



Workshop Power Platform for Administrators

Power Platform Analytics & Monitoring



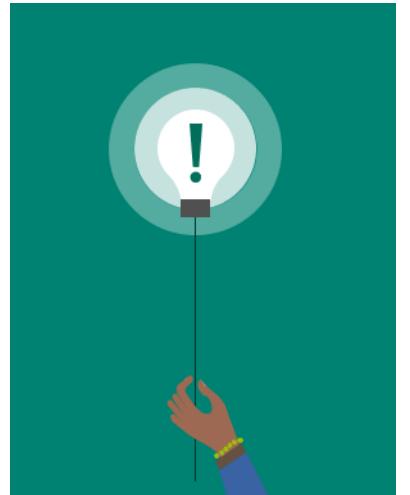
Learning Units covered in this Module

- Activity events in Office 365 Audit Logs
- Monitoring Storage Capacity and Add-on's
- Power Apps and Power Automate analytics
- Health monitoring of Power Platform services

Objectives

After completing this Learning, you will learn

- What Power Platform events are logged in Office 365 Audit Logs
- How to monitor environments' storage capacity
- What out-of-the-box analytics and reporting features of Dataverse, Power Apps and Power Automate analytics are available
- How to check and monitor Power Platform services health

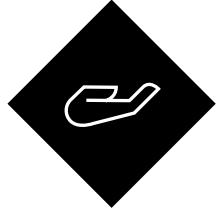


Activity events in Office 365 Audit Logs

Access Audit Logs

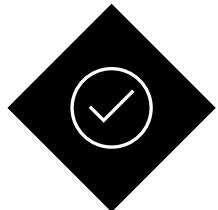
PowerApps, Power Automate, Dataverse audit records are available at

<https://compliance.microsoft.com/auditlogsearch>



ACTIVITY LOGGING

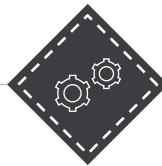
Available with Office E3 or greater license and integrated with Office Security and Compliance center.



Must be [enabled](#) at the organization/tenant level

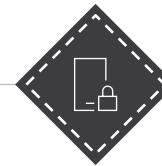
Office provides [API's](#) to query this data, which is currently used by many [SIEM](#) vendors to use the Activity Logging data for reporting.

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



User Activity Logged

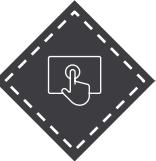
- Creates, Reads, Updates, Deletes on records and Dataverse metadata
- Dataverse record views
- Export to excel
- SDK calls
- Backend Microsoft support engineer CRUD activities
- Reports viewed

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



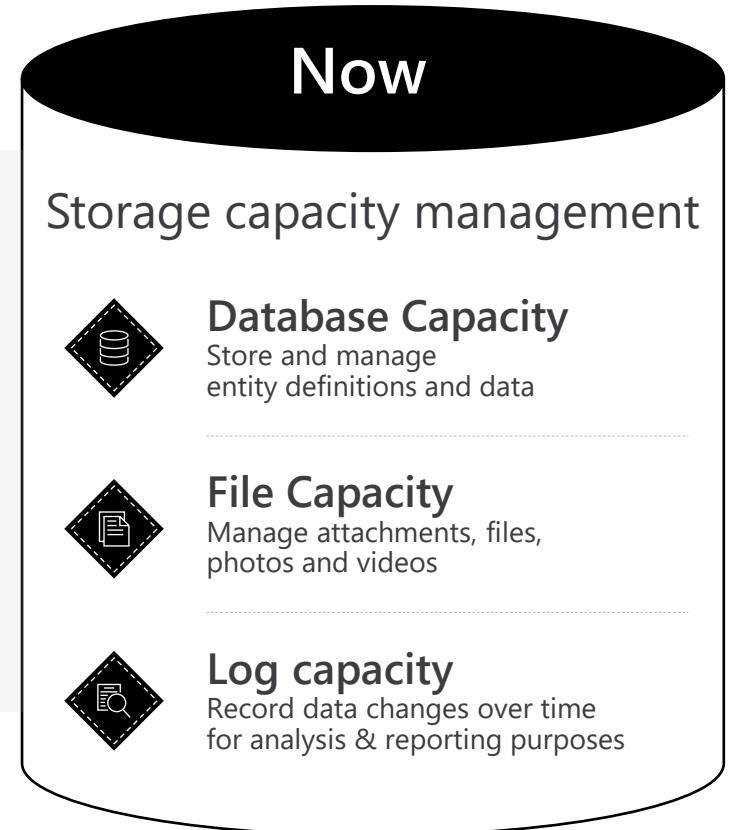
User Activity Logged

- 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

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>

The screenshot shows the Microsoft Power Platform Admin Center interface. At the top, there's a purple header bar with three dots and the text "Power platform". Below it is a navigation menu with several items: "Environments", "Analytics" (which has a dropdown arrow), "Common Data Service", "Power Automate", "Power Apps", "Data export (preview)", "Resources" (which is highlighted with a red border and has a dropdown arrow), and "Capacity".

Capacity Page Details

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

1. Storage capacity usage

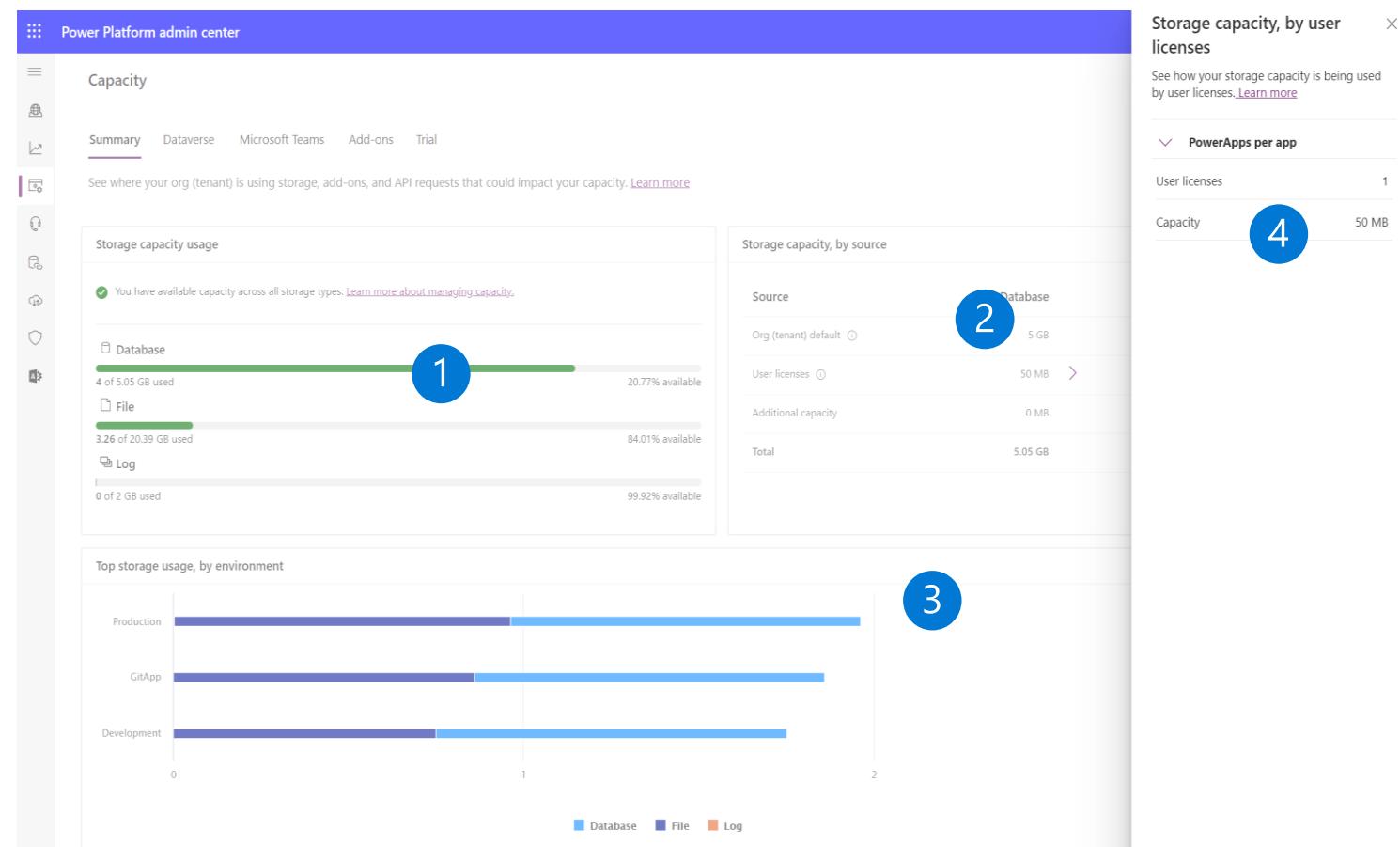
- Database – All tables
- File – Tables having file or image data type as well as Attachment, AnnotationBase, Insights application OOB tables
- Log – AuditBase & PluginTraceLogBase tables (Audit logging)

