



Microsoft Power Platform

2021 RELEASE WAVE 2 PLAN

Features releasing from October 2021 through March 2022

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Microsoft Power Platform: 2021 release wave 2 plan

The Microsoft Power Platform release plan for the 2021 release wave 2 describes new features releasing from **October 2021** through **March 2022** for Power BI, Power Apps, Power Apps portals, Power Automate, Power Virtual Agents, and AI Builder, as well as Microsoft Power Platform capabilities for governance and administration, ISV experiences, and data integration. You can either browse the release plan [online](#) or download the document as a [PDF file](#).

The Dynamics 365 and industry clouds features shipping in the 2021 release wave 2 have been summarized in a separate [release plan](#) as well as a downloadable [PDF](#).

2021 release wave 2 overview

Microsoft Power Platform enables users and organizations to analyze, act, and automate on the data to digitally transform their businesses. Microsoft Power Platform today comprises four products: Power BI, Power Apps, Power Automate, and Power Virtual Agents. It also has two add-ins: AI Builder and Power Apps portals.

Power BI

[Power BI](#) continues to invest in three primary areas to enable organizations to drive a data culture:

- **Empower every individual** with instantly familiar experiences and AI-infused insights. Power BI continues to advance creator experiences making it easier than ever to work with data. By leveraging the AI advancements from Microsoft Research, Power BI helps users find patterns in the vast amounts of data with readily available insights.
- **Empower every team** with BI woven into the fabric of where teams work by integrating Power BI deeply with Office 365 – Microsoft Teams, Excel, PowerPoint, and more. Power BI integration in Microsoft Teams will continue to mature, deepening the integration in channels, chats, and notifications within Teams.
- **Empower every organization** to meet the demanding needs of the large enterprise customers by providing centralized administration, governance, and industry-leading security capabilities. Power BI premium offers enhanced capabilities that help accelerate the delivery of insights at scale such as pay-as-you-go pricing and Microsoft-owner resource management, in addition to providing interactive experiences over big data.

Power Apps

[Power Apps](#) brings major improvements for makers by improving the sophistication and usability of apps that can be created across the web and mobile devices. With these improvements, makers can now publish their canvas app as standalone mobile apps. The unified and modern Power Apps designer will be generally available, to quickly build modern apps as well as take advantage of intelligent authoring, using AI and Power Apps Studio, for rapid app development.

Power Apps portals

[Power Apps portals](#) focuses on the advancements of capabilities that allow makers to enable more out-of-box scenarios, use developer capabilities and tools to enable advanced customizations and configurations, features that allows makers to create custom UI elements within forms and web elements and general availability of support for CI/CD of portals configuration using Power Platform CLI.

Power Automate

[Power Automate](#) continues to invest in these primary areas as part of this wave:

- **Microsoft Teams integration** - Integration with Microsoft Teams to provide collaborative scenarios and allow admins to push solutions that contain flows across their organization.
- **Power Automate Desktop** - Provide migration support for existing Softomotive and UI flow customers with secure credential management and much more.
- **Dynamics 365, Power Apps, Power BI, and Microsoft Dataverse** - Provide a seamless experience for professional developers and users to deploy solutions on Microsoft Power Platform with deeper integration.
- **AI Builder** - To leverage AI Builder's capability for automation and scaling, we're investing in content intelligence for understanding where to add support for multiple layouts, working with form controls and expanding support for more languages.

Power Virtual Agents

[Power Virtual Agents](#) brings improvements in the authoring experience with variable passing between topics, list variables, inline images and videos, regular expressions in custom entities, and commenting. Also included is bot creation from templates, sharing bots with security groups, and new AI capabilities to build your bots automatically from website content.

AI Builder

In 2021 release wave 2, [AI Builder](#) is adding new functionalities focused around intelligent document processing experiences, which include the ability to extract a broader set of content types in documents, such as checkboxes, signatures, typed fields like date and currency, and support for more prebuilt models in the document automation solution. Improving the AI model discovery experience, as well as improving performance metrics and simplifying the authoring experience, are also the primary focus for this release.

Microsoft Power Platform governance and administration and ISV experiences

[Microsoft Power Platform governance and administration](#) introduces many new capabilities in this release wave that helps IT professionals and administrators to set up, secure, and adopt the governance and administration of the platform across the enterprise.

[Microsoft Power Platform ISV experiences](#) enable Independent Software Vendors (ISV) to build applications leveraging the available Microsoft Power Platform capabilities. ISVs can create unique user experiences by extending their applications across Azure either using Azure Services or through custom code. Additional capabilities include enhancements to the current ISV Studio and more application management capabilities like tenant-level application usage metrics, and an opt-in feature to automatically update third-party ISV applications.

Data integration

[Data integration](#) is focused on key areas for this release including enhancements to data integration by enabling analytics to Data Lake in Common Data form, Office data integration to improve Data Export Service, enhancing Gateway for enterprises and Robotics Process Automation (RPA), enabling end-to-end diagnostic capability for fixing issues in queries or gateway, and enabling the dataflow experience in Dataverse in Teams so that data can be easily built.

Key dates for the 2021 release wave 2

This release plan describes functionality that may not have been released yet. Delivery timelines and projected functionality may change or may not ship (go to [Microsoft policy](#)).

Here are the [key dates](#) for the 2021 release wave 2.

Milestone	Date	Description
Release plans available	July 14, 2021	Learn about the new capabilities coming in the 2021 release wave 2 (October 2021 – March 2022) across Dynamics 365 and Industry Clouds and Microsoft Power Platform.

Milestone	Date	Description
Early access available	August 2, 2021	Test and validate new features and capabilities that will be a part of the 2021 release wave 2, coming in October, before they get enabled automatically for your users. You can view the Microsoft Power Platform 2021 release wave 2 early access features now.
Release plans available in 11 additional languages	August 13, 2021	The Dynamics 365 and Industry Clouds and Power Platform release plans are published in Danish, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Portuguese (Brazilian), Spanish, and Swedish.
General availability	October 1, 2021	Production deployment for the 2021 release wave 2 begins. Regional deployments will start on October 1, 2021.

Just like the previous release waves, we continue to call out how each feature will be enabled in your environment:

- **Users, automatically** – These features include changes to the experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically** – These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts** – These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

You can get ready with confidence knowing which features will be enabled automatically.

We've done this work to help you—our partners, customers, and users—drive the digital transformation of your business on your terms. We're looking forward to engaging with you as you put these new services and capabilities to work, and we're eager to hear your feedback as you dig into the 2021 release wave 2.

Let us know your thoughts. Share your feedback in the [Microsoft Power Platform community forum](#). We will use your feedback to make improvements.

Change history

This topic is updated when a feature's release date changes or when a feature is added or removed. You can see the full topic in the [Change history](#) online.

2021 release wave 2 features available for early access

This topic lists the features that can be enabled for testing in your environment beginning **August 2, 2021**. Features from the following apps are available as part of early access:

- Power Apps

The features from these apps update the existing user experiences. You can opt in early to enable these features in your environment. This will allow you to test these features and then adopt them across your environments. For information on how to enable these features, go to [Opt in to 2021 release wave 2 updates](#).

IMPORTANT If you are using Dynamics 365 apps, such as Sales, Service, Marketing, Finance, Supply Chain Management, Business Central, and Commerce, there are early access features that could impact your users. For Dynamics 365 early access features, go to [2021 release wave 2 features available for early access](#).

Power Apps

For a complete list of the Power Apps features, go to [What's new and planned for Power Apps](#).

Feature	Enabled for	Early access	General availability
Advanced lookup capabilities for all users in model-driven Power Apps	Users, automatically	✓ Jun 30, 2021	✓ Oct 1, 2021
Easily share a record in the new model-driven app experience	Users, automatically	✓ Aug 2, 2021	✓ Oct 3, 2021
Find all the relevant Power Apps on Office.com	Users, automatically	✓ Aug 2, 2021	Mar 2022
Model-driven app improvements	Users, automatically	✓ Aug 2, 2021	✓ Oct 7, 2021
Model-driven apps support multiple app side panes	Users, automatically	✓ Aug 2, 2021	Jan 2022
Modern search for all users in model-driven apps	Users, automatically	✓ Jul 29, 2021	✓ Oct 1, 2021

Feature	Enabled for	Early access	General availability
New column options in grid view page	Users, automatically	✓ Jul 29, 2021	✓ Oct 7, 2021
New model-driven app experience for editing multiple records	Users, automatically	✓ Aug 2, 2021	✓ Oct 3, 2021
Unified Interface browser support changes	Users, automatically	✓ Aug 2, 2021	✓ Oct 7, 2021

Power BI

Overview of Power BI 2021 release wave 2

Microsoft business intelligence helps drive a data culture where everyone at every level of an organization can make confident decisions with data at any scale. To enable organizations to drive a data culture, we're investing in three key areas:

- **Empower every individual** with instantly familiar experiences and AI-infused insights.
- **Empower every team** with BI woven into the fabric of where teams work, making data a standard part of every decision and turning insights into actions.
- **Empower every organization** to meet the most demanding enterprise needs for scalability and governance.

Empower every individual

Power BI continues to innovate and make it easier than ever for everyone to work with data. To build a data culture, every single individual needs to have instantly familiar experiences combined with easy-to-discover insights. Whether that involves authors creating reports by using the free Power BI Desktop tool, or consumers exploring data in the Power BI service and mobile applications, or individuals in Microsoft 365 using data to make better decisions, Power BI makes it easy and delightful to work with data. Power BI has taken advantage of a lot of the AI advancements in Microsoft Research to help our users find patterns in the vast amounts of data and insights that are readily available to use. Power BI will continue to empower every business user and business analyst to get amazing insights with AI-infused experiences. To ensure that those insights are available to everyone in the organization, wherever they are and in context, we developed the world-leading mobile BI app and provided embedded capabilities for your applications, websites, and portals. This empowers individuals across an organization to drive and grow the data culture.

Empower every team

Power BI makes data a standard part of every team's decision-making by deeply integrating BI into the places where teams work and infusing it into the most common collaboration experiences. Power BI integration in Microsoft Teams will continue to mature, deepening the integration in channels, chats, and notifications within Microsoft Teams. In addition, customers have told us that they value the ability to quickly move from insight to action to automation. Microsoft Power Platform makes this uniquely possible with Power BI, Power Apps, and Power Automate. These products are natively designed to work together to make it easy for customers to adapt quickly to changing business requirements. Insights become more valuable as they're shared, and by integrating Power BI deeply with Office 365

(Microsoft Teams, Excel, PowerPoint, and more) we bring insights to where everyone works and collaborates.

Empower every organization

Power BI can scale to meet the most demanding needs of large enterprise customers. With the centralized administration, governance, and industry-leading security capabilities in Power BI, IT always has full visibility and control. Power BI Premium provides unmatched capabilities in a single integrated BI platform without requiring customers to string together and integrate multiple products with high costs and disjointed experiences. With Power BI Premium, we bring capabilities that were previously only available to professional data engineers in IT organizations to analysts, accelerating time to value and helping put more power in the hands of business. This balance between business and IT is one of the reasons why the world's largest organizations are increasingly standardizing on Power BI and moving away from expensive, legacy BI products. With each release, Power BI Premium adds features that help organizations accelerate the delivery of insights at scale. These investments span many areas, such as Microsoft-owned resource management, auto-scale and pay-as-you-go pricing, advanced self-service data prep, interactive experiences over big data, and meeting advanced security and governance requirements.

For official product documentation and training for Power BI, go to:

- [Power BI docs](#)
- [Power BI training on Microsoft Learn](#)

What's new and planned for Power BI

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Power BI Embedded

Quickly and easily embed fully interactive reports and visuals into your applications by using Power BI analytics as your own.

Feature	Enabled for	Public preview	General availability
Power BI Embedded Gen2	Admins, makers, marketers, or analysts, automatically	✓ Feb 9, 2021	✓ Oct 4, 2021
Export Power BI report to PDF/PPTX/PNG - API	Users by admins, makers, or analysts	✓ Apr 1, 2020	Jan 2022
Easier and unlimited deployment of Power BI Embedded multitenant solution	Users by admins, makers, or analysts	-	Feb 2022
Embed Power BI in Jupyter notebook	Admins, makers, marketers, or analysts, automatically	-	Mar 2022
Power BI Embedded automatic spike prevention	Users by admins, makers, or analysts	Mar 2022	To be announced

Power BI Premium

New Power BI Premium features help organizations accelerate the delivery of insights at scale, meeting the most demanding needs of an enterprise.

Feature	Enabled for	Public preview	General availability
Hybrid tables	Admins, makers, marketers, or analysts, automatically	✓ Dec 15, 2021	
Data protection enhancements - Centralized Power BI DLP policies	Users by admins, makers, or analysts	✓ Dec 31, 2021	-
Deployment pipelines - multiple pipelines working together	Admins, makers, marketers, or analysts, automatically	✓ Jan 19, 2022	
Goals rollups	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Cascading of goals	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Deployment pipelines - deployment history	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Feature	Enabled for	Public preview	General availability
Web authoring for paginated reports in Power BI	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Deployment pipelines - Assign a workspace to all pipeline stages	Admins, makers, marketers, or analysts, automatically	-	✓ Dec 1, 2021
Deployment pipelines - Dataflows support	Admins, makers, marketers, or analysts, automatically	✓ Jun 15, 2021	✓ Jan 19, 2022
Performance and usage tracing for Analysis Services	Admins, makers, marketers, or analysts, automatically	-	Mar 2022
Set detailed, goal-level permissions	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	To be announced
Set triggers and actions on goals with Power Automate	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	To be announced

Power BI Pro

Power BI is evolving to help everyone discover and collaborate on insights and make it easier than ever to work with data.

Feature	Enabled for	Public preview	General availability
Power BI datasets hub enhancements	Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-
Sparklines for table and matrix visuals	Admins, makers, marketers, or analysts, automatically	Dec 2021	
Artifact-level access for Power BI apps	Users by admins, makers, or analysts	Mar 2022	
Format visuals for mobile-optimized reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Improved Power BI administration and operations	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Feature	Enabled for	Public preview	General availability
Natural language to DAX generation	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI integration with PowerPoint	Users by admins, makers, or analysts	Mar 2022	
Power BI catalog integration with Azure Purview	Admins, makers, marketers, or analysts, automatically	✓ Dec 31, 2020	✓ Oct 1, 2021
Export to Excel improvements for table and matrix visuals	Users, automatically	✓ Oct 31, 2021	✓ Nov 30, 2021
Power BI as a core capability in Microsoft Teams	Users by admins, makers, or analysts	✓ Oct 31, 2021	✓ Nov 30, 2021
Enhanced validation for dataflows	Users, automatically	Jan 2022	Mar 2022
Quick create on Microsoft Dataverse	Users by admins, makers, or analysts	✓ Oct 31, 2021	To be announced
Admin APIs to help with assessing oversharing risks	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced
Get admin insights with central metadata and reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced
Include Power BI reports and datasets in a Power Apps solution	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and

datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Power BI Embedded

Overview

Power BI Embedded enables developers to offer world-class analytics without developing it themselves. Developers can quickly and easily provide customer-facing reports, dashboards, and analytics in their own applications by using and branding Power BI as their own. Power BI Embedded reduces developer resource needs by automating the monitoring, management, and deployment of analytics, while maintaining full control of the application, Power BI features, and intelligent analytics.

Power BI Embedded Gen2

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Feb 9, 2021	✓ Oct 4, 2021

Business value

Improvements to the underlying architecture of Power BI Embedded will help customers increase their ROI, scale rapidly, and get up to 16X faster performance.

Feature details

Power BI Embedded has been available on a per-capacity licensing model since it was launched. With this new generation of Power BI Embedded, customers will get:

- Faster performance and more consistent reliability
- Simplified resource management making it as hands-off as possible
- Visibility into utilization at the workspace level, enabling consistent utilization analysis and cost management

See also

[Power BI Embedded Generation 2](#) (docs)

Export Power BI report to PDF/PPTX/PNG - API

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Apr 1, 2020	Jan 2022

Business value

Developers will be able to provide their users with the ability to export report data in PowerPoint, PDF, and PNG formats.

Feature details

With the ability to export report data in these formats, there will be two main scenarios:

- **Interactive mode:** Users interact with a report and export their own view of the data.
- **Non-interactive mode:** Offline generation of report snapshots are distributed to different users in the organization.

See also

[Export Power BI report to file](#) (docs)

Easier and unlimited deployment of Power BI Embedded multitenant solution

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Feb 2022

Business value

Power BI Embedded will enable ISVs to deploy a solution to an unlimited number of tenants while removing the burden of creating multiple service principals.

Feature details

Currently, an ISV can deploy a maximum of 1,000 tenants per one service principal. This new solution allows an unlimited number of tenants per service principal by introducing a service principal "child" named *service principal profile*. Each service principal profile can administer a customer tenant, and the number of profiles per service principal is unlimited.

Embed Power BI in Jupyter notebook

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

Jupyter notebook users will be able to embed Power BI reports and then use Power BI features to improve their data storytelling. Scientists, journalists, researchers, developers, and others using Jupyter notebooks will be able to embed Power BI reports as part of their notebooks and then use Power BI features to improve their data storytelling.

Feature details

Scientists, journalists, researchers, developers, and others using Jupyter notebooks will be able to embed Power BI reports as part of their notebooks. Once embedded, adding Power BI bookmarks will make it possible to show different views of the same report and order those views to facilitate data storytelling.

See also

[Feature exploration](#) (video)

Power BI Embedded automatic spike prevention

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	To be announced

Business value

This out-of-the-box capability allows ISVs to prevent slowdowns under heavy use without the need to configure vertical autoscaling in Azure, which requires scripting, using metrics, alert rules, and ARM APIs.

Feature details

This feature is similar to autoscaling in Power BI Premium. Power BI Embedded spike prevention uses an Azure subscription to automatically add more v-cores (virtual CPU cores) when the computing load on your Power BI Embedded subscription would otherwise be slowed by its capacity.

Power BI Premium

Overview

With each release, Microsoft Power BI Premium continues to deliver features that help organizations accelerate the delivery of insights at scale, meeting the most demanding needs of an enterprise. The 2021 release wave 2 investments will span the following areas:

- **Microsoft-owned resource management:** You won't have to worry about workload spikes and capacity utilization that can affect the speed of work.
- **Auto-scale and pay-as-you-go pricing:** You'll have the ability to scale beyond resource capacity without experiencing drops in performance.
- **Advanced self-service data prep:** Seamlessly ingest, prepare, and refresh data and reuse the data prep building blocks across Microsoft Power Platform and Azure.

- **Interactive experiences over big data:** Build reports on massive volumes of data in big data sources, such as Azure Synapse Analytics. Your reports are automatically made to perform well, and the full solution can be monitored end-to-end with ease.
- **Operational reporting and distribution:** Author and distribute pixel-perfect operational reports to millions of users.
- **Advanced security:** As data becomes more accessible, preventing risk of data leaking is critical. Secure and protect your data with Microsoft Information Protection labels. Discover and govern your data assets through Microsoft Azure Purview.

Hybrid tables

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Dec 15, 2021	-

Business value

Hybrid tables combine the performance of VertiPaq in-memory caches with the capabilities of DirectQuery, allowing users to unlock massive datasets for real-time, interactive analysis.

Feature details

Hybrid tables will contain in-memory VertiPaq caches of historical data for blazing-fast performance. In the same table, real-time data will be queried in DirectQuery mode and dynamically combined with cached data. The DirectQuery range can be limited to only the necessary real-time data, which improves the performance of queries on big-data sources. When combined with the automatic page refresh feature in Power BI, hybrid tables will unlock massive datasets with billions of rows for interactive analysis, while providing a great solution for real-time requirements.

See also

[Learn about hybrid tables in Power BI premium](#) (video)

Data protection enhancements - Centralized Power BI DLP policies

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Dec 31, 2021	-

Business value

Centralized Power BI data loss prevention (DLP) policies enable organizations to better control and protect their sensitive enterprise data by leveraging Microsoft's leading security solutions.

Feature details

Providing data protection capabilities in Power BI is critical to enabling our customers to control and protect their sensitive enterprise data. In Power BI, we've been leading the landscape with data protection capabilities by integrating with Microsoft's leading security solutions for information protection, threat protection, and cloud app security.

We've already implemented the following data protection features:

- Allowing customers to classify and label sensitive data in Power BI with Microsoft Information Protection (MIP) sensitivity labels.
- Allowing the application of sensitivity labels and protection to Power BI Desktop files (.pbix).
- Persisting MIP sensitivity labels and protection throughout the Power BI service and mobile apps, when viewing Power BI reports in Teams and SharePoint, and when content is exported to Excel, PowerPoint, and PDF.
- Persisting MIP sensitivity labels and protection in live connections to Excel files.
- Supporting inheritance of labels between artifacts, starting with inheritance upon creation of new Power BI assets.
- Enforcing label-specific permissions when data is exported out of Power BI.
- Monitoring user access and activity, including real-time risk analysis and protection.
- Adding downstream inheritance of labels within Power BI projects. When applying a label on a certain asset (such as a dataset), connected downstream assets (reports, dashboards) will also inherit that label.
- Persisting sensitivity labels and enforcing protection in Power BI Embedded (SaaS embedding).
- Providing an API for administrators to retrieve asset MIP sensitivity labels and an API to set/remove MIP sensitivity labels on an asset.
- Requiring the use of labels when content is created or edited in the Power BI service. This feature is managed by administrators in Microsoft 365 compliance, who can turn it on and off.
- Applying a default MIP sensitivity label policy that sets the default label on a Power BI file when the user creates a new file or edits the file without a sensitivity label in Power BI Desktop. This feature is managed by administrators in Microsoft 365 compliance, who can turn it on and off.
- Providing sensitivity labels in Power BI on government clouds (GCC, GCCH, and DOD).
- Providing protection while getting data from Excel files by using MIP sensitivity labels.

- Enabling the application of an Excel file's sensitivity labels on downstream Power BI datasets and reports.

We're continuing to invest in data protection and will introduce the following additional capabilities, allowing organizations across various industries to use the most sensitive data while adhering to company policies and ensuring data security. We'll extend capabilities to support more restrictive and demanding security and compliance requirements.

These capabilities include:

- Centralized Power BI data loss prevention (DLP) policies that enable security administrators to apply their organization's DLP policies in the Power BI service using the Microsoft 365 compliance center.
- Automatically triggering DLP actions according to the Microsoft Information Protection (MIP) sensitivity label of the content. Some examples include triggering alerts for security administrators and providing users with policy tips or warnings.
- Auto-detecting sensitive information by scanning the content or analyzing the content's data sources is coming soon.
- The addition of new DLP actions to automatically apply MIP sensitive labels is coming soon.

See also

[Data loss prevention policies for Power BI \(preview\)](#) (docs)

Deployment pipelines - multiple pipelines working together

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Jan 19, 2022	-

Business value

Many BI teams separate data items (datasets, dataflows) from visualization items (reports, dashboards). These are managed in different workspaces and sometimes by completely different teams, with different release processes. However, since these items are related by data connections, BI teams need an easy way to manage and connect them across the different lifecycle environments.

This feature enables different BI teams to manage items that are connected to each other in different pipelines, while also ensuring that those items will be connected across their respective environments.

Feature details

Today, object connections are persisted in a pipeline. What this means is that whenever a report and dataset are connected in Test stage, they'll remain connected to each other when deployed to Prod stage.

Going forward, we're extending this capability across different deployment pipelines. Here are some examples:

- A dataset and a report are managed in two different pipelines and are connected in Dev stage. When that dataset and report are being deployed (each one in its own pipeline) to Test stage, Power BI will maintain the connection between the dataset and the report.
- If you try to deploy the report into Test stage while the dataset in the second pipeline doesn't yet exist in Test stage (wasn't deployed), the deployment will fail. This is the same behavior we see in single pipeline deployments today.
- If a report points to a dataset in a different pipeline and in a different stage (for example, Prod stage), then after deploying the report to Test stage, the report will retain its connection to the dataset that's still in Prod stage. This allows BI teams who build reports only on Prod data to continue working with pipelines.

The examples above are for reports and shared datasets, but this feature will apply to any combination of items connected to each other and supported in deployment pipelines:

- RDL reports → datasets
- Datasets → datasets
- Datasets → dataflows

See also

[Feature exploration](#) (video)

Goals rollups

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to define rollups to determine how sub-goals roll up to an overall goal.

Feature details

It's important for users to define how their overall goals should be calculated. Rollups give users the flexibility to specify how they want their data aggregated, ranging from percent

completed, to weighted averages, to overall sums. Users will be able to use these rollups to measure progress toward an overall goal.

Cascading of goals

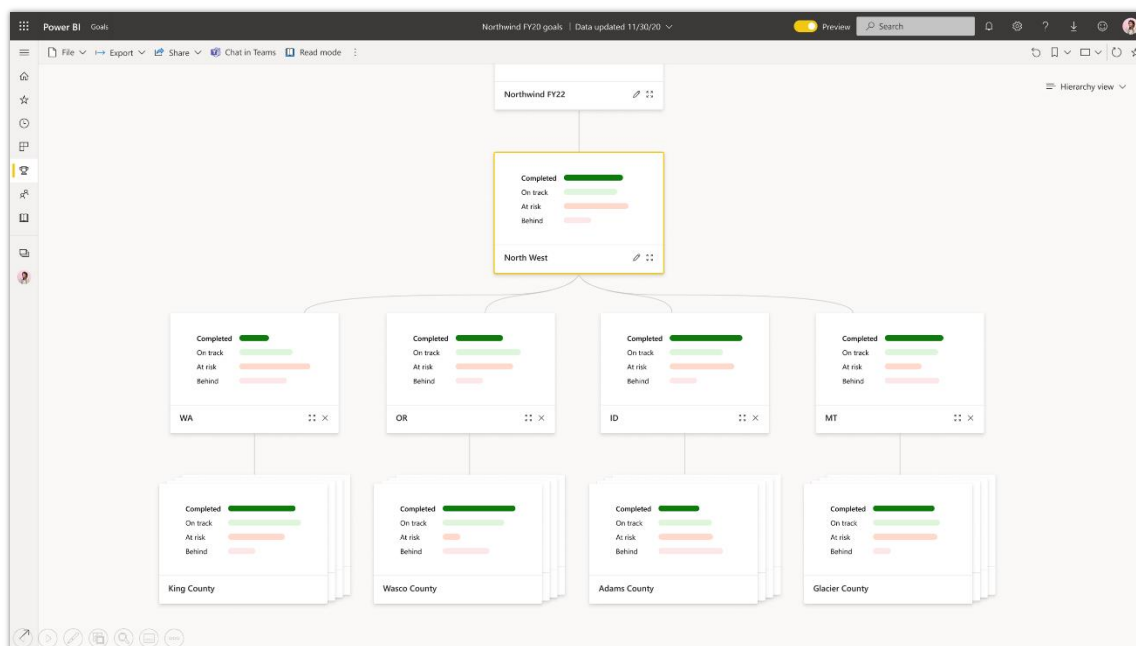
Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

In order to support enterprise deployments of goals, users must be able to easily cascade goals down to thousands of users in an organization. The cascading of goals will make it easy to do things such as roll out sales goals to 5,000 sales managers or introduce HR goals to an entire organization.

Feature details

With this feature, users will be able to define a hierarchy based on their Power BI data model (for example, a geographical or product hierarchy) and automatically cascade their goals across all different levels of the hierarchy. This allows users to easily automate the creation of goals for use by thousands of others in their organization at once.



Goals cascading by region and then by county

Deployment pipelines - Deployment history

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

This feature is designed for BI teams who use deployment pipelines to manage their content. To properly govern changes, BI teams need the ability to easily track their changes across time. The new deployment history feature tracks changes that have been deployed to Test and Production stages, and makes it easier for teams to collaborate and quickly find bugs and bug root causes.

Feature details

For the BI creator who deploys content in the pipeline, this new feature adds the ability to:

- See a summary of the changes you're about to make before the deployment process starts
- Add comments to that deployment that explain or describe the content and changes that are being deployed

For other BI creators with access to that pipeline, this new feature adds:

- An activity log for deployment history within each pipeline
- Deployment history that includes:
 - Stage it was deployed to
 - Who made the deployment
 - Deployment time
 - Status of deployment (completed or failed)
 - List of deployed artifacts that are new or have been changed
 - Deployer comments that were added as part of the deployment

Web authoring for paginated reports in Power BI

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Operational reporting remains a key part of any organization's business intelligence strategy. For many years, SQL Server Reporting Services (SSRS) has met that need for organizations worldwide. But as more and more customers transition to the Power BI cloud service, paginated reports in Power BI are meeting those customers' needs.

By evolving the ability to author these reports from locally installed, IT-centric tooling to a modern web-based offering, users can take advantage of the unique capabilities offered by paginated reports. Whether you're a casual user of Power BI or have used SSRS in the past, these new capabilities will set the standard and provide a simple yet powerful way to author paginated reports moving forward.

Feature details

The initial experience of web authoring for paginated reports will address a top customer request: to be able to create formatted tables using Power BI datasets while a paginated report is created behind the scenes.

Planned feature highlights include:

- Selecting fields from a Power BI dataset using the familiar Power BI online interface
- Choosing a theme to apply to your formatted table
- Selecting page settings to best meet your scenario
- Exporting to Excel, PDF, PPTX, and other supported formats
- Saving and subscribing to the report on a daily, weekly, or monthly basis
- Saving and opening in Report Builder for advanced editing scenarios

Additional capabilities will be added as all the formatting options for tables and matrixes are brought to the web.

Deployment pipelines - Assign a workspace to all pipeline stages

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Dec 1, 2021

Business value

Many Power BI creators have already implemented the use of workspaces as environments. With these workspaces already set up, it will now be easy to shift the existing workspaces to a pipeline. This will reduce the need for users to have Power BI Premium capacity permissions or create workspace permissions. Instead, they can simply assign existing workspaces to all stages, making the deployment process faster and easier.

Feature details

Upon pipeline creation, users can choose whether to assign an existing workspace or create a new one for each stage. The pipeline will create the connections between the content in different stages to enable rule-setting and content updates upon deployment.

Deployment pipelines - Dataflows support

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Jun 15, 2021	✓ Jan 19, 2022

Business value

Deployment pipelines help enterprise BI teams build an efficient and reusable process by maintaining development, test, and production environments. BI creators can incrementally transition new or updated content among environments, reconfiguring them with the appropriate data connections and permissions. With dataflow support, all of the major Power BI items can be managed within deployment pipelines. This includes dashboards, reports, paginated reports, datasets, and dataflows.

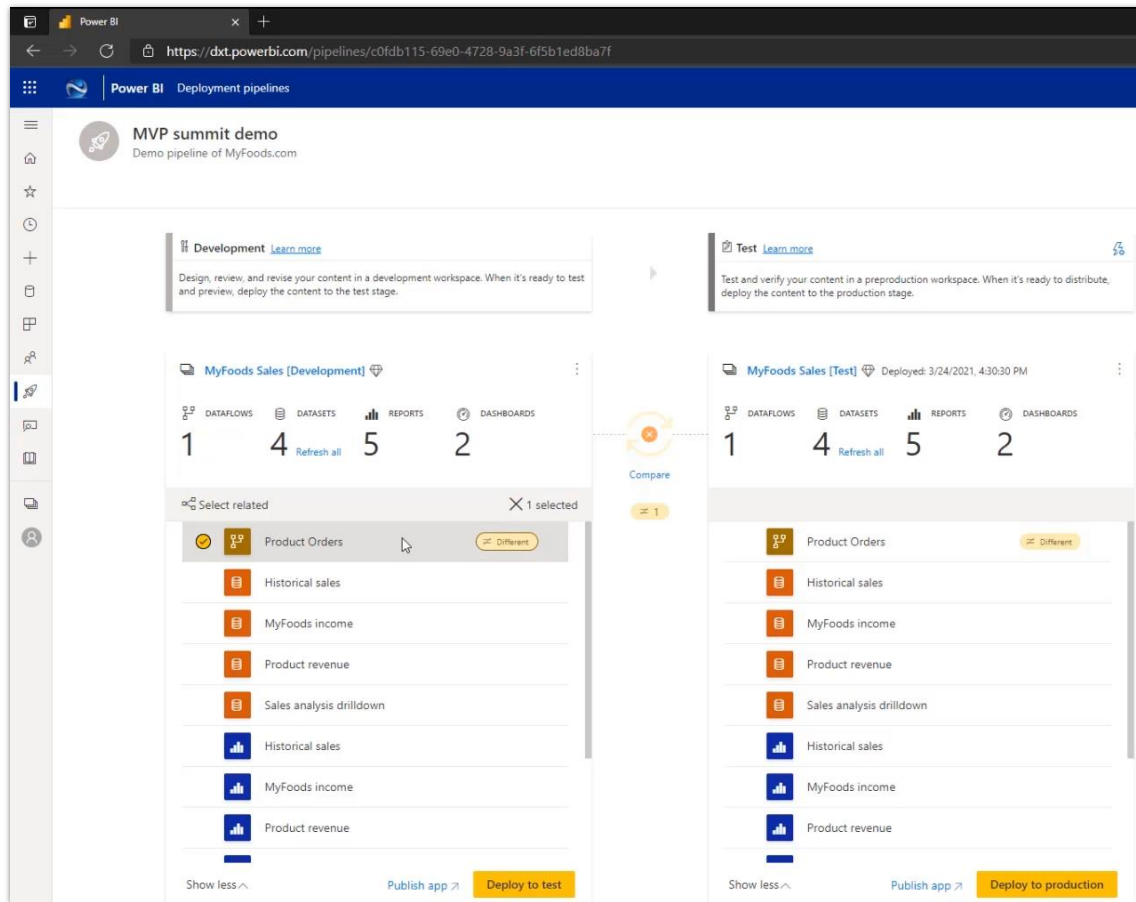
Feature details

Dataflows are an essential part of the Power BI data pipeline. In this feature, we'll add additional capabilities for managing dataflows, including:

- Detecting changes that are made to a dataflow and highlighting those changes in the pipeline *compare* feature.
- Deploying new and updated dataflows across the pipelines' lifecycle stages (dev/test/prod).
- Maintaining the relationship of dataflows with datasets across deployments and pipeline stages.

For the general availability release, additional enhancements will be available:

- Linked entities support: you'll be able to deploy and preserve connections between dataflows and linked entities.
- Sensitivity label support for dataflows through the pipeline stages.
- Action menu for dataflows.



Deployment pipelines with dataflows - compare workspace content before deployment

Thank you for your idea

Thank you for submitting [this idea](#). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

[Premium features of dataflows](#) (docs)

Performance and usage tracing for Analysis Services

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

Customers need visibility within the Power BI environment. Power BI administrators need to monitor performance, understand usage and adoption growth, support audits, and ensure

compliance within their Power BI environment. This requires access to detailed historical metrics. Customers also need to ensure business continuity by accessing recent activity data to respond to issues immediately.


Feature details

Administrators will have automatic access to a dedicated workspace that contains tenant-wide historical datasets and reports to help monitor and govern Power BI. The following areas of Power BI will be available:

- **Audit logs:** Provides information on asset lifecycle activities (create, access, modify, and delete). The information will match what is available in the Power BI activity log and Microsoft 365 audit log. We'll provide access to raw audit log data directly through Power BI dataflows and/or datasets, so you don't need Microsoft 365 admin rights to view the audit data. The Power BI administrator can control how much data to retain. We'll also provide audit log search capability within Power BI so admins don't have to visit external portals.
- **Report usage and performance metrics:** Provides insights into the user actions performed on Power BI reports through the Power BI portal, mobile apps, or embedded within custom applications. Usage and performance are logged at the report page level and include a breakdown of time spent on queries and report rendering. This helps understand whether an issue is related to an external data source, the Power BI data model, or design choices in the report.
- **Power BI Premium Gen2 utilization:** Provides capacity utilization logs and metrics about workload activity, core allocation, autoscale, throttling, CPU, and memory usage. This enables capacity planning, capacity optimization, cost distribution, and cross-charging.

For advanced debugging, we support integration with Azure Log Analytics. Power BI administrators and workspace owners will have access to detailed real-time and historical metrics. With these new metrics, administrators will be able to analyze performance and activity to better understand usage and resolve problems. The metrics are visualized by using a Power BI template app and reports.

Log Analytics for Analysis Services engine: Provides insights into activities performed against the Power BI datasets for reports and ad-hoc queries. This allows you to investigate query and refresh activity, load, and performance.



Settings

Bhavik v2 MSIT Testing

[About](#) [Premium](#) [Azure connections](#)

▸ **Storage**

▾ **Log Analytics**

Connect an Azure Log Analytics workspace to collect usage and performance logs for this workspace. [Learn more](#)

Subscription [redacted]

Resource group rg-byola

Log Analytics workspace bhmerc-msit-ws-0407

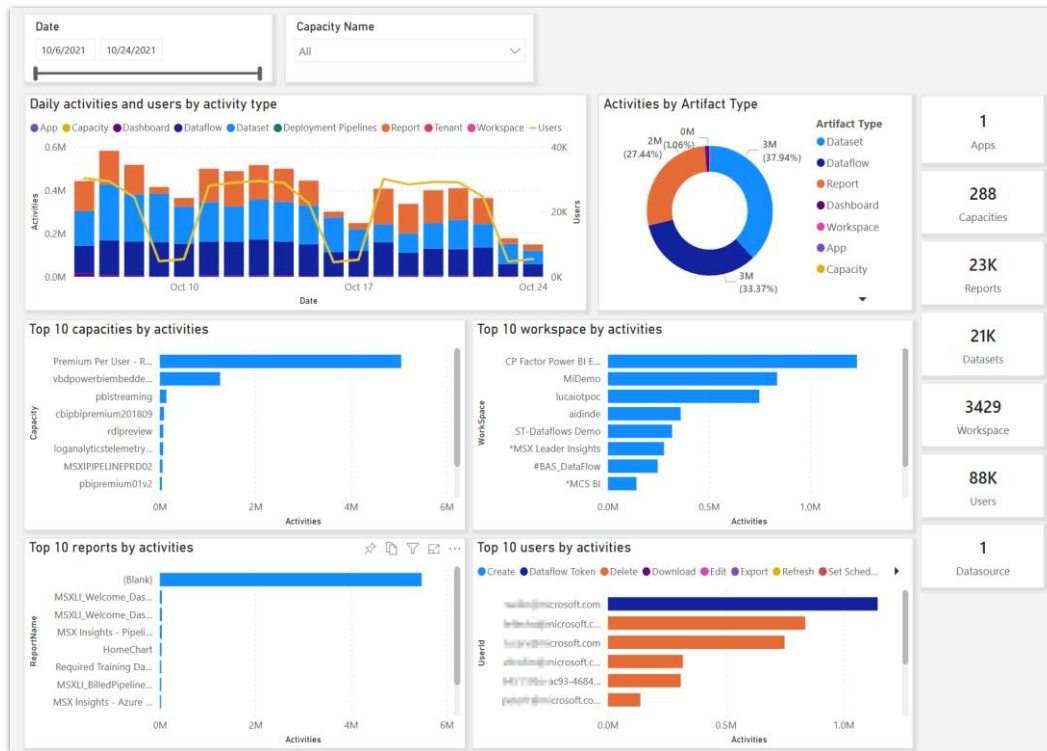
Configured by BI [redacted] M [redacted] on 2021-04-07T12:00:00Z

Disconnect from Azure

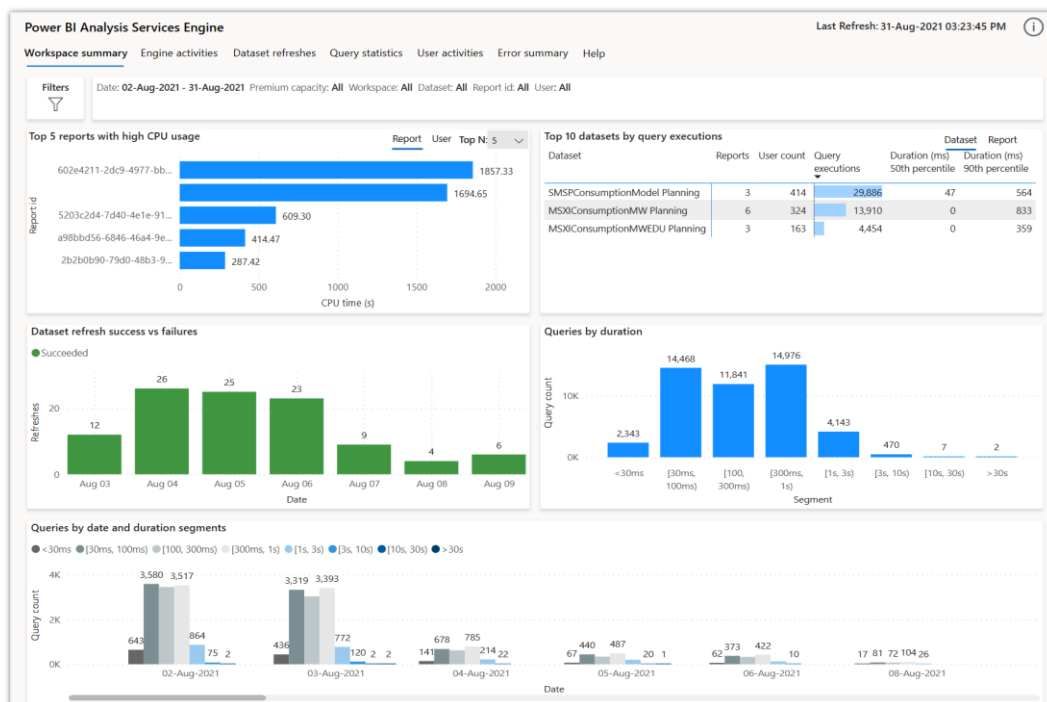
Disconnecting will stop usage and performance data from flowing into your Azure Log Analytics workspace.

