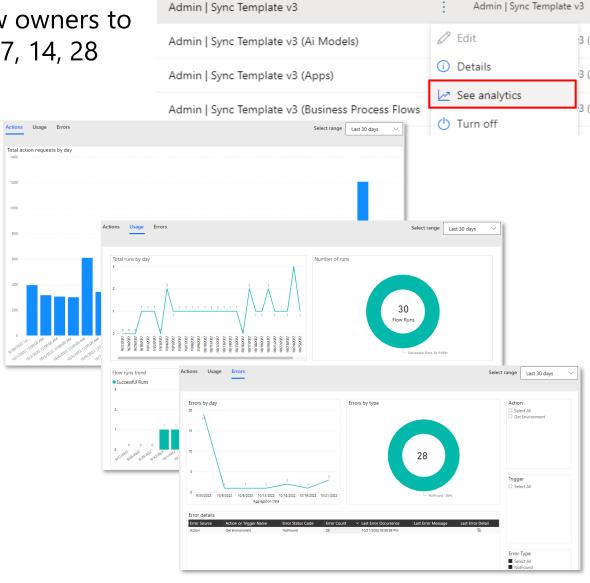
Individual flow level views which can be used by flow owners to view details for each flow within their scope, for last 7, 14, 28 days with data refreshed every 4-6 hours



- API usage
- Runs by day
- Total number of runs for the flow
- Gain insights into when the flow is run with the flow run trends

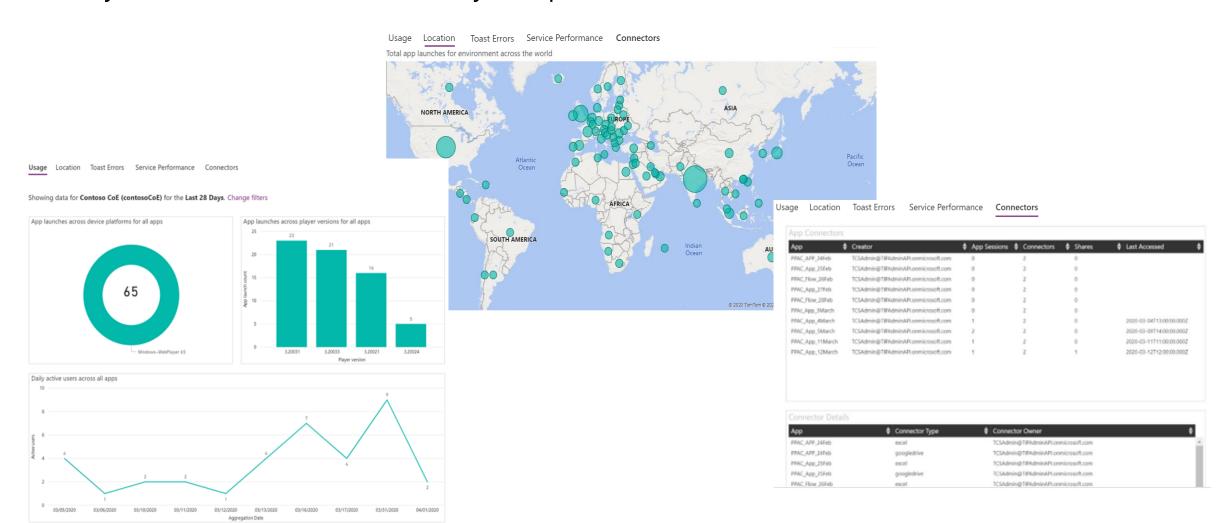
#### Flow Health

- The number of errors per day
- Flow errors by type
- Understand the details of a specific error – Error source, action or trigger name, error status code, error count, last error occurrence, last error message and detail



### Power Apps Environment level views

Analytics is available for a 7, 14, 28-day time periods and allows users to switch between environments.