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



Environment level breakdown

In Power Platform Admin Center, select Resources > Capacity > Dataverse

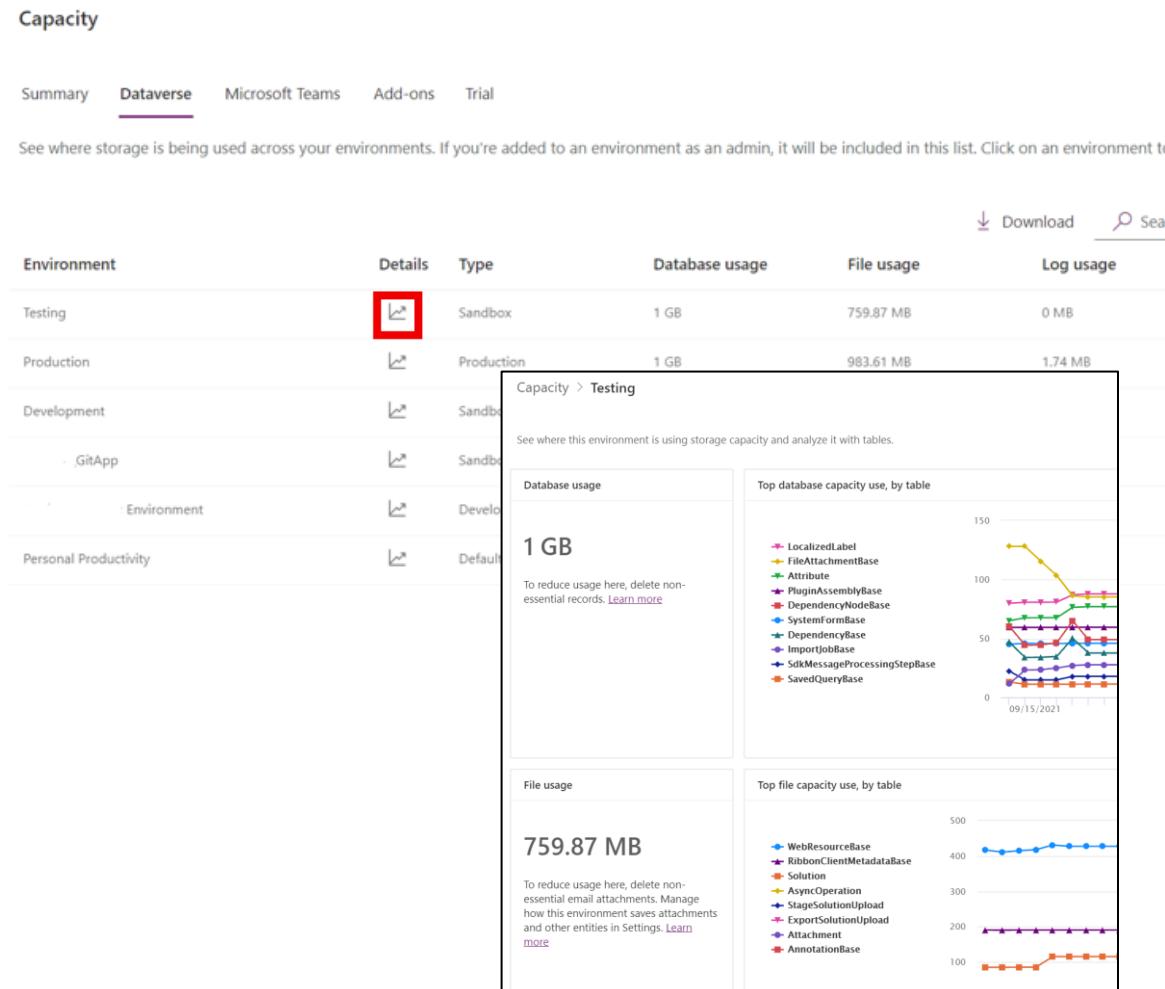
Provides similar information as the Summary tab,
but with an environment-level view

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

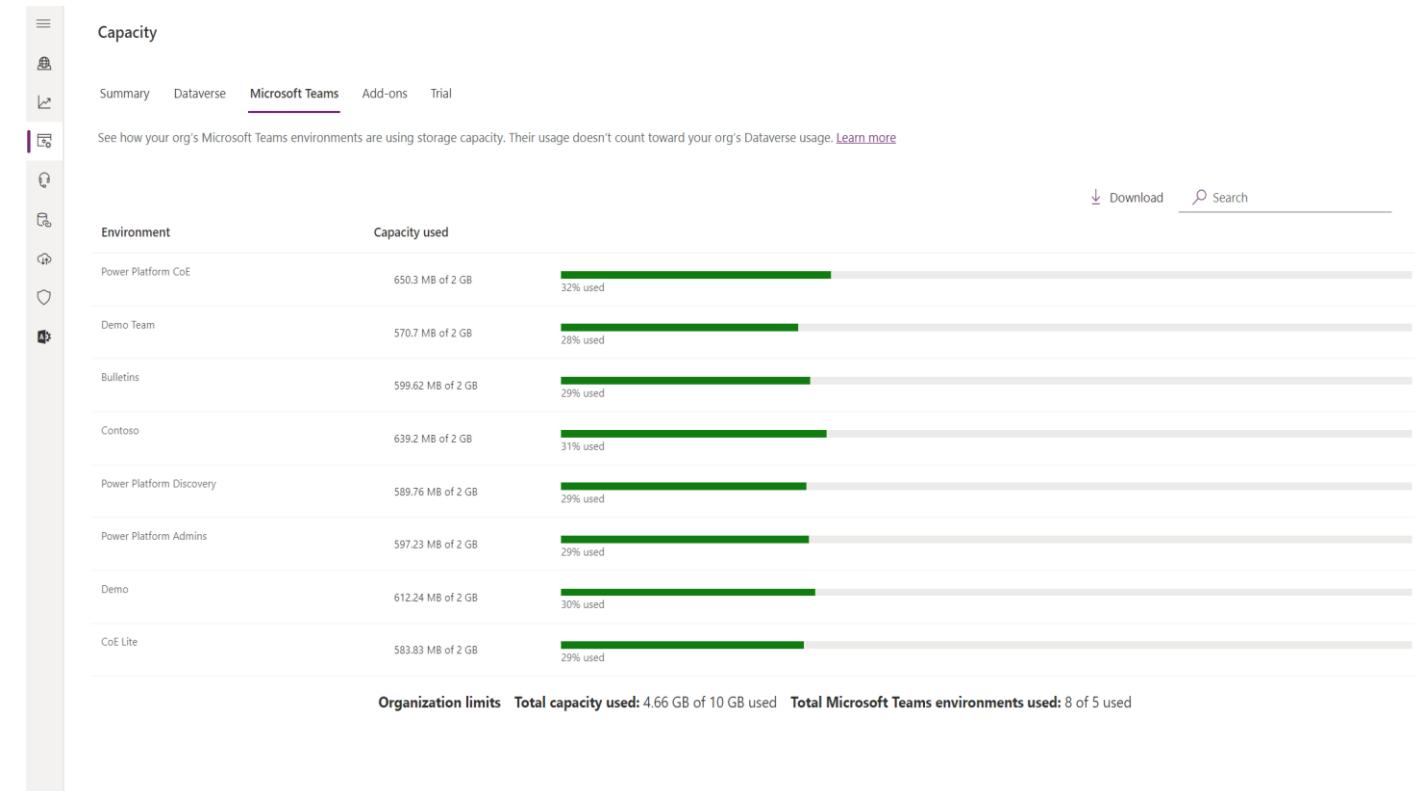
You can select an environment that's showing 0 GB,
and then go to its Environment Analytics page to
see the actual consumption.



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



Capacity add-on assignments per environment

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

- View and assign capacity add-ons per environment

The screenshot shows the 'Capacity' section of the Power Platform Admin Center. The 'Add-ons' tab is selected. A table lists environments and their assigned capacity passes. The 'Personal Productivity' environment has 3 App passes assigned. To the right, a 'Manage add-ons' panel shows detailed settings for various add-ons assigned to this environment.

Environment	App passes	Flow per business pro...	Portal page views	Portal logins
Personal Productivity	3	0	0	0

Manage add-ons

Assign add-ons to environments so that people can do more with their apps, flows, portals, virtual agents, and AI models. [Learn more](#)

Environment

Personal Productivity

App passes

Give unlicensed users access to Power Apps apps and flows.

3 0 passes remaining

Extra steps are required for App passes to work on model-driven apps. [Learn more](#)

Flow per business process

Assign capacity so your people can use business process flows.

0 0 flows remaining

Portal page views

Allow anonymous visitors to use your portals. A minimum of 50000 are required.

0 0 views remaining

Portal logins

Manage the number of logins allowed on your portals. A minimum of 100 are required.

0 0 logins remaining

AI Builder credits

Assign AI processing credits to your Power Apps apps and flows.

1000 1124000 credits remaining

App Passes for Microsoft Teams

Give unlicensed users access to Power Apps inside of Microsoft Teams.

0 0 passes remaining

Power Automate Unattended RPA

Assign capacity to use Unattended RPA

0 0 Unattended RPA's remaining

Trial environments

In Power Platform Admin Center, select Resources > Capacity > Trial

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

The screenshot shows the 'Capacity' page in the Power Platform Admin Center. The left sidebar has icons for Home, Data, Microsoft Teams, Add-ons, and Capacity. The main area has tabs for Summary, Dataverse, Microsoft Teams, Add-ons, and Trial, with 'Trial' selected. Below the tabs, it says 'See where storage is being used across your trial environments.' with a 'Learn more' link. On the right, there's a 'Download' button and a 'Search' bar. A table lists environments: DV2 and PetenTrial, both categorized as 'Trial'. The table columns are Environment, Type, Database usage, File usage, and Log usage. The last two columns show dates and times: 10/10/2021 1:45:22 PM and 10/10/2021 3:42:23 PM respectively.