Disconnect from Azure

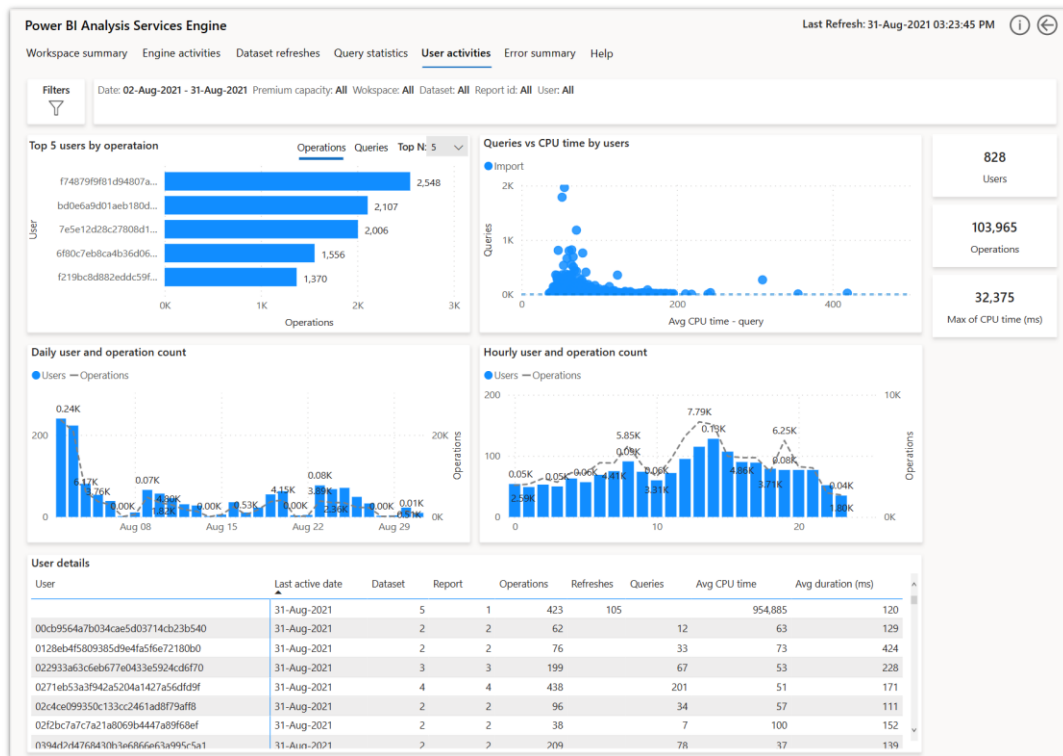
Workspace configuration for Azure Log Analytics



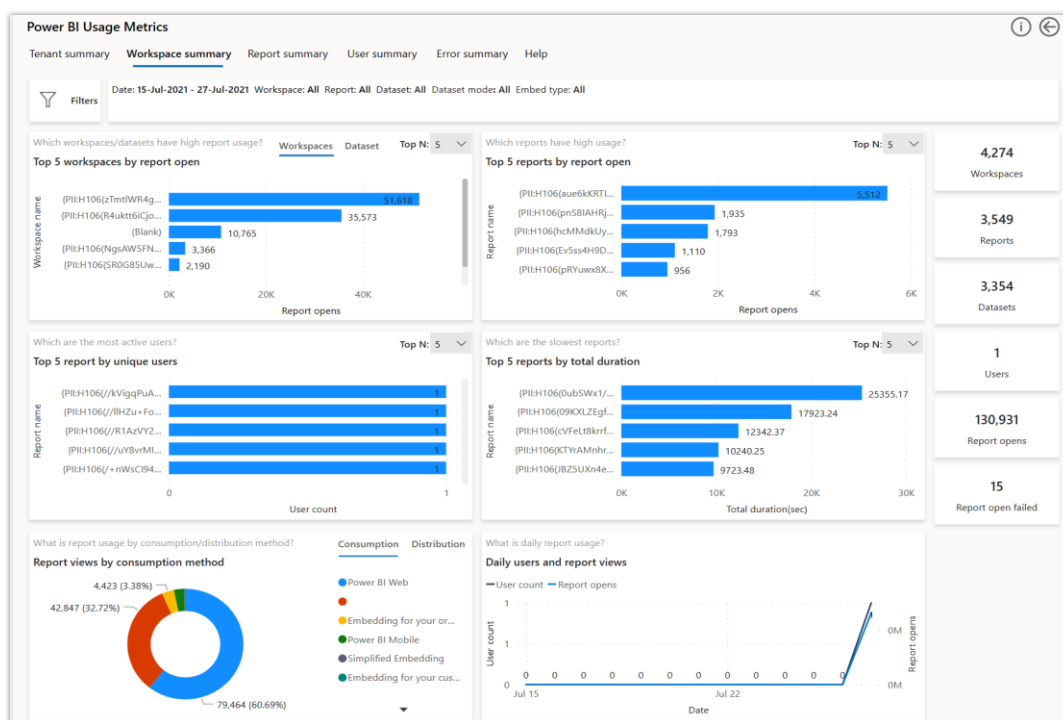
Tenant activity report showing administrators what activities users are performing



Workspace summary for Analysis Services engine



User activities for Analysis Services engine



Tenant usage metrics



See also

[Using Azure Log Analytics in Power BI](#) (docs)

Set detailed, goal-level permissions

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	To be announced

Business value

Users need to be able to restrict who can see goals and who can do check-ins. For example, there may be goals that should only be seen by the leadership team, or goals that contain sensitive information that should only be seen by certain individuals. Goal permissions provide more flexibility for defining and enforcing access.

Feature details

Users can set granular permissions for goals. These permissions include:

- **View permissions:** Who can see a goal
- **Check-in permissions:** Who can do a check-in
- **More granular check-in permissions:** Who can change the value, update the status, and add a note

Check-in permissions don't require edit permissions to the scorecard; therefore, users with check-in permissions for a goal don't also need a Power BI Pro license for scorecards in a Premium capacity workspace.

See also

[Protect your scorecards with goal-level permissions \(preview\)](#) (docs)

Set triggers and actions on goals with Power Automate

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	To be announced

Business value

With Power Automate integration, businesses can build automated processes around their goal-tracking systems.

Feature details

You can automate business workflows by setting triggers and actions on Power BI goals with Power Automate. Some examples of the types of workflows you can automate include:

- Get notifications when a goal changes status or falls behind
- Ensure accurate values and update a goal's value based on data in an Excel sheet
- Use Power Apps to input structured commentary that explains a trend or behavior, and push comments into the notes section for that goal

See also

[Use Power Automate to update goals automatically \(preview\)](#) (docs)

Power BI Pro

Overview

To build a data culture, everyone needs to be able to discover and collaborate on insights. Whether that involves authors creating reports by using the free Power BI Desktop tool, consumers exploring data in the Power BI service or mobile applications, or users of Microsoft 365 using data to make better decisions, Power BI will continue to evolve to make it easier than ever to work with data. To help organizations foster that data culture, we'll invest in the following:

- **Instantly familiar experiences and AI-infused insights:** Power BI will continue to advance our creator experiences, making it easier than ever to create beautiful and engaging content for the entire organization. This includes new report authoring tools such as sparklines for table and matrix visuals, artifact-level access for managing Power BI apps, and continued improvements to the datasets hub.
- **Amazing consumer experiences:** Consumer experiences will continue to evolve, both in the Power BI service and the Power BI mobile applications. This includes improvements to Excel export from table and matrix visuals, and easy creation from Microsoft Dataverse and Dynamics 365.
- **BI woven into the fabric of the organization:** Power BI integration in Microsoft Teams will continue to evolve, deepening the integration in channels, chats, and notifications within Teams.

Power BI datasets hub enhancements

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-

Business value

Enhancements to the datasets hub allow users to easily discover and reuse data in one central location. The datasets hub experience empowers users to curate, publish, discover, and reuse organizational datasets, and to answer their business questions either in Power BI or Excel. For data owners, the hub also enables efficient and centralized management of data assets.

Feature details

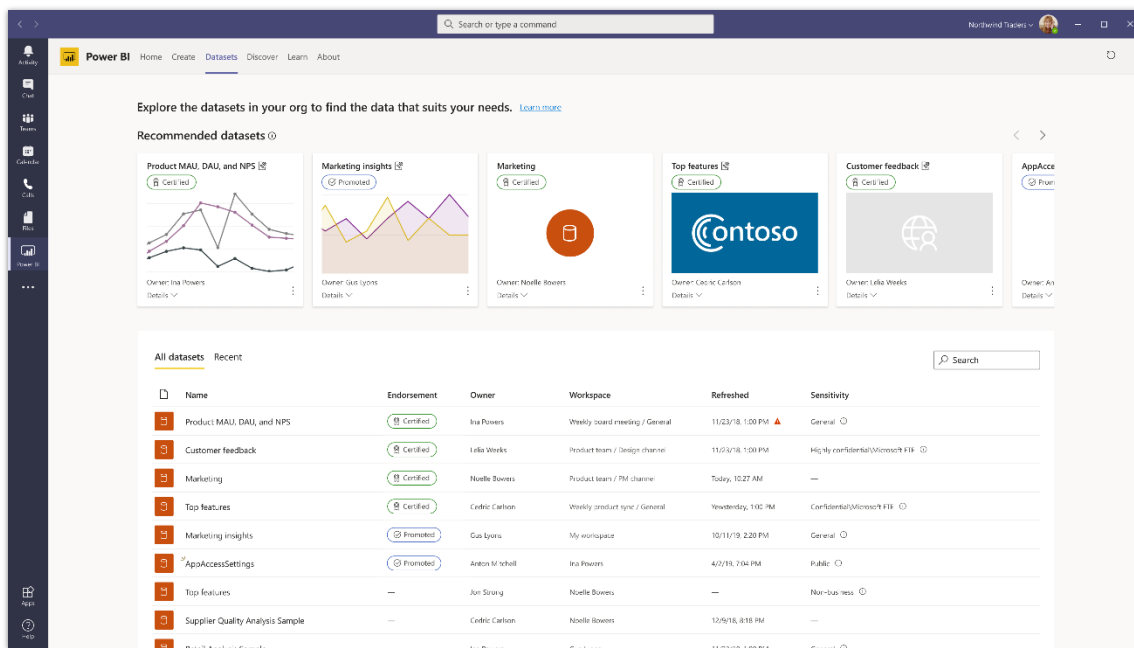
In the growing world of BI, making it possible to easily discover valuable, trustworthy data in one central location becomes crucial for deriving business insights and making the right business decisions. To address this, we recently introduced the new datasets hub, which can be accessed in both the Power BI service and Power BI Teams personal app.

The new datasets hub enables users to:

- Discover curated, non-curated, and recommended datasets that have been shared with them
- Explore relevant dataset properties (description, sensitivity, refresh time, and more)
- Discover related reports
- Explore usage information for the selected dataset
- Create a report based on a selected dataset or start from a template report
- Analyze a dataset in Excel
- View lineage and impact for the selected dataset

Moving forward, we're committed to making the datasets hub the central location for data discovery, exploration, and reuse for deriving insights. To accomplish this, we're expanding the capabilities of the datasets hub. This includes the ability to:

- Discover curated datasets that were marked by their owners as discoverable, and to request access to view the data, build reports, and analyze it in Excel
- View dataset schema
- View dataset refresh history and trigger a new refresh
- Share a dataset with a link or a chat in Teams to provide easy access and collaboration



Datasets hub

See also

[Datasets discovery using the datasets hub](#) (docs)

Sparklines for table and matrix visuals

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Dec 2021	-

Business value

Microsoft Excel is the most widely used tool for exploring data and has set the standard for how data is visualized for Power BI users. We want to make it easier for users who love Excel to feel at home in Power BI. A critical area for this is making sure authors can visualize tables and matrices in Power BI in a familiar and beautiful way. We started with the ability to expand and collapse rows, conditional formatting, and data bars. We're continuing that evolution with the addition of sparklines.

Feature details

We're further extending the capabilities of tables and matrixes with the introduction of sparklines. Similar to the capability available in Excel, this will allow report creators to add a sparkline column to a table or matrix visual. This extra column will display a trending line chart for each row in the visual. Users will be able to quickly see key trends without the need

to create two separate visuals. Sparklines will support a variety of formatting options, and will be quick to create and integrate solely through the formatting UI.

State Province	Total Quantity	Spark line	Spark column
Alabama	31,780		
Alaska	28,707		
Arizona	22,990		
Arkansas	19,617		
California	80,710		
Colorado	38,276		
Total	1,563,380		

A table including sparklines

Thank you for your idea

Thank you for submitting [this idea](#). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Artifact-level access for Power BI apps

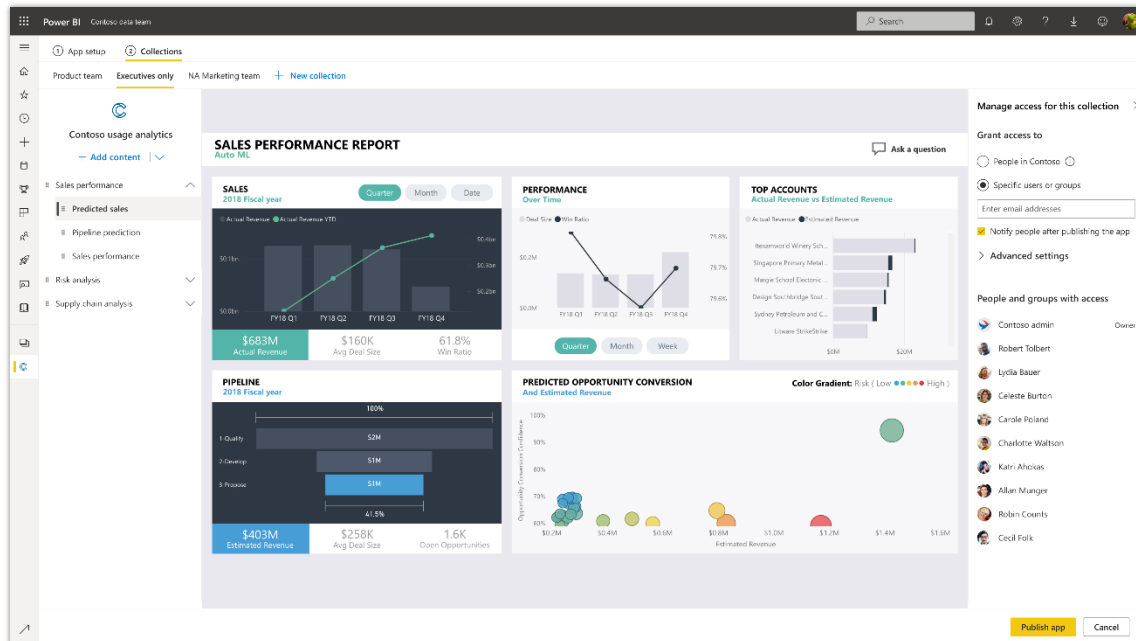
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	–

Business value

Power BI apps are one of the most popular ways to share analytics broadly and securely. Apps are an easy way for authors to share different types of content at one time. App authors create reports, dashboards, and links, and bundle them together into an app. The author can then share or publish the app to a location where users in the organization can access it. Because related Power BI content is bundled together, it's easier for users to find and install it in both the Power BI service and on their mobile devices. After an app is installed, users don't have to remember the names of a lot of different dashboards or reports because they're all together in one app, in a browser or on a mobile device.

Feature details

This new capability will allow app authors to create different versions of an app within the same workspace. Authors can decide what workspace content is shared with specific users and security groups. This will streamline the process for app creation, publishing, and updates. It will also help with content organization by reducing the number of workspaces needed for broad content distribution.



Screenshot of a consumer view of an app

Thank you for your idea

Thank you for submitting [this idea](#). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Format visuals for mobile-optimized reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

It's more important than ever to create reports that look great on mobile devices. Creators will now have separate formatting options for designing visuals meant for mobile.

Feature details

We're adding more design and formatting options that are specific to the mobile layout. Creators will be able to format visuals to optimize them for viewing on mobile devices. The new formatting options include the ability to update fonts, sizes, colors, and more.

Improved Power BI administration and operations

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Easily manage Power BI with enhanced administration experiences and added operational capabilities. Administrators can easily manage permissions and reduce maintenance overhead by identifying unused assets.

Feature details

Improved administration experiences enable Power BI administrators to be more productive and decrease maintenance overhead. Enhancements include:

- Ability to use APIs and reports to identify unused Power BI assets.
- Use of APIs to reassign permissions for assets.

Natural language to DAX generation

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Our mission is to make data analytics accessible for everyone and provide a no-code and low-code experience for every aspect of data analysis. DAX is the expression language used by millions of developers today in Power BI, Analysis Services, and Excel to define calculations that can range from one line to hundreds of lines of code. By harnessing the power of DAX, developers can create sophisticated calculations and business logic. DAX, while powerful, has a steep learning curve for business users. Instead of having business users learn to write code, we'll allow users to describe the analysis in natural language and Power BI will generate the code for them in the background.

Feature details

Through AI-assisted development, creators will be able to use natural language to describe what they're trying to measure and have Power BI automatically suggest DAX measures for them. By using natural language to help create DAX measures, we aim to further democratize the creation of measures with sophisticated business logic without having to become a DAX expert.

Power BI integration with PowerPoint

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	-

Business value

Data is at the core of decision making, evaluating, and monitoring the status of the business. This data, in the form of analytical outcomes and required actions, is being reviewed and discussed in almost every business meeting. To streamline the process of preparing for the meetings and enhance the meeting experience, Power BI is being embedded in PowerPoint presentations.

Feature details

Power BI will enable Microsoft PowerPoint organizations and their users to integrate Power BI report content into their presentations. When building their presentations, PowerPoint users can embed Power BI report pages or a specific bookmarked report view. After it's embedded, the presentation creator can modify filters and interact with the content directly from within PowerPoint. Users who have access to the presentation will be able to view the content, and users who also have Power BI will be able to interact and refresh that content. This feature enables easy and insightful data storytelling and integrates it into the familiar PowerPoint experience.

Power BI catalog integration with Azure Purview

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Dec 31, 2020	✓ Oct 1, 2021

Business value

Power BI introduces enhanced cataloging and governance capabilities by integrating with Azure Purview.

Feature details

By integrating with Azure Purview, the following enhanced cataloging and governance capabilities will be available in Power BI:

- Full and incremental scan of your organizations' Power BI assets and metadata into the catalog
- Ability to view end-to-end data journeys and lineage, all the way from the original data stores (including SQL DB, ADLS, and more) and down to your Power BI reports and dashboards
- Advanced search of Power BI assets by various metadata properties such as glossary terms and contacts, and the ability to view asset information and open assets for further exploration in the Power BI portal
- Ability to discover data sources in the catalog and open and connect to them in Power BI Desktop
- Ability to discover datasets and reports in the catalog and open them directly in the Power BI service for further exploration
- Viewing of endorsement and sensitivity labels for Power BI assets in the catalog

We have also invested in scanner APIs that will become generally available this year. These scanner APIs will make it possible for professionals and admins or partners to understand the relationships between artifacts and more easily manage Power BI projects in their organization. Such capabilities include the following:

Admin APIs to efficiently scan Power BI artifact metadata and lineage

A new set of APIs enable partners and Power BI admins to scan and retrieve information and lineage for all Power BI artifacts in the organization. The APIs support the use case of a large tenant with many artifacts and workspaces. With the metadata returned from the APIs, any customer or third-party tool can generate a catalog of Power BI artifacts with rich metadata and lineage cross tenant from the data source to the dataflow and dataset, then to the report and dashboard. Metadata returned includes some properties that were not accessible with the existing APIs, for example: description, sensitivity label-id, and endorsement label.

To make it more scalable and efficient, we also provide an API that returns the list of workspaces that were changed since the last API call. With this API, customers can do incremental scans and save time and COGS for Premium workspaces.

Service principal authentication for Power BI read-only Admin APIs

This enhancement allows the performance of read operations using Power BI admin APIs without the need for a user to sign in. Service principal can replace master user and help customers build a more robust and secure solution when going to production.

See also

[Sensitivity label inheritance from data sources](#) (docs)

Export to Excel improvements for table and matrix visuals

Enabled for	Public preview	General availability
Users, automatically	✓ Oct 31, 2021	✓ Nov 30, 2021

Business value

As users explore data in Power BI, many want to continue their analysis in Microsoft Excel. This new feature empowers users who might not have access to edit the report or who might not be familiar with Power BI authoring capabilities to pull the data into Excel in a format that's familiar to them. Customers can choose to export data directly from a table or matrix visual to continue their analysis and create their own view of the data.

Feature details

Currently, when data is exported from a Power BI table or matrix (service and Desktop), the structure of the visual is lost in the exported CSV or XLSX file. With this new feature, users will be able to export data from a Power BI table or matrix to Excel and maintain the structure of the visual in cross-tab format. This will reduce the time spent on reformatting data (especially hierarchical data) in Excel.

Sales Channel Item Type Region	Country	Offline				Online			
		Baby Food		Beverages		Baby Food		Beverages	
		Total Revenue	Unit Cost	Total Revenue	Unit Cost	Total Revenue	Unit Cost	Total Revenue	Unit Cost
Asia	Japan	4,881,208.88	797.10	1,391,993.20	190.74	9,365,967.92	1,275.36	2,612,786.80	349.69
	Brunei	2,534,675.12	159.42					199,432.35	31.79
	Bangladesh					2,247,229.84	159.42	146,003.65	31.79
	Malaysia	1,876,308.00	318.84	40,237.60	31.79	1,948,296.96	159.42		
	Thailand					1,265,422.96	159.42		
	Vietnam					1,172,756.32	159.42		
	Sri Lanka					1,100,767.36	159.42		
	Philippines					1,041,287.12	159.42		
	Mongolia			412,909.90	31.79			470,371.85	31.79
	Kazakhstan	402,831.84	159.42					312,885.30	31.79
	Laos							608,593.70	63.58
	Tajikistan			57,509.40	31.79			412,387.95	31.79
	South Korea					443,931.92	159.42		
	Bhutan			436,160.40	31.79				
	North Korea							325,981.50	63.58
	China			228,281.95	31.79				
	Kyrgyzstan					146,275.44	159.42	73,405.15	31.79
	Singapore			216,893.95	31.79				
	Cambodia	67,393.92	159.42						
	Myanmar							63,725.35	31.79
Middle East and North Africa		7,415,884.00	956.52	1,399,680.10	190.74	5,702,955.20	1,115.94	1,985,497.80	286.11
	Oman	2,359,297.76	159.42			1,610,050.96	159.42		
	Libya	1,877,329.12	318.84	215,897.50	31.79				
	Iran	2,067,512.72	159.42						
	Somalia					1,617,964.64	159.42	233,216.75	31.79
	Yemen					1,446,927.04	159.42		
	Egypt	699,211.92	159.42	424,867.30	31.79				
	Bahrain			94,567.85	31.79	103,133.12	159.42	728,072.80	63.58
	Algeria					810,514.00	159.42		
	Israel	412,532.48	159.42	100,166.95	31.79			134,663.10	31.79
	Morocco			564,180.50	63.58				
	Pakistan							337,701.65	31.79
	Lebanon							321,758.45	31.79
	Turkey					93,943.04	159.42	175,232.85	31.79
	Iraq							49,442.90	31.79
	Afghanistan					20,422.40	159.42		
	Tunisia							5,409.30	31.79
Total		12,297,092.88	1,753.62	2,791,673.30	381.48	15,068,923.12	2,391.30	4,598,284.60	635.80

Cross-tab XLSX export output from a Power BI matrix

Sales Channel Item Type Region	Offline		Beverages		Online		Beverages	
	Baby Food				Baby Food			
	Total Revenue	Unit Cost	Total Revenue	Unit Cost	Total Revenue	Unit Cost	Total Revenue	Unit Cost
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Total	12,297,092.88	1,753.62	2,791,673.30	381.48	15,068,923.12	2,391.30	4,598,284.60	635.80

Power BI matrix table

Thank you for your idea

Thank you for submitting [this idea](#). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

[Export the data that was used to create a visualization](#) (docs)



Power BI as a core capability in Microsoft Teams

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Oct 31, 2021	✓ Nov 30, 2021

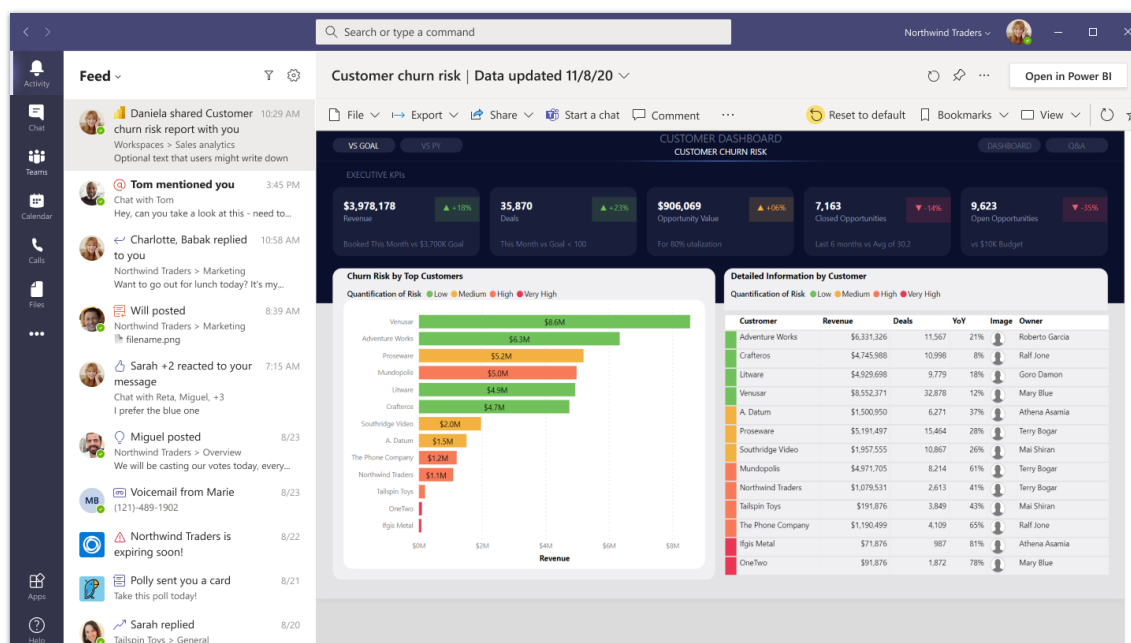
Business value

Modern work requires keeping everyone up to date and using relevant data to make decisions. By evolving the Power BI experience to make it a core part of Microsoft Teams, users have access to the data they need, when and where decisions are made.

Feature details

The Power BI experience in Microsoft Teams is becoming a core part of the platform. This includes:

- **Automatic installation of the Power BI app in Teams:** Users won't need to install the app to begin leveraging Power BI-integrated capabilities. This includes the Power BI personal app, rich links to Power BI content, and integrated search.
- **Teams usage analytics powered by Power BI:** Users can explore their personal chat, meeting, and channel usage data to see how they're spending their time. Because this is a simple Power BI report, they can further customize it and find even more insights.
- **Power BI notifications in Teams:** Once the app is installed, users will receive relevant Power BI notifications in the Teams activity feed.



Power BI notifications in Microsoft Teams



See also

[Explore Power BI as a core capability in Microsoft Teams](#) (video)

[Collaborate in Microsoft Teams with Power BI](#) (docs)

Enhanced validation for dataflows

Enabled for	Public preview	General availability
Users, automatically	Jan 2022	Mar 2022

Business value

Customers developing dataflows need a faster save and close experience. Enhanced validation will make the process of evaluating the data structure and the types of the queries much faster, reducing latency and enabling quicker saving.

Feature details

Users select **Save** when they're finished authoring or making changes to a dataflow. The save action is currently coupled with validating the dataflow, which can take a very long time. Previously, users weren't able to leave the screen and had to wait until after the validation completed in order to see their changes. Users could be subject to timeouts and were blocked from continuing to develop dataflows.

With this update, users can save a dataflow and close the editor. Power BI will get the schema from the Power Query experience directly, while support for incremental updates will enable saving a dataflow and closing the editor with less friction and latency.

Quick create on Microsoft Dataverse

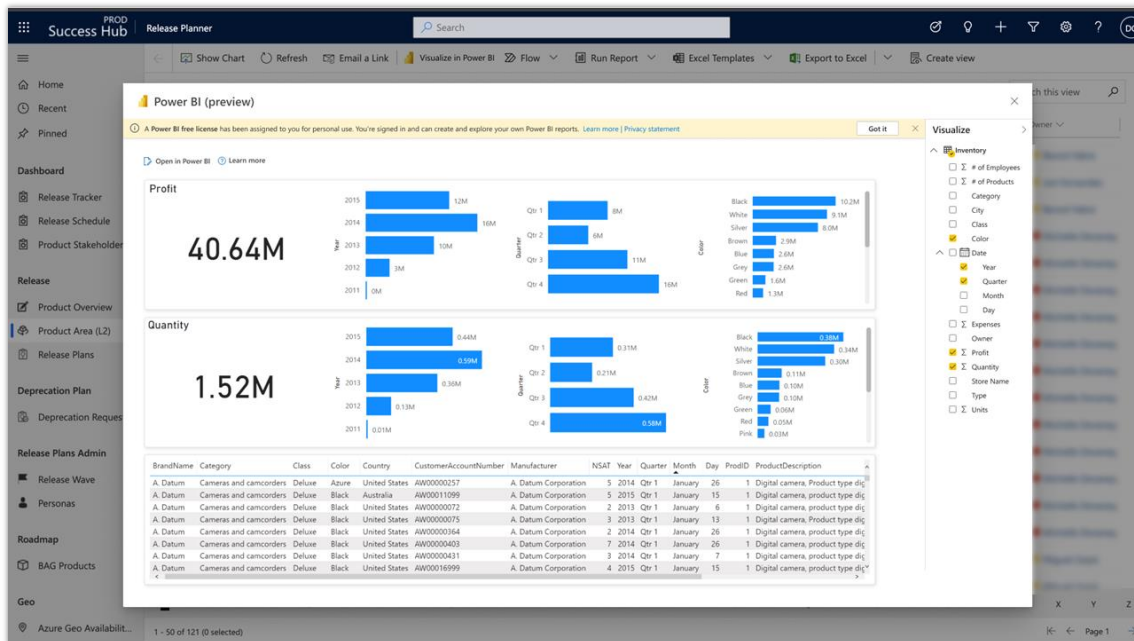
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Oct 31, 2021	To be announced

Business value

Microsoft Dataverse is the sophisticated and secure backbone that powers Dynamics 365 and Microsoft Power Platform. Dataverse contains critical data from business applications that users explore to find insights and make business decisions. Today, this is challenging for users who aren't familiar with Power BI or data analysis in general. We're introducing a new, easy way for users to generate a Power BI report quickly and start gaining insights from the data.

Feature details

When building model-driven apps in Power Apps that store data in Microsoft Dataverse, creators need simple ways to analyze and get insights from their data. Power BI is a natural fit, but there's friction in having to download Power BI Desktop and connect to the data. To remove the friction, we're providing a one-click solution that connects your data in Dataverse with a model in Power BI. Users can choose to "Analyze in Power BI" and a report will be generated on the fly for users to start exploring.



Automatically generated Power BI report in a model-driven app

See also

[Visualize your data quickly from Power Apps and Dynamics 365 apps \(preview\)](#) (docs)

Admin APIs to help with assessing oversharing risks

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

If customers cannot feel confident about their data being in Power BI without worrying that it could fall into the wrong hands, they would not support the adoption of Power BI. They could even hamper adoption due to increasing security and compliance requirements. This reduces PBI MAU and slows down standardization in S500.

Feature details

This feature will help admins gain visibility into and assess oversharing risks by delivering APIs that will enable them to see:

- What email subscriptions have been created for reports and dashboards.
- What artifacts have been shared with the entire organization.
- What reports and dashboards have been published to the web.

Get admin insights with central metadata and reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

Customers need visibility within the Power BI environment. Power BI administrators need to monitor performance, understand usage and adoption growth, support audits, and ensure compliance within their Power BI environment. This requires access to detailed historical metrics. Customers also need to ensure business continuity by accessing recent activity data to respond to issues immediately.

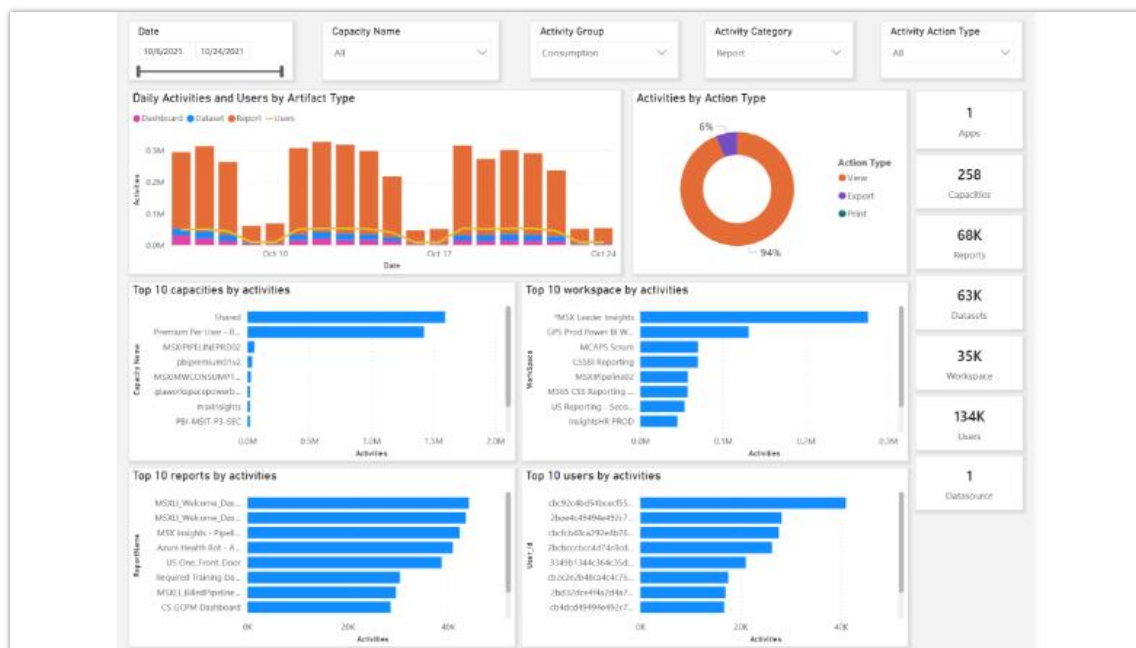
Feature details

Administrators will have automatic access to a dedicated workspace that will contain tenant-wide historical datasets and reports to help monitor and govern Power BI. The following areas of Power BI will be available:

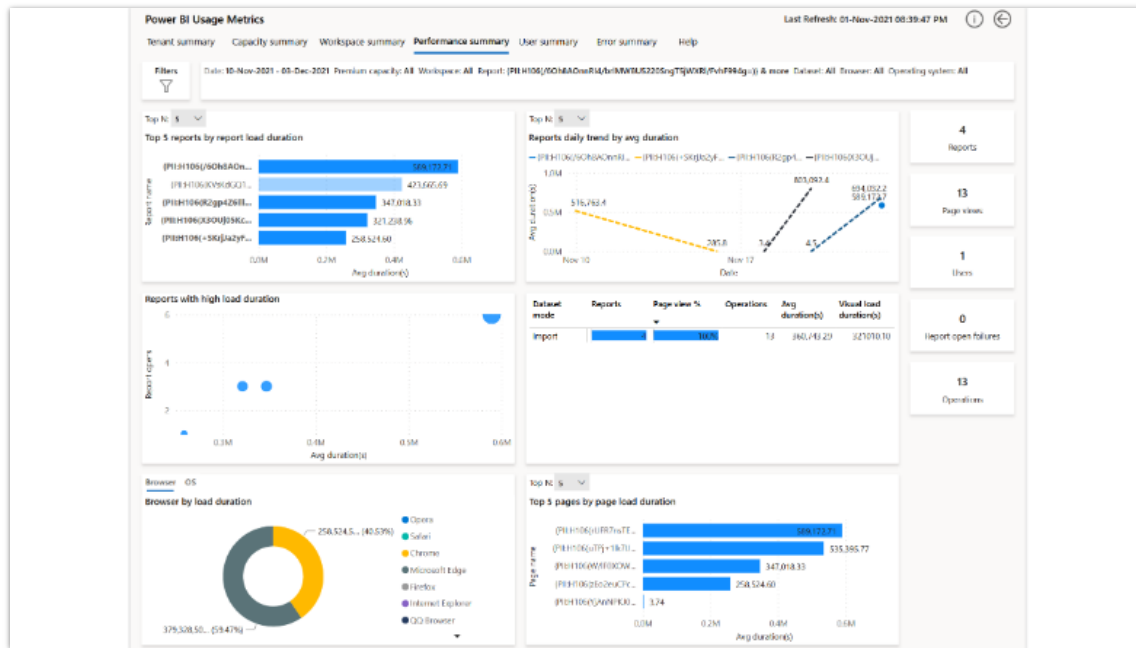
- **Artifact Metadata:** Standalone dataflows/datasets describing all known workspaces, reports, datasets, etc., regardless of whether they are actually used. At a minimum, we will provide artifact identifier and name. Each artifact will have additional relevant attributes such as certification status or owner, as appropriate.
- **Audit logs:** Provides information about asset lifecycle activities (create, access, modify and delete). The information will match what is available in the Power BI activity log and Microsoft 365 audit log. We will provide access to raw audit log data directly through Power BI dataflows and/or datasets so that you won't need Microsoft 365 admin rights to view the audit data. The Power BI administrator can control how much data to retain. We will also provide an audit log search capability within Power BI, so admins do not have to visit external portals.
- **Report usage and performance metrics:** Provides insights into the user actions performed on Power BI reports through the Power BI portal, mobile apps, or embedded within custom applications. Usage and performance are logged at the report page level and include a breakdown of time spent on queries and report rendering. This helps you

understand whether an issue is related to an external data source, the Power BI data model, or design choices in the report.

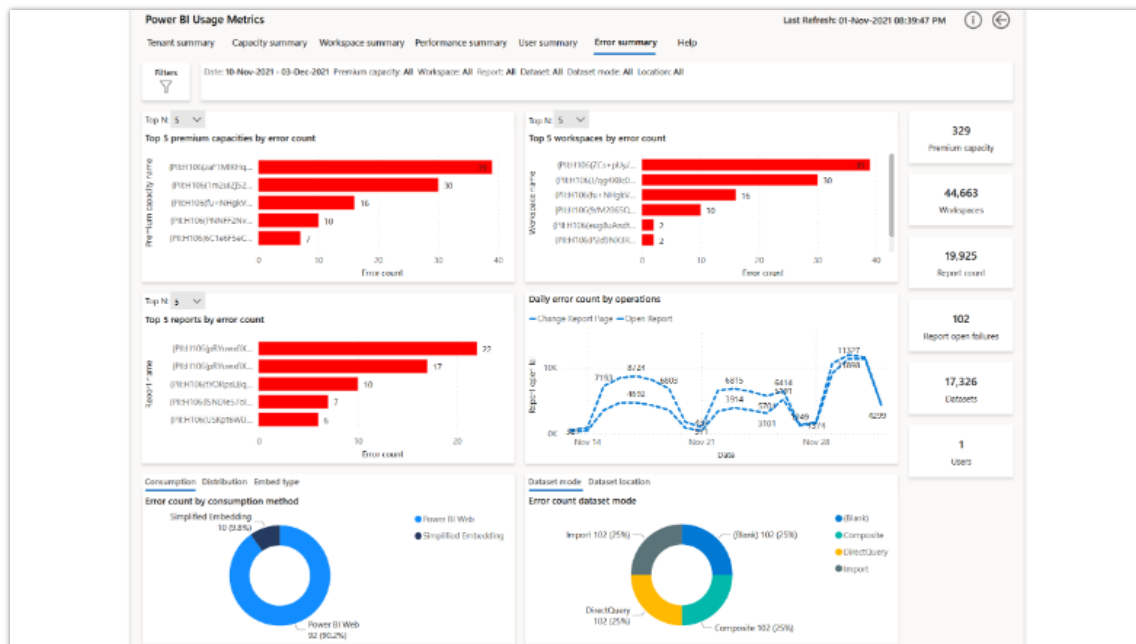
- **Power BI Premium Gen2 utilization:** Provides capacity utilization logs and metrics about workload activity, core allocation, autoscale, throttling, CPU, and memory usage. This enables capacity planning, capacity optimization, cost distribution, and cross-charging.
- **Feature Usage and Activity Analytics:** Analytical views over the audit log that can help you understand who is doing what. This allows you to better govern Power BI by identifying specific desired/undesired behaviors. For example, you may discourage direct report sharing from certain workspaces and want to know when it happens.