## **Detailed Insight on Power Apps**

#### Administrators can view data at the environment level for canvas apps



- Active Users How many users are using the app and daily active usage
- Location Where is the app usage and filter by country
- App Usage App launches with filters for device platform, player version, country



- Toast errors are errors which end users see
  - Errors per app in the environment,
  - Error trends across apps,
  - Overview across all apps for error breakdown by https status
- Service Performance Best and lest performing service(std and custom) in the environment



#### As an administrator:

- Monitor how much and where apps are being used
- Check out the platform being used to launch the apps, browser or mobile, Tailor your app updates based on platform and ensure that users are on the latest player version to ensure latest platform updates
- Identify apps with most errors and common http errors and work with makers to understand and fix issues ensure overall security of platform
- Get an overview of overall performance of different custom and standard API"s being used in the apps.
   Work with teams to fix issues proactively

## Maker analytics for Power Apps

Individual Power App level views which can be used by App Makers and Administrators to view details for each app within their scope, for last 7, 14, 28 days with data refreshed every 4-6 hours



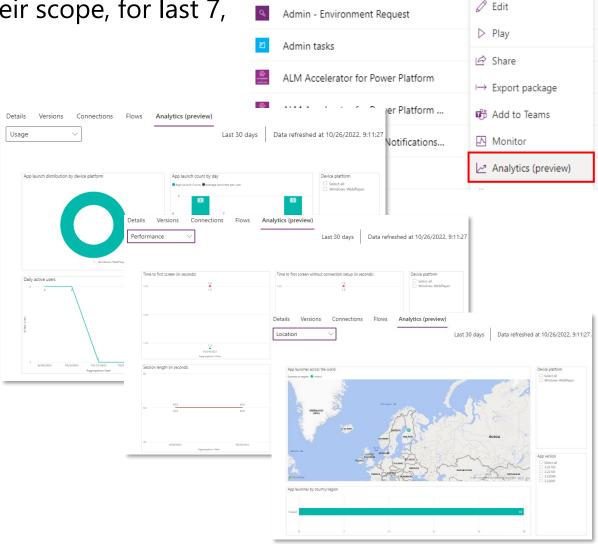
#### **App Adoption and** Usage

- Active Users How many users are using the app and daily active usage
- Location Where is the app usage and filter by country
- App Usage App launches with filters for device platform, player version, country



#### **App Health**

- Toast errors are errors which end users see
  - Errors per app in the environment,
  - Error trends across apps,
  - Overview across all apps for error breakdown by https status
- Performance Best and lest performing service(std and custom) in the environment

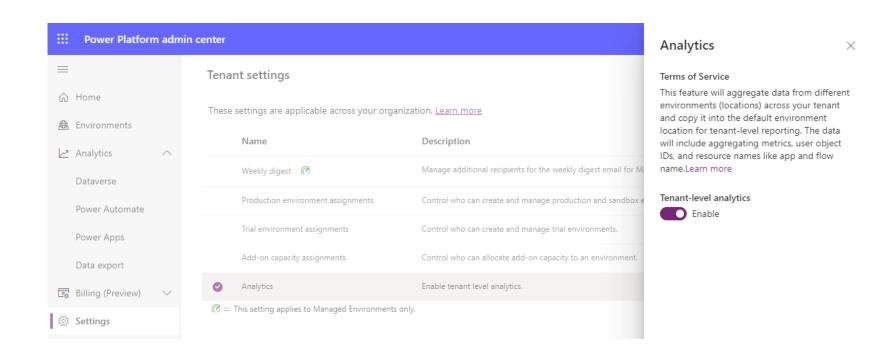


Admin - Command Center

2 d ago

### **Tenant Level Analytics**

- Available for canvas & model-driven apps, flows and environments
- Need to be explicitly enabled in Power Platform settings
- Usage and activity reports shows 28 days