Environment	Type	Database usage	File usage	Log usage
DV2	Trial	1 GB	756.02 MB	0 MB
PetenTrial	Trial	1 GB	742.88 MB	0 MB

Demonstration

Power Platform capacity reports



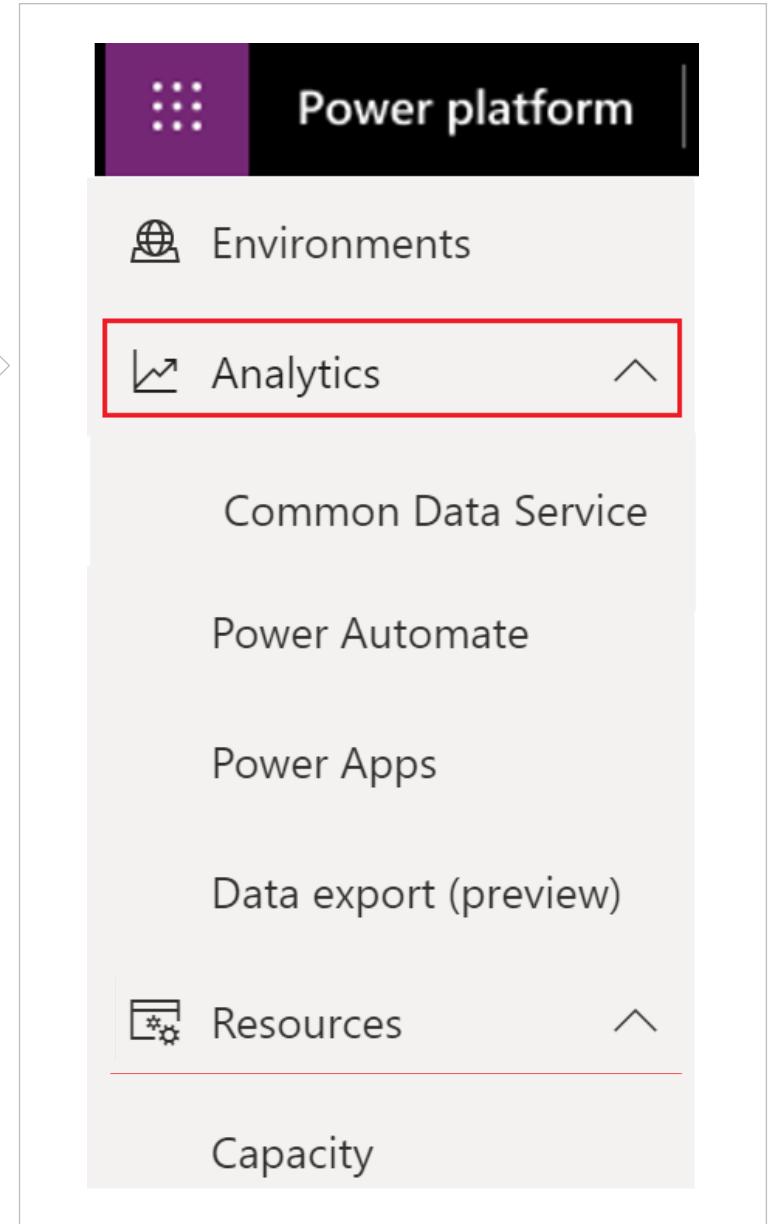
Power Apps and Power Automate analytics

Gain Deeper Insight on Adoption, & Usage

<https://aka.ms/ppac>

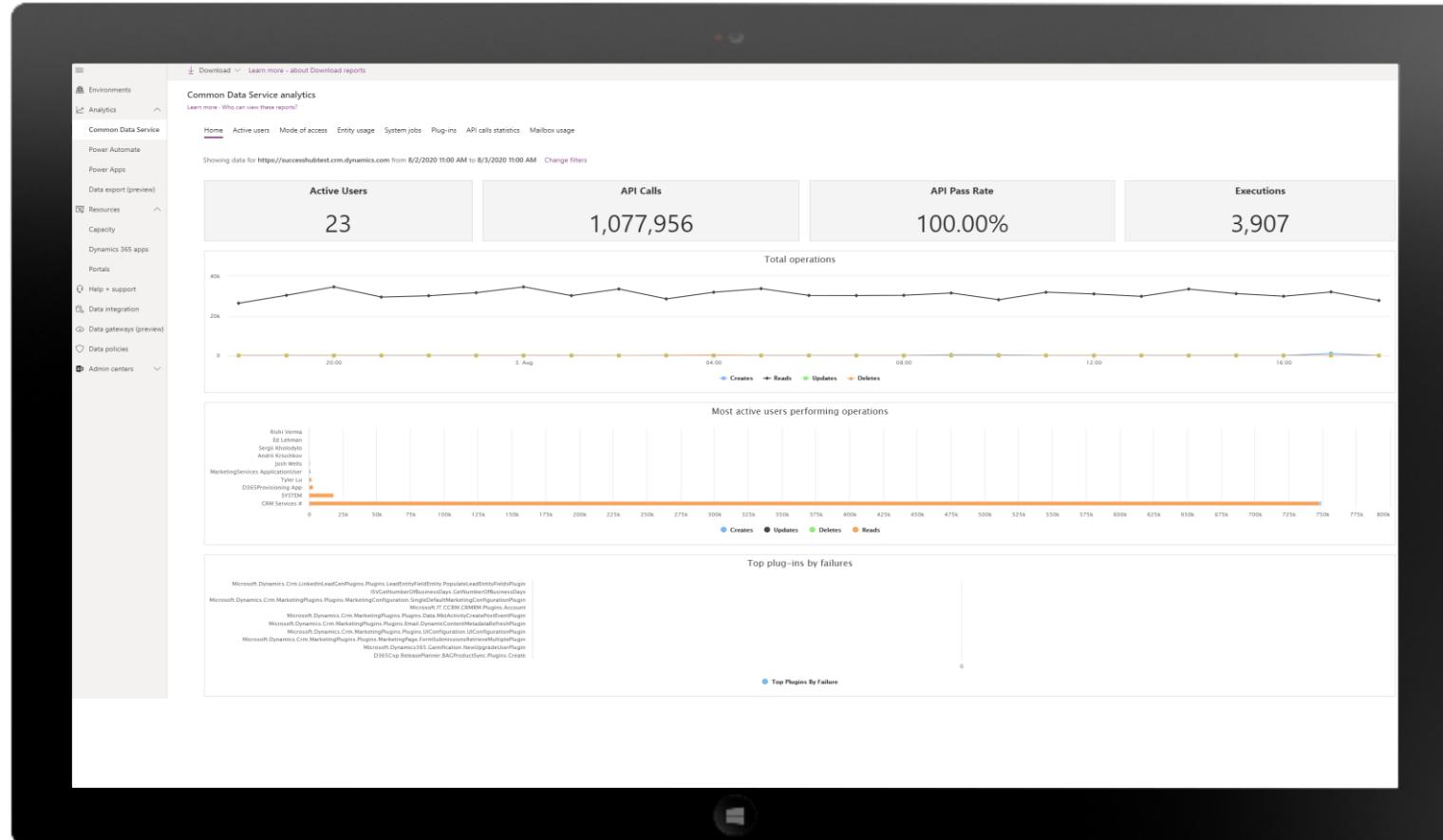
Admin analytics

- Available from Power Platform admin center
- Tenant level analytics (preview)
- 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

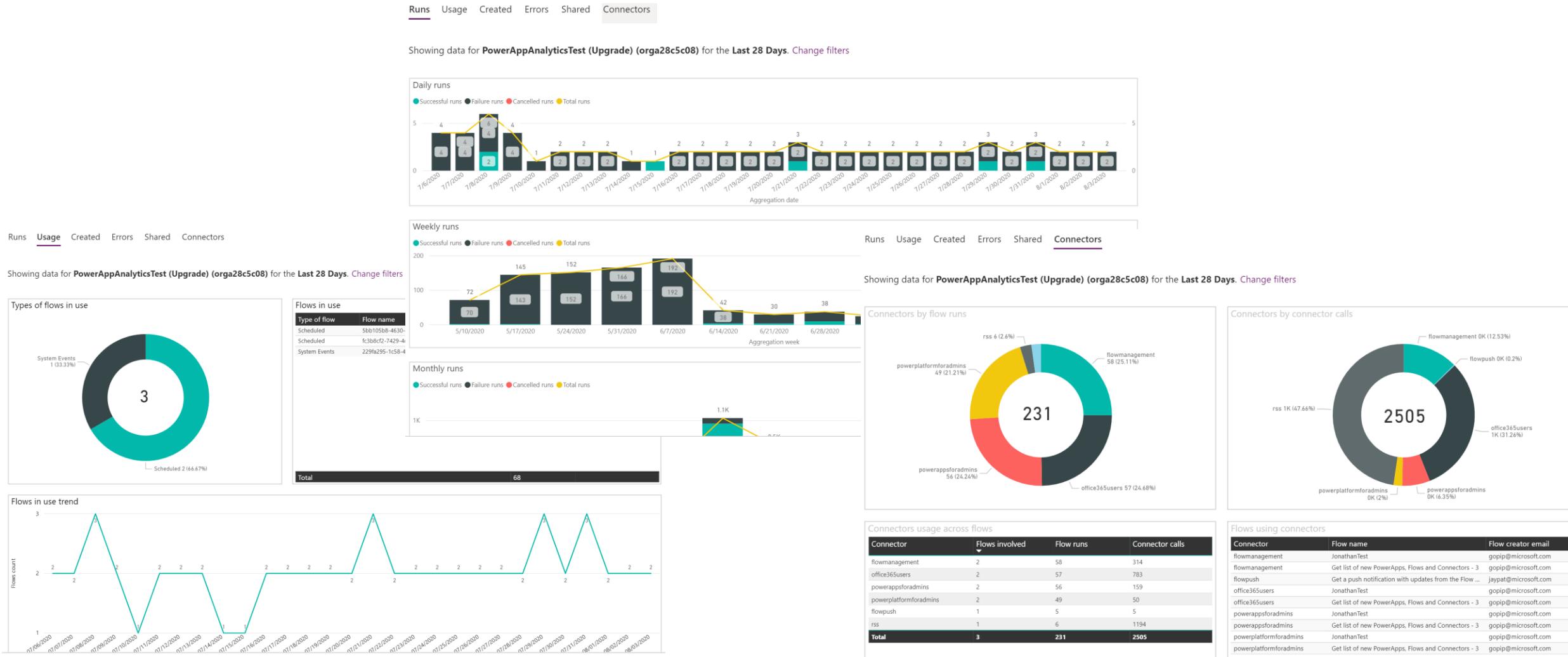


As an administrator:

- 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, plug-in'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 are 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 Makers and Administrators to view details for each flow within their scope, for last 7, 14, 28 days with data refreshed every 4-6 hours

Flow Usage

- ◆ 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

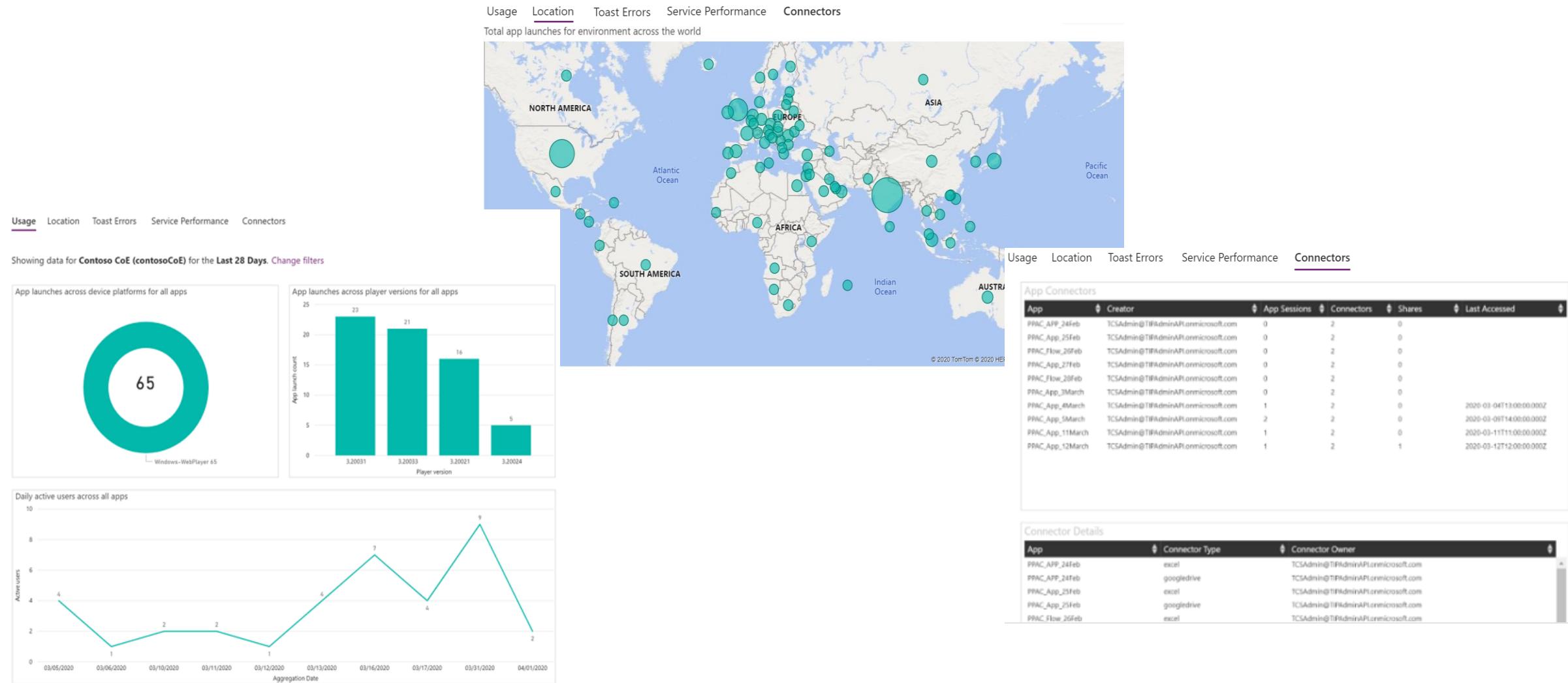
<https://flow.microsoft.com>

The screenshot shows the Microsoft Power Automate web interface. At the top, there's a navigation bar with 'Microsoft' and 'Power Automate'. Below it, a sidebar on the left includes 'Home', 'Action items', 'My flows' (which is highlighted with a red box), 'Create', 'Templates', 'Connectors', 'Data', 'AI Builder', 'Solutions', and 'Learn'. The main area is titled 'Flows' and shows a list of flows. The first flow listed is 'Http > Send an email.Response', which was modified 9 minutes ago. To the right of the flow list, there's a context menu with options like 'Edit', 'Share', 'Save As', 'Analytics' (which is also highlighted with a red box), 'Turn off', 'Repair tips off', 'Delete', and 'Details'. The 'Analytics' option is described as 'Get today's weather forecast for my current location'.

This screenshot shows the 'Analytics' view for a specific flow. At the top, it says 'Analytics for Get today's weather forecast for my current location'. Below that, there are three tabs: 'Api usage', 'Usage' (which is selected and highlighted with a blue underline), and 'Errors'. The main content area displays usage statistics for the flow.

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 least 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 least performing service(std and custom) in the environment

<https://make.powerapps.com>

The screenshot shows the Microsoft Power Apps portal interface. On the left, there's a navigation bar with 'Home', 'Learn', 'Apps' (which is highlighted with a red dashed border), 'Create', 'Data', 'Flows', 'Chatbots', 'AI Builder', and 'Solutions'. On the right, there's a list of apps under the heading 'Apps'. Each app entry includes a thumbnail, name, modified date, and a set of actions: 'Edit', 'Play', 'Share', 'Export package (preview)', 'Add to Teams', 'Monitor', and 'Analytics (preview)' (which is also highlighted with a red box). Below the list is a small circular profile picture.

The screenshot shows the Microsoft Power Apps portal interface with the 'Analytics (preview)' tab selected in the top navigation bar. The navigation bar also includes 'Edit', 'Play', 'Share', 'Export package (preview)', and 'Add to Teams'. Below the navigation bar, there are tabs for 'Details', 'Versions', 'Connections', 'Flows', and 'Analytics (preview)'. The 'Analytics (preview)' tab is active and has a purple background. A dropdown menu is open under the 'Usage' tab, showing options like 'Usage', 'Performance', 'Error', and 'Location'.

Power Apps Tenant Level Analytics

Analytics is available for canvas and model-driven apps

Need to be explicitly enabled in Power Platform settings

Power Platform settings

These settings are applicable across your organization. [Learn more](#)

Governance

Enable features across environments.

Who can create production and sandbox environments

Everyone

Only specific admins [\(i\)](#)