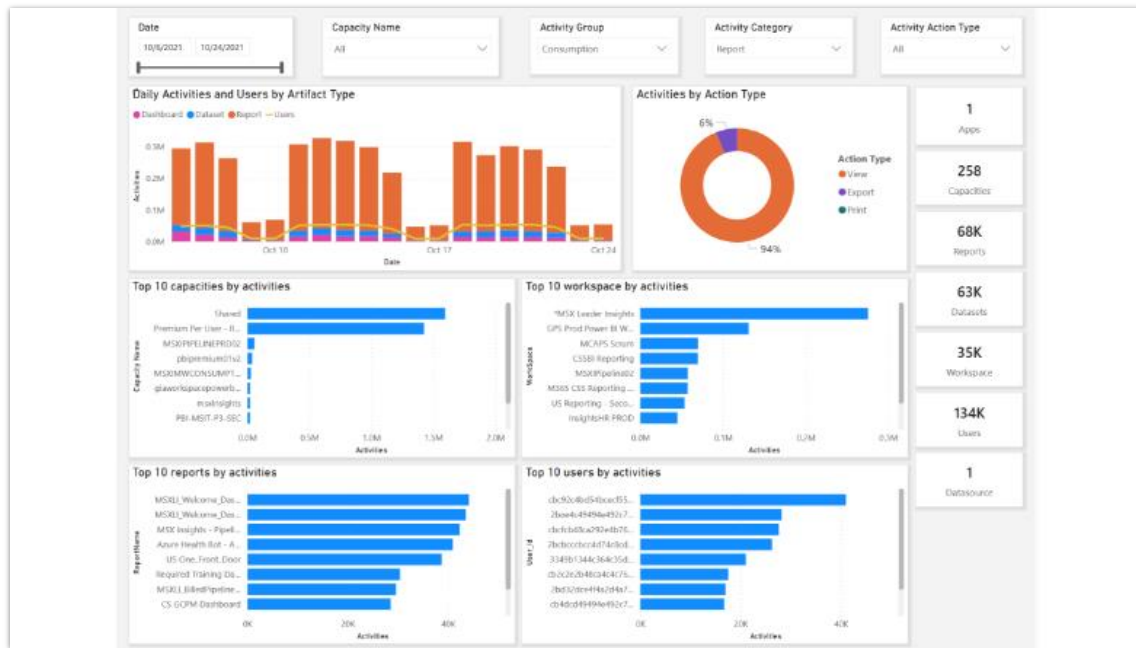
Summary of report usage at tenant level



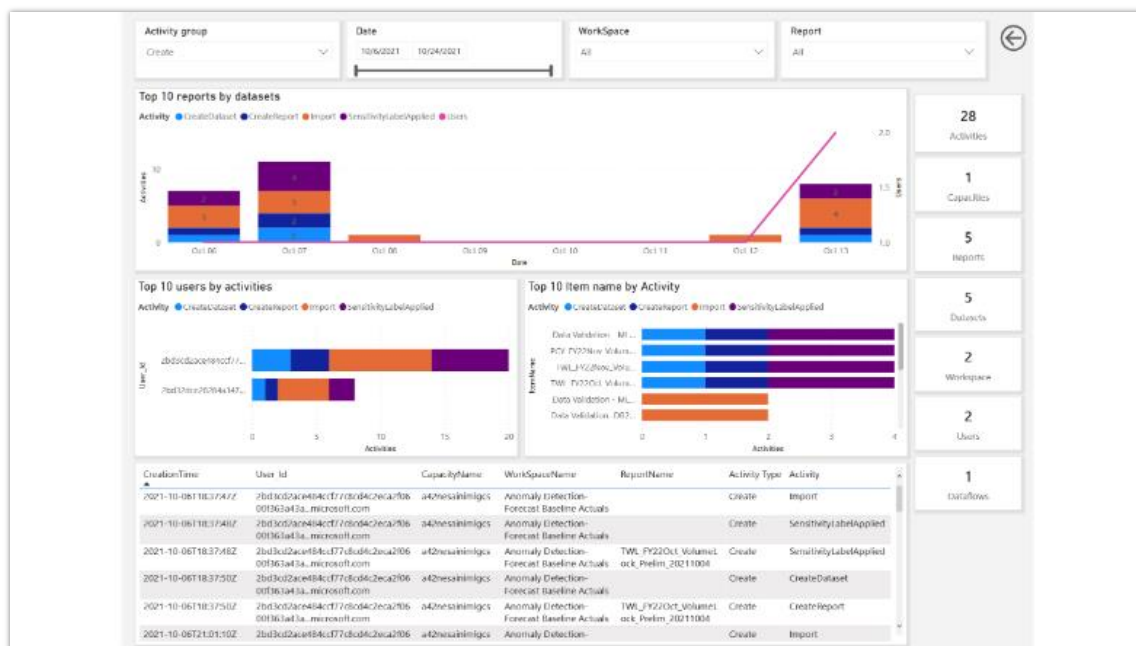
Performance summary highlighting slow running reports and trends



Overview of report viewing errors



Summary of activity across entire tenant based on Power BI audit log



Detailed view of activities which can be filtered by multiple grouping levels such as artifact

CreationDate	User ID*	Operation	Content*
2021-10-06T06:09:18Z	1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf	DeleteDatasetRows	["id":"9f57a6cb-1e81-45ac-adde-7fd9305e17e2","RecordType":20,"CreationTime":"2021-10-06T06:09:18Z","O2d7cd011db47","UserType":5,"UserKey":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","Workload":"PowerBI","UserId":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","ClientIP":"0.0.0.0","UserAgent":"","Activity":"DeleteDatasetRows","ItemName":"STHashV1_ProcOperations","DatasetName":"STHashV1_Prod","WorkspaceId":"6818e568-b11e-4a2d-b332-058129fd839","C e52150563b4d","DataConnectivityMode":"RealTime","IsSuccess":true,"RequestId":"4f98bc69-3ce6-4b8c-bac6 86972a8fd712","TableName":"STHashV1","LastRefreshTime":"2020-07-09T21:26:23Z"]
2021-10-06T06:09:20Z	1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf	DeleteDatasetRows	["id":"308d43a9-3dba-4a01-bf9e-64a9654e7abe","RecordType":20,"CreationTime":"2021-10-06T06:09:20Z","O2d7cd011db47","UserType":5,"UserKey":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","Workload":"PowerBI","UserId":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","ClientIP":"0.0.0.0","UserAgent":"","Activity":"DeleteDatasetRows","ItemName":"STHashV1_ProcOperations","DatasetName":"STHashV1_Prod","WorkspaceId":"6818e568-b11e-4a2d-b332-058129fd839","C e52150563b4d","DataConnectivityMode":"RealTime","IsSuccess":true,"RequestId":"5b59ecf8-efdf-406a-a067-86972a8fd712","TableName":"STHashV1","LastRefreshTime":"2020-07-09T21:26:23Z"]
2021-10-06T06:09:20Z	1f8b0800000000000400cb4e2c2a2948ccc971c8cd4c2eca2f600e4c8f7bb0f000000...@microsoft.com	RunEmailSubscription	["id":"fb66dc8c-8a06-4c31-b741-adf62116c0c0","RecordType":20,"CreationTime":"2021-10-06T06:09:20Z","O2d7cd011db47","UserType":9,"UserKey":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...@microsoft.com","Workload":"PowerBI","UserId":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...@microsoft.com","ClientIP":"","UserAgent":"","Activity":"RunEmailSubscription","ItemName":"gdp compliance dashboard","WorkspaceId":"0000-0000-0000-000000000000","Objectid":"gdp compliance dashboard","ReportId":"0dbfb734-1463-45dd 990a-4463-b58b-8f511467ee2e","ActivityId":"93545444-bc66-49e4-bb9b-5b01904a53","DistributionMetho
2021-10-06T06:09:21Z	1f8b08000000000004004bccc94c4ecc75c8cd4c2eca2f600e4c8f7bb0f000000...@microsoft.com	ViewReport	["id":"ef9e6c9d-295e-4e8d-a25c-e704b1da7bf3","RecordType":20,"CreationTime":"2021-10-06T06:09:21Z","O2d7cd011db47","UserType":9,"UserKey":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...@microsoft.com","Workload":"PowerBI","UserId":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...@microsoft.com","ClientIP":"","UserAgent":"Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like C Engagement","WorkspaceName":"M365 Field and Partner Marketing - ALL MEMBERS","DatasetName":"POE I 8501-7536c68201a7","Objectid":"POE by Engagement","DatasetId":"c0603282f-bd0b-455d-8754-fc70bdc0693 c4fde08b001b","IsSuccess":true,"ReportType":"PowerBIReport","RequestId":"293938aa-33c4-2fe3-582d-b51a4 57d461ba0b0","DistributionMethod":"Shared","ConsumptionMethod":"Power BI Web","SensitivityLabelId":"
2021-10-06T06:09:29Z	1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf	DeleteDatasetRows	["id":"fc50b8df-9bd8-41a0-a1ea-d558aab6d411","RecordType":20,"CreationTime":"2021-10-06T06:09:29Z","O2d7cd011db47","UserType":5,"UserKey":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","Workload":"PowerBI","UserId":"1f8b08000000000004003334313434493232d5b5b43035d73501008cddc3e0f000000...1-8a1b850f5dcf","ClientIP":"","UserAgent":"","Activity":"DeleteDatasetRows","ItemName":"STHashV1_ProcOperations","DatasetName":"STHashV1_Prod","WorkspaceId":"6818e568-b11e-4a2d-b332-058129fd839","C e52150563b4d","DataConnectivityMode":"RealTime","IsSuccess":true,"RequestId":"5b59ecf8-efdf-406a-a067-86972a8fd712","TableName":"STHashV1","LastRefreshTime":"2020-07-09T21:26:23Z"]

* UserIDs have been encrypted for privacy reasons

Prototype of audit log search report

Include Power BI reports and datasets in a Power Apps solution

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

Power Apps solutions is a Microsoft Power Platform tool that allows users to deploy applications built using Power Apps, Power Automate, Microsoft Dataverse, and other Microsoft Power Platform services. Until now, it hasn't supported content developed in Power BI. With the release of this feature, Power BI reports and datasets can be included as part of a Microsoft Power Platform solution for import, export, and customization.

Feature details

Power Apps makers will be able to:

- Add Power BI reports and datasets to a solution
- Connect Power BI mashup parameters to Power Apps environment variables
- Import and export Power Apps solutions with Power BI reports and datasets
- Embed Power BI reports in model-driven apps
- Use Power BI components to support managed and unmanaged Power Apps solutions operations

Power BI creators will be able to:

- Include Power BI reports and datasets (import and DirectQuery) in Power Apps application lifecycle management (ALM) solutions
- Use single sign-on (SSO) for Microsoft Dataverse data sources deployed with the Power Apps solution
- Customize deployed content in place with the ability to discard unmanaged changes
- Create additive customization to managed solutions

Power Apps

Overview of Power Apps 2021 release wave 2

Microsoft Power Apps is the industry-leading low-code application development platform that underpins Dynamics 365 extensibility, Microsoft 365 customization, and a standalone custom line of business applications for customers around the world. Power Apps dramatically lowers the cost, complexity, and time of software development through a range of powerful low-code development tools, a deep data platform in Microsoft Dataverse, and hundreds of connectors to common business data sources.

The 2021 release wave 2 plan provides significant improvements for Power Apps developers of all skill levels, improving the sophistication and usability of apps that can be created across the web and mobile devices.

What's new and planned for Power Apps

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Build advanced apps on a modern, unified platform

Modern intelligent designers and controls enable you to quickly build modern apps your users will want to use.

Feature	Enabled for	Public preview	Early access*	General availability
Define sequential measurements for specific spaces and areas	Users by admins, makers, or analysts	✓ Oct 7, 2021	-	
Visualize and plan routes using the Map component	Users by admins, makers, or analysts	✓ Oct 24, 2021	-	-

Feature	Enabled for	Public preview	Early access*	General availability
Use mixed-reality components in no- or low-connectivity scenarios with caching and offline support	Users by admins, makers, or analysts	Mar 2022	-	
Simplified Dataverse search configuration for admins and model-driven app makers	Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 3, 2021
Improved site map in model-driven apps	Users by admins, makers, or analysts	✓ Jun 30, 2021	-	✓ Oct 7, 2021
Intelligent authoring experience with Power Apps Studio	Admins, makers, marketers, or analysts, automatically	✓ Aug 8, 2021	-	Feb 2022
Unified and modern Power Apps designer	Admins, makers, marketers, or analysts, automatically	✓ May 26, 2021	-	Mar 2022
Reinvented maker experience for configuring model-driven apps for offline use	Admins, makers, marketers, or analysts, automatically	Jan 2022	-	To be announced
Organize business logic in your app with components	Admins, makers, marketers, or analysts, automatically	Mar 2022	-	To be announced

Collaborate with fusion teams

Fusion teams can take advantage of more ways to use Power Apps, in addition to opportunities to package their code for reuse.

Feature	Enabled for	Public preview	Early access*	General availability
Open source Power Fx empowers low code everywhere	Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-	

Feature	Enabled for	Public preview	Early access*	General availability
Collaborate easily with commenting across Microsoft Power Platform	Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	Feb 2022
Canvas component and component libraries	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022
Manage everything about solutions and tables in a modern way	Admins, makers, marketers, or analysts, automatically	✓ Sep 26, 2021	-	Mar 2022
Code component improvements	Admins, makers, marketers, or analysts, automatically	Feb 2022	-	To be announced

Roll out world-class experiences for users

Enhancements allow you to deliver better and more modern experiences to users of apps created with Power Apps.

Feature	Enabled for	Public preview	Early access*	General availability
Ratings for model-driven apps	Admins, makers, marketers, or analysts, automatically	Mar 2022	-	
Enjoy smoother mixed-reality experiences with performance improvements for complex models	Users by admins, makers, or analysts	Mar 2022	-	
Advanced lookup capabilities for all users in model-driven Power Apps	Users, automatically	-	✓ Jun 30, 2021	✓ Oct 1, 2021
Modern search for all users in model-driven apps	Users, automatically	-	✓ Jul 29, 2021	✓ Oct 1, 2021
Easily share a record in the new model-driven app experience	Users, automatically	-	✓ Aug 2, 2021	✓ Oct 3, 2021

Feature	Enabled for	Public preview	Early access*	General availability
New model-driven app experience for editing multiple records	Users, automatically	-	✓ Aug 2, 2021	✓ Oct 3, 2021
New column options in grid view page	Users, automatically	-	✓ Jul 29, 2021	✓ Oct 7, 2021
Model-driven app improvements	Users, automatically	-	✓ Aug 2, 2021	✓ Oct 7, 2021
New Power Apps grid (read-only)	Users by admins, makers, or analysts	✓ Aug 2, 2021	-	✓ Oct 7, 2021
Unified Interface browser support changes	Users, automatically	-	✓ Aug 2, 2021	✓ Oct 7, 2021
Model-driven apps support multiple app side panes	Users, automatically	-	✓ Aug 2, 2021	Jan 2022
Updates to Power Apps trial plan	Users by admins, makers, or analysts	-	-	Jan 2022
Pay-as-you-go business model for Power Apps	Users by admins, makers, or analysts	✓ Sep 2, 2021	-	Feb 2022
Find all the relevant Power Apps on Office.com	Users, automatically	-	✓ Aug 2, 2021	Mar 2022

* You are able to opt-in to some features as part of early access on August 2, 2021, including all mandatory changes that affect users. To learn more, go to [Early access FAQ](#).

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and

datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Build advanced apps on a modern, unified platform

Overview

Power Apps maker experiences enable you to create the applications you need to solve your business challenges. Modern intelligent designers and controls enable you to quickly build modern apps your users will want to use.

Define sequential measurements for specific spaces and areas

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	✓ Oct 7, 2021	-	-

Business value

Optimize inspections and audits by defining specific things that should be measured, such as heights, widths, distances, areas, and volumes.

Feature details

Makers can now define a specific set of things they want measured and run business logic on top of those measurements.

Some example scenarios include:

- Ensuring a building is up to code by requiring the measurement of room signs for accessible height, doorways for wheelchair access, and other room properties to guarantee proper installation
- Calculating cost estimates by defining a set of measurements, such as the perimeter of a lawn for fence pricing or the area of a floor for tile costs
- Auditing contracts with customers by measuring the physical aspects of the agreement, such as the amount of shelf space given to your products

These measurements use the power of mixed reality to leverage the existing sensors on most modern phones and tablets to bring understanding of the physical space in the context of business workflows.

See also

[Take measurements in mixed reality](#) (docs)

Visualize and plan routes using the Map component

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	✓ Oct 24, 2021	-	-

Business value

Allow your users to plan the best way to get from one destination to another with the Map component in Power Apps.

Feature details

The Map component can now find and visualize optimal routes, potentially to multiple destinations at a time. These routes take into account factors such as traffic and typical road speeds to provide the shortest or fastest route available.

Information returned includes the optimal waypoint order, distance, estimated travel time, and a representation of the route geometry.

See also

[Insert waypoint pins and draw routes between them](#) (docs)

Use mixed-reality components in no- or low-connectivity scenarios with caching and offline support

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	Mar 2022	-	-

Business value

Users of apps built with the View in 3D and View in MR components can keep using those apps to view mixed-reality content even if they have little or no internet connection. That way, if your app user is in an area where internet is not available, they can still use mixed-reality components to view and analyze spaces and shapes without impacting their productivity.

Feature details

The [View in 3D](#) and [View in MR](#) components will now cache content used in the control on your device so that these components can be used in no- or low-connectivity scenarios. This caching will also improve the load time of content that's been previously loaded into mixed reality.

There will also be support for designating what content should be cached for offline support. This enables users to make sure all the content they need for their day will be available on their device regardless of connectivity.

Simplified Dataverse search configuration for admins and model-driven app makers

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 3, 2021

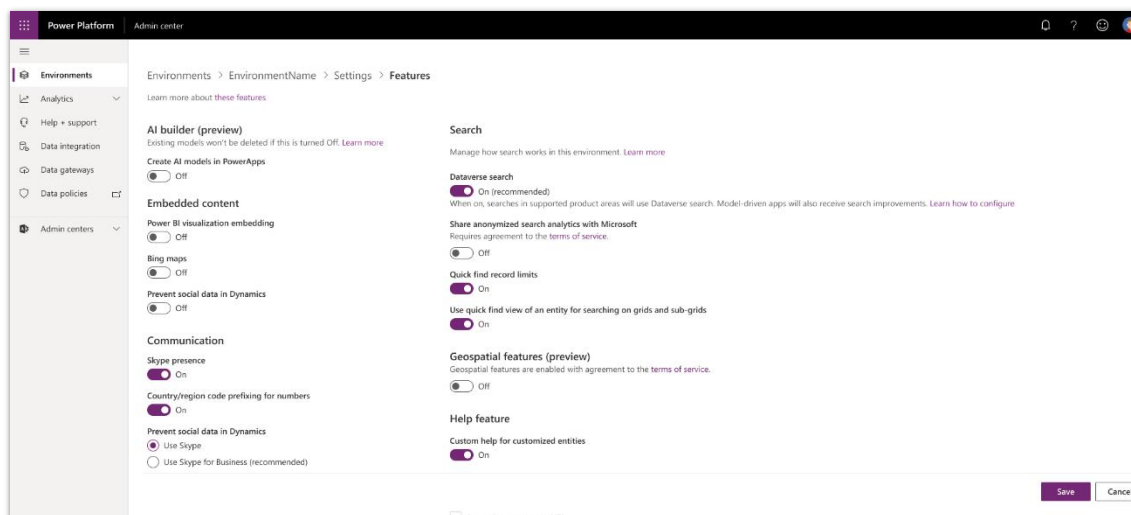
Business value

Administrators can enable Microsoft Dataverse search easily for their environments through the Power Platform admin center. Model-driven app makers can configure the global search experience within their apps.

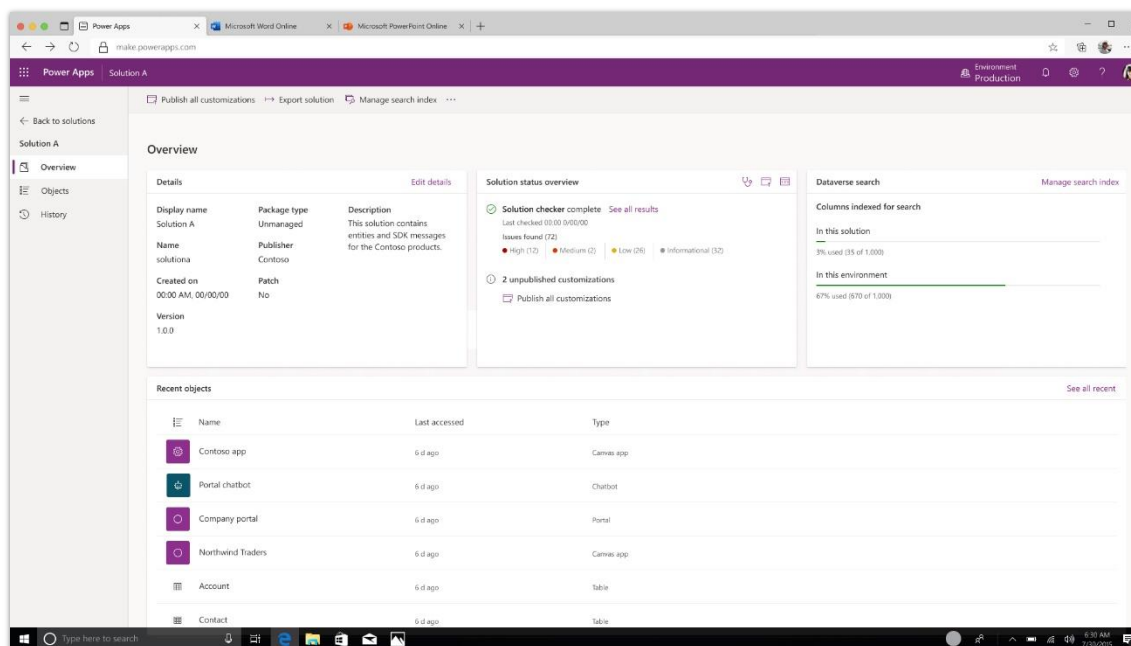
Feature details

Relevance search is now Dataverse search, enabled for the environment and used by global search in model-driven apps. Model-driven app makers can manage their users' global search experience by choosing the right tables to be a part of the search index.

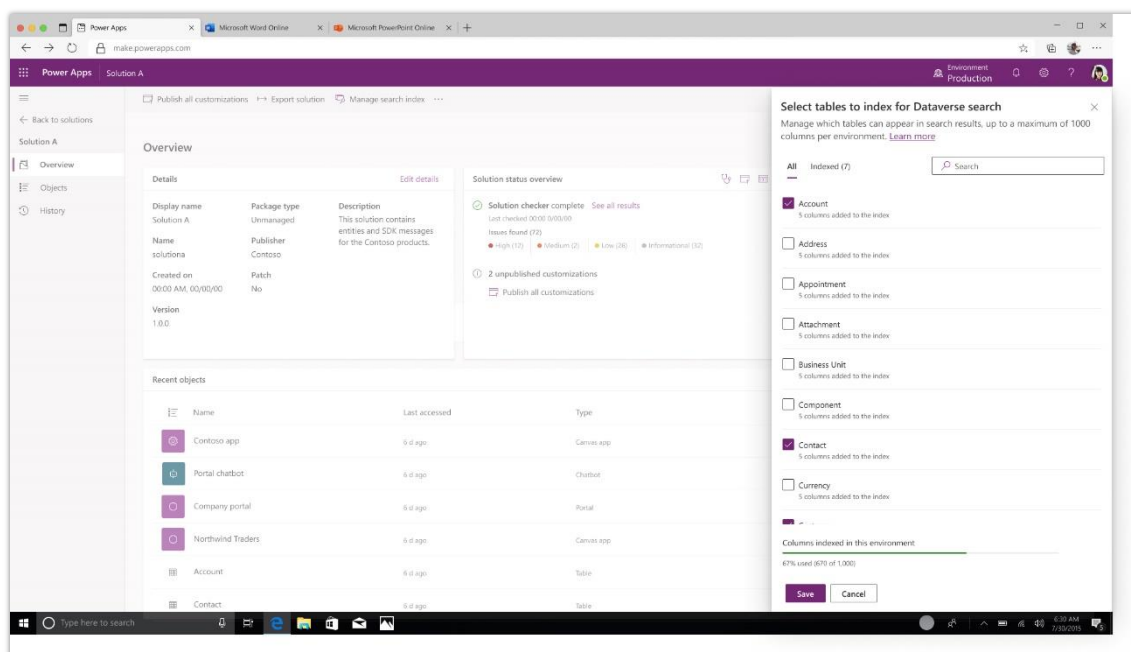
Configuring Dataverse search is an integral part of the modern solution explorer. Model-driven app makers can see what's in the search index in the context of a solution and add or remove tables to build the index so that users find their Dataverse information easily.



Enabling search for admins.



Configuring search for makers.



Configuring Dataverse search for makers.

See also

[What is Dataverse search? \(docs\)](#)

Improved site map in model-driven apps

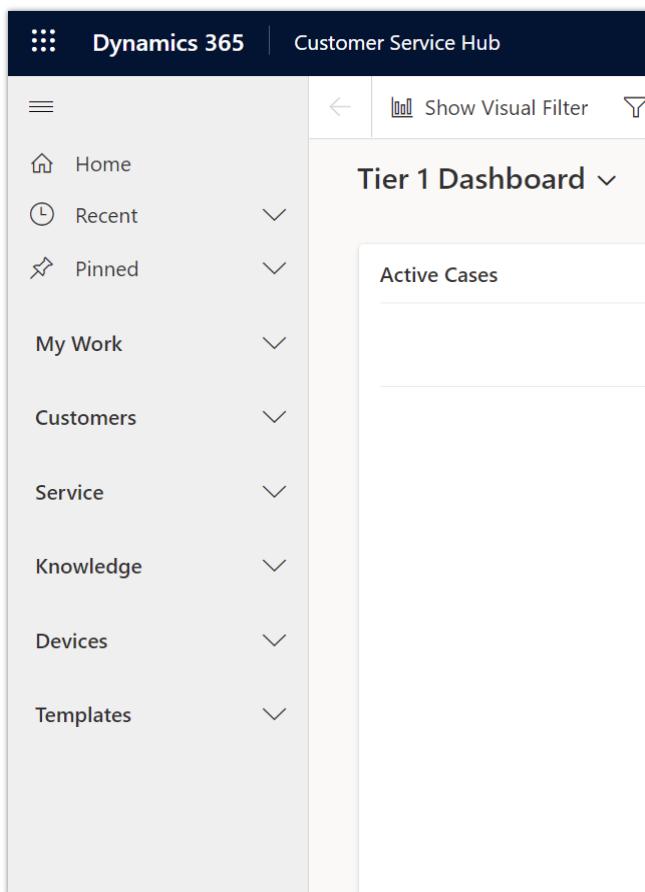
Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	✓ Jun 30, 2021	-	✓ Oct 7, 2021

Business value

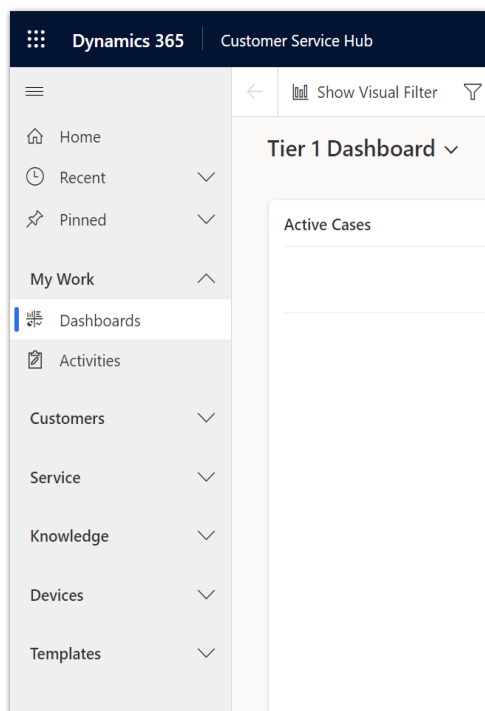
Makers can create a more streamlined app by using the improved model-driven app site map through collapsing groups and the option to hide **Home**, **Recent**, and **Pinned** items.

Feature details

Now users can more quickly get to items further down in the site map with less scrolling through collapsible groups. The user choice to collapse or expand per group is kept local in the browser.

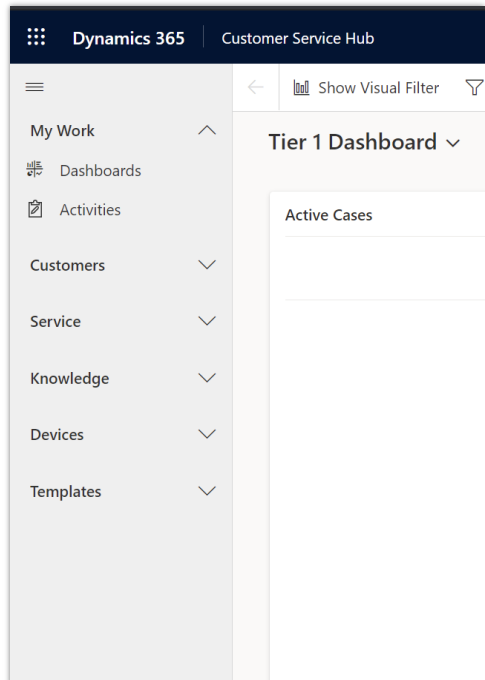


All groups collapsed



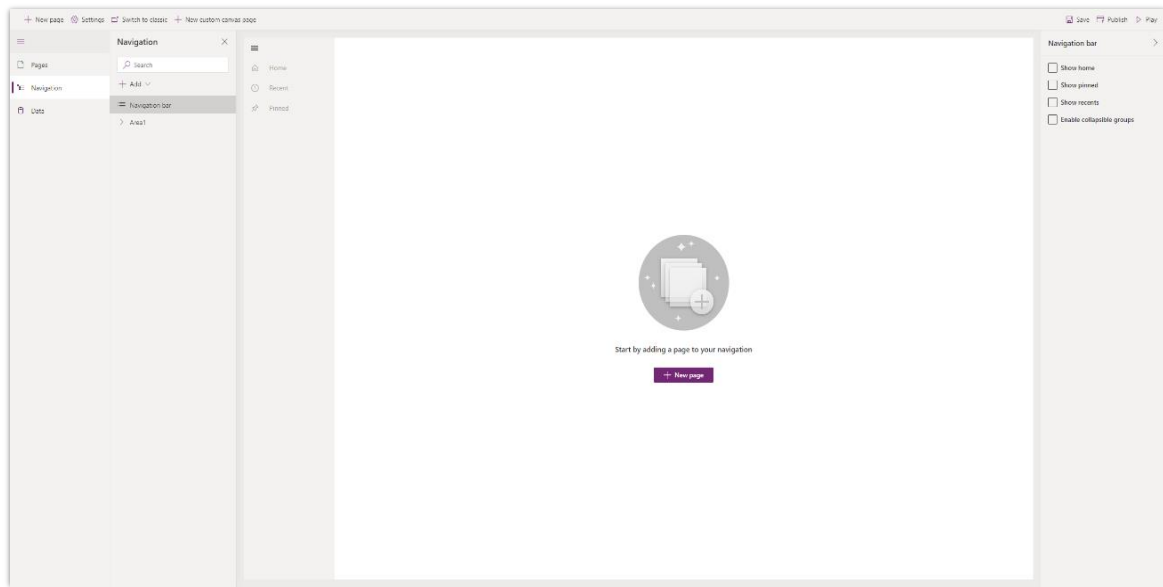
First group expanded

In addition, makers can toggle the visibility of the **Home**, **Pin**, and **Recent** items to have them hidden to remove the fixed items at the top of the site map.



Home, Pinned, and Recent buttons hidden from the site map

Makers can enable this behavior through the new modern app designer.



Configuring the site map in Power Apps Studio

The improved site map is also supported on mobile devices.

See also

[Navigation pane options](#) (docs)

Intelligent authoring experience with Power Apps Studio

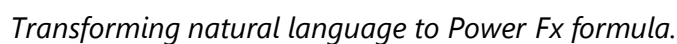
Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Aug 8, 2021	-	Feb 2022

Business value

The use of AI will help simplify the app authoring experience.

Feature details

[Microsoft Power Fx](#) is a powerful capability for makers to connect app components, make the app respond to button clicks or data changes, and more. However, it will take some time for a citizen maker persona to learn to use the formula language and write the formulas correctly. To remove the hurdle for rapid app development, we're bringing in the power of AI to help. This feature will enable makers to use natural language to type in expected behavior or input a desired format, and Power Apps will automatically generate formulas for makers to apply.



[Feature exploration: Learn a new way to write formulas with AI powered assistance](#) (video)

Unified and modern Power Apps designer

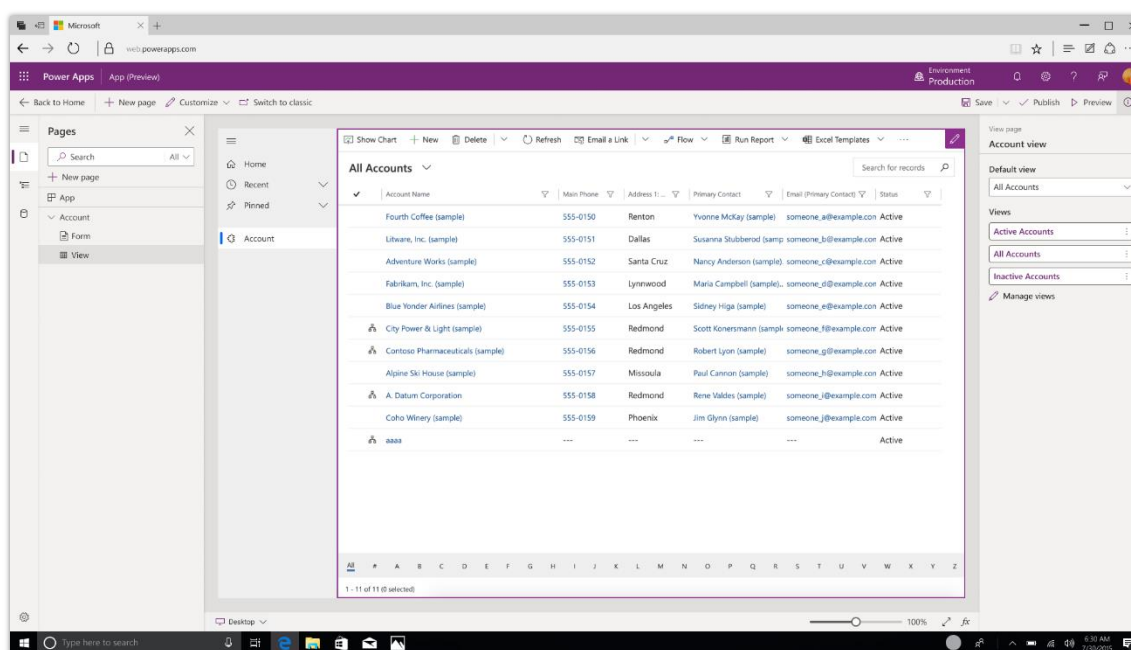
Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ May 26, 2021	-	Mar 2022

Business value

The modern app designer will allow makers and admins to build apps faster, in a more intuitive way. Getting started has never been easier.

Feature details

In the new Power Apps app designer, you can easily build an app with forms, views, and dashboards, and take advantage of the capabilities of canvas apps. The app designer will be your hub for productive app creation in Power Apps. The capabilities provided have reached parity with the classic model-driven app designer. The new app designer has surpassed them with features like a live preview and better integration with the other authoring experiences in Power Apps.



App authoring experience showing a centered live preview with configuration.

See also

[Overview of the model-driven app designer](#) (docs)

Reinvented maker experience for configuring model-driven apps for offline use

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Jan 2022	-	To be announced

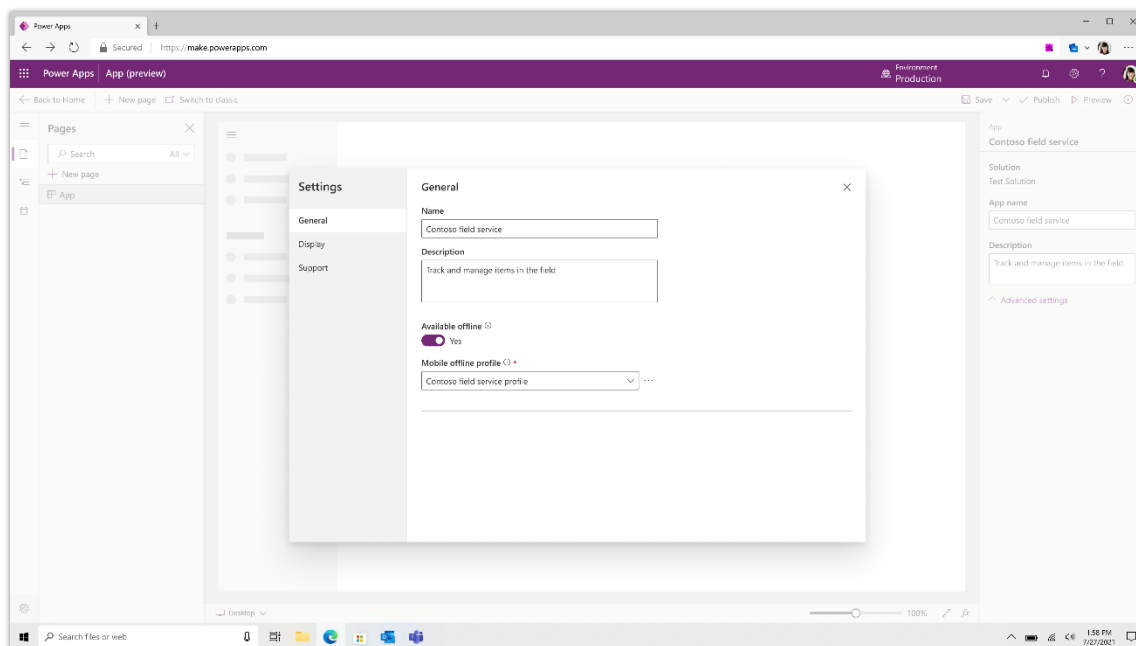
Business value

Setting up a model-driven app to use in offline mode is much easier, more intuitive, and accessible to all app makers.

Feature details

Through the modern app designer, makers can seamlessly configure their model-driven applications for offline use.

You don't need to figure out which tables to add and which filters to apply in your offline profile. Now, it's just one toggle switch to enable an app for offline and automatically generate a default offline profile. There's also no need to set users to offline profiles. If your user has access to the app (through security roles), they can also use the app in offline mode.



Offline configuration in the modern app designer.

Organize business logic in your app with components

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-	To be announced

Business value

Instead of having multiple copies of the same logic in an app, which can get out of sync and are hard to maintain, common logic can be placed into a component and shared within the app and across other apps with a component library.

Feature details

Raise your hand if you can name a computer language that doesn't have user-defined subroutines or functions. Stumped? Power Fx. Where does one put common logic that's to be reused across an app or between apps? Nowhere in Power Fx. In many apps, the same logic is replicated repeatedly in formulas, and that logic can get out of sync with its siblings if a maker changes one copy but doesn't realize there are others.

There's a better way. Early in 2021, we introduced component property parameters and enabled pure functions in Power Fx. A few months later, we added the ability for a component to access app scope, getting rid of the need for those pure functions to require everything to be passed in through parameters. The last piece of the puzzle is to introduce non-pure functions, which will fully enable code reuse. Any formula in an app can be hoisted out and placed in a function definition with parameters, immediately reused across the app, and abstracted for use across other apps.

Collaborate with fusion teams

Overview

Fusion teams can take advantage of more ways to use Power Apps for their user experiences, in addition to opportunities to package their code for reuse.

Open source Power Fx empowers low code everywhere

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-	-

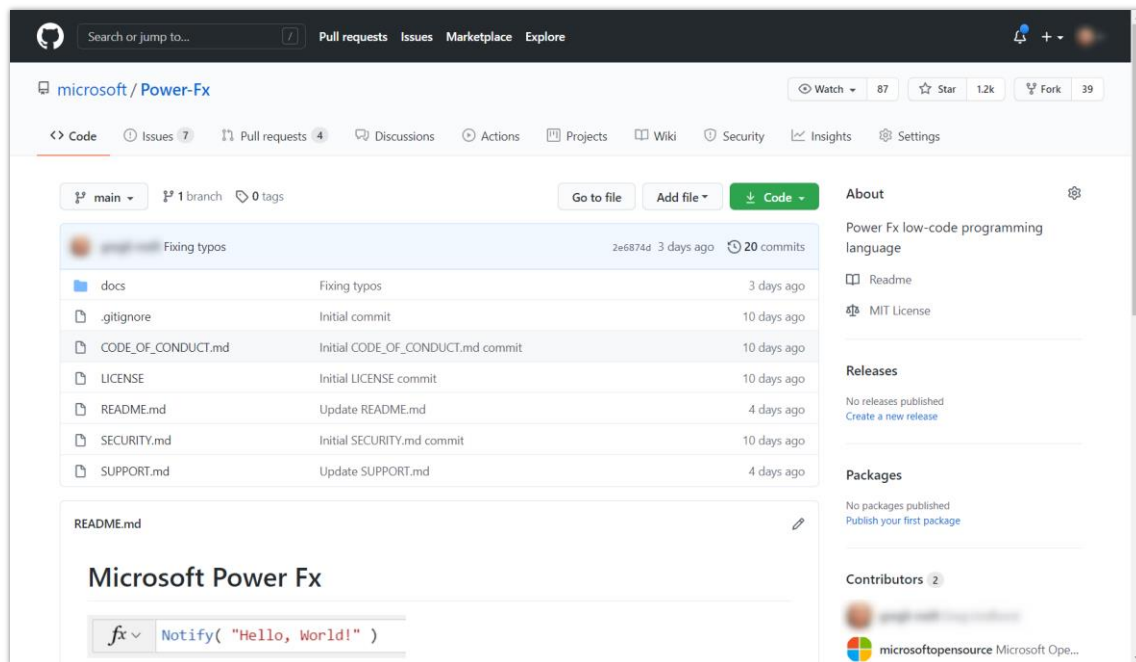
Business value

The same low-code Power Fx that supports Microsoft Power Platform products is available for anyone to use as open source. Like all other programming languages today, growth and adoption depend on a free exchange of ideas, issues, and enhancements in collaboration with the developer community.

Feature details

Power Fx is finding a home in Power Virtual Agents, Microsoft Dataverse, model-driven apps, and other products of Microsoft Power Platform. To further its adoption and engage more with our community of makers, we're taking a step that almost all programming languages do today—including Microsoft's own TypeScript and C#. We're making the language and implementation available as open source, so that anyone can integrate Power Fx in a wide spectrum of their own solutions. Anyone can view the code, raise bugs, discuss future directions, and help us grow and refine the language.

Source code and documentation will be available at <https://github.com/microsoft/Power-Fx>.



Open source home for Power Fx: <https://github.com/microsoft/Power-Fx>

See also

[Engage with Power Fx Open Source](#) (video)

[Microsoft Power Fx overview](#) (docs)

Collaborate easily with commenting across Microsoft Power Platform

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	Feb 2022

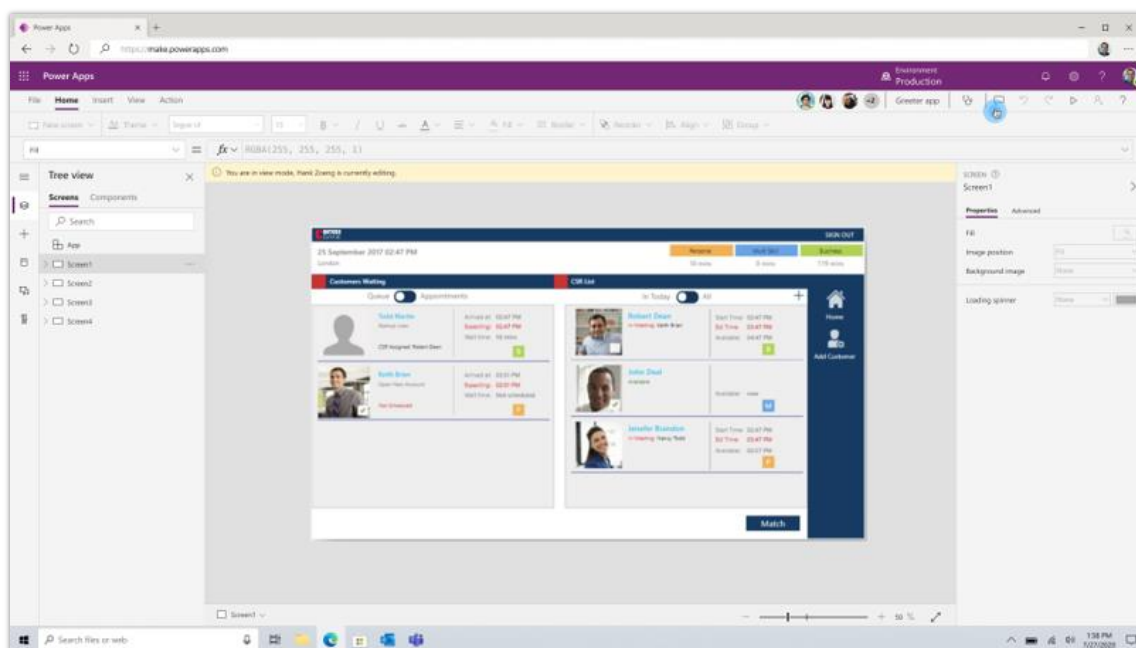
Business value

Enhance collaboration and productivity as fusion teams build new apps, flows, or solutions.