## **Power Apps Tenant Level Analytics**



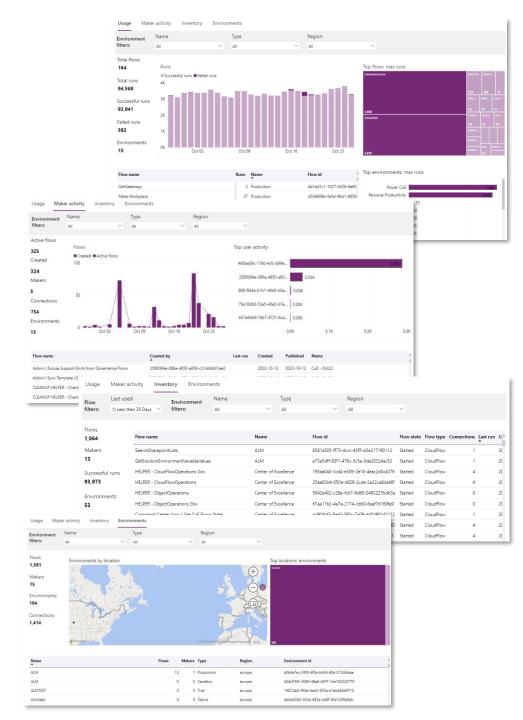
- Unique users, Total sessions, Apps used, New users, Environments
- Usage activity
- Top Apps Sessions / Unique users
- Top Environments Unique users
- Maker activity
- App inventory



#### As an administrator:

- Monitor top apps and environments per activity
- Monitor maker activity
- See total number of Apps, Makers, Environments, Connections
- See information when App is created, modified, last launched and for how many users/groups app is shared

Reports can be filtered by environment, environment type/state/region, app type, and app last used



## **Power Automate Tenant Level Analytics**



- Flow runs
- Usage activity
- Top Flows Max runs
- Top Environments Max runs
- Maker activity
- Inventory



#### As an administrator:

- Monitor top flows and environments per activity
- Monitor maker activity
- See total number of Flows
- See information when Flow is created, modified, last executed

Reports can be filtered by last run, environment and environment type or region

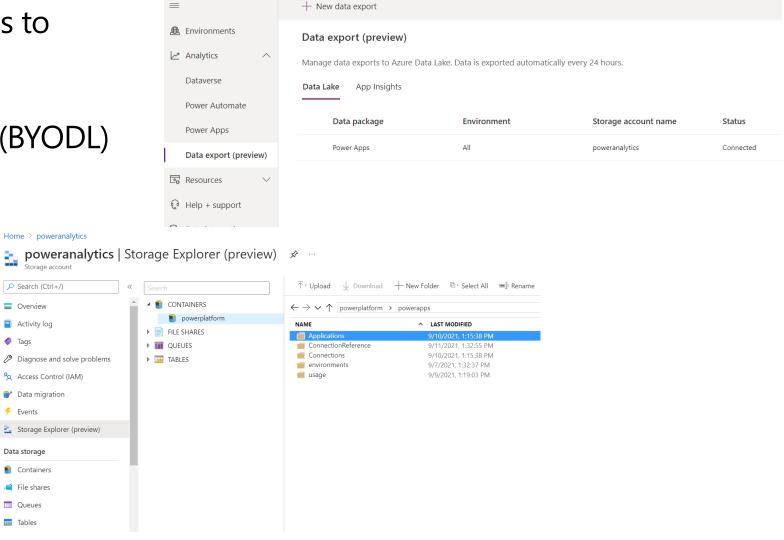


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## Data Export (Preview)

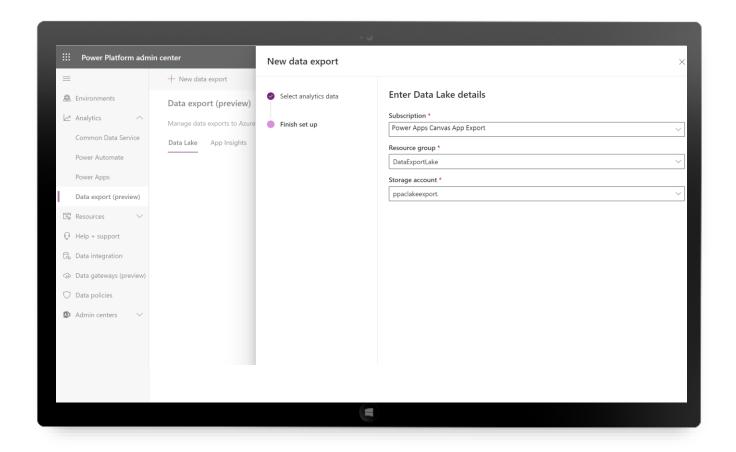
Tenant level analytics

- Export tenant level analytics to Azure Data Lake
- Bring Your Own Data Lake (BYODL)