Who can create trial environments

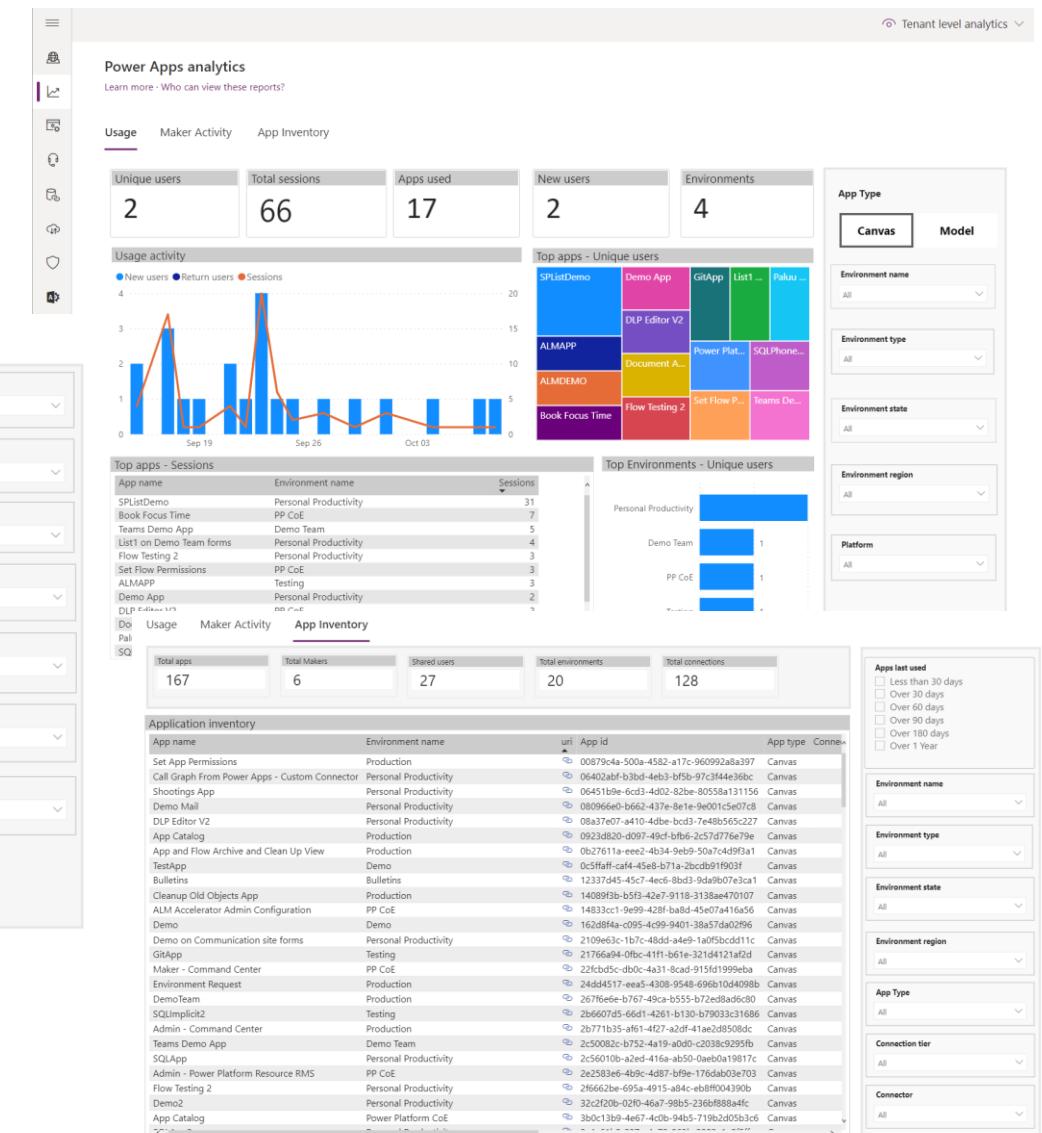
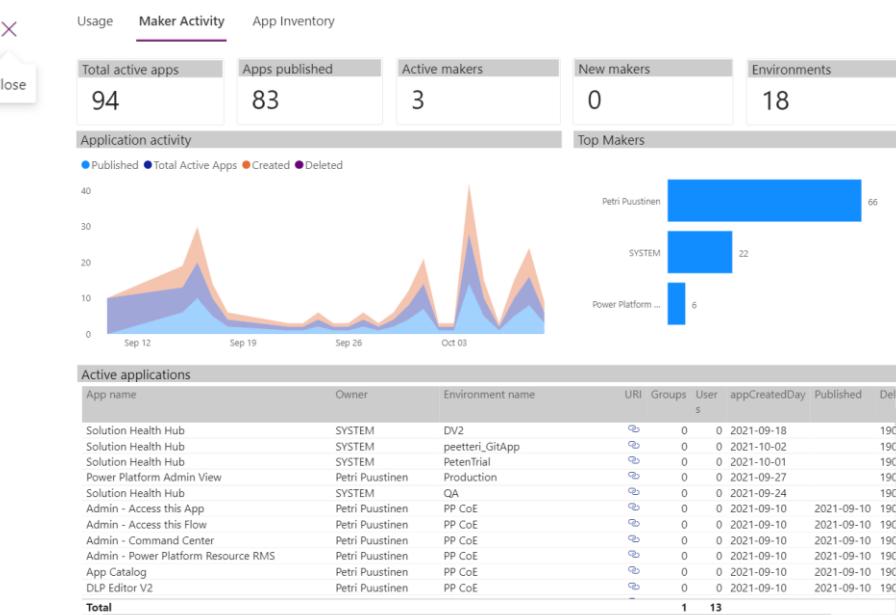
Everyone

Only specific admins [\(i\)](#)

Analytics

Enable tenant-level analytics

On



Power Apps Tenant Level Analytics

Administrators can view data at the tenant level for canvas and model-driven apps



- 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, connection tier, connector, app last used

Data Export (preview)

Tenant level analytics

Export tenant level analytics to Azure Data Lake

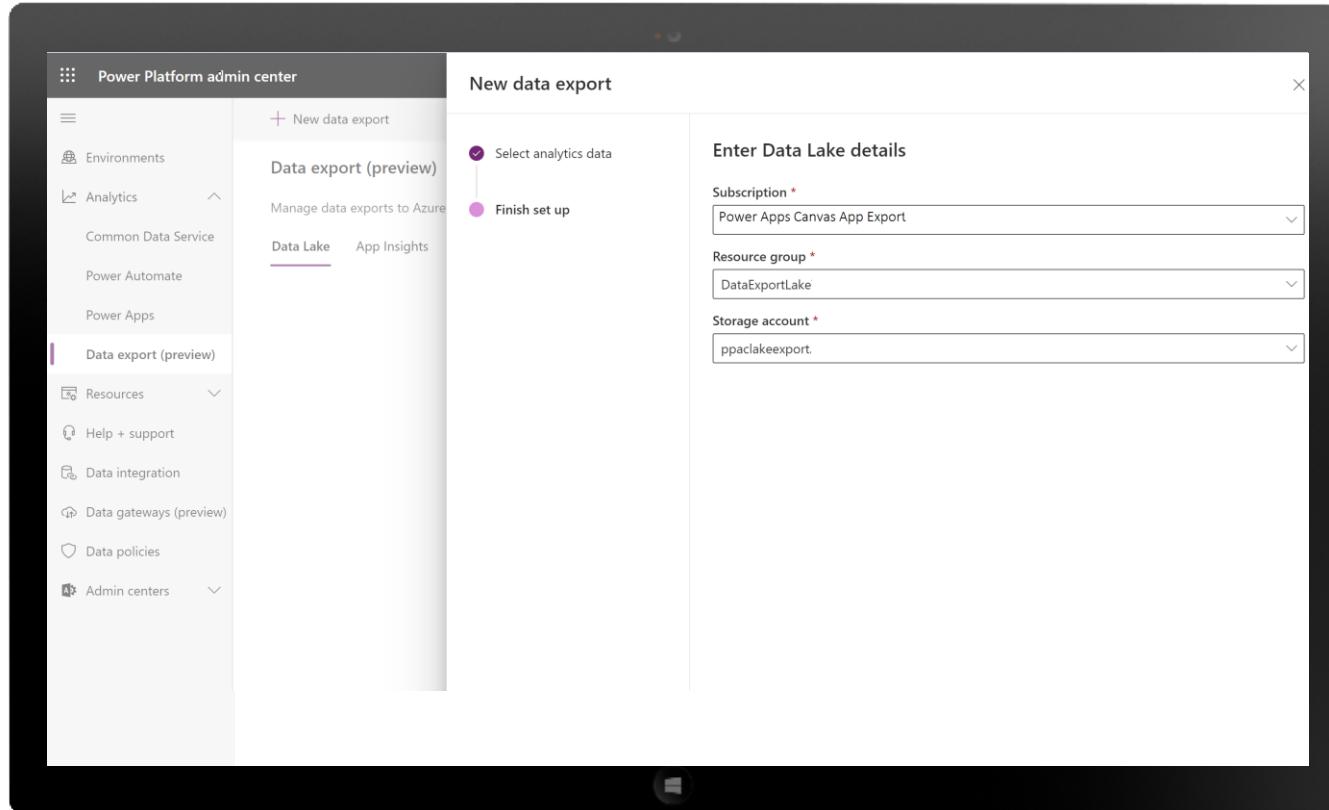
Bring your own lake (BYOL)

The screenshot illustrates the integration of tenant-level analytics with Azure Data Lake. On the left, the Microsoft Power BI interface shows the 'Data export (preview)' section under the Analytics hub. It displays a configuration for exporting data from 'Power Apps' to an 'Environment' named 'All' using a 'Storage account name' called 'poweranalytics', which is currently 'Connected'. On the right, the 'Storage Explorer (preview)' interface in the Azure portal shows the uploaded data package. The file structure includes 'CONTAINERS', 'FILE SHARES', 'QUEUES', and 'TABLES'. A specific folder named 'powerplatform' is selected. The 'powerplatform' folder contains several sub-folders: 'Applications', 'ConnectionReference', 'Connections', 'environments', and 'usage'. The 'Applications' folder is highlighted, showing its last modified date as 9/10/2021, 1:15:38 PM.

NAME	LAST MODIFIED
Applications	9/10/2021, 1:15:38 PM
ConnectionReference	9/11/2021, 1:32:55 PM
Connections	9/10/2021, 1:15:38 PM
environments	9/7/2021, 1:32:37 PM
usage	9/9/2021, 1:19:03 PM

Data Export (preview)