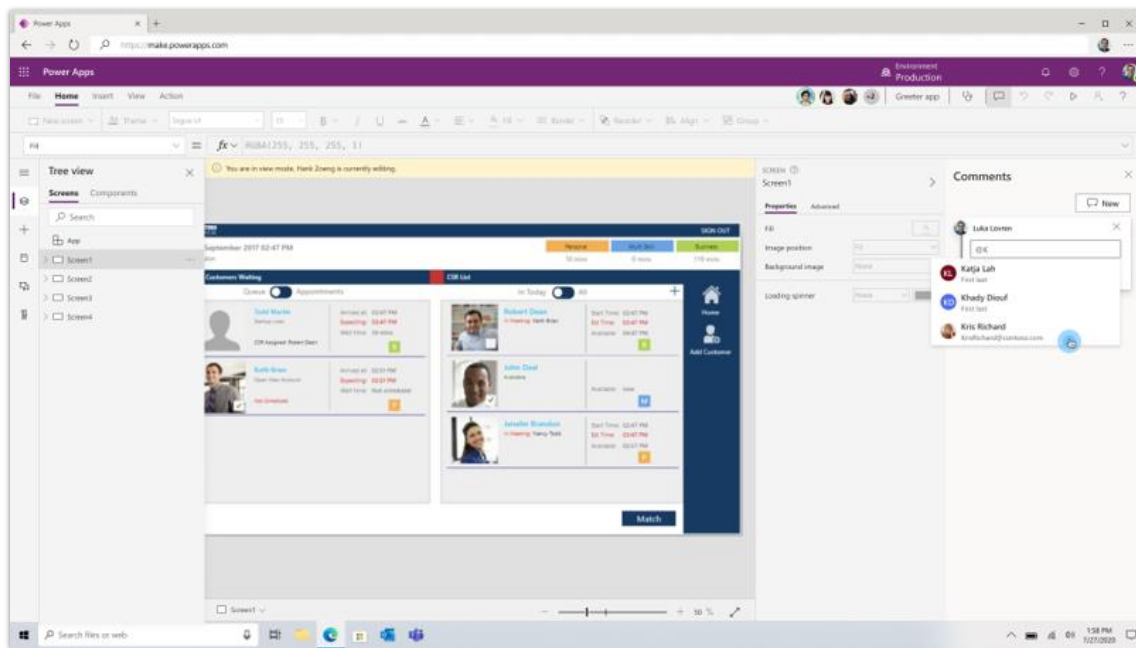
Feature details

In a typical work environment, team members look for an easy and effective way to collaborate, comment, and share tasks while building a new application or solution. Until now, Microsoft Power Platform has not offered a native solution for this type of collaboration. Instead, makers have needed to rely on external tools such as OneNote, email, and Microsoft Teams.

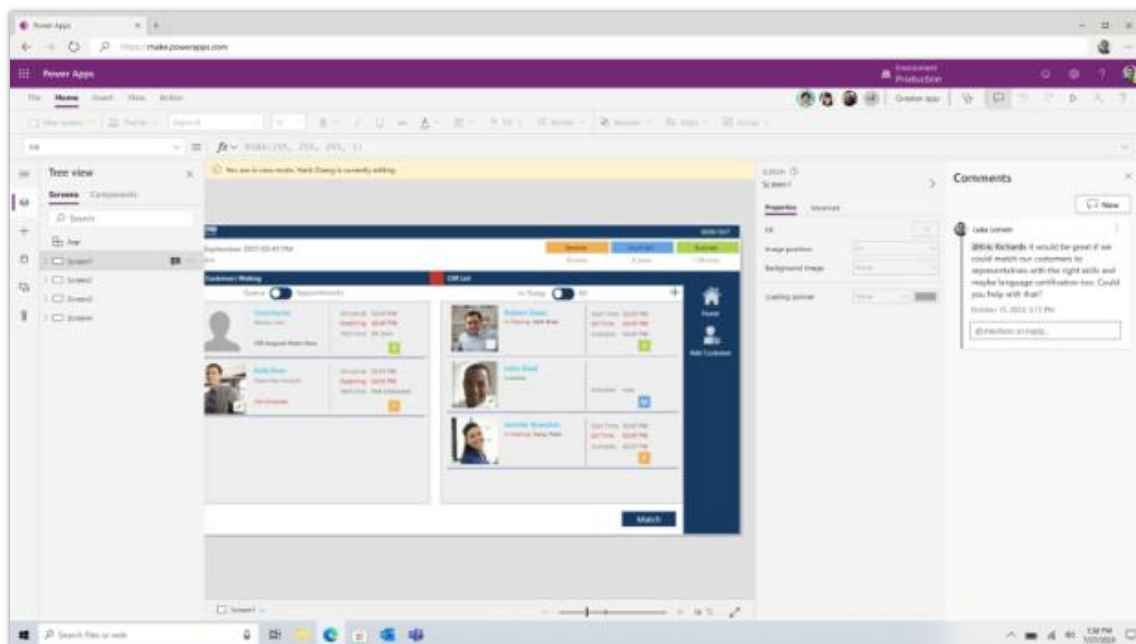
The introduction of commenting across Microsoft Power Platform will provide a new means of collaboration for team members who work together to build apps, flows, solutions, and chatbots. This is expected to boost engagement and enhance productivity among fusion teams who need to share feedback, request help, or ask for review.



Commenting on an app

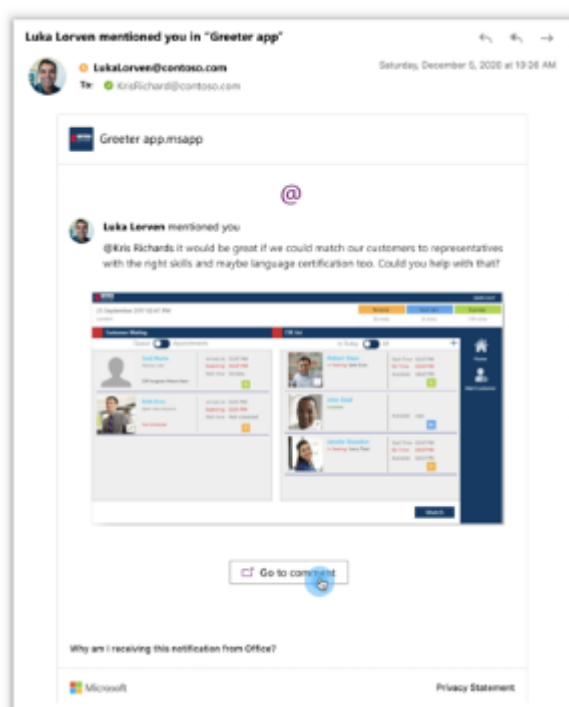


Mentions

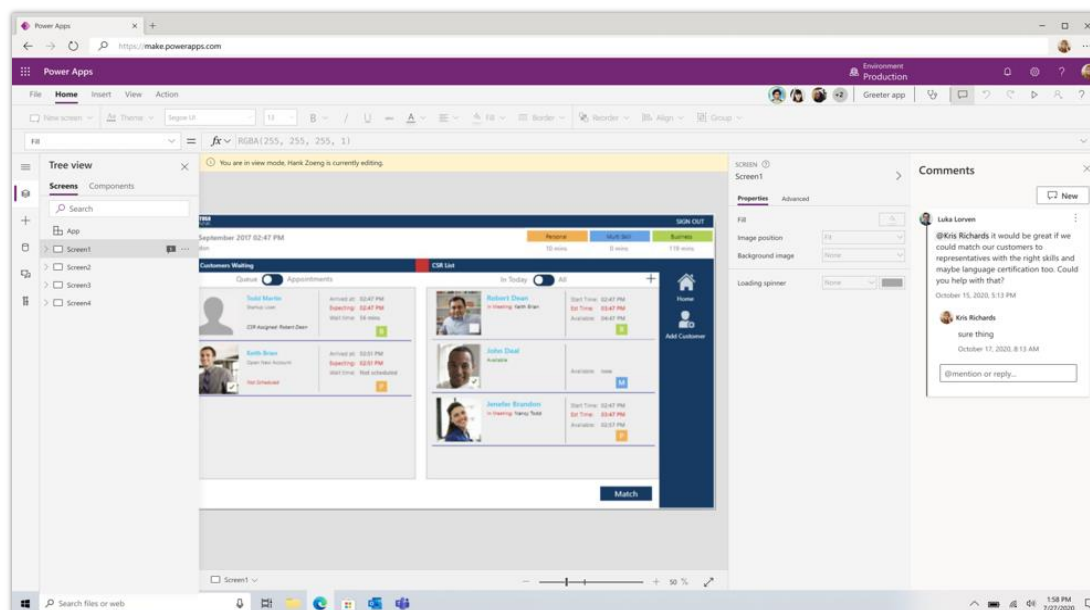


View mode





Email notification



Response

See also

[Collaborate easily with commenting across Power Platform](#) (video)

[Add comments preview](#) (docs)

Canvas component and component libraries

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

App makers don't have to rely on code components for simple UX components to get the benefits of custom extensibility, application lifecycle management (ALM), and reuse. Components and component libraries feature in canvas apps provide a much faster and simpler way not only to build custom UX, but also to have centralized control on upgrade, update, and solution support with ALM capabilities.

Feature details

Components and component libraries feature in canvas apps can be used to build reusable and centrally managed low-code UX components. Besides investments in reliability and fundamentals, this release will add component ALM support. Users will have the ability to package and ship component libraries and applications using standard Microsoft Dataverse solutions. Component libraries will also add support for new Fluent controls and Power Apps component framework code components for custom pages.

Manage everything about solutions and tables in a modern way

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Sep 26, 2021	-	Mar 2022

Business value

By having access to all the features from the portal, makers will enjoy an accessible and complete modern maker experience.

Feature details

[Power Apps](#), also known as the maker portal, will include all the features present today in the classic experiences, allowing makers to stay in the portal to manage everything about their solutions and tables. This improves productivity because makers don't need to "switch to classic" to access some features. With this milestone, the classic solution list and solution explorer are deprecated because all features can be used from the portal.

See also

[Solution view](#) (docs)

Code component improvements

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	-	To be announced

Business value

With Power Apps component framework already in general availability, we'll be adding more features that enable professional developers to build and extend Power Apps in a scalable manner with strong performance. Features being enabled for the next wave are geared toward enterprises that use some of the best practices and capabilities developed for the internal first-party components.

Feature details

In this release, code components for canvas apps will have the following improvements and new features:

- Virtual components and shared libraries support will enable code components to use system React and Fluent libraries. Developers can also create their own shared libraries that can be used across code components.
- Code components will have support for events in line with the canvas apps native components. This will enable developers to define custom events that can be raised by code components.
- For model-driven apps, code components can be created for the simple lookup and Multi-select option set (Choices) type, and properties of these new types can also be added. These are top community requests. Additional framework APIs on the canvas apps will be added, which approaches model-driven app parity.

Roll out world-class experiences for users

Overview

This release brings more modern experiences to users of apps created with Power Apps.

Ratings for model-driven apps

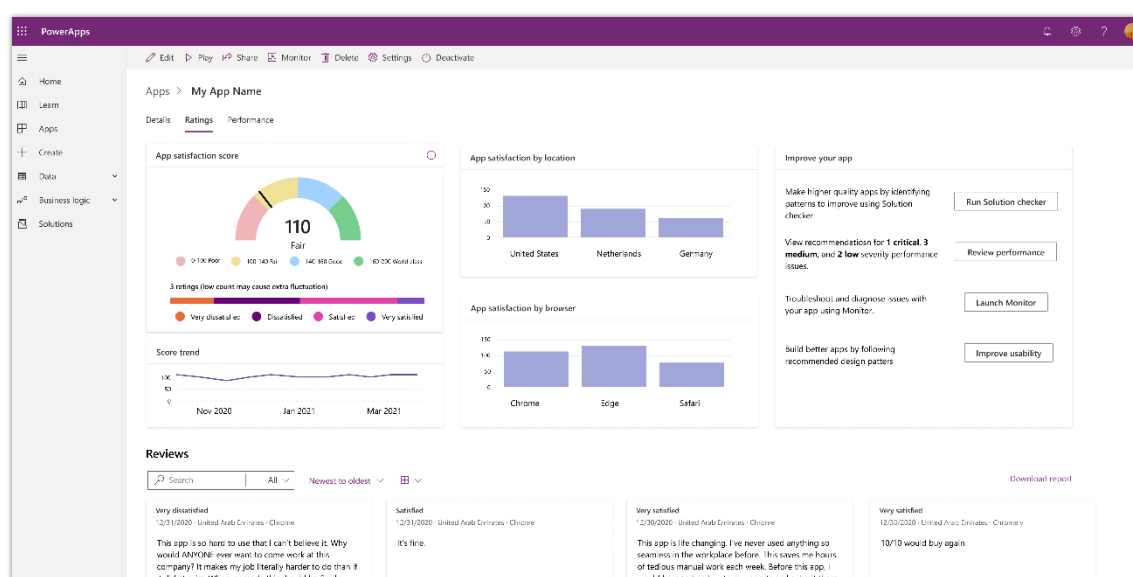
Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-

Business value

Ratings help makers build apps that users love. This feature closes the engagement gap between app makers and users by introducing a feedback loop. Enterprise makers can view app-level net satisfaction (NSAT) scores and reviews, and take action to improve their apps based on user feedback.

Feature details

Through the **Ratings** dashboard, makers can view app-level NSAT scores and user reviews for model-driven apps including Dynamics 365 customer engagement apps. Makers can dive into app ratings to understand what's working and where there's room for improvement. They can launch tools to help improve their app directly from the maker engagement hub, make enhancements to apps based on feedback, and track changes to their app satisfaction score over time.



Ratings dashboard in maker portal

Enjoy smoother mixed-reality experiences with performance improvements for complex models

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	Mar 2022	-	-

Business value

Supporting more complex content in mixed-reality experiences means you can expand your scenarios for sales, inspection, guided training, product design, or anything else. Your customers will also see a faster, more-responsive app, and your mixed-reality models will look smoother and respond more quickly.

Feature details

Bring more complex models into mixed reality with performance improvements including:

- Support for models optimized with gltfPack
- Runtime optimization of models with multiple submeshes
- Higher frames per second (FPS) during mixed-reality experiences by moving more logic into the native layer

These improvements will create a more responsive app and make for a smoother mixed-reality experience.

Advanced lookup capabilities for all users in model-driven Power Apps

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Jun 30, 2021	✓ Oct 1, 2021

Business value

Lookups are a core component of model-driven apps because they help you access underlying data relationships in Microsoft Dataverse. Advanced lookup capabilities help users be more productive with data-entry tasks by providing a better way to search and look up records within a context, as an intuitive extension of the simple lookup control in model-driven apps.

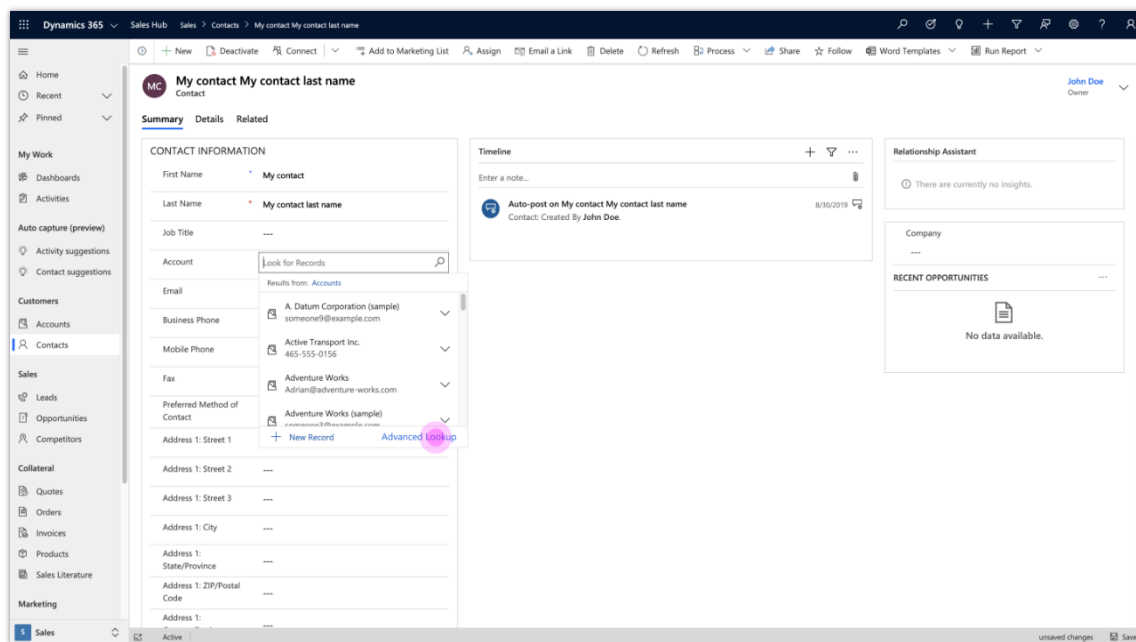
Feature details

Searching for and looking up rows in model-driven apps on the web is easier with advanced lookup. Use the advanced lookup capabilities to drill into a form and easily sort rows, and switch between tables or views in a lookup column.

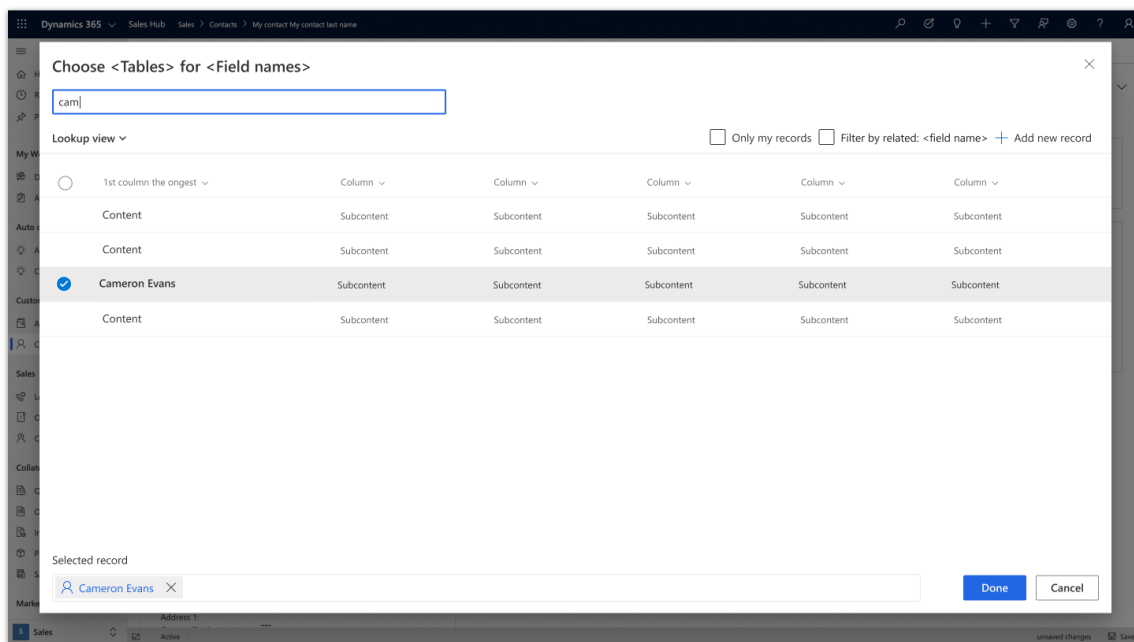
In addition to seeing results as you type, you can do the following:

- View more information per row to select the correct row easily.
- Switch views and sort on data to look up the correct row.
- Easily select multiple rows to a lookup field from the advanced lookup grid.
- Filter the rows to show only rows that you own.
- Explore data from advanced lookup without losing context.

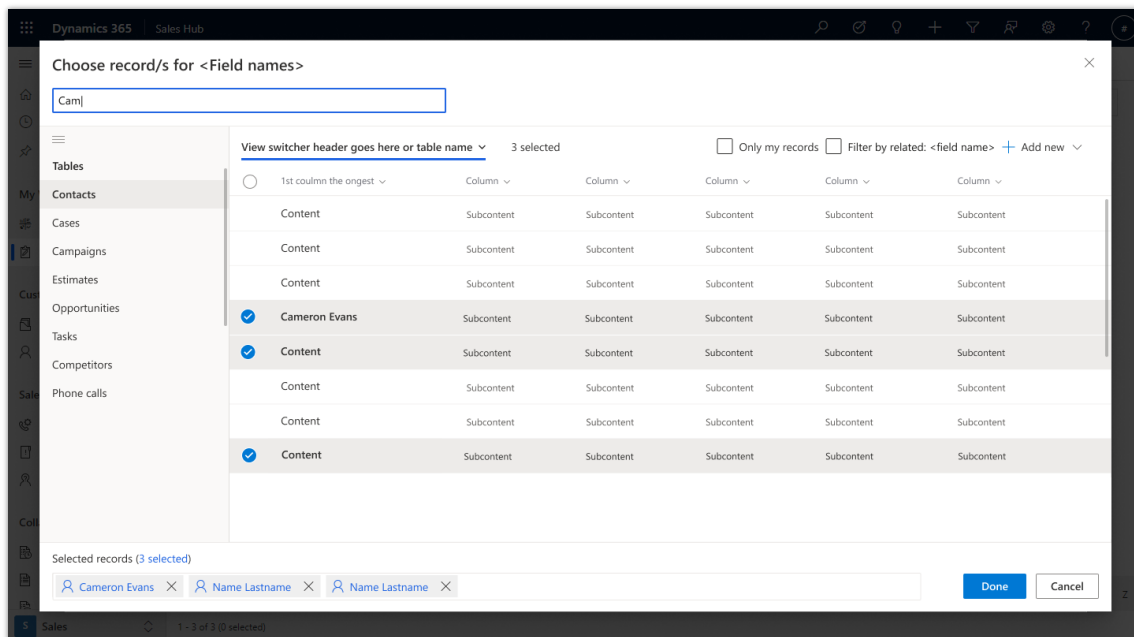
All these capabilities are available for an admin to opt-in under the **Advanced lookup** toggle in Power Platform admin center. In 2021 release wave 2, this will be enabled by default for all users.



Advanced Lookup entry point



Advanced lookup single table single select



Advanced lookup multi-table multi-select

See also

[Manage behavior settings](#) (docs)

Modern search for all users in model-driven apps

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Jul 29, 2021	✓ Oct 1, 2021

Business value

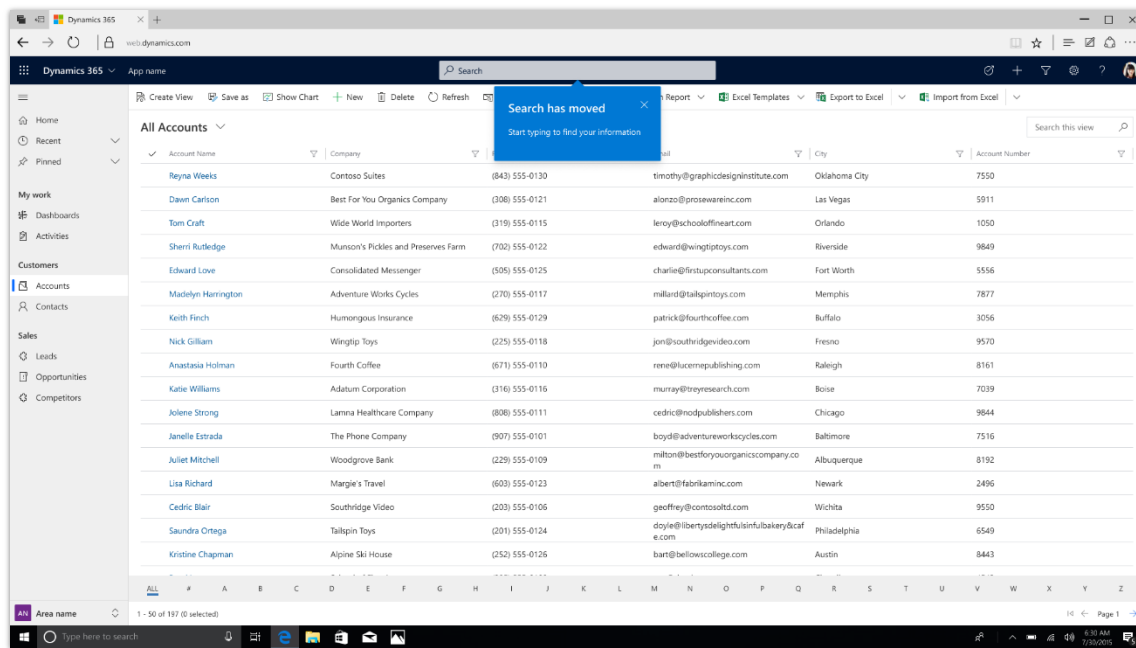
This capability introduces a modern global search experience, backed by Microsoft Dataverse search, for all model-driven Power Apps on all devices as the default—helping users find their information and navigate easily.

Feature details

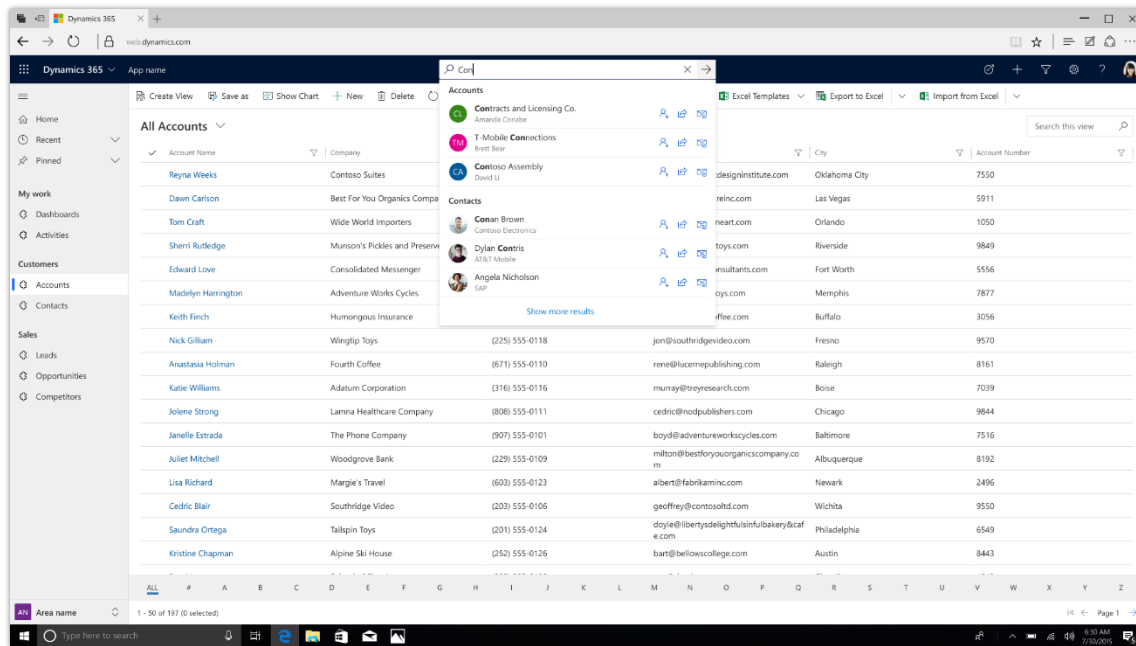
Relevance search is now Dataverse search and the only global search option for all users in model-driven apps in a production environment on any device. Global search is easy to use, fast, and intelligent. Relevance search delivers the following benefits:

- The search box is always available at the top of every page in your app. You can start a new search and quickly find the information that you're looking for.
- Personalized zero query experience of recent searches and rows, which helps you complete a search without a keystroke.
- Seeing suggested results as you type puts Dataverse information at your fingertips.
- High-quality results let you search and act on your information easily and quickly.
- Quick action commands that appear next to search results help you complete a task without losing context.

All these capabilities are available as an admin opt-in under the Dataverse search toggle in Power Platform admin center. With 2021 release wave 2, this will be enabled by default for all production environments. With this capability enabled by default, individual users won't have the ability to switch to categorized search.

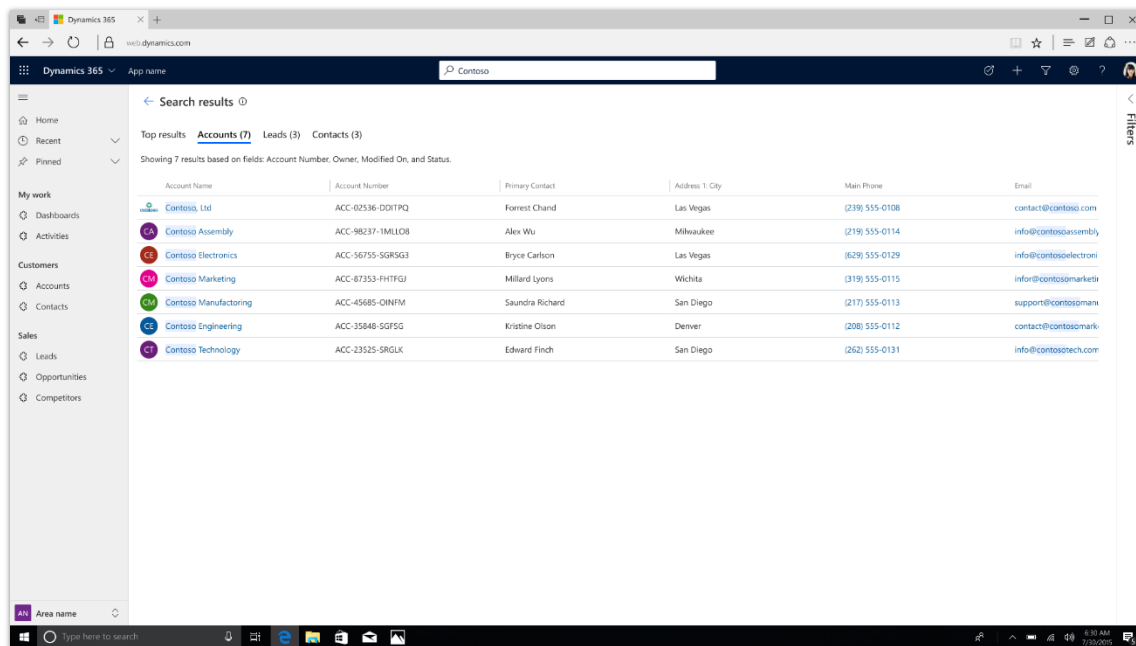


Search bar



Suggestions





Results page

See also

[Advanced lookup](#) (docs)

Easily share a record in the new model-driven app experience

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	✓ Oct 3, 2021

Business value

Removes the dependency on the previous web client hybrid experiences. Provides a Web Content Accessibility Guidelines (WCAG) 2.1 accessible experience by using modern dialogs and controls.

Feature details

User will be able to share a row quickly and easily with another user or team by using the Unified Interface dialog experience, which meets all WCAG 2.1 requirements and supports reflow across all viewport sizes. This capability is also fully supported in the mobile experience.

See also

[Share rows with a user or team](#) (docs)

New model-driven app experience for editing multiple records

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	✓ Oct 3, 2021

Business value

Removes the dependency on web client hybrid experiences. Provides a Web Content Accessibility Guidelines (WCAG) 2.1 accessible experience by using modern dialogs and controls.

Feature details

Users will be able to edit multiple rows quickly by using the Unified Interface dialog experience, which meets all WCAG 2.1 requirements and supports reflow across all viewport sizes. It's also fully supported on the mobile experience.

See also

[Edit multiple rows](#) (docs)

New column options in grid view page

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Jul 29, 2021	✓ Oct 7, 2021

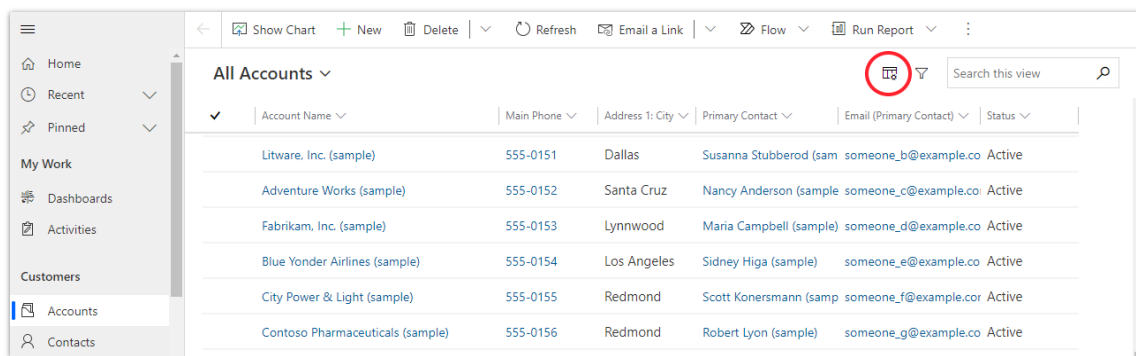
Business value

App makers can customize grid columns and the order in which they're shown directly from the grid view page.

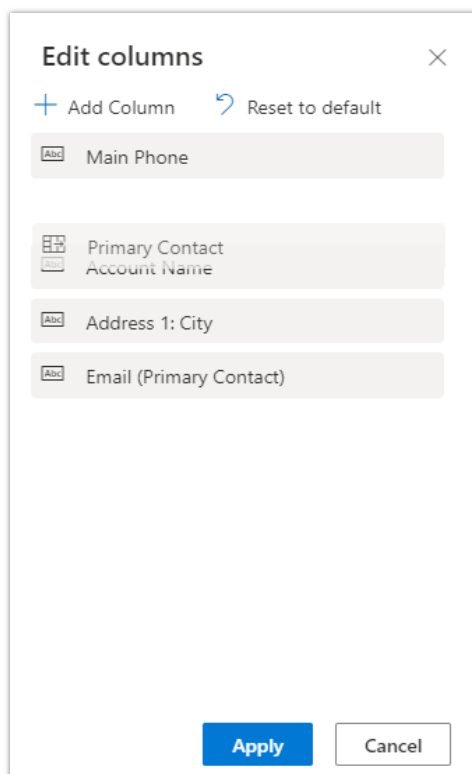
Feature details

The grid view page in model-driven apps now features column options settings that let app users customize which columns are shown in the grid. With this feature, users can:

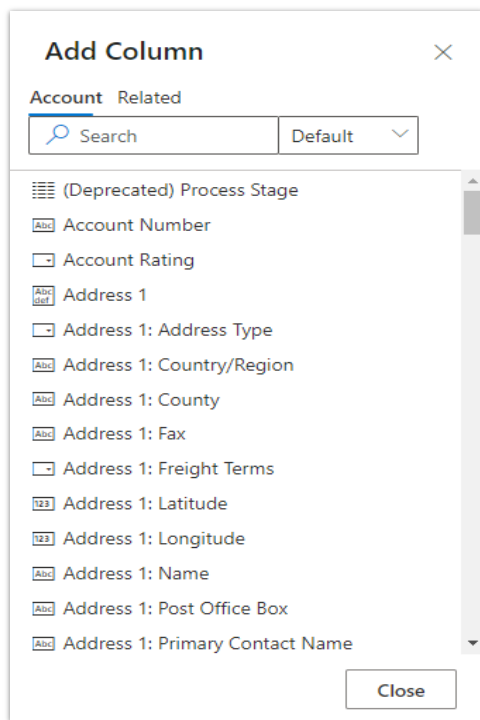
- Add new columns, from current or related tables
- Remove columns
- Change the order of columns in the grid



Column options button inside the grid view page.



Dragging columns to change their order.



Adding new columns

See also

[Use the column options in a view or grid](#) (docs)

Model-driven app improvements

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	✓ Oct 7, 2021

Business value

Model-driven apps are more accessible, responsive, and keyboard-friendly. Some components have styling updates to align with other Microsoft products.

Feature details

Model-driven apps have a number of improvements in 2021 release wave 2.

With this release, several accessibility compliance updates have been done for Web Content Accessibility Guidelines (WCAG) 2.1, including core shell and page support for zoom up to 400%, improved progressive collapse, and keyboard support access.

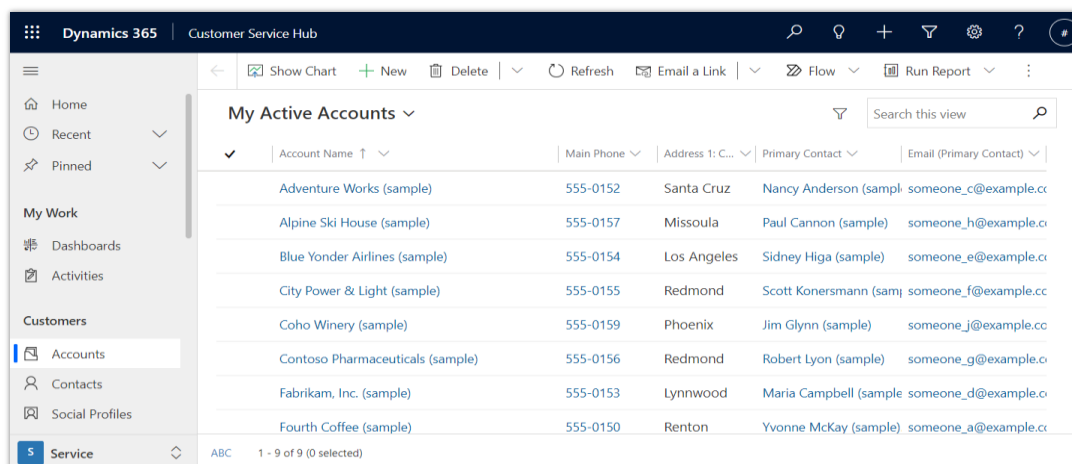
To be more effective in short viewports, large center dialogs will use the full screen. To be more effective with narrow viewports, the site map and side panes will move into a collapsed mode initially, and then move into an app menu in the header.

The improved app menu maintains the existing site map or session list, and it now has the app panes in addition to the current session app tabs.

To improve keyboard access, this release adds landmark regions for five main regions: header, navigation, main, left side pane (when used), and right side pane (when used).

- A user can move to the first or last element by using **Ctrl+Home** or **Ctrl+End**, respectively.
- To switch to the next region, use **Ctrl+F6**.
- Use **Shift+Ctrl+F6** to switch to the previous region.
- To support keyboarding to pop-up and toast notifications, **F2** will set focus to the visible notification.

As part of improving visual consistency with other Microsoft products, we're updating the styling for scroll bars and the message bar. Scroll bars use a thin, rounded styling that's consistent with Microsoft 365 and Microsoft Teams. This works with browsers supporting scroll bar styling, such as Microsoft Edge (Chromium) and Chrome. The app and form message bars have updated colors for information and warnings background, in addition to the call to action button. These message bar changes are done to align with Microsoft Fluent styling.



Scroll bars have updated styling such as site map and grid



App message bar warning updated styling



App message bar information updated styling

New Power Apps grid (read-only)

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	✓ Aug 2, 2021	-	✓ Oct 7, 2021

Business value

With grids serving as the data display and navigational cornerstone of views, a new grid control brings compliance with Microsoft Accessibility Standards, as well as improved productivity with performance improvements and a modern UI. It will serve as the foundation for numerous upcoming improvements in this area.

Feature details

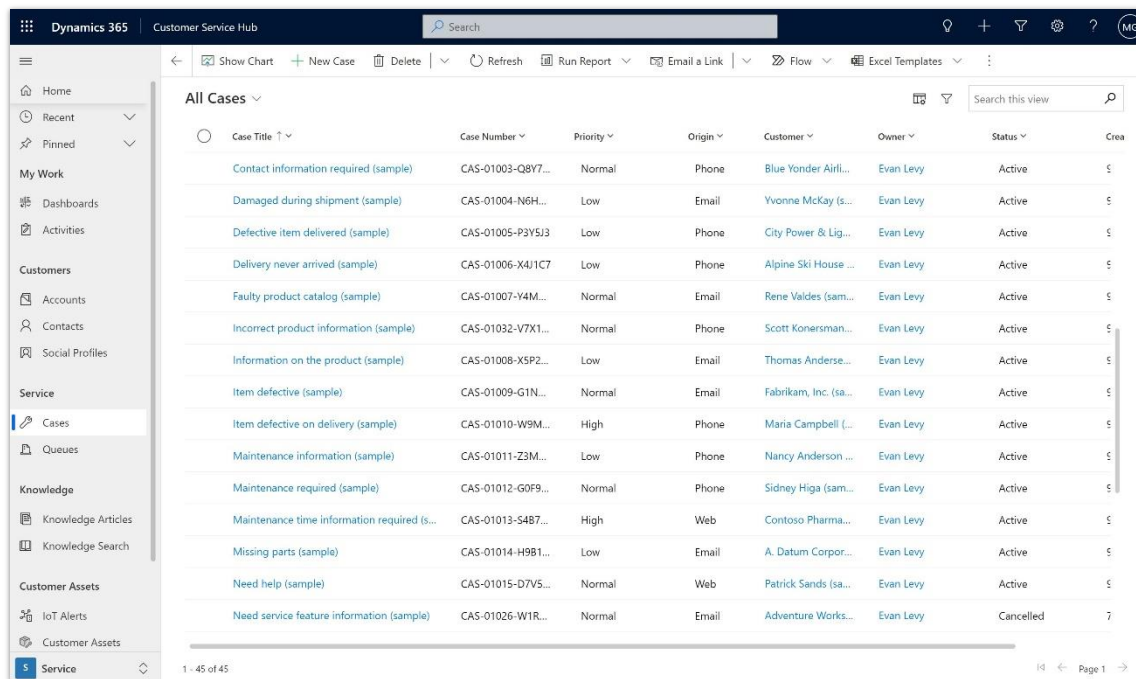
Model-driven apps now feature a new read-only grid control, both inside the view page and inside forms (sub-grids). The new grid control is in compliance with Microsoft Accessibility Standards and is the basis for numerous upcoming features.