## Data Export (Preview)

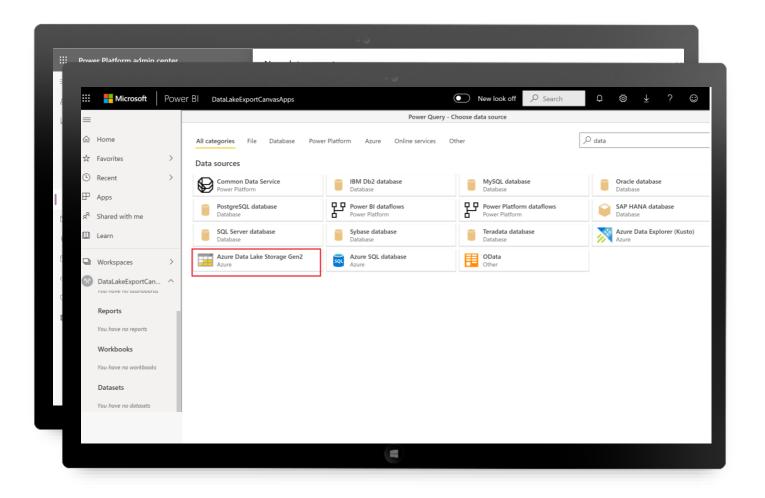
#### Tenant level analytics



## 1 Set up Data Lake Export

#### Data Export (Preview)

#### Tenant level analytics

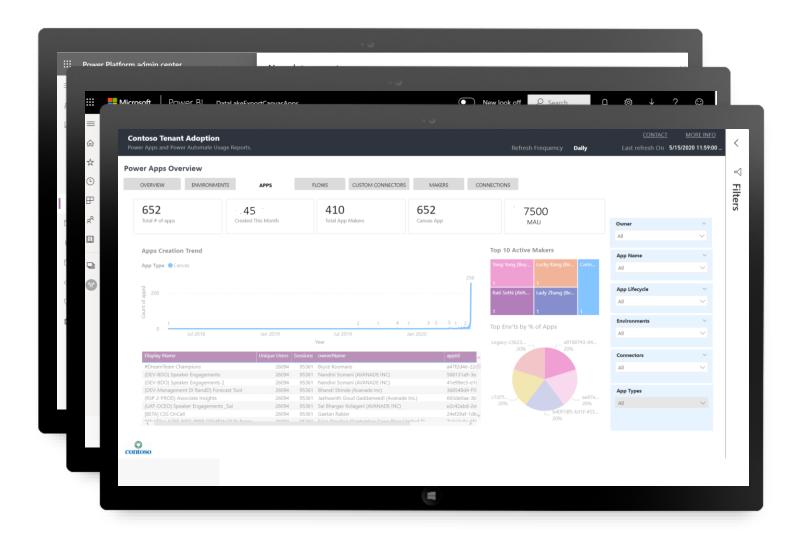




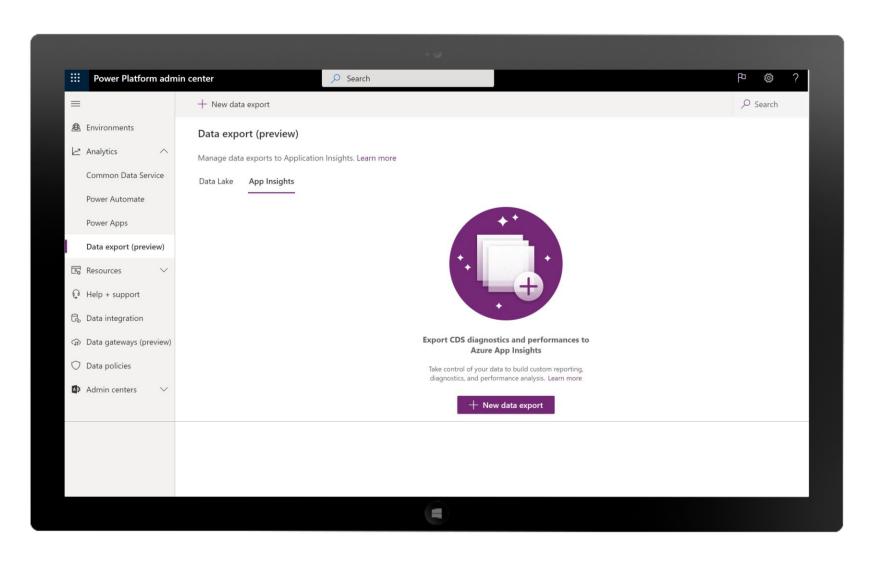