Tenant level analytics

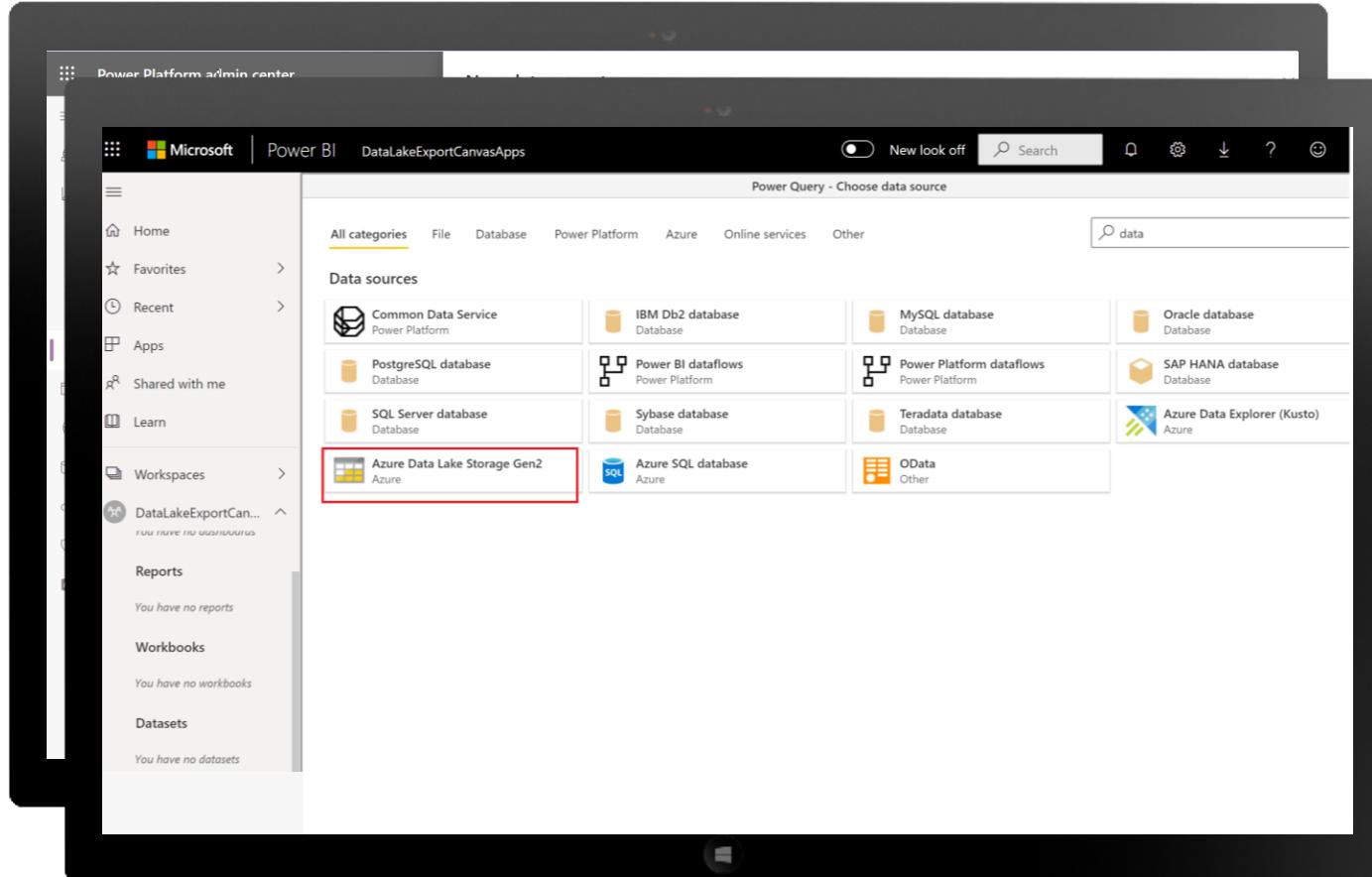


1

Set up Data Lake Export

Data Export (preview)

Tenant level analytics



- 1** Set up Data Lake Export
- 2** Use Power BI data flows to connect to the data lake

Data Export (preview)

Tenant level analytics

The screenshot shows a Microsoft Power BI report titled "Contoso Tenant Adoption". The report includes the following sections:

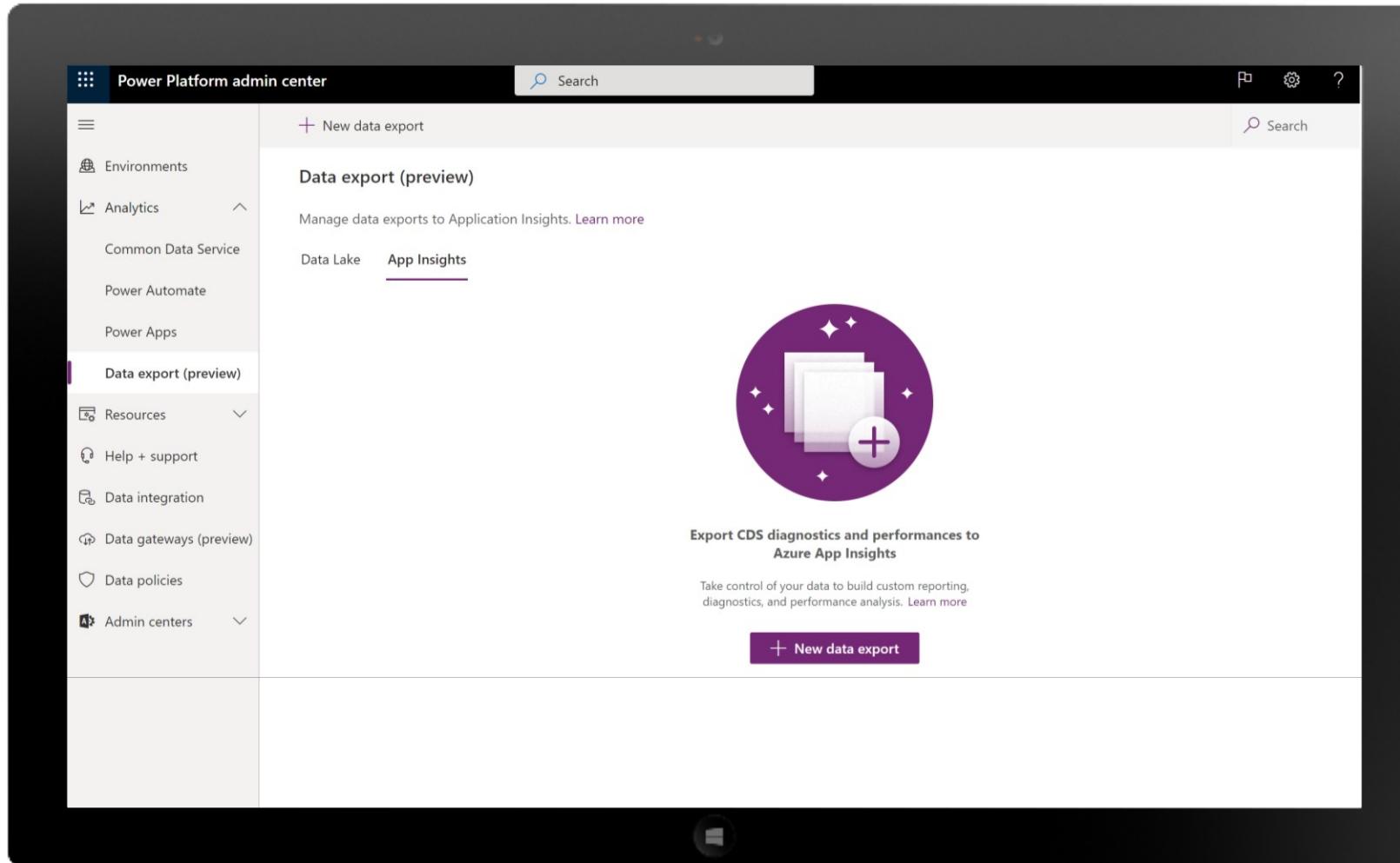
- Power Apps Overview:** Displays key metrics: Total # of apps (652), Created This Month (45), Total App Makers (410), Canvas App (652), and MAU (7500).
- Apps Creation Trend:** A line chart showing the count of apps created over time from July 2018 to January 2020.
- Top 10 Active Makers:** A grid of ten makers with their names and profile icons.
- Top Env'ts by % of Apps:** A pie chart showing the distribution of environments across apps.
- Filters:** A sidebar with dropdown filters for Owner, App Name, App Lifecycle, Environments, Connectors, and App Types.
- Table:** A detailed table of app metadata including Display Name, Unique Users, Sessions, ownerName, and apid.

1 Set up Data Lake Export

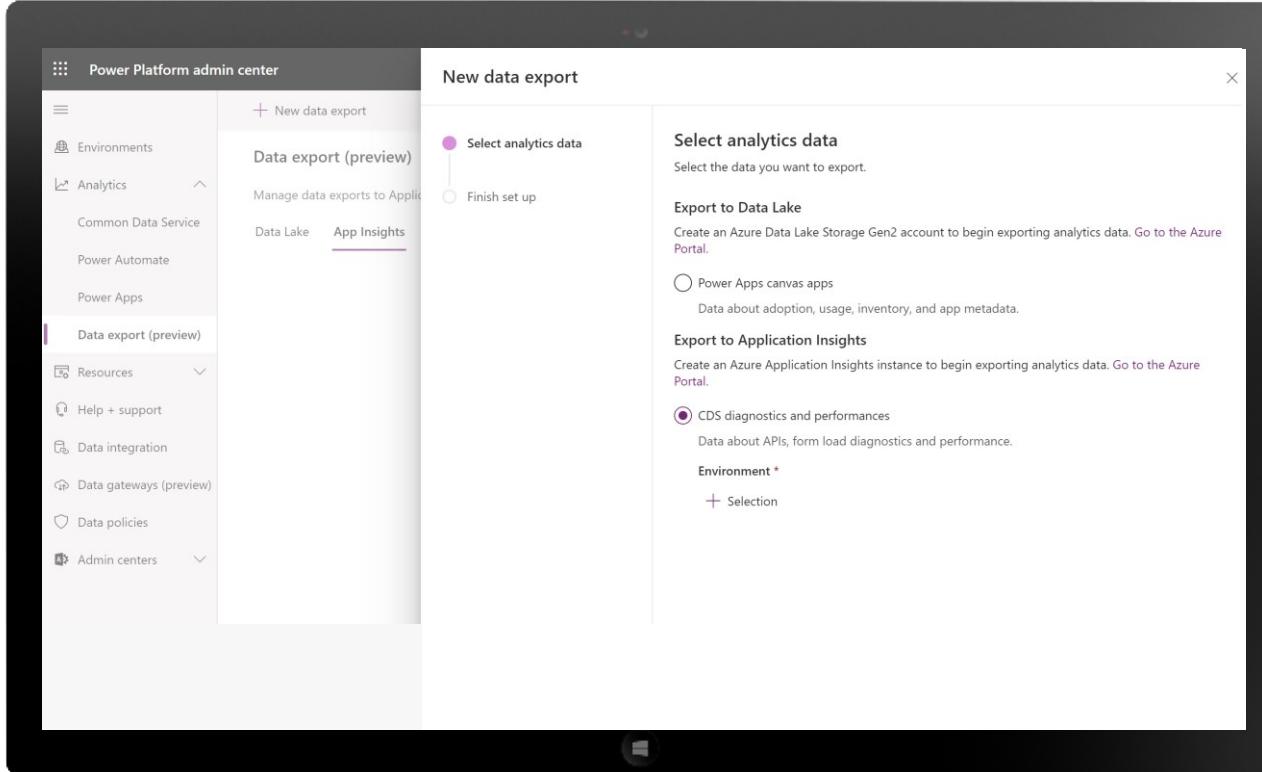
2 Use Power BI data flows to connect to the data lake