In addition to improved performance, the new control supports:

- Remembering grid view settings across the session
- Ability to resize columns
- Ability to reorder columns (through column options UI)

With the vision of the Power Apps grid being the grid control for all of Power Apps, the alphabetical navigation at the bottom of the grid (the jumpbar) will be turned off by default but can be enabled by customizing the grid control properties for the view or the form.

An editable version of the control will be coming soon.



New read-only grid control in a view page.

See also

[Power Apps grid control](#) (docs)

Unified Interface browser support changes

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	✓ Oct 7, 2021

Business value

Improve user experience and performance by supporting only modern browsers.

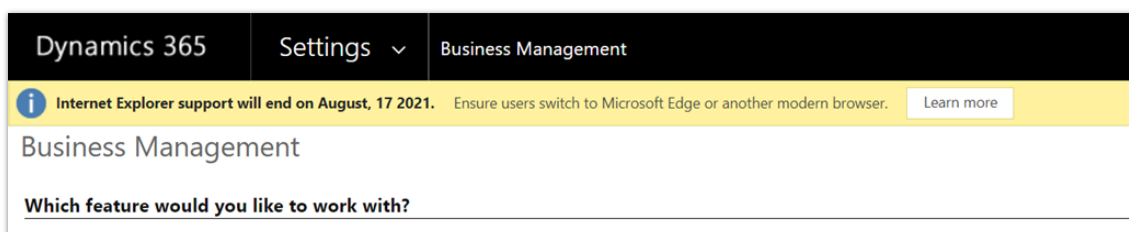
Feature details

With Internet Explorer support ending August 17, 2021, the Unified Interface web browser will start warning users who are running Internet Explorer by using the app message bar. The message will be shown each time the session starts and can be dismissed. Users who move to Microsoft Edge (Chromium) or another modern browser will see their performance improve as much as doubled compared to Internet Explorer, and they'll have a more consistent experience.



App message bar warning about the end of Internet Explorer support.

Administrators who open either the Power Platform admin center or the classic **Advanced Settings** and have users within the organization using Internet Explorer will see a warning message. After all users have stopped using Internet Explorer, we'll remove the message for those organizations.



Advanced Settings app message about the end of Internet Explorer support.

NOTE Starting in 2022 release wave 1, Internet Explorer and classic Microsoft Edge browsers will be blocked from opening Unified Interface. This will let us further improve the experience by adding browser enhancements that aren't possible on these deprecated browsers. Leading up to the blocked experience, an app error message will be shown to users of Internet Explorer.

To further improve user experience, 2021 release wave 2 will include user warnings for older browsers. Based on performance investigations, we see that use of older, unsupported browsers have performance issues not seen in the latest version of the same browser. For this release, we'll show users a warning message when they're using browser versions older than Microsoft Edge (Chromium) 83, Chrome 83, and Firefox 76. These browsers were all released in May 2020. Future twice-a-year releases will move up the version that shows warnings.



Warning app message shown when browser version is older than recommended.

See also

[Support end for Internet Explorer](#) (docs)

Model-driven apps support multiple app side panes

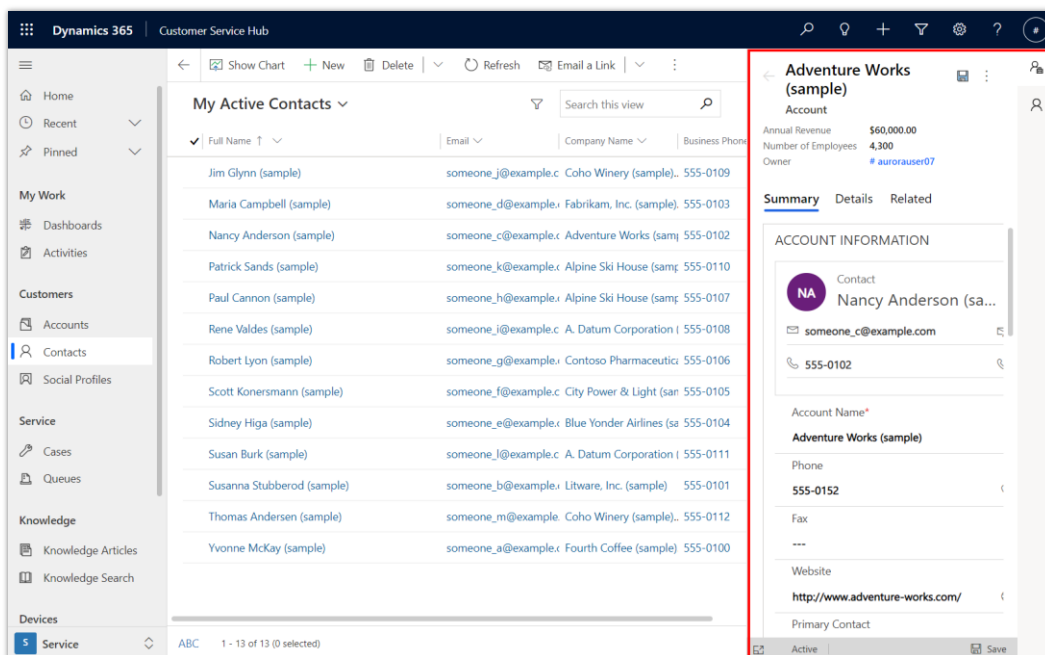
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	Jan 2022

Business value

Enable one or more productivity-enhancing panes to be opened to the side of the main content.

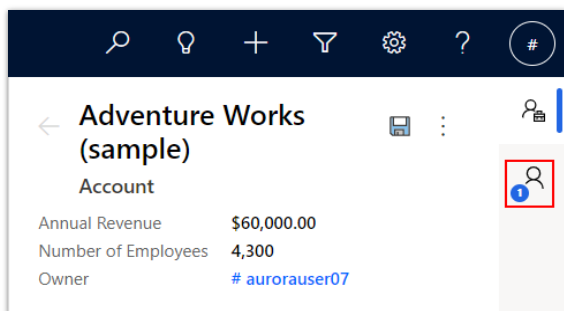
Feature details

Model-driven apps now support the ability to have multiple app-level side panes. The app side pane feature builds on the legacy `loadPane1` API, which was limited to a single side pane. This new feature creates a collection of tabs, each with a different pane. Omnichannel for Customer Service and Dynamics 365 Customer Service products have a similar experience of multiple tabs within the single pane. That experience is moving into the app side pane and allowing additional panes to be added.



Model-driven app with two panes in the app side pane

A set of new client APIs is used to create and manage multiple side panes. The pane can open pages in a way similar to how the `navigateTo` API works, and it allows either in-place navigation or opening in another part of the app. It's easy to open a view or form in the pane. The new custom page with out-of-the-box or custom components can create a more targeted experience. Each pane can have a badge over the tab icon to draw the user's attention.



App side pane tab has badge count overlay

To support the legacy `loadPane1` API along with the new multiple side panes, the `loadPane1` API will be placed in a tab in the side pane collection when 2021 release wave 2 is enabled. Before 2021 release wave 2, `loadPane1` will continue to work as it does now, but calls to the new API will replace the pane. For earlier opt-in to the combined behavior, a new app setting can be enabled for the model-driven app. In the future, the `loadPane1` API will be deprecated, with the exception that existing usage is moved to the app side pane. No changes are being made to the left side pane, which is used by Omnichannel for Customer Service and Dynamics 365 Customer Service products.

See also

[Creating side panes by using a client API](#) (docs)

Updates to Power Apps trial plan

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Jan 2022

Business value

Users without a Power Apps license can have access to the full capabilities of Power Apps through the 30-day trial plan, which can be extended two more times to continue using the app while you plan for the purchase of a license.

Feature details

The Power Apps 30-day trial plan allows users to renew the trial period two more times after the initial 30 days have ended, for a full trial period of up to 90 days. After that, a license will be required to use the app. This allows users to continue working with their apps without getting blocked and provides sufficient time to plan for and acquire the right licenses to access the app.

Pay-as-you-go business model for Power Apps

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	✓ Sep 2, 2021	-	Feb 2022

Business value

Only pay for what you use, after you use it. With pay-as-you-go, unlicensed users can use Power Apps without procuring a license or planning ahead.

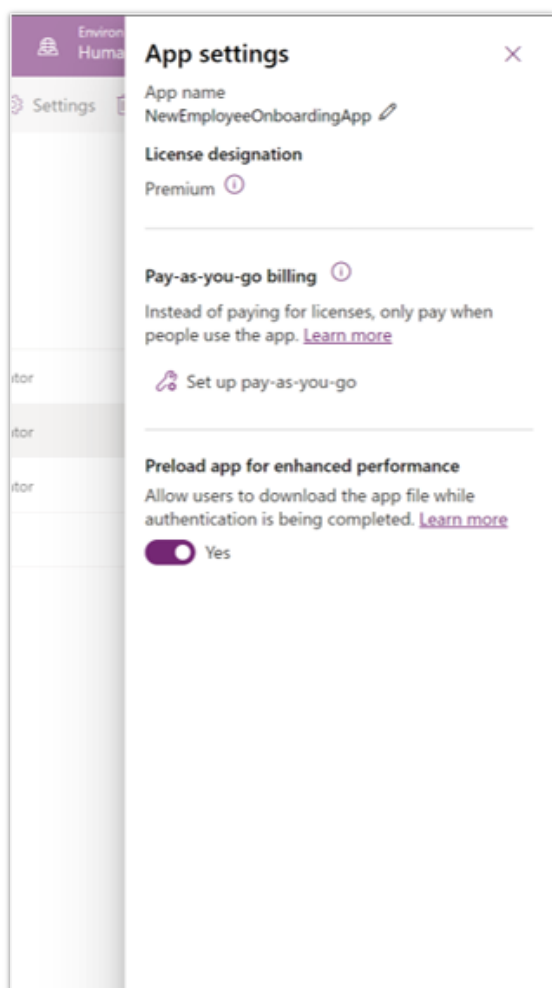
This creates a no-cliffs, seamless experience for professional developers to adopt Power Apps and pay using an Azure subscription. This model also provides new customers with flexibility to try out Power Apps without commitment. What's more, it offers existing customers the ability to enable additional usage in scenarios where subscription plans aren't economical, such as needing only occasional use of an app for a large user base.

Feature details

The pay-as-you-go billing model is enabled via three Azure meters: Power Apps per-app meter, Power Platform requests meter, and Microsoft Dataverse meter.

- The Power Apps per-app meter will allow active users to use the apps without any licenses. An active user is defined as a unique user who launched the app at least once in a month. Active app usage will be billed against the Azure subscription. People with existing user licenses will be excluded from billing.
- With the Dataverse meter and Power Platform requests meter, any overages beyond the entitlement will be charged against the Azure subscription.

pay-as-you-go setup can be done with a few simple clicks from within the Power Platform admin center or Power Apps. An itemized report will be available to view the charges.



Pay-as-you-go setup

See also

[Pay-as-you-go plan](#) (docs)

Find all the relevant Power Apps on Office.com

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2021	Mar 2022

Business value

Increase ROI from your digitization efforts by making it easier for users to find the right app at the right time from a single location where they can search for any digital asset: Office.com.

Feature details

Organizations are using Microsoft Power Platform to digitize multiple workloads in their line of business; however, finding the right app can sometimes be difficult. Users may fall back to asking their peers and sharing links, which isn't ideal.

With this feature, the right apps are surfaced in the **Business Applications** section on [Office.com](https://office.com). The first thing a user will see is the most relevant apps that they use. They can also search for apps based on names, keywords, descriptions, and other metadata.

Power Apps portals

Overview of Power Apps portals 2021 release wave 2

Power Apps portals empowers organizations to extend data and business process to their internal and external users in a secure manner. It allows organizations to create multilingual, responsive, and branded portals.

Use Power Apps portals [documentation](#) to get detailed information about how portals can be used to meet a variety of business requirements.

The 2021 release wave 2 is focused on enhancements in the areas of portals platform, new capabilities for pro development, and increased developer productivity. Several new capabilities are being added with a specific focus on pro development.

What's new and planned for Power Apps portals

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Core platform

Additional and enhanced capabilities on the platform allow makers to enable more scenarios out-of-box while implementing Power Apps portals.

Feature	Enabled for	Public preview	General availability
Dataverse search integration in portals	Users by admins, makers, or analysts	✓ Dec 20, 2021	
Enable your portal as a Progressive Web App (PWA)	Users by admins, makers, or analysts	✓ Nov 29, 2021	Jan 2022
Portals support for Choices multi-select columns in Microsoft Dataverse	Users by admins, makers, or analysts	✓ Dec 13, 2021	Feb 2022

Professional developer experiences

Unlock advanced portal customizations using professional developer capabilities and familiar toolsets.

Feature	Enabled for	Public preview	General availability
Portals Web API support for Microsoft Dataverse custom actions	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Support for CI/CD of portals configuration	Users by admins, makers, or analysts	-	✓ Nov 3, 2021
Portals support for Power Apps component framework	Users by admins, makers, or analysts	-	Jan 2022
Portals Web API support for Read operations	Users by admins, makers, or analysts	✓ Oct 25, 2021	Jan 2022
Web files in portals to use File column type from Microsoft Dataverse	Users, automatically	-	Feb 2022

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Core platform

Overview

The additional and enhanced capabilities on the platform allow makers to enable more scenarios out-of-box while implementing Power Apps portals.

Dataverse search integration in portals

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Dec 20, 2021	-

Business value

With Dataverse search enabled, global search within Power Apps portals will be consistent with the search within Microsoft Power Platform and provide enhanced capabilities.

Feature details

In this release, the portals global search experience will provide an option to use [Dataverse search](#) for searching records across multiple tables and columns while remaining consistent with applying the portals search configuration and security permissions.

Eventually, this experience will become the default search experience for Power Apps portals. It will replace the current [search](#) (based on Lucene.NET) with the new capabilities for intelligent search in future releases.

See also

[Configure Dataverse search in portals preview](#) (docs)

Enable your portal as a Progressive Web App (PWA)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Nov 29, 2021	Jan 2022

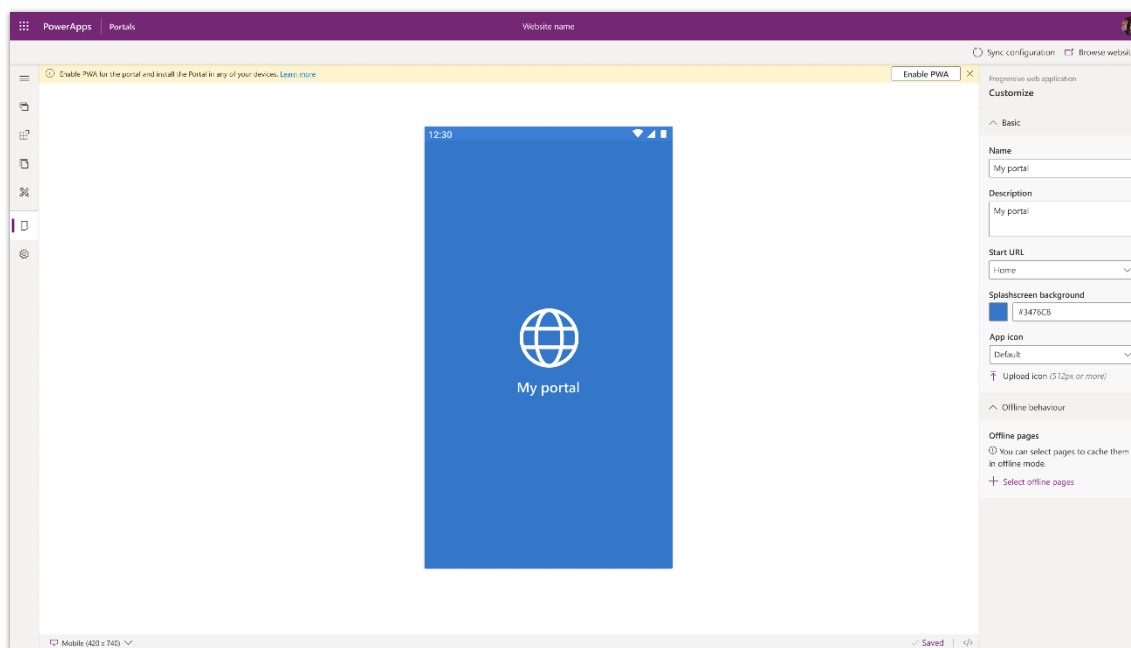
Business value

Makers can enable an existing portal as a Progressive Web App (PWA) to allow for a better native app-like experience for internal and external portal users. Additionally, makers will be able to increase the mobile outreach for portals by creating mobile application packages across app stores.

Feature details

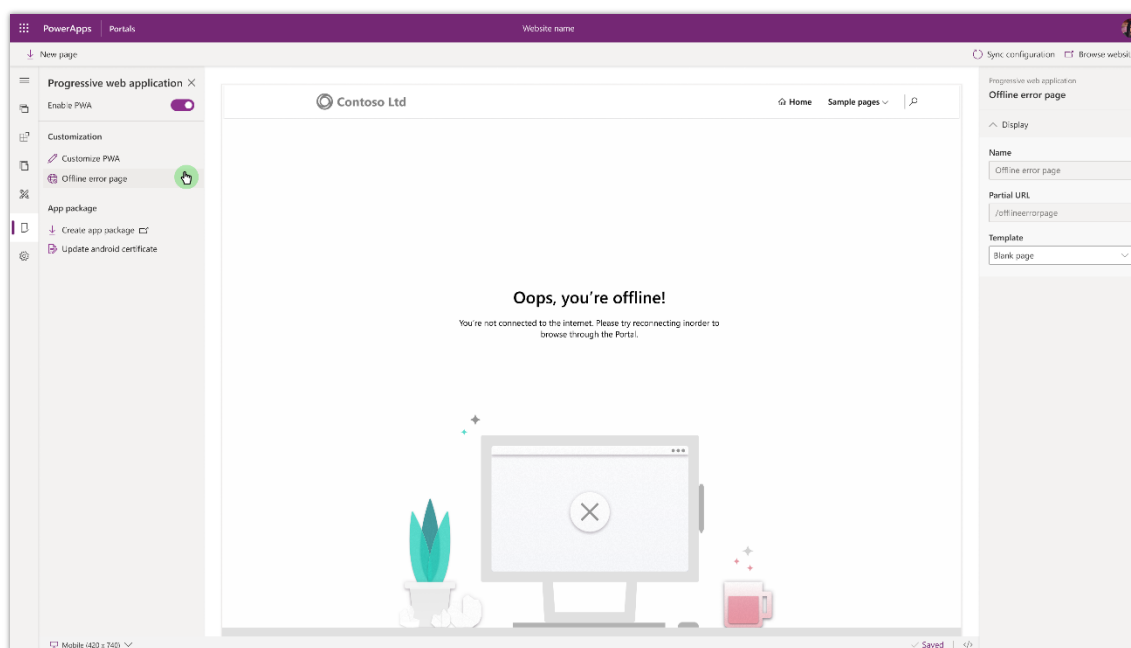
This feature will allow portal makers to enable their existing portals as Progressive Web Apps with the following capabilities:

- Makers can enable their portal as branded white label PWAs and end users can pin portals as PWAs from their browser across different platforms.



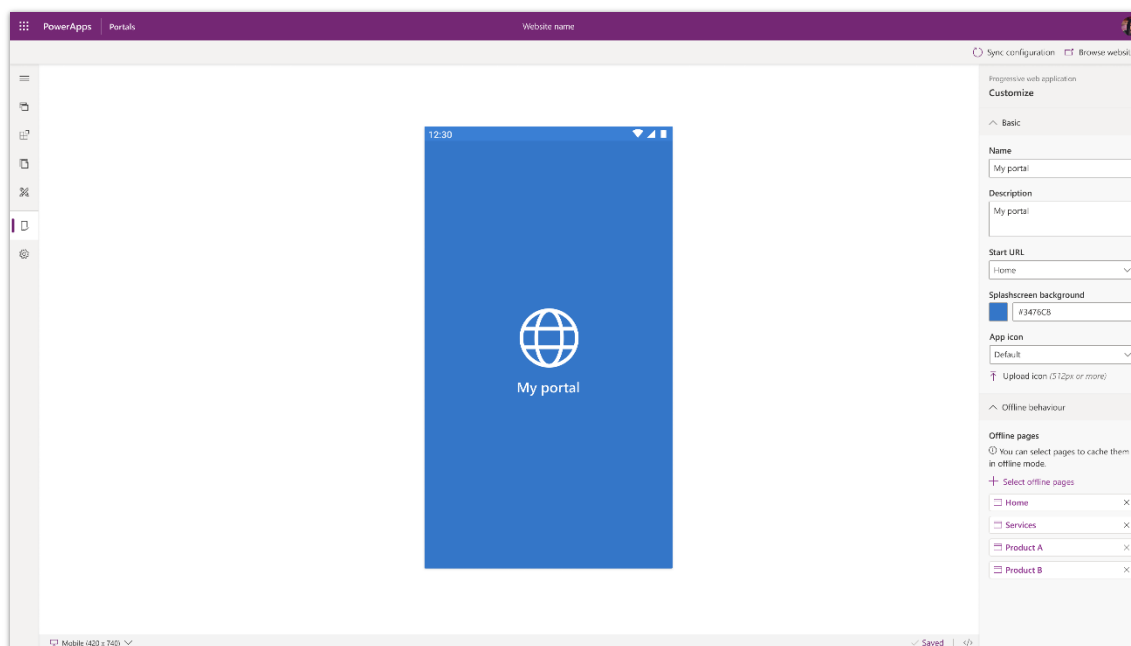
PWA Customize

- Makers can customize a generic offline page for the app to allow graceful handling of PWAs if end users are offline.



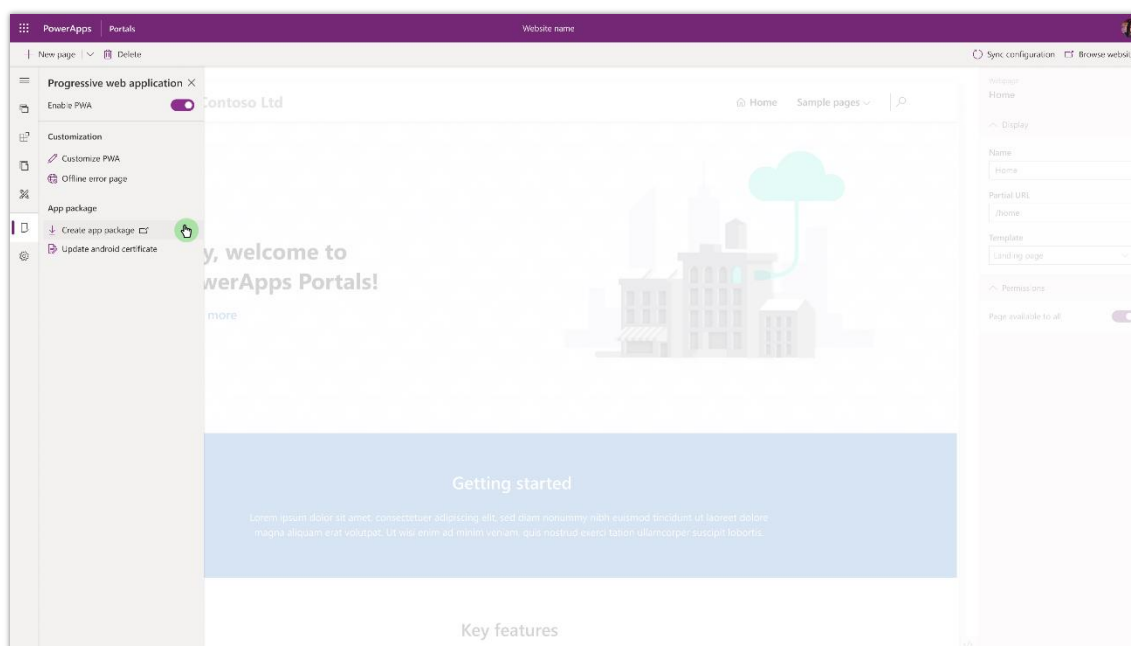
PWA offline generic error

- Portal makers can choose which pages can be cached in order to be accessible to end users even if they're offline.



PWA Offline cached pages

- For the portals which are enabled as PWAs, makers can go one step further and create mobile app packages for different app stores. Makers can use these packages to publish directly to different app stores.



PWA app package

See also

[Enable your portal as a Progressive Web App](#) (video)

[Overview of Progressive Web Apps](#) (docs)

Portals support for Choices multi-select columns in Microsoft Dataverse

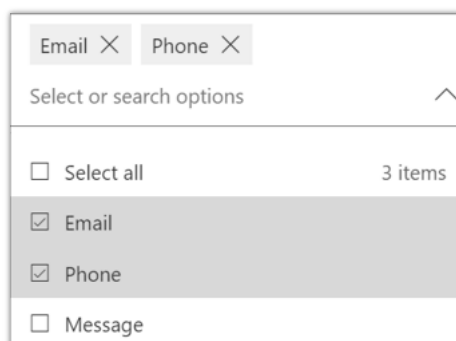
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Dec 13, 2021	Feb 2022

Business value

To configure forms and lists with multiple options in Power Apps portals, makers can set up their portal to surface Choices multi-select columns defined in Microsoft Dataverse.

Feature details

In this release, Power Apps portals is extending the support for [Choices multi-select columns](#) from tables in Dataverse to forms and lists in portals. Makers can design [basic forms](#) and [advanced forms](#) to include Choices columns that provide portal users the ability to select multiple options while submitting data, and display views with Choices columns through lists. Developers can design the webpages containing the Choices control using [Liquid templates](#) and [Web API](#).

A screenshot of a web form element. At the top, there are two tabs labeled 'Email' and 'Phone', each with a close 'X' icon. Below the tabs is a text input field with the placeholder 'Select or search options' and a small upward-pointing chevron icon on the right. Below the input field is a list of items. The first item is 'Select all' with an unchecked checkbox and '3 items' to its right. The next two items are 'Email' and 'Phone', both with checked checkboxes and highlighted with a grey background. The final item is 'Message' with an unchecked checkbox.

Choices column type

See also

[Configure choices column on portals preview](#) (docs)

Professional developer experiences

Overview

Use professional developer capabilities and tools with portals to enable advanced portal customizations and configurations.

Portals Web API support for Microsoft Dataverse custom actions

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

This feature enables Power Apps portals developers to use Microsoft Dataverse custom actions from portals Web API.

Feature details

Actions represent reusable operations you can perform using Web API. Actions may have observable side effects, such as creating or updating records. This feature will enhance portals Web API by adding support for Microsoft Dataverse custom actions. By including custom actions support, developers will be able to call Web API to perform complex operations.

Support for CI/CD of portals configuration

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	✓ Nov 3, 2021

Business value

This feature enables Power Apps portals developers to use Microsoft Power Platform CLI tools to enable CI/CD for portal configurations.

Feature details

Microsoft Power Platform CLI tooling is the first step toward a comprehensive application lifecycle management (ALM) story where the enterprise developers and independent software vendors (ISVs) can create, build, debug, and publish their extensions and customizations quickly and efficiently. For more information, go to [What is Microsoft Power Platform CLI?](#)

See also

[Announcing General Availability of Power Apps portals support for Microsoft Power Platform CLI](#) (blog)

[Microsoft Power Platform CLI commands for portals](#) (docs)

Portals support for Power Apps component framework

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2022

Business value

This feature will allow makers to be able to use code components on portals to create custom UI elements used within forms and webpages on a portal.

Feature details

Power Apps component framework enables app makers to create code components to use across apps. With general availability, we'll support the following code components created using Power Apps component framework inside Power Apps portals.

Field components on forms

This type of code components will allow fields on portal forms to be replaced with code components. The configuration will typically involve configuring the code component in the corresponding table form in Microsoft Dataverse first. After that, the code component will be enabled on the portal using a basic form or an advanced form's step metadata configuration.

The following is an example of how a sample linear slider code component looks on a form inside a portal.

The screenshot shows a portal form for 'Contoso, Ltd.' with a header bar containing a home icon and 'Knowledge Base'. The form is titled 'Details' and contains several fields: 'Topic *' (text input), 'Contact' (lookup field with a magnifying glass icon), 'Account' (lookup field with a magnifying glass icon), 'Est. Revenue' (text input), and 'Est. Close Date' (date picker). A 'Submit' button is at the bottom left. A red box highlights a 'Budget Amount' linear slider code component, which shows a value of 512.

Linear slider code component on a portal webpage.

Components on webpages

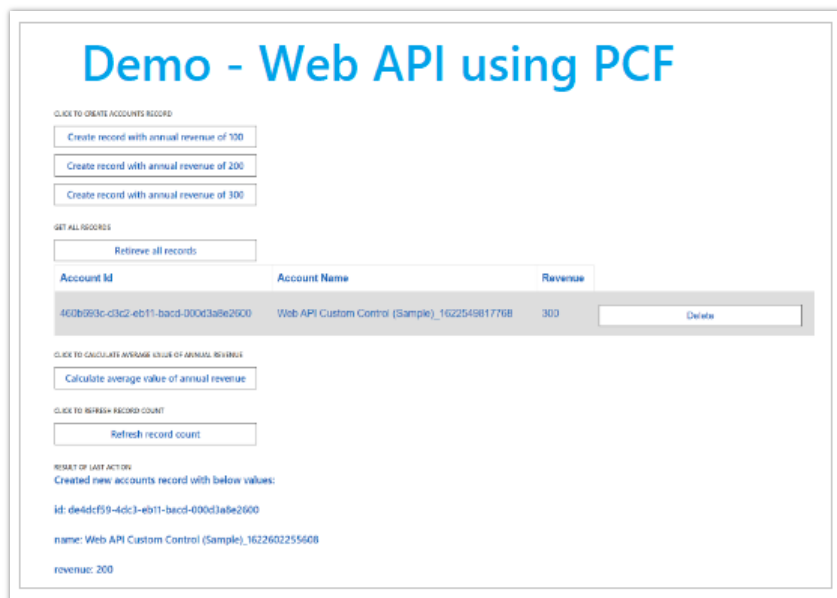
Adding code components directly on page using liquid tags will be allowed. The following is an example of how the sample 3D viewer code component added using liquid tag looks on a page inside a portal.



3D image viewer code component on a portal page.

Web API support

The Web API support for component controls will allow using CRUD operations (Create/Read/Update/Delete) using `context.webAPI` methods. The following is an example of how Web API code component looks on a webpage inside a portal.



Code component using Web API.

Portals Web API support for Read operations

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Oct 25, 2021	Jan 2022

Business value

Developers will be able to use GET requests to retrieve data from tables in Microsoft Dataverse.

Feature details

The portals Web API enables building a richer user experience inside Power Apps portals pages. You can use Web API to perform Create, Update, and Delete operations across all Microsoft Dataverse tables from your portal pages. For example, you can create a new account or update a contact for a product by using the portals Web API instead of using forms or lists.

This feature will enhance portals Web API by adding support for the **Read** operation. With this feature, developers can use portals Web API for querying the data, including support to:

- Use GET requests to retrieve data from a table
- Allow query options to set criteria for data you want from a table

See also

[Query data using portals Web API](#) (docs)

Web files in portals to use File column type from Microsoft Dataverse

Enabled for	Public preview	General availability
Users, automatically	-	Feb 2022

Business value

This feature will make the **Web File** table consistent with rest of the Microsoft Power Platform capabilities for storing files and allow portals to store single files through the **file columns** capability in Microsoft Dataverse.

Feature details

Web files in portals currently use the **Notes** (annotations) table to store single files as attachments. With this capability, we're bringing the [file columns](#) capability in Microsoft Dataverse to the **Web File** table in portals for storing the associated files.

- Once this capability is available, makers will be able to manage files using a new file column in the **Web File** table.
- Portals Studio will start using the new column for storing image, theme, or files used by portals website.
- This release will also include a one-time attachment migration to the new file column for the most recent Notes attachments.

Power Automate

Overview of Power Automate 2021 release wave 2

Microsoft Power Automate provides the tools you can use to improve your business' productivity by automating repetitive, time-consuming tasks. Power Automate provides a better way to get things done across your organization through digital and robotic process automation (RPA).

Power Automate is investing in several areas as a part of Microsoft Power Platform 2021 release wave 2, including the following:

- **Microsoft Teams:** With more than 100 million daily active users, Microsoft Teams is central to Microsoft's remote work strategy, and Power Automate is key to the Microsoft Teams extensibility strategy for providing automation for your collaboration scenarios. We will build more and easier entry points across the Microsoft Teams experience, such as in meetings/calendars and other types of conversations. It will also be possible for administrators to push solutions that contain flows across the teams in their organization.
- **Dynamics 365, Power Apps, Power BI, and Microsoft Dataverse:** With deeper integrations, we're making it easier for professional developers and users to collaborate and deploy solutions on Microsoft Power Platform.
- **Power Automate Desktop:** This component was released to general availability in 2020, and it enables makers to automate the diversity of applications on their desktops. Going forward, we'll provide migration for existing Softomotive and UI flows customers, secure credential management, and much more. We're building enterprise trust for desktop flows by providing what centers of excellence need in the cloud: centralized management, monitoring, and reporting that allow users to scale beyond the per-flow experience in the portal. These experiences will provide security, governance, and administration so that administrators can extend their control over desktop flow artifacts in the Power Platform admin center and Center of Excellence toolkit.
- **AI builder:** Effective automation in any organization relies heavily on AI to be reliable and scalable, so we're further investing in content intelligence – specifically, in document automation where we'll be adding better support for multiple layouts, extracting content from tables, working with checkboxes and radio buttons on forms, and support for more languages.
- **Process advisor:** Process advisor is the newest component in Power Automate. This component provides organizations with insights into their tasks via a process map that shows variations across different instances and analytics. With this knowledge, organizations can use the recommendations that process advisor provides to make more informed decisions on which areas to automate to optimize their processes.

What's new and planned for Power Automate

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Cloud flows

Cloud flows are automations that run in the cloud and can be triggered automatically, instantly, or with a schedule.

Feature	Enabled for	Public preview	Early access*	General availability
Connection references panel on the flow details page shows unfilled references	Users, automatically	-	-	Dec 2021
Default connection reference names will be unique	Users, automatically	-	-	Dec 2021
Solution checker warns if flows don't meet ALM guidelines	Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022
Integrations with team management in Microsoft Teams	Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022
Access the connection reference edit panel from the flow details page	Users, automatically	-	-	Mar 2022
Updates for instant flows in canvas apps	Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022

Feature	Enabled for	Public preview	Early access*	General availability
More collaborative comments in cloud flows	Admins, makers, marketers, or analysts, automatically	Nov 2021	-	Mar 2022

Desktop flows

Power Automate Desktop and desktop flows enable you to automate repetitive processes in desktop or web applications.

Feature	Enabled for	Public preview	Early access*	General availability
Power Automate availability in Windows	Admins, makers, marketers, or analysts, automatically	✓ Mar 15, 2021	-	✓ Oct 4, 2021
Save an Excel workbook as XML data	Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 25, 2021
Sensitive variables in Power Automate Desktop	Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 25, 2021
Clear last error in the Get last error action	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Create a copy of a desktop flow from the Power Automate for desktop console	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Display message windows are now scrollable	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Import window element as a parameter in the Send keys action	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Feature	Enabled for	Public preview	Early access*	General availability
On block error action offers more options for unhandled errors	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Save an Excel workbook as an XLSB file	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Syntax highlighting within the script editor in Power Automate for desktop designer	Admins, makers, marketers, or analysts, automatically	-	-	Dec 2021
The Recognize entities in text action is available in desktop flows	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Web recorder and desktop recorder are now unified	Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021
Support Windows OCR engine in the OCR actions	Admins, makers, marketers, or analysts, automatically	-	-	Dec 2021
Restructure of Excel instance functionality to support multiple macros	Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022
Scale unattended desktop flows with the Azure Virtual Desktop starter kit	Admins, makers, marketers, or analysts, automatically	✓ Oct 25, 2021	-	Feb 2022
Monitor desktop flows in Power BI through DirectQuery	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022
Power Automate to support tenant picker with UI	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Feature	Enabled for	Public preview	Early access*	General availability
Convert Base64 encoded text to and from file	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022
New action to Extract tables from PDF	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022
Option to include headers during table extraction	Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022
Java automation in SWT framework applications	Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022
More resilient UI automation in Citrix environments	Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022
Power Automate for desktop supports IE mode in Edge browser	Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022
Custom dialog action in Power Automate Desktop	Admins, makers, marketers, or analysts, automatically	Feb 2022	-	Mar 2022
Data loss prevention policies for desktop flows	Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	To be announced

Document automation

Document automation is an end-to-end solution allowing users to receive documents in emails, extract data from documents, and review and approve that data.

Feature	Enabled for	Public preview	Early access*	General availability
Document automation solution	Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 8, 2021

Process advisor

Process advisor quickly captures detailed steps for each process in your organization to help you better understand places to streamline workflows.

Feature	Enabled for	Public preview	Early access*	General availability
Process advisor support for custom attribute filtering	Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	-
Process advisor support for process mining using event log data	Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	-
Customize filters in process advisor	Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-	-
Process advisor task mining support for the auto-grouping of recordings	Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-
Share process mining analysis reports with others in process advisor	Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-
Process advisor improved connector recommendations for automate activities	Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-

* You are able to opt in to some features as part of early access features on August 2, 2021, including all mandatory changes that affect users. To learn more, go to [Early access FAQ](#).

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Cloud flows

Overview

Cloud flows are automations that run in the cloud using our 475+ connectors. They can be triggered automatically, instantly, or with a schedule.

Connection references panel on the flow details page shows unfilled references

Enabled for	Public preview	Early access	General availability
Users, automatically	-	-	Dec 2021

Business value

The connection references panel on the flow details page will now allow users to view the details of the connection references that are missing connections.

Feature details

Currently, if you import a flow into a solution that doesn't have a connection, those missing connection references aren't shown in the connection references panel on the flow details page.

With this feature, the connection references panel will display the details of the connection references that are missing connections.

Default connection reference names will be unique

Enabled for	Public preview	Early access	General availability
Users, automatically	-	-	Dec 2021

Business value

Default names of connection references will now be unique, eliminating the risk of connection references having the same name.

Feature details

Currently, when a connection reference is automatically created, its name defaults to the connector's name. This can result in many connection references having the same name.

With this feature, the default names of connection references will be unique and include the name of the solution in which they are created.

Solution checker warns if flows don't meet ALM guidelines

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022

Business value

With the addition of solution checker rules for flows, users will be warned if flows don't meet the established guidelines for application lifecycle management (ALM).

Feature details

The application lifecycle management process may include a step where the solution checker reports whether resources are built based on established ALM guidelines and best practices. Currently, there aren't any solution checker rules for flows.

With this feature, solution checker rules will be added to ensure that solution flows use connection references instead of connections, and to check if solution flows use the SharePoint data source when possible.

Integrations with team management in Microsoft Teams

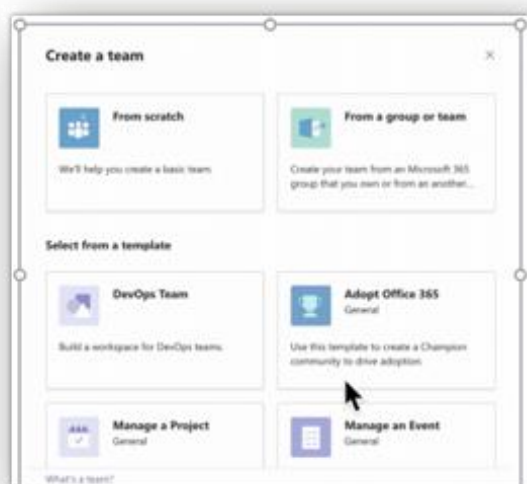
Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022

Business value

This feature adds Power Automate flow templates in Microsoft Teams templates. Team owners can now more easily add flows into new teams when they create a team from a Microsoft Teams template.

Feature details

Users who create and manage teams in Microsoft Teams can use Power Automate for several scenarios. For example, we'll pair Power Automate templates with Microsoft Teams templates to enable scenarios like posting a welcome message, automated channel notifications, and more.



Microsoft Teams templates

Access the connection reference edit panel from the flow details page

Enabled for	Public preview	Early access	General availability
Users, automatically	-	-	Mar 2022

Business value

With the addition of a link to the connection reference edit panel on the flow details page, users will save time by opening the connection reference directly instead of having to navigate to the solution first.

Feature details

Currently, the connection references panel on the flow details page shows the name of a connection reference, but the user must first navigate to the solution and open it in order to edit the connection reference.

With this feature, the connection references panel on the flow details page will be updated with a link to the connection reference edit panel so that users can quickly view its details, change its name, or adjust its connection.

Updates for instant flows in canvas apps

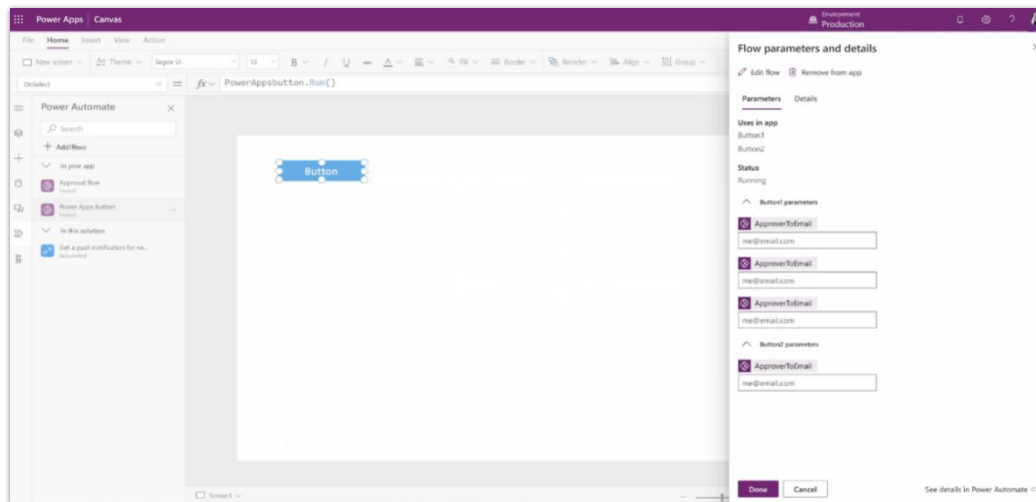
Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022

Business value

Enhancements to instant flows in canvas apps include a new **Flow parameters and details** pane, which makes it easier to pass a complex set of data to a flow.

Feature details

A common challenge in working with instant flows in canvas apps is that you need to modify the data that you send to the flow. Previously, you needed to work with the formula bar, which can be challenging when there's a complex set of data to pass to the flow. To make this easier, we're adding a **Flow parameters and details** pane that you can access while you're working on your canvas app.