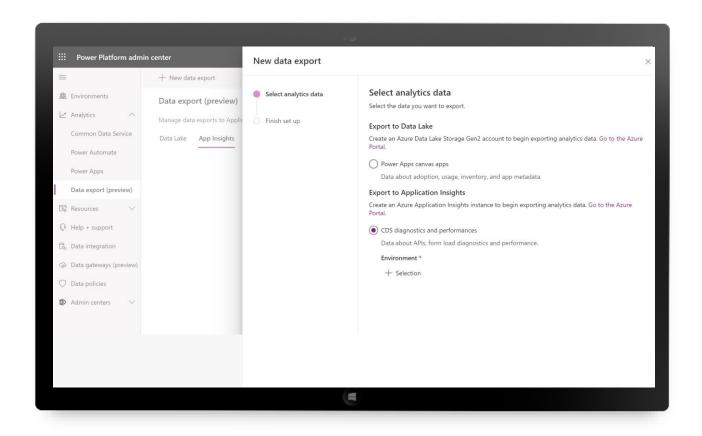
### Data Export (Preview)

#### Tenant level analytics

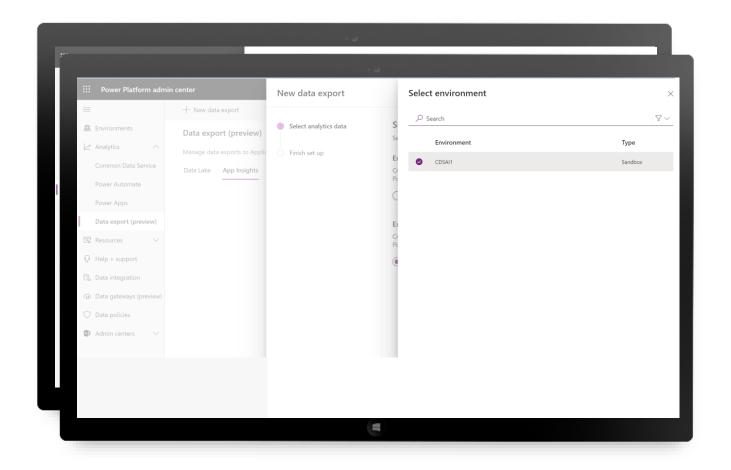


- Set up Data Lake Export
- Use Power BI data flows to connect to the data lake
- Build and share custom reports