3 Build and share custom reports

Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)

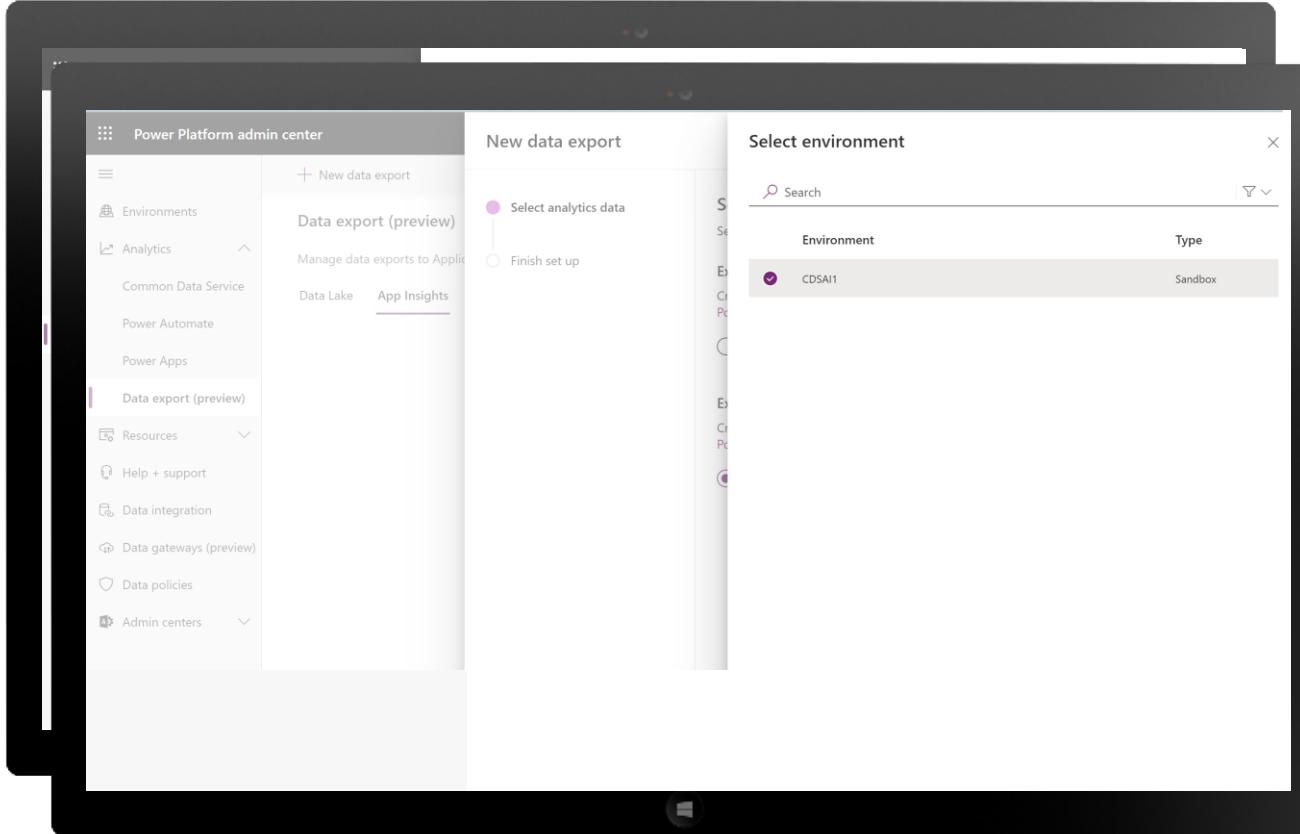


Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)



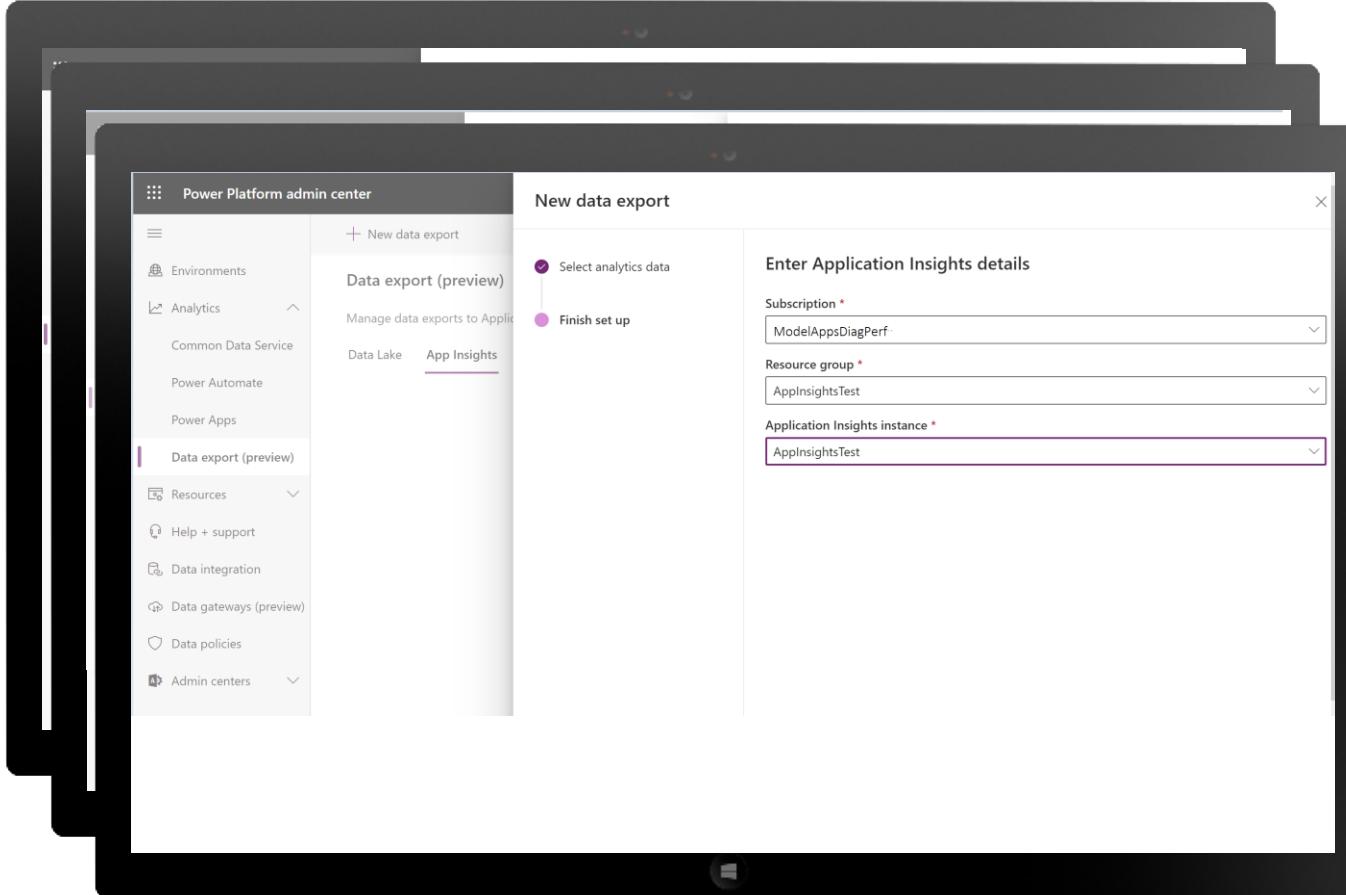
1 Set up continuous export

Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)