New pane in canvas apps.

This new pane shows:

- Each place where an instant flow is called in the canvas app
- A view of the data that's passed to each flow input so you can quickly change the data passed to your flow
- A way to remove a flow from the canvas app entirely

More collaborative comments in cloud flows

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Nov 2021	-	Mar 2022

Business value

More functionality to commenting in cloud flows will bring collaborative authoring to business processes.

Feature details

Like comments in your favorite Microsoft 365 applications, such as Word and PowerPoint, you'll be able to *@mention* colleagues and even create tasks in Microsoft Planner for specific comments. You'll also receive email notifications when someone leaves a comment in your flows or mentions you in a comment.

See also

[Engage with collaborative comments in cloud flows](#) (video)

Desktop flows

Overview

Power Automate Desktop continues to get quicker and simpler to use, easier to deploy, more scalable, and easier to govern. In 2021 release wave 2, we'll make substantial improvements across the board to these capabilities.

Power Automate availability in Windows

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Mar 15, 2021	-	✓ Oct 4, 2021

Business value

Users of the new Windows 11 will have Power Automate for desktop in their machines by default.

Feature details

With the new Windows release, users will be able to automate core scenarios on their desktops. Power Automate will be available at no additional cost to users of Windows Home and above, and will be searchable from the **Start** menu. Once launched, users will be able to sign in to Power Automate with a Microsoft or school account and easily begin automating.

See also

[Power Automate availability in Windows](#) (docs)

Save an Excel workbook as XML data

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 25, 2021

Business value

Users will be able to save their Excel workbooks as XML data.

Feature details

Users will now be able to save their Excel workbooks as XML data (.xml), either through the **Save Excel** or **Close Excel** action. This feature will be present as an option in the **Document format** list of both actions. It will be called: XML Data (*.xml).

To use this feature, the user works on an existing file that contains the XML map(s) that are needed to save/export the workbook as XML data. The save operation produces an .xml file with the extracted data in the location the user selects.

See also

[Desktop actions reference: Save Excel](#) (docs)

Sensitive variables in Power Automate Desktop

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 25, 2021

Business value

For security purposes, users will be able to mask sensitive data and avoid persisting their values in the logs.

Feature details

With this feature, users can tag any variable as *sensitive*. Sensitive variables are not visible in the Power Automate Desktop designer during runtime and they're also not logged in the desktop flow logs.

See also

[Manage variables and the variables pane: Sensitive variables](#) (docs)

Clear last error in the Get last error action

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

The latest addition of the **Get last error** action will allow users to clear the error value stored in the memory.

Feature details

The **Get last error** action must be enhanced to include a toggle button that enables users to select whether its contents are cleared after it's invoked. If the action is called again, the variable should contain the "No error" message, as it currently does.

See also

[Clear last error in the Get last error action](#) (docs)

Create a copy of a desktop flow from the Power Automate for desktop console

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

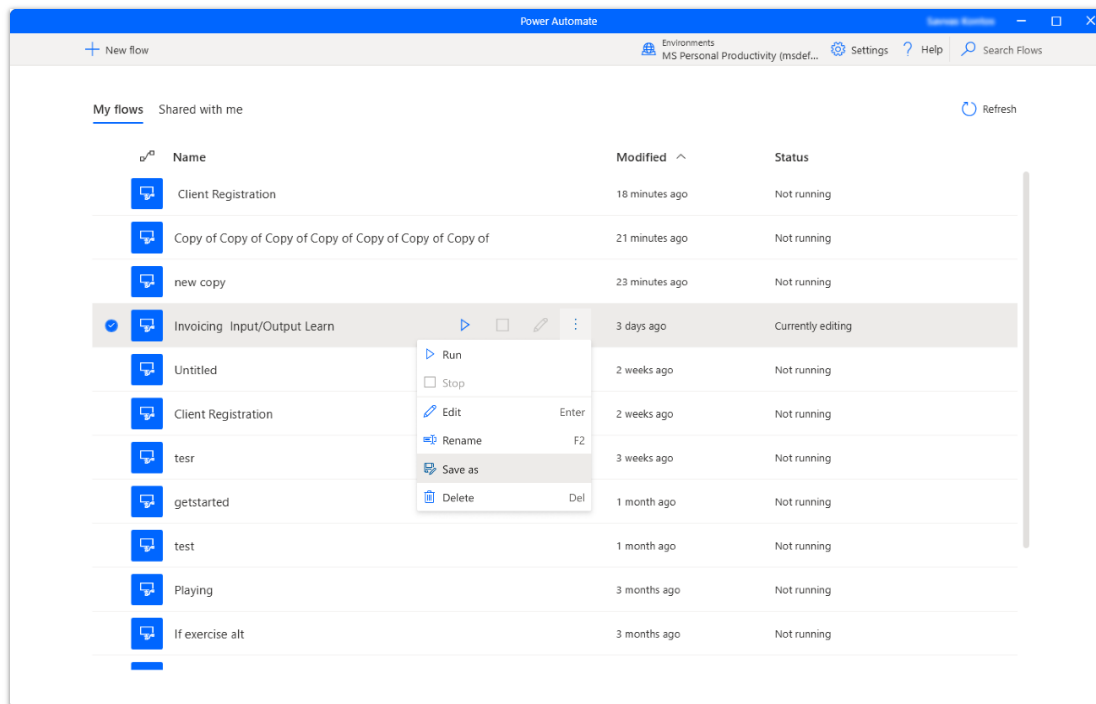
Users can duplicate a flow directly from the flow list in the Power Automate for desktop console.

Feature details

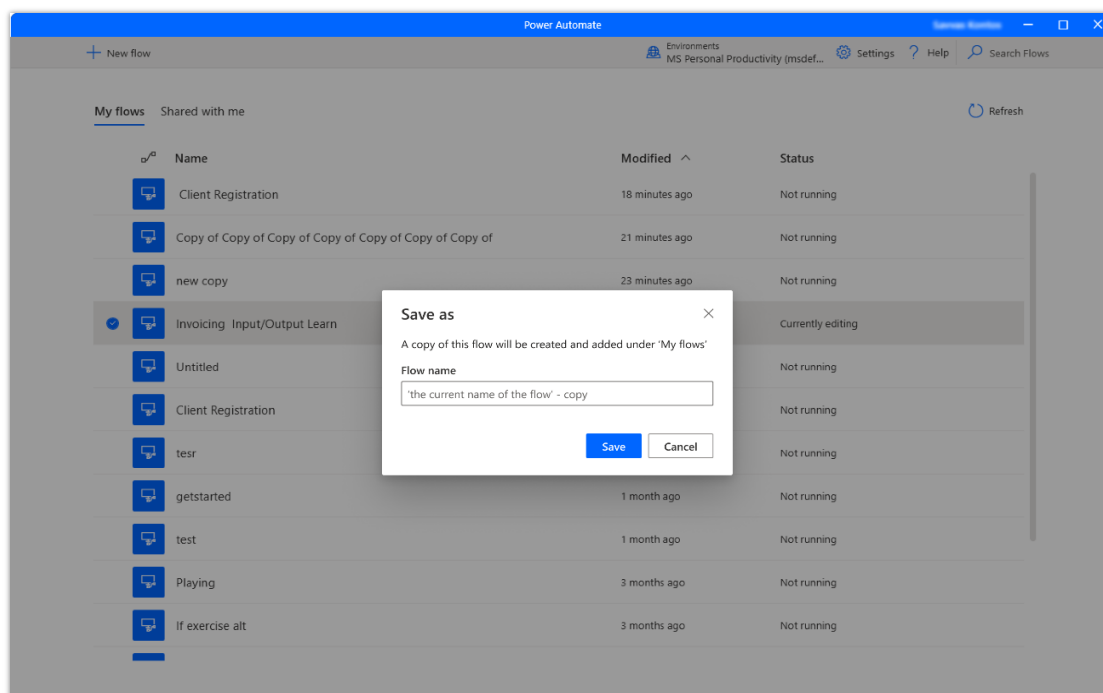
To create a copy of a desktop flow directly from the Power Automate for desktop console:

- Navigate to the console.
- Select the flow that you want to duplicate.
- Select **Save as** from the menu list.

After a few moments, the copy of your flow will appear under the **My flows** tab of the console.



The Save as flow menu option in Power Automate for desktop console.



The Save as dialog as it appears in Power Automate for desktop console

See also

[Create a copy of a desktop flow from the Power Automate for desktop console](#) (docs)

Display message windows are now scrollable

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

Users have a more convenient way of interacting with pop-up dialogs generated by **Display message** actions.

Feature details

Display pop-ups are now more flexible and efficient to use, allowing users to scroll through the presented text. Users have a more convenient way of interacting with pop-up dialogs generated by **Display message** actions. A scrollbar appears, depending on the size of the provided text, making the whole interaction more user friendly.

Import window element as a parameter in the Send keys action

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

The **Send keys** action of Power Automate for desktop is enhanced with a new parameter that allows users to specify the window to which keys should be sent. The action is more robust and the user is able to control its outcome fully.

Feature details

With the new "Find window mode" parameter, users can set the window to which inserted keys will be sent, even if the window is not in the foreground. Options for the parameter include:

- Foreground window
- By window UI element
- By window instance/handle
- By title and/or class

See also

[Import window element as a parameter in the Send keys action](#) (docs)

On block error action offers more options for unhandled errors

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

Users will be able to handle more errors through the exception configuration modal.

Feature details

This feature will assist users/RPA developers in capturing and handling errors that stem from erroneous logic. Such errors include division by zero, index out of bounds cases when retrieving from a list, and more.

See also

[On block error action offers more options for unhandled errors](#) (docs)

Save an Excel workbook as an XLSB file

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

Users will be able to save their Excel workbooks as XLSB files.

Feature details

Excel workbooks can now be saved as XLSB files (.xlsb), either through the Save Excel or Close Excel action. This allows for more scenario coverage and elaborate flow creation.

More info on (.xlsb): This is a binary file format, which is a collection of records and structures that specify Excel workbook content. The content can include unstructured or semi-structured tables of numbers, text, formulas, external data connections, charts, and images.

See also

[Save Excel](#) (docs)

Syntax highlighting within the script editor in Power Automate for desktop designer

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Dec 2021

Business value

Support for syntax highlighting in the script editor provides citizen developers a better experience while embedding code in their flows.

Feature details

This feature brings support for syntax highlighting for all the actions that support script editors. These actions include:

- Run VB Script
- Run PowerShell
- Execute SQL statement
- Run JavaScript
- Run Python
- Run JavaScript function in webpages

The Recognize entities in text action is available in desktop flows

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

Power Automate for desktop enables users to extract various entities from natural language text using the **Recognize entities in text** action.

Feature details

The **Recognize entities in text** action receives text expressed in natural language and returns a table containing the recognized entities, such as numbers, dates, measurement units, and more.

See also

[Recognize entities in text](#) (docs)

Web recorder and desktop recorder are now unified

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Dec 13, 2021

Business value

Users can now record both their web- and desktop-related activities using the same recorder.

Feature details

The web recorder and desktop recorder are unified into a single Power Automate for desktop recorder. With the unified recorder, users can record both their web- and desktop-related activities during a single recording session.

See also

[Record flows in Power Automate Desktop](#) (docs)

Support Windows OCR engine in the OCR actions

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Dec 2021

Business value

Provide users an alternate OCR engine to choose in OCR related actions to improve results of finding and extracting texts in different cases. Windows OCR engine also has direct UX benefits, such as supporting more languages and robustness in finding text on screen when compared to Tesseract OCR engine.

Feature details

Apart from Tesseract OCR engine, we want to support the Windows OCR engine as a way to work with the following OCR related actions:

- If text on screen (OCR)
- Wait for text on screen (OCR)
- Move mouse to text on screen (OCR)
- Extract text with OCR

Restructure of Excel instance functionality to support multiple macros

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Jan 2022

Business value

Users will now have the ability to create Excel processes and have the ability to group Excel instances under a single Excel process.

Feature details

This new feature allows Excel instances to reference multiple macros. The ability to launch isolated instances will also remain available.

Scale unattended desktop flows with the Azure Virtual Desktop starter kit

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 25, 2021	-	Feb 2022

Business value

Scale automation without the need to provision machines by leveraging Azure Virtual Desktop (AVD) integration. This will reduce TCO and enable customers to adapt to their changing business needs by easily scaling up and down.

Feature details

With desktop automation, you must first provision and configure custom environments for you to manage. These additional steps slow adoption. This feature allows IT admins to register their Azure Virtual Desktop pools with Power Automate so they can be used to run desktop automations, providing elastic scale on demand.

See also

[Introduction to the Power Automate Azure Virtual Desktop integration starter kit](#) (docs)

Monitor desktop flows in Power BI through DirectQuery

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

This feature enables users to create custom Power BI reports with real-time desktop flows run data.

Feature details

Leverage DirectQuery in Power BI to connect to the desktop flows related tables from Microsoft Dataverse for real-time data retrieval while respecting the existing Dataverse security model. Build insightful dashboards from scratch for operational monitoring and reporting, or improve the performance of your existing dashboard solutions. For more information, go to [Desktop flow analytics dashboard starter template](#).

Power Automate to support tenant picker with UI

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

Users with accounts that belong to multiple tenants can now easily switch between tenants by using the in-app tenant picker.

Feature details

Users of the Power Automate app may often need to sign in to multiple tenants. With the tenant picker feature within Power Automate for desktop, users will be able to switch between tenants of the same organization or different ones, without taking extra steps through the Power Automate portal.

Convert Base64 encoded text to and from file

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

In 2021 release wave 2, you'll be able to convert Base64 encoded text to file and the other way around.

Feature details

Users will be able to leverage two new actions in Power Automate desktop:

- Convert Base64 encoded text to file
- Convert file to Base64 encoded text

New action to extract tables from PDF

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

With this new action, users will be able to automatically identify and extract all structured data tables from a PDF document, making it fast and easy to prepare and use tabular data from PDFs in your flow.

Feature details

With just the PDF document path as an input, this action will extract all the tables from the selected PDF page range and store each table in a list variable with the following additional information:

- Start page index
- End page index
- Table order number
- Table name

In advanced settings of the action, users will also have an option to select first row as column headers and another option to merge tables that match across page boundaries. Both will be true by default.

Option to include headers during table extraction

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Feb 2022

Business value

This will offer an easy way to include column headers, after extracting an entire HTML table in a variable, by using the new corresponding property.

Feature details

In every datatable type variable, there will be a new property of datarow type, which will hold the column names of the said table. This will enable writing these column headers in a row (for example, in Excel) in an easy and straightforward way, rather than relying on the existing **Columns** property, which returns the column headers in the form of a list.

Java automation in SWT framework applications

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022

Business value

In 2021 release wave 2, Power Automate desktop supports Java automation scenarios related to Java apps that have the Standard Widget Toolkit (SWT) as underlying technology.

Feature details

Power Automate desktop capabilities for UI automation in Java apps and applets are now enhanced, as Power Automate for desktop now supports UI automation scenarios based on SWT Java apps.

The user experience for automation Java apps will be seamless, independently of the underlying technology used, and the user will be able to cover most of the Java automation cases.

More resilient UI automation in Citrix environments

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022

Business value

Power Automate will improve the support for reliable UI automation with Citrix systems.

Feature details

Today, customers can automate Citrix systems using image recognition with desktop flows. Although image recognition is flexible and can work for any system, it's not as reliable as UI automation, which leverages the UI elements using accessibility APIs.

In this release, we'll improve our support for UI automation on Citrix environments by having a lightweight runtime inside the target Citrix environment. This runtime will be able to communicate with the Citrix session and thus directly access UI elements, bringing direct addressability to controls that bypasses the need for image-based lookup where possible. Customers will have a choice to use either this lightweight runtime approach or existing image processing for performing their automation.

Power Automate for desktop supports IE mode in Edge browser

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	Mar 2022

Business value

Web automation scenarios that are related to web pages opened in Internet Explorer (IE) mode in Edge browser can now be supported.

Feature details

Users may perform web automation actions on web pages that are being opened in IE mode in Edge browser. IE mode in Microsoft Edge is useful for cases that require Internet Explorer 11 for backward compatibility with existing websites but also need a modern browser. After the deprecation of the Internet Explorer browser, these pages will be opened in IE mode in Microsoft Edge.

Power Automate for desktop will support web actions that are being applied over a web page that is opened in IE mode in Edge browser. This new feature is a seamless experience for the user when performing web automation tasks in either default Edge mode or IE mode.

Custom dialog action in Power Automate Desktop

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	-	Mar 2022

Business value

With this action, users will be able to create their own dialog, combining the controls and elements of their choice into a single dialog window.

Feature details

The custom dialog feature will be based on the adaptive cards technology. Makers can use an intuitive designer to configure this dialog in any way they'd like in order to meet their needs. For example, a maker can combine controls and elements into a single dialog. Makers can also provide input data in a flexible and dynamic way.

Data loss prevention policies for desktop flows

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	To be announced

Business value

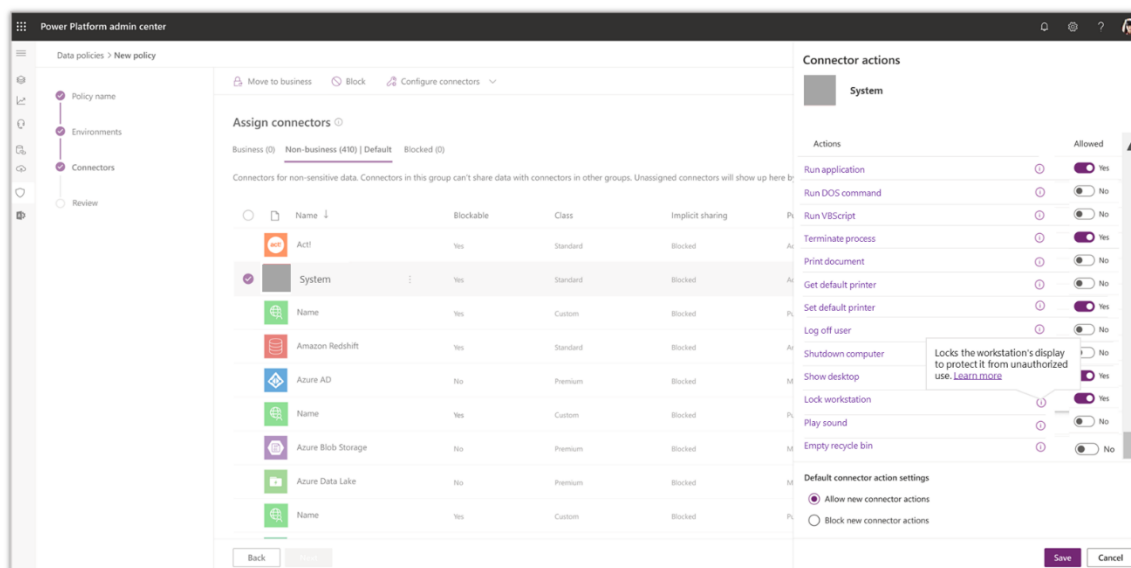
Data loss prevention policies in Microsoft Power Platform give additional control to administrators who wish to limit their users beyond the standard policies that govern access to their data.

Feature details

In 2021 release wave 2, admins will be able to create new policies to govern desktop flows. These policies will allow environment admins to perform the following actions:

- Classify Power Automate Desktop modules into either business, non-business, or blocked categories
- Block specific actions in modules
- Set the default rules for new actions and new modules

As with cloud flows, there will be some built-in actions that cannot be blocked by admins. If a desktop flow is in violation of one or more policies, it will not run.



Pane for configuring options for a module in data loss prevention for desktop flows.

See also

[Data loss prevention \(DLP\) policies](#) (docs)

Document automation

Overview

Document automation is a solution that allows you automate processing of your documents in an end-to-end process. It includes the following capabilities:

- Process documents received in emails orchestrated by Power Automate
- Extract data from documents using AI Builder models
- Process the data extracted and allow users to review and approve data through central manual validation Power Apps
- Export the processed data to external systems using Power Automate connectors
- Statistics on number of documents processed

Document automation solution

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	-	-	✓ Oct 8, 2021

Business value

Document automation is reference implementation for automating documents such as invoices. It can be used out-of-the-box to save days of implementation or as inspiration to accelerate your implementation.

Feature details

[Document automation](#) is an end-to-end solution for processing documents at scale. It includes:

- A document queue
- A Power Apps validation station to allow for manual user validation of processed documents
- AI Builder preconfigured models to extract data from documents
- Many flows for importing documents and exporting data to external systems

Document automation offers a generic solution that's customizable for a broad range of document types and specialized solutions for specific types of documents.

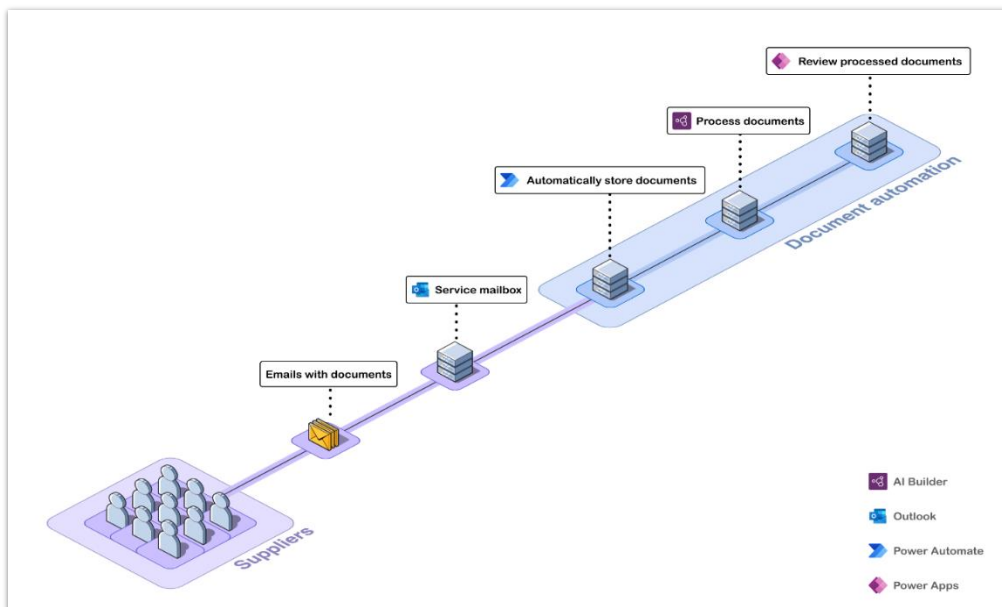


Diagram showing the stages of document automation.

New capabilities that are generally available in the toolkit include:

- Automatic data validation
- Confidence scores in the Power Apps validation application
- Exportation of extracted data to Dynamics 365 Finance and Operations
- Richer interactions with the manual validation application
- Prebuilt models like receipt processing and invoice processing

See also

[Document automation toolkit](#) (docs)

Process advisor

Overview

Process advisor quickly captures detailed steps for each process in your organization to help you better understand places to streamline workflows.

Process advisor support for custom attribute filtering

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	-

Business value

Customers can now use different custom attributes as filters to derive deeper insights.

Feature details

Process advisor process mining now supports custom attribute filtering in analytics. This provides users with the ability to filter through multiple attributes specific to their data to acquire richer insights.

See also

[Visualize and gain insights from processes in process advisor](#) (docs)

Process advisor support for process mining using event log data

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 24, 2021	-	-

Business value

Customers can now use event log data from systems of record to understand inefficiencies in the process.

Feature details

Process advisor now supports process mining using event log data. This allows users to leverage event log data from systems of record to produce process maps and analytics that can help them better understand and address inefficiencies.

See also

[Prepare processes and data in process advisor](#) (docs)

Customize filters in process advisor

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	-	-

Business value

With the ability to choose your specific custom attributes (such as Location, Vendor, Department, and more), you can filter and drill down into your process data to understand your processes accordingly.

Feature details

Every organization has unique needs when it comes to analyzing their tasks. Users now have the ability to see custom attributes as filters in their process advisor reports, so they can customize their reports according to what is important to their business.

See also

[Visualize processes in process advisor](#) (docs)

Process advisor task mining support for the auto-grouping of recordings

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-

Business value

Users can more easily annotate their desktop recordings with recommended groupings.

Feature details

Process advisor will now provide recommended groupings for desktop recordings, making it easier for users to annotate the recordings. Users can choose to follow the recommendations or continue creating their own groupings.

Share process mining analysis reports with others in process advisor

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-

Business value

Users of process advisor can share permissions with others to view their process mining analytics.

Feature details

Process advisor now supports the sharing of process mining analysis reports with others. Users who aren't owners of the process are able to view the analytics and gain meaningful insights into the process.

Process advisor improved connector recommendations for automate activities

Enabled for	Public preview	Early access	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-	-

Business value

Users of process advisor will be provided with improved connector recommendations for automate activities.

Feature details

These improvements to process advisor will enable richer automation recommendations by providing more connector recommendations based on desktop recordings.



Power Virtual Agents

Overview of Power Virtual Agents 2021 release wave 2

Power Virtual Agents enables anyone in your organization to create AI-powered bots that can chat with users about specific topics. They can answer routine questions, resolve common issues, or automate tasks that take up valuable customer or employee time.

The 2021 release wave 2 brings improvements in the authoring experience with variable passing between topics, list variables, inline images and videos, regular expressions in custom entities, and commenting. We are also facilitating initial bot setup with bot creation from templates, sharing bots with security groups, and new AI capabilities to build your bots automatically from website content.

Creating a bot is typically a complex and time-intensive process, requiring long content update cycles and a team of experts. Power Virtual Agents gives anyone in your organization the ability to create powerful custom bots using an easy, code-free graphical interface without the need for AI experts, data scientists, or teams of developers. A bot can interact with users, ask for clarifying information, and ultimately answer a user's questions.

With deep integration with Power Automate and the Microsoft Bot Framework, authors can extend their bots to integrate with API back ends, which will enable the bots to handle additional topics, limited only by the author's imagination. You can deploy bots to many channels including websites, Microsoft Teams, and Facebook.

Use Power Virtual Agents documentation to get detailed information and answers to address your needs, from basic authoring tips all the way to complex bot configuration topics.

For official product documentation and training for Power Virtual Agents, go to:

- [Power Virtual Agents documentation](#)
- [Power Virtual Agents training on Microsoft Learn](#)
- [Power Virtual Agents videos on YouTube](#)

What's new and planned for Power Virtual Agents

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Bot configuration

Configure bots to suit the individual needs of an organization and to provide further extensibility with other services and features.

Feature	Enabled for	Public preview	General availability
Share bots with colleagues using security groups	Users by admins, makers, or analysts	-	✓ Oct 15, 2021
Connect bots to phone call interactions with Dynamics 365 Customer Service	Users by admins, makers, or analysts	-	✓ Nov 1, 2021
Mention and interact with bots directly in a team's channel in Microsoft Teams	Admins, makers, marketers, or analysts, automatically	-	Jan 2022
Use Power Virtual Agents bots as Bot Framework skills	Admins, makers, marketers, or analysts, automatically	-	Jan 2022

Core authoring

Use the Power Virtual Agents conversational editor to construct your dialogs with rich content, variables, and powerful entity types.

Feature	Enabled for	Public preview	General availability
Notify Microsoft Teams users about updates to their queries	Admins, makers, marketers, or analysts, automatically	✓ Oct 26, 2021	-
Use regular expressions (regex) in your bots	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021
Pass and return variables to subtopics	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 28, 2021
Refresh Power Automate flows in topics without needing to remove them	Admins, makers, marketers, or analysts, automatically	-	Jan 2022

Feature	Enabled for	Public preview	General availability
Run flow connectors as the user	Users by admins, makers, or analysts	-	Jan 2022
Add comments to enable better collaboration	Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	Feb 2022

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Bot configuration

Overview

Bots can be configured to suit the individual needs of an organization and to provide further extensibility with other services and features. This includes authentication provider support, the use of Microsoft Bot Framework skills to augment the bot's capabilities, integration with Microsoft Teams, Facebook, and other channels, and more.

Share bots with colleagues using security groups

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	✓ Oct 15, 2021

Business value

By using security groups to share a bot, you can easily manage who should or shouldn't have access to your bot within your organization. This makes it easier for your business to target specific internal groups.

Feature details

In addition to only [allowing teammates or the whole tenant to chat with the bot](#), you can share your bot with security groups. This means you can set a dynamic group of users to chat with the bot, which is helpful when creating bots that only apply to specific groups of types of users. For example, you might create a bot for HR employees that's specific to their role.

See also

[Share bot with security groups](#) (docs)

Connect bots to phone call interactions with Dynamics 365 Customer Service

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	✓ Nov 1, 2021

Business value

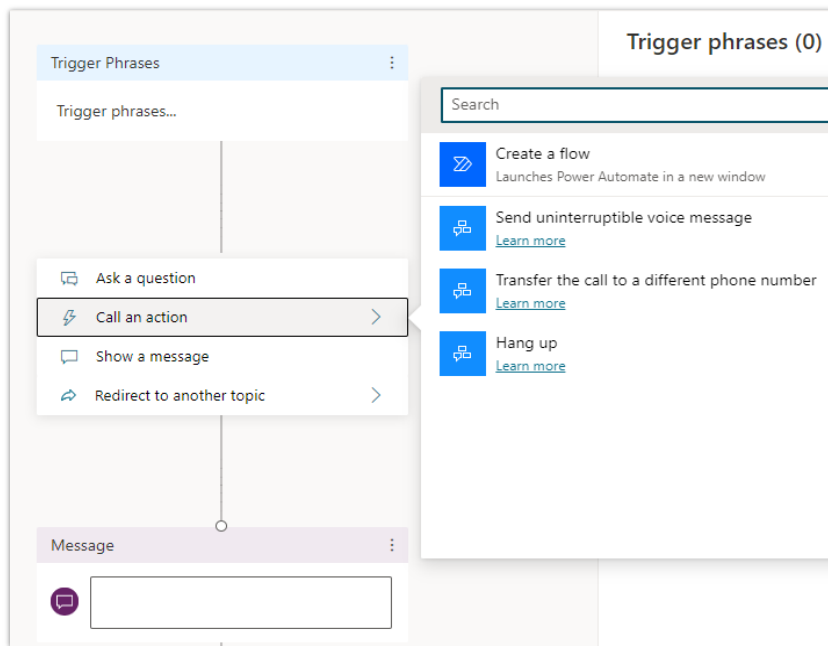
Expand the scope of your support offerings by allowing your customers to interact with bots using their voice. Integrate those chats with Dynamics 365 Customer Service for further escalation.

Feature details

With Power Virtual Agents, you can seamlessly and contextually hand off escalated Power Virtual Agents conversations to live (human) agents using the Chat Add-in for Dynamics 365 Customer Service.

You can connect both voice-based and text-based bot conversations by installing extension solutions that link your bot with Dynamics 365 Customer Service.

The Power Virtual Agents telephone extension adds a number of additional actions and variables that can be used by Power Virtual Agents chatbots to understand, reply to, and transfer voice calls to the bot.



List of voice-related actions that can be added to a node in Power Virtual Agents.

See also

[Configure hand-off for voice and text bot conversations to Dynamics 365 Customer Service \(docs\)](#)

Mention and interact with bots directly in a team's channel in Microsoft Teams

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Jan 2022

Business value

Interacting with bots directly in a Microsoft Teams channel helps team members solve issues on their own without having to navigate to a separate website or location to access the bot.

Feature details

Bot makers can create and add chatbots to a team's channel in Microsoft Teams. Team members can talk directly to a bot in a channel by typing the @ symbol followed by the bot's name. Anyone else in the channel will be able to see the bot's responses.

Use Power Virtual Agents bots as Bot Framework skills

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Jan 2022

Business value

Bot makers can extend the capabilities of their Power Virtual Agents bots by making them available as Microsoft Bot Framework skills.

Feature details

Power Virtual Agents bots aren't always used in isolation. Sometimes, you might want to include a bot as part of an existing bot system or other process.

Going forward, bot authors will be able to make their bots available as Microsoft Bot Framework skills. This means you can allow Bot Framework and other Power Virtual Agents bots to use the bot-turned-skill in dialogs to extend the original bot's capabilities.

See also

[Use Power Virtual Agents bots as skills with Bot Framework bots feature exploration](#) (video)

Core authoring

Overview

Creating a bot with Power Virtual Agents is easy to do with the no-code authoring canvas, and there are a number of ways you can manage how topics interact, how you want the conversation to flow, and what it should feel like.

It's easy to test the bot without having to fully deploy the bot whenever you make a small change. There are also lesson topics that guide you through topic authoring from simple to complex scenarios as well as default system topics. You can choose what language you want your bot to use, too. Variables and entities make your bot more capable of understanding your users, and rich content makes your bot more relatable and easier to use.

Notify Microsoft Teams users about updates to their queries

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 26, 2021	-

Business value

Microsoft Teams users can receive proactive messages when a change or update is made to a question they asked the bot. This increases the bot user's efficiency as they'll no longer need to constantly open and ask the bot the same question.

Feature details

We're adding the ability to send proactive messages from a bot to its users in a Microsoft Teams chat by using a Power Automate workflow. For example, a bot user might ask the bot *Has my budget been approved?*, to which the answer is *Not yet*.

Now, instead of the user having to ask the question again every day, you can create a Power Automate flow that notifies the user that the response to their question has changed, and what the new response is.

See also

[Send proactive messages and cards in Microsoft Teams](#) (docs)

Use regular expressions (regex) in your bots

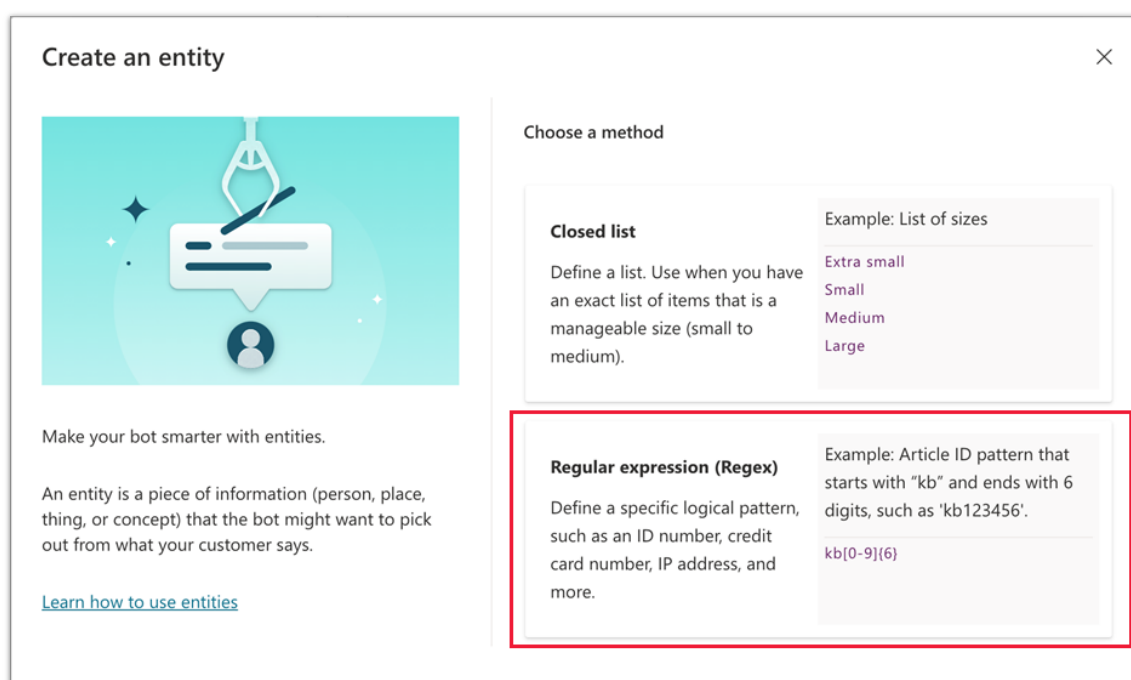
Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021

Business value

Regular expressions provide a powerful, flexible, and efficient method for processing text. The extensive pattern-matching notation of regular expressions enables you to quickly parse large amounts of text and ensure they match a predefined pattern.

Feature details

Power Virtual Agents now supports entity extraction based on regular expression patterns. Your bot will be able to identify patterns such as product IDs, serial numbers, email addresses, and other patterns from user responses.



Screenshot of the entity creation window, with the Regex option highlighted.

See also

[Use entities and slot filling in Power Virtual Agents bots: Regex entities](#) (docs)

Pass and return variables to subtopics

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 28, 2021

Business value

This feature enables authors to pass variables from the parent topic to subtopics, facilitating the creation and maintenance of large topics.

Feature details

Subtopics operate just like normal topics except they run within the context of that parent topic. With the addition of variable passing, variables from the parent topic can be referenced in the subtopics as well, making them even more powerful.

For example, say you had a topic that's provided as a response when a user asks for the best places to eat in a city. Within that topic, you might ask follow-up questions to determine the type of food they want, in which area of the city they want to eat, or their price range. You

could design a conversation path that included all of these follow-up questions in one topic, but it could become long, convoluted, and hard to follow from an admin perspective.

Instead, you can have each follow-up question call a subtopic. Any variables you assign within the subtopic will be available within the parent topic, so you could branch off into a subtopic to determine what type of food they want, fill that as a variable, and then return to the original topic to continue asking other follow-up questions. You could then call the food type variable either in the parent topic or use it in the subtopic that asks where they want to eat. That way, you'll only return restaurants that serve the type of food the user wants.

Screenshot of the authoring canvas showing variable properties pane with receive values selected.

See also

[Passing variables between topics](#) (docs)

Refresh Power Automate flows in topics without needing to remove them

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Jan 2022

Business value

All of your flow management needs for Power Virtual Agents are now visible within the authoring canvas, meaning bot makers no longer need to open a new window to troubleshoot issues with flows.

Feature details

Use the **Call an action** node to refresh and replace Power Automate flows directly in a conversation without removing or replacing the flow. This allows makers to see changes made in Power Automate directly in the Power Virtual Agents authoring canvas.

For example, if updates are made to the variable names, input, and output of a flow, the changes will be reflected directly in the authoring canvas. You'll also receive notifications about these changes from within Power Virtual Agents.

Run flow connectors as the user

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2022

Business value

Allowing flows to run as the user lets your bot take action on a user's behalf using their own credentials instead of those of the bot maker.

Feature details

Add Power Automate flows containing connectors that run with the user's permission (referred to as a *run-only user* in Power Automate). This reduces the need to use authentication tokens and helps the chatbot act on your user's behalf. This can be useful for tasks such as sending an email from the user's address, adding a task to their To Do list, accessing files with their credentials, and other tasks where you don't want the bot maker's credentials to be used.

Add comments to enable better collaboration

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 31, 2021	Feb 2022

Business value

Allow everyone on your team to see and share ideas, comments, and questions in the bots they author. This helps speed up development time and reduces barriers to communication and collaboration.

Feature details

Bot makers, developers, and anyone who has access to author a bot can share ideas, concerns, and questions by leaving comments related to specific topics or even nodes within

a topic. Other authors can respond to these comments and leave their own, allowing conversations to occur directly inside the authoring experience.

See also

[Add comments to bots](#) (docs)

Microsoft Dataverse

Overview of Microsoft Dataverse 2021 release wave 2

Microsoft Dataverse is a low-code data platform that allows you to easily build scalable and interconnected applications, automations, and agents using common data, security, and business logic.

Deliver services with agility

Quickly add business value with an extensible data platform that uses out-of-the-box common tables, extended attributes, semantic meanings, and an open ecosystem enabled by Common Data Model.

Increase scale and efficiency

Boost productivity and reduce costs by quickly developing applications, processes, and reusable data schemes. Repeatably build, validate, and deploy your applications using GitHub and Azure DevOps.

Make your data work smarter

Get accurate insights by adding low-code AI tools to your process automation. Identify and resolve duplicated and conflicting data with a managed data platform that includes built-in business logic and rules.

Rely on the security of a trusted platform

Protect your data with a robust security management infrastructure that provides critical security and compliance capabilities—advanced encryption, rich access control, and deep integration with Azure Active Directory.

What's new and planned for Microsoft Dataverse

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Bridge Microsoft Power Platform to Azure data

Azure Synapse Link for Dataverse is a comprehensive solution that enables seamless Dataverse integration with Azure Synapse Analytics.

Feature	Enabled for	Public preview	General availability
Link Dataverse to Azure Synapse Analytics workspace to bring in Dynamics 365 data	Admins, makers, marketers, or analysts, automatically	✓ May 25, 2021	Nov 2021
Azure Synapse Link for Dataverse - Government Cloud	Admins, makers, marketers, or analysts, automatically	✓ May 26, 2021	✓ Nov 15, 2021
Access Dataverse choice labels directly from Azure Synapse Link for Dataverse	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced
Analyze incremental updates of your Dataverse data with Azure Synapse Link for Dataverse	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced
Azure Synapse Link for Dataverse - China Cloud	Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced
Receive notifications regarding the state of your Azure Synapse Link for Dataverse	Users by admins, makers, or analysts	Mar 2022	To be announced

Microsoft Dataverse API

APIs are web services that apps use to interact with Microsoft Dataverse and are the glue that binds Microsoft Power Platform together.

Feature	Enabled for	Public preview	General availability
Microsoft Dataverse search API v2.0	Admins, makers, marketers, or analysts, automatically	-	✓ Dec 3, 2021

Microsoft Dataverse data

Microsoft Dataverse is the default data store for Microsoft Power Platform. It provides extensive security, filtering, and search within environment bounds.

Feature	Enabled for	Public preview	General availability
Delete and remove users with disabled status	Users by admins, makers, or analysts	Mar 2022	-
Microsoft Dataverse search enabled by default for production environments	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021
Publishers can update non-customizable table settings through solutions	Users, automatically	-	✓ Oct 12, 2021
Microsoft Dataverse search can search through file data type	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 31, 2021
Lookup validation for solutions	Users, automatically	-	Jan 2022
Microsoft Dataverse auditing enhancements	Users by admins, makers, or analysts	✓ Mar 31, 2021	Jan 2022
Access integration with Microsoft Power Platform	Admins, makers, marketers, or analysts, automatically	✓ Nov 2, 2021	Feb 2022
Modernize business units	Users by admins, makers, or analysts	✓ Nov 12, 2021	Feb 2022
Patching the Basic User security role	Users by admins, makers, or analysts	-	Mar 2022
Support Azure Active Directory group with dynamic membership type	Users by admins, makers, or analysts	-	Mar 2022
Support merging of security role privileges for ALM solution import	Users by admins, makers, or analysts	-	Mar 2022

Microsoft Dataverse plug-ins

Developers can write plug-ins that respond to events raised by the Microsoft Dataverse framework. These plug-ins are the foundation of Dynamics 365 solutions.