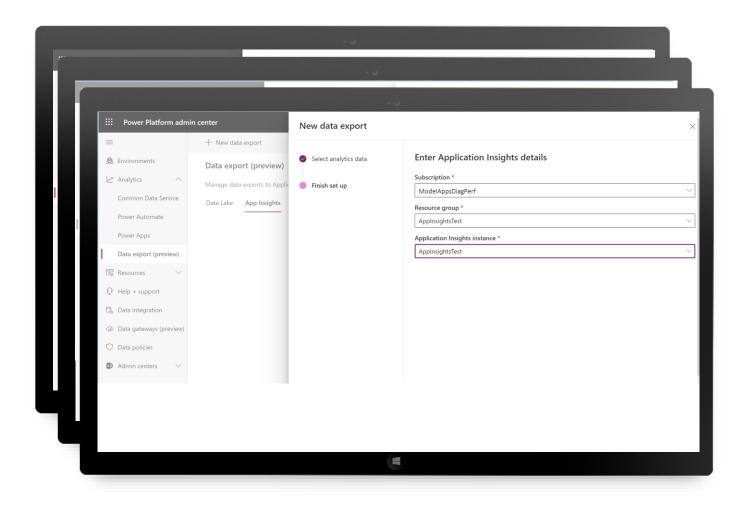




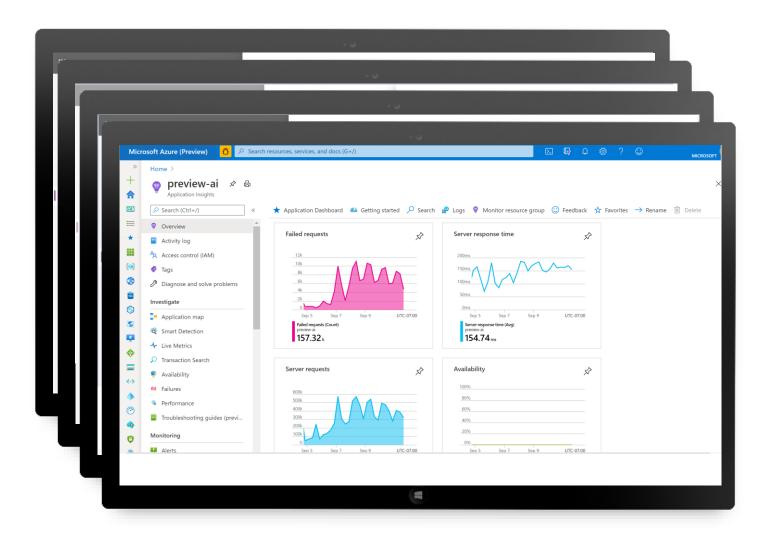




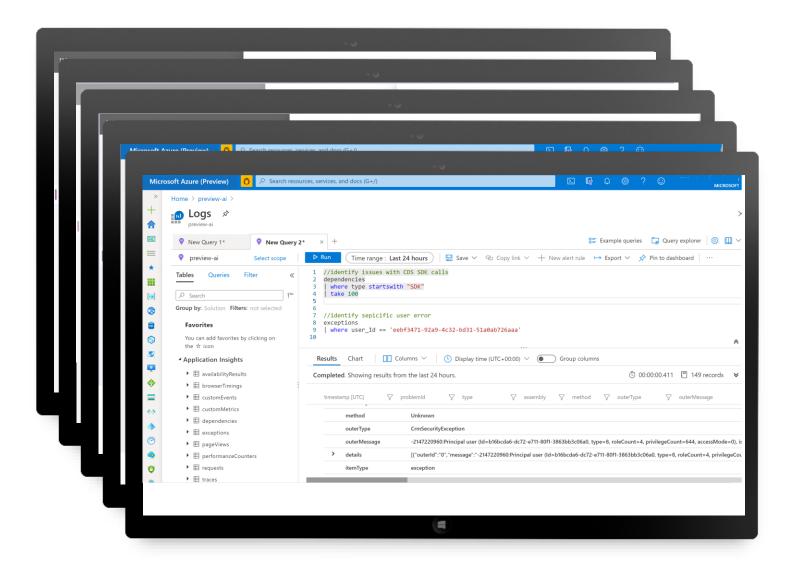
2 Select environment



- Set up continuous export
- 2 Select environment
- Provide Application Insights instance



- Set up continuous export
- 2 Select environment
- Provide Application Insights instance
- OOB reports with App Insights



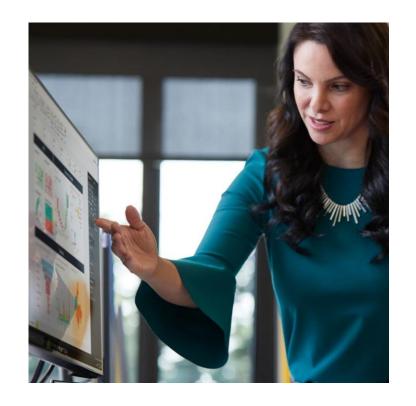
- 1 Set up continuous export
- 2 Select environment
- Provide Application Insights instance
- OOB reports with App Insights
- Custom query with Log Analytics