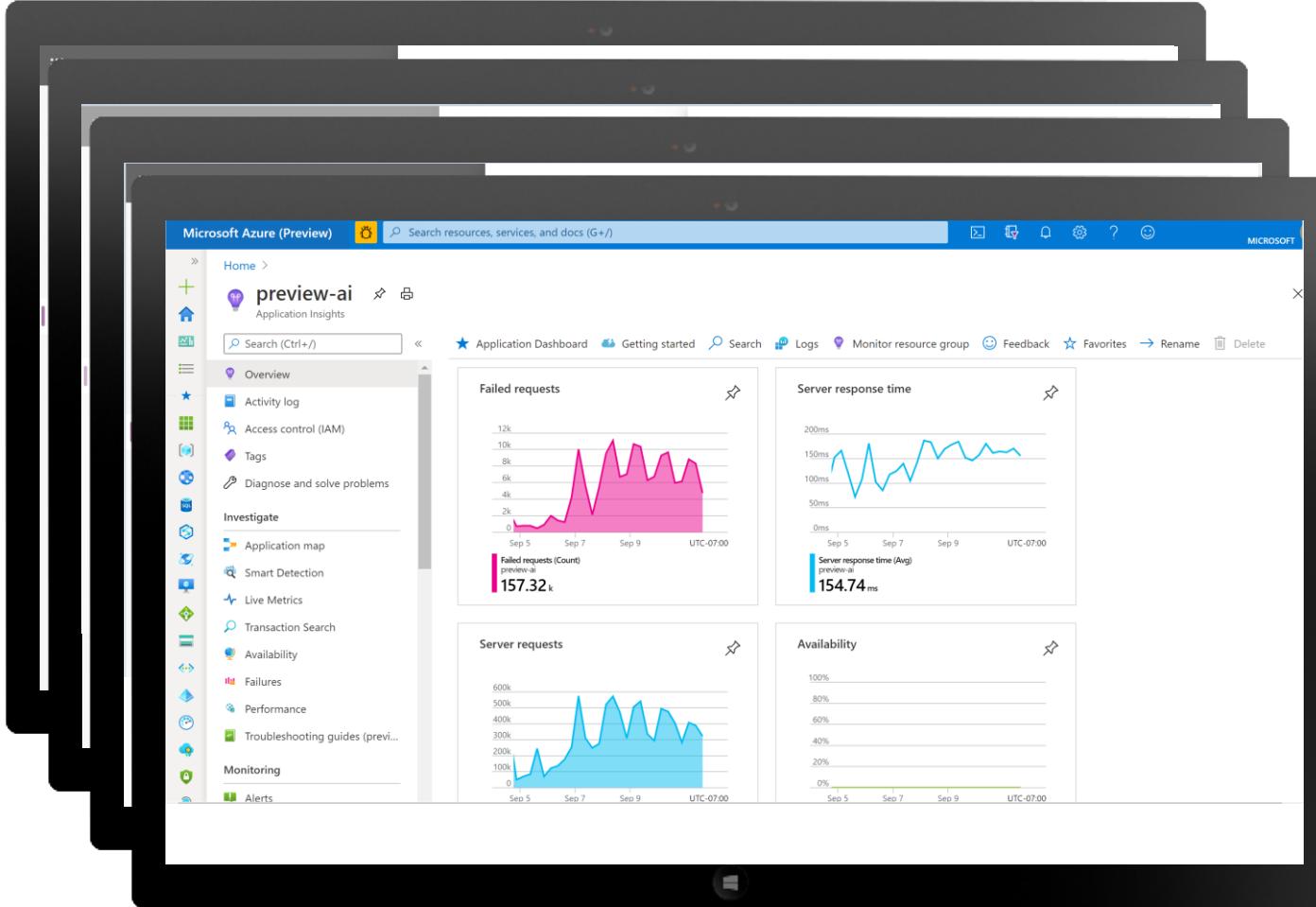
- 1 Set up continuous export
- 2 Select environment

Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)



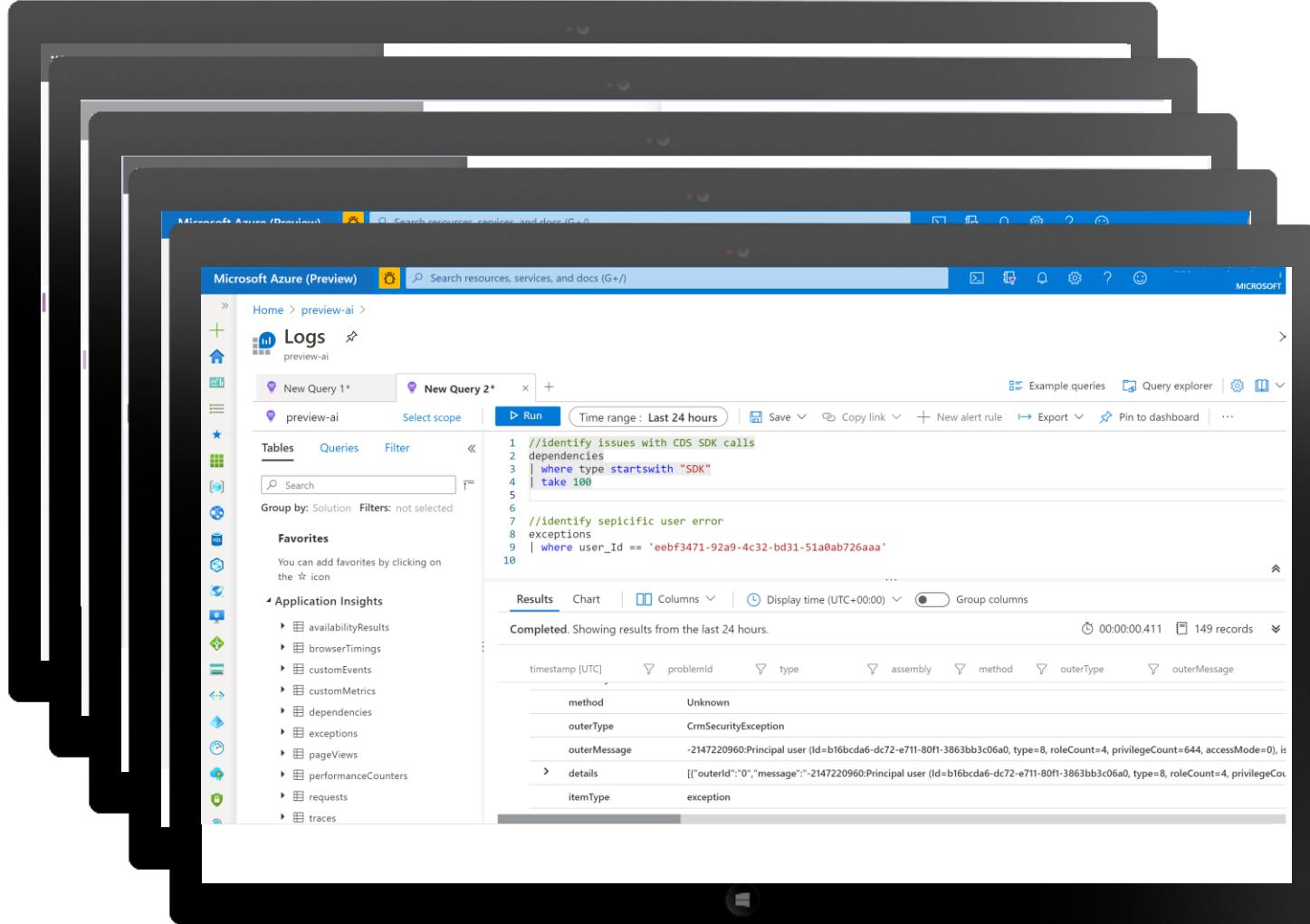
- 1 Set up continuous export
- 2 Select environment
- 3 Provide Application Insights instance

Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)



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

Analyze model-driven apps and Microsoft Dataverse telemetry with Application Insights (preview)



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

Demonstration

Dataverse, Power Apps and
Power Automate analytics



Health monitoring of Power Platform services

Monitoring platform status

Power Apps and Automate service status can be seen in both portals and Office 365 Service Health

<https://admin.microsoft.com/Adminportal/Home?source=applauncher#/servicehealth>

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

Microsoft Power Automate

Health

✓ Healthy

Power Apps

✓ Healthy

Power Apps Support

<https://powerapps.microsoft.com/en-us/support>

No known issues: Power Apps is running smoothly

Search

Search support



Power Automate support

<https://flow.microsoft.com/en-us/support>

Warning:

Starting October 12th, security certificates of old Power Automate Desktop versions (older than July 21 release - version 2.11.51.21196) will expire. Users using these old versions will need to install the latest version of Power Automate Desktop to continue using desktop flows.

Last updated: 10/07/2021 4:54:15 PM UTC

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](#)

The screenshot shows the Microsoft 365 Message Center interface. At the top, there are navigation links for 'Inbox' (which is underlined) and 'Archive'. Below the header, there are two status indicators: 'Preferences' and 'Planner syncing'. On the right side, it shows '3 items' and a search bar with a magnifying glass icon. Further down, there are filter options: 'Service: Microsoft Power Automate, Microsoft Po...', 'Tag', and 'Message state'. The main area displays a table with three rows of messages. The columns are: 'Message title', 'Service', 'Last updated', 'Act by', and 'Tag'. The first message is titled '(Updated) Power Apps can now display images from Mic...', associated with 'Power Apps in Microsoft 365' and 'SharePoint', last updated on Oct 5, 2021, with tags 'NEW FEATURE' and 'USER IMPACT'. The second message is titled 'Upcoming changes to Power Apps per app plan licenses', associated with 'Power Apps', last updated on Sep 24, 2021, with a tag 'ADMIN IMPACT'. The third message is titled '(Updated) PowerApps/PowerAutomate Retirement of Di...', associated with 'Microsoft Power Automate in Microsoft 365', last updated on Aug 26, 2021, with tags 'MAJOR UPDATE', 'ADMIN IMPACT', and '+2'.

Message title	Service	Last updated	Act by	Tag
(Updated) Power Apps can now display images from Mic...	Power Apps in Microsoft 365 SharePoint	Oct 5, 2021		NEW FEATURE USER IMPACT
Upcoming changes to Power Apps per app plan licenses	Power Apps	Sep 24, 2021		ADMIN IMPACT
(Updated) PowerApps/PowerAutomate Retirement of Di...	Microsoft Power Automate in Microsoft 365	Aug 26, 2021	Sep 25, 2021	MAJOR UPDATE ADMIN IMPACT +2

Demonstration

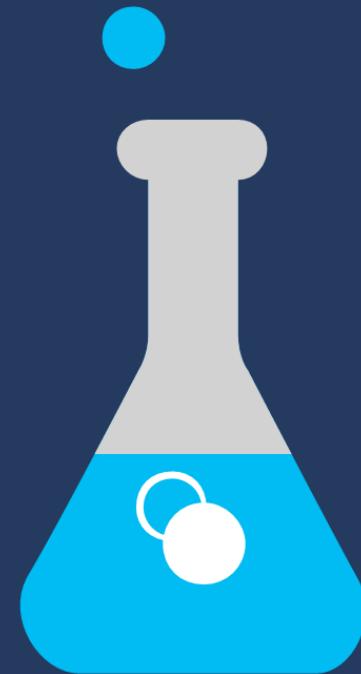
Power Apps and Automate
service health



Questions?



Create Audit Retention Policy



LAB