Feature	Enabled for	Public preview	General availability
Dependent assemblies for plug-ins	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Bridge Microsoft Power Platform to Azure data

Overview

Customers have asked for a single, end-to-end way to work with data in Microsoft Dataverse, including running AI and machine learning, integrating with external datasets, and slicing and dicing large volumes of Dataverse data. Now, instead of using multiple tools to get the job done, you can accelerate time-to-insight with a single comprehensive solution: Azure Synapse Link for Dataverse. This solution can help you deliver on your end-to-end goals, and is already built in and available out of the box.

Azure Synapse Link for Dataverse enables seamless Dataverse integration with Azure Synapse Analytics to empower users to analyze data in the lake. With just a few clicks, you can bring your Microsoft Dataverse data to Azure Synapse Analytics and visualize data in your Azure Synapse workspace. You can also quickly start processing the data to discover insights using advanced analytics capabilities for serverless data lake exploration, code-free data integration, data flows for extract, transform, load (ETL) pipelines, and optimized Apache Spark for big data analytics.

Enterprise customers are now able to use the familiarity of T-SQL to analyze big data and gain insights, while optimizing their data transformation pipeline to leverage the deep integration of Azure Synapse with other Azure services such as Power BI Embedded, Azure CosmosDB, and Azure Machine Learning.

Link Dataverse to Azure Synapse Analytics workspace to bring in Dynamics 365 data

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ May 25, 2021	Nov 2021

Business value

With this feature, you can bring Dynamics 365 data to Azure within a few clicks to enable several analytical scenarios using AI and ML.

Feature details

With this feature, you can use Synapse Link for Dataverse to link a Microsoft Dataverse environment to Azure Synapse Analytics workspace and bring external data or Dynamics 365 data that's stored in Microsoft Dataverse to Azure Synapse Analytics.

Synapse Link for Dataverse enables a seamless integration with Azure Synapse Analytics. With a few clicks, you can bring your Dataverse data to Azure Synapse, visualize data in your Azure Synapse workspace, and rapidly start processing the data to discover insights using advanced analytics capabilities for serverless data lake exploration, code-free data integration, data flows for extract, transform, load (ETL) pipelines, and optimized Apache Spark for big data analytics.

Seamless integration of Dataverse with Azure Synapse empowers our customers to analyze data in the lake. Enterprise customers are now able to use the familiarity of T-SQL to analyze big data and gain insights from it, while optimizing their data transformation pipeline to leverage the deep integration of Azure Synapse with other Azure services, such as Power BI Embedded, Azure Cosmos DB, Azure Machine Learning, and Azure Cognitive Services.

See also

[Create an Azure Synapse Link for Dataverse with your Azure Synapse Workspace](#) (docs)

Azure Synapse Link for Dataverse - Government Cloud

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ May 26, 2021	✓ Nov 15, 2021

Business value

Azure Synapse Link for Dataverse will be available for Government Cloud.

Feature details

Government Cloud customers are looking to analyze their Dataverse data in Azure Synapse Analytics in a manner that's compliant with government regulations. With just a few clicks, Government Cloud users can leverage Azure Synapse Link for Dataverse to quickly and continuously analyze their data securely.

Access Dataverse choice labels directly from Azure Synapse Link for Dataverse

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

Users will have direct access to Dataverse choice text labels from Azure Synapse Link for Dataverse, eliminating the extra steps that were previously needed to access the integer-to-text label mapping.

Feature details

Previously, Azure Synapse Link for Dataverse wrote an integer label rather than the text label for columns that use Microsoft Dataverse choices (option sets) to maintain consistency during edits. This approach required users to take extra steps to access the integer-to-text label mapping that's stored in the Microsoft.Athena.TrickleFeedService/table-EntityMetadata.json file to make it available with their Dataverse data.

Now, Azure Synapse Link for Dataverse customers have access to a separate table containing their Dataverse choices integer-to-text label mapping, which can be joined with the raw Dataverse data to expose the text label for each Dataverse choice column. This helps both citizen developers and data engineers to easily read the user-friendly version of their Dataverse data.

Analyze incremental updates of your Dataverse data with Azure Synapse Link for Dataverse

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

Users will be able to query and analyze the incremental updates made to Microsoft Dataverse data during a specified time period.

Feature details

Data is rapidly changing, and businesses have a requirement to continuously ingest these changes into their pipelines in Azure Synapse. To enable these scenarios, Azure Synapse Link for Dataverse now provides separate timestamped Incremental folders with changes that occurred during a user-specified time period.

After every specified time interval (in minutes), the user is provided a new timestamped folder that contains only the changes to the Dataverse data that occurred within that period. This empowers users to analyze and report on the changes to their data as well as incrementally load updates into their ingestion pipelines.

Azure Synapse Link for Dataverse - China Cloud

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	To be announced

Business value

Azure Synapse Link for Dataverse will be available for China Cloud.

Feature details

Companies in China are looking to analyze their Dataverse data in Azure Synapse Analytics in a manner that's compliant with government regulations. With just a few clicks, China Cloud users can leverage Azure Synapse Link for Dataverse to quickly and continuously analyze their data securely.

Receive notifications regarding the state of your Azure Synapse Link for Dataverse

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	To be announced

Business value

Users can subscribe to notifications to stay on top of the state of their Azure Synapse Link for Dataverse, instead of manually checking the monitoring page.

Feature details

Azure Synapse Link for Dataverse has a detailed monitoring page describing link status and health. This includes synchronization status of each Microsoft Dataverse table, the number of records or changes, and details about link configuration strategy. Previously, users had to

manually open the monitoring page and check the state of their link. With this feature, users can subscribe to customized notifications and easily stay informed about the health of their Azure Synapse Link.

Microsoft Dataverse API

Overview

Microsoft Dataverse APIs are the glue that binds Microsoft Power Platform together.

- The data APIs provide capabilities to work with data in your Microsoft Dataverse tables and perform specialized operations.
- The relevance search API makes it possible to easily find relevant information that can span multiple tables.

Microsoft Power Platform depends on APIs exposed by Microsoft Dataverse APIs. Canvas apps, model-driven apps, and Microsoft Power Automate depend on Dataverse APIs. ISVs and customers use our APIs to create integrations and custom applications.

Microsoft Dataverse search API v2.0

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Dec 3, 2021

Business value

This capability makes searching over data in Microsoft Dataverse more flexible to meet the diverse requirements makers may have while building search experiences.

Feature details

Microsoft Dataverse search API enables programmatic access to search capabilities over your data in Dataverse. With the new API v2.0, we're adding the following two capabilities:

1. Define a more granular search scope. This includes the ability to specify which tables and columns to search, which filters to apply at a column level, and which columns to include in the search response.
2. Use Microsoft Dataverse search from plug-ins.

See also

[Search across table data using Dataverse search](#) (docs)

Microsoft Dataverse data

Overview

Microsoft Dataverse is the default data store for Microsoft Power Platform. Microsoft Dataverse allows the storage of many types of data in customizable tables. Depending on your data needs, it's possible to store structured and unstructured data in one or many environments. Microsoft Dataverse provides extensive security, filtering, and search capabilities within environment bounds. Microsoft Dataverse API and logic capabilities are used to build and maintain workflows for your application needs.

Delete and remove users with disabled status

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	-

Business value

Remove users who are no longer active in the system to free up storage space and allow for historical records to be purged.

Feature details

When users have been disabled or deleted from Azure Active Directory or Microsoft 365 admin, they are set to **disabled** status in Microsoft Dataverse. Disabled users residing in the system not only take up storage space but also inhibit the ability to purge historical records. This feature provides the capability to delete and remove users who have a disabled status while maintaining data integrity.

Microsoft Dataverse search enabled by default for production environments

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021

Business value

Microsoft Dataverse search enabled by default for production environments makes it easier for users to find information and makers to build intelligent apps, bots, and flows over data in Microsoft Dataverse.

Feature details

Microsoft Dataverse search is now enabled by default for production environments. It is easy to use, fast, and intelligent, and it helps users find their information easily in experiences like

global search in model-driven apps in Power Apps. It also enables makers to build apps, bots, and flows that intelligently search over data in Microsoft Dataverse.

See also

[Enable Dataverse search](#) (docs)

Publishers can update non-customizable table settings through solutions

Enabled for	Public preview	General availability
Users, automatically	-	✓ Oct 12, 2021

Business value

This feature reduces the steps needed for publishers to manage their solutions and make updates that are critical to their users.

Feature details

Today, publishing a new version of a solution to **Enable Auditing = On** on the account table would be ignored because **Allow Customizations = Off**. There are workarounds that would need to be done involving multiple steps to allow customizations on the table, make the changes, and then reinstate the customization lock afterwards.

For example, a customer has their account table set to **Enable Auditing = Off** and **Allow Customizations = Off**.

This new feature will allow a publisher to update **Account to Enable Auditing = On** in a new version of their solution without having to change the customization setting. Because the change is submitted by the publisher, the table setting change is enforced. If a table change was submitted through a different publisher, the **Allow Customization = Off** would be honored, and the change will not be allowed.

For more information about this feature, go to [Publishers can modify table properties for non-customizable solutions](#).

Microsoft Dataverse search can search through file data type

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 31, 2021

Business value

Searching the file data type makes it easier for users to search through their textual information stored in files in Microsoft Dataverse.

Feature details

Microsoft Dataverse search can now search through the file data type, enabling search over text in files like Word docs and PDFs. Microsoft Dataverse search is easy to use, fast, and intelligent, and it helps users find their information easily in experiences like global search in model-driven apps in Power Apps. It also enables makers to build apps, bots, and flows that intelligently search over data in Microsoft Dataverse.

Lookup validation for solutions

Enabled for	Public preview	General availability
Users, automatically	-	Jan 2022

Business value

Performing a validation for all required relationships reduces problems post publishing and helps customers be more successful when distributing solutions.

Feature details

With this new feature, solutions will automatically check for all required lookup relationships prior to export.

Before this feature, it was possible to create a solution, select your solution components, and then export even if you didn't include the lookup relationships necessary for your solution to successfully be imported.

Now, at the time of export, a check will automatically be made on every table of a solution to find lookup fields. Once found, the check will validate that the relationship necessary for the lookup to work properly was included in the solution. If it's not present, an error message will provide details of what table is involved and which relationship is missing.

For more information about this feature, go to [Important New Feature: Relationship Validation for Solutions](#).

Microsoft Dataverse auditing enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Mar 31, 2021	Jan 2022

Business value

Auditing enhancements will provide unlimited log capacity and more granular ways to manage audit logs based on an organization's individual needs for retention of audit data.

Feature details

The following changes have been made to Microsoft Dataverse auditing:

- Audit data is stored in log storage
- Administrators can set a retention period for audit data
- Expired data will automatically be removed from the system per the retention period
- Joining tables from the database storage and the log storage will no longer be possible

See also

[Audit data and user activity for security and compliance](#) (docs)

Access integration with Microsoft Power Platform

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 2, 2021	Feb 2022

Business value

Microsoft Access users can now choose to migrate their databases to Microsoft Dataverse. This will provide rich data possibilities through the use of Microsoft Power Platform while allowing users to continue managing their data using existing Access forms.

Feature details

The Microsoft Access migration tool will simplify and automate the process of moving data to Microsoft Dataverse or Microsoft Dataverse for Teams, using a few simple steps.

- Users can migrate data, tables, and relationships into Microsoft Dataverse or Dataverse for Teams.
- Migrated data and schema can be used with Power Apps, Power Automate, Power Virtual Agents, and Power BI.
- Access users will be able to continue using their desktop client to manage their data, in addition to using the Microsoft Power Platform clients.
- Preview will support 80 percent of available Access types for migration, and provide support for 1:M and self-referential relationships, with more data types and relationships coming in the future.

See also

[Learn about Access integration with Microsoft Power Platform](#) (video)

[Migrate Microsoft Access data to Microsoft Dataverse](#) (docs)

Modernize business units

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Nov 12, 2021	Feb 2022

Business value

We're extending the functionality of the business unit security model by expanding it to allow security roles from different business units to be assigned to a user. This allows a user to access data from different business units based on their security roles.

Feature details

By decoupling a user's business unit from their security role's business unit, security roles from different business units can be assigned to a user. This allows the user to access data from the respective business units without the need to create and join an owner team of the unit. In addition, a user who has security roles from different business units can set the owning business unit for the record when it's created or updated.

See also

[Feature exploration: Modernize business units](#) (video)

[Create or edit business units](#) (docs)

Patching the Basic User security role

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2022

Business value

In order to provide a consistent user experience, a patch will be made to an older version of the Basic User security role to update its global Read/Write privileges to the basic level.

Feature details

Environments that were provisioned between July and September of 2018 may contain an older version of the Basic User security role. This older version has global Read and Write privileges for the following tables:

- Account
- Activity
- Contact

- Customer Relationship
- Feedback
- SLA
- SLAKPI Instance
- Social Profile

A patch will be rolled out to update these global Read/Write privileges to the default basic-level privileges. Users who have been assigned the Basic User security role may be impacted.

Support Azure Active Directory group with dynamic membership type

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2022

Business value

Large enterprises heavily use the dynamic membership type in Azure Active Directory groups to simplify the group membership management. Supporting the dynamic membership type in Microsoft Dataverse will unblock these enterprises.

Feature details

Microsoft Dataverse supports Azure Active Directory (Azure AD) security and office groups including the ability to differentiate Owners, Members, and Guests. To complete the full Azure AD group functionality, we're extending the support of the dynamic membership type. The dynamic membership type leverages business rules to manage the group membership dynamically. Microsoft Dataverse authentication and authorization will be extended to support this membership type.

Support merging of security role privileges for ALM solution import

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2022

Business value

Support the application lifecycle management (ALM) process where security role/privilege updates are honored in managed solutions.

Feature details

Today, when the custom security role and privileges are shipped in upgraded managed partner solutions, the updated security role and privileges are ignored during solution updates. The security role and privileges are replaced with the original ones. When we implement this feature, the custom security role and privileges shall be merged with the original ones thereby honoring any customizations that are released in subsequent solution upgrades.

Microsoft Dataverse plug-ins

Overview

Microsoft Power Platform depends on compute capabilities included in Microsoft Dataverse. Developers can write plug-ins that respond to events raised by the Microsoft Dataverse event framework. These plug-ins are the foundation of the capabilities of Dynamics 365 solutions.

Dependent assemblies for plug-ins

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Support for dependent assemblies with Microsoft Dataverse plug-ins allows developers to be more productive by leveraging capabilities provided by additional assemblies.

Feature details

Microsoft Dataverse plug-in developers have long used an unsupported capability provided by the [ILMerge utility](#) to combine a plug-in assembly plus any needed dependent assemblies together into a single .NET assembly. The resulting assembly can be registered with the web service to extend the Dataverse business logic.

The **dependent assemblies** capability provides a supported way for developers to include additional dependent assemblies along with the plug-in assembly when registering a plug-in with Microsoft Dataverse.

AI Builder

Overview of AI Builder 2021 release wave 2

AI Builder is a Microsoft Power Platform capability that gives everyone in your organization, regardless of their technical expertise, the ability to add AI capabilities to the applications and automation flows they create and use. Using AI is made easier with the native integration of AI Builder in the Power Automate and Power Apps experiences.

We're focusing on providing new functionalities centered around intelligent document processing experiences. New functionalities include the ability to extract a broader set of content types in documents, such as checkboxes, signatures, typed fields like date and currency, and support for more prebuilt models in the document automation solution (for example, receipts, and invoices). Our focus is also on improving the AI model discovery experience, improving performance metrics, and simplifying the authoring experience.

What's new and planned for AI Builder

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

AI scenario improvements

Improvements make it easier to understand the breadth of business possibilities with AI and to try out AI scenarios.

Feature	Enabled for	Public preview	General availability
Bring your own model into AI Builder	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	
AI Builder credit inclusion in Power Apps	Users, automatically	Dec 2021	Dec 2021

Feature	Enabled for	Public preview	General availability
Explore new AI Builder home page	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	Jan 2022
Power Fx support for AI models	Admins, makers, marketers, or analysts, automatically	Dec 2021	Mar 2022
Entity extraction - Advanced training dataset	Admins, makers, marketers, or analysts, automatically	Feb 2022	Mar 2022
AI BYOM - Improvements to bring your own model	Admins, makers, marketers, or analysts, automatically	Feb 2022	To be announced
Enhanced prediction with forecasting support	Admins, makers, marketers, or analysts, automatically	Feb 2022	To be announced

Document processing improvements

New capabilities for intelligent document processing allow customers to process a broader range of document types with increased accuracy.

Feature	Enabled for	Public preview	General availability
Explicitly tag tables in form processing	Admins, makers, marketers, or analysts, automatically	✓ Apr 1, 2021	✓ Oct 22, 2021
Form processing new language support	Users, automatically	-	✓ Oct 25, 2021
Form processing support for checkboxes	Admins, makers, marketers, or analysts, automatically	✓ Oct 22, 2021	Feb 2022
Model summary and performance metrics	Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Extend AI Builder across Microsoft Power Platform

Direct integration of AI Builder models with other Microsoft products provides makers with new templates and easy-to-leverage authoring examples.

Feature	Enabled for	Public preview	General availability
AI Builder features in Microsoft Teams	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

AI scenario improvements

Overview

One of the core principles of AI Builder is to give citizen makers the ability to build AI scenarios with easy-to-use and delightful user interfaces. Scenario improvements focus on the top of the funnel, including redesigning the AI Builder homepage to make it easier to understand the breadth of business possibilities with AI and to try out AI scenarios.

Bring your own model into AI Builder

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	-

Business value

Enable tighter collaboration among makers, pro developers, and data scientists. In-house data science teams that have built their own data science models now have the power to upload them into AI Builder so that makers can use them in Microsoft Power Platform to achieve their business goals.

Feature details

Pro developers and data scientists are able to leverage existing AI models created outside of AI Builder and use them in Microsoft Power Platform. The first phase of this feature release focuses on supporting the import of generic external models as well as models created in Lobe as an enabler. [Lobe](#) is a free desktop application that allows on-the-edge training of AI models focusing on vision and classification scenarios.

See also

[Bring your own AI model into AI Builder](#) (docs)

AI Builder credit inclusion in Power Apps

Enabled for	Public preview	General availability
Users, automatically	Dec 2021	Dec 2021

Business value

AI Builder credits allow existing Power Apps customers to try AI Builder and then decide to convert to paid customers.

Feature details

This feature seeds AI Builder credits into Power Apps premium licenses to lower the barrier to adoption among existing Power Apps customers. Users can first try AI Builder, and then choose to activate the license.

Explore new AI Builder home page

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	Jan 2022

Business value

Improvements to the AI Builder home page make it simpler to browse and select AI Builder models.

Feature details

The new home page for AI Builder focuses on making it easier for you to understand which AI model to choose when implementing a scenario. Models are grouped by key functionality type, and it's easier to try out AI models before building out scenarios.

The home page also features case studies and sample processes to build out using AI Builder. AI Builder showcases a new model summary page, which focuses on improved performance/accuracy scores.

See also

[AI models and business scenarios](#) (docs)

Power Fx support for AI models

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Dec 2021	Mar 2022

Business value

Makers can now flexibly utilize more AI models when creating Power Apps, leading to more usage of intelligent applications.

Feature details

Previously, access to AI models in Power Apps was limited to a handful of models accessed via custom controls. Now, AI models can be accessed directly from Power Fx expressions, including those registered via bring your own model. Any control can access a model, allowing makers to utilize more AI models and create more powerful experiences.

See also

[Use Power Fx in AI Builder models in Power Apps preview](#) (docs)

Entity extraction - Advanced training dataset

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	Mar 2022

Business value

Improved support for managing training datasets across versions of models will enhance the customer experience of entity extraction scenarios.

Feature details

The current experience of entity extraction for labeling and managing training data is very limited, resulting in customers not being able to productionalize the scenario. The improved support for managing training datasets across versions of models will increase customer satisfaction and adoption.

AI BYOM - Improvements to bring your own model

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	To be announced

Business value

Enable tighter collaboration among makers, pro developers, and data scientists. In-house data science teams that have built their own data science models now have the power to upload them into AI Builder so that makers can use them in Microsoft Power Platform to achieve their business goals.

Feature details

Pro developers and data scientists are able to leverage existing AI models created outside of AI Builder and use them in Microsoft Power Platform.

Improvements to bring your own AI model (BYOM) capabilities include:

- Unified model registration APIs
- Improved authentication support
- Simplified application lifecycle management support

Enhanced prediction with forecasting support

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	To be announced

Business value

This feature enables Microsoft Power Platform makers to build high-quality prediction models to classify, predict numerical values, and forecast future outcomes.

Feature details

AI Builder generic prediction capability will be enhanced by leveraging automated machine learning (AutoML) to build machine learning models with high scale, efficiency, and productivity while sustaining model quality.

- Binary prediction
- Classification
- Prediction of numerical values
- Forecast of future outcomes

Document processing improvements

Overview

New capabilities for intelligent document processing allow customers to process a broader range of document types with increased accuracy. Feature updates include:

- Checkbox detection in documents
- General availability of the supervised tables feature that allows users to customize an AI model to detect complex tables in documents
- Support for multipage tables
- The ability to process a page range of documents
- Extraction of typed fields (for example, dates and currency)
- Signature detection in documents
- Accuracy score
- Increased collection size, which allows users to train a model to detect up to 200 collections of documents in the same model
- Support for more than 73 languages detected in forms processing custom model

Explicitly tag tables in form processing

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Apr 1, 2021	✓ Oct 22, 2021

Business value

You can process and train documents with content embedded in tables. This improves the accuracy of a table's extraction and allows you to capture data from tables that weren't detected before. You can experience faster table tagging and draw from tables across multiple pages.

Feature details

This feature allows you to train an AI model to process a wide variety of documents with content embedded within tables. If a table is not detected, or is detected incorrectly by the default model, you'll be able to manually draw the table and tag its content to teach the AI model how to recognize it. This improves the accuracy of the table's data extraction and allows you to capture data from tables that weren't detected before. Drawing tables across multiple pages is also supported as well as a faster table tagging experience.

See also

[Create a form processing custom model](#) (docs)

Form processing new language support

Enabled for	Public preview	General availability
Users, automatically	-	✓ Oct 25, 2021

Business value

AI Builder form processing now supports documents in more than 73 languages.

Feature details

AI Builder form processing extends language support capabilities to more than 73 languages, including English, French, Italian, German, Spanish, Portuguese, Dutch, simplified Chinese, traditional Chinese, Japanese, Korean, Czech, Hungarian, Polish, Swedish, Turkish, Danish, Norwegian, Cebuano, Fijian, Swahili (Latin), Uzbek (Latin), Zulu, Afrikaans, Albanian, Indonesian, Malay (Latin script), Filipino, Catalan, Galician, Basque, Haitian Creole, Irish, Javanese, Scottish Gaelic, Scots, Romansh, Luxembourgish, Occitan, Breton, Asturian, Neapolitan, Western Frisian, Corsican, Friulan, Manx, Kara-Kalpak, Gilbertese, Bislama, Kachin (Latin script), Khasi, Hani, Greenlandic, Tetum, Zhuang, Volapük, Interlingua, Kabuverdianu, Cornish, Estonian, Finnish, and Slovenian.

See also

[Requirements and limitations for a form processing model](#) (docs)

Form processing support for checkboxes

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 22, 2021	Feb 2022

Business value

AI Builder form processing now recognizes checkboxes. You can automatically process documents, such as surveys and order forms, which typically contain many checked and unchecked checkboxes.

Feature details

Support for checkboxes allows you to train a form processing model to recognize checkboxes in documents. The AI model detects whether the checkbox is selected or not,

allowing you to automatically process forms like surveys and order forms, where checkbox input has been submitted.

See also

[Create a form processing custom model](#) (docs)

Model summary and performance metrics

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

Get insights on your form processing performance and recommendations on how to improve it.

Feature details

The new summary page for form processing models provides an accuracy score after training the model that indicates whether it's ready to use or needs to be reviewed. The improved summary page also provides recommendations on how you can enhance the model.

Extend AI Builder across Microsoft Power Platform

Overview

AI Builder is already integrated into Power Apps and Power Automate, giving makers the ability to create AI models and infuse them into their apps and flows. We're focusing on improving the ability to integrate AI models into Power Automate and Microsoft Teams with new templates and easy-to-leverage authoring examples for makers.

AI Builder features in Microsoft Teams

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 1, 2021

Business value

Bring the efficiency and simplicity of AI Builder into Microsoft Teams.

Feature details

AI Builder functionalities are available in Microsoft Teams. This allows users to easily create flows leveraging AI Builder actions directly from Microsoft Teams. A simplified creation and

trial experience has been put together to minimize friction and allows users to build out hyperautomation scenarios from Microsoft Teams.

See also

[Use AI Builder in Teams](#) (docs)

Governance and administration

Overview of Microsoft Power Platform governance and administration 2021 release wave 2

Microsoft Power Platform offers a range of governance and administration capabilities that span Power Apps, Power Automate, Power Virtual Agents, and Microsoft Dataverse. These capabilities are designed to help administrators and IT professionals set up, secure, manage, govern, and monitor the use and adoption of Microsoft Power Platform and its components across the enterprise. In addition to the Power Platform admin center, which is the unified user experience we aim to provide for Microsoft Power Platform administrators, a unified API surface and rich tooling like PowerShell cmdlets are also available to provide fully automatable management capabilities beyond the out-of-box portal experience.

What's new and planned for Microsoft Power Platform governance and administration

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

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This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

An enhanced, unified Power Platform admin center

Enhancements to the Power Platform admin center and Dynamics 365 offer a unified experience for managing environments, deployments, capacity, and usage.

Feature	Enabled for	Public preview	General availability
Granular admin privilege management	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Intuitive, modern UI experiences for user, teams, and role management	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Feature	Enabled for	Public preview	General availability
Project Operations-based trials (with ERP) in the Power Platform admin center	Admins, makers, marketers, or analysts, automatically	✓ Sep 30, 2021	✓ Oct 1, 2021
Pay as you go for Power Apps and related Power Platform products using Azure subscription	Users by admins, makers, or analysts	✓ Nov 1, 2021	Feb 2022

Automation and tooling for administrators

Rich tooling experiences are available for administrators and IT professionals managing Microsoft Power Platform.

Feature	Enabled for	Public preview	General availability
Power Platform admin center analytics on Dynamics 365 license usage	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power Platform admin center hygiene analytics for Power Apps	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power Platform admin center tenant-level analytics for Power Automate	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Search audit logs for Power Apps and Power Automate using Microsoft 365 Defender	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Modernized user interface for advanced settings	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 8, 2021
Unified Microsoft Power Platform API	Admins, makers, marketers, or analysts, automatically	Dec 2021	Mar 2022
Microsoft Power Platform tenant isolation support and allowed list of tenants	Admins, makers, marketers, or analysts, automatically	Jan 2022	Mar 2022
New connectors disabled by default in GCC High and DoD	Admins, makers, marketers, or analysts, automatically	Jan 2022	Mar 2022

Feature	Enabled for	Public preview	General availability
Reporting for Finance and Operations storage	Admins, makers, marketers, or analysts, automatically	Mar 2022	Mar 2022
Lockbox for Microsoft Power Platform	Users by admins, makers, or analysts	Mar 2022	To be announced

Description of **Enabled for** column values:

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- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

An enhanced, unified Power Platform admin center

Overview

The unification of the Power Platform admin center continues towards delivering a single admin experience, not only for Microsoft Power Platform, but also for Dynamics 365. The admin center is offering a unified experience for managing environments, deployments, users, capacity, and usage. Powerful analytics empowers admins to gain visibility into creation and usage, and to investigate and diagnose issues with their deployments. The integrated help and support experience is enhanced with live chat and virtual agent experiences, which optimizes the self-service experience and reduces the time spent contacting Microsoft Support.

Granular admin privilege management

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Empower organizations to define a variety of security roles at the tenant and environment levels, supporting the ability to assign different fine grained admin privileges.

Feature details

Currently, Microsoft Power Platform supports centralized admin roles at the tenant and environment levels. In large enterprises where an admin team is comprised of specialized roles, there's a need to enable fine grained custom admin role definition at the tenant and environment levels, allowing different admin personas to perform distinct privileged operations in the enterprise.

With this feature, admin roles can be managed in a decentralized manner, attributing different admin privileges to different security roles/personas. For example, dedicated roles can be defined to enable security admins to manage data loss prevention policies, business owners to view analytics reports, and operations admins to perform environment lifecycle actions.

Intuitive, modern UI experiences for user, teams, and role management

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Modern, intuitive portal experiences will be available in the Power Platform admin center replacing the legacy web client UI. Not only does this feature ensure a consistent user experience for the administrator, but it also streamlines the navigation patterns, allowing for better discovery and faster job completion.

Feature details

We'll provide a modern, intuitive UI experience within the Power Platform admin center instead of the legacy web client UI for user, group teams, and role management. This will enable admins to seamlessly manage users and permissions by leveraging the modern admin center interface without going back and forth between the modern and legacy Dynamics 365 UI.

Admins will be able to use the modern UI to perform tasks like edit user details, create or edit security roles, and add/remove users to/from security roles. Admins will also be able to manage all aspects of Microsoft Dataverse for Teams from the modern UI as a means to leverage Microsoft Azure Active Directory groups to manage security role assignment in Microsoft Power Platform environments.

Project Operations-based trials (with ERP) in the Power Platform admin center

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Sep 30, 2021	✓ Oct 1, 2021

Business value

Today, customers who want to do a trial of Project Operations apps need to do so in either the Lifecycle Services (LCS) portal when enterprise resource planning (ERP) functionality is required or the Power Platform admin center when CRM functionality is required. In some cases, customers need to use both admin portals to manage their trial. This is very time consuming and has a disconnected experience. The new single admin portal approach resolves these issues.

Feature details

Project Operations, inclusive of scenarios that require the deployment of Dynamics 365 Finance and Operations apps, will now be fully managed in the Power Platform admin center. Historically, Finance and Operations apps have only been deployable through the Lifecycle Services (LCS) admin portal. This has now been reimaged to better align with the rest of the Dynamics 365 apps, and now Finance and Operations will appear as another app installed on top of Microsoft Dataverse.

Behind the scenes, all of the infrastructure and databases that today's Finance and Operations customers are used to provisioning will still get deployed, but those technical details will be hidden away in the Power Platform admin center. New customers with a trial of the Project Operations suite will get a Microsoft Dataverse and an X++ ERP runtime simultaneously.

For trial scenarios, this now means that customers who need ERP and CRM combined functionality can get a single environment that contains the full stack of capabilities, and it'll all be in a single admin center experience.

Pay as you go for Power Apps and related Power Platform products using Azure subscription

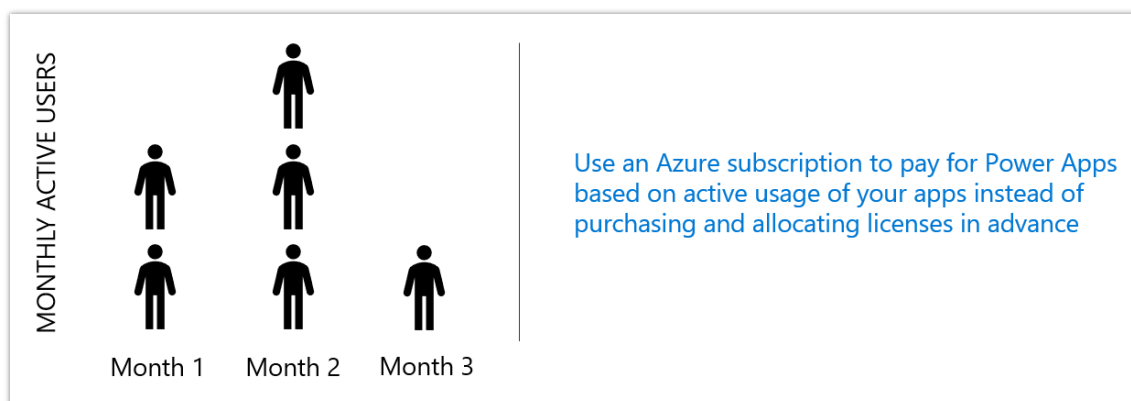
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Nov 1, 2021	Feb 2022

Business value

By enabling organizations to use their Azure subscription to purchase a subset of Microsoft Power Platform products as pay-as-you-go meters, customers will have the flexibility to address dynamic business needs.

Feature details

This feature will enable customers to use their Azure subscription to purchase selected Microsoft Power Platform products. The initial wave of products will include Power Apps per app, Dataverse (database, file, log), and Power Platform requests (API calls). Customers will be able to link environments to an Azure subscription, at which point all usage of the aforementioned products will be billed against that subscription using newly created pay-as-you-go meters. For more information, go to [Announcing pay-as-you-go for Power Apps](#) or read the [Pay-as-you-go plan overview](#).



Graphic showing a graph with usage of a Power App growing and shrinking over time.

Tell us what you think

Help us improve Microsoft Power Platform governance and administration by discussing ideas, providing suggestions, and giving feedback. Use the [forum](#).

Thank you for your idea

Thank you for submitting [this idea](#). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

[Announcing pay-as-you-go for Power Apps](#) (blog)

[Pay-as-you-go plan](#) (docs)

Automation and tooling for administrators

Overview

Rich tooling experiences like PowerShell cmdlets are available for administrators and IT professionals to provide additional management capabilities for use outside the out-of-the-box portal experiences. A unified API surface for administrating all services across Microsoft Power Platform will help optimize a fully automatable management experience.

Power Platform admin center analytics on Dynamics 365 license usage

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

These solutions are designed for admins responsible for optimizing Dynamics 365 licenses used across their organization. The embedded analytics in the Power Platform admin center provide visual representations of the usage of Power Apps by users assigned to roles that require a Dynamics 365 license. Quickly identify underutilized license assignments and pinpoint opportunities to improve resource allocations.

Admins struggle with the responsibility of ensuring users have the Dynamics 365 license assignments they need to perform their unique business functions. Oftentimes, admins account for this by purchasing more licenses than necessary to ensure users are granted access to everything they could possibly need. This ultimately creates bloat in license allocations and results in heavy costs for a business. As individuals change roles, license assignments must be frequently revisited to avoid paying for unused licenses. Each instance of an unused license represents an opportunity for savings. Power Platform admin center analytics make it easy to identify instances where Dynamics 365 licenses are assigned but aren't being used.

Feature details

Microsoft Power Platform service admins, Dynamics 365 admins, and Microsoft 365 global admins will be able to opt in to use embedded analytics to help manage the efficiency of Dynamics 365 license allocations for their entire organization. These analytics are used to surface monthly average usage (MAU) broken down by license types to help admins optimize Dynamics 365 license assignments. These solutions will quickly become essential by empowering admins to get a clear sense of which applications are being used to support particular business functions.

Dynamics 365 license information for users of Power Platform apps is presented in this view alongside usage information for apps, bots, and services logged throughout the business day. Using this information, admins are able to better articulate how users are taking advantage of Power Platform resources to help digitally transform their business.

This view is designed to help answer basic questions on licensing such as:

- How many Dynamics 365 licenses are assigned but not being used?
- Which Dynamics 365 license is required to perform a particular business function?
- How many active users in this environment have Dynamics 365 licenses assigned?
- Which environment has the most/least active users with Dynamics 365 licenses?

Power Platform admin center hygiene analytics for Power Apps

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Take advantage of actionable insights embedded in the Power Platform admin center designed to help admins identify unused and orphaned Power Apps deployed across the organization. Need to manage the rapid growth of Power Apps across the organization? Use these solutions to help reduce service COGS for your business by maximizing investments on those applications that are being used most often across active environments.

Admins often struggle with the responsibility of ensuring the organization's app portfolio continuously promotes the most effective solutions. This can be even more difficult when tasked with supporting a bloat of unused applications. At best, orphaned solutions offer a distraction to members of your organization. More often, they present the opportunity to elevate privileges by performing operations that function using shared credentials. Hygiene analytics for Power Apps are essential in managing costs attributed with the expansion of apps to supplement or replace transactions which were historically paper-based.

Feature details

Microsoft Power Platform service admins, Dynamics 365 admins, and Microsoft 365 global admins will be able to opt in to out-of-box, tenant-level reports designed to help identify unused and orphaned applications. For environment-level admins, views are automatically filtered to only include the environments they manage. These analytics are derived from telemetry events produced when users open and interact with Power Apps.

Unlike the Usage report, this view surfaces those applications that are not being used by members of your organization. Use built-in filters to view applications which haven't been used in the last month, two months, three months, or over a year. Admins are responsible for maintaining good environment hygiene by ensuring outdated solutions are frequently purged from the organization's app portfolio.

Power Platform admin center tenant-level analytics for Power Automate

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Out-of-box tenant-level reports improve the ability of Microsoft Power Platform service admins to keep track of key metrics like monthly active users (MAU) and monitor the

distribution of cloud flow events by environment. Admins can use these solutions to identify underutilized cloud flows and evaluate how broadly service connectors are being used to support automated events. Easily identify the most active and widely distributed flow operations to ensure they receive the right level of investments.

If you're interested in tracking the most successful flow event makers or surfacing environments most reliant on a specific connector, use purpose-driven solutions to monitor the application lifecycle management of automated flow events across the organization. Get trend analysis on creation and management of flow events by active makers. Stay on top of Microsoft Power Platform investments as you transform your business with a complete inventory view of flow events.

Feature details

Microsoft Power Platform service admins, Dynamics 365 admins, and Microsoft 365 global admins will be able to opt in to out-of-box tenant-level reports for Power Automate with options to drill down to the environment level. For environment-level admins, views are automatically filtered to only include the environments they manage.

Usage reports will provide insights into MAU sessions, new and returning users, and a list of apps in use with filters for app type, connector tier, country, device platform, and player version.

The **Inventory** report lists all flows with their owner, environment they belong to, published date, last launched date, and the type of flow (cloud or desktop). There will be filters for flow type, connector tier, and country.

Search audit logs for Power Apps and Power Automate using Microsoft 365 Defender

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Organizations depend heavily on the availability of detailed activity logs as a means of protecting intellectual property. Audited Power Platform events can be used by admins to complete investigative tasks like replaying the actions of a specific employee. Activity logs stored in Microsoft 365 Defender include details on create, read, write, and delete operations performed against Dataverse tables, as well as Power Automate-related activities such as when a cloud flow was last executed. Admins can also search for details on environment patching and deployment operations performed by Microsoft Support.

Service activity logging and the ability to track user actions are critical in detecting and preventing the impact of a data compromise. Detailed logs produced by the Power Platform

service can be evaluated to determine the cause of an event. Use the Microsoft 365 Defender audit log search tool to identify all activities that occurred in Power Platform or target specific events that occurred within a given timeframe.

Feature details

Use Microsoft 365 Defender to manage activity logs produced by Power Platform apps, bots, and services with ease. When an audited activity is performed by a user or an admin, an audit record is generated and stored in the audit log for your organization. The length of time that an audit record is retained and searchable in the log depends on your Office 365 or Microsoft 365 Enterprise subscription, and specifically the type of the license that's assigned to specific users.

System administrators can start or stop auditing services for an organization. Logging takes place at the SDK layer, which means a single user action can trigger the creation of multiple logged events. The types of events logged include but aren't limited to:

- When a specific user accesses the system
- Every time an app gets launched
- When apps and flows are created or deleted
- When Dataverse tables are created or deleted

Modernized user interface for advanced settings

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 8, 2021

Business value

This feature provides a modern user experience when configuring advanced settings using the web client.

Feature details

As part of the web client removal, some admin settings in the web client/legacy user interface have been moved to a modern experience. Organization admins will have a new option in the Microsoft Power Platform environment settings to configure this behavior.

From environment settings, select **Product > Behavior > Use updated experience for classic setting where possible**.

The default is **Off** for the existing environments and **On** for environments created after October 2021. When this option is turned **On**, you'll be redirected to the modern experience when accessing some settings from the legacy experience.

Please note that not all legacy settings have a modernized user interface, but for the ones that have modernized parity available, turning on this option enables redirection.

See also

[Manage behavior settings](#) (docs)

Unified Microsoft Power Platform API

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Dec 2021	Mar 2022

Business value

The Microsoft Power Platform API will provide customers with a single unified API for all admin management scenarios across environments, tenant settings, capacity, licensing, and resources.

Feature details

Today, customers have a myriad of programmability options from PowerShell to Management Connectors to REST APIs. The REST APIs are disparate across different endpoints depending on the resource in question, and they provide a challenging experience. This delays documentation and reduces parity between PowerShell and the APIs.

Unification of the various APIs into a single Microsoft Power Platform API will be done in phases. First, we'll start by enabling tenant settings, capacity, and licensing APIs on a single endpoint. Then, we'll enable environment management capabilities like environment creation, adding Microsoft Dataverse to an existing environment, backup, copy, restore, and so forth. Next, we'll start to enable the endpoints for various resources that an environment can contain like Power Apps, Power Automate flows, Power Virtual Agents, and more.

Most notably, this will have no impact to the Dataverse APIs which remain separate. This Microsoft Power Platform API will be a unified API surface for all other admin management actions.

Microsoft Power Platform tenant isolation support and allowed list of tenants

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Jan 2022	Mar 2022

Business value

Admins can manage data exfiltration or infiltration risks for Azure AD-based connectors in their tenant by turning on tenant isolation for Microsoft Power Platform connections. This

will prohibit connections from your tenant to external tenants and block other tenants from establishing Microsoft Power Platform connections to your tenant. For legitimate business use cases where such cross-tenant connections are required to be enabled, admins can specify an allowed list of tenants that are exempt from tenant isolation, along with specifying the direction of permitted cross-tenant connections (inbound from external tenant, outbound from your tenant, or both).

Feature details

Enable/disable tenant isolation using self-serve capability through the Power Platform admin center: When tenant isolation is turned on, all Azure AD-based connectors can no longer be used to create cross-tenant connections to or from your tenant. Previously, customers had to create a support ticket to enable tenant isolation. Now, we're allowing you to manage your tenant's tenant isolation settings directly through the Power Platform admin center.

Choose an allowed list of tenants that are exempt from tenant isolation: This is a new capability within tenant isolation to allow legitimate business scenarios to continue connecting to explicitly identified tenants, even as everything else is disallowed. Wildcard * is also supported if all tenants need to be enabled in an inbound or outbound direction instead of identifying specific tenants.