#### Demonstration

Dataverse, Power Apps and Power Automate analytics

Demo the following:

Go through analytics reports in PPAC

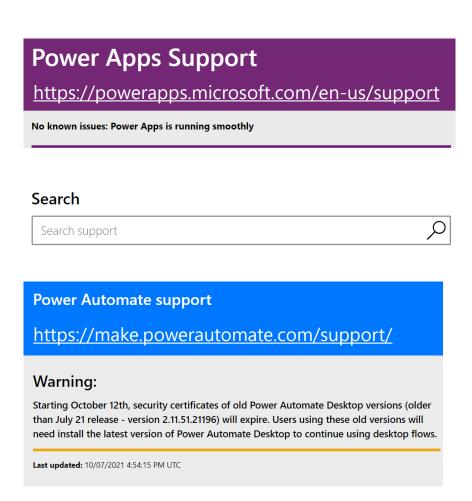


# Health Monitoring of Power Platform Services

### Monitoring platform status

Power Apps and Automate service status can been seen in both portals and Office 365 Service Health <a href="https://admin.microsoft.com/Adminportal/Home?source=applauncher#/servicehealth">https://admin.microsoft.com/Adminportal/Home?source=applauncher#/servicehealth</a>

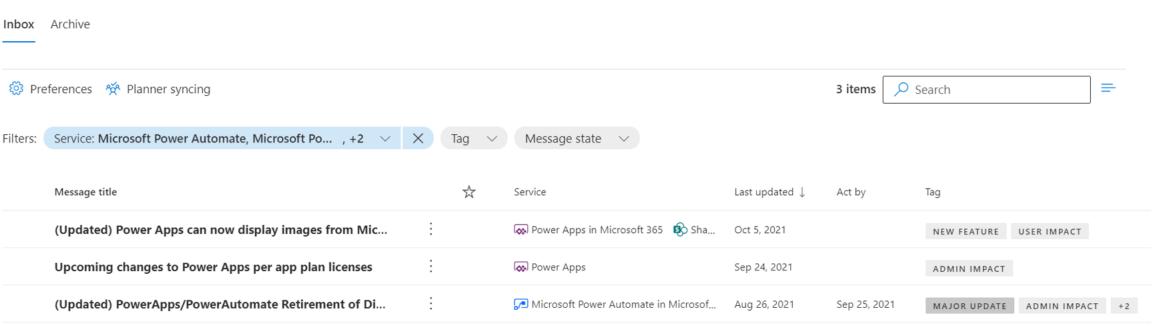
#### Service health All services Incidents Advisories History Reported issues View the health status of all services that are available with your current subscriptions. Preferences Service Health Healthy Microsoft Power Automate Healthy Power Apps



### Monitoring platform updates and changes

Power Apps and Automate services platform updates and changes can be monitored in Office 365 Message Center

Each message gives you a high-level overview of a planned change and how it may affect your users, and links out to more detailed information to help you prepare. Learn more about managing changes

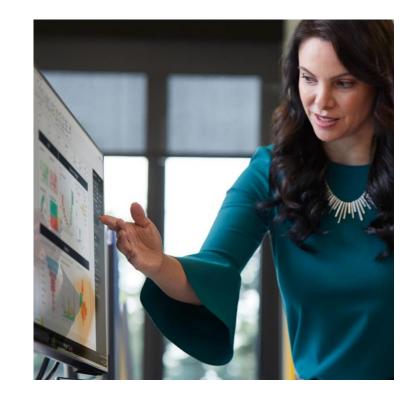


#### **Demonstration**

Power Apps and Automate service health

#### Demo the following:

- 1. Show how to check Power Apps and Automate service health status in
  - 1. <a href="https://powerapps.microsoft.com/en-us/support">https://powerapps.microsoft.com/en-us/support</a>
  - 2. <a href="https://flow.microsoft.com/en-us/support">https://flow.microsoft.com/en-us/support</a>
  - 3. <a href="https://admin.microsoft.com/Adminportal/Home?source=ap-plauncher#/servicehealth">https://admin.microsoft.com/Adminportal/Home?source=ap-plauncher#/servicehealth</a>



### Questions?