New connectors disabled by default in GCC High and DoD

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Jan 2022	Mar 2022

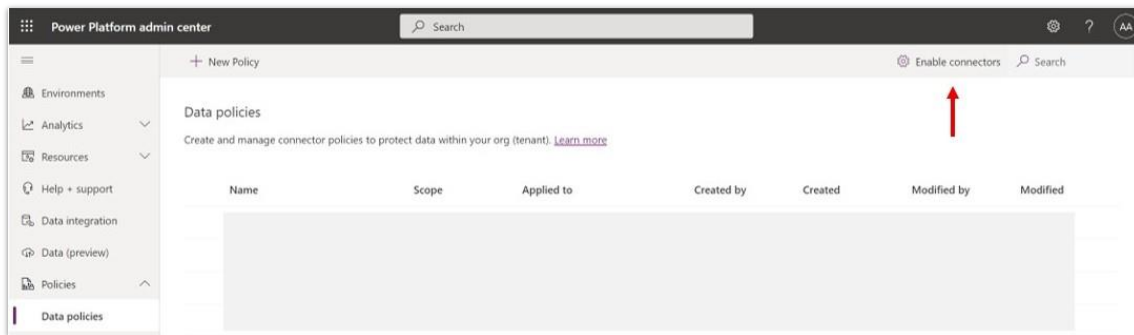
Business value

When new connectors are introduced to Microsoft Power Platform, they can be used immediately by all makers. This requires admins to constantly monitor the connector ecosystem and reactively update the organization's data loss prevention (DLP) policies to prevent makers from inadvertently exfiltrating data. Such occurrences must be avoided at all costs in US government clouds where strict federal compliance is mandated. Administrators can now rely on this safeguard mechanism in GCC High and DoD to better control the use of connectors.

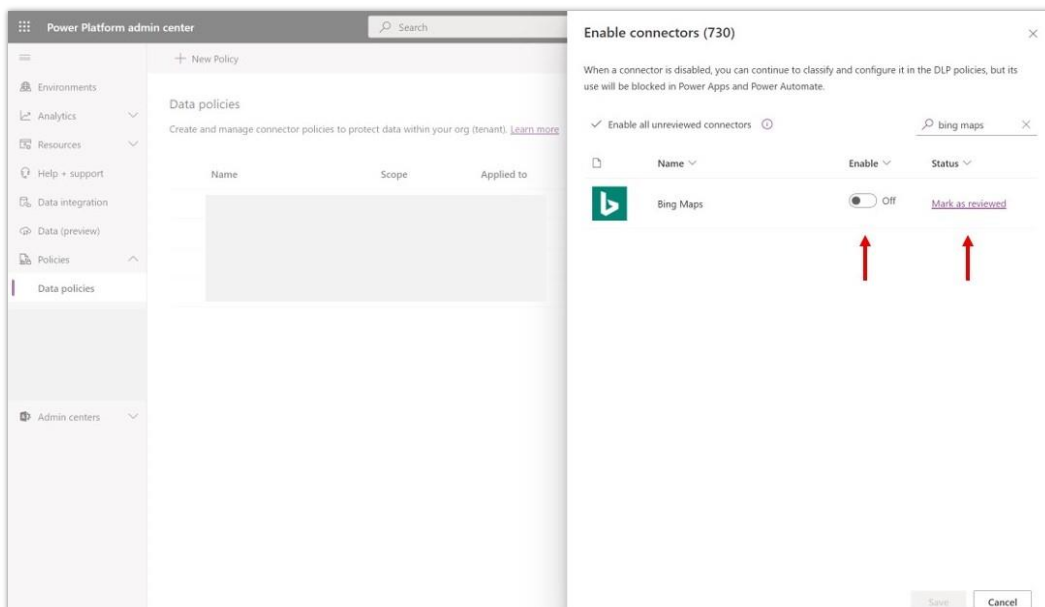
Feature details

New connectors that are introduced by Microsoft and partners to Microsoft Power Platform will be disabled by default for customers operating in the following US government clouds: GCC High and DoD. Administrators will be able to review these new connectors before explicitly authorizing their use across the organization. Connectors currently available in GCC High and DoD will remain enabled, but admins can still leverage the new tenant-level setting

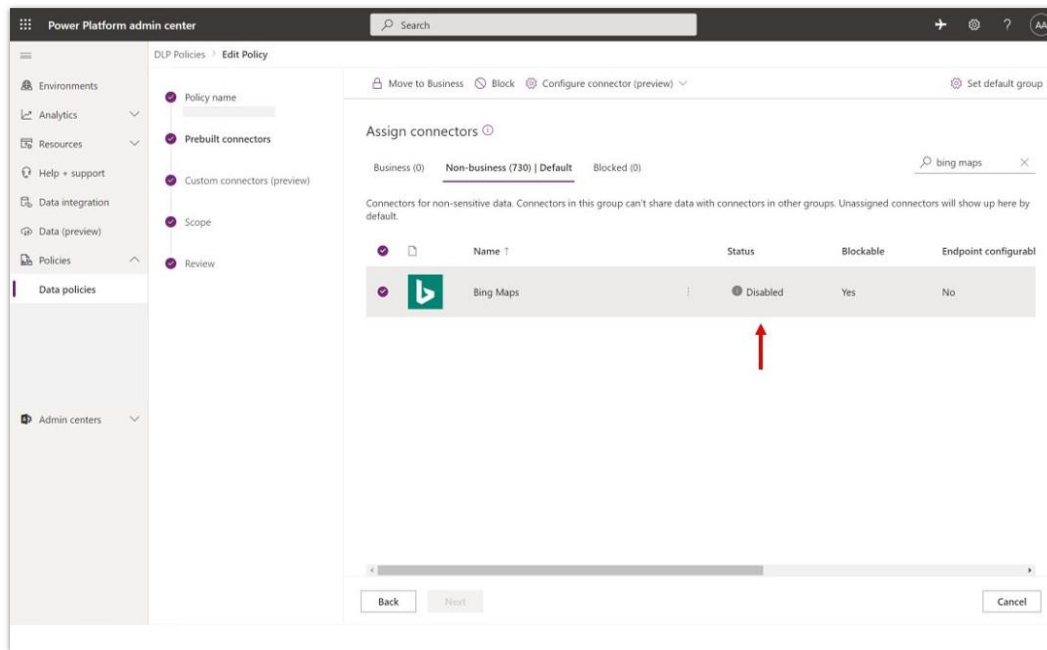
to disable them. This setting will be located in the "Data policies" section of the Power Platform admin center.



The new setting available on the Data policies page of the Power Platform admin center



Example where a new connector, Bing Maps, has been disabled by default



Connector status reflected in the DLP policy wizard experience

Reporting for Finance and Operations storage

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	Mar 2022

Business value

Admins will have access to Finance and Operations storage reporting directly in the Power Platform admin center. These reports will offer clarity on how much storage has been used and allow admins to take timely action if entitlement limits are exceeded.

Feature details

Within the Power Platform admin center, storage reporting will show how much storage a customer has used against their entitlement limit. (For this release, the scope will cover database storage only.) Admins will be able to download the report in a Microsoft Excel format. Eventually, we'll enhance the experience with more visualized analytics, similar to what Microsoft Dataverse has in the Power Platform admin center today.

Lockbox for Microsoft Power Platform

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2022	To be announced

Business value

Lockbox for Microsoft Power Platform allows organizations to control temporary just-in-time access to their environments for Microsoft engineers to help solve critical support requests.

Feature details

There are three core capabilities included with lockbox for Microsoft Power Platform:

1. Administrators can choose which Microsoft Dataverse databases need to be protected by lockbox.
2. On the rare occasion that Microsoft needs to temporarily access data in those lockbox-protected databases to resolve a critical issue, administrators will be notified and can visit the Power Platform admin center to approve or reject the data access request.
3. After access is granted to Microsoft, any action taking place in the lockbox-protected database during the temporary access period is recorded and made available to your organization as SQL audit logs. These logs can be exported to an Azure data lake for further analysis.

Pro development

Overview of Microsoft Power Platform pro development 2021 release wave 2

Microsoft Power Platform offers a rich spectrum of extensibility points and tooling capabilities providing the professional (pro) developer a great experience for extending the platform. The intent of the pro developer investments is to not only help ensure an improved experience for the citizen developer but also to make sure the enterprise can fully leverage all available application development skills.

The upcoming investments range from deeper integration with Microsoft Azure to Visual Studio Code and Visual Studio extensions (Power Platform Tools).

What's new and planned for Microsoft Power Platform pro development

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the date of release.

This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Fusion development

Rich tooling is available for developers to easily extend Microsoft Power Platform, resulting in a no-cliffs application development and automation experience.

Feature	Enabled for	Public preview	General availability
ALM accelerator for Azure DevOps and GitHub Actions	Users by admins, makers, or analysts	✓ Nov 1, 2021	-
Visual Studio Code extension in GitHub Codespaces	Users by admins, makers, or analysts	✓ Nov 1, 2021	-

Feature	Enabled for	Public preview	General availability
Visual Studio extension for Microsoft Power Platform pro development	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	✓ Nov 2, 2021
Cross-platform support for Microsoft Dataverse development	Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	Jan 2022
Visual Studio Code tools extension	Admins, makers, marketers, or analysts, automatically	✓ Jan 4, 2022	Feb 2022
Deeper integration with Azure API Management	Users by admins, makers, or analysts	✓ Oct 1, 2021	Mar 2022
PCF tooling support for theming	Admins, makers, marketers, or analysts, automatically	✓ Oct 2, 2021	Mar 2022

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Fusion development

Overview

Rich tooling is available for the pro developer to easily extend Microsoft Power Platform, providing a true no-cliffs application development and automation experience.

Microsoft Power Platform Build Tools and GitHub Actions are designed to allow the pro developer to set up fully automated CI/CD pipelines for Power Apps and Power Automate solutions, and they'll support working with connection reference and environment variable features. GitHub Actions for Power Platform will be made generally available.

The Microsoft Power Platform CLI (command line interface) will become cross-platform compatible and a Visual Studio Code extension will be made available to simplify the experience of installing and working with Power Platform CLI.

ALM accelerator for Azure DevOps and GitHub Actions

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Nov 1, 2021	-

Business value

Customers can use the application lifecycle management (ALM) accelerator to implement continuous integration and development (CI/CD) for their Microsoft Power Platform environments.

Feature details

The ALM accelerator can be used to quickly implement CI/CD to support both citizen development and also more advanced CI/CD capabilities for professional developers. Customers can also incorporate Microsoft Power Platform development into their enterprise ALM practices.

Visual Studio Code extension in GitHub Codespaces

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Nov 1, 2021	-

Business value

Professional developers can now start using GitHub Codespaces for fusion development with citizen developers.

Feature details

With Microsoft Power Platform Build Tools compatible with GitHub Codespaces, professional developers can now get started even faster building code-first components for Microsoft Power Platform, supporting the new standard of "from code to cloud in minutes."

Visual Studio extension for Microsoft Power Platform pro development

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	✓ Nov 2, 2021

Business value

Developers needing to build plug-ins for Microsoft Dataverse, Dynamics 365 Customer Engagement (on-premises), and Dynamics 365 Finance and Operations environments can do so with the extension for Visual Studio 2019.

Feature details

Developers can now build and deploy plug-ins directly from Visual Studio 2019. The plug-in will also support business events for Dynamics 365 Finance and Operations, enabling developers to use familiar tools to extend Microsoft Dataverse, Dynamics 365 Customer Engagement (on-premises), and Dynamics 365 Finance and Operations.

See also

[Install Power Platform Tools](#) (docs)

Cross-platform support for Microsoft Dataverse development

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 1, 2021	Jan 2022

Business value

With this release of Microsoft Power Platform CLI, Microsoft Power Platform Build Tools, and GitHub Actions for Microsoft Power Platform, developers are no longer limited to Windows machines and agents, but can now build code-first components on both PC and Mac.

Feature details

The next release of pro developer tooling will be cross-platform compatible. This means developers will no longer have to use PCs to develop code-first components for Microsoft Power Platform. They can now build on both Windows and Mac while using Linux-based agents for GitHub Actions and Microsoft Power Platform Build Tools.

Visual Studio Code tools extension

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Jan 4, 2022	Feb 2022

Business value

With the Visual Studio Code tools extension, developers can now get Microsoft Power Platform CLI and required dependencies directly from a single extension.

Feature details

The Visual Studio Code integration experience is further enriched with additional Microsoft Power Platform CLI capabilities. These features include:

- Support for exporting solutions from Microsoft Power Platform into Visual Studio Code for solution modification purposes
- Support for unpacking canvas apps
- Multi-platform support on Microsoft Windows and Linux
- Support for Power Apps portals development
- Help to get started faster with common commands exposed through Visual Studio Code command palette

See also

[Integrated Development Environment IDE extensions](#) (docs)

Deeper integration with Azure API Management

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Oct 1, 2021	Mar 2022

Business value

With deeper integration with Azure API Management, developers can now easily update existing APIs and no longer need to export their APIs after every update or rewire connections in the app.

Feature details

Last year, we introduced integration between Azure API Management and Microsoft Power Platform by enabling developers to export an API from API Management directly to Microsoft Power Platform. With deeper integration, developers can now update connectors served by Azure API Management and view which connectors an instance serves.

See also

[Export APIs from Azure API Management to the Power Platform](#) (docs)

PCF tooling support for theming

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Oct 2, 2021	Mar 2022

Business value

This feature provides more consistent theming across code components built using the Power Apps component framework by including fonts, sizing, and Microsoft Teams theming.

Feature details

Along with current color theming, we're adding new support for theming across code components built using the Power Apps component framework, including properties such as fonts and sizing. This update also includes Microsoft Teams theming, where theming is automatically passed to the code component when in Teams. This feature will be available in both canvas and model-driven apps, with support for building themed code components using Microsoft Power Platform CLI.

ISV experiences

Overview of Microsoft Power Platform ISV experiences 2021 release wave 2

Microsoft Power Platform enables ISVs to build deep vertical and horizontal business applications leveraging a range of Microsoft Power Platform capabilities. ISV apps can easily be extended across the full stack either through Azure services or custom code, which enables creating unique user experiences. Improvements in this area includes additional enhancements to the ISV Studio and additional application management capabilities.

What's new and planned for Microsoft Power Platform ISV experiences

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

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This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Microsoft Power Platform ISV experiences

ISV experiences is focusing on optimizing how ISVs building on Microsoft Power Platform can better scale.

Feature	Enabled for	Public preview	General availability
Application usage by tenant in ISV Studio	Admins, makers, marketers, or analysts, automatically	Feb 2022	-
Auto update for ISV applications	Users by admins, makers, or analysts	Feb 2022	-
ISV app license management	Users by admins, makers, or analysts	✓ May 1, 2021	✓ Oct 1, 2021

Feature	Enabled for	Public preview	General availability
Maintenance window management	Admins, makers, marketers, or analysts, automatically	✓ Sep 2, 2021	✓ Nov 12, 2021
Install AppSource apps with GitHub Actions or Azure DevOps tasks	Admins, makers, marketers, or analysts, automatically	Jan 2022	Feb 2022
Build Tools and GitHub Actions support for certification submission and AppSource publishing	Admins, makers, marketers, or analysts, automatically	Feb 2022	Mar 2022

Description of **Enabled for** column values:

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Microsoft Power Platform ISV experiences

Overview

In 2021 release wave 2, we're focusing on auto updates, simplified publishing experience, simpler packaging, and auto re-certifications.

Application usage by tenant in ISV Studio

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	-

Business value

This feature is a top demand from ISVs and increases NSAT towards ISV Studio and ISV Connect Program.

Feature details

With the addition of tenant level application usage in ISV Studio, ISVs can now better understand how their applications are used and focus on features and capabilities that have more impact on end customers. An ISV can help customers understand under used features to make sure that their customers make the most out of the application they have purchased.

Auto update for ISV applications

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Feb 2022	-

Business value

This feature increases benefits and incentives in ISV Connect Program and increases NSAT for enrolled ISVs.

Feature details

With this new capability, administrators can decide which ISV applications can be updated automatically. This is an opt-in feature, which includes an option to automatically update sandbox or test environments before enabling this feature in production environments.

ISV app license management

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ May 1, 2021	✓ Oct 1, 2021

Business value

This new capability enables ISVs to more easily monetize their Microsoft Power Platform investment while, at the same time, making it easier for customers to manage their purchased ISV licenses.

Feature details

This feature will enable ISVs to better manage the licensing of applications they build on top of Microsoft Dynamics 365 Customer Engagement Apps and Microsoft Power Platform. It allows ISVs to:

- Define licenses that provide access to specific features of their applications and have Microsoft Power Platform enforce those licenses at runtime
- Enable their customers to manage licensing for ISV applications alongside Microsoft first-party products in the Microsoft 365 admin center
- Gain visibility into license assignment and usage

See also

[Partners: Introducing a new way to manage and enforce licenses for your products](#) (blog)

Maintenance window management

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Sep 2, 2021	✓ Nov 12, 2021

Business value

This feature enables risk mitigation and reduction in business disruption from updates delivered during critical business hours.

Feature details

While we work hard to ensure there is no downtime or performance degradation from the way updates are delivered today, there is always a chance something can go wrong. In the interest of customer focus, we'll enable customers to choose their maintenance window for an organization for certain types of updates to ensure that they happen in the least disruptive timeframe of a day.

See also

[Preview: Manage your maintenance window](#) (docs)

Install AppSource apps with GitHub Actions or Azure DevOps tasks

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Jan 2022	Feb 2022

Business value

Keeping apps up to date can be a challenging task for administrators in a modern workplace. The capability eliminates this burden by removing manual tasks.

Feature details

The support for automated installation of applications from Microsoft AppSource enables developers to automatically provision development environments to support scenarios where an app has a dependency on another application available from AppSource.

Build Tools and GitHub Actions support for certification submission and AppSource publishing

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	Mar 2022

Business value

With the new tasks added to Microsoft Power Platform Build Tools and GitHub Actions, ISVs will be able to automatically push new releases to the Partner Center.

Feature details

ISVs who invest significantly in automating their build pipelines would like to have the ability to use their existing CI/CD pipeline to submit changes and their builds directly into the Partner Center for certifying or recertifying their application. With this new capability, coupled with the planned feature for auto-updates, ISVs can now implement true CI/CD all the way from application development to customer updates.

Data integration

Overview of data integration 2021 release wave 2

The data integration team's vision is to democratize data for business users so it's seamless to extract, transform, and load into Microsoft Dataverse and Azure Data Lake Storage from any data source and to allow other Microsoft products to leverage this data.

We are investing in a few key pillars:

- Microsoft Power Platform dataflows. Power Query is the industry-leading smart data prep tool and evolves by infusing artificial intelligence and machine learning (AI/ML) into data transformations and by extending dataflows to all of Microsoft Power Platform. In 2021 release wave 1, we're enabling the dataflows experience in Dataverse in Teams so that customers can easily populate data and build better applications.
- Enhanced data integration by enabling analytics on Dataverse data through the Export to Data Lake in Common Data Model form, new and enhanced connectors, and improvements in the connectivity platform. Other enhancements include Office data integration to enable new insights, extending dual-write for more entities, improving Data Export Service, and enhancing the gateway for enterprises and Robotics Process Automation (RPA).
- End-to-end diagnostics so that customers can better diagnose and fix issues in queries or the gateway.
- The Common Data Model establishment of industry-wide structure and semantics of underlying data so that customers can reason about that data through various business application solutions, analytics, and machine learning (ML) algorithms.

What's new and planned for data integration

This topic lists features that are planned to release from October 2021 through March 2022. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released**. For more information, go to [Microsoft policy](#).

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This check mark (✓) shows which features have been released for public preview or early access and for public preview, early access, and general availability.

Microsoft Power Platform connectors

The connector platform provides a rich set of connectors for customers and allows partners and customers to develop connectors efficiently.

Feature	Enabled for	Public preview	General availability
Add existing custom connector to a solution	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Environment variable support in custom connectors	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Moving 100 connectors from preview to production	Users, automatically	-	Mar 2022

Microsoft Power Platform dataflows

Microsoft Power Platform dataflows provide a no-code experience based on Power Query Online for non-technical users to connect, transform, and enrich data.

Feature	Enabled for	Public preview	General availability
Azure Synapse-based compute for Microsoft Dataverse tables in Dynamics 365 Customer Insights	Admins, makers, marketers, or analysts, automatically	Feb 2022	-
Azure Synapse-based compute for dataflow tables in Dynamics 365 Customer Insights	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Entity mapping UX enhancements	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Export dataflow as Power Query template	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Improved experience to update a dataflow's M query parameters	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Improved refresh history and diagnostics for dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Feature	Enabled for	Public preview	General availability
Duplicate dataflows in Microsoft Power Platform environments	Admins, makers, marketers, or analysts, automatically	-	✓ Oct 15, 2021
New capabilities to support relational database integration with Microsoft Dataverse tables	Admins, makers, marketers, or analysts, automatically	-	Feb 2022

On-premises data gateway

The on-premises data gateway will continue to be an enterprise-grade product with features such as enhancements to load balancing, monitoring, and integration.

Feature	Enabled for	Public preview	General availability
On-premises data gateway security roles	Admins, makers, marketers, or analysts, automatically	Feb 2022	
Gateway diagnosability	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Improved gateway and data source management in Power BI	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Power Query connectors

Power Query connectors enable connectivity to hundreds of applications, websites, databases, online services, and systems of record, with no code experience.

Feature	Enabled for	Public preview	General availability
New Google Sheets connector	Admins, makers, marketers, or analysts, automatically	✓ Nov 15, 2021	
Amazon Redshift support for native queries in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Feature	Enabled for	Public preview	General availability
Browse support for the Dataverse connector in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Common Data Model folder view feature in Azure Data Lake Storage Gen 2 connector	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Dataverse connector availability in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Dataverse connector available in Excel	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Dataverse support for native queries in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Google BigQuery support for native queries in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Navigator performance improvements for Google BigQuery connector	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
SharePoint list V2 connector improvements	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
Support for native queries in import and DirectQuery mode in the Power Query SDK	Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Power Query Online

Power Query is the data connectivity and data preparation experience for users across a wide variety of Microsoft products and services.

Feature	Enabled for	Public preview	General availability
Get Data experience improvements	Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Feature	Enabled for	Public preview	General availability
Global search	Admins, makers, marketers, or analysts, automatically	Mar 2022	-
New transform – Percentiles	Admins, makers, marketers, or analysts, automatically	Mar 2022	
New transform – Rank	Admins, makers, marketers, or analysts, automatically	Mar 2022	
New transform - Time-based binning	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI Online quick create - Modify manually entered data used in quick reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI Online quick create - Use data from a CSV file when creating quick reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI Online quick create - Use data from a PDF file when creating quick reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI Online quick create - Use data from an Excel file when creating quick reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power BI Online quick create - Use Microsoft Dataverse data when creating quick reports	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Power Query support for paginated reports in Power BI	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Support for multi-value parameters	Admins, makers, marketers, or analysts, automatically	Mar 2022	
Browse support for the SharePoint list connector in Power Query Online and dataflows	Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Feature	Enabled for	Public preview	General availability
Date picker for entering dates	Admins, makers, marketers, or analysts, automatically	-	Mar 2022
New Group By aggregate function - Count distinct values	Admins, makers, marketers, or analysts, automatically	-	Mar 2022

VNet data gateways

Enterprises that subscribe to VNet connectivity for their data services in Azure can seamlessly connect to Microsoft Power Platform using VNet data gateways.

Feature	Enabled for	Public preview	General availability
VNet data gateway connectivity improvements	Admins, makers, marketers, or analysts, automatically	✓ Nov 30, 2021	
VNet data gateway troubleshooting	Admins, makers, marketers, or analysts, automatically	Mar 2022	

Description of **Enabled for** column values:

- **Users, automatically:** These features include changes to the user experience and are enabled automatically.
- **Admins, makers, marketers, or analysts, automatically:** These features are meant to be used by administrators, makers, marketers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts:** These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, go to the [International availability guide](#). For more information about geographic areas and datacenters (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

Microsoft Power Platform connectors

Overview

A critical part of data integration and the suite of products it supports—Power Apps, Power Automate, Power BI, and Power Query—is connectivity to external data sources. The

connector platform has two key objectives: providing a platform that allows partners and customers to develop connectors efficiently and providing a rich set of connectors for customers.

As part of platform investments, we provide a rich set of tools, samples, and documentation to help partners and customers build connectors. We also invest in our certification processes and tools for connectors so that partners can get their connectors certified and make them available on the platform. A key investment here is also geared towards leveraging the larger community by open-sourcing connectors.

Along with strengthening the ISV community's ability to create their own connectors, we plan to continue to invest in enterprise-grade data connectors such as SQL Server, SAP, Oracle Database, and Outlook.

Add existing custom connector to a solution

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Connectors created outside of a solution in your Microsoft Power Platform environment can now be imported to a solution, enabling existing custom connectors to be ALM-ready.

Feature details

Custom connectors must be packaged inside a solution for it to be fully ALM-ready. This allows the custom connector to be packaged and deployed through the various ALM tooling we provide for Microsoft Power Platform, as well as leverage features such as environment variable support.

Until now, customers couldn't import or add existing custom connectors to a solution, and instead had to create new custom connectors. Not only has this been inconvenient for users but has impacted existing apps and flows.

With this release, an existing custom connector can be added to a solution via API or through the maker portal, enabling the connector to be fully solution-aware and ALM-ready.

Environment variable support in custom connectors

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Custom connectors can now leverage environment variables in the configuration, allowing for seamless development, testing, and deployment of apps and flows using custom connectors.

Feature details

Many enterprises provide app developers access to data sources using APIs. These APIs are often behind an API management product where different versions of the APIs (Dev, Test/UAT, Prod) are maintained. They're also secured by Azure AD or an OAuth server. Until now, customers have had to create different custom connectors, or update custom connectors after deployment, with different API endpoints and application ID/secrets.

With this release, customers can now use an environment variable inside their custom connectors. A custom connector can reference an environment variable for the host/base URL, as well as for other properties like OAuth client ID and client secrets. This allows the same custom connector to be packaged and deployed to different environments where those settings may be different.

For example, in the development environment, the custom connector can target a development API endpoint with a development OAuth/AAD application. The same custom connector in a production environment can target the production API endpoint using a production OAuth/AAD application. This allows for seamless development, testing, and deployment of apps and flows using a custom connector.

Moving 100 connectors from preview to production

Enabled for	Public preview	General availability
Users, automatically	-	Mar 2022

Business value

Moving more connectors from preview to production, or general availability, will allow enterprise customers to have access to more connectors.

Feature details

To learn about the criteria we're using to determine the connectors that are ready to move from preview to production, go to [\[Move your connector from preview to general availability \(GA\)\]](#).

Microsoft Power Platform dataflows

Overview

Microsoft Power Platform dataflows provide a no-code experience based on Power Query Online for non-technical users to connect, transform, and enrich data from a wide variety of sources into Microsoft Dataverse and Azure Data Lake Storage in the Common Data Model format.

Dataflows provide the building blocks that allow Microsoft to enable out-of-box analytics and AI insights—such as those provided by AI Builder and Dynamics 365 Customer Insights—making them a huge differentiator for Dynamics 365 offerings.

Azure Synapse-based compute for Microsoft Dataverse tables in Dynamics 365 Customer Insights

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	-

Business value

Dynamics 365 Customer Insights users can leverage a new data lake connector powered by Azure Synapse and Microsoft Dataverse to discover and transform Dataverse data exported to a data lake, enabling preparation for hundreds of millions of records.

Feature details

Users of Dynamics 365 Customer Insights often need to import data from Dataverse. When data volumes are large, a multi-step and product approach is needed to extract, transform, and load Dataverse data into Customer Insights. With this new functionality, customers can save time and reduce the complexity of this process by leveraging the new Synapse-enabled connector that can transform larger data volumes from within Customer Insights—saving you time and the need for external data transformation tools.

Azure Synapse-based compute for dataflow tables in Dynamics 365 Customer Insights

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users of Dynamics 365 Customer Insights will have enhanced performance powered by Azure Synapse to transform data from other dataflows.

Feature details

By leveraging Azure Synapse Analytics, Dynamics 365 Customer Insights will improve the scale of dataflow authoring and refresh of computed tables, enabling data preparation for hundreds of millions of records.

Entity mapping UX enhancements

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

UX improvements will make it easier for users to map their data to Microsoft Dataverse.

Feature details

Enhancements to the mapping entity screen in Microsoft Power Platform dataflows will make it easier for users to map their data and turn on the right settings for loading data into Microsoft Dataverse.

Export dataflow as Power Query template

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

With Power Query templates, queries and dataflows are now portable. You can easily re-create your dataflows in other Microsoft Power Platform environments or share them to be leveraged in other solutions that require dataflows.

Feature details

We've been working on making Power Query queries reusable and portable across the products in which Power Query is available. Today, you can already create a dataflow from queries exported from Excel desktop. With this feature, you'll also be able to export dataflows as Power Query templates and reuse or share your work.

For example, you can:

- Export a dataflow as a Power Query template to duplicate a dataflow from one Microsoft Power Platform environment to another
- Create templates of dataflows and share them with customers or other people in your organization to accelerate reuse and further customize the dataflow you created

Improved experience to update a dataflow's M query parameters

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Customers can update M query parameters without editing the dataflow, allowing for faster and easier customization of the dataflow's queries.

Feature details

M query parameters have been instrumental to Power Query and dataflow customers in making their queries more dynamic and customizable. With this feature, customers will be able to update the M query parameters without editing the dataflow directly, allowing for faster and more frictionless customization of queries.

For example, a single dataflow can transform data from a company's different departments or regions, while parameters can be created to control which department or region data should be filtered for. By updating the M query parameters, it would be possible to change or add more departments or regions without the need to edit the dataflow.

Another example of M query parameters improving performance would be leveraging different query parameter values during development and production scenarios. If data volumes are very large while authoring a dataflow, it may be advisable to work with a smaller dataset to improve authoring performance. Leveraging parameters to filter a smaller working set of data—for example, the top 1,000 rows of the dataset—would make authoring much faster. Once dataflow authoring is complete, changing the working set to the full dataset is desired. By configuring a parameter to control the workset size, customers can easily change the working set size without editing the dataflow, improving the overall experience of handling large volumes of data.

Improved refresh history and diagnostics for dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Feature details

We're improving inline refresh history and error messaging with enhanced diagnostics so users can easily analyze and troubleshoot dataflows.

Duplicate dataflows in Microsoft Power Platform environments

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	✓ Oct 15, 2021

Business value

Dataflow creators can duplicate an existing dataflow as a way to jumpstart a new dataflow that requires only slight modifications.

Feature details

The **Duplicate dataflow** action will be added to the dataflows management experience in [Power Apps](#), allowing dataflow creators to copy an existing dataflow in order to save time and effort when creating a new dataflow that only requires minor changes.

New capabilities to support relational database integration with Microsoft Dataverse tables

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Feb 2022

Business value

Customers will be able to load relational data containing multiple and composite keys into Microsoft Dataverse tables.

Feature details

New dataflow capabilities will support the integration of relational data sources into Microsoft Dataverse tables. Customers will be able to load relational data containing multiple and composite keys.

On-premises data gateway

Overview

The on-premises data gateway is a well-established product that's widely used by enterprises to access on-premises data sources and transfer petabytes of data weekly. Today, gateways are used either with one or a combination of services and applications like Power BI, Power Apps, Power Automate, Azure Logic Apps, and others. Based on enterprise requests, we plan to continue to focus on making the on-premises data gateway an enterprise-grade product with features such as enhancements to load balancing, monitoring, and integration with additional services in the current milestone.

On-premises data gateway security roles

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Feb 2022	-

Business value

Administrators will have improved flexibility when assigning security roles, allowing more non-admin users to create data sources on the gateway.

Feature details

We're planning on adding extra security roles to the on-premises data gateway in Power BI. With these new roles, non-admin users can create data sources on the gateway and share the data source with others when they have the right permissions.

Gateway diagnosability

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

The gateway diagnostics dashboard in the Power Platform admin center will help admins troubleshoot gateway issues and help with capacity planning.

Feature details

In May 2019, we released a performance monitoring feature that provided insights to gateway admins about gateway utilization. However, this information is saved in log files.

In this release, we plan to create a gateway diagnostics dashboard in the Power Platform admin center. The dashboard will assist admins in troubleshooting gateway issues and help with capacity planning. The dashboard will also provide insights into the queries that run on the gateway.

Improved gateway and data source management in Power BI

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

This feature will provide an improved experience with standardized and more efficient gateway and data source management.

Feature details

We've been working on centralizing gateway and data source management in the Power Platform admin center. In the upcoming release, we'll be enhancing this experience with features such as the ability to add service principals as gateway/data source users and installers via the gateway management experience in Power Platform admin center. Additionally, we also plan on replacing the existing gateway management experience in Power BI with this improved experience.

Power Query connectors

Overview

Power Query connectors enable connectivity to hundreds of applications, websites, databases, online services, and systems of record, quickly and easily with no code experience. Every connector is built following Microsoft's best practices for seamless integration and use.

New Google Sheets connector

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 15, 2021	-

Business value

The release of the Google Sheets connector for Power Query Desktop will allow you to connect to and load your business data from Google Sheets.

Feature details

Google Sheets connectivity is the second-most upvoted ask on the Power BI Ideas forum. We're planning to release and support a Google Sheets connector in Power Query Desktop to address this user feedback and connectivity gap.

See also

[Google Sheets](#) (docs)

Amazon Redshift support for native queries in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Customers will be able to use native queries to access Amazon Redshift data.

Feature details

You can use native queries to access your Amazon Redshift data in the Power Query Online and dataflows experiences, leveraging another query option for various business scenarios. More information on native queries can be found in [Import data from a database using native database query](#).

Browse support for the Dataverse connector in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Browse support for the Dataverse connector will create a simpler, friendlier browse experience when selecting an environment.

Feature details

When using the Dataverse connector in Power Query Online and dataflows, users can choose to browse environments in a picker instead of being required to specify an environment URL in order to connect.

Common Data Model folder view feature in Azure Data Lake Storage Gen 2 connector

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

You'll be able to use the Common Data Model folder view feature in the Azure Data Lake Storage Gen 2 connector as a generally available feature.

Feature details

The Common Data Model folder view feature in the Azure Data Lake Storage Gen 2 connector will be generally available for use. Support will be provided at a generally available level.

Dataverse connector availability in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Customers can connect to and load their business data from Microsoft Dataverse for use in Power Query Online and dataflows.

Feature details

It's important to have similar experiences and functionalities across different Power Query experiences. With this feature, you'll be able to use the Dataverse connector in Power Query Online and dataflows, along with its availability in Power Query Desktop today.

Dataverse connector available in Excel

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Customers can connect to and load their business data from Microsoft Dataverse for use in Excel.

Feature details

It's important to have similar experiences and functionalities across different Power Query experiences. With this feature, you'll be able to use the Dataverse connector in Excel, along with its availability in Power Query Desktop today.

Dataverse support for native queries in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to use native queries to access their Microsoft Dataverse data.

Feature details

You can use native queries to access your Dataverse data in the Power Query Online and dataflows experiences, leveraging another query option for various business scenarios. More information on native queries can be found in [Import data from a database using native database query](#).

Google BigQuery support for native queries in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to use native queries to access their Google BigQuery data.

Feature details

You can use native queries to access your Google BigQuery data in the Power Query Online and dataflows experiences, leveraging another query option for various business scenarios. More information about native queries: [Import data from a database using native database query](#).

Navigator performance improvements for Google BigQuery connector

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Performance improvements to Google BigQuery navigation will allow users to connect to data quicker and work with larger data warehouses.

Feature details

Performance will be improved for initial connection and navigation design-time experiences for the Google BigQuery connector. Report builders will be able to connect to data quicker and work with larger data warehouses with ease.

SharePoint list V2 connector improvements

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users can leverage additional features such as support for data types preservation and folding improvements to the SharePoint list V2 connector.

Feature details

Additional features will be added to the SharePoint list V2 connector to unblock key connectivity scenarios. This includes support for data types preservation and folding improvements. The connector is also generally available.

Support for native queries in import and DirectQuery mode in the Power Query SDK

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Connector developers will be able to implement native query support for their connectors in both import and DirectQuery modes using the Power Query SDK. This will allow users to query their data using this functionality in Power Query experiences.

Feature details

A common user ask is the ability to use native queries (custom SQL) in various connectors on our platform. This feature empowers custom and certified connector developers to implement native query support in their connectors for users to leverage.

Power Query Online

Overview

Power Query is the data connectivity and data preparation experience for users across a wide variety of Microsoft products and services, including Power BI, Excel, Dynamics 365 Customer Insights, and more. For more information, go to [Power Query](#).

Get Data experience improvements

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Improvements to the Power Query **Get Data** experience will allow makers to connect to their data more easily.

Feature details

Connecting to data is key for using Power Query, so we're making several changes to the **Get Data** experience to enhance and simplify the process of connecting to your data sources. Improvements will include:

- The ability to manage data source and connection settings
- Improved messaging to help guide users through addressing errors
- Data source settings UX simplification
- Consistent styling
- Cleaner flow stage names and instructions

Global search

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

The global search capability will allow makers to easily find results that match their search criteria.

Feature details

Makers will have the ability to easily find what they need by using the Power Query Online global search capability. They'll be able to find commands, queries, and steps that match their search criteria.

New transform – Percentiles

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

A transformation to create percentiles will give users more statistical information about their data.

Feature details

We're planning to add percentiles as a transformation to the data profiling capabilities in Power Query Online. Users will get more statistical information on their data profile that will help by better preparing the data.

New transform – Rank

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

A transformation to add ranking will help users analyze their data in a different way.

Feature details

We're planning to add rank as a transformation to the data profiling capabilities in Power Query Online. This will help by better preparing the data to allow users to look at their data profile in a different way.

New transform - Time-based binning

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

A transformation to add time-based binning will help users analyze their data in a different way.

Feature details

We're planning to add time-based binning as a transformation to the data profiling capabilities in Power Query Online. This will help by better preparing the data to allow users to look at their data profile in a different way.

Power BI Online quick create - Modify manually entered data used in quick reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to edit data after it's been manually entered and used in the [Power BI Online quick create experience](#).

Feature details

We recently released the ability to [quickly create new reports](#) by manually entering data directly into Power BI. Building on top of that scenario, we're enabling users to modify the data once it's already been used in a report.

Power BI Online quick create - Use data from a CSV file when creating quick reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to create reports on top of Text/CSV data when working within the [Power BI Online quick create experience](#).

Feature details

We recently released the ability to [quickly create new reports](#) by entering data directly into Power BI. Building on top of this scenario, we're enabling users to pull data from a CSV file as an alternative to manually entering data.

Power BI Online quick create - Use data from a PDF file when creating quick reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to create reports on top of data from a PDF file when working within the [Power BI Online quick create experience](#).

Feature details

We recently released the ability to [quickly create new reports](#) by entering data directly into Power BI. Building on top of this scenario, we're enabling users to pull data from a PDF file as an alternative to manually entering data.

Power BI Online quick create - Use data from an Excel file when creating quick reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to create reports on top of Excel data when working within the [Power BI Online quick create experience](#).

Feature details

We recently released the ability to [quickly create new reports](#) by entering data directly into Power BI. Building on top of this scenario, we're enabling users to pull data from an Excel file as an alternative to manually entering data.

Power BI Online quick create - Use Microsoft Dataverse data when creating quick reports

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Users will be able to create reports on top of Microsoft Dataverse data when working within the [Power BI Online quick create experience](#).

Feature details

We recently released the ability to [quickly create new reports](#) by entering data directly into Power BI. Building on top of this scenario, we're enabling users to pull data from Microsoft Dataverse as an alternative to manually entering data.

Power Query support for paginated reports in Power BI

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Creators will be able to leverage Power Query Online to ingest and transform data to be used in their paginated reports.

Feature details

When working in the Power BI service, creators will be able to use Power Query Online to connect to all supported data sources. They'll then be able to author paginated reports using this data in their Power BI service authoring environment.

Support for multi-value parameters

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Feature details

Query parameters allow Power Query users to easily parameterize parts of their queries like filter values and easily update those parameter values in a centralized way (for example, when used across multiple queries).

Query parameters provide capabilities to restrict allowed parameter values that can be picked from a list of values, either static or dynamic (for instance, the result of another query); however, a current limitation is that users can only pick a single value (for example, *shoes*) for the parameter. An area of recurring customer feedback is the need to support the selection of more than one value. For example, a **Product Category** parameter could have *Shoes*, *Shirts*, and *Accessories* as allowed values. This improvement would allow selecting both *Shoes* and *Shirts* through the Query Parameters UX and downstream binding of those

parameters (for example, "Column1 in/not-in ProductCategory" instead of the current "Column1 = ProductCategory").

Browse support for the SharePoint list connector in Power Query Online and dataflows

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

Browse support for the SharePoint list connector will create a simpler, friendlier browse experience when selecting a list.

Feature details

When using the SharePoint list connector in Power Query Online and dataflows, users can choose to browse in a site picker instead of being required to specify a site URL.

Date picker for entering dates

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

The date picker makes it easier for users to select a particular date and lowers the risk of data being entered incorrectly.

Feature details

Manually inputting dates can be tedious and lead to incorrectly entered data, especially as users need to account for differences in location. To address this issue, we're introducing a date picker for date fields, making it easier to select a particular date that takes locale into account.

New 'Group By' aggregate function - Count distinct values

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	-	Mar 2022

Business value

Makers will have the ability to count the number of distinct values within a group.

Feature details

When grouping rows, makers currently have the ability to count the total number of values within each group; however, one of the most frequently asked-for capabilities is the power to count the number of distinct values. We're adding this capability as an aggregate function in the **Group By** transform.

VNet data gateways

Overview

This feature allows enterprises that subscribe to VNet connectivity for their data services in Azure to seamlessly connect to Microsoft Power Platform using VNet data gateways.

VNet data gateway connectivity improvements

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	✓ Nov 30, 2021	-

Business value

Customers will be able to connect to additional data sources using VNet data gateways.

Feature details

We plan to enable connectivity for Snowflake and Azure Databricks using VNet data gateways. Azure AD single sign-on (SSO) for these services will also be enabled when connecting through VNet data gateways.

See also

[Supported Azure data services](#) (docs)

VNet data gateway troubleshooting

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	-

Business value

Enterprises will be able to troubleshoot network issues with VNet data gateways using a self-diagnostic tool.

Feature details

Since VNet data gateways are Microsoft managed, enterprises don't have the ability to troubleshoot connectivity from VNet data gateways to the data source like they do with on-premises data gateways. This feature will help reduce that gap by providing enterprises with a self-diagnostic tool.

Got feedback?

Share your feedback on a community forum for [Dynamics 365](#) or [Power Platform](#). We'll use your feedback to make improvements. To find out about updates to these release notes, follow us on Twitter @MSFTDynamics365.

